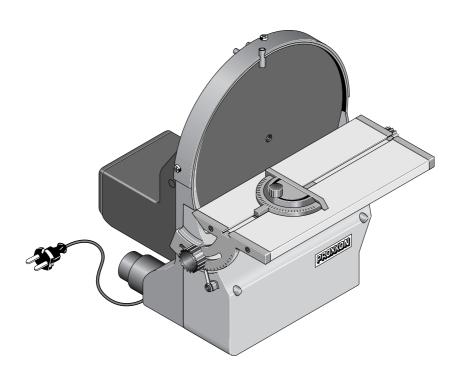
# PROXXON

# **TSG 250/E**



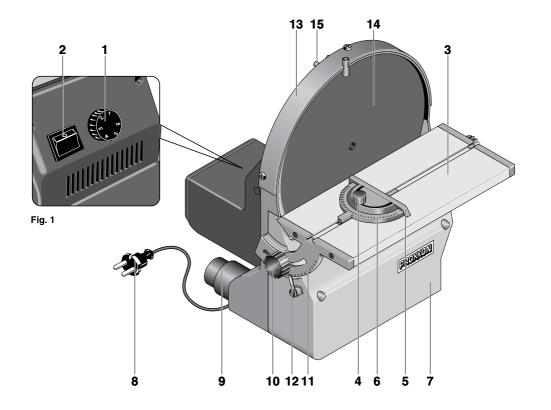
# MANUAL

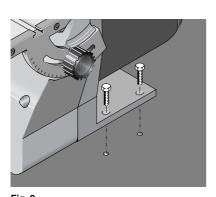
## **Spare Parts List**

28060 - 99

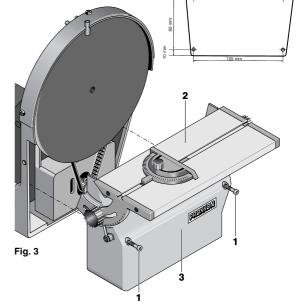
	Spare raits Eist			
	PROXXON	TSG 250/E		
	ET-Nr.:	Description		
	28060 - 03	Sanding disc		
	28060 - 08	Indicator		
	28060 - 09	Motor		
	28060 - 10	Splash guard		
	28060 - 11	Ball bearing		
	28060 - 12	Spacer		
	28060 - 14	Strain relief		
	28060 - 16	Fastening screw		
	28060 - 17	Toothed belt pulley		
	28060 - 18	Toothed belt		
	28060 - 19	Fastening screw		
	28060 - 20	Washer		
	28060 - 21	Fastening screw		
	28060 - 22	Fastening screw		
	28060 - 23	Fastening screw		
	28060 - 28	Washer		
	28060 - 30	Screw		
	28060 - 31	Fastening screw		
	28060 - 35	Shaft		
	28060 - 36	Sealing		
	28060 - 37	On/Off switch		
	28060 - 39	Regulating knob		
	28060 - 40	Connecting cable		
	28060 - 41	Kink protection		
	28060 - 42	Connecting piece for vacuum cleaner		
	28060 - 43	Sandpaper (accessory)		
	28060 - 44	Screw		
	28060 - 47	Countersunk screw for shaft		
	28060 - 48	Locking ring		
	28060 - 49	Screw for motor bracket		
	28060 - 50	Motor plate		
	28060 - 51	Drive-in nut		
	28060 - 52	PA-disc		
28060 - 53		PA-disc		
	28060 - 54	Spring washer f. axis		
	28060 - 55	U-disc f. splash guard		
	28060 - 56	Main housing		
	28060 - 57	Motor cover		
	28060 - 58	Board with potentiometer		
	28060 - 59	Article packaging (not shown)		
	28060 - 60	Table guide right		
	28060 - 61	Table guide left		
	28060 - 62	Locking screw		
	28060 - 63	Screw		
	28060 - 64	Screw		
	28060 - 65	Front housing cover		
	28060 - 66	Cover		
	28060 - 67	Screw		
	28060 - 68	Label		
	28060 - 69	Table		
	28060 - 70	Angle stop complete		
	28060 - 71	Threaded pin		
	28060 - 72	Square nut		

Operating instructions









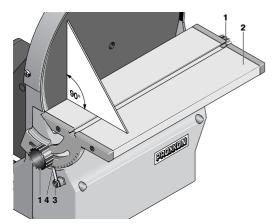
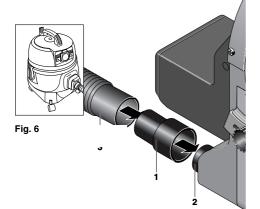


Fig. 4



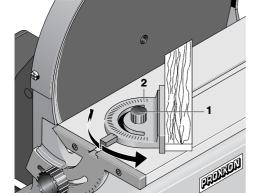


Fig. 8

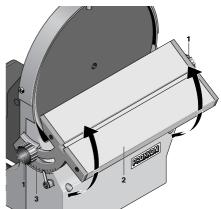


Fig. 5

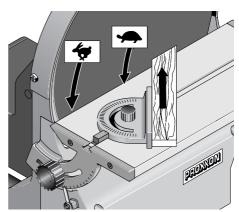


Fig. 7

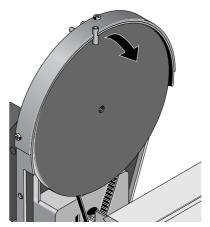


Fig. 9



### Translation of the Original Operating Instructions Operating Instructions Disc sander TSG 250/E

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#### 1 Introduction

Dear Customer!

The use of these instructions

- makes it easier to become acquainted with the device,
- prevents malfunctions due to improper handling, and
- increases the service life of your device.

Always keep these instructions close to hand. Only operate this device with exact knowledge of it and comply with the instructions.

PROXXON will not be liable for the safe function of the device for:

- handling that does not comply with the usual intended use,
- other application uses that are not stated in the instructions,
- disregard of the safety regulations,

You will not have any warranty claims for:

- operating errors,
- · lack of maintenance.

For your safety, please comply with the enclosed safety regulations without fail.

Only use original PROXXON spare parts.

All rights reserved for further developments within the meaning of technical progress. We wish you much success with the device.

Mantalan with the alternation

#### WARNING!

Read all safety warnings and instructions. Failure to follow all safety warnings and instructions listed below may result in electric shock, fire and/or serious injury.

KEEP ALL SAFETY WARNINGS AND INSTRUCTIONS FOR THE FUTURE!

### 2 Description of disc sander TSG 250/E

Thank you for choosing the disc sander TSG 250/E. You now have a precision instrument for sanding long edges, end sections, radii, mitres, or accurate flat surfaces at right angles and many more things that require great exactness.

A high-precision manufactured and carefully balanced sanding disc with dual ball-bearing synchronous belt drive guarantees excellent running smoothness, precise true run and lowest wear.

Soft and hard woods, plates, non-ferrous metals or steel, even plastic, cork, rubber and many other materials can be machined at sanding speeds of approx. 250-750 m/min (adjustable).

A clearly laid out table at the rear of the device makes it easy to pre-select the rotational speed or sanding speed for the appropriate material.

The high-quality aluminium sanding table can be adjusted to tilt up by 10° and down by 50°. A scale makes it easy to read the angle. This also contains the guide groove of the angle stop that is also included in the delivery.

It is even possible to accurately refinish small turning steels, sharpen chisels and knives, resand screwdriver edges, etc. ...

Delivery includes two sanding discs of 80 and 240 grit each. A silicone film was attached to the sanding disc to guarantee best sanding disc exchange (e.g. while working with different grits).

A suction connection for the vacuum cleaner makes sure that sanding dust has no other place to go but in the vacuum cleaner. This presents the best equipment for any occurring sanding work.

### 3 Scope of delivery:

- 1 pc. Disc sander TSG 250/E
- 1 pc. Angle stop
- 1 pc. Rubber connecting piece for vacuum cleaner connection
- 2 pc. Sanding discs 80 grit
- 2 pc. Sanding discs 240 grit
- 2 pc. Storage discs
- 1 pc. Operating instructions
- 1 pc. Brochure with safety regulations
- 1 pc. Device packaging

### 4 Legend (Fig. 1)

- 1. Speed controller
- 2. On/Off switch
- 3. Sanding table
- 4. Clamping screw angle stop
- 5. Angle stop
- 6. Scale angle stop
- 7. Housing
- 8. Mains cable
- 9. Connecting piece for vacuum cleaner
- 10. Clamping screw of angle adjustment
- 11. Scale of angle adjustment
- 12. Indicator
- 13. Protecting cover
- 14. Sanding disc

#### 5 Technical data

Sanding speed: 250 – 750 m/min

Sanding disc: Ø 250 mm

Table adjustment: tilts 10° up, 50° down

Noise level: 72 dB(A)
Vibration: <= 2.5 m/s<sup>2</sup>
Work table: 275 x 105 mm

Overall size (without table)

(L x D x H): 270 x 280 x 330 mm

Motor:

Voltage: 230 V, 50/60 Hz Short-term operation SO 15 min

#### Noise/vibration information

The information on vibration and noise emission has been determined in compliance with the prescribed standardised and normative measuring methods and can be used to compare electrical devices and tools with each other.

These values also allow a preliminary evaluation of the loads caused by vibration and noise emissions.

#### Warning!

Depending on the operating conditions while operating the device, the actually occurring emissions could differ from the values specified above!

Please bear in mind that the vibration and noise emission can deviate from the values given in these instructions, depending on the conditions of use of the tool. Poorly maintained tools, inappropriate working methods, different work pieces, too high a feed or unsuitable work pieces or materials or unsuitable bits and cutters (here: saw blade) can significantly increase the vibration load and noise emission across the entire work period.

To more accurately estimate the actual vibration and noise load, also take the times into consideration where the device is switched off, or is running but is not actually in use. This can clearly reduce the vibration and noise load across the entire work period.

#### Warning:

Ensure regular and proper maintenance of your tool

- Stop operation of the tool immediately if excessive vibration occurs!
- Unsuitable bits and cutters can cause excessive vibration and noises. Only use suitable bits and cutters!
- Take breaks if necessary when working with the device!

Use only in closed rooms!



Do not dispose of the electrical device in the household waste!



### 6 Commissioning the device

#### 6.1 Setting up your disc sander:

#### Note:

When setting up the device, always make sure you have a level and firm surface! Secure stability is indispensable for working with the device!

#### Note:

When setting up and fixing the device, always disconnect the mains plug to prevent the disc from starting up inadvertently. Risk of injuries!

- Remove the disc sander from the packaging and check if the scope of delivery is complete.
- 2. Fasten the device with the fastening screws to a sturdy workbench or worktop (see Fig. 2) as per the master gauge for holes in Fig. 2a.

# 6.2 Removing and attaching the sanding table (Fig. 3):

#### Attention:

Before removing and inserting the sanding table, always disconnect the mains plug to prevent the disc from starting up inadvertently. Risk of injuries! Your TSG 250/E is normally operated with the attached sanding table (as in delivery condition). But it is also possible to remove the sanding table if required for certain work tasks or when changing the sanding discs.

- 1. Unscrew Allen screws 1
- 2. Take off sanding table 2 together with the housing cover 3

- To attach, simply insert the sanding table together with the housing cover back in the normal position
- 4. Screw Allen screws 1 back in and tighten.

### 6.3 Check and set angle display (Fig. 4):

#### **Attention:**

Before doing any adjusting work, always disconnect the mains plug to prevent the disc from starting up inadvertently. Risk of injuries!

The angle display is set accurately by the factory. The angle stop can be easily readjusted, should this ever be necessary:

- 1. Release both clamping screws 1
- Align work table 2 with an angle to exactly 90° as shown in Fig. 4
- 3. Retighten clamping screws 1
- 4. Release screw 3 slightly and correct the "zero" position of indicator 4 as necessary.
- 5. Re-tighten screw 3

# 6.4 Setting the sanding table angle (Fig. 5):

#### Attention:

Before setting the sanding table, always disconnect the mains plug to prevent the disc from starting up inadvertently. Risk of injuries!

To chamfer boards or slats, for example, we recommend placing these objects on the pivoted table. Also refer to Fig. 5a. Set the chamfer angle as follows:

- 1. Release the right and left clamping screws 1 (Fig. 5)
- Swivel sanding table 2 to the required angle position and check the set value on angle scale 3.
- 3. Retighten clamping screws 1.

# 6.5 Connecting the vacuum cleaner (Fig. 6):

#### Attention:

Before connecting the vacuum cleaner, always disconnect the mains plug to prevent the disc from starting up inadvertently. Risk of injuries! We recommend you always work with the vacuum cleaner! This not only guarantees clean work but also reduces the harmful effect of some dusts!

- 1. Slide rubber adapter 1 onto suction connection 2
- 2. Insert vacuum cleaner nozzle 3 in rubber adapter 1
- 3. Switch on vacuum cleaner while working

#### Here's another tip:

Using the Proxxon CW-matic vacuum cleaner omits that annoying manual activation and deactivation. The CW-matic is equipped with an automatic control that switches on and off automatically whenever the electrical tool is activated or deactivated.

# 7 Working with the disc sander TSG 250/E:

#### Caution!

Safe and accurate work is only possible with careful fastening!

Never leave an activated device unsupervised.

- 1. Switch on the disc sander.
- 2. Adjust the rotational speed of the sanding disc with speed controller **1** (Fig. 1).
- 3. Place the work piece on the work table and guide with sensitivity and little force.
- 4. Exert more pressure on the work table and less pressure against the sanding disc.

#### Note:

For good sanding results, please note the following points:

#### Do not overload the device!

First and foremost, the disc sander is a machine for sanding accurate angles. Cutting your work piece very accurately beforehand will make your desired machining easier and faster while requiring less sanding discs. The sanding disc rotates anticlockwise. It is therefore advisable to sand using the left half of the work table.

- If you will be sanding mitres, adjust the required sanding table angle beforehand, as described earlier
- 2. Insert the mains plug
- 3. Use switch 2 (Fig. 1) to activate the device
- 4. Set the required rotational speed at the rotational speed regulating knob (Pos. 1, Fig. 1)

#### Caution!

Only use perfect sanding discs. Replace worn out sanding discs in time.

### 7.1 Notes on sanding speed

The sanding speed of your TSG 250/E is infinitely adjustable from approx. 250 - 750 m/min. This enables you to optimally adjust to different material features. Please also note that the circumferential speed of the sanding disc is greatest along the outside and decreases towards the centre (see Fig. 7).

General recommendations on selecting the sanding speed are difficult; it is best you experiment to find out the correct sanding speed for "your" material or work piece.

Empirically, non-ferrous metals and plastic require less sanding speeds than soft and hard woods; the same also applies to ceramics and glass. In conclusion: Recommendations, as said, are difficult: the right speed depends on the material, contact pressure or abrasive wear and the grit of

### 7.2 Working with the angle stop (Fig. 8):

If you will be sanding the ends of thinner strips to mitre, it is expedient to use the angle stop included in the scope of delivery.

- 1. Insert the angle stop (Pos. 5, Fig. 1) with the stop rail into the designated groove.
- 2. Release clamping screw 1 (Fig. 8).

the sanding discs.

- 3. Set the required angle on scale 2 and re-tighten clamping screw 1.
- Guide the desired work piece at the limit stop against the sanding disc as shown in the image

# 7.3 Adhering or replacing the sanding discs (Fig. 9):

#### Attention:

Before adhering or changing the sanding discs, always disconnect the mains plug to prevent the disc from starting up inadvertently. Risk of injuries!

#### Note:

When changing the sanding disc, we recommend removing the sanding table together with the housing cover. This procedure is explained in the section "Removing and attaching the sanding table".

Along with your disc sander, your basic equipment includes two sanding discs with 80 and 240 grit each; these are easily obtainable spare parts. The sanding disc of your TSG 250/E is covered with an adhesive silicone film:

This material ensures the completely uncomplicated exchange of sanding discs because they do not stick but adhere firmly: Firmly enough to work, but loose enough to be easily removed later on. Replacing the discs is thus no problem, either because of wear or because you need discs with different grits while working.

- We recommend removing the sanding table together with the housing cover. This procedure is explained in the section "Removing and attaching the sanding table".
- 2. To change the disc, simply pull it off from the plate.
- 3. Peel off the rear protective film of the new disc.
- 4. Press the disc on to the sanding disc evenly and bubble-free.
- If necessary, reassemble the sanding table with housing cover as explained in the section "Removing and attaching the sanding table".

#### Attention:

Two storage discs of silicone film are also included in the scope of delivery. If you remove a sanding disc but want to use it again, please cover the adhesive surface with the film for storage.

#### 8 Accessories:

# Self-adhesive white corundum sanding discs for TSG 250/E (Ø 250 mm)

Industrial quality. For sanding soft and hard woods, chipboards, fibre boards, non-ferrous metals, steel, plastic, cork, rubber and minerals.

Article number 28 970 80 grit (5 pieces)
Article number 28 972 150 grit (5 pieces)
Article number 28 974 240 grit (5 pieces)

# Self-adhesive silicon carbide sanding discs for TSG 250/E (Ø 250 mm)

For sanding non-ferrous metals, steel, glass, GRP, plastic and ceramics.

Article number 28 976, 320 grit, Contents: 5 pieces

#### 9 Care and maintenance

#### Attention:

Always disconnect the mains plug before any cleaning, adjusting, maintenance or repair!

#### Note:

The machine is primarily maintenance free. For a long service life, clean the device after every use with a soft cloth, hand brush or brush. A vacuum cleaner can also be recommended. The vacuum cleaner should always be used in general!

The external surface of the housing can be cleaned using a soft, possibly moist cloth. Mild soap or other suitable cleansers may be used as well. Do not use solvents or alcohol-based cleansers (e.g. benzene, cleaning alcohols, etc) as these could attack the plastic housing casings.

### 10 Disposal

Do not dispose of the device in the household waste! The device contains valuable substances which could be recycled. If you have questions concerning this topic, please address your municipal disposal company or other appropriate municipal institutions.

### 11 CE Declaration of Conformity

Name and address: PROXXON S.A. 6-10, Härebierg L-6868 Wecker

Product

Disc sander TSG 250/E

designation

Article No.: 28060

In sole responsibility, we declare that this product conforms to the following directives and normative documents:

EU-EMC 2016/30/EC

**Directive** DIN EN 55014-1 / 05.2012

DIN EN 55014-2 / 01.2016 DIN EN 61000-3-2 / 03.2015 DIN EN 61000-3-3 / 03.2014

**EU Machinery** 

Directive 2006/42/EC

DIN EN 62841-1 / 07.2016

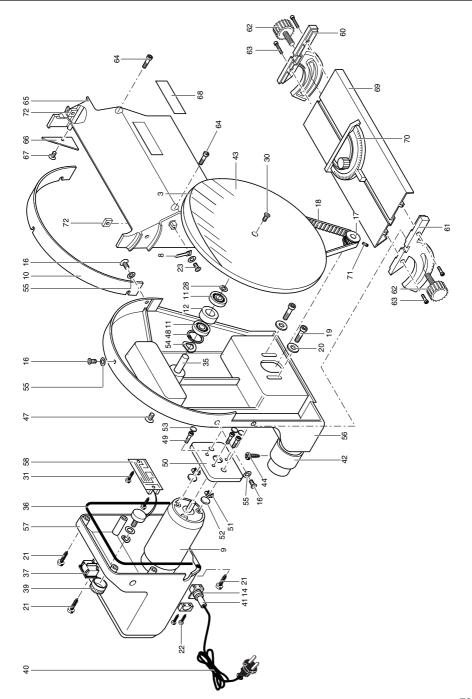
Date: 27.03.2018

Dipl.-Ing. Jörg Wagner

PROXXON S.A.

**Device Safety Division** 

The CE document authorized agent is identical with the signatory.



# PROXXON

#### (GB) Service note

All PROXXON products are thoroughly inspected after production. Should a defect occur nevertheless, please contact the dealer from whom you purchased the product. Only the dealer is responsible for handling all legal warranty claims which refer exclusively to material and manufacturer error.

Improper use, such as capacity overload, damage due to outside influences and normal wear are excluded from the warranty.

You will find further notes regarding "Service and Spare Parts Management" at www.proxxon.com.