Operation Manual

Electric Chainsaw Sharpener





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 minimize 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.

Technical data

Motor	Tension (V)	230		
	Frequency (Hz)	50		
	Power (W)	220		
Speed (rpm)		7500		
Table/vice angles (°)		35 (right to left)		
Arbor diameter (mm)		approx. 10		
Wheel size (mm)		100∅×3.2 (thickness)		
Overall size (mm)		175×320×210		
Weight (kg)		1.84		

Keep this manual. You will need the manual for safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep the manual in a safe and dry place for future reference.

Safety warnings and precautions

Warning: When using tools, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

- Keep the work area clean. Cluttered areas can lead to occurrence of injuries.
- Be aware of the working area conditions. Do not use machines or power tools in damp or wet locations. Do not expose them to rain either. Keep the work area well lit. Do not use electrically powered tools in the presence of flammable gasses or liquids.
- Keep children away. Children must never be allowed in the work area. Do not let them handle machines, tools or extension cords.
- Store idle equipment. When not in use, tools must be stored in a dry location to avoid rust. Always lock up tools and keep them out of reach of children.
- Use the right tool for the required work. Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do its job better and more safely for the work, which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
- Dress adequately. Do not wear loose clothing or jewellery as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-slip footwear are recommended when working. Tie long hair together.





- Use eye and ear protection. Always wear approved impact safety glasses. Wear a full-face shield if you are producing metal shavings or wood splinters.
- Do not overreach. Keep proper footing and balance at all times. Do not reach over or across running machines.
- Take care of the tools. Keep the tools sharp and clean for a better and safer performance. Follow
 the instructions for lubricating and changing equipment. Inspect tool cords frequently. If they
 appear damaged, they need to be repaired by an authorized technician. The handles must be
 kept clean, dry and free from oil and grease at all times.
- Avoid unintentional starting. Be sure the switch is in the OFF position when not in use and before plugging it in.
- Stay alert. Watch what you are doing, use common sense. Do not operate any tool when you are tired.
- Check for damaged parts. Before using the tool, any part that appears damaged should be
 examined carefully to determine whether the part will be safe to be operated properly and perform its intended function. Check the alignment of connecting or moving parts, any broken parts
 or mounting fixtures and any other condition that may affect the proper operation. Any part that
 is damaged needs to be repaired or replaced properly by a qualified technician. Do not use the
 tool if any switch does not turn on and off properly.
- Protect against electric shock. Prevent body contact with grounded surfaces such as pipes, radiators, cooker plates and refrigeration units.
- Replacement parts and equipment. When maintenance work needs to be carried out, only identical and original replacement parts may be used. Use of any other parts will void the warranty. Only use equipment intended for the use of the tool.
- Do not operate the tool if you are under the influence of alcohol or drugs. Read the package insert and labels on the medicaments to determine if your judgment or reflexes are affected by them. If there is any doubt, do not operate the tool!
- Use a proper size and type of extension cord. If an extension cord is required, it must be the proper size and type to supply the correct current to the tool without heating up. Otherwise, the extension cord could melt and catch fire or cause electrical damage to the tool. This tool requires use of an extension cord of 0 to 10 A capability (up to 15 m/50 ft), with a wire size of 18 AWG gauge. Longer extension cords require bigger sized wire gauges. If you are using the tool outdoors, use an extension cord rated for outdoor use.
- Maintenance. For your safety, maintenance should be performed frequently by a qualified technician only.
- Never use the electric chainsaw sharpener around flammable materials.

Note: Performance of this tool (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect the performance of the tool.

Warning: The warnings, cautions, and instructions discussed in this operating manual cannot cover all possible conditions and situations that may occur. The operator needs to understand that common sense and caution are factors which cannot be built into this product, but must be applied by the operator of the tool.

Additional safety warnings

Grinding wheel warnings

• Do not use a grinding wheel if it is chipped, cracked or worn. You can check if the wheel has cracks that are non-visible to the human eye by hanging it from the central hole and tapping it with a non-metallic object (i.e., screwdriver handle). If it is in a good condition, it will produce a metallic sound. A dull sound indicates a crack or break.





- Only use grinding wheels that fit the mandrel (1/8"). Do **not** try to change or modify the mounting hole on a grinding wheel to make it fit.
- Do not over-tighten the **nut (3).** Hand-tighten it only. Over-tightening may cause the wheel to get damaged or crack.
- Never use the chain saw sharpener without the grinding wheel cover (2) in its designated place.
- Always test the grinding wheel (5) by running it for a minute prior to contact with a chain.
- Stay away from the wheel when it is turning and make sure no one is standing close or in the line of the wheel trajectory.
- If the grinding wheel vibrates, turn the machine off immediately and check that it is mounted securely and not damaged.
- Never try to stop the grinding wheel with your hands, even if you are wearing safety gloves. The wheel will cut through gloves and your hand causing serious injury.
- Never operate tool without the grinding wheel cover in place.
- The listed speed of the replacement grinding wheel must be the same as or exceed the rpm rating of this tool.

Warning! This machine is designed to sharpen chain saw chains.

Do not attempt to sharpen or grind any other tools or objects.

Unpacking

When unpacking, check that no parts listed on the parts list are missing.

Assembly

- 1. When installing the sharpener on a workbench, make sure that the **lock wheel (46)** is accessible as shown in the mounting picture in **fig. 1.**
- 2. Bolt (bolts not included) the unit directly down to the workbench through the two ¼" holes in the base (40). The workbench must have a solid surface capable of supporting the weight of the sharpener, the work-piece and various tools (see fig. 2).



Figure 1: 1/4" hole with bolt



Figure 2: Base (40)

Warning! Always unplug the unit before changing grinding wheels or when making any adjustments to the sharpener.

Mounting a grinding wheel

Refer to the assembly drawing and fig. 3 and 4 below.

1. Raise the engine casing (12, 24) and lock it in the up position by tightening the screw (45).





- 2. Remove the two screws holding the grinding wheel cover (2) and set the cover aside.
- 3. Unscrew the **nut (3)** that holds the **grinding wheel (5)** in place.
- 4. Install the new wheel on the pressure plate (4) making sure it fits properly.

Note: Do not use a grinding wheel if it chipped, cracked, or worn. You can check if the wheel has cracks not visible to the human eye by hanging it up by the central hole and tapping it with a nonmetal object (i.e., screwdriver handle). If it is in good condition, it will produce a metallic sound. A dull sound indicates a crack or break.

- 5. Replace the nut (3).
- 6. Replace the grinding wheel cover (2).
- 7. Release the **screw (45)** and lower the top housing.
- 8. Never operate tool without the grinding wheel cover in place.

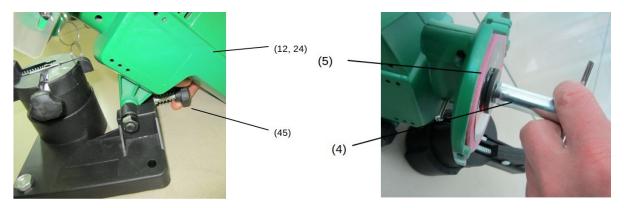


Figure 3: Engine housing (12, 24) and screw (45)

Figure 4: Grinding wheel (5) and pressure plate (4)

Operation

Warning! Always unplug the unit while adjusting chain to be sharpened.

Refer to the assembly drawing on and the various photographs.

Note: Raise the top casing while adjusting the chain.

- 1. Clean the chain before sharpening it. Wash it with a non-flammable solvent. Do not use gasoline to dry the chain.
- 2. Lift up the chain stop (53) and secure the chain in the fixed disk (50) (see fig. 6).
- 3. Lower the **chain stop** (53) so that it is positioned on the tooth (blade) you want to start with (see **fig. 5).** The tip of chain stop needs to be positioned against the tooth.



Figure 5: Chain stop (53) and screw (58)



Figure 6: Chain stop (53)





- 4. Loosen the lock wheel (46) to allow the entire housing to turn. Rotate the casing to match the degree of angle you need on the angle gauge. Chains come in various sizes with varying degrees of sharpening angles. Check with your chain manufacturer's manual to determine what degree you need to sharpen at. Once the degree is set, tighten the lock wheel (46).
- 5. Lower the **engine casing (12, 24)** so that the **grinding wheel (5)** slightly touches the chain tooth.
- 6. Hold it in position while you tighten the **screw (45)** so that the wheel will only go down to that point (see **fig. 7**).
- 7. Depending on the amount of material you wish to remove, tighten or loosen the **screw (58)** and set the lock nut accordingly (see **fig. 5)**. The lock nut of the **screw (58)** will determine how much material is removed. Once you set the lock nut, fully tighten the **screw (58)**.

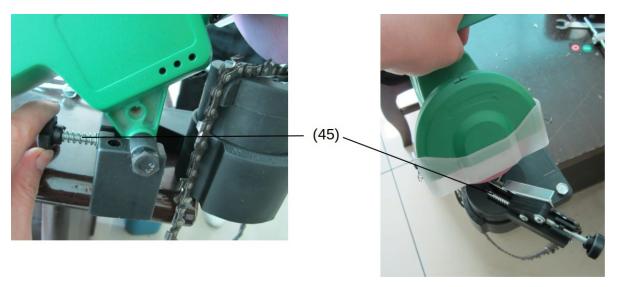


Figure 7: Screw (45)

Figure 8: Screw (45)

- 8. Lock the chain in the **fixing disk (50)** by turning the **screw (52)** (see **fig. 8)**. The **screw (52)** should be installed so that it can easily be released and tightened. You will need to release it each time you move to the next link, and tighten it to sharpen the link.
- 9. If the chain has been repeatedly sharpened, the chain depth limiting gauges may need to be taken down with a flat file (not included) (see **fig. 9, 10).** File down each gauge so that they are at a lower level than the cutting teeth.







Figure 9

Figure 10

Figure 11

- 10. Put on your protective gear and make sure the immediate area is clear of bystanders.
- 11. Plug in the **power cord (23)** and press the green button on the **switch (25)** to turn on the machine.





12. Slowly lower the grinding wheel as shown in **fig. 10.** If you notice slight errors in your settings, turn off the unit and unplug it before you make your adjustments.

Note: A good grind can be achieved when the contact between the wheel and the teeth are gradual and smooth. Do not process each tooth too long.

- 13. After sharpening one tooth, turn off the machine. Lift the **engine casing (12, 24)**, release the **screw (52)**, and move the chain to the next link, then position the **chain stop (53)**. Tighten the **screw (52)**. Turn the machine back on and continue sharpening the next tooth. Repeat this process until you have sharpened all of the links set up for this angle.
- 14. After you finish sharpening all of the teeth on the chain, turn off the machine by pushing the red button on the **switch (25)** and unplugging the unit.
- 15. Loosen the **lock wheel (46)** and reset the angle so that the first tooth that has not been sharpened is positioned against the **screw (52)** and locked it as explained (see **fig. 11)**.
- 16. As you did with the first half of the chain, be sure to lower the **engine casing (12, 24)** so that the **grinding wheel (5)** slightly touches the chain tooth, and lock it in place. Follow all of the steps from 2 to 7 double checking everything before you plug in the machine and turn it on again.

Attention: Remember to turn the machine off and unplug it if you need to make any adjustments!

17. After you have repeated all of the steps regarding the sharpening, your chain is ready to be mounted onto the saw.

Maintenance

- Keep the sharpener clean and free of dust, metal debris and dirt.
- Check the grinding wheel before each use to make sure it is not damaged. Do not use a grinding
 wheel if it is chipped, cracked, or worn. You can check if the wheel has non-visible cracks to the
 human eye by hanging it up by its central hole and tapping it with a non-metallic object (i.e.,
 screwdriver handle). If it is in good condition, it will produce a metallic sound. A dull sound
 indicates a crack or break.
- Replace the grinding wheel after it has reached a diameter of 3".

Please read the following carefully:

The manufacture and/or distributor has provided the parts diagram in this manual as a reference tool only. Neither the manufacturer nor the distributor makes any representation or warranty of any kind to the buyer that he or she is qualified to make any repairs to the product or that he or she is qualified to replace any parts of the product. In fact, the manufacturer and/or distributor expressly states that all repairs and parts replacements should be undertaken by certified and licensed technicians and not by the buyer. The buyer assumes all risk and liability arising out of his or her repairs to the original product or replacement parts there to or arising out of his or her installation of replacement parts thereto.

Note: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.





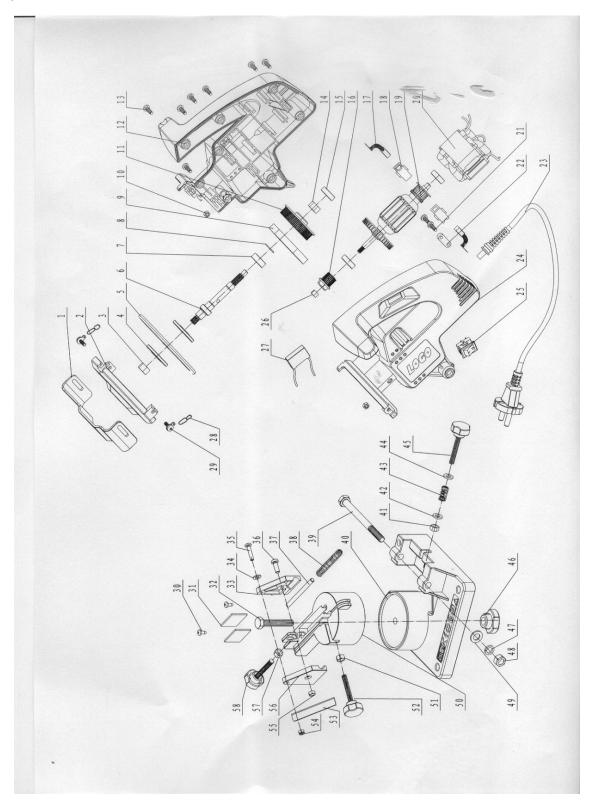
Parts list

Nº	Name	Nº	Name
1	Safety guard	30	Bolt
2	Grinding wheel cover	31	Clip
3	Nut	32	Screw
4	Pressure plate	33	Left cover
5	Grinding wheel	34	Flat pad
6	Output shaft	35	Screw
7	Bearing	36	Screw
8	Shaft circlip	37	Handspike
9	Synchronous belt	38	Spring
10	Nut	39	Screw
11	Big belt wheel	40	Base
12	Left engine casing	41	Nut
13	Bolt	42	Flat pad
14	Nut	43	Spring
15	Bearing	44	Flat pad
16	Small belt wheel	45	Screw
17	Carbon brush	46	Lock wheel
18	Carbon brush holder	47	Spring pad
19	Rotor	48	Nut
20	Stator	49	Flat pad
21	Bolt	50	Fixing disc
22	Pressing line plate	51	Nut
23	Power cord	52	Screw
24	Right engine casing	53	Chain stop
25	Switch	54	Nut
26	Nut	55	Nut
27	Capacitor	56	Right cover
28	Chain	57	Nut
29	Bolt	58	Screw





Explosion view







Disposal regulations

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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