LEISTER®

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GROOVER

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Operating Instructions

GB

Please read operating instructions carefully before use and keep for future reference.

Leister GROOVER
Grooving machine

Application

Intended use

- Cutting welding grooves into floor coverings of:
  tiles,
  rolls,
  nap-tiles and -rolls

Improper use

Any other use of the UNIDRIVE 500 or any use beyond the type of use described is deemed improper use.

Technical Data

Voltage	**V~**	120, 230
Frequency	**Hz**	50/60
Power consumption	**W**	350, 700
Cutting speed	**rpm**	Pos 1: 14500, Pos 2: 18000
Noise emission level	**L_{pA} (dB)**	89 (K = 3dB)
Sound pressure level	**L_{WA} (dB)**	100 (K = 3dB)
Vibration acceleration	**a_h (m/s²)**	< 2.5 (K = 1.5m/s²)
Groove depth adjustment	**mm**	0 – 4, infinitely
	inch	0 – 3/16
Weight	**kg**	6.4 } without power supply cord
	lbs	14.1
Size	**mm**	240 × 205 × 255
	inch	9.4 × 8 × 10
Mark of conformity		2
Protection class II		4

Technical data and specifications are subject to change without prior notice.

The stated vibration acceleration has been measured using a standardised test procedure, and can be used for comparison of one electrical equipment with another. It can also be consulted to give a preliminary assessment of the vibrational loading.

The times when the equipment is switched off or is running whilst not actually being used can considerably reduce the vibrational loading over the entire working period.

General Safety Rules

WARNING! Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains-operated (Power supply cord) power tool or battery-operated (Power supply cord) power tool.

Work area

Keep work area clean and well lit. Cluttered and dark areas invite accidents.

The tool must be operated **under supervision**.

Do not operate power tools in explosive atmospheres, such as the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical safety

Check the cables of electric tools for damage before connecting them to the mains. Damaged cables increase the risk of an electric shock.

Danger! Unplug the tool before opening it, as live components and connections are exposed.

The voltage rating stated on the tool must correspond to the line/mains voltage.

Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.

Do not abuse the cord. Never use to cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

For personal protection, we strongly recommend the tool to be connected to an **RCCB** (**R**esidual **C**urrent **C**ircuit **B**reaker) / **GFCI** (**G**round **F**ault **C**ircuit **I**nterrupter) before using it on building sites.

Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.

Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

Personal safety

Risk of injury from touching the cutting blade.

Risk of injury by ejected particles. Ejector pipe and dustbag must be fitted.

Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

General Safety Rules

Use safety equipment. Always wear eye hearing protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or safety glasses used for appropriate conditions will reduce personal injuries.

Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.

Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

Dress properly. Do not wear loos clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

If devices provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust-related hazards.

Power tool use and care

Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.

Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

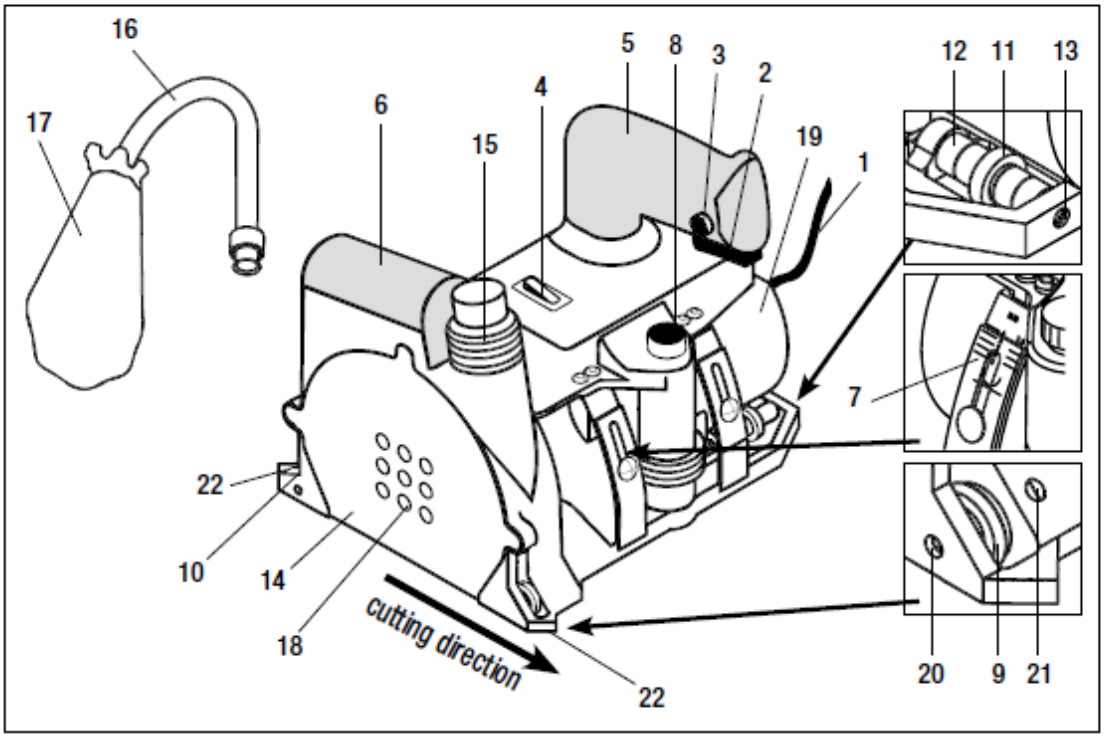
Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hand of untrained users.

Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the tool repaired before use. Many accidents are caused by poorly maintained power tools.

Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

Use the power tool, accessories and tool bits etc. in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

Description of tool



1. Power supply cord
2. Operating switch
3. Locking button of operating switch
4. Cutting speed switch
5. Handle
6. Hand rest
7. Scale for depth adjustment
8. Control knob for depth adjustment
9. Adjustable guide roller
10. Rear roller
11. Tracking wheel
12. Spacers
13. Roller axle
14. Cutting blade cover
15. Threaded connection
16. Ejector pipe
17. Dustbag
18. Air inlet openings
19. Motor housing
20. Adjustment screw for guide roller
21. Locking screw
22. Positioning arrows

Operating condition

- Adjust the **tracking wheel (11)** with **spacers (12)** to the pitch as required when using nap-rolls, or tiles.
- Fit the **ejector pipe (16)** and **dustbag (17)**.
- Adjust the groove depth.
  - With your left hand push down the **handle (5)** of the drive unit up to the magnet stop.
  - With your right hand on the **control knob (8)** adjust the required groove depth until approx. 3/4 of the material thickness is visible on the scale.
- ***Caution: Cutting blade can protude!***
- Align the tool along the grooving line via the **adjustable guide roller (9)** and the red **positioning arrows (22)**. Pay attention to the direction of cutting!

Operation

- Connect tool to rated voltage.
- **Cutting speed switch (4)** set to position 1 or position 2 depend from material thickness.
- Hold the GROOVER by the **handle (5)** (left hand) and by the **hand rest (6)** (right hand).
- Align the marking arrows on the tool (red) with the grooving line. The adjustable **guide roller (9)** should run inside the grooving line and the **rear roller (10)** in the groove.
- Activate the **locking button(3)**. Switch on the **operating switch (2)**.
- Press the handle down to the magnet stop (grooving position).
- The GROOVER is easy to push forward and straight along the grooving line with the **adjustable guide roller (9)** and the **rear roller (10)**.
- At the end of the groove, switch off the **operating switch (2)** and release the **handle (5)**. The tool will spring back into the starting position.

  Caution: The cutting blade run out!
- If required set the **guide roller (9)** with the **locking screw (21)** and **adjustment screw (20)** (grooving centre).

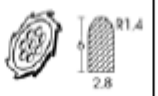
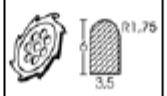
Changing the cutting blade

- ***Caution: Unplug the tool !***
- Remove the **cutting blade cover (14)**.
- Remove the blade with a box spanner.
- Clean the hub of the tool as well as the cutting blade to be inserted.
- Insert and fit the cutting blade. Check that the cutting blade revolves freely.
- Refit the **cutting blade cover (14)**.

Accessories

- The Leister GROOVER is fitted with a tungsten carbide tipped cutting blade
- Only Leister tungsten carbide cutting blades should be used
- Only perforated blades should be fitted to the GROOVER, otherwise the suction pressure is too low

Illustration not to scale	Order number	
	102.401	Tungsten carbide tipped blade ∅ 110 × 3.5 mm, trapezium profile
	102.402	Tungsten carbide tipped blade ∅ 110 × 4 mm, round profile
	102.404	Tungsten carbide tipped blade ∅ 110 × 2.5 mm, round profile

Illustration not to scale	Order number	
	**102.403**	Tungsten carbide tipped blade ∅ 110 × 2.8 mm, round profile
	**102.405**	Tungsten carbide tipped blader ∅ 110 × 3.5 mm, round profile
	102.406	Diamond cutting blade ∅ 110 × 3.5 mm, semi-round profile

Maintenance

- After use, disconnect the tool from the power supply. Remove the **cutting blade cover (14)**. Clean the **cutting blade, cutter housing** and **dustbag (17)**. Refit the **cutting blade cover (14)**.

Service and Repairs

- The carbon brushes of the tool's motor should be checked after about 1600 hours running time by your Service Centre.
- Repairs have to be carried out by authorised **Leister Service Centres** only. They guarantee a specialized and reliable **repair service within 24 hours** using original Leister spare parts.

Warranty

- For this tool, the guarantee or warranty rights granted by the relevant distributor/seller shall apply. In case of guarantee or warranty claims any manufacturing or workmanship defects will either be repaired or replaced by the distributor at its discretion. Warranty or guarantee rights have to be verified by an invoice or a delivery document. Heating elements shall be excluded from warranty or guarantee.
- Additional guarantee or warranty claims shall be excluded, subject to mandatory provisions of law.
- Warranty or guarantee shall not apply to defects caused by normal wear and tear, overload or improper handling.
- Warranty or guarantee claims will be rejected for tools that have been altered or changed by the purchaser.

Disposal

Electrical equipment, accessories, and packaging should be subjected to environmentally friendly recycling. Please observe national and local regulations when disposing of our products. **For EU countries:** Do not dispose of electrical equipment with household refuse.