

User's manual – AREBOS Bench drill 500W

# AREBOS

## Bench drill 500 W

AR-HE-TBM500



Please follow all security measures in this user's manual to ensure a secure use.

CE

Thank you for trusting AREBOS.

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Please read and save these instructions. Read through this user's manual carefully before using this product. Protect yourself and others by observing all safety information, warnings and cautions. Failure to comply with instructions could result in personal injury and/or damage to product or property. Please retain instructions for future reference.

# 1. Safety instructions

## 1.1 Explanation of the symbols



By means of a CE marking, it can be recognized that a product complies with the legal requirements of European legal standards and therefore may be traded within the European Community.



This product **must not** be disposed of with household waste!



**Warning!** Read the safety instructions carefully. Failure to follow the safety precautions could result in serious injury or damage. Keep the operating instructions in a safe place.



**Warning!** Wear ear protection!



**Warning!** Wear a mask!



**Warning!** Wear safety glasses!



Take special care when using this article.



Do not wear gloves.



Do not wear long hair loose. Use a hair net.



Watch your step! Laser beam! Do not look into the beam!

## 1.2 Safety rules

- **Keep all safety information and instructions for the future.** The term "power tool" used in the safety instructions refers to mains operated power tools (with mains cable) and battery-operated power tools (without mains cable).
- **Warning!** Read all safety notes and instructions. Failure to observe the safety instructions can cause electric shock, fire and/or serious injury.
- **Attention! The machine must be securely fastened to the floor with suitable screws as there is a risk of tipping over.**

## 1.3 Safety work area

- Keep your workspace in order. Disorder in the work area can result in accidents.
- Take environmental influences into account. Do not expose power tools to rain. Do not use power tools in a damp or wet environment. Ensure that the working area is well lit. Do not use power tools where there is a risk of fire or explosion.
- Protect yourself from electric shock. Avoid body contact with earthed parts (e.g. pipes, radiators, electric cookers, refrigerators).
- Keep other persons away. Do not allow other persons, especially children, to touch the power tool or the cable. Keep them away from your work area.
- Keep unused power tools safe. Unused power tools should be stored in a dry, elevated or locked location out of the reach of children.
- Do not overload your power tool. You will work better and safer in the specified power range.
- Use the correct power tool. Do not use low-power machines for heavy work. Do not use the power tool for purposes for which it is not intended. For example, do not use a hand-held circular saw to cut tree branches or wood chips.
- Wear suitable clothing. Do not wear wide clothing or jewellery, they may be caught by moving parts. When working outdoors, non-slip footwear is recommended. Wear a hair net for long hair.
- Use protective equipment. Wear protective goggles. Use a breathing mask for dust-generating work.

- Connect it to a vacuum cleaner. If there are connections for dust extraction and collection, make sure that they are connected and used correctly.
- Do not use the cable for purposes for which it is not intended. Do not use the cable to disconnect the plug from the outlet. Protect the cable from heat, oil, and sharp edges.
- Secure the workpiece. Use clamping devices or a vice to hold the workpiece. It is therefore held more securely than with your hand.
- Avoid abnormal posture. Ensure a secure stand and maintain balance at all times.
- Maintain your tools with care. Keep the cutting tools sharp and clean to work better and safer. Follow the lubrication and tool change instructions. Check the connection wiring of the power tool regularly and have it replaced by an approved specialist if damaged. Check extension cords regularly and replace them if damaged. Keep handles dry, clean and free of oil and grease.
- Disconnect the plug from the socket. When not using the power tool, before maintenance and when changing tools such as saw blade, drill bit, milling cutter.
- Do not leave any tool keys inserted. Before switching on, check that the keys and setting tools have been removed.
- Avoid unintentional start-up. Make sure that the switch is turned off when the plug is plugged into the socket.
- Use an extension cord for outdoor use. In the open air, only use extension cables approved for this purpose and marked accordingly.
- Be careful. Pay attention to what you are doing. Get to work with common sense. Do not use the electrical tool if you are not concentrated.
- Check the power tool for possible damage. Before continuing to use the power tool, carefully inspect protective devices or slightly damaged parts to ensure that they are functioning properly and in accordance with their intended purpose. Check that the moving parts function properly and are not jammed or that parts are damaged. All parts must be properly assembled and meet all conditions to ensure proper operation of the power tool. Damaged safety devices and parts must be repaired or replaced by a recognised specialist workshop in accordance with their intended use, unless otherwise specified in the instructions for use. Damaged switches must be replaced at a customer service workshop. Do not use power tools if the switch cannot be switched on and off.
- **Caution!** The use of other tools and accessories may result in injury.
- Have your power tool repaired by a qualified electrician. This power tool complies with the relevant safety regulations. Repairs may only be carried out by a qualified electrician using original spare parts.
- Never obscure warning labels on the power tool.
- Mount the power tool on a firm, level and horizontal surface. If the power tool can slip or wobble, the insertion tool cannot be guided evenly and safely.
- Keep the work surface clean except for the workpiece to be machined. Sharp-edged drilling chips and objects can lead to injuries. Material mixtures are especially dangerous. Light metal dust can burn or explode.
- Guide the insert tool only switched on against the workpiece. Otherwise there is a risk that the insert tool will get caught in the workpiece and the workpiece will be taken with it. This can lead to injuries.
- Do not enter the drilling area with your hands while the power tool is running. There is a risk of injury if you come into contact with the insert tool.
- Never remove drill chips from the drilling area while the power tool is running. Always move the drive unit first to the rest position and switch off the power tool.
- Do not remove any drilling chips with bare hands. Hot and sharp-edged metal chips in particular pose a risk of injury.

- Break long drilling chips by interrupting the drilling process by briefly turning back the turning wheel. There is a risk of injury due to long drilling chips.
- Keep handles dry, clean and free of oil and grease. Greasy, oily handles are slippery and lead to loss of control.
- Use fixtures to clamp the workpiece. Do not machine workpieces that are too small to clamp. If you hold the workpiece by hand, you cannot secure it sufficiently against twisting and injure yourself.
- Turn off the power tool immediately if the insert tool blocks. The insert tool will lock if: the power tool is overloaded or it cants in the workpiece to be machined.
- Do not touch the insert tool after machining until it has cooled down. The insert tool becomes very hot when working.
- Inspect the cable regularly and have a damaged cable repaired only by an authorised service centre. Replace damaged extension cables. This will ensure that the safety of the power tool is maintained.
- Keep the unused power tool safe. The storage area must be dry and lockable. This prevents the power tool from being damaged during storage or from being operated by inexperienced persons.
- Never leave the tool before it has come to a complete stop. Trailing insert tools can cause injuries.
- Do not use the power tool with a damaged cable. Do not touch the damaged cable and disconnect the power plug if the cable is damaged during work. Damaged cables increase the risk of electric shock.

#### **1.4 Precautions against accident hazards**

- Do not look directly into the laser beam with an unprotected eye.
- Never look directly into the beam path.
- Never point the laser beam at reflective surfaces, persons or animals. Even a low-power laser beam can cause damage to the eye.
- **Caution!** If procedures other than those specified here are used, this can result in dangerous beam exposure.
- If the cross-cut saw is not used for an extended period of time, the batteries should be removed.
- Do not replace the laser with another type of laser.
- Repairs to the laser may only be carried out by the manufacturer of the laser or an authorized

#### **1.5 Residual risks**

- The power tool is built according to the state of the art and the recognized safety regulations. Nevertheless, individual residual risks may occur during operation.
- Danger to health from electricity if incorrect electrical connection cables are used.
- Furthermore, despite all precautions taken, there may be non-obvious residual risks.
- Residual risks can be minimized if the "Safety Instructions" and the "Intended Use" as well as the operating instructions are observed in their entirety.
- Do not stress the machine unnecessarily: excessive pressure during sawing will quickly damage the saw blade. This can lead to a reduction in machine performance during processing and a reduction in cutting accuracy.
- Avoid accidental start-up of the machine: the operating button must not be pressed when inserting the plug into the socket.
- Use the tool recommended in this manual. This will ensure that your saw performs optimally.

- Keep your hands away from the working area when the machine is in operation. Before carrying out any adjustment or maintenance work, switch off the machine and unplug it from the power supply.

## 2. Technical Data

<b>Model</b>	<b>AR-HE-TBM500</b>
Rated input voltage	230 V~/50 Hz
Nominal power	500 W (S2 15 min)
Engine speed	1450 min <sup>-1</sup>
Output speed (infinitely variable)	550/950/1450/1950/2500 min <sup>-1</sup>
Drill chuck holder	B16
Drill chuck	1,5 – 16 mm
Size drilling table	164 x 162 mm
Angle adjustment	45°/0°/45°
Drilling depth	50 mm
Column diameter	46 mm
Height	590 mm
Footprint	298 x 190 mm
Weight	14.5 kg
Laser class	II
Wavelength Laser	650 nm
Laser Power	< 1 mW
Sound power level L <sub>pA</sub>	72,6 dB (A)
uncertainty K <sub>pA</sub>	3 dB
Sound power level L <sub>WA</sub>	82 dB (A)
Uncertainty K <sub>WA</sub>	3 dB
Vibration emission value ah	1.58 m/s <sup>2</sup>
Uncertainty K	1,5 m/s <sup>2</sup>
Cable length	1.5 m
Plug type	Schuko plug type F

- **Hint!** Wear hearing protection.  
Exposure to noise can cause hearing loss. Vibration total values (vector sum of three directions) determined according to EN 61029.

### 3. Scope of delivery



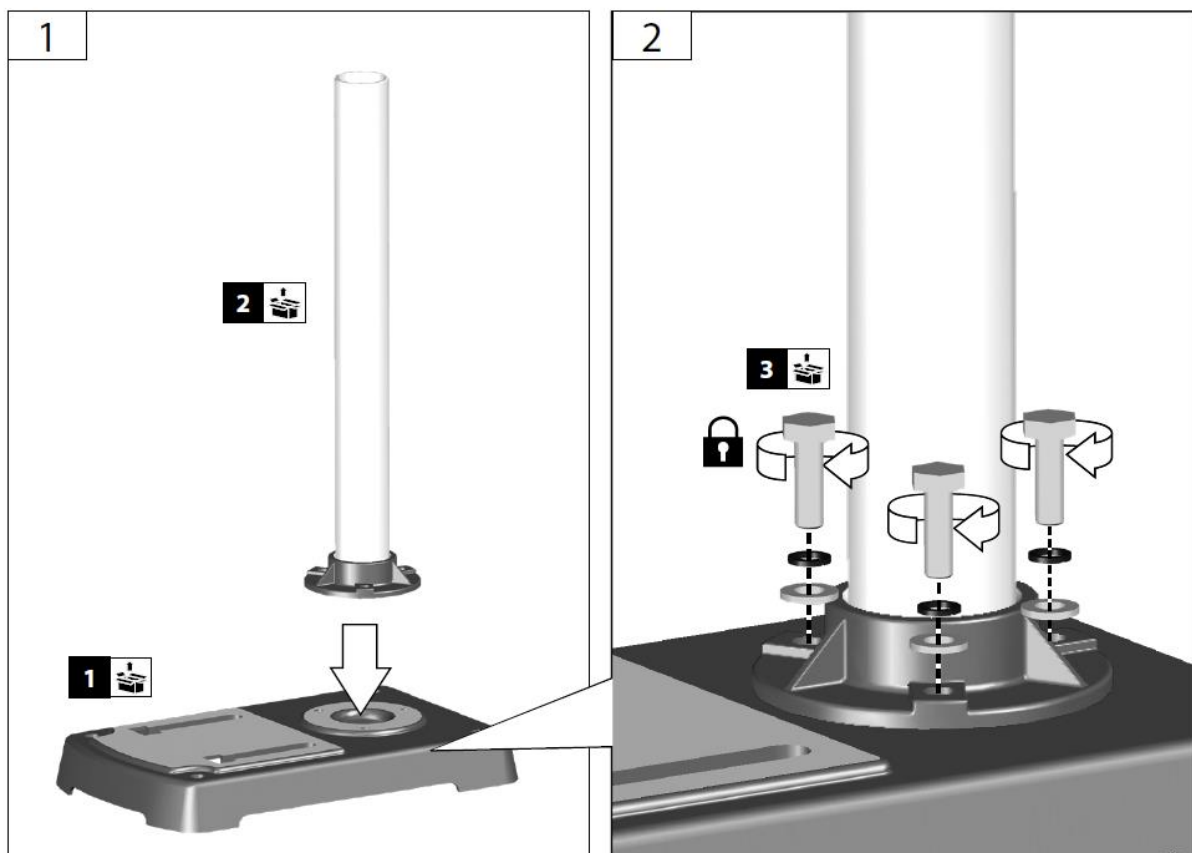


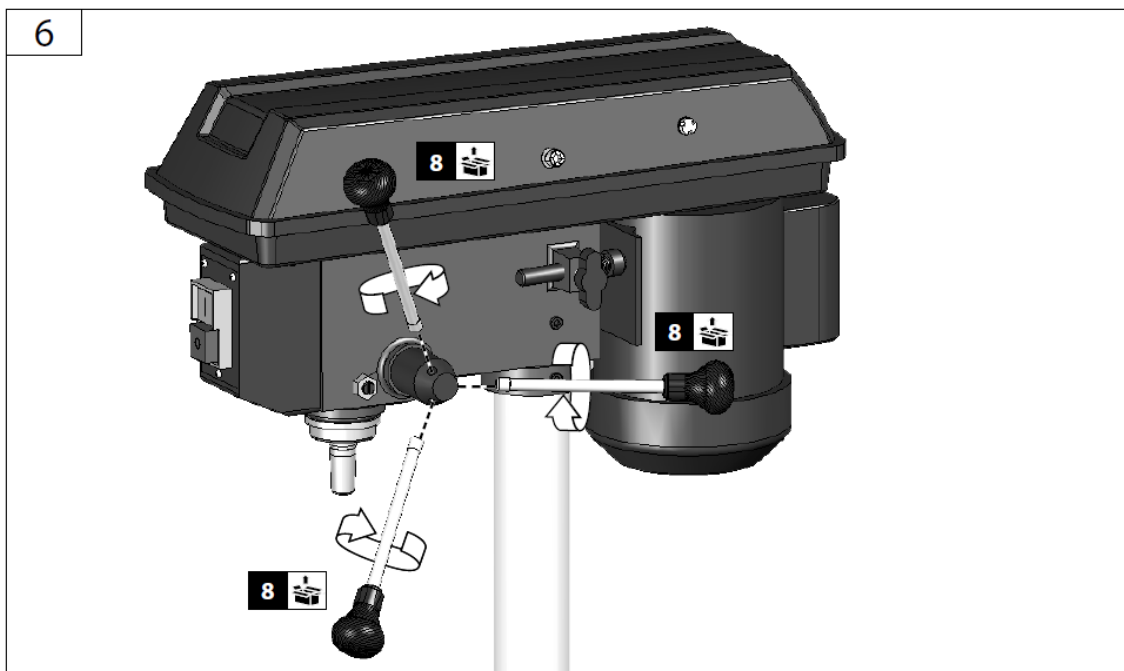
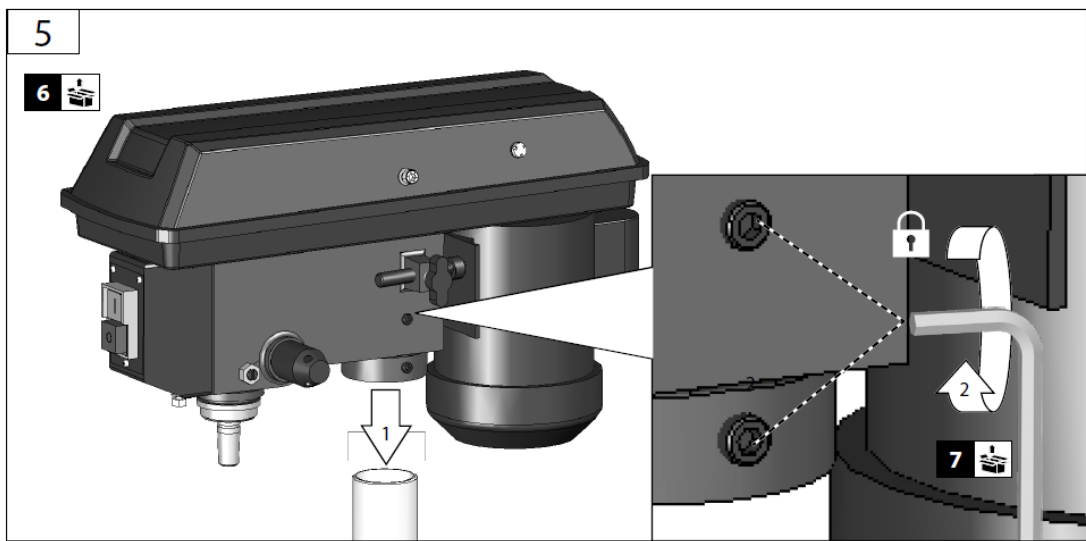
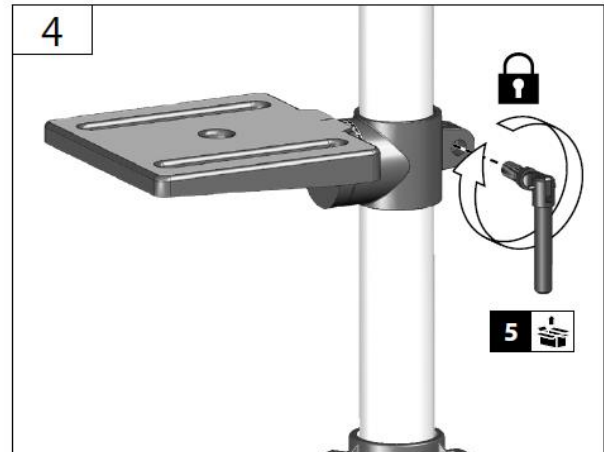
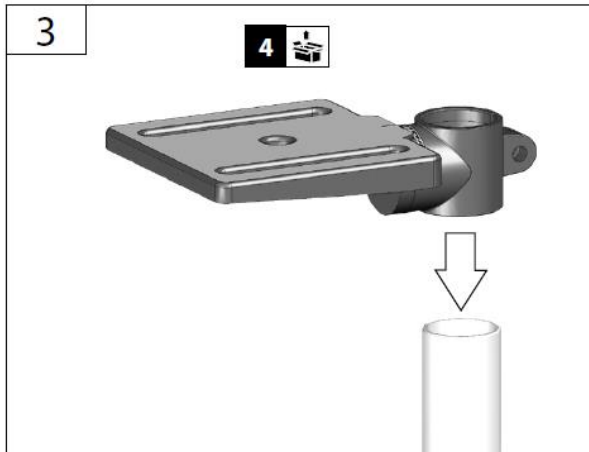
## 4. Construction

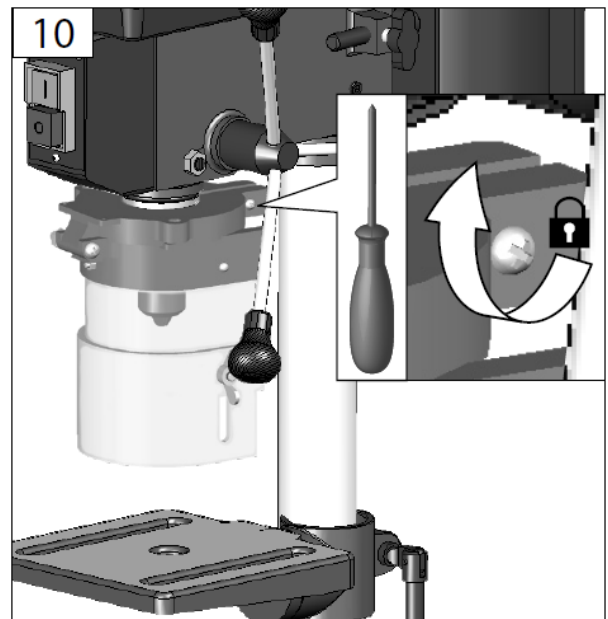
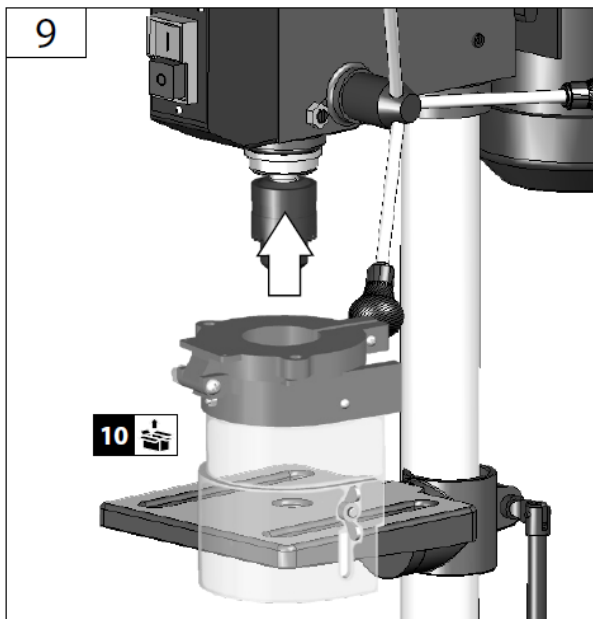
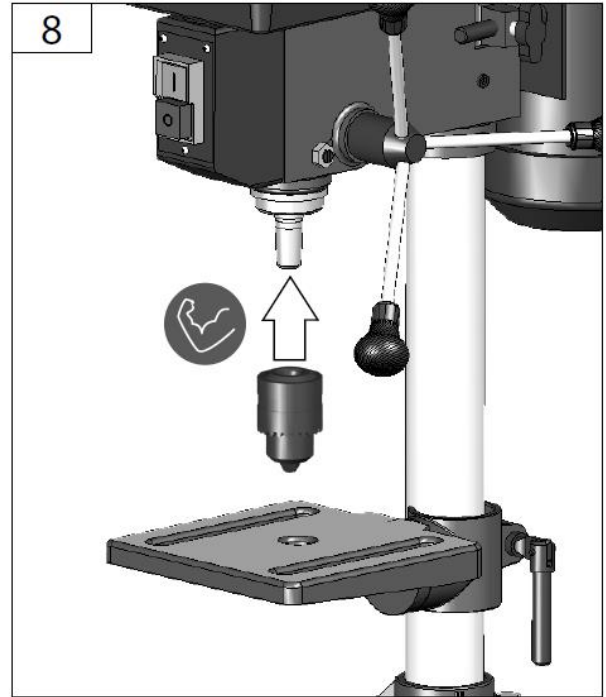
### 4.1 Unpacking

- Open the packaging and carefully remove the device.
- Remove the packaging material and any packaging and transport locks (if present).
- Check that the scope of delivery is complete.
- Check the device and accessories for transport damage.
- If possible, keep the packaging until the end of the warranty period.
- **Attention!** The device and packaging materials are not children's toys! Children must not play with plastic bags, foils or small parts! There is a danger of swallowing and suffocation!

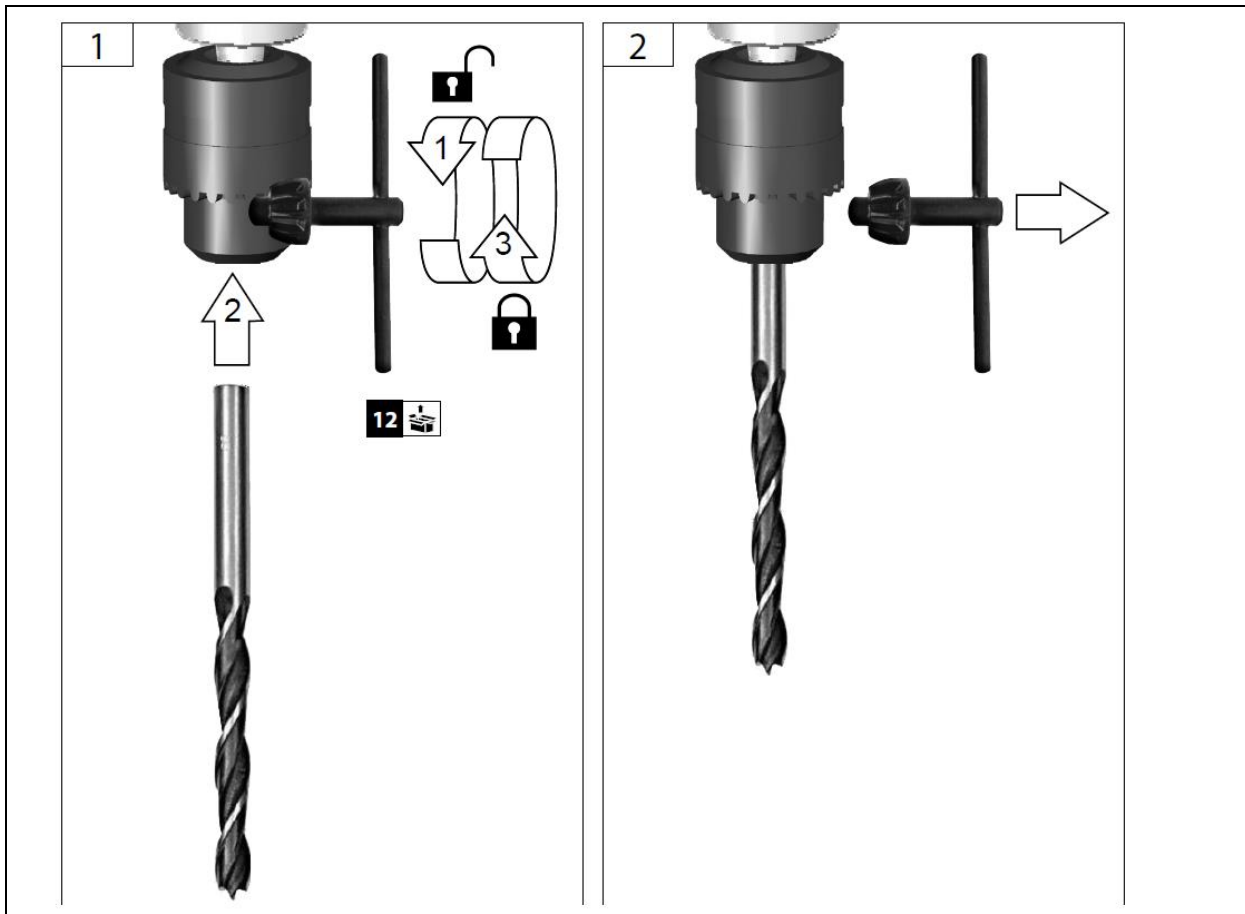
### 4.2 Assembly of the device



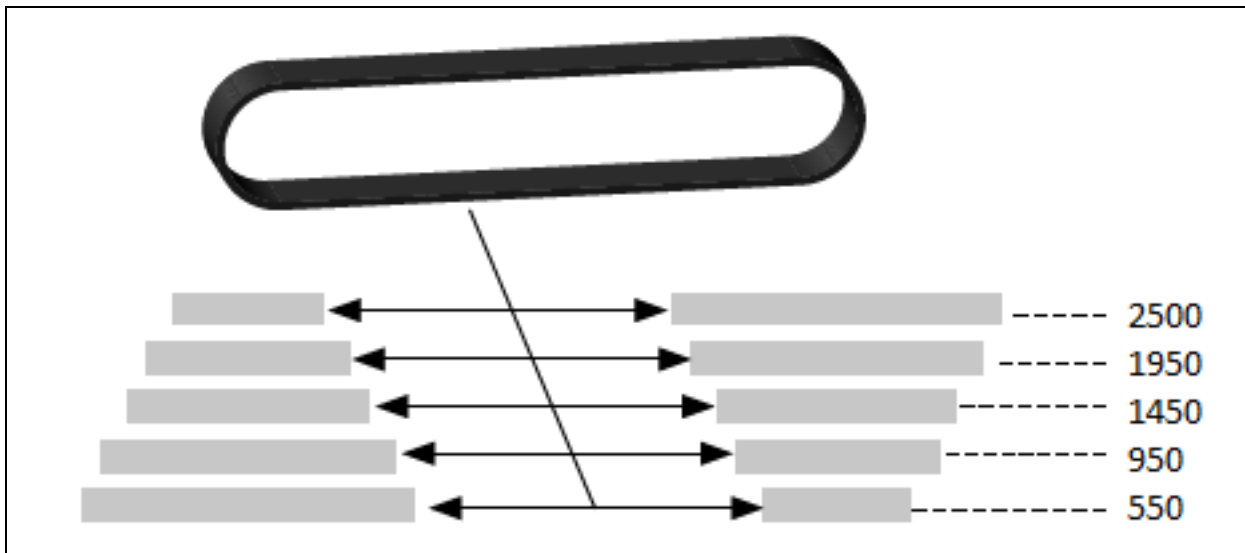




#### 4.3 Clamping the drill bit

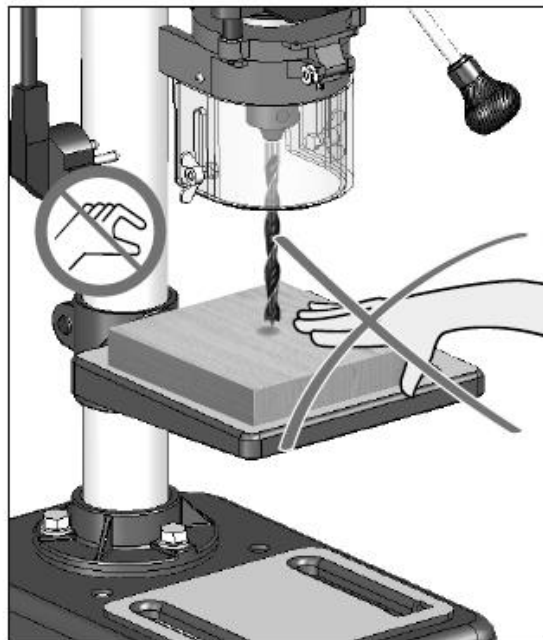
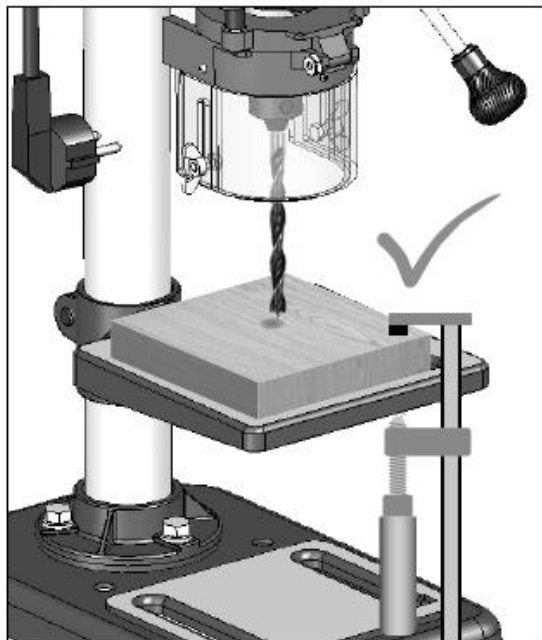
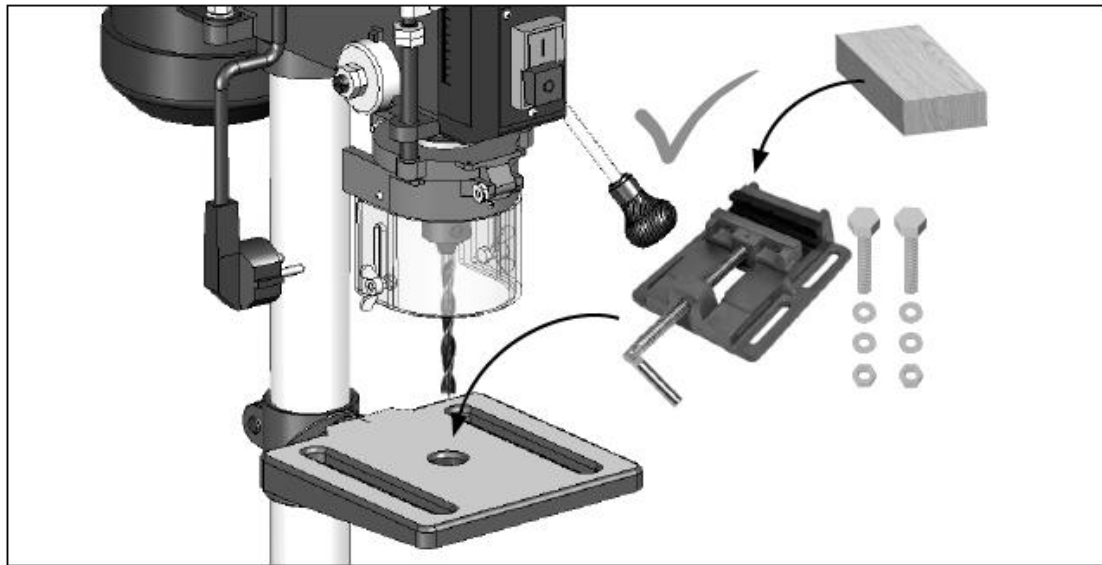


#### 4.4 Spindle speed

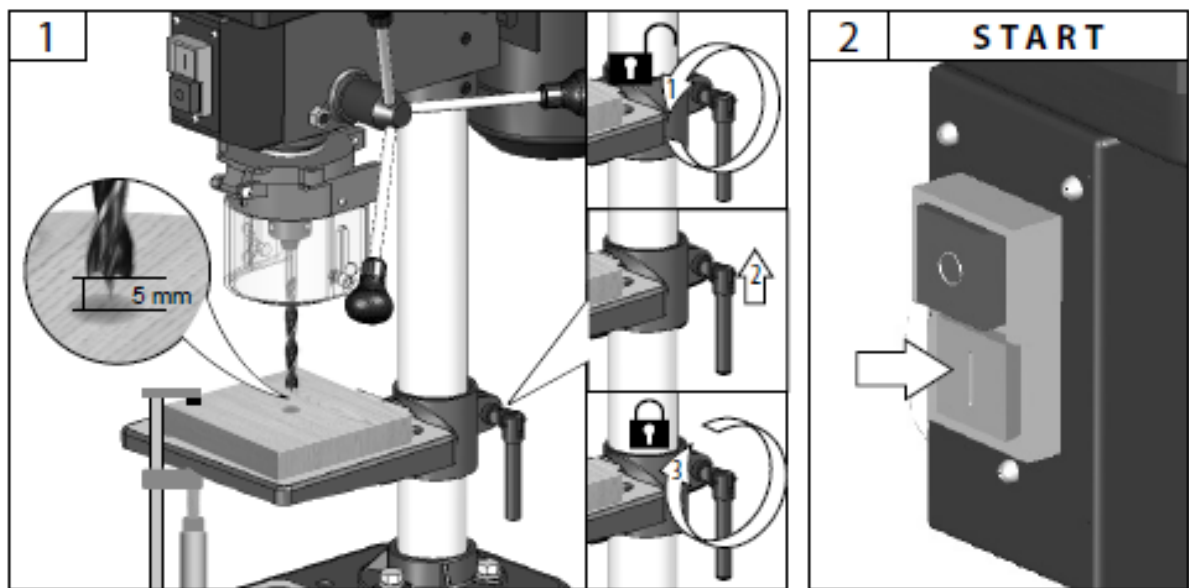
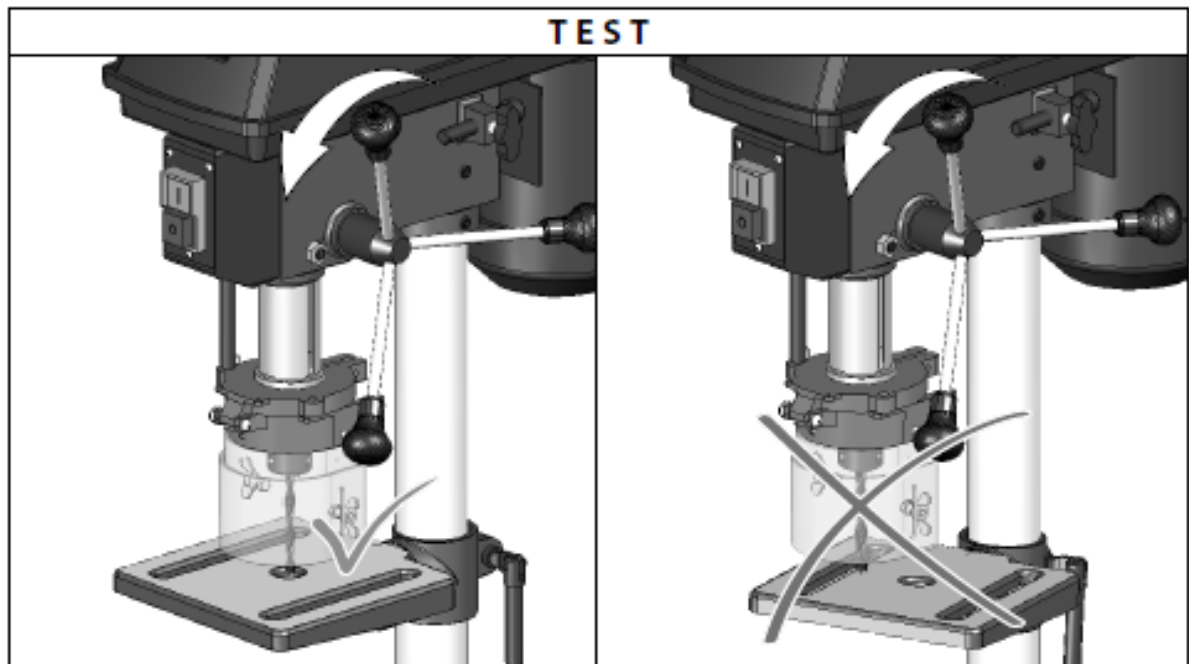


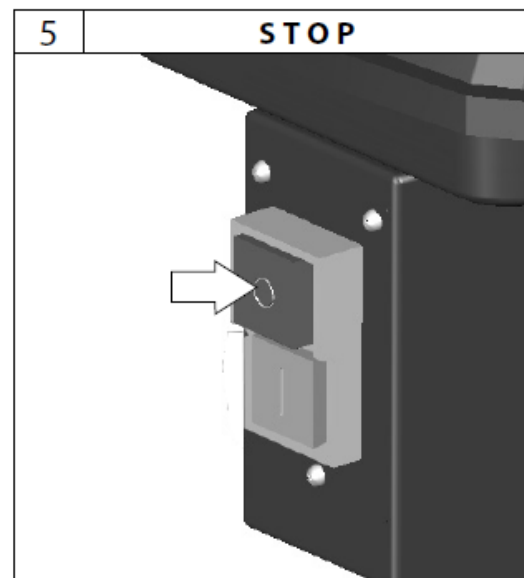
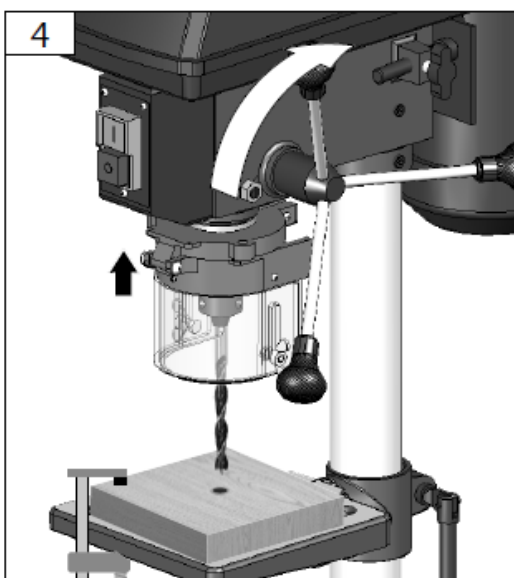
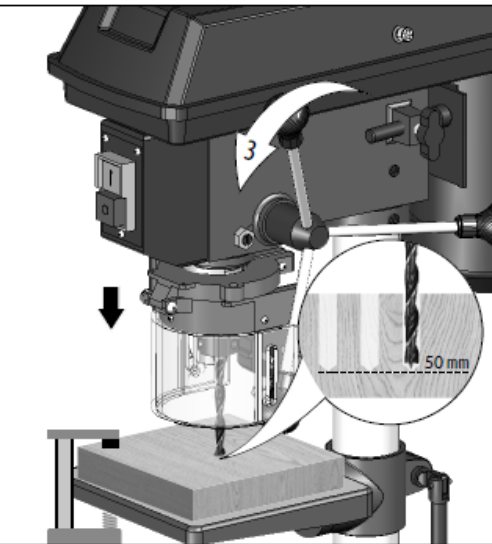
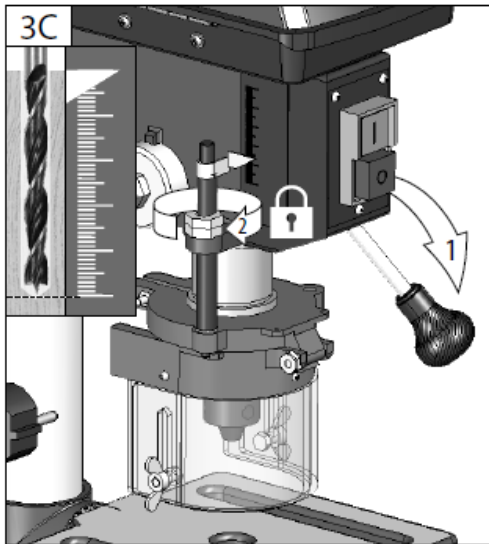
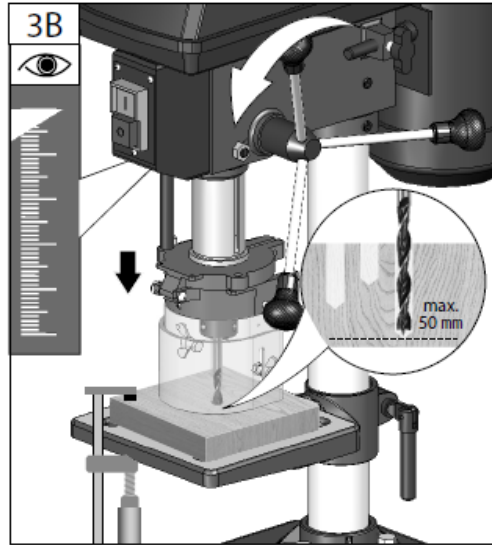
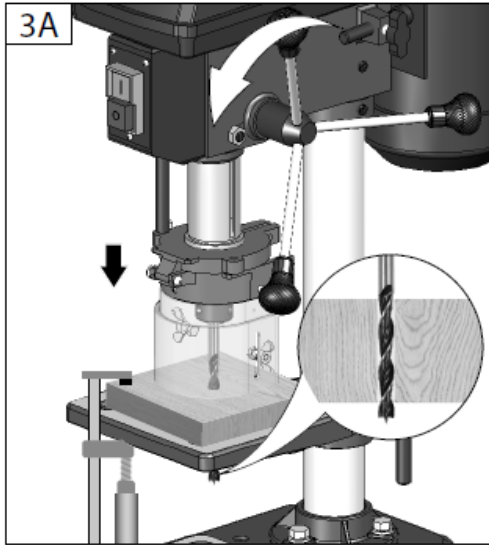
To set the speed of the drill, the belt drive is set to the respective "height". Open the belt case (see 2. Technical data; Fig. 6) by loosening the cross screw. The wing screw is loosened by hand between the motor and the switch for the laser, so that the belt relaxes. The belt can now easily be set to the desired speed. The device is reassembled in the reverse order. Tension the belt so tight that it can be rotated by approx. 90°. The belt box must be closed again with the cross screw.

#### 4.5 Clamping the workpiece

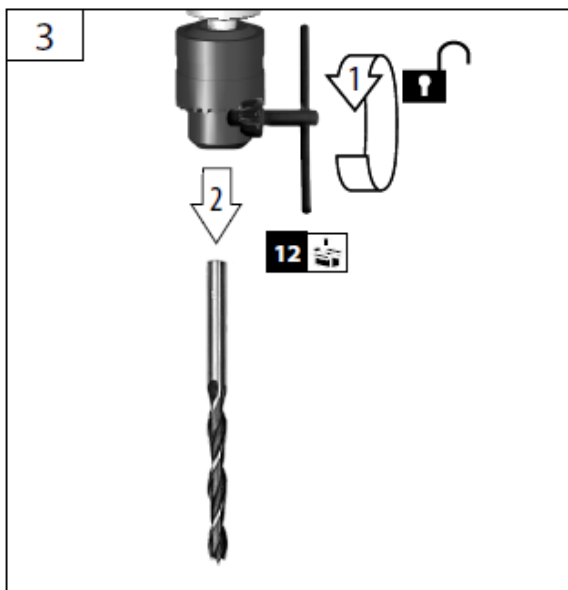
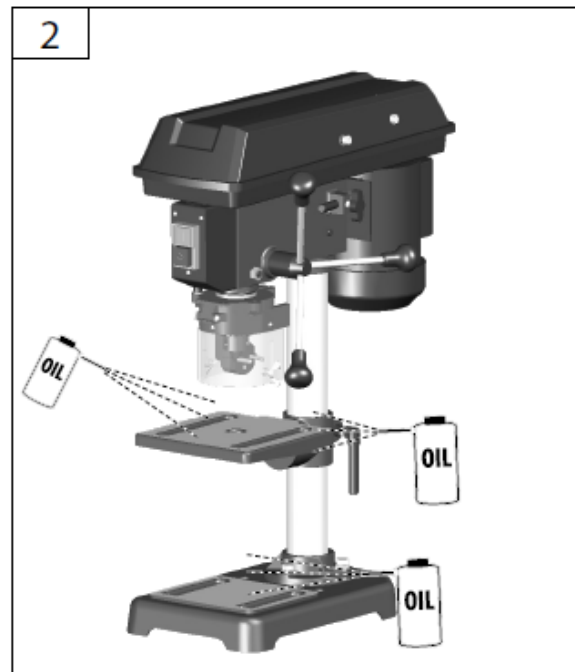


#### 4.6 Test run





## 4.7 Maintenance



## 5. Intended Use

- The machine may only be used in a technically perfect condition and in compliance with all safety instructions.
- This device may only be used as intended. The manufacturer cannot be held responsible for any damage resulting from non-compliance with the provisions of the generally applicable regulations as well as the provisions of these instructions.
- **It is strictly forbidden to dismantle, modify, alienate or install any other protective devices on the machine.**



- Even with proper use and compliance with all safety regulations, residual risks may still exist:
  - Noise emission
  - Dust emission
  - Hand-arm vibrations
  - Risk of burns
  - Tool and workpiece heat up during operation
  - Risk of injury
  - Sharp tools and workpiece edges

## 6. Putting into service

### 6.1 Before use

- Check the on/off switch incl. emergency stop switch for proper function
- Perform a visual check before each operation
- In particular, check safety devices, electrical operating elements, electrical cables and screw connections for damage and tight fit.  
Replace any damaged parts before operation.
- Make sure that the table clamp lever is firmly tightened before starting the machine.
- Make sure that the drill is securely fastened in the chuck.
- Remove the clamping wrenches. Always check that the spanners have been removed before turning on the machine.
- **Attention!** Keep body parts and clothes away from moving parts of the device.

### 6.2 Safety precautions when handling the machine

- Use protective equipment that is tailored to your needs. Wear a hair net for long hair.
- Do not wear gloves when using a drill. Do not attempt to drill a material that does not have a flat surface unless you are using a suitable support.
- Never start the drill with the drill pressed against the workpiece.
- Always use clamps, jaws or a vice to secure the workpiece to the table.
- Adjust the drill to the speed appropriate for the job.
- Switch off the machine immediately in the event of a blockage. Disconnect the power plug and remove the jammed workpiece.
- Do not remove chips or splinters while the machine is running.

### 6.3 Mains connection

- **Attention! Operation is only permitted with a residual current circuit breaker (RCD max. residual current 30mA).**
- Only connect to single-phase alternating current and only to the mains voltage specified on the rating plate. Only connect to sockets with earthing contact.
- Only connect the machine to the socket when switched off.

## 7. Inspection and maintenance plan

Regular maintenance period	Before each commissioning	After each commissioning	If necessary
Check safety equipment.	✓		
Check V-belt and tighten if necessary.	✓		
Lubricate the column and table with a thin layer of oil.		✓	
Clean taper mandrel.			✓
Clean the machine from drilling dust or metal chips.		✓	

## 8. Maintenance and Cleaning

### 8.1 Maintenance

- **Caution!** Disconnect the mains plug before any adjustment, maintenance or repair.
- Have work that is not described in these operating instructions carried out by a specialist workshop. Only use original parts. Allow the unit to cool before carrying out any maintenance or cleaning work. There is a risk of burns!
- Before each use, check the unit for obvious defects such as loose, worn or damaged parts, correct seating of screws or other parts. Replace damaged parts.
- Perform a visual inspection before each operation.
- The device must not be used if it is damaged or safety devices are defective.
- Replace worn and damaged parts.
- **Attention!** If the connecting cable of this device is damaged, it must be replaced by the manufacturer or its customer service or a similarly qualified person in order to avoid hazards.
- Repairs and work not described in this manual should only be carried out by qualified personnel.
- Only use original accessories and square parts.

### 8.2 Cleaning

- Always keep the machine clean, especially air vents. Never spray the machine body with water!
- Do not clean plastics with solvents, flammable or toxic liquids. Only use a damp cloth for cleaning.
- Treat all moving parts with an environmentally friendly oil.
- Only a regularly maintained and well-maintained appliance can be a satisfactory aid.
- Lack of maintenance and care can lead to unforeseeable accidents and injuries.
- Clean the ventilation openings and the surface of the device with a soft brush, a brush or a cloth.
- Remove chips, dust and dirt with a vacuum cleaner if necessary.
- Lubricate moving parts regularly.

### 8.3 Service Information

- It should be noted that the following parts of this product are subject to normal or natural wear and tear or that the following parts are required as consumables.
- Wear parts: Carbon brushes; V-belts, batteries, drills

## 8.4 Storage

- Store the device and its accessories in a dark, dry and frost-free place that is inaccessible to children. The optimum storage temperature is between 5 and 30°C.
- Keep the power tool in its original packaging.
- Cover the power tool to protect it from dust or moisture.
- Keep the operating instructions with the power tool.

# 9. Disposal instruction

## 9.1 Disposal of the packaging

- Please make reference to the guidelines and standards for appropriate disposal of the packaging valid in your region. In part, the package may consist of plastic bags – watch this respect, with special care to ensure that this is not out of the reach of children. There is a risk of suffocation!

## 9.2 Disposal of waste equipment

- Equipment must be disposed of in accordance with the rules and regulations of the local waste disposal.

## 9.3 Meaning of the “dustbin”



The symbol of the crossed-out dustbin on batteries or accumulators indicates that they must not be disposed of with household waste at the end of their service life. If batteries or accumulators contain mercury (Hg), cadmium (Cd) or lead (Pb), you will find the respective chemical symbol below the symbol of the crossed-out trash can. You are legally obliged to return old batteries and accumulators after use. You can do this free of charge in a retail store or at another collection point near you. Addresses of suitable collection points can be obtained from your city or local government.

Batteries may contain substances that are harmful to the environment and human health. Special care must be taken when handling batteries containing lithium due to the particular risks involved. The separate collection and recycling of old batteries and accumulators is intended to avoid negative effects on the environment and human health.

Please avoid the generation of waste from old batteries as much as possible, e.g. by preferring batteries with a longer life or rechargeable batteries. Please avoid littering public spaces by not carelessly leaving batteries or electrical and electronic equipment containing batteries. Please consider ways to reuse a battery instead of disposing of it, for example by reconditioning or repairing the battery.

You can also find more information on the Battery Act on the Internet at [www.batteriegesetz.de](http://www.batteriegesetz.de).

You can also visit our website at [www.arebos.de](http://www.arebos.de) to find out about other return options we have created.

**Our customer service number: +49 (0) 931-45232700**

Canbolat Vertriebs GmbH • Gneisenaustraße 10-11 • 97074 Würzburg

## EU Declaration of Conformity

We,

Canbolat Vertriebs GmbH, Gneisenaustraße 10-11, 97074 Würzburg, Germany,

Hereby declare that the product named below, seen its design and construction as well as according to our sales, has been complied with the relevant and basic health and safety EU-requirements.

Name of the product: Arebos Bench drill 500 W

Art. Nr.: 4260551589867

Model Nr.: AR-HE-TBM500

If the product has any modification not allowed by us, this declaration loses its validity.

Tested acc. to:

EU Standard:

EN 55014-1 :2006+A1+A2

EN 61000-3-2 :2014

EN 61000-3-3 :2013

EN 55014-2 :2015

EN 61029-1 :2009+A11

Date/Manufacturer Signature/Location:

Würzburg, February 4, 2021



Identification of the signatory:

Korhan Canbolat, head of the company

Authorised representative for the technical documentation:

Korhan Canbolat

**Office address:**

Canbolat Vertriebs GmbH

Gneisenaustraße 10-11

D-97074 Würzburg

Return address can be found in the imprint: <https://www.arebos.de/impressum/>

VAT identification number: DE 263752326

Court of the Commercial Register is Würzburg, HRB 10082

WEEE Reg.-No. DE 61617071