

Operator's manual



TruTool S 250 (2A1)

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1. Safety

1.1 General safety information

WARNING

Read all safety warnings and all instructions.

- Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury
- Save all warnings and instructions for future reference.

DANGER

Electrical voltage! Risk of fatal injury due to electric shock!

- Remove the plug from the plug socket before undertaking any maintenance work on the machine.
- Check the plug, cable and machine for damage each time before using the machine.
- Keep the machine dry and do not operate it in damp rooms.
- Connect the fault current (FI) circuit breaker with a maximum breaking current of 30 mA when using the electric tool outside.
- Only use original TRUMPF accessories.

WARNING

Damage to the machine due to improper handling.

- Wear safety glasses, hearing protection, breathing protection, protective gloves and working shoes when working.
- Connect the plug only when the machine is switched off. Pull the power plug after use.
- Do not carry the machine by the cable.
- Have maintenance carried out by specialists.

1.2 Specific safety information for seam locker

WARNING

Risk of injury to hands.

- Do not reach into the processing line with your hands.
- Use both hands to hold the machine.

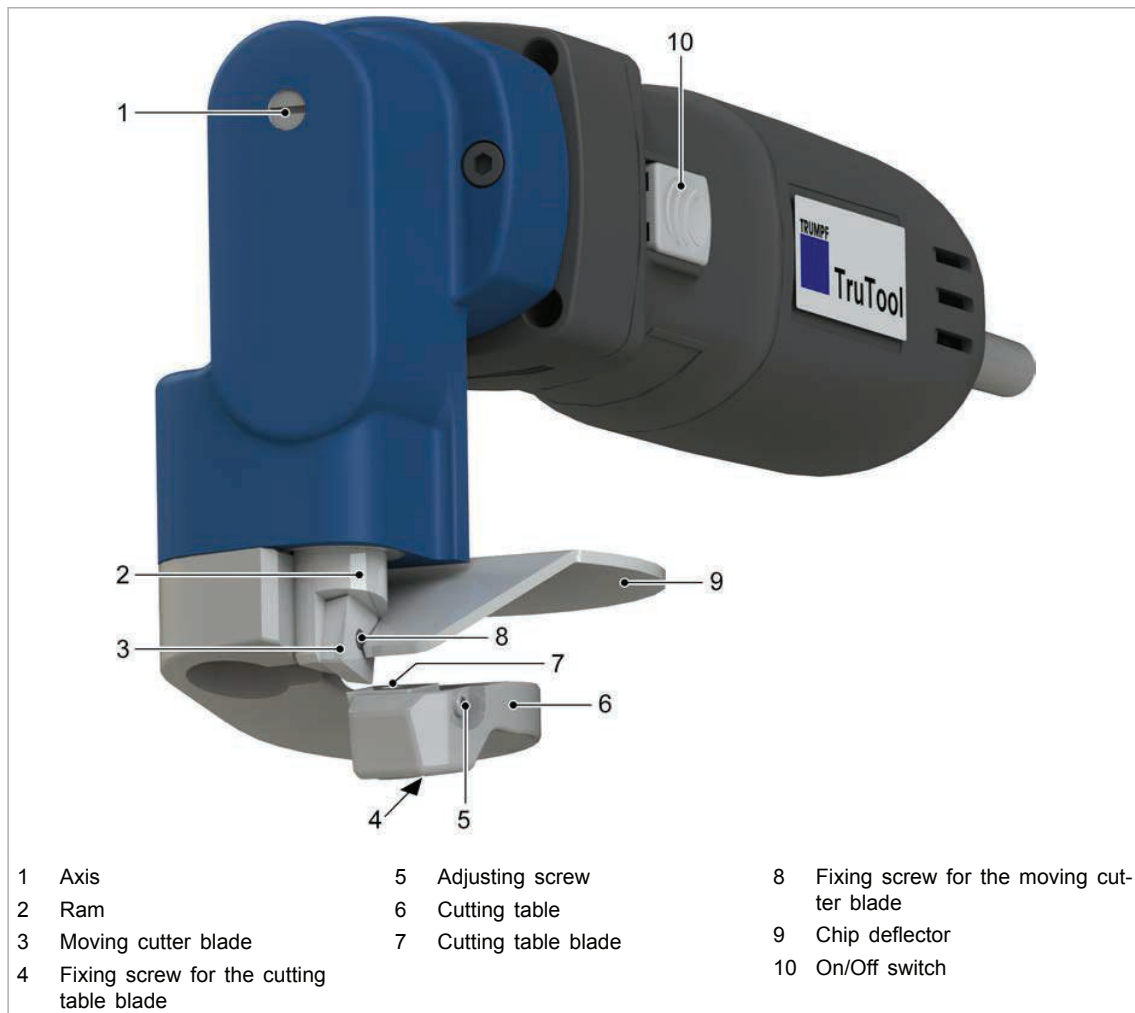
WARNING

Risk of injury from hot and sharp chips!

Chips exit the chip ejector at high speed.

- Use a chip deflector, which is neither damaged nor bent.

2. Description



TruTool S 250 (2A1)


Fig. 73844

2.1 Intended use

The TRUMPF TruTool S 250 shears (2A1) is an electrically powered hand-held device designed for the following applications:

- Slitting and trimming of plate-shaped workpieces made of steel, aluminum, non-ferrous heavy metals and plastic.
- Slitting straight or curved exterior and interior cutouts.
- Slitting from scribed lines.

2.2 Technical data

TruTool S 250 (2A1)	Other countries			USA
	Values	Values	Values	Values
Voltage	230 V	120 V	110 V	120 V
Frequency	50/60 Hz	50/60 Hz	50 Hz	50/60 Hz
Working speed	4 - 7 m/min			13- 23 ft/min
Nominal power consumption	550 W	500 W		
Idle stroke rate	2100/min			
Weight	2.2 kg			4.85 lbs
Protective insulation	II / 			

Tab. 1




Acceptable material thickness		
	Standard cutter	SC cutter
Steel up to 400 N/mm ²	2.5 mm (0.098 in)	-
Steel up to 600 N/mm ²	-	2.0 mm (0.079 in)
Steel up to 800 N/mm ²	-	1.5 mm (0.06 in)
Aluminum up to 250 N/mm ²	3.0 mm (0.118 in)	-
Starting hold diameter	28 mm (1.1 in)	28 mm (1.1 in)
Smallest radius	20 mm (0.787 in)	20 mm (0.787 in)

Tab. 2

2.3 Icons

Note

The following symbols are important for reading and understanding the operator's manual. The correct interpretation of the symbols will help you operate the machine better and safer.

Icon	Name	Meaning
	Read operator's manual	Read the operator's manual and safety information in their entirety before starting up the machine. Closely follow the instructions given.
	Safety class II	Indicates a doubly insulated tool.
	Alternating current	Type or property of current
V	Volt	Voltage
A	Ampere	Current, current input
Hz	Hertz	Frequency (oscillations per second)
W	Watt	Power, power input
mm	Millimeters	Dimensions e.g.: material thickness, chamfer length
in	Inch	Dimensions e.g.: material thickness, chamfer length

Icon	Name	Meaning
n_0	Idle speed	Revolution speed without load
.../min	Revolutions/strokes per minute	Revolution speed, stroke rate per minute

Tab. 3

2.4 Noise and vibration information

WARNING

Noise emission value may be exceeded.

- Wear hearing protection.

WARNING

The vibration emission value can be exceeded!

- Select the right tools and exchange them in time in the event of wear.
- Have maintenance carried out by trained specialized technicians.
- Define additional safety measures for protecting the operator from the effect of vibrations (e. g. keep hands warm, organization of working procedures, machining at normal feed force).
- Depending on the operating conditions and state of the electric tool, the actual load might be higher or lower than the specified measured value.

Notes

- The specified vibration emission value was measured in accordance with a standardized testing procedure and can be used to compare one electric tool with another.
- The specified vibration emission value can also be applied for a provisional estimate of the vibration load.
- Times during which either the machine is switched off or running but not actually in use can considerably reduce the vibration load during the entire working period.
- Times during which the machine works independently and self-propelled do not have to be calculated.

Designation of measured value	Unit	Value according to EN 60745
Vibration emission value a_h (vector sum of three directions)	m/s^2	20.2
Uncertainty K for vibration emission value	m/s^2	6.0
A-class acoustic pressure level L_{pA} typically	dB (A)	80



Designation of measured value	Unit	Value according to EN 60745
A-class acoustic power level L_{WA} typically	dB (A)	91
Uncertainty K for noise emission value	dB	3

Tab. 4

3. Setting work

3.1 Selecting blades

NOTICE

Damage to property as a result of incorrect blade selection!

This strongly impairs the cut quality and the individual tools become overstressed.

- Use suitable tools only.

The cutter is characterized by the following points:

- Moving cutter blade (upper blade) and cutting table blade (lower blade) are the same size and can be used (top or bottom) as much as desired.
- All cutters have four blades.
- They are "4-fold multi-edge cutters" which cannot be grinded again.

Notes

- Depending on the thickness or strength of the workpiece, two different types of blade can be selected for processing.
- Standard configuration blades with a tensile strength $\leq 400 \text{ N/mm}^2$ do not have any special identification. Chromium steel blades are identified with "Cr".

For this reason, it is recommended that the tools only be used in accordance with the specifications (see "Tab. 2", pg. 4).

3.2 Selecting and setting cutting clearance

⚠ DANGER

Electrical voltage! Risk of fatal injury due to electric shock!

- Remove the plug from the plug socket before changing the tool or undertaking any maintenance work on the machine.

Selecting cutting clearance

The blade clearance "a" is set to a material thickness of 2.0 mm on delivery of the machine.

Material thickness s mm	Blade clearance = Cutting clearance a mm
0.3-0.8	0.1
0.8-1.3	0.2

Material thickness s mm	Blade clearance = Cutting clear- ance a mm
1.3-1.8	0.3
1.8-2.5	0.4

Tab. 5

Setting cutting clearance

1. Select cutting clearance.
2. Tap the on/off switch several times until the moving cutter blade has reached the lower dead point.
3. Gently fasten the cutting table blade with fixing screw.
4. Set the cutting table blade to the desired cutting clearance using the adjusting screw (check with feeler gauge).
5. Tighten the fixing screw.
6. Gently tighten the adjusting screw.

4. Operation

CAUTION

Damage to property due to excessively high line voltage

Motor damage

- Check the line voltage. The power supply voltage must correspond to the information on the nameplate of the machine.
- When using an extension cord that is longer than 5 m, the cord must have a line diameter of at least 2.5 mm².

WARNING

Damage to the machine due to improper handling.

- Make sure the machine is always in a stable position when operating it.
- Never touch the tool while the machine is running.
- Always operate the machine away from your body.
- Do not operate the machine above your head.

4.1 Turning TruTool S 250 (2A1) on and off

Switching on the machine
Switching off the machine

1. Slide the On/Off switch forwards.
2. Slide the On/Off switch to the rear.

4.2 Working with TruTool S 250 (2A1)

Cutting radii

- Do not cant machine.
- Work only with low feed.

Cutting at the edge

- Cutting in upside-down position.
- The cutting table faces upwards.

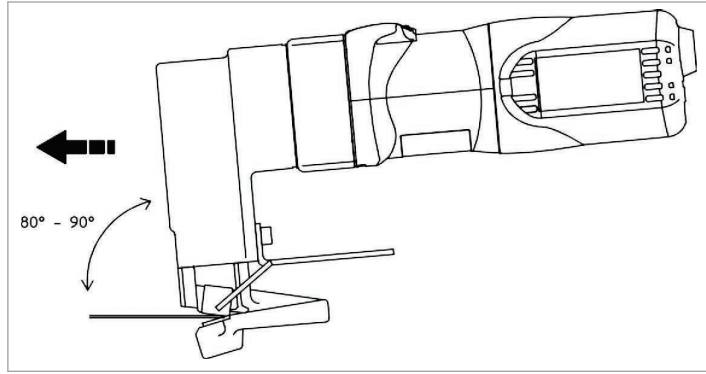


Fig. 37872

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

5. Maintenance

DANGER

Risk of fatal injury due to electric shock!

- Remove the plug from the plug socket before changing the tool or undertaking any maintenance work on the machine.

WARNING

Risk of injury due to incorrect repair work

Machine does not work properly.

- Maintenance may be carried out by trained specialist technicians only.

CAUTION

Damage to property caused by blunt tools!

Machine overload.

- Check the cutting edge of the punch hourly for wear. A sharp punch provides good cutting performance and is easier on the machine.
- Change the punch in a timely manner.

Maintenance point	Procedure and interval	Recommended lubricants	Lubricant Order No.
Moving cutter blade	Check every hour	-	-
Cutting table blade	Check every hour	-	-
Ram guide	Every 20 operating hours	Lubricating grease "G1"	0139440
Gearbox and gear head	Every 300 operating hours, have a trained specialist relubricate or replace the lubricating grease.	Lubricating grease "G1"	0139440
Cutting table blade	Turn if necessary	-	-
Cutting table blade	Change as needed	-	-
Moving cutter blade	Change as needed	-	-
Ventilation slots	Clean as needed	-	-

Maintenance positions and maintenance intervals

Tab. 6

5.1 Changing blade

Top and bottom blades are the same. They both have four cutting edges and are interchangeable.

If the cutting performance is not satisfactory, turn each cutter by 90° or replace them.

Turning/changing moving cutter blade

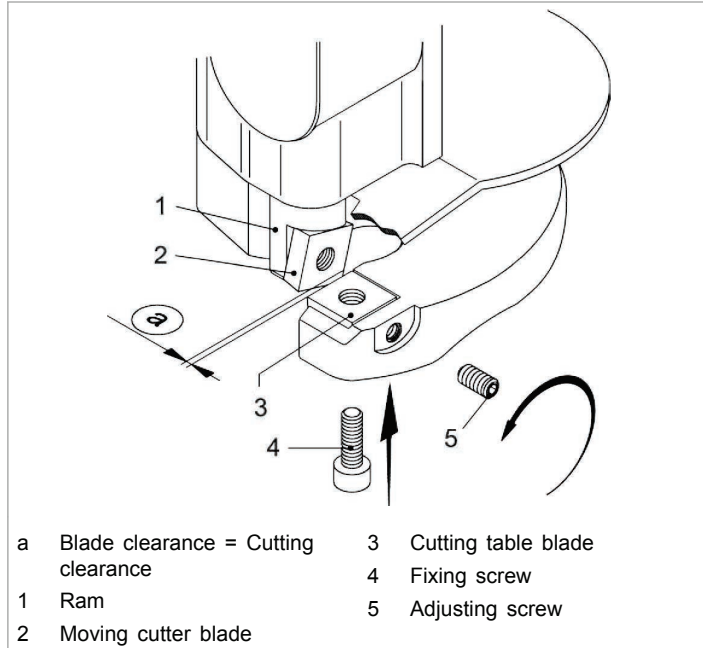


Fig. 10182

1. Loosen the fixing screw on the relevant cutter.
2. Rotate moving cutter blade 90° and mount it again (or mount new cutter).

Note

Make sure that the adjusting screw is directly at the bottom cutter.

3. Insert and tighten the fixing screw.

5.2 Changing the power cable

If the power cable is to be replaced, it should be procured from the manufacturer or an authorized dealer to avoid safety hazards.

Note

For TRUMPF service addresses, see www.trumpf-power-tools.com.

5.3 Replacing carbon brushes

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

Notes

- Use only original spare parts from TRUMPF.
 - Observe the information on the rating plate.
-
- Have the carbon brushes checked and replaced as required by a qualified technician.

6. Accessories and consumables

Note

Moving cutter blade (upper blade) and cutting table blade (lower blade) are the same size and can be used (top or bottom) as much as desired. All cutters have four blades.

They are "4-fold multi-edge cutters" which cannot be grinded again.

Consumables	Quantity	Order number	Scope of delivery
Cutter	2 piece	-	X
	4-pack	0127911	-
	10-pack	1279106	-
Blade CR	2-pack	0919161	-

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Accessories	Quantity	Order number	Scope of delivery
TRUMPF Box S1	1 piece	1763681	X
Cover, TRUMPF Box lining	1 piece	1889485	X
Seal cap	4 piece	1890095	X
TRUMPF Box S102 lining	1 piece	1771093	X
Allen key 4 mm	1 piece	0023065	X
Allen key DIN 911 - 2.5	1 piece	0067822	X
Twist pack	1 piece	0345244	X
Safety information EW	1 piece	0125699	X
Operator's manual, Tru-Tool S 250 (2A1)	1 piece	1942456	X

TruTool S 250 (2A1)

Tab. 8

6.1 Ordering consumables

Note

The following data must be specified in order to ensure that parts are delivered correctly and without delay.

1. Specify the order number.
2. Enter further order data:
 - Voltage data
 - Quantity
 - Machine type
3. Specify the complete shipping information:

- Correct address.
- Desired delivery type (e.g. air mail, courier, express mail, ordinary freight, parcel post).

Note

For TRUMPF service addresses, see
www.trumpf-powertools.com.

4. Send the order to the TRUMPF representative office.

**7. Appendix: Declaration of conformity,
guarantee, replacement parts lists**