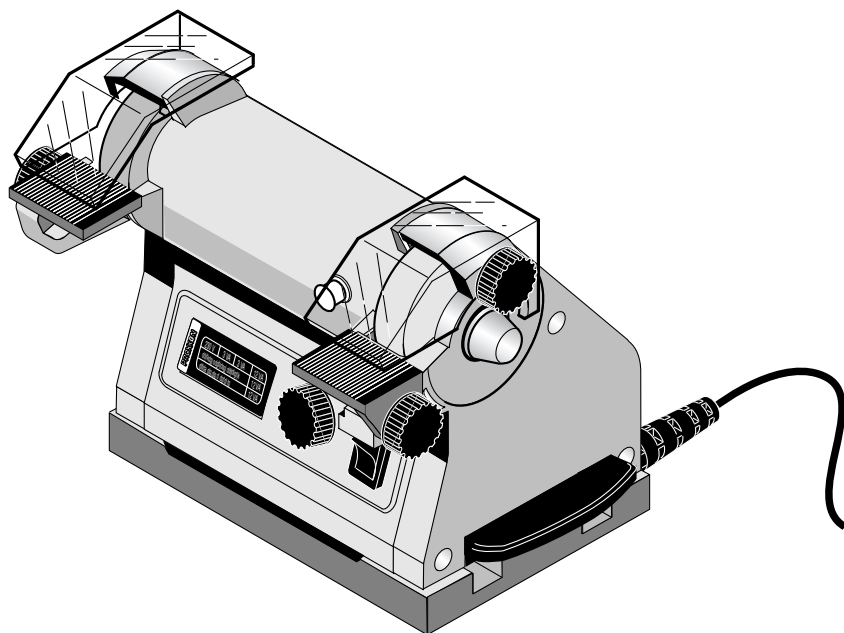


PROXXON

SP / E



Manual

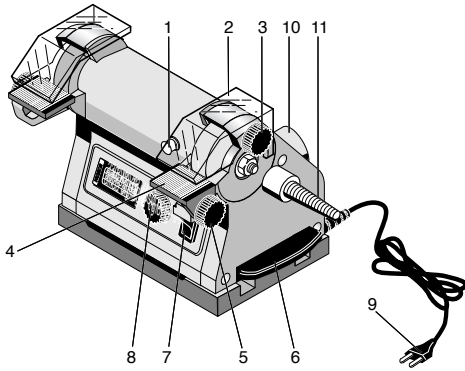


Fig. 1

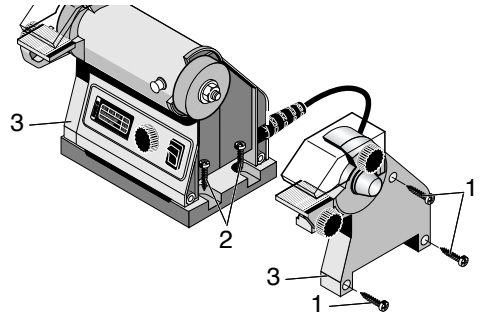


Fig. 2

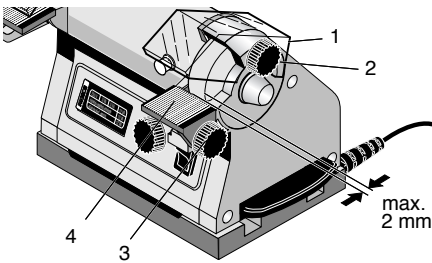


Fig. 3

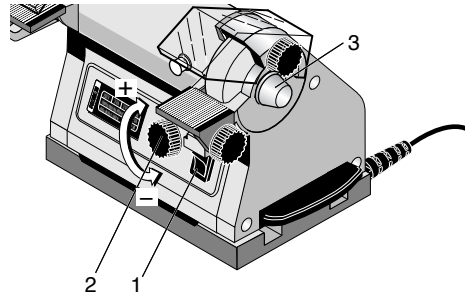


Fig. 4

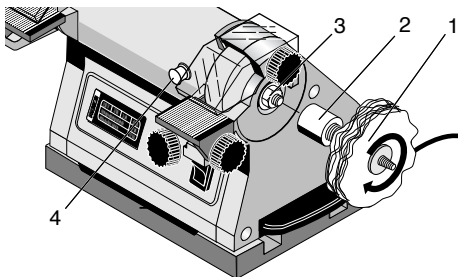


Fig. 5

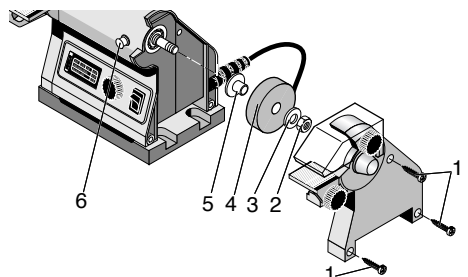


Fig. 6

Translation of the Original Operating Instructions SP/E

Dear customer!

Using these instructions

- makes it easier to get familiar with the device
- prevents malfunctions caused by improper handling, and
- lengthens the service life of your device.

Please keep these instructions readily accessible at all times.

Use the device only when you have understood it exactly and always adhere to the instructions.

PROXXON is not liable for the safe functioning of the device in cases of:

- handling that does not conform to the usual usage,
- purposes of use not designated in the instructions,
- disregard of the safety instructions.

You are not entitled to guarantee claims in cases of:

- operator errors,
- inadequate maintenance.

For your own safety, please follow the safety instructions exactly.

Use only genuine PROXXON replacement parts.

We reserve the right to make improvements in the sense of technical progress. We wish you much success with the device.

Please observe the supplemental safety notes when working with the SP/E grinding and polishing device.

1. Do not use any damaged or deformed grinding discs.
2. Use only grinding discs recommended by the manufacturer that are labelled with a rotational speed equal to or greater than 24 m/s.

Legend

1. Locking button
2. Protection hood
3. Locking screw for protection hood
4. Work piece rest
5. Locking screw for work piece rest
6. Grinding dust drawer
7. On – Off – switch
8. Speed control button
9. Mains supply cable
10. Extraction socket for grinding dust
11. Polishing mandrel

Description of machine

The Proxxon grinding and polishing apparatus SP / E is the ideal machine for grinding and polishing of various materials.

The silicium – carbide disc (grey) is most suitable for the grinding of hard materials such as hard metals, grey cast iron, high speed steels, ceramics and glass as well the grinding of soft materials such as copper, aluminium and plastics.

With the special fused alumina disc (red) you can grind tough materials such as non – hardened steel, welding seams, hardened steel and titanium.

A variety of polishing discs are available as accessories. The required mandrel is included with the machine.

The electronic speed control allows perfect adjustment of the rotary speed to the polishing job.

The slim housing in the area of the grinding discs also allows the grinding of longer work pieces.

The strong plastic housing is fitted with a socket for a vacuum cleaner.



Technical data

Motor

Voltage	230 V ; 50 Hz
Power	100 W 5/30 min
Speed	3000 to 9000 / min

Machine

Discs	Ø 50 x 13 x 12.7 mm
Size	approx. 250 x 130 x 100 mm
Weight	approx. 1200 g
Grinding speed	8 to 24 m/s
Noise level	≤70 dB (A)
Vibration	≤ 2.5 m/s ²

For use in dry environments only



Protection class II device



Please do not dispose off the machine!



Accessories (included):

Polishing mandrel

Operation

Danger !

Safe and accurate work is only possible with the machine properly fastened !

Fasten the machine to a strong table top.

If the machine needs to be portable, it is possible to screw it onto a strong wooden plate and then to clamp the wooden plate with C – clamps to the edge of table.

Fastening the machine

1. Unscrew the fastening screws 1 (Fig. 2) for both lateral covers (3).
2. Fasten both sides of the machine base with 4 fastening screws (2) to a sturdy base.

Danger !

Danger of injury !

Do not run the grinding machine without the protective covers over the grinding discs.

3. Re – attach the lateral covers and fasten them securely.

Working with the machine

Danger !

Danger of injury !

Do not work without breathing mask and protective goggles with non – splintering lenses.

Connect the mains supply cable only if the machine is switched off.

Connect the dust extractor (vacuum cleaner) to the socket at the back of the machine.

When working with the grinding disc the polishing mandrel must be removed first.

Danger of injury !

The work piece may heat up excessively during grinding.

Before the first use of a grinding disc you should run the machine for approx. 5 minutes at highest speed but without load. During this time you should leave the danger area.

1. Loosen the locking screw 3 (Fig. 3) for the work piece rest (4) and adjust the grinding angle as desired.
2. Retighten the locking screw.

Danger !

Danger of injury !

The gap between grinding disc and work piece rest must not exceed 2 mm.

3. Loosen the locking screw 1 (Fig. 3) for the protection hood (2) and adjust it for best possible protection.
4. Retighten the fastening screw.

Attention !

Repeat this adjustment on the opposite side.

Do not press the locking button while the grinding disc is rotating.

5. Switch the machine on with the switch 1 (Fig. 4).
6. Adjust the correct speed for the work with the adjustment button.

Attention !

Observe when using a dust extractor.

Sparks can cause fire to your vacuum cleaner.

You should therefore only switch the vacuum cleaner on after finishing the grinding work.

Note !

Not the high pressing power, but the correct and even rotary speed results in high grinding power.

Remember that the work piece will heat up during the grinding process. Cool the work piece down in water.

Attention !

The machine is not designed for permanent operation.

If the machine overheats switch it off and let it cool down.

Fitting the polishing mandrel

Danger !

Before fitting the polishing mandrel pull the mains plug out. Use only genuine Proxxon polishing discs.

Attention !

Do not press the locking button as long as the grinding discs are running.

1. Press the locking button 4 (Fig. 5) to block the shaft.
2. Unscrew the nut (3) with a suitable spanner.
3. Screw the polishing mandrel (2) on.
4. Screw the polishing tools onto the mandrel.
5. Cover the grinding discs completely with the protective hoods.
6. After finishing the work remove the polishing mandrel.

Changing the grinding wheels

Danger !

Before changing the grinding wheel pull the mains plug out.

The grinding wheel must not be bigger than the specified diameter (50 mm).

The grinding wheel must be changed when the gap between protection and grinding wheel exceeds 5 mm.

Use only genuine Proxxon grinding wheels.

1. Unscrew the fastening screws 1 (Fig. 6) for the lateral cover and remove the cover.

Attention !

Do not press the locking button as long as the grinding wheel is turning.

2. Press the locking button (6) to block the shaft.
3. Unscrew the nut (2) with a spanner (right hand side right hand thread, left hand side left hand thread).
4. Remove tensioning washer (3), grinding wheel (4) and centering flange (5).
5. Place the new grinding wheel on the centering flange and push it over the shaft.
6. Screw the tensioning disc and the nut on.
7. Press the locking button and tighten the fastening nut.

Danger !

Danger of accident !

Never run the grinding wheels without the protection hoods.

8. Reattach the lateral covers and fasten them securely.

Danger !

Danger of injury !

Before the first use run the grinding wheel for approx. 5 minutes without any load at highest speed. During this time leave the danger area.

Maintenance

Attention !

Spare parts must only be installed by a specialist.

Proxxon does not assume liability for damage caused by the unprofessional replacement of spare parts.

Attention !

Before any service or cleaning work pull the mains plug out.

After use

1. Pull the drawer 6 (Fig. 1) out to side and empty it.
2. Clean the unit with a brush or a soft cloth from all grinding dust. Make sure that all ventilation slots are free and unrestricted.

Cleaning

Caution!

Always disconnect the mains plug before doing any cleaning, setting, maintenance or repair works!

Note: The machine is mostly maintenance free. For a long service life, the device should be cleaned after every use with a soft cloth, hand brush or a soft brush. Even a vacuum cleaner can be recommended.

External cleaning of the housing can be carried out using a soft, possibly moist cloth. While doing so, a mild detergent or other suitable cleansing agent can be used. Do not use solvents or cleansing agents containing alcohol (e.g. benzene, cleaning alcohol, etc.) as these can corrode the plastic housings.

Disposal

Please do not dispose of the device in domestic waste! The device contains valuable substances that can be recycled. If you have any questions about this, please contact your local waste management enterprise or other corresponding municipal facilities.

EC-Declaration of conformity

Name and address:

PROXXON S.A.

6-10, Håreberg

L-6868 Wecker

Product designation: SP-E

Article No.: 28030

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

EU EMC Directive 2004/108/EC

DIN EN 55014-1 / 02.2010

DIN EN 55014-2 / 06.2009

DIN EN 61000-3-2 / 03.2010

DIN EN 61000-3-3 / 06.2009

EU Machinery Directive 2006/42/EC

DIN EN 61029-1 / 01.2010

Date: 13.05.11

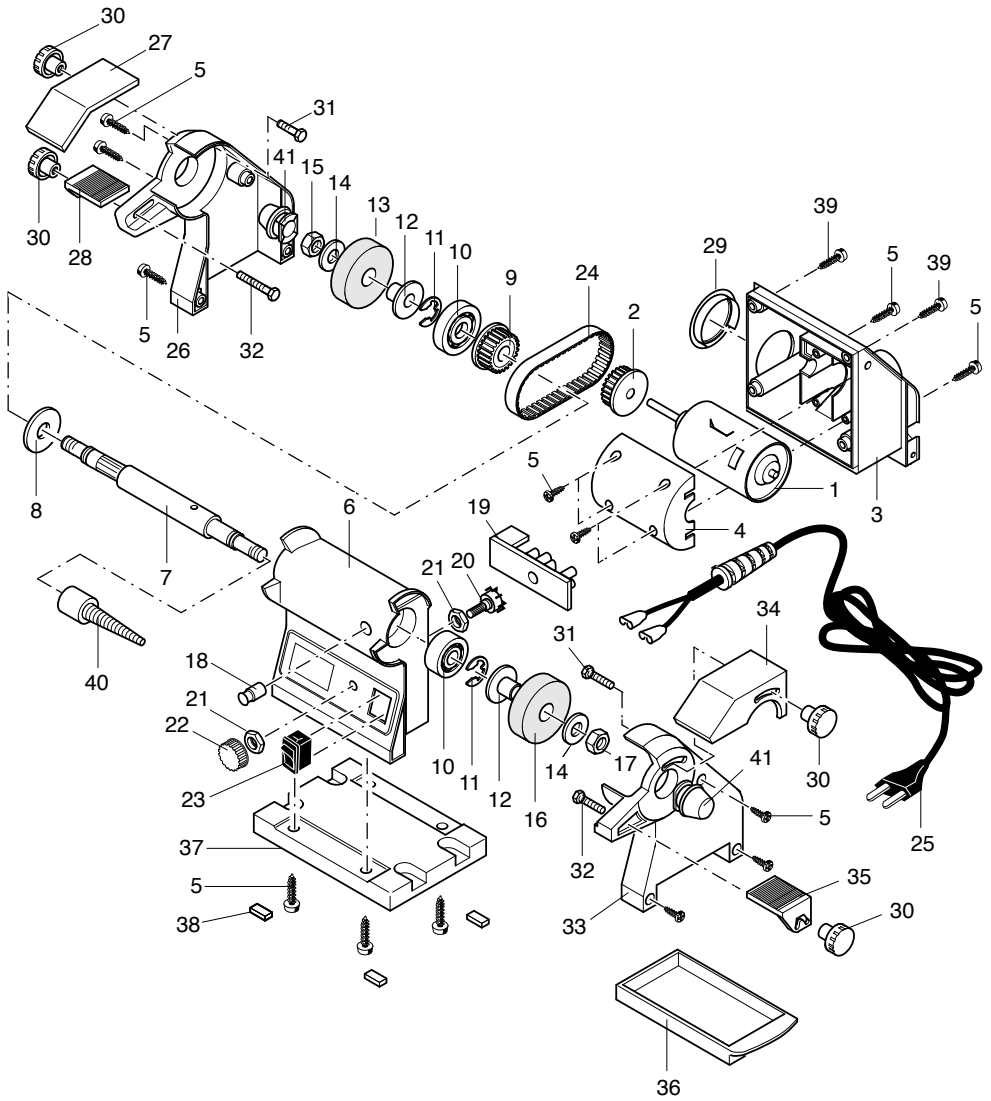


Dipl.-Ing. Jörg Wagner

PROXXON S.A.

Machine Safety Department

The CE document authorized agent is identical with the signatory.



Spare Parts List

SP/E Art-No. 28 030

ET – Nr.:	Description
28030-01	Motor
28030-02	Pouly
28030-03	Casing part, back
28030-04	Motor casing
28030-05	Screw
28030-06	Casing part, front
28030-07	Shaft
28030-08	Washer
28030-09	Pouly
28030-10	Ball bearing
28030-11	Circlips
28030-12	Bushing
28030-13	Grinding disc (ass.)
28030-14	Washer
28030-15	Nut M8 (LHT)
28030-16	Grinding disc (ass.)
28030-17	Nut M8 (RHT)
28030-18	Blocking pin
28030-19	Board
28030-20	Potentiometer
28030-21	Nut M6
28030-22	Control knob
28030-23	On-off switch
28030-24	Toothed belt
28030-25	Connecting cable
28030-26	Left cover
28030-27	Protective cover, left
28030-28	Supporting table, left
28030-29	Plastic ring
28030-30	Knurled nut
28030-31	Screw
28030-32	Screw
28030-33	Right cover
28030-34	Protective cover, right
28030-35	Supporting table, right
28030-36	Chip drawer
28030-37	Baseplate
28030-38	Rubber feet
28030-39	Screw
28030-40	Polishing arbor
28030-41	Cover
28030-97	Packaging (not shown)
28030-99	Manual