holzstar
Holzbearbeitungsmaschinen

Instruction Manual

Wood Lathe

DB 450

DB 450

DB 450

Imprint

Product identification

Wood Lathe	Item number
DB 450	5920450

Manufacturer

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Indications regarding the operating instructions

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1 Introduction

You have made a good choice by purchasing a HOLZ-STAR wood lathe DB-450.

Carefully read the operating instructions prior to commissioning.

They describe correct commissioning, intended use and safe as well as efficient operation and maintenance of your wood lathe.

The operating instructions form part of the wood lathe. Keep these operating instructions at the installation location of your wood lathe. Also observe the local accident prevention regulations and general safety regulations for the use of the wood lathe.

1.1 Copyright

The contents of these operating instructions are protected by copyright. Their application is permitted within the context of the use of the lathe. Any further use shall not be permitted without written consent by the manufacturer. For the protection of our products, we shall register trademark, patent and design rights, as this is possible in individual cases. We strongly oppose any infringement of our intellectual property.

1.2 Customer service

Please contact your specialist retailer if you have any questions regarding your lathe or require any technical information. Your specialist retailer will be happy to support you with specialist 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
Internet: www.holzstar.de

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

We are always interested in valuable experience and knowledge gained from using the application, which-then could be shared and be valuable to develop our-products even further.

1.3 Limitation of Liability

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 descriptions and illustrations in this document as a result of special variants, optional extras or recent, technical modifications.

The obligations defined in the supply contract shall apply in addition to the general terms and conditions and the manufacturer's general terms and conditions as well as the statutory regulations valid at the time of the conclusion of the contract.

2 Safety

This section provides an overview of all important safety packages for personal protection as well as safe and reliable operation. The sections on individual service life phases contain additional, specifically applicable safety information.

2.1 Legend of symbols

Safety Instructions

Safety instructions in these operating instructions have been highlighted with symbols. Safety instructions are indicated by signal terms that express the degree of risk involved.

DANGER!

This combination of symbol and signal term indicates a directly dangerous situation which may cause death or serious injury if not averted.

WARNING!

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

ATTENTION!

This combination of symbol and signal term indicates a potentially dangerous situation which may cause material damage or harm the environment if it is not averted.

NOTE!

This combination of symbol and signal term indicates a potentially dangerous situation which may cause material damage or harm the environment if it is not averted.

Tips and recommendations

Tips and recommendations

This symbol highlights useful tips and recommendations as well as information for efficient and reliable operation.

To reduce the risk of personal injury and property damage and to avoid dangerous situations, the safety instructions in this manual must be observed.

The term "machine" replaces the usual trade name of the device to which these operating instructions refer (see cover sheet).

2.2 Obligations of the operating company

The operating company is the person who operates the lathe for business or commercial reasons by herself, or leaves it to a third party for use or application, and who bears the legal product responsibility for the protection of the user, the staff or for third parties.

Obligations of the operating company

If the lathe is used for commercial purposes, the operating company of the lathe must comply with the legal working safety regulations. Therefore, the safety notes in this operating manual, as well as the safety, accident prevention and environment protection regulations applying for the area of application of the lathe must be met. The following applies in particular:

- The operator must inform himself about the applicable occupational health and safety regulations and determine additional hazards in a hazard assessment which are caused by the special working conditions at the place of use of the machine. These must be implemented in the form of operating instructions for the operation of the machine.
- During the entire period of use of the machine, the operator must check whether the operating instructions issued by him correspond to the current state of the rules and regulations and, if necessary, adapt them.
- The operator must clearly regulate and define the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- The operator must ensure that all persons handling the machine have read and understood these instructions. In addition, he must train the personnel at regular intervals and inform them about the dangers.
- The operator must provide the personnel with the necessary protective equipment and instruct them to wear the required protective equipment in a binding manner.

Furthermore, the operator is responsible for ensuring that the machine is always in perfect technical condi-tion. The following therefore applies:

- The operator must ensure that the maintenance intervals described in these instructions are observed.
- The operator must have all safety devices regularly checked for operability and completeness.

2.3 Requirements to staff

The different tasks described in this manual represent different requirements to the qualification of the persons entrusted with these tasks.

WARNING!

Danger in case of insufficient qualification of the staff!

Insufficiently qualified persons cannot estimate the risks while using the lathe and expose themselves and others to the danger of severe or lethal injuries..

- Have all works only performed by qualified persons.
- Keep insufficiently qualified persons out of the working area.

Only persons reliable working procedures can be expected from, are allowed to perform all works. Persons the responsiveness of which is affected by e. g. drugs, alcohol or medication, are not allowed to work with the machine.

The qualifications of the personnel for the different tasks are mentioned below:

Operator

The operator is instructed by the operating company about the assigned tasks and possible risks in case of improper behaviour. Any tasks which need to be performed beyond the operation if it is indicated in these instructions and if the operating company expressively commissioned the operator.

Qualified electrician

Due to their technical training, knowledge and experience as well as knowledge of the relevant standards and regulations, skilled electricians are able to carry out work on electrical systems and to recognize and avoid possible dangers independently.

Qualified personnel

Due to their professional training, knowledge and experience as well as their knowledge of relevant regulations the specialist staff is able to perform the assigned tasks and to recognise and avoid any possible dangers themselves.

Manufacturer

Certain works may only be performed by specialist personnel of the manufacturer. Other personnel is not authorized to perform these works. Please contact our customer service for the execution of all arising work.

2.4 Personal protective equipment

The personal protective equipment serves to protect persons against impairments of safety and health while working. The staff member has to wear personal protective equipment while performing different tasks on and with the machine which are indicated in the individual paragraphs of these instructions.

The personal protective equipment is explained in the following paragraph:

Respiratory protection

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

Ear protection

The ear protection protects against hearing damage caused by noise.

Eye protection

Protective glasses protect the eyes against projected parts and splashes of liquid.

Protective gloves

The protective gloves provide protection for the hands against sharp-edged components, as well as against friction, abrasions or deeper injuries.

Safety boots

The safety boots protect the feet against crushes, falling parts and slipping over on slippery under-ground.

Protective clothes

Protective work clothing means tight-fitting clothing with low tear resistance.

2.5 Safety labels on the lathe

The following safety signs are applied on the lathe (Fig. 1), which need to be observed and followed.

Fig. 1: Safety labels

If safety labels on the machine are damaged or missing, this can cause errors, personal injury and material damage. The safety symbols attached to the machine must not be removed. Damaged safety symbols must be replaced immediately.

As soon as the signs are not clearly visible and comprehensible at first glance, the machine must be stopped until new signs have been attached.

2.6 Safety instructions

NOTE!

The instructions for use and maintenance must be read carefully before starting, using, servicing or otherwise modifying the machine. Handling and working with the machine is only permitted to persons who are thoroughly familiar with the handling and mode of operation of the machine.

ATTENTION!

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

- Before switching on the machine, check that the workpiece is correctly positioned!
- Never place your hands near rotating parts when working with the machine!
- Do not remove the sharp-edged chips by hand; use a hand brush or chip hook!
- Use the guards and secure them securely. Never work without guards and keep them functional. Check the functionality before starting work.
- Always keep the machine and its working environment clean. Ensure adequate lighting.
- Always secure your workpiece when working with suitable clamping devices. Ensure that there is sufficient contact surface.
- The machine must not be modified in its design and must not be used for purposes other than those intended by the manufacturer.
- Never work under the influence of concentration-disturbing diseases, overloading, 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 instructions on the machine and keep it in a perfectly legible condition.
- Keep children and persons unfamiliar with the machine away from your working environment, machine and tools.
- The machine may only be used, equipped and maintained by persons who are familiar with it and have been informed of the dangers.
- Do not pull the mains cable around the plug to pull it out of the socket. Protect the cable from heat, oil and sharp edges.

ATTENTION!

Make sure that the main switch is in the "OFF" position when connecting the machine to the power supply in order to avoid unintentional switching on.

- Wear tight-fitting work clothing, safety glasses, safety shoes and hearing protection. Tie long hair together. Do not wear watches, bracelets, chains, rings or gloves (rotating parts!) when working.
- Immediately eliminate any faults that impair safety.
- Never leave the machine unattended in operation and remain with the machine until the tool has come to a complete standstill. Then pull out the mains plug to protect against unintentional switching on.
- Protect the machine from moisture (danger of short circuits!).
- Never use electric tools and machines in the vicinity of flammable liquids and gases (danger of explosion!).
- 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 tool! Make sure that the tools are not blunt or damaged.
- Only use original spare parts and accessories to avoid possible hazards and accident risks.

2.7 Safety instructions for the lathes

- The machine must always be operated by qualified personnel who are familiar with its operation and function.
- Always wear eye protection.
- Securely fasten the wood to be processed
- Do not work with cracked or faulty wood
- Use the lowest speed after clamping a new workpiece.
- Observe the warnings on the machine.
- The clamped material must not be too unbalanced to prevent ejection.
- Before switching on the motor, turn the clamped workpiece a few turns by hand to avoid collisions.
- Do not wear work gloves, as they can get caught on the workpiece.
- Wear a dust mask to protect yourself from wood dust.
- Prevent the tool from being hooked in during machining

- Place the tool on the support. Set the cutting edge of the tool to the center of the workpiece.
- Pay attention to the correct direction of rotation.
- Remove all loose snags before switching on the unit.
- Always ensure that the machine is used and handled safely.

3 Intended Use

The Wood Lathe DB 450 is used exclusively for turning wood or wood-like materials whose max. Turning diameter is 250 mm. The max. Tip width of the workpiece is 450 mm (which can be optionally extended to 1000 mm). It is suitable for private use, not for industrial use. Proper use also includes compliance with all information in this manual. Any use beyond the intended use or otherwise is considered misuse.

WARNING!

Danger in case of misuse!

Misuse of the lathe can lead to dangerous situations.

- Only operate the lathe in the power range specified in the technical data.
- Never bypass or disable the safety devices.
- Never work on materials other than those specified for the intended use.
- Only operate the lathe in a technically perfect condition.
- Never machine several workpieces at the same time.

Stürmer Maschinen GmbH assumes no liability for constructive and technical changes to the lathe.

Claims of any kind due to damage due to improper use are excluded.

ATTENTION!

Certain types of wood and wood products produce harmful dust emissions when processed. Therefore, only use your machine in a well-ventilated room and preferably use an extraction unit.

ATTENTION!

The machine may only be operated in a technically perfect condition. Any faults must be rectified immediately.

Unauthorised modifications to the machine or improper use of the machine as well as disregard of the safety regulations or the operating instructions exclude the manufacturer's liability for any resulting damage to persons or objects and invalidate the warranty claim!

3.1 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:

- Injuries caused by flying work pieces or work piece parts
- Fire hazard with insufficient ventilation of the motor
- Danger of electric shock, if the wiring is not correct.
- Danger from noise and dust (wear ear protection and use a suitable extraction system).

WARNING!

It should be pointed out that every machine has residual risks. All operations (even the simplest ones) must be carried out with great care. Safe working depends on you!

4 Technical Data

Type	DB 450
Max. turning Ø	254 mm
Max. height	127 mm
Max. width	450 mm
Spindle head thread	M33 x 3.5
Morse cone	MK 2
Speeds	680, 1.000, 1.400, 2000, 2.800 min-1
Speed stages	5
Motor output	370 W
Electrical connection	230 V / 50 Hz
Dimensions (LxBxH)	820 x 300 x 430 mm
Weight	31 kg

Ear protection

The noise level (sound pressure level) of this machine may exceed 82 dB (A) at the workplace.

It is recommended to wear ear protection.

It should be noted that the duration of sound exposure, the type and nature of the

Working area as well as other machines which are in operation at the same time the noise level at

Influence workplace with.

4.1 Type plate

Fig. 2: Type plate DB 450

5 Transport, packaging, storage

5.1 Delivery

After delivery, check the lathe for visible transport damage. If you discover any damage to the lathe, report it immediately to the transport company or dealer.

Transport

CAUTION!

Injuries caused by parts falling over or off a forklift, pallet truck or transport vehicle.

Only use means of transport that can carry the total weight and are suitable for it.

Improper transport of individual devices, unsecured devices stacked on top of each other or next to each other in packed or already unpacked condition is accident-prone and can cause damage or malfunctions for which we do not grant any liability or guarantee.

Transport the scope of delivery secured against shifting or tilting with a sufficiently dimensioned industrial truck to the installation site.

General risks during internal transport

CAUTION: 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.

Devices may only be transported by authorized and qualified persons. Act responsibly during transport and always consider the consequences. Refrain from daring and risky actions.

Gradients and descents (e.g. driveways, ramps and the like) are particularly dangerous. If such passages are unavoidable, special caution is required.

Before starting the transport check the transport route for possible danger points, unevenness and disturbances as well as for sufficient strength and load capacity.

Danger points, unevenness and disturbance points must be inspected before transport. The removal of danger spots, disturbances and unevenness at the time of transport by other employees leads to considerable dangers.

Careful planning of internal transport is therefore essential.

Transport with a forklift/lift truck:

For shipping, the device packed in a wooden box is de-livered on a pallet so that it can be transported with a forklift truck or pallet truck.

5.2 Packaging

All of the machine‘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 shred-ded 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

Let the lathe cool down completely. Storage the thoroughly cleaned lathe in a dry, clean and frost-free env-ironment. Environmental temperature range: -25 °C to +55 °C.

5.4 Scope of delivery

- Wood lathe
- Tailstock
- Revolving center of gravity
- Turning steel edition
- Instruction manual

5.5 Accessories, not included

Fig. 3: Accessories

	Description	Item number
1.	8-part turning tool set	5931011
2.	4-jaw chuck set 1 Ø 100 mm, M33 x 3.5	5931021
3.	Bed extension BV1000	5920451
4.	4-jaw chuck set 2 Ø 100 mm, M33 x 3.5	5931023

6 Description of device

6.1 Machine

Illustrations in these operating instructions may de-viate from the original.

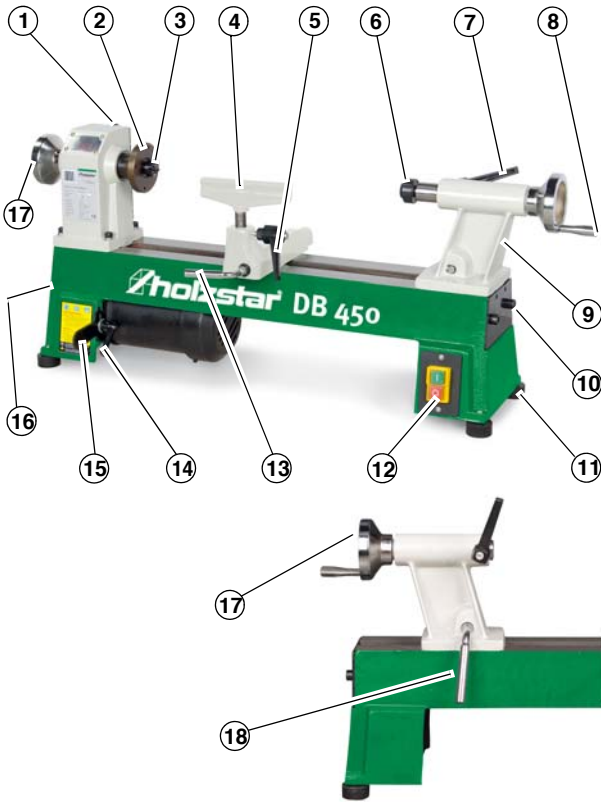

Fig. 4: Wood Lathe DB 450

1. Headstock with cover
2. Plate
3. Face driver
4. Tool rest
5. Clamping the height adjustment
6. Revolving centering tip
7. Clamping the tailstock spindle
8. Crank for tailstock spindle
9. Tailstock
10. Cover for lengthening the tip width

11. Stand
12. On / off switch
13. Clamping lever for carriage
14. Motor clamping
15. Belt tension
16. Cover for lower pulleys
17. Handwheel
18. Tailstock clamping

7 Setting up and connection

7.1 Requirements for the installation site

The Wood Lathe must be stable on a level and solid ground. It is important to ensure that there is enough freedom of movement to work. The site should meet the following criteria:

- The substrate must be level, firm and vibration-free.
- The substrate must not let any lubricant through.
- The installation or work area must be dry and well ventilated.
- Do not operate machines that cause dust and chips near the machine.
- The site must have good lighting.

7.2 Assembly

Use a screwdriver to tighten the crank on the tailstock (Fig.5).

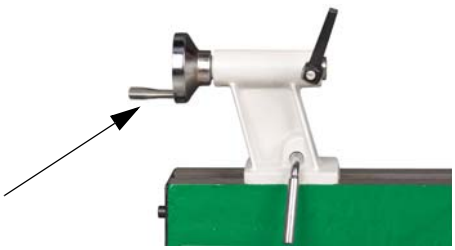

Fig. 5: Mount the tailstock

Degrease the cone seats on the two centering points and insert them by hand. The revolving centering point should be placed in the tailstock (Fig.6).

Fig. 6: Degrease conical seats

7.3 Setting up the Wood Lathe

The machine must be placed on a stable and free surface. This prevents the machine from falling over and injuring someone, as well as vibrations and thus inaccuracies in the workpieces.

Place the machine on a level surface and unscrew the respective feet until the machine has a tilt-free position!

CAUTION!

Danger of injury due to a machine that is not stably erected!
Check the stability of the machine after placing it on stable ground.

ATTENTION!

Prior to commissioning the lathe, all moving parts must be greased. Lubricate guides, sleeves, bearings with commercial grease resp. Lubricate.

To lubricate the shifter shafts and drive shafts, the belt cover must be removed. For this purpose, only an adhesive grease may be used, as it may otherwise lead to malfunction of the belt! When servicing / maintaining the lathe, lubricate at least once a month or more often if necessary!

ATTENTION!

Make sure that the machine is freely accessible for the operating personnel, for material transport as well as for adjustment and maintenance work.

7.4 Electrical connection

DANGER!

Danger to life due to electric shock!

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

DANGER!

All work on the electrical installation may only be carried out by a qualified electrician.

8 Settings

Danger!

Danger to life due to electric shock!

Before making any adjustments, disconnect the machine from the mains voltage!

DANGER!

Before starting, using, maintaining or performing any other work on the machine, read the instructions for use and maintenance carefully. Handling and working with the machine is only permitted for persons who are familiar with the handling and operation of the machine.

8.1 Speed setting

Remove the covers on the headstock and lower pulley cover. To do this, loosen the upper screw of the cover. Slide the cover up and swing it to the side.

Loosen the lever for engine clamping (Pos. 1, Fig. 7)) and push up the belt tension lever (Pos. 2, Fig. 7). The belt is now relaxed. Place the belt on a different pair of discs to change the speed (RPM).

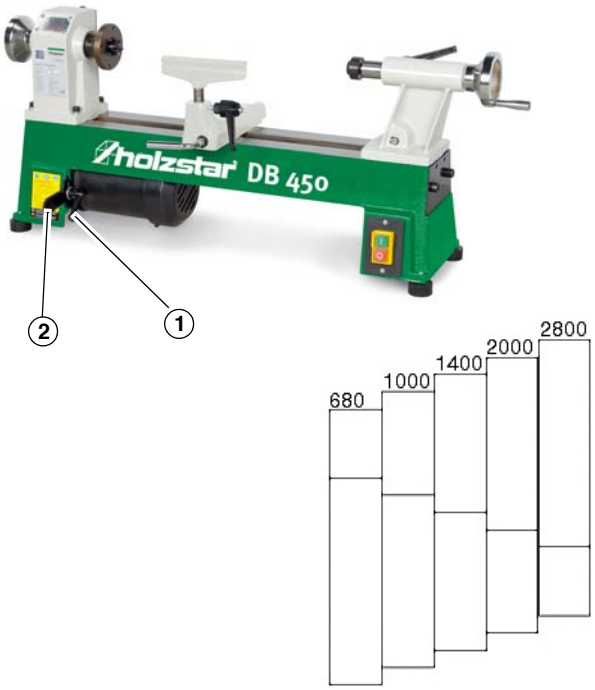

Fig. 7: Speed setting

8.2 Clamping of workpieces

Option 1: Tension between tips

Mark the center of the two plan sides of the workpiece. Especially with irregular workpieces, make sure that a large imbalance occurs if the middle is incorrectly marked.

Now place a center hole at the marking or clamp the workpiece directly.

Loosen the clamp of the tailstock and push it forward so that the workpiece still fits between the tips. Clamp the tailstock. Press the center of the marking on the driver tip (Pos. 1, Fig. 8). Turn the spindle of the tailstock out of the crank so that the revolving centering point (Pos. 2, Fig. 8) presses sufficiently deep into the other marking. Clamp the spindle.

Before starting the machine, execute a few sample revolutions on the handwheel (Pos. 4, fig. 8) to avoid collisions.

Fig. 8: Clamping of workpieces

Option 2: Clamping on the faceplate

Unscrew the faceplate from the spindle. Make sure that the plane surface of the workpiece is perpendicular to the axis of rotation. Screw the faceplate centrically onto the plane surface with sufficiently long wood screws (when turning, make sure that you do not reach the screws with the tool!). Screw the face plate with the workpiece back onto the spindle and tighten. Support the workpiece again as described above with the revolving centering point in the tailstock. Also perform a few sample rotations before switching on.

8.3 Adjusting the tool rest

Release the clamp for the slide (Pos.5, Abb.8). This allows you to move the tool rest forwards and backwards or twist it. After adjustment, the clamp must be tightened again. Adjust the height of the tool rest so that the tool edge is centered on the axis of rotation. Fix the position by the clamping lever (Pos.6, Fig.8).

8.4 Remove the centering tips

To remove the follower centering point in the tailstock, turn the tailstock spindle on the crank to the very rear.

The driver tip in the headstock can be removed by means of a round steel which is guided by the handwheel. With light hammer blows on the round steel, the driver tip can be removed.

9 Cleaning and maintenance

NOTE!

Cleaning and maintenance work should only be carried out on the machine if it is disconnected from the mains voltage and the spindle is at a standstill.

To maintain the accuracy and functionality of the machine, it is essential to treat it with care, to keep it clean and to lubricate and oil regularly (monthly or on demand). Only good care will ensure that the working quality of the machine is maintained.

NOTE!

Oil, grease and cleaning agents are hazardous to the environment and must not be discharged into wastewater or in the
normal household waste. Dispose of these funds in an appropriate manner. Those with oil, grease or Detergent soaked cloths are easily combustible. Collect the cloths or the cleaning wool in a suitable, closed container and carry it to an environmentally friendly disposal - do not throw in the household waste!

9.1 Cleaning

Any chips should be removed regularly. Before opening the housing cover, switch off the device and remove the plug. Clean the machine with a brush, broom or vacuum cleaner. Remove sawdust and dust from the cooling holes of the engine.

After cleaning, always apply a suitable lubricating oil to the guides.

DANGER!

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

9.2 Maintenance

As a result of wear, it may happen that maintenance work must be carried out on the machine.

ATTENTION!

Maintenance work may only be carried out by qualified personnel with mechanical knowledge.

NOTE!

Lubrication!

- When servicing / maintaining the Wood Lathe, all moving parts must be lubricated at least once a month or, if necessary, more often.
- To lubricate the shifter shafts and drive shafts, the belt cover must be removed. For this purpose, only an adhesive grease may be used, as it may otherwise lead to malfunction of the belt!
- In addition, guides, sleeves and bearings must be lubricated or oiled with commercially available lubricating grease!

10 Working instructions

NOTE!

For an optimal turning result are perfect and sharpened tools to use

Material selection

Faulty wood tends to splinter and becomes a risk to the user and machine.

Workpieces made of glued woods should only be worked by an experienced craftsman. The turning of these woods requires a careful gluing without weak spots, because the workpiece can explode due to the centrifugal force that arises.

Mastery in basic wood turning should be mastered by the user with solid material.

Material preparation

For the turning of long wood, the material must first be cut to a square shape.

For turning wood, the material must also be cut to size. For example, you can saw out the cross-section of the cross-piece with a band saw. Suitable is an octagonal shape, thereby vibration can be avoided.

Center the workpiece

The centering of the prepared workpieces is an important operation before they are inserted into the machine. Centering means measuring the center of the workpiece, marking with grains and punching a depression of 1.5 to 2 mm diameter into the center. If the workpiece is not centered exactly, the imbalance causes excessive vibrations. A spinning out of the workpiece can be the result. Only through the exact workpiece centering can you achieve a clean concentricity.

During the woodturning

The still unprocessed workpiece must be machined at low speed. After the pre-turning, that is, when the basic shape of the workpiece, as well as a uniform concentricity is reached, the speed can be increased. The revolving center point must be readjusted in between using the handwheel with the motor switched off. The center of the grain must be firmly in the wood. Turn the workpiece by hand to check the tight fit between the tips.

11 Care, maintenance and repair

DANGER!

Danger of electrocution!

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

- Before starting any cleaning or maintenance work, switch off the machine and disconnect the power plug.
- Connections and repairs of the electrical equipment may only be carried out by a qualified electrician.

11.1 Care after end of work

Wearing safety gloves!

NOTE!

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

Step 1: Disconnect the power plug from the power outlet.

Step 2: Remove the machine from shavings and dust with a hand brush or brush.

Step 3: Check the machine for damage to the safety devices. If necessary, carry out or arrange the repair according to the safety instructions.

ATTENTION!

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

11.2 Maintenance

Maintenance and repair work may only be carried out by qualified personnel.

If the Wood Lathe does not work properly, contact a dealer or our customer service. The contact details can be found in chapter 1.2 Customer Service.

Please consider the following points:

1. All protective and safety equipment must be reinstalled immediately after repair and maintenance work has been completed.

2. Clean the spindle thread for the tool holder when changing the tool and lightly oil it.

3. Unscrew tailstock quill from time to time, clean and spray with dry lubricant. Lubricate the threaded spindle.

4. Check the clamping of tailstock and tool rest and adjust if necessary.

5. Check drive belt and replace if necessary. The check should be carried out after approx. 100 operating hours.

11.3Lubrication

NOTE!

When servicing / maintaining the lathe, all moving parts must be lubricated at least once a month or more often if necessary.

Prior to commissioning and during the regular maintenance / repair of the lathe, all moving parts must be lubricated at least once a month or more often if necessary.

To lubricate the shifter shafts and drive shafts, the belt cover must be removed. For this purpose, only a sticking grease may be used, otherwise it may cause malfunction of the belt!

In addition, guides, sleeves and bearings must be lubricated or oiled with commercially available lubricating grease!

The spots to be greased are shown in Figure 9.

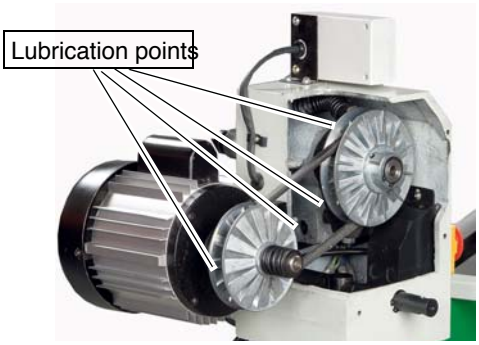

Fig. 9: Lubrication points

12 Disposal, recycling of old equipment

In your own interests and in the interests of the environment, please ensure that all components of the machine are disposed of in the proper and approved way.

12.1Decommission

Disused machinery must be taken out of service immediately in order to avoid later misuse and endangering the environment or people.

Step 1: Remove all environmentally hazardous fluids from the old machine.

Step 2: If necessary, dismantle the machine into manageable and usable assemblies and components.

Step 3: Guide the machine components and operating materials to the appropriate disposal routes.

12.2Disposal of electrical equipment

Please note that electrical appliances contain a variety of recyclable materials as well as environmentally harmful components. Make sure that these components are disposed of separately and properly. In case of doubt, please contact your municipal waste disposal. If necessary, the help of a specialized disposal company can be accessed for the treatment.

12.3Disposal of lubricants

The disposal instructions for the lubricants used are provided by the lubricant manufacturer. If necessary, ask for the productspecific data sheets.

12.4Disposal 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.

13 Troubleshooting

Fault	Possible cause	Solution
Motor does not start	No mains voltage.	Check mains fuse.
	Switch, capacitor are defective.	Have checked by a qualified electrician.
	Electrical extension conductor is defective.	Pull the mains plug, check and replace if necessary.
The workpiece is fluttering	Workpiece loosens during work.	Observe the working instructions in the operating instructions.
	No centering.	Observe chapter "Working instructions" in the operating instructions.
	Speed too high.	Select a lower speed.
The tool rest or the tailstock can no longer be clamped.	The eccentric clamp is too loose.	Tighten the hexagon nuts on the underside. This only has to be in contact and not tightened.
Strong vibrations.	Workpiece deformed, unround, has large weak points/ cracks or has not been prepared for turning.	Prepare the workpiece for turning by planing and sawing.
	Spindle bearing is worn.	Replace the spindle bearing.
	Belt is worn.	Replace the belt
	Motor mounting or handle are loose.	Tighten screws and handle.
	The lathe stands on an uneven surface.	Place the lathe on a flat surface and align it.
The workpiece surface is too rough.	The lathe is out of focus.	Resharpen the turning iron.
	Turning iron spring	Clamp the lathe tool shorter.
Motor overheats and has no power	Motor overloaded.	Reduce the feed.
	Mains voltage is too low	Switch off and have it checked by a specialist.
	Motor is connected incorrectly.	Let it checked by a specialist.
Insufficient working accuracy	Uneven, heavy or clamped workpiece.	Clamp workpiece mass-balanced and tension-free.
	Incorrect horizontal position of the tool rest.	Adjust the tool rest.

14 Spare parts

DANGER!

Risk of injury caused by the use of incorrect spare parts!

The use of incorrect or faulty spare parts may cause risks for operating staff and damage as well as malfunctions.

- Only original spare parts from the manufacturer or replacement parts approved by the manufacturer must be used.
- In case of doubt, always contact the manufacturer.
- Using non-approved spare parts voids the manufacturer's warranty.

Tips and recommendations

The manufacturer warranty shall be rendered void in the event of a use of unauthorised spare parts.

14.1Spare parts orders

Spare parts are available from authorised retailers or directly from the manufacturer. The contact details have been listed in section 1.2 Customer service.

The following key data is required for queries or spare parts orders:

- Device type
- Item number
- Position number
- Year of construction
- Quantity
- Desired shipping type (post, freight, sea, air, express)
- Shipping address

Spare parts orders without the aforementioned data cannot be taken into account. The supplier shall deter-mine the shipping type if no relevant data was provided.

Data on the machine type, item number and year of manufacture is listed on the type plate attached to the device.

Example

The drive belt for the Wood Lathe DB 450 must be ordered. The drive belt has the number 26 in the spare parts drawing 1.

By ordering spare parts, send a copy of the spare parts drawing (1) with the marked part (drive belt) and marked positon number (26) to the dealer or spare parts department and provide the following information:

- Type of device:**Wood Lathe DB 450**
- Item number:**5920450**
- Drawing number: **1**
- Position number: **26**

14.2Spare parts drawing DB 450

The following spare parts drawing is intended to help identify the necessary spare parts. To order, please send a copy of the list of spare parts with the marked components to your dealer.

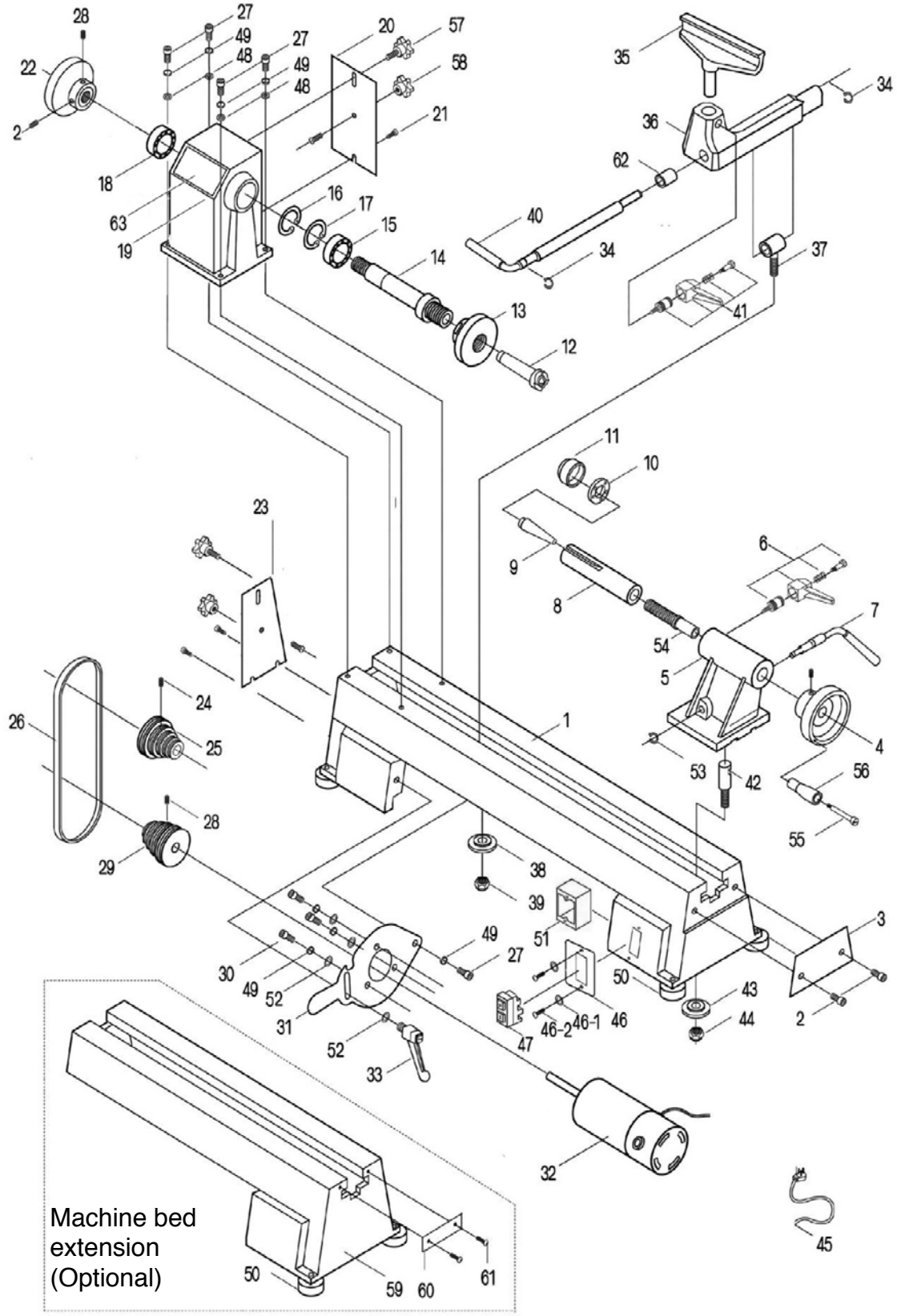

Fig. 10: Spare Parts Drawing DB 450

15 Electrical Schematic

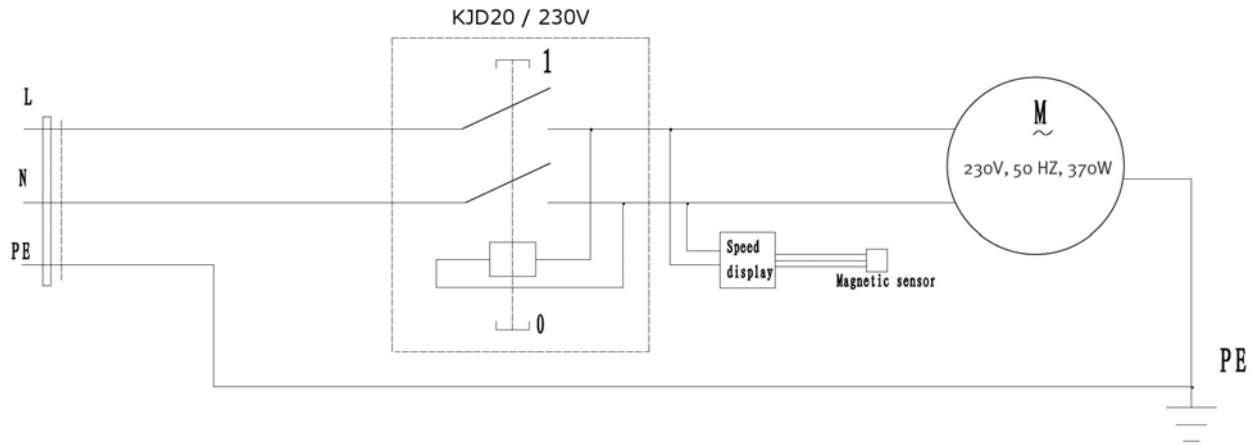

Fig. 11: Electrical schematic DB 450

16 EC Declaration of Conformity

According to Machinery Directive 2006/42/EC Annex II 1.A

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

hereby declares that the following product

Product group: Holzstar® Wood working machines

Description of the machine: DB 450

Item number: 5920450

Machine type: Wood Lathe

Serial number*: _____

Year of manufacture*: 20____

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

complies with all relevant regulations of the aforementioned directive as well as any other, applicable directives (subsequently added) – including the changes applicable at the time the declaration was made.

Relevant EU directives:	2014/30/EU	EMC Directive
	2012/19/EU	WEEE Directive

The following harmonized standards have been applied:

DIN EN ISO 12100:2010	Safety of machinery. General principles for design. Risk assessment and risk reduction
DIN EN 60204-1:2007-06	Safety of machinery - Electrical equipment of machines - Part 1: General requirements
DIN EN 12779:2016	Safety of woodworking machines - Chip and dust extraction systems with fixed installation - Safety requirements

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

Hallstadt, den 13.04.2016

_____
Kilian Stürmer
Managing Director

CE


stürmer
OPTIMUM