Operation Manual

Bench Grinder 62541





Illustration similar, may vary depending on model

Read and follow the operating instructions and safety information before using for the first time.

Technical changes reserved! Due to further developments, illustrations, functioning steps, and technical data can differ insignificantly.

Updating the documentation

If you have suggestions for improvement or have found any irregularities, please contact us.





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Introduction

Thank you for purchasing this quality product. To minimise the risk of injury we urge that our clients take some basic safety precautions when using this device. Please read the operation instructions carefully and make sure you have understood its content. Keep these operation instructions safe.

Safety instructions

The symbols used in these instructions are intended to draw your attention to possible dangers. The danger signs and the associated explanations must be properly understood. However, the warnings themselves do not eliminate the dangers and cannot replace the correct measures to prevent accidents.



Caution! This symbol denotes a point relating to safety and means a warning or danger. Failure to heed this warning could result in an accident, which could result in injury to yourself or others. To reduce the risk of personal injury, fire, or electric shock, always follow the recommendations provided.

Read the instructions! Before operating the device, familiarise yourself with the relevant section in the operating instructions.

According to the applicable safety standards

Wear ear protection, protective goggles, a respirator, and safety gloves while working.

General safety instructions

Warning! When using power tools, the following points should be observed to maintain basic safety. Read all instructions carefully first and get to know the applications, operating limits, and possible dangers of this tool before you start operating it.

- Keep your work area clean. Untidy work areas and workbenches increase the risk of accidents.
- Consider the environment of your work area. Do not expose your electrical device to rain. Do not use electrical devices in a damp or wet environment. Keep your work area well lit. Do not use electrical devices near flammable liquids or gases.
- **Protect yourself from electric shock.** Avoid body contact with earthed surfaces, e.g., pipes, heaters, or refrigerators.
- Keep bystanders away. Do not let bystanders, especially children, touch the device or the extension cord. Keep them away from the work area.
- **Store unused devices and tools.** Tools and equipment not in use should be kept in a dry, lockable place and out of children's reach.
- Do not apply force to the device. It works more effectively and safely when used as intended.
- Use the appropriate tool. Do not use small appliances and small tools for work intended for high-performance tools. Use tools only for their intended purpose, e.g., never use a circular saw to cut branches.
- Wear appropriate clothing. Do not wear loose clothing or jewellery as they could get caught in moving parts. If you work outdoors, non-slip footwear is recommended. Secure long hair with the help of a hair elastic or a hair net.





- **Put on protective equipment.** Wear protective glasses; wear a respirator when performing work that generates dust.
- **Connect a dust extractor.** If the tool is intended to be used for connecting dust collection and extraction devices, make sure that these are connected and being used.
- Handle the power cord carefully. Never pull on the power cord to unplug the device. Keep the power cord away from heat, oil, and sharp edges.
- **Secure workpieces.** If possible, secure workpieces with clamps or a vice. Holding workpieces by hand only can be dangerous.
- Do not overheat.
- **Maintain tools carefully.** Keep cutting tools sharp and clean for better and safer job performance. Follow the directions for lubricating and replacing accessories. Check the power supply regularly. If the power supply is damaged, have it repaired by a professional. Check the extension cord regularly and replace it if it is damaged. Keep your hands dry, clean, and free from oil and grease.
- **Disconnect the tool from the power supply.** Unplug the device when you are not using the device, servicing it, or replacing accessories (e.g., blades, attachments, and burrs).
- **Remove the adjustment wrenches.** Always ensure that the wrench and adjustment key have been removed from the tool before turning it on.
- Avoid unintentional starting. Make sure that the device is switched off before connecting it to the mains.
- Use extension cords for outdoor use. If you want to use the device outside, only connect it to an extension cable suitable for outside areas.
- **Stay alert.** Pay full attention to what you are doing and always use the device with foresight and caution. Do not operate the device when tired or under the influence of alcohol, drugs, or medicine.
- Check the device for damaged parts. Before continuing to use the tool, it should be carefully checked to determine whether it is working properly and fulfilling its intended function. Check to see if any parts have jammed, are damaged, or have any other type of damage that would affect their operability. A guard or other damaged part should be properly repaired, unless otherwise stated in this manual. Have damaged switches replaced by an authorised service centre. Do not use the device if the switch no longer turns it on and off.
- **Warning!** The use of accessories other than those recommended in these operating instructions can lead to injuries.
- Have your device repaired by a specialist. This power tool complies with the relevant safety regulations. Repairs may only be carried out by specialists with original spare parts, as this can otherwise lead to considerable dangers for the user.

Caution! Replacement of the plug or the power cord must always be carried out by a qualified electrician.

Special safety instructions concerning grinding machines

- Do not use damaged or deformed grinding wheels.
- Only use grinding wheels recommended by the manufacturer and whose specified speed reaches or exceeds the speed stated on the nameplate of the tool.
- Readjust the spark protection frequently to compensate for wheel wear. Keep the distance between the protection and the wheel as small as possible, but under no circumstances should it be greater than 2 mm.
- Mount the grinder on a suitable work surface before starting work.
- The grinding wheel should correspond to the size of Ø150×16×12.7 mm recommended by the manufacturer.
- If the grinding wheel is 91 mm or less in diameter, replace it with a new one.

Other safety instructions

- Wear protective goggles.
- Always wear protective equipment and eye protection.
- Do not overtighten the grinding wheel nut.
- Make sure that the grinding wheel can move freely before switching on the device.





- When switching on the switch, stand next to the machine, not in front of it. Then stand or sit in front of the machine to start working.
- Let a new grinding wheel spin for a minute before use to make sure that it is in good condition.
- Do not operate the bench grinder without a protective device.
- Do not use the grinder for cutting.

Warning!

Some of the dust generated from electrical grinding, sawing, sanding, drilling, and other work contains chemicals known to cause cancer, birth defects, and other reproductive harm. Some of these chemicals are

- lead from lead paints,
- crystalline silicon from brick, cement, and other masonry,
- arsenic and chromium from chemically treated sawn timber.

The danger posed by these substances increases with the scope of this type of work. To minimise exposure to them, you should only work in well-ventilated areas. Always wear approved safety equipment to work, e.g., a respirator that can filter out microscopic particles.

Intended use

- The machine is intended for roughing and brushing metal and stone materials without the use of water.
- It can be used for sharpening or practically any cutting tool: plane irons, chisels, gouges, lathe tools, drills, etc. Care should be taken not to sharpen a tool too hard or for too long to avoid overheating.

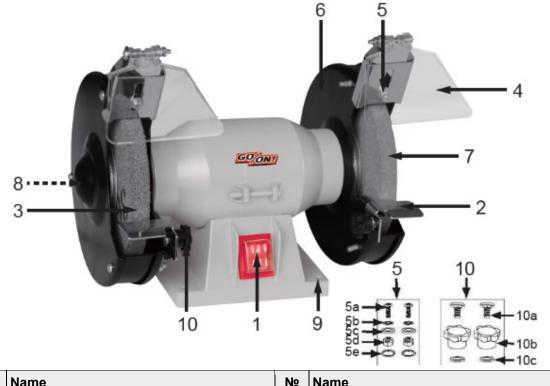
Power supply	220–240 V, 50 Hz		
Input power (W)	120 (S ₂ 30 min)		
Idle rotation speed (1/min)	2950		
Wheel size (mm)	ø150×16		
Hole diameter (mm)	12.7		
Sound pressure level (dB (A))	63	WEAR EAR PROTECTION!	
Sound power level (dB (A))	76		
Vibrations (%)	under 2.5		
Weight (kg)	5		

Technical specifications



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Main parts names



N⁰	Name	N⁰	Name
1	On/off switch	5e	Toothed washer
2	Workpiece holder	6	Wheel protection
3	Grinding wheel (rough)	7	Grinding wheel (fine)
4	Spark protection	8	Clamping flange
5	Spark protection fixation set	9	Pre-drilled holes for workbench mounting
5a	Screw	10	Workpiece holder mounting set
5b	Circlip	10a	Square screw
5C	Washer	10b	Lock nut
5d	Nut	10C	Washer

Assembly

Unpacking

- 1. Open the packaging and carefully remove the device.
- 2. Remove the packing material.
- 3. Remove the packing and transport locks (if present).
- 4. Check whether the delivery is complete.
- 5. Check the device and its accessories for damage during transport.
- 6. If possible, keep the packaging until the warranty period expires.
- 7. If you want to transport the electrical device, hold the wheel protection on both sides to lift it off.

Warning!

• Never use the grinder if it is not securely mounted. Assemble the grinder before use.

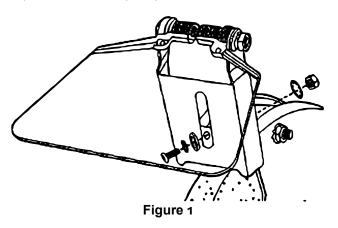




- Always pull out the power plug before working on the power tool (e.g., transport, assembly, modification, cleaning, and maintenance).
- The transparent protective shield (4) and spark protection (5) must be attached before use.

Attaching the spark guard

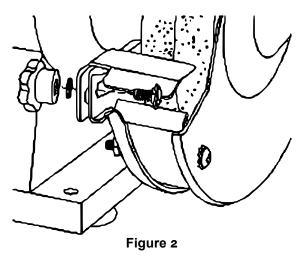
- 1. Bring the slot in the spark protection (5) over the hole on the top of the wheel protection (6).
- 2. Place the circlip (5b) and a washer (5c) on the screw (5a).
- 3. Screw a screw (5a) through the spark protection slot (5) and the hole on the top of the wheel protection (6) (see Fig. 1).
- 4. Secure the screw (5a) with a tooth lock washer (5e) and nuts (5d).
- 5. Repeat steps 1 to 4 for the second spark protection.



Attaching the workpiece holder

The workpiece holder (2) must be attached to both sides of the bench grinder before use. Use the assembly set (10) for fastening.

- 1. Hold the workpiece holder (2) against the wheel protection rail. Make sure that the workpiece holder is pointing in the right direction. The angled corner must point away from the bench grinder (see Fig. 2).
- 2. Screw one of the screws (10a) through the rail slot and the workpiece holder.
- 3. Place a washer (10c) on the other end of the screw.
- 4. Secure the screw (10a) with a lock nut (10b).
- 5. Repeat steps 1 to 4 on the other side for the second workpiece holder.







Fixing the grinding machine

Note: The material required for attaching the grinding machine is not included in the scope of delivery. Contact your dealer for the appropriate fastening material.

The bench grinder should be screwed onto a stable surface for safe use. To do this, use the four holes on the device feet **(g)**. We recommend that you attach the grinder bracket to the corner of a workbench. When choosing the location, make sure that there is enough space around the grinding machine so that you can work on it unhindered.

Note: The four rubber feet underneath the device feet can remain on the bench grinder to reduce noise.

- 1. First place the bench grinder in the intended place and mark the drill holes on the workbench with a pen through the pre-drilled holes on the device base (9).
- 2. Put the machine aside and drill the four holes with a suitable drill.
- 3. Put the grinding machine back in the right place and secure it with the appropriate screws and washers (see Fig. 3).

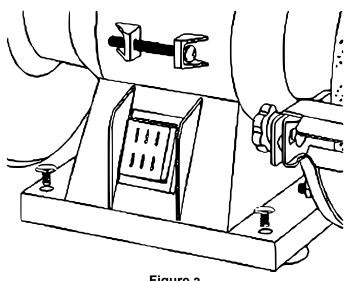


Figure 3

Connecting to the power supply

- 1. Insert the mains plug into a properly installed socket.
- 2. Before use, check that the mains voltage corresponds to the voltage specified on the nameplate. Also check that the power plug matches the socket.
- 3. The bench grinder must be earthed. Therefore, only connect the power plug to earthed sockets.
- 4. If the power cord or its plug is damaged, the cord must be repaired by an electrician to prevent accidents.
- 5. When the device is not in use, before maintaining the device and when replacing accessories (e.g., blades, attachments, and mills), pull the power plug out of the socket.

Grinding wheels

General remarks

- 1. Only use grinding wheels that comply with the information provided by the manufacturer on the type of fastening, dimensions, and permissible speed.
- 2. Note that the maximum speed of the grinding wheels must be higher than the maximum speed of the power tool.
- 3. Store grinding wheels in a dry place and at a constant temperature.
- 4. Make sure that the grinding wheel is of the right size (see section "Technical specifications").





- 5. Check the grinding wheel before use. Do not use broken, cracked or otherwise damaged grinding wheels.
- 6. Do not use separate means or attachments to adapt grinding wheels with larger holes to the device.

Replacing grinding wheels

- 1. Switch off the device and pull out the plug.
- 2. Remove the transparent protective shield (4), the spark protection (5), and the outer wheel protection (6).
- 3. The wheel protection is removed after removing the three screws on the outside with a crosshead screwdriver (see Fig. 3).
- 4. Loosen the internal adjusting nut with a 19 mm open-end wrench. Remove the nut and the clamping flange (8).

Note: Carefully put the screws, washers, nuts, etc. aside and within reach so that they are not lost and are within reach after the new grinding wheel has been attached.

- 5. Now remove the worn grinding wheel from the spindle.
- 6. Place the new grinding wheel on the spindle. Before doing this, make sure that the grinding wheel is undamaged and that it matches the technical features of this double grinder.
- 7. Perform a noise test. Flawless grinding wheels make a clear sound when they are carefully struck with a plastic hammer (or piece of wood).
- 8. Put the clamping flange (8) back on the spindle and secure it with the adjusting nut.
- 9. Reattach the wheel protection to the bench grinder. Make sure that the open side is pointing in the right direction, forwards. Tighten all screws securely.
- 10. Reattach the spark protector to the machine.

Tips and hints for grinding wheels

- Grinding wheels should not be attached temporarily. They should also only be installed on the type of machine for which they are intended. This seems to be self-evident, but **accidents** keep coming when the discs are mounted on home-made or improvised equipment unsuitable for work.
- Accidents are also caused when heavy grinding wheels are mounted on spindles that can only support light grinding wheels. The **vibrations** become too strong and the wheel can break. Under no circumstances should a grinding wheel be screwed onto the tapered spindle of a polishing machine. This dangerous type of assembly can lead to the grinding wheel breaking because the tapered spindle is wedged.
- New grinding wheels should be carefully unpacked and cleaned with a brush. Also check them for **shipping damage.** If a tool is used carelessly when unpacking, the grinding wheel can be damaged.
- The functionality of a grinding wheel can also be checked by tapping it lightly with a non-metallic tool, procedure known as **sound test**. The grinding wheel must be dry and free of sawdust so that the sound test can be carried out, otherwise the sound will be muffled. Also note that or-ganically bound discs do not give off the same clear, metallic sound as inorganically bound discs. Heavy grinding wheels should be supported on a clean, hard floor for the sound test, while light grinding wheels can be hung with the hole on a finger or a small pencil. If the disc does not sound right, e.g., due to cracks, it should not be used.
- All grinding wheels are relatively **fragile.** It should not be assumed that organically bound discs (resin, shellac, or rubber) can withstand rough treatment.
- If the disc **wears out** with use, the actual peripheral speed will decrease. If the speed of the device remains constant, this can lead to a reduced grinding effect. To ensure the machine working properly, the grinding wheel should be replaced when it has reached a diameter of g1 mm or less.





Commissioning

- 1. Check the power supply unit, power plug and accessories for damage.
- 2. Under no circumstances should you use electrical devices that are visibly damaged.
- 3. Wear appropriate clothing and protective equipment.
- 4. Make sure that there are no assembly or adjustment tools in or on the power tool.
- 5. Make sure that the necessary cutting tools/auxiliary tools fit.
- 6. Disconnect the power plug when the machine is not in use, before maintenance and when replacing accessories such as blades, attachments, and mills.
- 7. The eye protection shields are adjustable and should be aligned so that the operator has a clear view of the workpiece through the protection shields.
- 8. Wait for the machine to reach its maximum speed after switching it on before starting grinding.

Tips and hints for operation

- Before using the bench grinder, make sure that it is firmly in place and cannot slip. Also make sure that the transparent protective shield (4) is firmly and securely attached to the spark protection (5).
- Secure the workpiece you want to work on securely so that it cannot slip.
- The size of the workpiece should match the size of the bench grinder.
- Do not use low-powered machines for work that requires high-powered machines. Use the power tool only for the purpose for which it has been designed. For example, do not use a hand-held circular saw to cut branches or trunks.
- Allow the machine to pause briefly after 30 min of operation.
- Make sure that your fingers and hands do not come into contact with the grinding wheels.
- When you have checked and attached the tool attachment, ensure that bystanders are not near the rotating tool attachment and allow the device to run at maximum speed for one minute. Most damaged tool attachments break during this test period.
- Make sure that bystanders are at a safe distance from your work area.
- Do not work on workpieces that are too small to be fixed or held securely.
- If a material jam occurs, turn off the power at the switch and open the guard to clear the jam.
- To hold and guide the workpiece safely, always place it on the workpiece holder (2).
- Before switching it on, make sure that the work area around the bench grinder is clean and tidy. Remove and secure materials and objects that could come into contact with the bench grinder and especially the grinding wheels.
- Move the workpiece slowly and without pressure on the grinding wheels.
- Always remember that <u>both</u> grinding wheels are turning. Therefore, make sure that you do not accidentally touch the unused grinding wheel when grinding with the other grinding wheel.
- Do not use the machine near flammable materials; the sparks produced by grinding are very hot and can cause fire or injury.
- Make sure that the workpiece is held at an angle of 15° to 30° to the grinding slide.
- The best grinding results can be achieved by applying slight pressure to the tool. Excessive pressure will damage the grinding wheel and cause serious injury.

Maintaining and cleaning the device

- Keep the ventilation openings clean and free. Clean the product regularly.
- If anything unusual happens during use, switch off the power supply and unplug it. Check and repair the device before using it again.
- The device may only be repaired by a qualified technician.
- Repair or maintenance by unqualified personnel can increase the risk of injury.
- Only use identical spare parts when repairing the device.
- Clean the housing with a damp cloth and do not use any cleaning agents. Then let it dry completely.





Storage

- Keep the machine, the operating instructions and, if applicable, the accessories in the original packaging. In this way, all instructions and parts are always at hand.
- Pack the device well or use the original packaging to avoid any transport damage.
- Keep the device in a dry place.

Storing grinding wheels

- The grinding wheels should not tip over or be damaged when in storage. Do not place heavy iron parts or tools on top.
- Suitable shelves, containers or drawers must be provided for the various types of grinding wheels. For most smooth and conical grinding wheels, it is advisable to keep them upright on a grinding wheel stand.
- To keep the wear as low as possible, the grinding wheels must be stored in a dry room where large temperature fluctuations cannot occur. It is recommended that you mark the grinding wheels with the date that they were received on. Older grinding wheels should be used before newer grinding wheels. If there is any doubt or if a disc has been in storage for more than three years, the manufacturer should be consulted regarding its suitability.





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EU guidelines regarding the disposal of scrap electric appliances (WEEE, 2012/19/EU) were implemented in the law related to electrical and electronic equipment and appliances.

All WilTec electric devices that fall under the WEEE regulations are labelled with the crossed-out wheeled waste bin logo. This logo indicates that this electric equipment must not be disposed with the domestic waste.

The company WilTec Technik GmbH has been registered in the German registry EAR under the WEEE-registration number DE45283704.

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

The logo on the article or on its packaging points out that this article must not be treated as normal household waste but must be disposed to a recycling collection point for electronic and electrical waste equipment. By contributing to the correct disposal of this article you protect the environment and the health of your fellow men. Environment and health are threatened by inappropriate disposal.



Material recycling helps reduce the consumption of raw materials.

Additional information on recycling this article can be provided by your local community, municipal waste disposal facilities, or the store where you purchased the article.

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