Operator's manual

TruTool F 300 (1B1)

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english

TRUMPF

Contents

1. Safety

USA/CAN

- Read the operator's manual and the safety information (order no. 1239438) in their entirety before starting up the machine. Closely follow the instructions given.

Other countries

- Read the operator's manual and the safety information (order no. 125699) in their entirety before starting up the machine. Closely follow the instructions given.
- Adhere to the safety regulations in accordance with DIN VDE, CEE, AFNOR and to the specific regulations of the country of operation.

Danger

Risk of fatal injury from electric shock

- Pull the plug from 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 earth leakage (EL) circuit breaker with a maximum release current of 30 mA when using the electric tool outside.

Warning

Risk of injury due to improper handling.

- Wear safety glasses, hearing protection, protective gloves and work shoes when working at the machine.
- Do not insert the plug unless the machine is switched off. After use, pull out the power plug.

Warning

Risk of injury to hands.

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

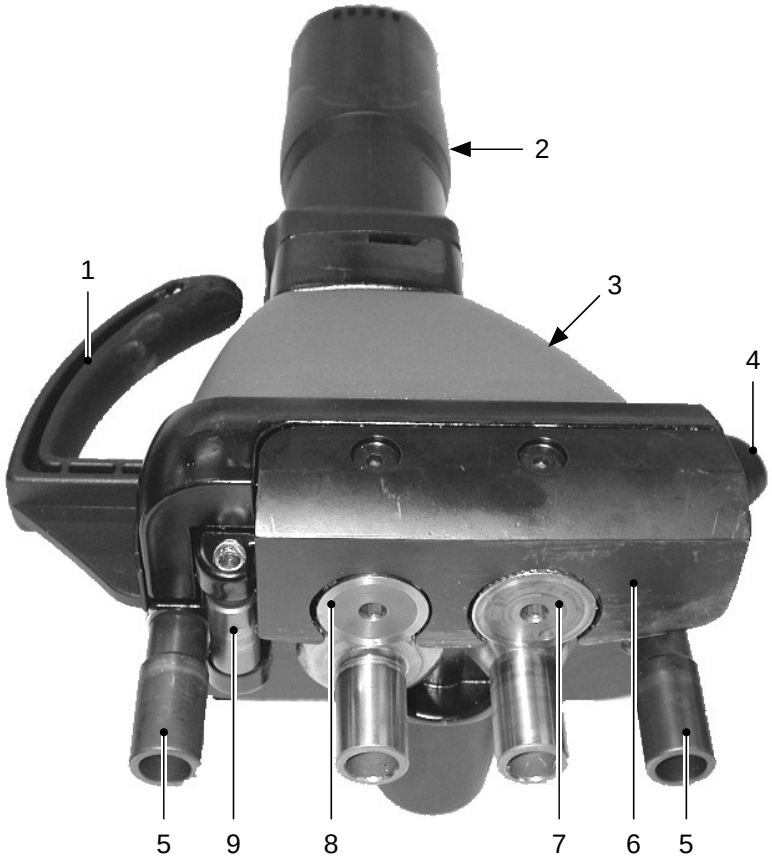
Caution

Damage to property due to improper handling

The machine will be damaged or destroyed.

- Do not use the power cable to carry the machine.
- Always position the cable leading away from the machine, at back of the machine. Do not pull the cable over sharp edges.
- Have servicing and inspections of handheld electric tools carried out by a qualified specialist. Only use original accessories provided by TRUMPF.

2. Description



1	Handle	4	Lever to set the positions "Tool open" and "Tool in work position"	6	Guide rail
2	On/Off switch			7	Driver roller 30°
3	Suspension eyelet			8	Driver roller 75°
		5	Supporting roller	9	Roller

Fig. 38112

2.1 Intended use

Warning

Risk of injury

➢ Only use the machine for work and materials described in "Intended use".

The TRUMPF seam locker TruTool F 300 is an electrical hand-held device used for the following applications:

- Closing of Pittsburgh lock seams on correspondingly pre-machined workpieces, e.g. ventilation ducts, housings, containers, etc.
- Machining of all lock seam elevations.

Notes

- The lock seam can be closed on straight or curved contours.
- The machine adjusts itself automatically to the material thickness to be processed.

2.2 Technical data TruTool F 300

	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
Material stability 400 N/mm²	0.75-1.25 mm	0.75-1.25 mm	0.75-1.25 mm	0.03-0.05 in 22-18 gauge
Working speed	6-10 m/min	6-10 m/min	6-10 m/min	19-34 ft/min
Idle speed n_0	160/min	160/min	160/min	160/min
Nominal power consumption	1400 W	1200 W	1140 W	1200 W
Weight	6.5 kg	6.5 kg	6.5 kg	13.8 lbs
Inside radiuses	min. 150 mm	min. 150 mm	min. 150 mm	Min. 5.9 in
Outside radiuses	Min. 300 mm	Min. 300 mm	Min. 300 mm	Min. 11.8 in
Protective insulation	Class II	Class II	Class II	Class II

Technical data Table 1

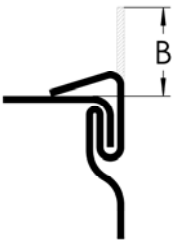
Noise and vibration	**Measured values in accordance with EN 60745**
A-class sound pressure level	Typically 81 dB (A)
A-classified noise level	Typically 85 dB (A)
Hand-arm vibration	Typically less than or equal to 2.5 m/s²

Table 2

Note
The measured values specified above may be exceeded while working.

2.3 Lock seams

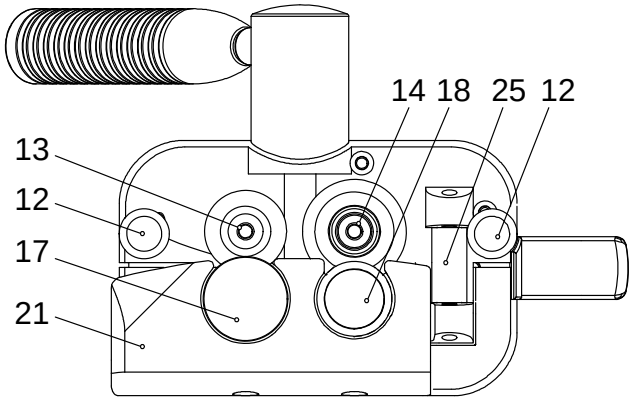
"Pittsburgh lock seam" geometry

Material thickness range		Height of flange (B) [mm]	Figure
[mm]	[Gauge]		
0.75-1	22-21 0.03 - 0.04 in	9-11	 B Height of flange
>1-1.25	21-18 0.04 - 0.05 in	11-13	

Pittsburgh lock seam geometry Table 3

Note
The lock seam quality depends essentially on the height of the flange B. If B is too small, then the lock seam cannot be properly closed. When the Pittsburgh lock seam machine is set to 1.25 mm material thickness, the correct flange heights will also appear automatically on all thinner sheets.

Roller arrangement

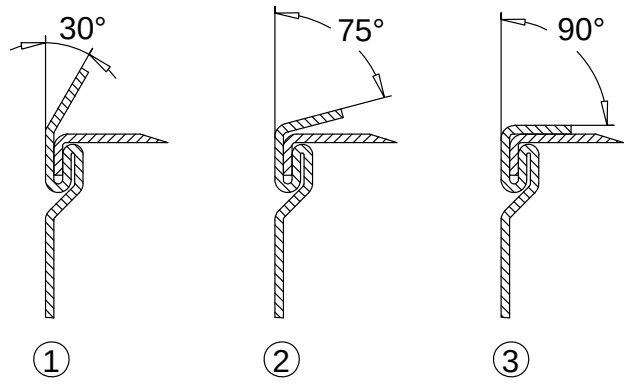


12	Supporting roller	18	Driver roller for the second forming stage (75°)
13	Driver roller for the first forming stage (30°)	21	Guide rail
14	Driver roller for the second forming stage (75°)	25	Horizontal roller for the third forming stage (90°)
17	Driver roller for the first forming stage (30°)		

View of the machine from below: roller arrangement

Fig. 13418

Folding process sequence



1	First stage	3	Third stage
2	Second stage		

Folding process

Fig. 13416

3. Setting work

3.1 Changing the speed

Caution

Damage to property due to low speed!

Motor damage due to overheating

➢ Select the appropriate speed.

It is easier to operate the tool at reduced speed.

1 Setting wheel for speed controller at motor

Fig. 27948

Reducing the speed

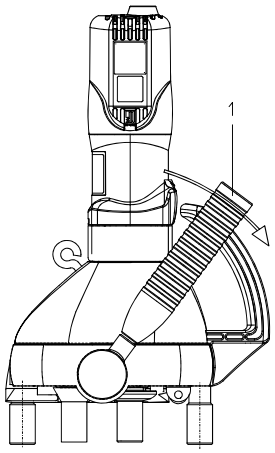
➢ Rotate the setting wheel for the speed controller counter-clockwise.

3.2 Setting the tool

The clearance between the rollers and the guide rail can be locked into place in two positions in order to be able to place the machine at the desired position of the channel or to be able to remove it from the machining position at the end of the channel:

- Lever (1) in position against the direction of feed: Tool open.
- Lever (1) in direction of feed in end position: Tool in work position.

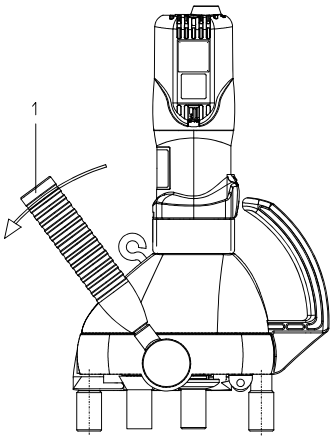
Tool open



1 Lever

Tool open Fig. 37864

Tool in work position



1 Lever

Tool in work position Fig. 37863

Note
No adjustment for material thickness is required because the machine automatically adjusts itself to the material thickness.

3.3 Machining of inside radiuses

1 Supporting rollers

Fig. 38111

➢ Unscrew supporting rollers (1) before the machining of inside radiuses.

4. Operation

Caution

Damage to property due to high power-supply voltage

Motor damage

- Check the line voltage. The power supply voltage must correspond to the information on the nameplate of the machine.

Warning

Risk of injury 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 Operating the TruTool F 300

Switching on

- Push the on/off switch down until it locks into place.

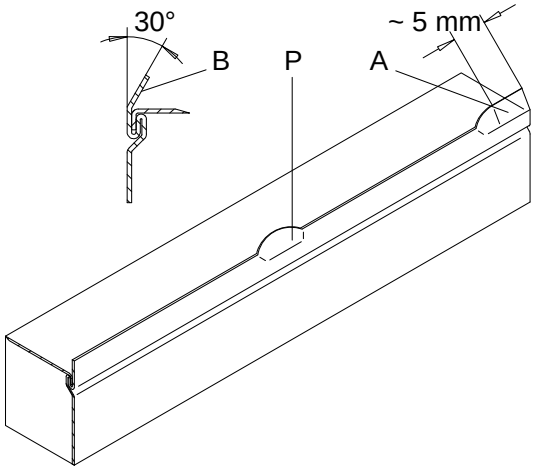
Operating the TruTool F 300

In order to improve work results, lightly oil the rollers or the sheet with universal oil (order no. 138648).

Depending on the construction type of the channel to be machined, a distinction is made between two possible ways of commencing work:

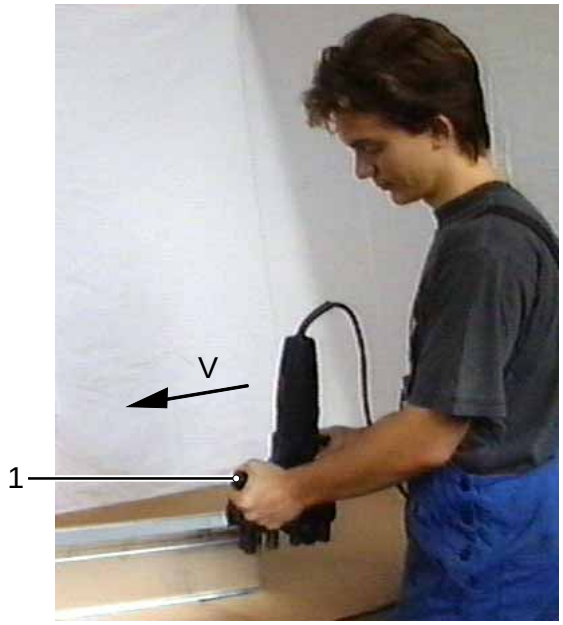
- Channel open.
- Flange at the beginning of the channel.

Channel open Bevel the web at the beginning of the channel approximately 30° for a length of approximately 5 mm.



A	Beveling for the placement of the machine	B	Flange
		P	Tacking point

Fig. 13411



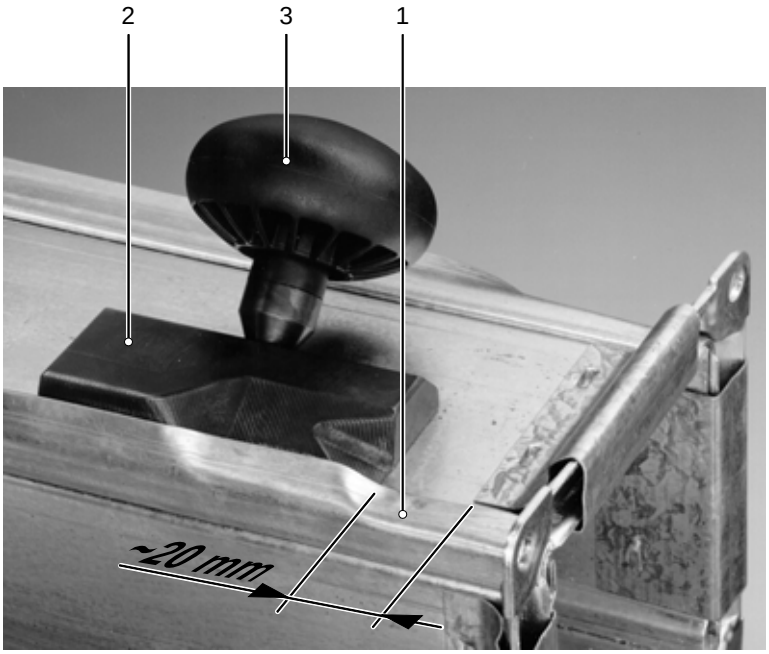
V Direction of feed 1 Lever

Fig. 13415

1. Move lever (1) in end position in direction of feed (tool in work position).
2. Switch on machine and place against the beginning of the channel.
   - The curved guide rail ensures a simple placement of the machine at the beginning of the machining process.
3. The machine is drawn through the driving rollers in the feed direction, meaning that lock seam closure takes place.

Flange at the beginning of sthe channel

The machine cannot be placed up against the beginning of the channel.
Preparation of the channel so that the machine can be brought into position.



1	Preformed suspension lug	3	Handle on the molding
2	Molding for pre-forming the suspension lug		

Fig. 13412

1. Move lever into position against the direction of feed (Tool open).
2. Set machine up against desired (prepared) position on the channel.
3. Position lever in direction of feed (Tool in work position).
   - The working direction (direction of feed) of the machine is determined by its design.
4. Switch on the machine.
5. Close the lock seam.
6. Move lever into "tool open" position.
7. Switch off machine and remove from the machining position.

Notes

- A minor refinishing operation (length approximately 130 mm) must be carried out manually at the end of the channel following the use of the seam locker.
- The suspension lug can be pre-formed without a molding by 30° to a length of approximately 80 mm for small material thicknesses (0.75-1 mm)

Switching off

➢ Push the upper end of the on/off switch.

5. Maintenance

Warning

Risk of injury due to incorrect repair work

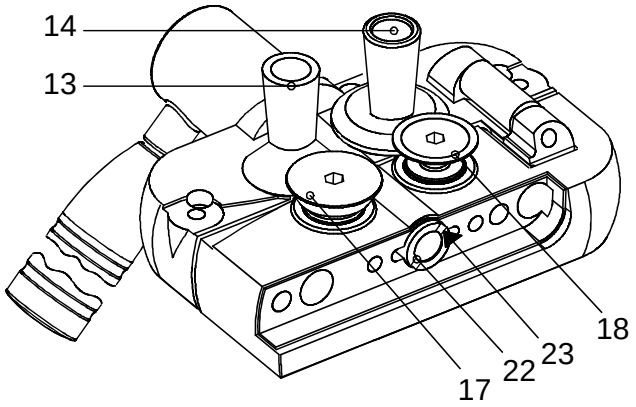
Machine does not work properly.

- Repair work may only be carried out by a qualified technician.

Maintenance point	Procedure and interval	Recommended lubricant	Lubricant order no.
Guide rails of the machine	A trained specialist should clean with a steel brush and lubricate with oil every 10 operating hours	Universal oil	138648
Gearbox and gear head (2)	After 300 operating hours, arrange for a qualified technician to relubricate or to replace the lubricating grease.	Lubricating grease "G1"	139440
Ventilation slots	Clean as needed	-	-

Maintenance positions and maintenance intervals Table 4

5.1 Tightening screws with torque



13	Roller (30°)	18	Driver roller (75°)
14	Roller (75°)	22	Slotted nut
17	Driver roller (30°)	23	Cylindrical pin 5 m 6x24 DIN 6325

View of the TruTool F 300 seam locker from below, the guide rail is dismounted. Fig. 14423

If parts of the machine have been disassembled, when reassembling:

- Tighten screws and nuts with the correct torque.
- Secure with Loctite 262.

Components	Torque	Threaded nut retention
Roller (30°)	24 Nm	Loctite 262
Roller (75°)	24 Nm	Loctite 262
Driver roller (30°)	24 Nm	-
Driver roller (75°)	24 Nm	-
Slotted nut	16 Nm[1]	Loctite 262
Cylindrical pin 5 m 6x24 DIN 6325	-	-

Table 5

[1] Locking mechanism must be closed (special wrench order no. 922759).

5.2 Replacing carbon brushes

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

- Have the carbon brushes checked and replaced as required by a qualified specialist.

Note
Only use original replacement parts and observe the information on the rating plate.

6. Original accessories and wearing parts

Description	Supplied original accessories	Wearing parts	Options	Order no.
Guide rail	+	+		920881
Driver roller 30°	+	+		135477
Driver roller 75°	+	+		135478
Roller (horizontal)	+	+		135791
Suspension eyelet	+			107666
Allen key DIN 911-4	+			067849
Universal oil (0.1 l)	+			138648
Case	+			982582
Molding (aid for the pre-forming of the suspension lug → lock seam preparation)	+			136688
Operator's manual	+			1476811
Safety information (red document), other countries	+			125699
Safety information (red document), USA	+			1239438

Original accessories, wearing parts and optional items Table 6

Ordering wearing parts

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

1. Specify the order number.
2. Enter further order data:
   - Voltage data
   - Quantity
   - Machine type
3. Provide complete shipping information:
   - Correct address
   - Desired delivery type (e.g. air mail, courier, express mail, ordinary freight, parcel post)
4. Send the order to the TRUMPF representative office. Refer to the address list at the end of the document for TRUMPF service addresses.