

General information

Reading and storing the user manual



This user manual accompanies this 500 W bench drill. It contains important information on assembly, starting and handling. For improved readability, the 500 W bench drill will be referred to only as the “bench drill” below.

Before using the bench drill, read the user manual carefully. This particularly applies to the safety notes.

Failure to heed this user manual may result in severe injury or damage to the bench drill.

The user manual is based on the standards and rules in force in the European Union. When abroad, you must also observe country-specific guidelines and laws.

Store the user manual for future use. If you pass the bench drill on to third parties, please be absolutely sure to include this user manual.

Explanation of symbols

The following symbols and signal words are used in this user manual, on the bench drill or on the packaging.

 **WARNING!**

This signal symbol/word designates a hazard with moderate degree of risk which may lead to death or severe injury if not avoided.

NOTICE!

This signal symbol/word warns against potential damages to property.



This symbol provides you with useful supplementary information on assembly or operation.



Declaration of conformity (see chapter “Declaration of conformity”): Products marked with this symbol meet all applicable Community regulations for the European Economic Area.



Read the user manual.



Drilling may cause materials, splinters and chippings to be ejected from the workpiece. Wear protective goggles.



Always wear a dust mask when performing work that produces dust.



Wear ear protection when working with the tool which produces intense noise.



When performing work, wear suitable, tight fitting clothing.



If you have long hair, always wear a hair net or cap to contain your hair.



Wear suitable protective gloves.

Safety

Proper use

The bench drill is only intended for private use and is not suitable for commercial purposes.

- The bench drill is designed for drilling in work materials such as wood and metal. It must not be used to drill into work materials that are hazardous to health such as asbestos.
- The chuck is suitable for drill bits and tools with a shank diameter of up to 16 millimetres and cylindrical tool shank. Tools with a taper shank can also be used.
- The bench drill must not be operated continuously for more than 15 minutes. After 15 minutes, the bench drill must cool off before it is used again.
- The bench drill must only be used by adults.

Only use the bench drill as described in this user manual. Any other use is deemed improper and may result in damage to property or even personal injury.

The manufacturer or vendor accepts no liability for damage caused by improper or incorrect use.

Residual risk

Even if you use the bench drill in compliance with applicable regulations, residual risks cannot be ruled out. The following risks associated with the construction and design of this bench drill may occur:

- eye injury if suitable eye protection is not worn,
- lung injury if a suitable dust mask is not worn,
- hearing loss if suitable ear protection is not worn,
- injury to health if the bench drill is not used or maintained properly,
- injury to health attributed to hand and arm vibration if the bench drill is used over a prolonged period of time, is not guided in a controlled manner and maintained properly,
- risk of injury if long hair, loose-fitting clothing or jewellery get caught by rotating device parts.
- Reduce the residual risk by using the bench drill cautiously and in accordance with all applicable regulations and guidelines as well as following all instructions.

ATTENTION! When using power tools, the following basic safety measures must be taken in order to provide protection against electric shocks, risk of injury and fire.

Read all these notes before using this power tool and keep the safety notes in a safe place.

WARNING!

Danger for children and persons with impaired physical, sensory or mental capacities (e.g. partially disabled persons, older persons with reduced physical and mental capacities) or lack of experience and knowledge (e.g. older children).

- The bench drill must only be used by adults.
- Children must be supervised to make sure that they do not play with the bench drill.
- Keep children away from the packaging material and small parts. There is a choking hazard if swallowed.

General safety notes

WARNING!

Risk of electric shock!

A faulty electrical installation or excessive mains voltage may result in an electric shock.

- Only connect the bench drill if the mains voltage of the socket corresponds to the specification on the nameplate.
- Only connect the bench drill to an easily accessible socket so that you can quickly disconnect it from the mains in case of a failure.
- Do not operate the bench drill if it exhibits visible damages or the mains cord or mains plug is defective.
- If the mains cord of the bench drill is damaged, it must be replaced by the manufacturer, its customer service team or a person with similar qualifications.
- Only open the housing to the extent described in this user manual. Have qualified professionals perform repairs. Contact a qualified workshop for this. Liability and warranty claims are waived in the event of repairs performed by the user, improper connection of the device or incorrect operation.
- Only parts that comply with the original device data may be used for repairs. Electric and mechanical parts, which are essential for providing protection against risk sources, are contained in this bench drill.
- Protect the bench drill against moisture and only use it in dry indoor rooms.
- Do not immerse the bench drill, the mains cord and the mains plug in water or other liquids.
- Never touch the bench drill or the mains plug with damp hands.
- Never pull the mains plug out of the socket by the mains cord; instead, always do so by taking hold of the mains plug.
- Keep the bench drill, mains plug and mains cord away from open flames and hot surfaces.
- Lay the mains cord so that it does not pose a tripping hazard.

- Do not kink the mains cord and do not lay it over sharp edges.
- Always switch the bench drill off and pull the mains plug out of the socket when you are not using the bench drill, cleaning it, changing settings or in the event of a fault.

⚠ WARNING!**Risk of injury!**

Improper handling may result in severe injury.

- When working with the bench drill, stand in front of it so that you can easily operate it and have an eye on everything.
- Only use sharp, undamaged drill bits that are suitable for the respective material.
- Before drilling, always fold the chip guard down. If applicable, adjust its length for optimal protection.
- Never touch the chuck or fitted drill bit or tool while it is still rotating. After you have switched the device off, the clamping chuck will not come to an immediate stop, but continue to rotate for a while.
- Only use the accessories included in the product contents or those recommended by the manufacturer.

⚠ WARNING!**Burn hazard!**

The drill bit or fitted tool may be very hot directly after drilling.

- Wear suitable work gloves or wait until the drill bit or fitted tool have cooled down before changing them.

⚠ WARNING!**Injury to health!**

Some work materials pose a health hazard. It is not permitted to use this bench drill to drill into work materials and other materials (e.g. asbestos) that pose a health hazard.

NOTICE!**Risk of damage!**

Improper handling may result in damage to the bench drill.

- Do not exert excessive pressure while drilling. Always drill at the speed that suits the drill bit and the material you are drilling into.
- Only use the accessories included in the product contents.
- Do not use aggressive solvents to clean the bench drill.

Working safely**1. Keep your work area orderly**

- Disorganisation in your work area poses a risk of accident.

2. Take any environmental factors into account

- Do not expose the power tools to rain.
- Do not operate power tools in wet or damp rooms.
- Ensure that the work area is well lit.
- Do not use the power tools if there is a risk of fire or explosion.

3. Protect yourself against electrical shock

- Avoid contact between your body and earthed parts (e.g. pipes, radiators, electric stoves, cooling units).

4. Keep other persons away

- Do not allow other persons, particularly children, to touch the power tool or the cable. Keep them away from your work area.

5. Store unused power tools in a safe area

- Unused power tools should be stored in a dry, elevated or closed off area that is out of the reach of children.

6. Do not overload the power tool

- It works better and more safely within the specified power range.

7. Use the right power tool

- Do not use any low-power machines to perform heavy-duty work.
- Do not use the power tool for purposes other than the intended one. Do not use e.g. a handheld circular saw to cut tree branches or wood blocks.

8. Wear suitable clothing

- Do not wear any loose-fitting clothing or jewellery as it could be caught by moving parts.
- It is recommended that you wear firm footwear when working.
- If you have long hair, wear a hair net.

9. Use protective equipment

- Wear protective goggles.
- Use a breathing mask when performing dusty work.

10. Connect the dust extraction device

- If there are any ports for dust extractors and collectors, make sure that they are connected and used properly.

11. Do not use the cable for purposes other than the intended one

- Do not use the cable to pull the plug out of the socket. Protect the cable against heat, oil and sharp edges.

12. Secure the workpiece

- Use clamping fixtures or a vice to hold the workpiece. This will ensure that it is more securely held than it would be with your hand.

13. Avoid an abnormal posture

- Assume a stable position and keep your balance at all times.

14. Take good care of your power tools

- Keep cutting tools sharp and clean so that you can work more effectively and safely.
- Observe the notes for lubricating and changing tools.
- Check the connector cable of the power tool regularly and have it replaced by a qualified professional in case of damage.
- Keep the handles dry, clean and free of oil and grease.

15. Pull the plug out of the socket

- When not using the power tool, before performing maintenance and when changing tools such as saw blades, drill bits, router bits.

16. Do not leave any tool keys inserted

- Before you switch the tool on, make sure that keys and adjusting tools have been removed.

17. Prevent accidental start-up

- Ensure that the switch is off when inserting the plug in the socket.

18. Use an extension cord which is suitable for outdoor application

- When outside, only use an extension cord that is approved for such use and which is labelled accordingly.

19. Remain attentive

- Pay attention to what you are doing. Approach work in a reasonable manner. Do not use the power tool if you are unable to concentrate.

20. Check the power tool for any damages

- Before you continue to use the power tool, the protective devices or easily damaged parts must be carefully checked to ensure they are functioning properly and as intended.
- Check to make sure that moving parts are fully functional, that they are not jammed and that the parts are not damaged. All parts must be properly mounted and fulfil conditions to ensure property operation of the power tool.
- Damaged protective devices and parts must be properly repaired or replaced by a qualified workshop to the extent not otherwise specified in the user manual.
- Damaged switches must be replaced by a customer service workshop.
- Do not use any power tools if the switch cannot be turned on and off.

21. ATTENTION!

- Using other fitted tools and accessories may pose a risk of injury.

22. Have your power tool repaired by an electrical technician

- This power tool complies with applicable safety regulations. Repairs may only be performed by an electrician who uses original replacement parts; otherwise, there is a risk of accident for the operator.

Safety notes for bench drills – drilling

- **Place the power tool on a solid, flat and level surface and secure it.** If the power tool slips, wobbles or vibrates, it will not be possible to guide the drill bit in a safe and even manner.
- **Keep everything in your work area clean, except for the workpiece.** Drilling chips and objects with sharp edges could cause injury. Mixtures of materials are particularly dangerous. Light metal dust e.g. could catch fire or explode.
- **Set the correct speed before you start working. The speed must suit the drill bit diameter and the workpiece.** If the speed is not properly set, the drill bit may catch in the workpiece.
- **Switch the power tool on before moving the spindle with the fitted drill bit towards the workpiece.** Otherwise, the drill bit could catch in the workpiece and jerk the workpiece. This could result in injury.
- **Keep your hands away from the area where you are drilling while the power tool is running.** There is a risk of injury if you come into contact with the drill bit.
- **Never remove drill chips from the area where you are drilling while the power tool is running.** Always first guide the spindle to the idle position and then switch the power tool off.

- **Do not remove the drill chips with your bare hands.** Hot, sharp-edged metal chips pose a risk of injury.
- **Mill long drill chips down to size by briefly lifting the drill bit with the spindle.** Long drill chips pose a risk of injury.
- **Keep the handles dry, clean and free of oil and grease.** Greasy, oily handles are slippery and make it more difficult to guide the spindle in a safe and controlled manner.
- **Use the enclosed vice to clamp the workpiece you intend to drill into in place.** Never hold the workpiece with your hand only.
- **Immediately switch off the power tool if the drill bit catches in the workpiece.** The drill bit may catch if you apply excessive pressure for example or the drill bit cants in the workpiece.
- **Once you are finished working with the bench drill, do not touch the drill bit until it has cooled down.** The drill bit may become very hot during work and there is a risk of injury.
- **Never leave your work area until the drill bit has come to a complete stop.** Tools that are still rotating could inflict injury.

Unpacking and checking the product contents

NOTICE!

Parts of the bench drill are greased to provide protection against corrosion.

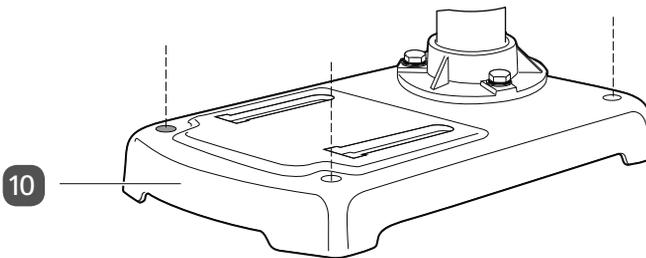
- Wear suitable work clothing. Place all parts on a piece of cardboard or similar.
1. Take all parts out of the packaging and check whether the bench drill or individual parts exhibit damages. If this is the case, do not use the bench drill. Contact the manufacturer at the service address specified on the warranty card.
 2. Check to make sure that the delivery is complete (see **fig. A + B**).
 3. Remove all protective films and other transport packaging.

Assembly



- You will need an AF 13 open-ended spanner to mount the drill column.
- Make sure that the bench drill is completely and properly assembled before you start it.

1. Place the base plate **10** on a solid and stable base such as a workbench. Use the three hexagon screws, washers and spring washers **22** to tightly screw the drill column **7** in place (see **fig. C**).
2. Slide the drilling table **12** onto the drill column and fix it in place with the rotary knob **9** (see **fig. D**).
3. Place the entire machine head on the drill column (see **fig. E**). Screw the two grub screws **25** in to secure the machine head.
4. Screw all three handles **6** into the handle fixture **5** (see **fig. E**).
5. Remove the three screws from the foldable chip guard **15**. Insert the transparent protective hood **14** in the frame of the foldable chip guard and tighten the three screws again (see **fig. F**).
6. Insert the foldable chip guard with the screw mounted protective hood on the spindle and screw it in place (see **fig. G**).
7. With a jerk and applying some force, slide the chuck **13** onto the spindle (see **fig. H**). The chuck must audibly and noticeably lock into place. Use a rubber mallet for this.
8. Use 4 screws and washers (not included in the product contents) to secure the base plate on the base. The type and size of the screws differ depending on the base used. If necessary, consult a qualified outlet.



Operation

Preparations

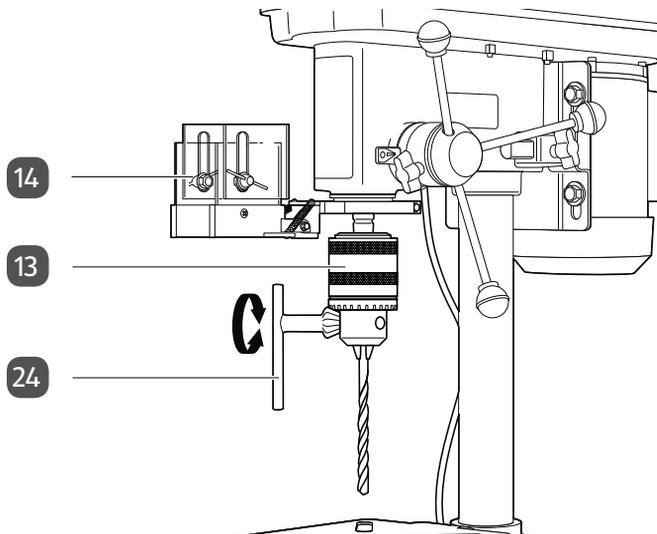
⚠ WARNING!

Burn hazard!

Using unsuitable tools poses a serious risk of injury.

- Only use tools (drill bits, countersinks etc.) that are not damaged and suitable for use in the bench drill in accordance with this user manual.

1. Fold the transparent protective hood **14** up.
2. Use the enclosed chuck key **24** to loosen the jaws of the chuck **13**.



3. From below, insert the drill bit/tool vertically in the chuck opening and use the chuck key to tighten the chuck jaws. **Then be absolutely sure to remove the chuck key.** The drill bit/tool must be clamped in place in a central position. Only use drill bits and tools with a shank diameter of 3 to max. 16 millimetres with a cylindrical tool shank or taper shank.
4. Clamp the workpiece in the vice **20** included in the product contents (see chapter “Clamping the workpiece in the vice”).

5. Place the vice on the drilling table.
6. Use the fixing screws, washers and nuts **21** to secure the vice (see chapter “Clamping the workpiece in the vice”).
7. Position the drilling table **12** at the required height (see chapter “Adjusting the drilling table”).
8. Fold the protective hood **14** down.
9. If applicable, adjust the length of the protective hood (see **fig. G**) so that it offers optimal protection (see chapter “Adjusting the drilling table”).
10. Set the speed so that it corresponds to the workpiece and the fitted drill bit/tool (see chapter “Setting the speed”).

The bench drill is now ready for operation.

Emergency stop switch

If you hit the emergency stop switch **18** with a small amount of pressure, the spindle will stop in place. The chuck and the fitted tool will stop rotating.

The emergency stop switch is a safety fixture. It is not intended to increase convenience of use. Normally, you should always switch the bench drill off with the red off switch **0 19**.

- After the emergency stop switch has been pushed, it must be manually unlocked. Otherwise, the bench drill cannot be switched back on. To do so, turn the emergency stop switch slightly clockwise until the spring force unlocks it.
- Only operate the bench drill again after the risk leading to the activation of the emergency stop switch has been rectified.
- Only switch the bench drill back on once you are convinced that the bench drill is in proper working condition.

Drilling

WARNING!

Risk of injury!

Improper handling may result in severe injury.

- Before you switch the device on, check whether the chuck key has been removed. The chuck key, if it becomes projectile, may inflict serious injury.
- Keep your hands away from the work area.

- Never attempt to remove drill chips while a drill bit or tool is still rotating. First always switch the bench drill off and wait until it comes to a stop.
- Never remove drill chips with your bare hands as they may have very sharp edges and may be hot.
- Never touch the drill bit, the tool or the chuck while it is still rotating.

⚠ WARNING!**Risk of injury!**

When drilling, projectile chips and rotating parts pose a serious risk of injury.

- Wear suitable protective clothing. In particular, protect your eyes by wearing suitable protective goggles.
- Before working with the device, take off any jewellery (rings, chains etc.).
- If applicable, wear a hair net or cap to prevent your hair from getting caught in rotating parts.

⚠ WARNING!**Burn hazard!**

The drill bit or fitted tool may be very hot directly after drilling.

- Wear suitable work gloves or wait a moment until the drill bit or fitted tool have cooled down before changing them.

⚠ WARNING!**Injury to health!**

Some work materials pose a health hazard. It is not permitted to use this bench drill to drill into work materials and other materials, e.g. asbestos, that pose a health hazard.

1. Follow the steps described in the chapter “Preparations”.
2. Insert the mains plug in a socket with safety contacts.
3. Push the green on switch **I** **19** (see **fig. A**) to switch the bench drill on.
4. Turn one of the handles **6** counterclockwise to lower the spindle with the chuck. Turn it until the drill bit/tool penetrates the workpiece to the desired depth.
5. Then guide the handle in the opposite direction up to the stop point and back to the home position.
6. Switch the bench drill off by pushing the red off switch **O** **19**.

Speed table

Make sure the speed is correct when drilling. This depends on the drill bit diameter and the workpiece you intend to drill. The following list will help you select the right speed for the different work materials.

The specified speeds (in rpm) are reference values.

Drill bit Ø	Grey cast iron	Steel	Iron	Aluminium	Bronze
3	2550	1600	2230	9500	8000
4	1900	1200	1680	7200	6000
5	1530	955	1340	5700	4800
6	1270	800	1100	4800	4000
7	1090	680	960	4100	3400
8	960	600	840	3600	3000
9	850	530	740	3200	2650
10	765	480	670	2860	2400
11	700	435	610	2600	2170
12	640	400	560	2400	2000

Drill bit Ø	Grey cast iron	Steel	Iron	Aluminium	Bronze
13	590	370	515	2200	1840
14	545	340	480	2000	1700
16	480	300	420	1800	1500
18	425	265	370	1600	1300
20	380	240	335	1400	1200
22	350	220	305	1300	1100
25	305	190	270	1150	950

Setting the speed

WARNING!

Risk of injury!

The rotating drive discs can cause serious injury.

- Never attempt to adjust the speed when the bench drill is operating.
- Always close the protective hood after making an adjustment.

WARNING!

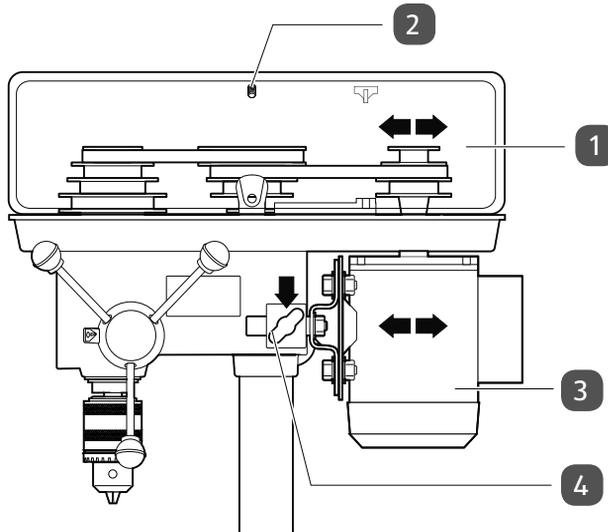
Risk of injury!

The V-belts must be tensioned with a certain amount of force, which poses a risk of catching oneself.

- Wear protective gloves.

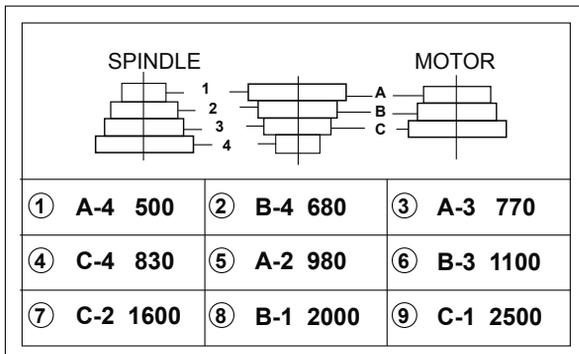
The bench drill can be set to nine different speeds. They are set by changing the position of two V-belts. The V-belts are tensioned between three pairs of drive discs; the middle pair of discs can be pivoted.

1. Switch the bench drill off (push the red off switch **0** **19**) and pull the mains plug out of the socket.



2. With one of the Allen keys **23** and a certain amount of force, push against the spring-loaded locking screw **2** of the protective hood and loosen it by turning it counterclockwise.
3. Fold the protective hood **1** up.
4. Loosen the two lateral tensioning screws **4** and push the motor **3** towards the machine head. This will release the tension on the V-belts.

The following figure is located on the inside of the protective hood and shows the possible positions for the V-belts:



Example: **A-4**

A means that the right V-belt is located in position A and **4** that the left V-belt is located in position 4.

The speed amounts to 500 rpm.

5. Set the required speed according to the following table. Please also observe the recommended speeds (see the “Speed table”).

Position	Revolutions per minute	Position	Revolutions per minute
A-4	500	B-4	680
A-3	770	C-4	830
A-2	980	B-3	1100
C-2	1600	B-1	2000
C-1	2500		

6. Pull the motor away from the machine head to tension the V-belts.
 7. Tighten the two lateral tensioning screws **4**.
 8. Check the V-belt tension. The tension has been set correctly if you can push the middle of the V-belt in approx. 1 cm.
 9. Close the protective hood and tighten the locking screw again.



The protective hood is equipped with a safety switch. If the protective hood is not closed and locked, the bench drill cannot be switched on.

Setting the height of the transparent protective hood

The transparent protective hood protects you against projectile chips. Before you start drilling, make sure that the point where you intend to drill is closed off to the maximum extent. **The protective hood is not a substitute for wearing suitable protective clothing such as protective goggles.**

1. Switch the bench drill off (push the red off switch **0 19**) and pull the mains plug out of the socket.
2. Loosen the lateral wing screws on the transparent protective hood **14** slightly (see **fig. G**).
3. Set the height of the bottom part of the protective hood to the correct height and tighten the two lateral wing screws again.

Clamping the workpiece in the vice

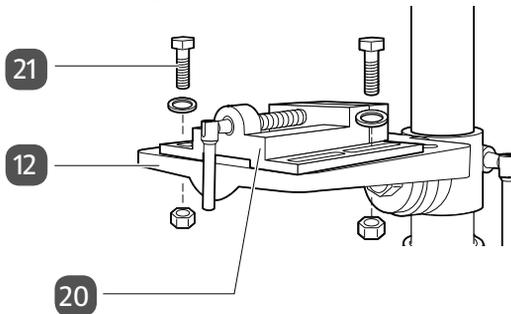
⚠ WARNING!

Risk of injury!

Improper handling may result in severe injury.

- Never attempt to hold the workpiece with your hands.
- Always clamp the workpiece in the enclosed vice.
- If the workpiece cannot be clamped in the vice, it is too large and must not be processed with this bench drill.

1. Screw the vice **20** into an open position and insert the workpiece.
2. Clamp the tool in place.
3. Place the vice on the drilling table **12**.



4. Use two fixing screws, two nuts and four washers **21** to secure the vice diagonally on the drilling table.
5. Only hand tighten the screws so that you are still able to slide the vice with the workpiece clamped in place on the drilling table and to position it exactly. It will also self-centre while drilling.

Adjusting the drilling table

- Switch the bench drill off (push the red off switch **0** **19**) and pull the mains plug out of the socket.

Adjusting the height

1. Hold the drilling table **12** in place with one hand.
2. With the other hand, loosen the rotary knob **9** that fixes the drilling table on the drill column **7** somewhat (see **fig. D**).
3. Position the drilling table at the desired height.
4. Tighten the rotary knob again.

Adjusting the incline

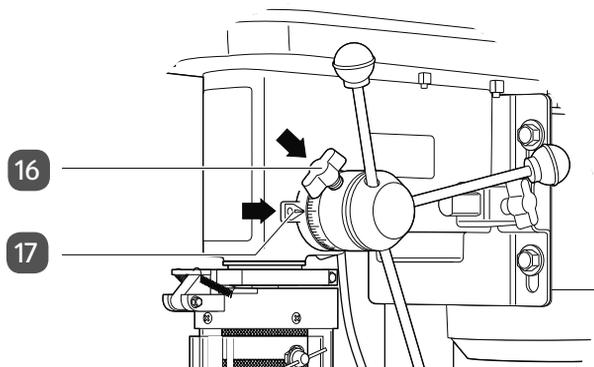
The drilling table can be inclined at an angle of no more than 45° to either the left or right.

You will need an AF 18 open-ended spanner to set the incline.

1. Use a suitable open-ended spanner to loosen the screw on the bottom of the drilling table **12** (see **fig. D**).
2. Turn the drilling table to the right or left. You can determine the set angle with the scale **8** (see **fig. A**). For exact adjustment, the drilling table is marked so you can set the exact number of degrees.
3. Tighten the screw on the bottom of the drilling table again (see **fig. D**).

Setting the drill depth

You can set the desired drill depth with the scale ring.



1. Switch the bench drill off (push the red off switch **0** **19**) and pull the mains plug out of the socket.
2. Loosen the clamp screw **16** that fixes the scale in place.
3. Lower the spindle with the fitted tool onto the workpiece.

4. Turn the scale forward to the stop point until the arrow mark **17** on the drill head is pointing towards the zero line of the scale.
5. Turn the scale to the desired drill depth. If you would like to drill a hole with a depth of 20 millimetres for example, turn the scale to “20”.
6. Tighten the clamp screw.
7. Move the spindle back to the home position.

Tips for best results when drilling

- Drilling in metal: Select a low speed for hard metals and/or large drilling diameters. A lubricant may be used when drilling in metal.
- Drilling in wood: Wear a dust mask as wood dust is harmful to health. Drill at a low speed. Never use a lubricant when drilling in wood.
- Drilling in ceramics/tiles: Use a suitable drill bit with a centring tip.
- Chip breaking: In many cases, excessively long drill chips can be broken by taking the drill bit out of the drill hole by briefly lifting the spindle while drilling.
- Centre drilling: A high speed is required for this.
- Countersinking: Perform the countersinking process with a low speed.

Removing blockages

- You should generally select a suitable feed rate so that chips can be broken down without any disruptions.
- If the tool gets caught in the workpiece, turn off the device and pull the mains plug out of the socket. Turn the tool fitted in the chuck counterclockwise with a small jerk to break the chips and release the tool again.
- If a piece breaks off when working on the workpiece, switch off the bench drill and pull the mains plug. Use pliers to help remove the fragment to prevent it from being uncontrollably projected.

Cleaning and care

Proper, regular care is not only important for safe use, but can also extend the service life of the power tool.

WARNING!

Risk of electric shock!

A faulty electrical installation or excessive mains voltage may result in an electric shock.

- Pull the mains plug out of the socket before you clean the bench drill, change tools or perform maintenance.

⚠ WARNING!**Risk of injury!**

Maintenance may only be performed by qualified persons.

Cleaning**⚠ WARNING!****Burn hazard!**

The drill bit or fitted tool may be very hot directly after drilling.

- Wear suitable work gloves or wait a moment until the drill bit or fitted tool have cooled down before removing these parts to clean the bench drill.

⚠ WARNING!**Risk of injury!**

Do not remove the drill chips with bare hands. Hot, sharp-edged metal chips pose a risk of injury.

- Wear suitable protective gloves when cleaning.

NOTICE!**Risk of short circuit!**

Water that has penetrated the housing may cause a short circuit.

- Never immerse the bench drill in water.
- Make sure that no water penetrates the housing.

NOTICE!**Risk of damage!**

Improperly cleaning the bench drill may damage it.

- Do not use any aggressive cleaners, brushes with metal or nylon bristles, as well as sharp or metallic cleaning utensils such as knives, hard scrapers and the like. They could damage the surfaces.
1. Switch the bench drill off (push the red off switch **0** **19**) and pull the mains plug out of the socket.
 2. Wait a moment until the bench drill and fitted drill bit or tool have cooled off.
 3. Remove the drill bit or the tool.
 4. Remove the chips and other parts with a brush or similar.
 5. Clean the bench drill with a damp, soft cloth. You can use a mild soap for dirt that sticks to the device.
 6. Let all parts dry completely before using the bench drill again or putting it into storage.

Care

- From time to time, grease the drill column with commercially available acid-free lubricating grease (available in supply stores).

Checking the condition of the bench drill

Regularly check the condition of the bench drill. Among other things, check to make sure:

- that the switches are not damaged,
- that the accessories are in proper condition,
- that the mains cord and the mains plug are not damaged,
- that the motor vents are unobstructed and clean. If applicable, use a soft brush to clean them.

If you identify a damage, you must have it repaired by a specialist workshop to prevent risks.

Storage

1. Clean the bench drill thoroughly before you put it into storage (see section “Cleaning”).
2. If possible, store the clean bench drill and the accessories in the original packaging or cover them with a suitable blanket.



The storage room should not be accessible for children and the temperature should be 5 to 30 °C.

Transport

- The bench drill is heavy. If possible, have a second person help you carry it. With one hand, grasp under the base plate and hold the drill column of the bench drill with the other. **Do not carry the bench drill by the machine head.**
- If you transport the bench drill with a vehicle, you must use tension straps to secure it against slipping.
- When transporting it over larger distances, you should disassemble the bench drill and transport it in the original packaging.

Technical data

Type:	Bench drill ZJ4116QM
Operating voltage:	230 V~, 50 Hz
Output:	500 W
Short operation:	S2 min; 15 minutes then the bench drill has to cool off
Protection class:	I ⚡
Weight:	18.3 kg
Motor speed:	1450 rpm
Spindle speed:	500 – 2500 rpm
Speeds:	9
Chuck adapter:	B 16
Toothed ring drill chuck:	2 – 16 Ø mm
Max. shank diameter:	16 mm
Throat depth:	115 mm
Max. drill depth:	50 mm
Column diameter:	46 mm
Article number:	92682

Disposal

Disposing of the packaging



Dispose of the packaging separated into single type materials. Dispose of cardboard and carton as waste paper and foils via the recyclable material collection service.

Disposing of old devices

Dispose of the bench drill in accordance with the regulations in your country.



Old devices must not be disposed of with household waste!

If at some point it is no longer possible to use the bench drill, each consumer is required by law **to dispose of old devices separately from their household waste**, e.g. at a collection point in their community/borough. This ensures that old devices are recycled in a professional manner and also rules out negative consequences for the environment. For this reason, electrical devices are marked with the above symbol.

Noise/vibration information

⚠ WARNING!

Injury to health!

- Wear ear protection and suitable protective clothing when working with the device.

Noise levels were determined in accordance with EN 61029.

The A-weighted noise level of the power tool normally amounts to:

- Sound pressure level L_{pA} 65.5 dB(A), uncertainty K_{pA} 3 dB(A)
- Sound power level L_{WA} 78.5 dB(A), uncertainty K_{WA} 3 dB(A)
- Vibration emission level $a_h \leq 2.5 \text{ m/s}^2$
- Uncertainty: $K = 1.5 \text{ m/s}^2$

The specified vibration emission level was determined on the basis of a standardised test procedure and can be used to compare power tools with one another.

The specified vibration emission level may also be used to initially assess the exposure.

WARNING!

While actually using the power tool, the vibration emission level may differ from the level specified depending on how the power tool is used.

Attempt to keep the stress associated with vibrations as small as possible. Exemplary measures that can reduce vibration stress include wearing gloves when using the tool and limiting the amount of time you use it.

At the same time, all parts of the operating cycle must be accounted for (e.g. times when the power tool is turned off and when it is turned on, but not operating under load).

Troubleshooting

	Problem	Possible cause	Solution
1.	The bench drill cannot be switched on.	The mains plug is not completely inserted in the socket.	Insert the mains plug.
		The protective hood 1 is not closed and locked in place. A safety switch prevents the machine from being operated with the hood open.	Close and lock the protective hood.
		The emergency stop switch 18 was pushed and is still locked in place.	Unlock the emergency stop switch by turning it clockwise.
2.	The drill bit / tool hardly penetrates the workpiece that is clamped in place.	The drill bit / tool are in poor condition.	Check the drill bit or the fitted tool.
		The speed was not set correctly.	Set another speed.

Declaration of conformity

EG Konformitätserklärung

Wir,

MEROTEC GmbH
D-47877 Willich, Hanns-Martin-Schleyer Str. 18a, Germany

erklären hiermit, dass unser Produkt

Tischbohrmaschine
Modell-Nr. ZJ4116QM

den folgenden Richtlinien entspricht:

EMC Richtlinie: 2004/108/EC
Maschinenrichtlinie : 2006/42/EC
RoHS Richtlinie: 2011/65/EU
WEEE Richtlinie: 2012/19/EU

Benannte Stelle: TÜV Rheinland LGA Products GmbH
Anschrift: Tillystraße 2, 90431 Nürnberg, Germany

Angewandte harmonisierte Normen:

EN 61029-1:2009+A11:2010
EN 55014-1:2006+A1+A2
EN 55014-2:1997+A1+A2
EN 61000-3-2:2014
EN 61000-3-3:2013

Dokumentationsbevollmächtigter:
Dirk Wohrab
MEROTEC GmbH

Rechtsgültige Unterschrift:
Datum: 07.07.2015


Ronald Menken
Geschäftsführer MEROTEC GmbH



WORKZONE

WARRANTY CARD

500 W BENCH DRILL

Your details:

Name _____

Address _____



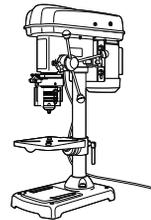
_____ E-mail _____

Date of purchase* _____

* We recommend you keep the receipt with this warranty card.

Location of purchase _____

Description of malfunction:



If after contacting the manufacturer you are requested to return the faulty product please return the completed warranty card together with it.

Unit A&B
Escrick Business Park
Escrick
York
YO19 6FD

AFTER SALES SUPPORT

GB 01904727501
IRE 019022605

 support@coreservice.co.uk

Regular charges from your landline provider, calls from mobiles may vary.

MODEL: ZJ4116QM

PRODUCT CODE: 92682

11/2015

Phone lines available
Monday to Friday,
8am - 6pm.
Regular charges from your
landline provider, calls from
mobiles may vary.

3

YEARS
WARRANTY



Warranty conditions

Dear Customer,

The **ALDI warranty** offers you extensive benefits:

Warranty period: 3 years from date of purchase.

Costs: Free repair/exchange.
No transport costs.

ADVICE: Please contact our service hotline by phone, e-mail or fax before sending in the device. This allows us to provide support in the event of possible operator errors.

In order to make a claim under the warranty, please send us:

- the faulty item together with the original purchase receipt and the completed warranty card.
- the product with all components included in the packaging.

The warranty does not cover damage caused by:

- **Accident** or **unanticipated events** (e.g. lightning, water, fire).
- **Improper use** or **transport**.
- **Disregard of the safety** and **maintenance instructions**.
- Other **improper treatment** or **modification**.

After the expiry of the warranty period, you still have the possibility to have your product repaired at your own expense. If the repair or the estimate of costs is not free of charge you will be informed accordingly in advance.

This warranty does not affect your statutory rights. In the event that a product is received for repair, neither the service company nor the seller will assume any liability for data or settings possibly stored on the product by the customer.
