**ProxxonTools.com** 



# TG 125/E



# Manual

Notes:

















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Dear Customer,

By purchasing your PROXXON Disc-Sander TG 125/E, you have chosen a good-quality, high-grade machine.

In order to operate the Disc Sander safely and correctly, please read the enclosed safety information and operating instructions prior to operation.

This instruction manual covers:

- safety regulations
- operation and maintenance
- spare parts list

#### Please read carefully!

Using this instruction manual will

• make it easier for you to get used to the machine,

- help prevent faults occurring due to improper use and
- increase the service life of your machine.

Keep this instruction manual in an easily accessible place. Only operate this machine if you are qualified to do so and follow the guidelines in this instruction manual.

So read and become familiar with this entire instructions manual, learn the tool's applications, limitations and possible hazards.

PROXXON does not accept responsibility for the safe functioning of the machine

- if it is handled in a manner which constitutes improper use;
- if it is used for other purposes it is not intended and designed for;

- if it is used for other purposes which are not specified in the instruction manual;
- if the safety regulations are not observed.
- Warranty claims are invalid if the machine is incorrectly operated, or the machine has not been sufficiently maintained.

In the interests of your safety, please always observe the safety regulations. Failure to follow the instructions listed below, may result in electric shock, fire, and/or serious personal injury or property damage. This can result in serious injury or possibly even death.

Only use genuine PROXXON spare parts.

We reserve the right to make further alterations for the purpose of technical progress.

We wish you every success with your machine.

Read and understand the entire owners manual before attempting assembly or operation!

### 1. General safety instructions

- 1. KEEP GUARDS IN PLACE and in working order.
- REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- KEEP WORK AREA CLEAN. Cluttered areas and micro band saws invite accidents.
- DON'T USE IN DANGEROUS ENVIRON-MENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
- 5. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
- MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
- DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
- USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will

cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Exception No. 1: The reference to the table and the table itself may be omitted if a statement indicating the appropriate gage and length is incorporated into the instruction.

Exception No. 2: The information regarding extension cords need not be provided for a permanently connected tool.

10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewellery which may get caught in moving parts. Non-slip footwear is recommended.

Wear protective hair covering to contain long hair.

Exception: The reference to gloves may be omitted from the instructions for a grinder.

- 11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- 12. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
- 13. DON'T OVERREACH. Keep proper footing and balance at all times.
- 14. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 15. DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and the like.
- 16. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in off position before plugging in.
- 17. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
- 18. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- 19. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and

perform its intended function check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

- 20. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
- 21. NEVER LEAVE TOOL RUNNING UNAT-TENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

#### Table 1:

Minimum gage for cord:

Total length	of			
cord in feet	25 ft	50 ft	100 ft	150 ft
AWG:	18	16	16	14

#### 2. Additional safety regulations

- DO NOT OPERATE THIS MACHINE UNTIL it is assembled and installed according to the instructions.
- 2. DO NOT OPERATE this machine while tired or under the influence of drugs, alcohol or any medication.
- OBTAIN ADVICE from a supervisor, instructor, or another qualified person if you are not familiar with the operation of this tool.
- 4. FOLLOW ALL WIRING CODES and recommended electrical connections.
- 5. KEEP ARMS, HANDS, AND FINGERS away from the grinding disk.
- NEVER START THE MACHINE before clearing the table of all objects (tools, scrap pieces, etc.).
- NEVER PERFORM LAYOUT, ASSEMBLY, or setup work on the table/work area when the machine is running.
- TURN THE MACHINE "OFF" AND DISCON-NECT THE MACHINE from the power source before installing or removing accessories, before adjusting or changing set-ups, or when making repairs.
- TURN THE MACHINE "OFF", disconnect the machine from the power source, and clean the table/work area before leaving the machine.

# 3. Additional safety instructions for disc sanders:

- Operate only after you have received instruction.
- 2. Wear proper clothing.
- 3. Wear face shield, safety glasses, or goggles and use glass safety guard on sander.
- 4. Make sure that no one but you is inside the operator's area.
- 5. Adjust sander for your job before turning power on
- Stand to one side of wheel when turning power on. The wheel may be cracked, causing it to break up.
- 7. Turn on power after permission is given.
- 8. Keep hands away from the wheel while it is in motion
- 9. Hold work with your hands. Ask permission to grind small pieces.
- 10. Use the face of the wheel only
- 11. Press materials against wheel with correct amount of pressure.
- 12. Before connecting to the power source, be sure the switch is in the "off" position.
- 13. Make sure grinding pad and disc are securely fastened to the tool. Unplug the sander when changing discs.
- 14. Do not allow the edge of the disc to touch the edge of the stock
- Sand or finish with a stroking motion; do not pause in one spot.

#### WARNING:

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- · lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Use a vacuum cleaner for wood dust collection as described in our manual whenever possible.

### 4. Introduction

#### Legend (Fig. 1)

- 1. Grinding disc
- 2. Swivel-mounted grinding table
- 3. Rotary knob for speed control
- 4. On-off switch
- 5. Angle stop
- 6. Mains cable
- 7. Connecting piece
- 8. Guide slot for angle stop
- 9. Clamp
- 10. Locking button for angle adjustment
- 11. Grinding discs
- 12. Storage discs
- 13. Rubber connector

#### 4.2. Description of machine

Thank you for purchasing the TG 125/E disc grinding machine. You now own a high-precision machine to use in grinding work for which complete accuracy is required.

A high-precision manufactured and carefully balanced grinding disc with double ball-bearing direct drive guarantees excellent smoothness, precision concentricity and minimum wear.

In this way, soft and hard woods, plates, non-ferrous metal or steel, even plastic, cork, rubber and many further materials can be processed with high precision at grinding speeds of approximately maximal 1400 m/min (adjustable).

The various fixing possibilities ensure particular flexibility: Your TG 125/E can be operated both in "normal position" and in standing, with the grinding table removed. To this end, it is fixed with the enclosed clamp.

The grinding table is made of high-grade aluminium and can be adjusted upwards by  $10^{\circ}$  and downwards by  $50^{\circ}$ . This also includes the guide slot for the angle stop that is also included in the scope of delivery. Two grinding wheels in each of the grain sizes offered of 80, 150 and 240 are included in the scope of delivery. In order to guarantee optimal compatibility of grinding wheels (e.g. when working with various grain sizes) the grinding disc is bonded with silicon foil.

In order that the swarf goes directly where it should, namely into the vacuum cleaner, there is a connecting piece to which the vacuum cleaner can be connected. So you are optimally equipped for the grinding work.

### 5. Scope of delivery

- 1 x TG 125/E disc sander
- 1 x Angle stop
- 1 x Connecting piece
- 1 x Rubber connector
- 2 x Grinding wheels grain 80
- 2 x Grinding wheels grain 150
- 2 x Grinding wheels grain 240
- 2 x Storage discs
- 1 x Operating instructions
- 1 x Brochure with safety instructions
- 1 x Vice

### 6. Specifications

Length:	approx	k. 11.8 inch (300 mm	ו)
Width:	approx	k. 5.5 inch (140 mm)	
Height:	approx	k. 6.3 inch (160 mm)	
Weight:	approx	k. 3 kg (6.6 lb)	
Ø Grinding disc:	125 m	m	
Dimensions grinding	table:	3.86 x 5.5 inch	
	,	(98 x 140 mm)	
Motor:		· · ·	
Voltage:		115 Volt	
		50/60 Hz $\sim$	
Power input:		140 Watt	
Speed:		max. 3600 rpm	
Grinding speed:		max. 1400 m/min	
Noise development:		< 55 dB(A)	
Only in dry rooms		Ĺ	n ➡

Only in dry rooms

Please do not dispose of this electrical machine in the household refuse



### 7. Operating the tool

#### 7.1. Setting up your disc sander (fig. 2):

#### Warning!

To avoid injury from unexpected starting or electrical shock, do not plug the power cord into a power source receptacle during unpacking and assembly. Never connect the plug to the power source receptacle until the assembly and adjustment steps are completed, and you have read and understand the safety and operating instructions. Make certain the switch is in the off position before connecting the machine to the power source receptacle.

#### Note:

When setting up the machine, make sure that the ground below it is level and secure! A secure stand is indispensable for working with the machine!

The disc grinding machine can be operated in two different positions: Once in the normal horizontal position or standing vertically (for sharpening tools and blades for example).

In both positions, the machine should be securely clamped with the enclosed vice, as shown in fig. 2.

# 7.2. Removing and inserting the grinding table (fig.3):

#### Caution:

Before removing and inserting the grinding table, always disconnect the mains plug to prevent the disc being started up accidentally. Risk of injury!

Normally, your TG 125/E is operated with the attached grinding table (as in delivery condition). Additionally, there is also the possibility, where required, of removing the grinding table, if this is necessary for certain tasks or for changing the grinding wheels.

- 1. Remove Allen head screw 1
- 2. Remove the grinding table with grinding table holder 2 by pulling out from the front
- 3. To insert, simply push into the normal position
- 4. Turn in Allen head screw 1 again

# 7.3. Affixing and replacing grinding wheels (fig. 4):

#### Note:

Before affixing or replacing the grinding wheels, always disconnect the mains plug to prevent the disc being started up accidentally. Risk of injury!

Two grinding wheels in each of the grain sizes 80, 150 and 240 are supplied as initial equipment with your disc grinding machine; these can also be easily obtained as spare parts. The grinding disc of your TG 125/E is bonded with a silicon film. This material guarantees completely non-problematic replacement of the grinding wheels because they do not stick, but only grip firmly: Firmly enough to work but loosely enough to be easily removed. It is therefore no problem to change wheels, whether because of wear or because discs with various grain sizes are required when working.

#### Caution:

When replacing the wheels, it is advisable to remove the grinding table as described in the previous section!

- 1. Remove the rear protective foil above the adhesive surface from the desired wheel,
- 2. Push the wheel evenly and bubble-free onto the grinding disc.
- 3. To replace, simply remove the grinding wheel again and push on the new wheel.

#### Caution:

There are also two storage discs made of silicon foil included in the scope of delivery. If a grinding wheel is to be used again after removal, please cover the adhesive surface with foil for storage!

#### 7.4. Adjusting the grinding table angle (fig. 5):

#### Caution:

Before adjusting the grinding table, always disconnect the mains plug to prevent the disc being started up accidentally. Risk of injury!

- 1. Loosen rotary knob 1 At the same hold rotary knob 2
- 2. Swing grinding table 3 into the desired angle position and check the set value on angle scale 4.

3. Tighten rotary knob 1. At the same hold rotary knob 2

#### 7.5. Connecting the dust exhaust (fig. 6):

#### Caution:

Before connecting the dust exhaust, always disconnect the mains plug to prevent the disc being started up accidentally. Risk of injury!

It is recommended to always work with the dust exhaust! This not only guarantees clean working, it also reduces the hazardous effect of some dusts!

- 1. Push adapter piece 1 onto connecting piece 2 of the machine
- 2. Push rubber adapter 3 onto adapter piece 1
- 3. Insert vacuum cleaner nozzle 4 into rubber adapter 3
- 4. Switch on vacuum cleaner when working

#### Another small tip:

When using the Proxxon CW-matic vacuum cleaner, manual switching on and off is no longer necessary. The CW-matic is fitted with an automatic control device; it automatically switches on and off when the power tool is switched on and off. The same effect can be obtained with traditional vacuum cleaners by using our vacuum control device.

#### Caution:

When operating the device in vertical position, a flexible hose is required to connect the vacuum device. This is placed directly upon the connecting pieces on the machine. If required, this hose can be obtained as an accessory from a specialist shop or directly from PROXXON (address on the last page of these instructions).

# 7.6. Working with the TG 125/E disc grinding machine

- 1. If mitres are to be ground, adjust the grinding angle as described above
- 2. Insert the mains plug
- 3. Switch on the machine at switch 1
- 4. Set the required speed on the speed control button (pos. 3, fig. 1)

#### 7.7. Working with the angle stop (fig. 7):

If, for example, the ends of somewhat thinner strips are ground for mitre, it is advantageous to use the angle stop included in the scope of delivery.

- 1. Loosen knurled screw 1
- 2. Set the desired angle on scale 2
- 3. Turn the knurled screw tightly and insert into the intended table groove
- 4. Guide the desired workpiece up to the stop against the grinding wheel as shown in the illustration

#### 7.8. Notes on grinding speed

The grinding speed of your TG 125/E is infinitely adjustable to approx. 1400 m/min. In this way, optimal adaptation to various material conditions is possible. Please note that the circumferential speed of the grinding disc is greatest at the edge and reduces towards the middle.

General recommendations on the selection of the grinding speed are difficult; it may be necessary to experiment somewhat to find out the correct grinding speed for "its" material and workpiece.

Based on experience, non-ferrous metals and plastic require lower grinding speeds than soft and hard wood; this also applies for ceramics and glass.

But as stated: Recommendations are difficult, the correct speed depends on the material, contact pressure and friction and grain size of the grinding wheels.

#### 8. Optional Accessories

Note: Use accessories and spare parts that have been recommended by PROXXON. Improper accessories may be hazardous!

# Self-adhesive white Corundum Sanding Discs for TG 125/E

Industrial quality. For sanding soft and hard woods, chipboards, fibre boards, non-ferrous metals, steel, plastics, cork, rubber and minerals. Ø 125 mm. One quadratic silicon film for storage and reuse of used sanding discs is included.

NO 28 160	80 grit	5 pieces
NO 28 162	150 grit	5 pieces
NO 28 164	240 grit	5 pieces

#### 9. Care and maintenance

#### Caution:

Before cleaning, adjusting, service or repair, disconnect the mains plug and turn switch in "Off"-Position!

#### Caution:

If any part is missing or damaged, do not plug the disc sander in until the missing or damaged part is replaced, and assembly is complete. To avoid electrical shock, use only identical PROXXON-replacement parts when servicing double insulated tools.

Any attempt to repair or replace electrical parts on this disc sander may create a hazard unless repair is done by a qualified service technician. Repair service is available at your PROXXON service center (You find the address at address at the back of this manual)

To avoid fire or toxic reaction, never use gasoline, naphtha, acetone, lacquer thinner, or similar highly volatile solvents to clean the disc sander.

#### Cleaning:

The machine is largely maintenance free. To ensure a long service life, however, the machine should be cleaned with a soft cloth, handbrush or paintbrush after each time it is used. A vacuum cleaner is also recommended here. A vacuum cleaner should always be used during work!

The outside of the housing can be cleaned with a soft, possibly damp cloth. In this process, mild soap or another suitable cleaning agent can be used. Solvents or cleaning agents containing alcohol (e.g. petrol, cleaning alcohols etc.) should be avoided, since these can attack the plastic cases.

#### 10. Disposal

Please do not dispose of this machine in household refuse! The machine contains materials that can be recycled. If you have any questions about his, please contact your local recycling company or other relevant communal facilities.

### LIMITED WARRANTY OF PROXXON POWER TOOLS FOR HOME USE

Prox-Tech, Inc., ("Seller") warrants to the original purchaser only, that all PROXXON consumer power tools will be free from defects in material or workmanship for a period of two years from the date of purchase. Seller's sole obligation and your exclusive remedy under this limited warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the repair or replacement of parts, without charge, which are defective in material or workmanship and which have not been misused, carelessly handled, or misrepaired by persons other than Seller or Authorized Service Station. In the event of a failure of a product to conform to this written warranty, please refer to the Service and Repair section on the back of this manual and take action accordingly. This Limited Warranty does not apply to accessory items such as circular saw blades, drill bits, router bits, jigsaw blades, sanding belts, grinding wheels and other related items. Damage to the product resulting from tampering, accident, abuse, negligence, unauthorized repairs or alterations, unapproved attachments or other causes unrelated to problems with material or workmanship are not covered by this warranty. Any implied warranties shall be limited in duration to two years from date of purchase. Some states in the U.S. and some Canadian provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. In no event shall seller be liable for any incidental or consequential damages (including but not limited to liability for loss of profits) arising from the sale or use of this product. Some states in the U.S. and some Canadian provinces do not allow the exclusion or limitation of incidental or consequential damages; so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights, which vary from state to state in the U.S., province to province in Canada and from country to country. This limited warranty applies only to PROXXON power tools sold within the United States of America, Canada, the commonwealth of Puerto Rico and Mexico. For warranty coverage within other countries contact your local PROXXON Importer.