holzstar
Holzbearbeitungsmaschinen

Instruction Manual

Wood Lathe

DB 1102 VARIO

DB 1102 VARIO

DB 1102 VARIO

Imprint

Product identification

Wood Lathe	Item number
DB 1102 VARIO	5921102

Manufacturer

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

Fax: 0049 (0) 951 96555 - 55
E-Mail: info@holzstar.de
Internet: www.holzstar.de

Indications regarding the operating instructions

Original operating instructions

Edition: 03.03.2021
Version: 1.05
Language: English

Author: FL

Indications regarding the Copyright

Contents

1 Introduction

You have made a good choice by purchasing a HOLZ-STAR Wood Lathe.

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

1.2 Customer service

Please contact your specialist retailer if you have any questions regarding your Wood 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 hazardous situation which may cause minor or light injuries if it is not averted.

IMPORTANT!

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.

Observe the safety information in these operating instructions to minimise the risk of personal injury as well as material damage and prevent hazardous situations.

2.2 Responsibility of the operator

The operator is the person who operates the machine himself for commercial or economic purposes or leaves it to a third party for use or use and bears legal product responsibility for the protection of the user, the personnel or third parties during operation.

Obligations of the operator:

If the machine is used in the commercial sector, the operator of the machine is subject to the legal obligations for occupational safety. Therefore, the safety instructions in this operating manual as well as the safety, accident prevention and environmental protection regulations applicable to the area of application of the machine must be observed. The following applies in particular:

- The operator must obtain information about the applicable occupational safety regulations and, in a risk assessment, must also identify additional hazards that arise as a result of the special working conditions at the place of use of the machine. He must implement these in the form of operating instructions for the operation of the machine.
- The operator must check during the entire period of use of the machine whether the operating instructions he has prepared comply with the current state of the regulations and adjust them if necessary.
- The operator must clearly regulate and determine the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- The operator must ensure that all persons handling the machine have read and understood this manual. In addition, he must train the staff at regular intervals and inform them about the dangers.
- The operator must provide the personnel with the necessary protective equipment and bind the wearing of the necessary protective equipment in a binding manner.

Furthermore, the operator is responsible for ensuring that the machine is always in perfect technical condition. Therefore, the following applies:

- The operator must ensure that the maintenance intervals described in this manual are adhered to.
- The operator must have all safety equipment regularly checked for functionality and completeness.

2.3 Qualification of the staff

The various tasks described in this manual place different demands on the qualifications of the persons entrusted with these tasks.

WARNING!

Danger due to insufficient qualification of persons!

Insufficiently qualified persons can not assess the risks involved in handling the machine and expose themselves and others to the risk of serious or fatal injuries.

- All work should only be carried out by qualified persons.
- Keep inadequately qualified persons out of the work area.

Only persons who are expected to carry out this work reliably are permitted for all work. Persons whose reactivity z. As influenced by drugs, alcohol or drugs are not allowed.

This manual identifies the qualifications of the persons listed below for the different tasks:

Operator:

The operator has been instructed in a briefing by the operator about the tasks assigned to him and possible dangers of improper behavior. The operator may only carry out tasks that go beyond normal operation if this is specified in this operating manual and the operator has expressly entrusted this to him.

Electrician:

Due to their professional training, knowledge and experience as well as knowledge of the relevant standards and regulations, the electrician is in a position to carry out work on electrical installations and to recognize and avoid possible dangers independently.

Personnel:

Due to their technical training, knowledge and experience, as well as knowledge of the relevant standards and regulations, qualified personnel are in the position to carry out the work assigned to them and to recognize possible dangers independently and to avoid hazards.

Manufacturer:

Certain work may only be carried out by specialist personnel of the manufacturer. Other personnel are not authorized to carry out this work. To carry out the work, contact our customer service.

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:

Respirator mask

The dust mask serves to protect the respiratory tract from wood chips and wood dust.

Hearing protection

Hearing protection protects against hearing damage caused by noise.

Safety goggles

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

Protective gloves

The protective gloves are designed to protect the hands from sharp-edged components, as well as from friction, abrasions or deeper injuries.

Safety shoes

The safety shoes protect the feet from crushing, 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 labels on the device

The following safety markings are attached to the Wood Lathe (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.

2.6 General Safety Instructions

This machine is equipped with various safety devices to protect both the operator and the machine. Before starting to operate the machine, you must read and fully understand the manual. In addition, the operator must also consider other aspects of the danger in relation to the environmental conditions and the material.

Please note the following:

- Before connecting the device to the power supply, make sure that all safety devices are switched off.
- devices are installed and functional.
- If it is necessary to remove protective covers, switch off the machine and pull out the mains plug.
- Do not connect the machine to the power supply when the protective cover has been removed.
- Never touch a rotating tool with your hands.
- Replace damaged tools immediately.
- Keep the handles dry, clean and free of oil and grease.
- If you are not working on the machine, switch the machine off and pull the mains plug.
- Before cleaning or maintenance work, switch off the machine and pull out the mains plug.
- Never pull the power cord to disconnect the machine from the mains. Keep the cable away from heat, oil and sharp edges.
- No changes may be made to the machine.
- Perform regular inspections according to the instructions in the manual.
- Make sure that no user-caused malfunctions can occur on the machine.
- Do not damage, alter or remove the safety instructions attached to the machine. If they become illegible or are lost, contact the manufacturer and renew the safety instructions.
- Always keep the working area clean and accessible.
- Before switching on the machine, check that assembly tools have been removed from the machine's working area.
- Consider the surroundings of the working area. Do not use the machine in a damp or wet environment.
- Keep the working area well lit.
- Do not use the machine near flammable liquids or gases.
- Before starting work, remove objects such as rings, watches, bracelets, ties, etc. and protect or fix your hair so that it does not hang on parts of the machine or can be pulled in by rotating machine parts.
- Wear shoes that are recommended or required by the health and safety regulations of all countries.
- Always wear the necessary safety equipment (safety goggles, respiratory protection, safety shoes, hearing protection, etc.).
- Always wear a dust mask while working on material that generates dust during the process.
- Never wear loose work clothes.
- Do not work on the machine under the influence of drugs or alcohol and when tired.
- Only use original HOLZSTAR accessories and spare parts.
- Repairs may only be carried out by qualified technicians using original spare parts, otherwise considerable danger for the user may arise.

2.7 Safety devices

Motor circuit breaker

NOTE!

In the motor of the lathe there is a thermal protection switch which automatically switches off the motor in case of thermal overload.

After removing the cause of the overload and waiting until the motor has cooled down completely, the motor can be started again.

3 Intended use

The Wood Lathe DB 1102 VARIO is designed exclusively for turning wood or wood-like materials. All specified data (see chapter "Technical Data") must be observed. It is suitable for private use, not for industrial use.

Intended use also includes compliance with all specifications in this manual. Any use beyond the intended use or other use is considered misuse.

Stürmer Maschinen GmbH does not assume any liability for design and technical modifications to the Wood Lathe. Claims of any kind for damage due to improper use are excluded.

3.1 Foreseeable misuse

- It is not permitted to operate the machine with materials that are not explicitly mentioned in this manual.
- It is not permitted to machine materials with dimensions and diameters outside the limits specified in this manual.
- Never machine several workpieces at the same time.
- It is not permitted to operate the machine without the safety devices provided.

3.2 Residual risks

Even if all safety regulations are complied with and the device is used as intended, the following residual risks must be observed:

- Risk of injury due to contact with live components.
- Risk of serious injury (especially cuts) due to improper handling/guiding of the tools. Always away from the body.
- Risk of injury to hands/fingers from the rotating workpiece during operation. Always guide tools away from the body.
- Hearing damage, unless the user has taken precautions for hearing protection.
- Risk of injury due to tool kickback, ejection of the workpiece or parts thereof.
- Risk of injury to the eyes from flying parts, even with safety glasses.

These risks can be minimized if all safety regulations are applied, the machine is properly maintained and cared for and the machine is operated as intended and by appropriately trained personnel.

4 Technical Data

Model	DB 1102 VARIO
Length approx.	1968 mm
Width/depth approx.	572 mm
Height approx.	1194 mm
Weight	175 kg
Supply voltage	230 V
Max. turning diameter	408 mm
Max. height	203 mm
Max. width	1067 mm
Spindle head thread	M 33 x 3,5
Speed	Fast: 250-3200 U/min Slow: 100-1200 U/min
Speed stages	2
Control of the speed regulation	Electronic variable
Taper of tailstock sleeve	MK2
Travel of tailstock sleeve	102 mm
Motor power output	1,5 kW
Rated current	8 A

4.1 Type plate

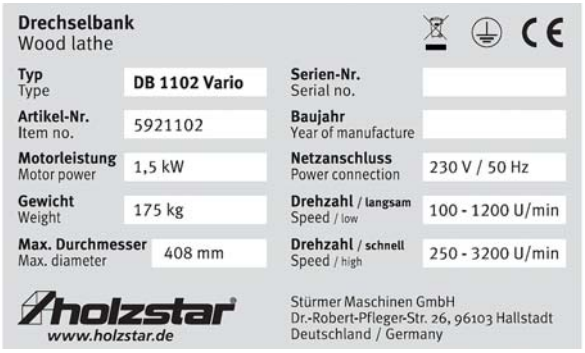

Fig. 2: Type plate DB 1102 VARIO

5 Transport, packaging, storage

5.1 Delivery

Check the Wood Lathe for visible shipping damage after delivery. If you discover damage to the Wood Lathe, immediately report it to the carrier or dealer.

Transport

Improper transport 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.

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.

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 disturban-ces 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 / pallet truck:

For shipping, the device packed in a wooden box is delivered on a pallet so that it can be transported by a forklift or a 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 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

The Wood Lathe must be thoroughly cleaned before it is stored in a dry, clean and frost-free environment. Cover the machine with a protective tarpaulin.

6 Description of the Device

6.1 Machine

Illustrations in these operating instructions may differ from the original.

Fig. 3: Wood Lathe DB 1102 VARIO

1 Protective cover spindle
2 Control panel
3 Workpiece holder
4 Tool rest
5 Clamping lever of the tool rest
6 Quill
7 Tailstock
8 Handwheel for moving the quill
9 Tailstock clamping lever
10 Machine bed
11 Machine base
12 Motor clamping lever
13 Motor

6.2 Control Panel

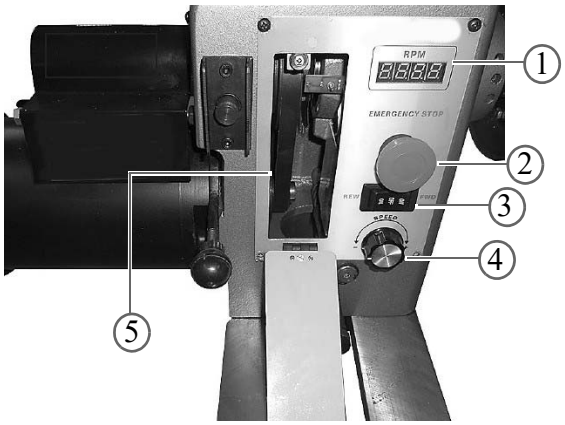

Fig. 4: Control panel

1 Digital display speed
2 Emergency stop buttons
3 Direction switch spindle
4 Speed controller
5 Drive belt

1 - Speed indicator

The currently set speed is displayed here.

2 - Emergency stop button

Stops the motor when it is pushed in. Prevents restarting until it is reset. Reset the switch by turning it clockwise until it pops out.

3 - Direction of rotation switch

The direction of rotation of the lathe can be set by the direction switch. Two speed levels can be selected with the switch.

- Spindle rotation direction right (FWD)
- Spindle rotation direction left (REW)

DANGER!

Wait until the spindle has come to a complete stop before changing the direction of rotation with the direction switch. Changing the direction of rotation during operation can destroy the motor and the direction switch.

4 - Speed controller

Stepless adjustment of the speed

7 Scope of delivery

- Driver
- Tailstock
- Locking pin
- Hand rest 360 mm
- Clamping disk 150 mm
- Operating tool

8 Accessories

- Four-jaw chuck Ø 150 mm M33 x 3,5
Item number: 5931020
- Four-jaw chuck M33 x 3,5, Profi-Set
Item number: 5931054
- Faceplate for four-jaw chuck Profi-Set
Item number: 5931055
- Driver set MK2, 3-piece
Item number: 5931056
- Four-jaw chuck Ø 95 mm Premium-Set
Item number: 5931057
- Four-jaw chuck Ø 115 mm Premium-Set
Item number: 5931058

9 Setting up and connection

9.1 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.
- There must be sufficient space for the operating personnel, for material transport as well as for adjustment and maintenance work.
- The site must have good lighting.

9.2 Setting up the Wood Lathe

ATTENTION!

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!

Pay attention to the weight of the machine! The machine may only be set up by two persons. Check the aid accordingly for sufficient dimensioning and load capacity.

DANGER!

To ensure sufficient stability of the machine, it should be bolted to the ground. For this purpose there are 4 holes at the bottom of the machine frame.

The Wood lathe (A, Fig.5) is supplied in 2 separate parts and is already largely assembled. The base of the machine (B, Fig.5) must be assembled after delivery.

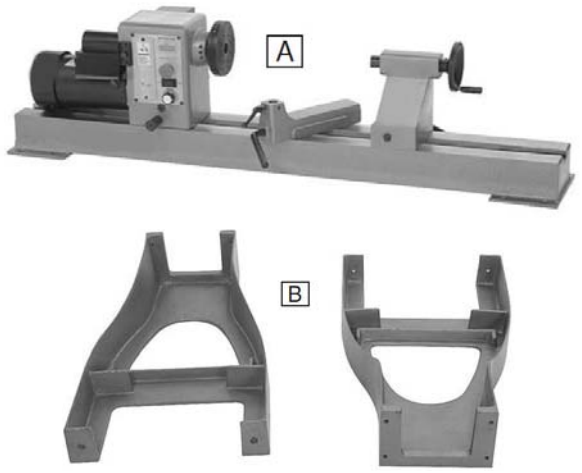

Fig. 5: Scope of delivery

Mounting the machine on the machine frame

The following steps will make the machine ready for operation:

Step 1: Unpack the machine and check for completeness and damage.

Step 2: Lift the machine onto the machine frame with the help of a second person.

Step 3: Fasten the machine to the machine frame with 8 Allen screws

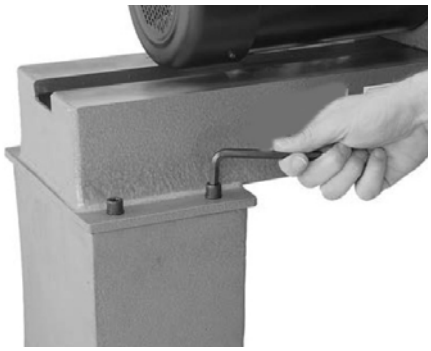

Fig. 6: Assembly lathe and machine base frame

Step 4: If the machine is not fixed to the floor, screw the 4 machine feet into the machine base and align.

Fig. 7: Screw in machine feet

Fixing the machine on the ground

In order to achieve the required stability of the lathe, the lathe can be connected to the ground at its machine frame. We recommend the use of compound anchor cartridges or heavy duty anchors.

Fasten the lathe to the ground using the holes provided in the machine frame.

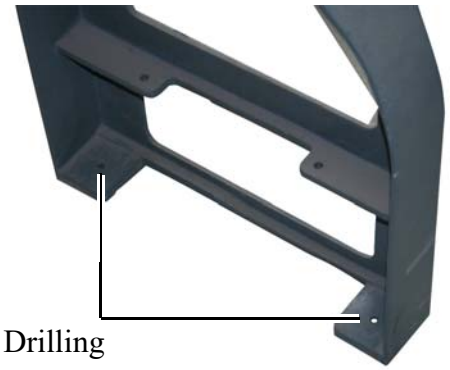

Fig. 8: Drilling

Mounting the tool holder

The tool holder can be attached to the rear part of the machine with the screws.

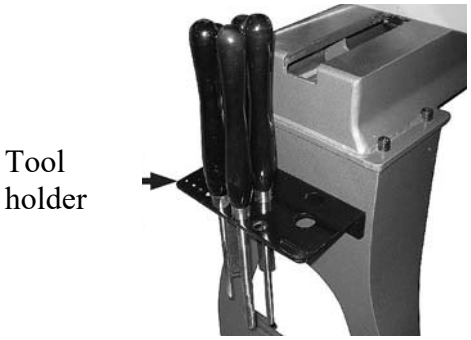

Fig. 9: Mounting the tool holder

9.3 Electrical connection

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.

DANGER!

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

Step 1: Plug the plug into a 230V power outlet.

Step 2: The machine is now ready for operation.

10 Commissioning of the wood lathe

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.

- Disconnect the power before starting adjustments to the machine.

CAUTION!

Risk of crushing!

Improper work on the machine may cause injury to the upper limbs of the machine.
measured.

DANGER!

Check the electrical connection, cables and contacts before commissioning.

NOTE ON LUBRICATION!

All moving parts must be lubricated before the lathe is used. The belt cover must be removed to lubricate the gear and drive shafts. Only adhesive grease may be used here, otherwise it may lead to malfunctions!

In addition, guides, quills and bearings must be lubricated or oiled with commercially available grease.

WARNING!

Danger to life!

There is danger to life for the operator and other persons if they do not observe the following rules.

- The Wood Lathe may only be operated by a trained and experienced person.
- The operator must not work when under the influence of alcohol, drugs or medication.
- The operator must not work if he is overtired or suffers from concentration disturbing diseases.
- The Wood Lathe may only be operated by one person. Other persons must stay away from the work area during operation.

Wear ear protection!

Wear protective goggles!

Wear safety shoes!

Wear protective work clothing!

Wear a respirator!

10.1 Switching on the machine

Step 1: Connect the machine to the power supply.

Step 2: Press the emergency stop button and turn it clockwise. The machine is now ready for operation.

Fig. 10: Switch on the machine (emergency stop button)

Step 3: Set direction switch to FWD to turn on the machine.

10.2 Switching off the machine

Step 1: Turn the direction switch to the middle. Press neutral position.

Step 2: Press the emergency stop button.

NOTE!

If the wood lathe is not used for a longer period of time, disconnect the power plug.

10.3 Speed variation with speed controller

You can continuously adjust the speed of the lathe in two speed ranges.

10.4 Speed change due to belt change

DANGER!

Do not open the protective cover until the lathe is disconnected from the power supply.

Close and screw the protective cover after each change of position of the V-belt.

Ensure that the drive belt has the correct tension.

If the tension of the drive belt is too high or too low

Drive belt can cause damage.

Step 1: Switch off the lathe and pull the power plug.

Step 2: Open the protective cover.

Step 3: Loosen the motor fixing screw (Fig.11).

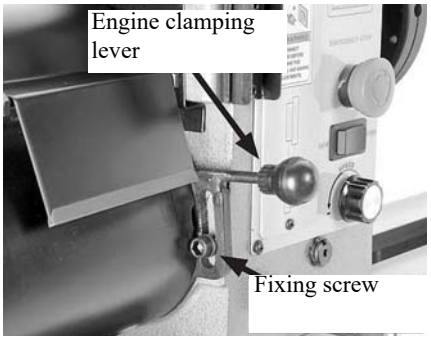

Fig. 11: Loosen motor mounting screw

Step 4: Motor assembly using the motor clamping lift the lever upwards.

Step 5: Tighten the engine mounting screw (Fig.11).

Step 6: Place the belt on the desired pulley set.

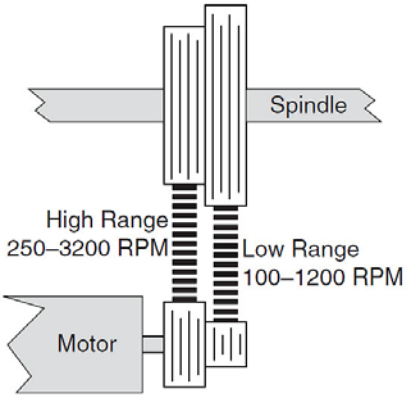

Fig. 12: Set speed

Step 7: Loosen the motor mounting screw (Fig.11)

Step 8: Push down the motor tensioning handle to tension the drive belt.

Step 9: Tighten the motor fastening screw (Fig.11).

Step 10: Close the protective cover again.

NOTE!

When the belt is properly tensioned, the belt should bend about 1⁄4" if moderate pressure is applied to the belt in the middle between the upper and lower pulleys.

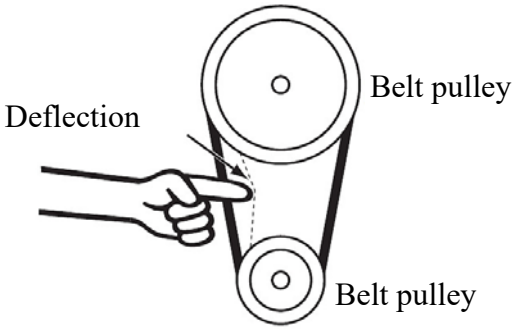

Fig. 13: Check belt tension

10.5 Adjusting the tailstock

With the lathe you have the possibility to move the tailstock on the machine bed.

Step 1: Release the clamping lever to slide the tailstock to the desired position on the machine bed.

Step 2: Tighten the clamping lever again to fix the tailstock

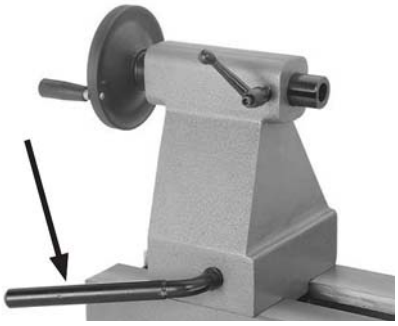

Fig. 14: Moving the tailstock

NOTE!

The hexagon clamping nut under the tailstock must be adjusted from time to time to ensure the correct clamping pressure of the tailstock on the bed.

10.6 Adjusting the tailstock

Proceed as follows to fit the center point into the tailstock quill:

Step 1: Loosen the clamping lever of the sleeve.

Step 2: Turn the handwheel to the right until the quill protrudes about 25 mm.

Step 3: Insert the centring tip into the sleeve.

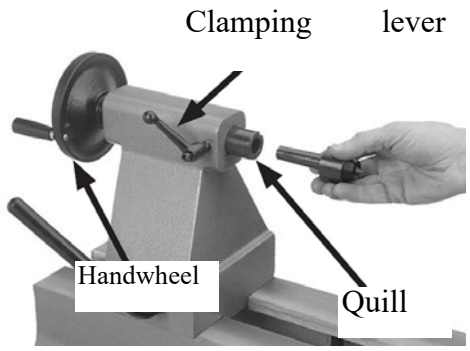

Fig. 15: Inserting the centering point

Step 4: Check if the centering tip is tight.

Step 5: Retighten the clamping lever of the sleeve.

Proceed as follows to remove the center point from the tailstock quill

Step 1: Loosen the clamping lever of the sleeve.

Step 2: Turn the spindle completely backwards by turning the handwheel to the left.

Step 3: Remove the centering point.

10.7Adjusting the tool rest

Use the tool rest to safely guide the turning tool and as support for the hand. Always operate the lathe with the tool rest firmly engaged. Failure to do so may result in serious injury.

Proceed as follows to mount the tool rest on the machine bed:

Step 1: Loosen the clamping lever of the tool rest to slide the tool rest to the desired position on the machine bed.

Step 2: Tighten the clamping lever again to fix the tool rest.

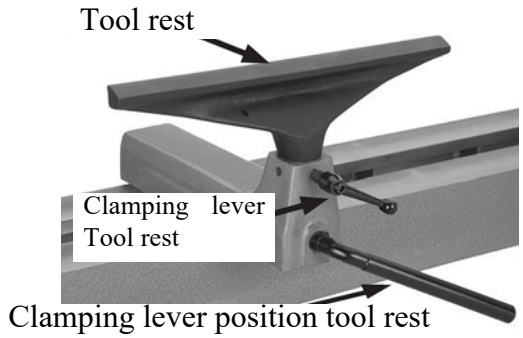

Fig. 16: Adjusting the tool rest

NOTE!

The hexagon clamping nut under the tool rest must be adjusted from time to time to ensure the correct clamping pressure on the bed.

Proceed as follows to set the height and angle of the tool rest

Step 1: Loosen the clamping lever of the tool rest.

Step 2: Adjust the tool rest to obtain the desired position.

Position the tool rest approximately "1⁄4" from the workpiece and approximately "1⁄8" above the workpiece centerline (see Figure 17).

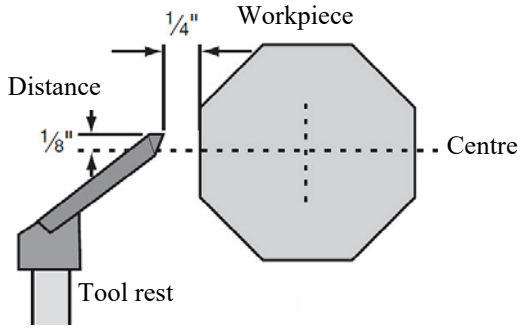

Fig. 17: Positioning the tool rest

Step 3: Tighten the tool rest clamping lever.

10.8 Adjusting the headstock

With the lathe you also have the possibility to move or swivel the headstock on the machine bed.

DANGER!

Always operate the lathe with the headstock firmly locked to the bed. Failure to do so may result in serious injury.

Proceed as follows to move the headstock on the

to move the machine bed:

Step 1: Switch off the machine and pull the mains plug.

Step 2: Loosen the clamping lever of the headstock lock (Fig.18).

Fig. 18: Positioning of the headstock

Step 3: Adjust the headstock to obtain the desired position

Step 4: Tighten the clamping lever of the headstock lock again.

NOTE!

The hexagon clamping nut under the tool rest must be adjusted from time to time to ensure the correct clamping pressure on the bed.

Proceed as follows to swivel the headstock on the machine bed:

Step 1: Switch off the machine and pull the mains plug.

Step 2: Loosen the clamping lever of the headstock lock (Fig.18).

Step 3: Pull out the swivel pin (Fig.19) and turn the headstock to the desired position.

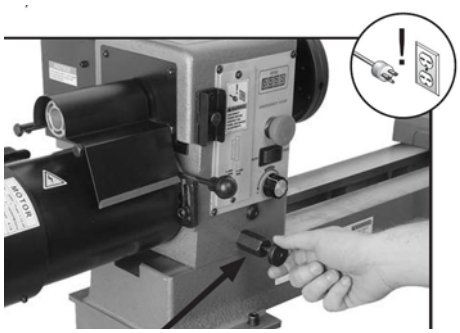

Fig. 19: Tilting the headstock

Step 4: Release the pivot bolt (Fig.19) to lock the headstock. Make sure that the pin is inserted into the headstock engages.

NOTE!

The swivel pin can lock the headstock at 45°, 90°, 135°, 180°, 270° and 360°.

Step 5: Retighten the clamping lever of the headstock lock (Fig.18) firmly.

10.9 Mounting the faceplate

Proceed as follows to mount the faceplate:

Step 1: Switch off the machine and pull the mains plug.

Step 2: Press the spindle lock and turn the spindle by hand.

Fig. 20: Mount the face plate

Step 3: Screw the face plate onto the spindle.

Step 4: Tighten the 3 set screws centrically along the inside of the face plate.

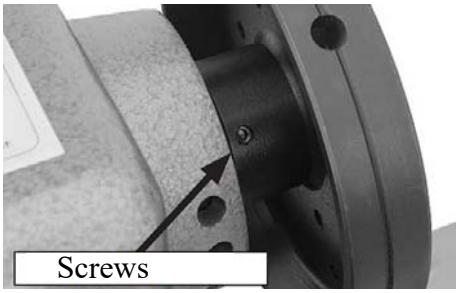

Fig. 21: Tighten the faceplate

DANGER!

To prevent the faceplate and workpiece from coming off the spindle during operation, the headstock faceplate MUST be screwed firmly onto the spindle and secured by fully tightening the three faceplate set screws. Failure to follow these instructions properly may result in serious injury.

NOTE!

To remove the headstock faceplate, disconnect the machine from the power source and perform the above steps in reverse order.

10.10 Inserting the driver

Proceed as follows to insert the driver into the spindle

Step 1: Switch off the machine and pull the mains plug.

Step 2: Remove the faceplate. (If available)

Step 3: Insert the driver into the sleeve with a quick and firm movement.

Fig. 22: Insert driver

Step 4: Check if the driver is tight.

Proceed as follows to remove the driver from the spindle

Step 1: Switch off the machine and pull the mains plug.

Step 2: Put on gloves to hold the driver.

Step 3: Insert the ejector mandrel through the outer end of the spindle.

Step 4: By tapping on the centre of the ejector mandrel, release the driver.

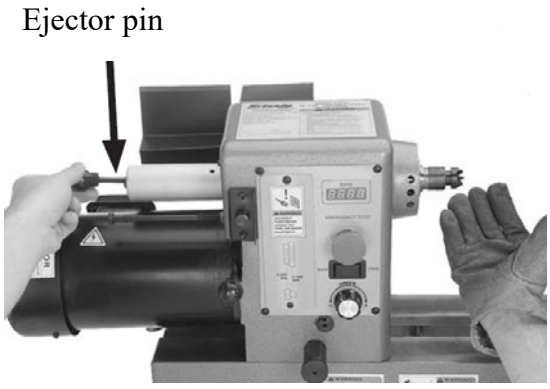

Fig. 23: Release driver

11 Operation

11.1 Material selection

The wood lathe must be of good quality and without defects such as cross cracks or knots. Defective wood tends to splinter and becomes a risk for the operator and the machine. Workpieces made of glued wood should only be processed by an experienced craftsman.

Turning these woods requires careful gluing without weak points, as the workpiece can be destroyed due to the centrifugal force generated..

11.2 Material preparation

For turning long logs, the material must first be cut to a square shape. For the turning of crossbars, the material must also be cut raw. You can saw the crossbar raw with a band saw, for example. An octagonal shape is suitable, so vibrations can be avoided.

11.3 Center workpiece

The centering of the prepared workpieces is an important operation before inserting them into the machine. Centering means measuring the center of the workpiece, marking it with grains and punching a recess of 1.5 mm to 2 mm diameter into the center. If the workpiece is not precisely centered, the unbalance will cause excessive vibration. This can result in the workpiece being ejected.

NOTE!

A clean concentricity can only be achieved by exact workpiece centring.

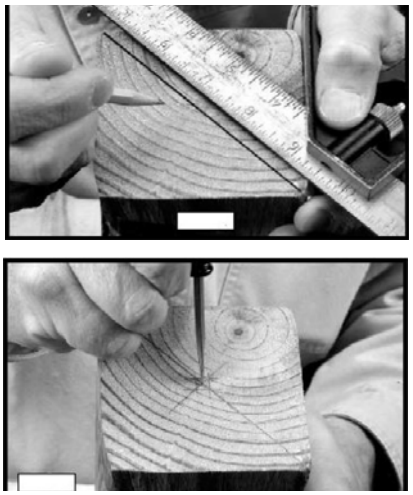

Fig. 24: Center workpiece

11.4 During the turning process

The unmachined workpiece must be machined at low speed. After pre-turning, i.e. when the basic shape of the workpiece has been achieved, as well as uniform concentricity, the speed can be increased. The revolving centre punch must be readjusted in between by means of the handwheel with the motor switched off. The centre punch must be firmly seated in the wood. Turn the workpiece by hand to check that it is firmly seated between the points.

11.5 Processing operation

To complete a typical machining operation, the operator performs the following:

Step 1: Ensure that the workpiece is suitable for turning. There must be no extreme arcs, knots or cracks.

Step 2: Prepare the workpiece with a band saw or table saw and cut so that it is approximately concentric.

Step 3: Clamp the workpiece between the centres or attach it to the faceplate or chuck.

Step 4: Adjust the tool rest according to the type of operation.

Step 5: Turn the workpiece by hand to ensure that the spindle and workpiece can rotate freely over the entire range of motion.

Step 6: Put on safety goggles, ear protection and respiratory protection.

Step 7: Turn emergency stop button clockwise to release it.

Step 8: Set spindle direction control to Forward or Switch backwards and set the appropriate speed.

Step 9: Perform the operation.

Step 10: Switch off the machine as soon as the operation is completed.

DANGER!

Switch off the machine before changing the direction of rotation.

12 Care,maintenance and repair

DANGER!

Risk of fatal injury due to electric shock!

Contact with live components may result in fatal injury. Switched-on electrical components can make uncontrolled movements and lead to serious injuries.

- Before starting cleaning and maintenance work, switch off the machine and disconnect the mains plug.
- Connections and repairs to the electrical equip-ment may only be carried out by a qualified electrician.

12.1 Care after work

Use protective gloves!

NOTE!

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

Step 1: Unplug the power cord from the wall outlet.

Step 2: Clean the machine of chips and dust with compressed air (Attention: wear protective goggles and dust mask!) and/or with a dry cloth.

Step 3: Spray or oil all unpainted metal surfaces with some anti-rust spray.

Step 4: Clean the sleeve, grease the thread.

Step 5: Check the machine for damage to the Check safety devices. If necessary, carry out or arrange for the repair, observing the safety instructions.

Step 6: Check the machine regularly for

- Appropriate tension of the drive belt
- Loose screws and nuts
- Worn or damaged switches

Step 7: Check the drive belt every 6 months, or monthly if used daily, and replace it if worn or damaged.

12.2 Maintenance and repair

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.All protection and safety equipment must be reinstalled immediately after completion of repair and maintenance work

12.2.1 Functional test

The lathe is delivered ready for operation.

A functional test should be carried out before each use.

The drive belt must be under tension.

Check the direction of rotation of the workpiece.

12.2.2 Lubrication

Oil shafts, threads, quills and guides regularly (at least once a month or more often if necessary).

All bearings have been lubricated and sealed at the factory and do not require any additional lubrication.

12.2.3 Changing the drive belt

The drive belt must not come into contact with oil or grease. It must be checked regularly for wear, cracks or brittleness.

Replace the drive belt if necessary, at least once a year.

Proceed as follows to replace the drive belt:

Step 1: Switch off the machine and pull the mains plug.

Step 2: Remove belt access flap.

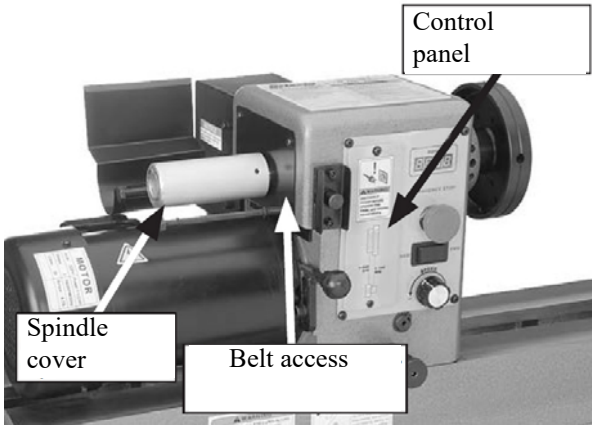

Fig. 25: Change drive belt

Step 3: Remove the spindle cover and the two hexagonal bolts.

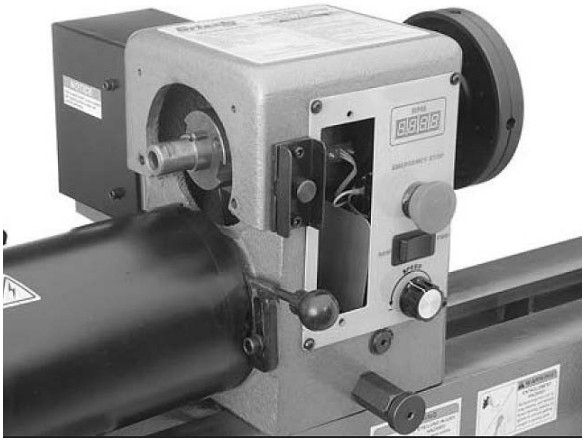

Fig. 26: Remove spindle cover

Step 4: Loosen and remove the 3 set screws on the spindle.

Step 5: Loosen the socket head screw of the motor mounting (Fig.11).

Step 6: Unroll the belt from the lower pulley of the motor.

Step 7: Pull out the belt from the lateral belt access flap.

Step 8: Install the new belt in the opposite direction.

Step 9: Tension the belt.

Step 10: Replace the spindle cover and the access flaps.

13 Troubleshooting

Fault	Possible causes	Remedy
The workpiece surface is too rough	1. Turning tools out of focus, 2. Turning iron springs	1. sharpen turning tools 2. Tighten the turning iron for a shorter period
The workpiece becomes conical	1. Tips are not aligned (tailstock offset)	1. Align the tailstock to the middle
The workpiece flutters	1. Workpiece loosens when working 2. Centering not centered 3. Too high speed	1. Observe the working instructions in the operating instructions 2. Center workpiece 3. Select lower speed
Strong vibrations	1. Workpiece warped, non-circular, has large flaws / cracks or was not prepared for turning 2. Worn out spindle bearing 3. worn belt 4. Engine mounting or handle loose 5. Turning lathe stands on uneven surface	1. Prepare workpiece by planing, sawing for turning 2. Replace spindle bearing 3. Replace belt 4. Tighten screws and handle 5. Place lathe on level surface and align
Engine is not running	1. Motor incorrectly connected 2. Fuse defective	1. Let it checked by a specialist 2. Let it checked by a specialist
Engine overheats and has no power	1. Motor overloaded 2. too low mains voltage 3. Motor incorrectly connected	1. Reduce feed 2. Switch off and have it checked by a specialist 3. Have it checked by a specialist
Poor work accuracy	1. Uneven, heavy or distorted workpiece 2. Inaccurate horizontal position of the tool rest	1. Balance the workpiece in a balanced way and clamp it tension-free 2. Align tool rest
Digital display does not work	1. Digital display sensor not in the correct position	1. Open the belt cover and position the sensor so that it detects the screws

14 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.

14.1Decommissioning

Disused machines must be decommissioned immediately to prevent misuse at a later point and putting the environment or persons at risk.

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.

14.2Disposal 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 waste management company can be used for the treatment.

14.3 Disposal of lubricants

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

14.4 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.

15 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.

- Exclusively genuine spare parts made by the manufacturer or spare parts authorised by the manufacturer shall be used.
- Always contact the manufacturer if you are unsure.

Tips and recommendations

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

15.1 Ordering spare parts

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 determine 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 engine for the Wood Lathe DB 1102 VARIO must be ordered. The engine has the number 61 in the spare parts drawing 2.

By ordering spare parts, send a copy of the spare parts drawing (2) with the marked part (engine) and marked positon number (61) to the dealer or spare parts department and provide the following information:

- Type of device: **Wood Lathe DB 1102 VARIO**
- Item number: **5921102**
- Drawing number: **2**
- Position number: **61**

15.2 Spare parts drawings DB 1102 VARIO

The following spare parts drawings 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.

Spare parts drawing 1

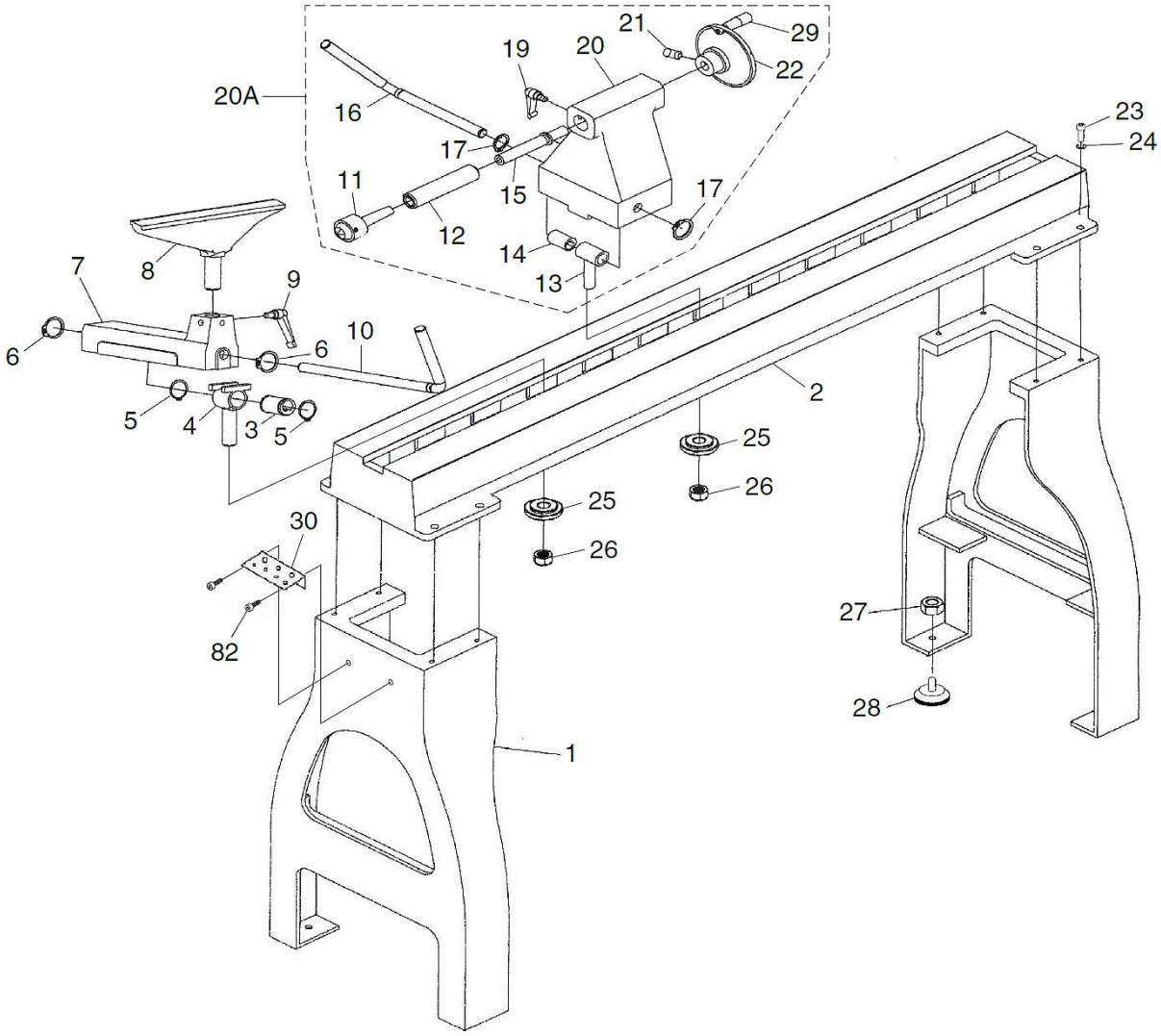

Fig. 27: Spare parts drawing 1 Wood Lathe DB 1102 VARIO

Spare parts drawing 2

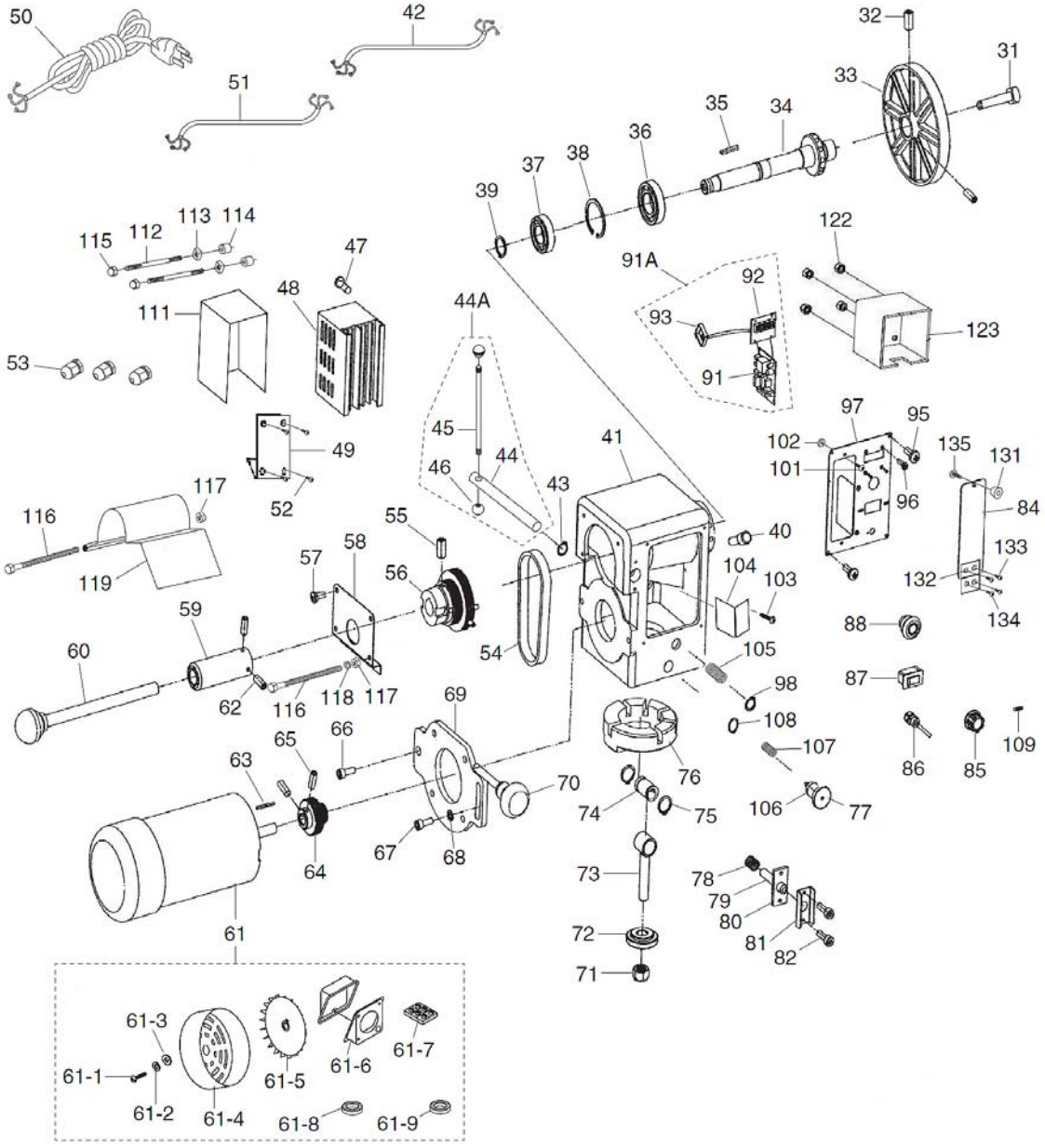

Fig. 28: Spare parts drawing 2 Wood Lathe DB 1102 VARIO

16 Electrical circuit diagram

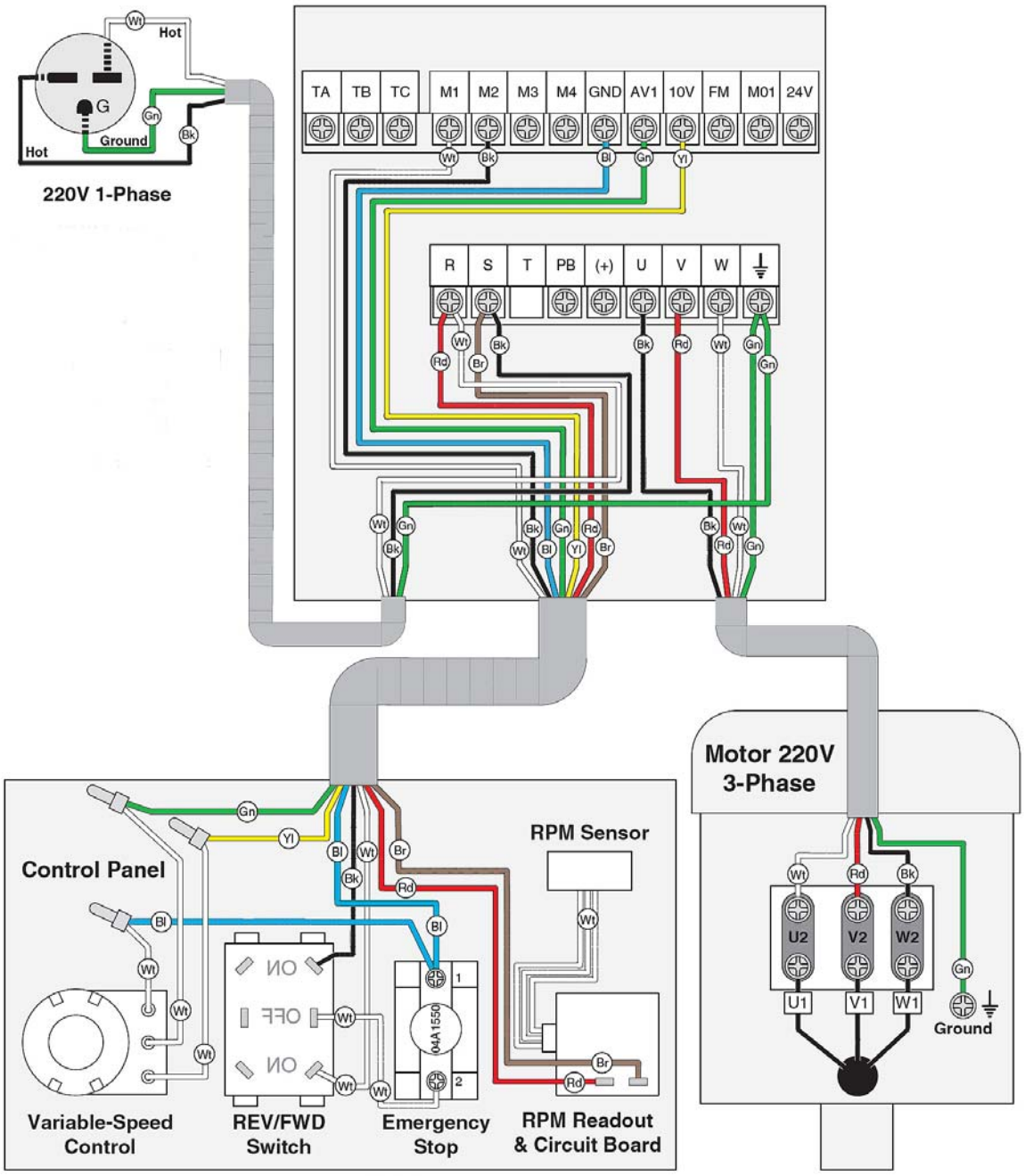

Fig. 29: Electrical circuit diagram DB 1102 VARIO

17 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® Woodworking machines

Machine type: Wood Lathe

Description of the machine: DB 1102 VARIO

Item number: 5921102

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 12100:2011-03	Safety of machinery - General principles for design - Risk assessment and risk reduction
DIN EN 60204-1:2006/A1:2009-10	Safety of machinery - Electrical equipment of machines - Part 1: General requirements
DIN EN 61000-6-2:2005-02	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments
DIN EN 61000-6-4:2011-09	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments
DIN EN 55014-1:2018-08	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission
DIN EN 55014-2:2016-01	Electromagnetic compatibility - Requirements for household appliances , electric tools and similar apparatus - Part 2: Immunity - Product family standard
DIN EN 61000-3-2:2015-03	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
DIN EN 61000-3-3:2014-03	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection

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

Hallstadt, 03.03.2021

Kilian Stürmer
Geschäftsführer

18 Notes


stürmer
OPTIMUM