

# Operator's manual



## TruTool S 250 (1A1)

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english



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**Warranty**

**Replacement parts list**

**Addresses**

# 1. Safety

- USA/CAN** ➤ Read the Operator's Manual and the general safety rules (Material number 1239438, red document) in their entirety before starting up the machine. Follow precisely the directions contained therein.

- Rest of the world** ➤ Read the Operator's Manual and the safety instructions (Material number 125699, red document) in their entirety before starting up the machine. Follow precisely the directions contained therein.
- The safety regulations according to DIN VDE, CEE, AFNOR and other regulations which are valid in individual countries should be adhered to.



## Lethal danger due to electric shock!

- Remove the plug from the plug socket before undertaking any maintenance work on the machine.
- Check the plug, the cable and the machine for damage each time before the appliance is used.
- Keep the machine dry and do not operate in damp rooms.
- When using the electric tool outside, connect the fault current (FI) protective switch with a maximum breaking current of 30 mA.



## Danger of injury possible due to improper handling!

- When working with the machine, wear safety glasses, hearing protection, protective gloves and work shoes.
- Do not plug in the plug unless the machine has been switched off. Pull out the mains plug after use.



## Risk of injury to the hands!

- Do not place your hand into the processing line.
- Use both hands to hold the machine.



**Caution**

**Damage to property possible due to improper handling!**

**The machine will be damaged or destroyed.**

- Do not use the power cord to carry the machine.
- Always guide the electric cord away from the back of the machine and do not pull it across sharp edges.
- Arrange for start-ups and checks on manual electric tools to be carried out by a trained specialist. Only used the original accessories provided by TRUMPF.

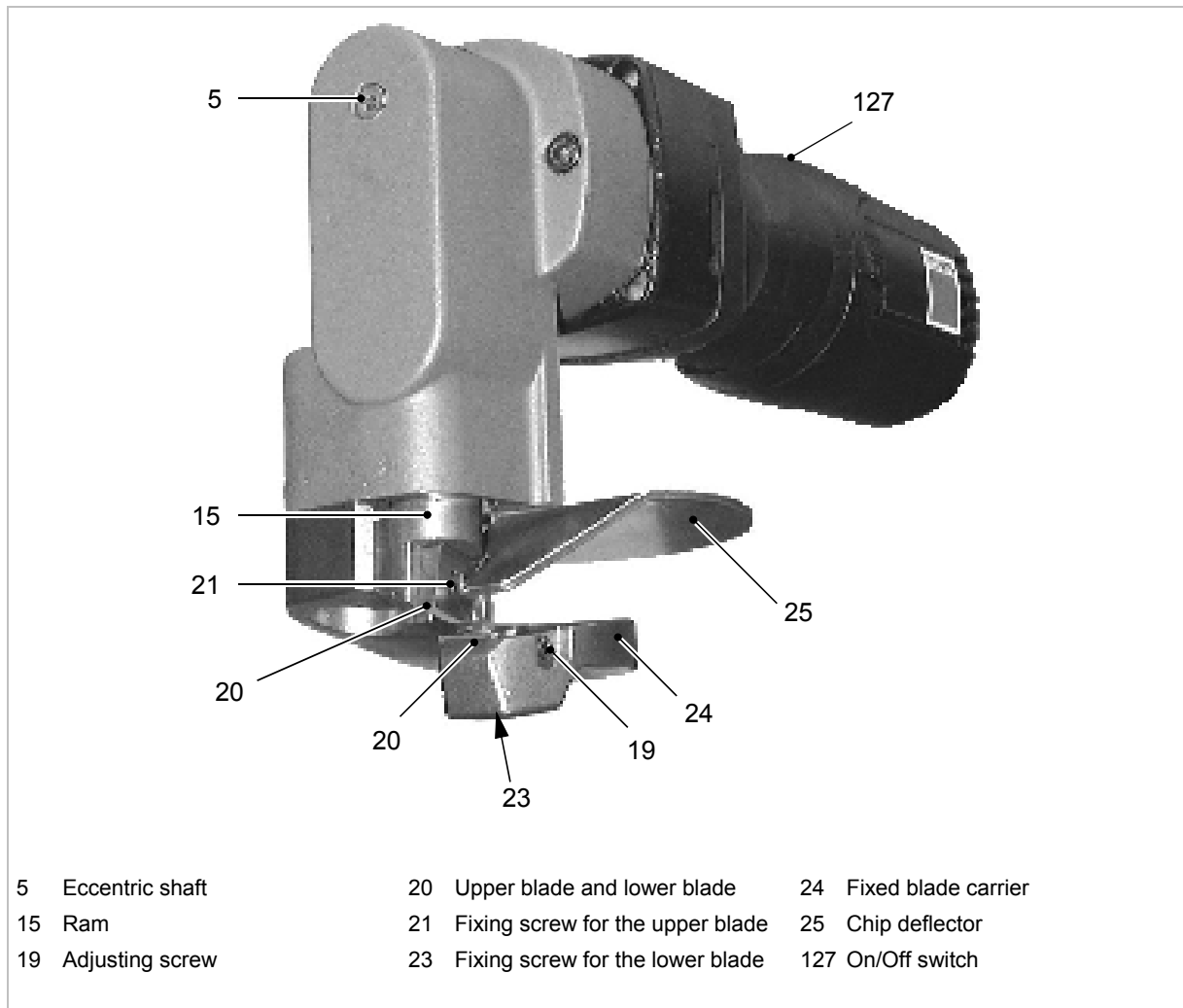


**Warning**

**Risk of injury from chip!**

- Use chip deflector.

## 2. Description



TruTool S 250

Fig. 36728

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## 2.1 Correct use



### Warning

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#### Risk of injury!

- For processing and materials, only use machines which are named in "Correct use".

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The TRUMPF portable shears TruTool S 250 are an electric hand tool used for the following applications:

- Slitting of plate-shaped workpieces made of steel, aluminium, non-ferrous heavy metal and plastic.
- Slitting straight or curved exterior and interior cutouts.
- Slitting along scribed lines.

## 2.2 Technical data TruTool S 250

	Rest of the world			USA
	Values	Values	Values	Values
<b>Voltage</b>	230 V	120 V	110 V	120 V
<b>Frequency</b>	50/60 Hz	50/60 Hz	50 Hz	50/60 Hz
• <b>Steel 400 N/mm<sup>2</sup></b>	2.5 mm	2.5 mm	2.5 mm	0.1 in
• <b>Steel 600 N/mm<sup>2</sup></b>	2.0 mm	2.0 mm	2.0 mm	0.079 in
• <b>Steel 800 N/mm<sup>2</sup></b>	1.5 mm	1.5 mm	1.5 mm	0.06 in
• <b>Aluminium 250 N/mm<sup>2</sup></b>	3.0 mm	3.0 mm	3.0 mm	0.12 in
<b>Working speed</b>	4-7m/min	4-7m/min	4-7m/min	13-23 ft/min
<b>Starting hole diameter</b>	28 mm	28 mm	28 mm	1.1 in
<b>Nominal power consumption</b>	500 W	500 W	500 W	500 W
<b>Stroke rate with nominal load</b>	1760/min	1600/min	1600/min	1600/min
<b>Weight</b>	2.2 kg	2.2 kg	2.2 kg	5.1 lbs
<b>Smallest radius with curved cutouts</b>	20 mm	20 mm	20 mm	0.787 in
<b>Protective insulation</b>	Class II	Class II	Class II	Class II

Technical data

Tab. 1

Noise and vibration	Measured values in accordance with EN 60745
A-weighted sound level	Typically 81 dB (A)
A-weighted acoustic power level	Typically 85 dB (A)
Hand-arm vibration	Typically 2.6 m/s <sup>2</sup>

Measured values for noise and vibration

Tab. 2

### Note

The measured values specified above may be exceeded while working.

### 3. Tool assembly

#### 3.1 Selecting the blade



**Caution**

**Damage to property can result from improper blade selection!**

**The quality of the cut will be severely impaired and the individual tools will be overloaded.**

- Use only appropriate tools.

The blade is notable for the following points:

- Moving cutter blade (upper blade) and fixed cutter blade (lower blade) are identical in shape and can be used interchangeably (above or below).
- All blades have four cutting edges.
- They are non-regrindable "4-way multi-edge, throw-away cutters".

##### Notes

- Two different blade types can be selected for the machining process, depending on the sheet thickness or the tensile strength of the workpiece.
- Standard blades with a tensile strength of  $\leq 400 \text{ N/mm}^2$  have no special identification marking. Chromium steel blades are marked with "Cr".

Blade type	Sheet thickness ranges (mm)	Type of material and Tensile strength	Material No.
Standard	0.3-3.0	Aluminium 250 N/mm <sup>2</sup>	127911
Standard	0.3-2.5	Mild steel 400 N/mm <sup>2</sup>	127911
Cr	0.3-2.0	Stainless steel 600 N/mm <sup>2</sup>	919761
Cr	0.3-1.5	Stainless steel 800 N/mm <sup>2</sup>	919761

Tab. 3

## 3.2 Setting the cutting clearance

The blade clearance "a" is factory-set to a sheet thickness of 2.0 mm when the machine is first delivered (see Fig. 10182, Pg. 12).

Set the following values to obtain optimum cutting results:

Sheet thickness [mm]	Blade clearance [mm]
0.3-0.8	0.1
0.8-1.3	0.2
1.3-1.8	0.3
1.8-2.5	0.4

Tab. 4

1. Push the On/Off switch several times until the moving cutter blade has reached the lower dead point.
2. Loosen the lower blade.
3. Set the blade to the required clearance using the adjusting screw (19).
4. Retighten the blade.
5. Tighten the adjusting screw (19) slightly.
6. Check clearance with the setting gauge.

## 4. Operation

### 4.1 Working with the TruTool S 250

#### Switching on the TruTool S 250 Working with the TruTool S 250

- Move the On/Off switch to the front.

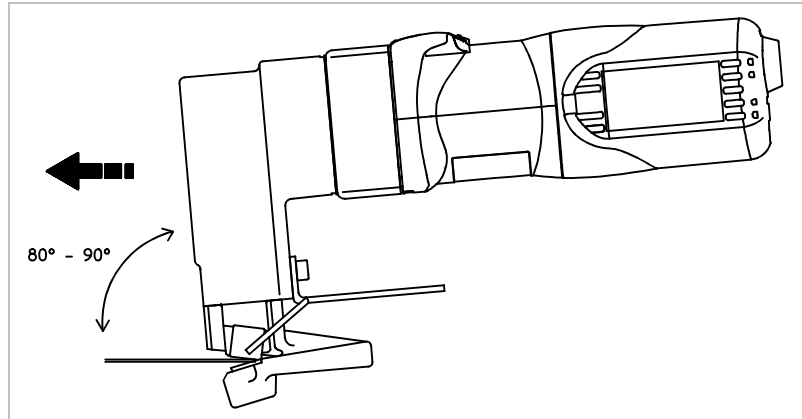


Fig. 37872

1. Do not move the machine towards the workpiece until full speed has been reached.
2. Machine/process the material.
  - Move the device forward at an angle of 80 to 90° to the sheet surface.

#### Requirements for the cutting of radiuses

- Do not tilt the machine.
- Proceed with a low feed rate.

#### Requirements for cutting near the margin

- Cut in upside-down position, meaning that the cutting table is facing upwards.

#### Note

Do not burden the device to such an extent that it comes to a standstill.

#### Switching off the TruTool S 250

- Move On/Off switch to the rear.

## 5. Maintenance



**Danger**

### Possible lethal danger due to electric shock!

- Pull the plug out of the socket when carrying out tool changes and before all maintenance work on the machine.



**Caution**

### Damage to property possible due to blunt tools!

#### Overloading of the machine.

- Check the cutting edge of the cutting tool hourly for wear. Sharp blades provide good cutting performance and are easier on the machine. Replace blades promptly.



**Warning**

### Risk of possible injury due to improper repairs!

#### The machine does not function properly.

- Repairs should be carried out only by a trained specialist.

### Note

Check tools hourly for wear.

Maintenance point	Procedure and time interval	Recommended lubricants	Order No. Lubrication agents
Moving cutter blade	Check hourly	-	-
Fixed cutter blade	Check hourly	-	-
Ram guide	Every 20 operating hours	Lubricating grease "G1"	0139440
Gearbox and gear head (2)	After 300 operating hours, arrange for a trained specialist to relubricate or to replace the lubricating grease	Lubricating grease "G1"	0139440
Fixed cutter blade	Turn over as needed	-	-
Fixed cutter blade	Replace as needed	-	-
Moving cutter blade	Turn over as needed	-	-
Moving cutter blade	Replace as needed	-	-
Ventilation slots	Clean as needed	-	-

Maintenance table

Tab. 5

## 5.1 Changing the blade



**Danger**

### Possible lethal danger due to electric shock!

- Pull the plug out of the socket when carrying out tool changes and before all maintenance work on the machine.

Upper and lower blades are identical. They each have 4 cutting edges and can be used interchangeably.

In the event of insufficient cutting performance, rotate each of the blades by 90° respectively or replace them.

1. Loosen the screw on the respective blade.
2. Rotate blade by 90°.
3. Tighten the screw.

### Note

Take care to ensure that the adjusting screw (19) is up against the lower blade.

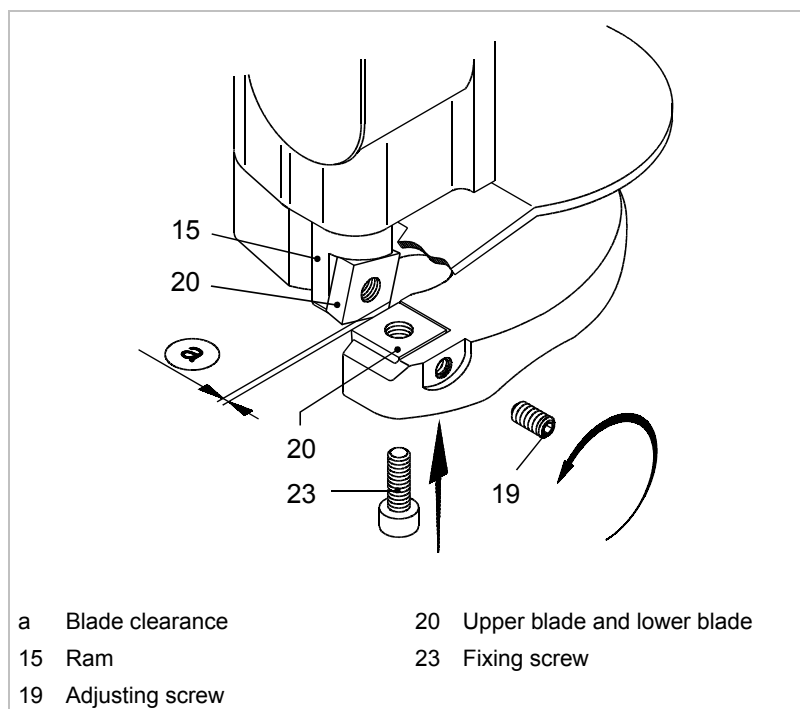


Fig. 10182

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## 5.2 Replacing carbon brushes

The motor comes to a standstill when the carbon brushes are worn out.

- Have the carbon brushes checked and replaced as needed by a trained technician.

### **Note**

Only use original replacement parts and observe the specifications on the type plate.

## 6. Original accessories and wearing parts

Designation	Original accessories delivered	Wearing parts	Optional	Material number
2 Standard blade for the machining of mild steel	+	+		127911
2 Chromium steel blades for the machining of high-tensile sheets		+	+	919761
Allen key DIN 911-4	+			023065
Allen key DIN 911-2.5	+			067822
Case	+			971396
Lubricating grease "G1" (900 g) can			+	0139440
Lubricating grease "G1" (25 g) tube			+	0344969
Operator's manual	+			1254078
Safety instructions (printed in red), other countries	+			125699
Safety instructions (printed in red), USA	+			1239438

Original accessories, wearing parts and optional items

Tab. 6

### Note

Moving cutter blade (upper blade) and fixed cutter blade (lower blade) are identical in shape and can be used interchangeably (above or below).

All blades have 4 cutting edges. They are non-regrindable "4-way multi-edge, throw-away cutters".

### Ordering wearing parts

To ensure fast delivery of the correct original and wearing parts:

1. Give the order number.
2. Enter further order data:
  - Tension data
  - Number of pieces
  - Machine type
3. Give complete dispatch data:
  - Correct address.
  - Required delivery type (e.g. air mail, courier, express mail, ordinary freight, parcel post).
4. Send the order to the TRUMPF representative office. For TRUMPF service addresses, see the address list at the end of the document.