

# Operator's manual



## TruTool F 301 (1A1)

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english



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## Warranty

## Replacement parts list

## Addresses

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## 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.



**Danger**

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### 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.
- 



**Warning**

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### 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.
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**Warning**

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### Risk of injury to the hands!

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

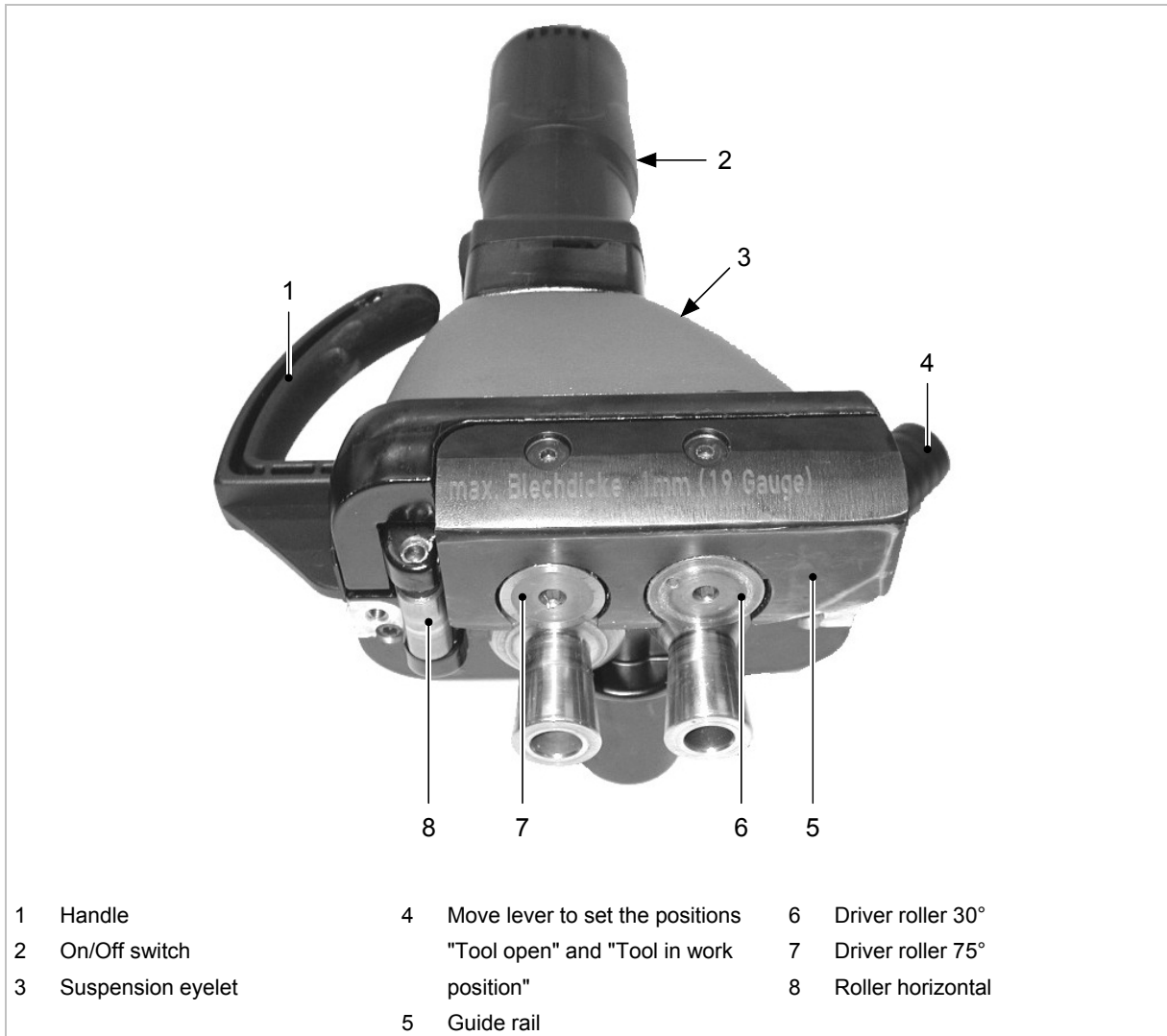
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**Damage to property possible due to improper handling!**

**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.
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## 2. Description



Folding closer TruTool F 301

Fig. 38110

## 2.1 Correct use



**Warning**

### Risk of injury!

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

The TRUMPF Fold closer TruTool F 301 is an electric hand tool used for the following applications:

- Closing of Pittsburgh lock joints on correspondingly pre-machined workpieces, e.g. ventilation ducts, housings, containers, etc.
- Machining of all lock seam elevations.
- Closing of the lock seams on straight or curved contours.
- Automatic adjustment to the sheet thickness.

## 2.2 Technical data TruTool F 301

	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>Material tensile strength 400 N/mm<sup>2</sup></b>	0.45-1 mm	0.45-1 mm	0.45-1 mm	0.018-0.039 in 26-19 GA
<b>Working speed</b>	4-7 m/min	4-7 m/min	4-7 m/min	13-23 ft/min
<b>No load speed n<sub>0</sub></b>	160/min	160/min	160/min	160/min
<b>Nominal power consumption</b>	500 W	500 W	500 W	500 W
<b>Weight</b>	5.2 kg	5.2 kg	5.2 kg	11.5 lbs
<b>Radiuses inside</b>	min. 150 mm	min. 150 mm	min. 150 mm	min 5.9 in
<b>Radiuses outside</b>	min. 300 mm	min. 300 mm	min. 300 mm	min 11.8 in
<b>Protective insulation</b>	Class II	Class II	Class II	Class II

Technical data

Table 1



Noise and vibration	Measured values in accordance with EN 60745
-	Typically 81 dB (A)
A-weighted acoustic power level	Typically 85 dB (A)
Hand-arm vibration	Typically less than or equal to 2.5 m/s <sup>2</sup>

Measured values for noise and vibration

Table 2

**Note**

The measured values specified above may be exceeded while working.

**"Pittsburgh lock seam" geometry**

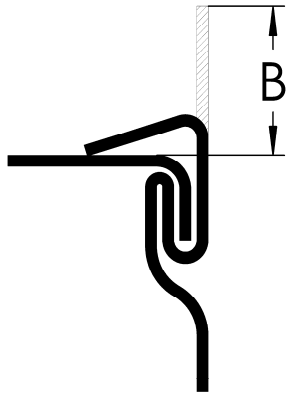
Sheet thickness range		Height of flange
[mm]	[Gauge]	
0.45-1	26-19	 <p>B Height flange 8 mm/0.315 in</p>

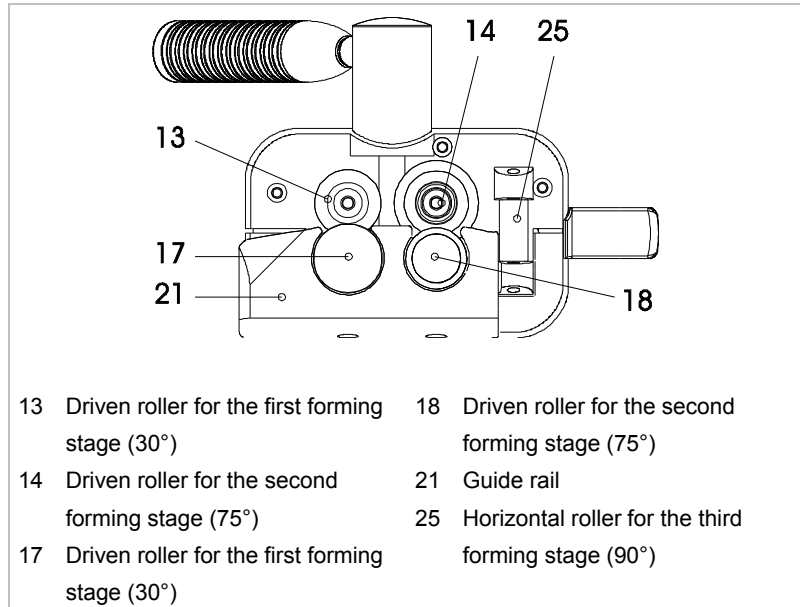
Table 3

**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.



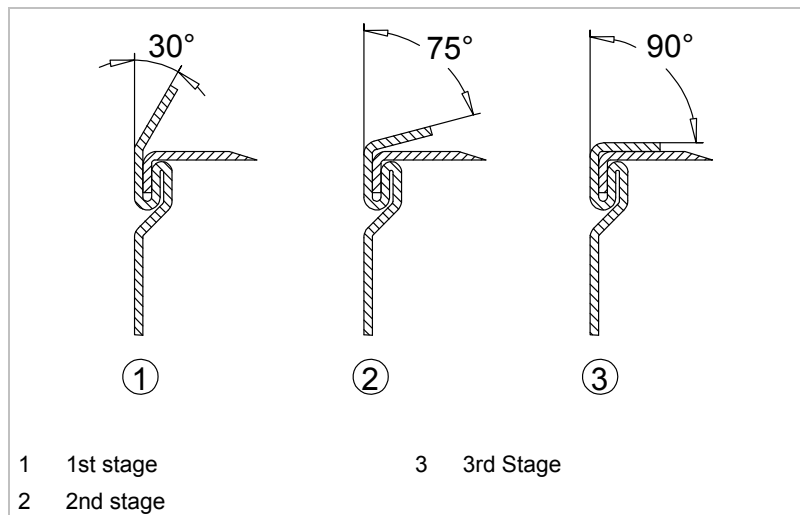
**Roller arrangement**



View of the machine from below: roller arrangement

Fig. 18181

**Folding process sequence**



Folding process

Fig. 13416

**Note**

The reforming of the of the takes place in 3 stages.



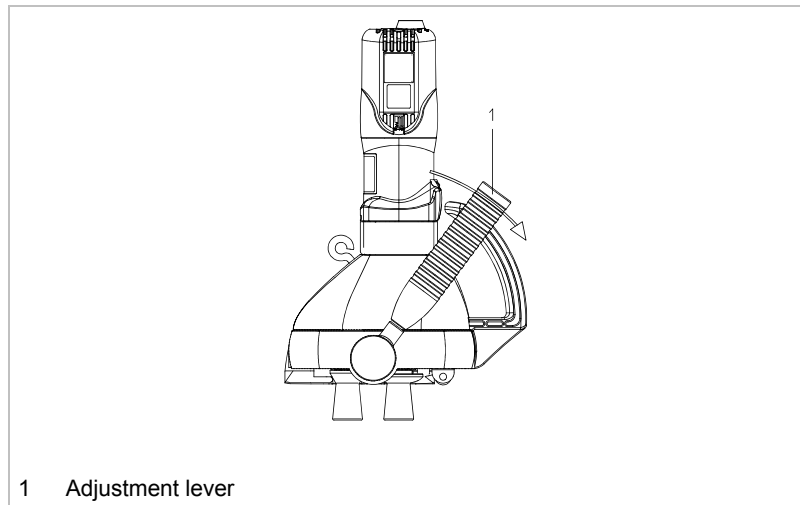
### 3. Tool assembly

#### 3.1 Setting the tool

The clearance between the rollers and the guide rails can be locked into place in order to be able to place the machine at the desired position of the channel (and) 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.
- Move lever (1) in direction of feed in end position: Tool in work position.

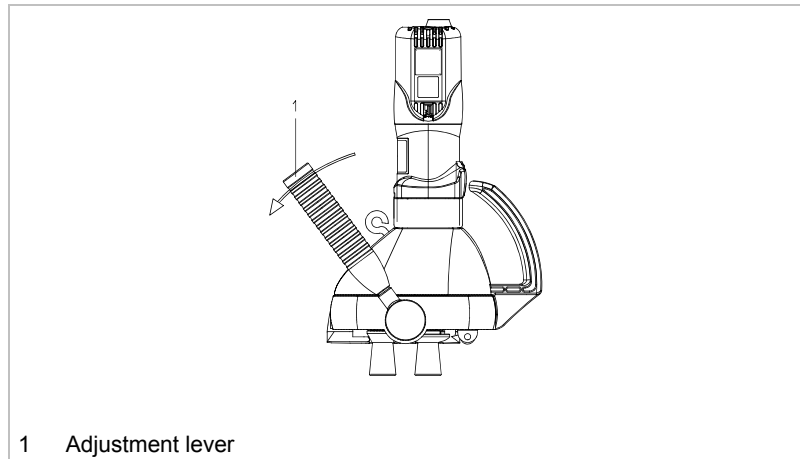
**Tool is open**



Tool is open

Fig. 37866

**Tool in work position**



Tool in work position

Fig. 37867

**Note**

No adjustment for sheet thickness is required, because the machine automatically accommodates itself to the sheet thickness.

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## 4. Operation



**Caution**

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**Damage to property possible due to too-high network voltage!**

**Damage to the motor.**

- Check the power supply. The power supply must correspond to the information on the machine type plate.
- 



**Warning**

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**Danger of injury possible due to improper handling!**

- When working with the machine, always ensure that it has a secure base.
  - Never touch the tool while the machine is running.
  - Always guide the machine away from the body while working.
  - Do not work holding the machine above your head.
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### 4.1 Working with the TruTool F 301

**Switching on the TruTool F 301**

- Move the On/Off switch downwards.

**Working with the TruTool F 301**

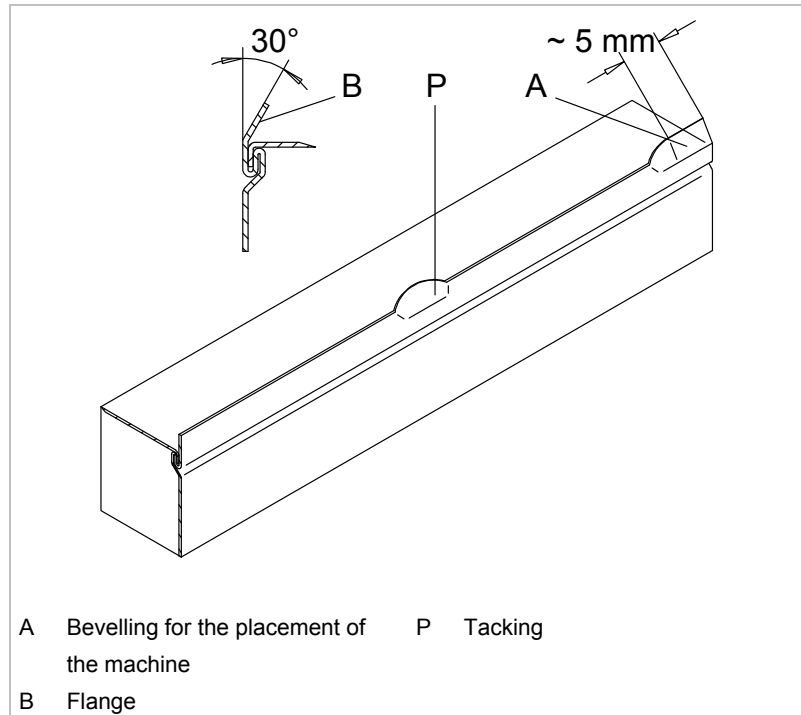
- In order to improve work results, lightly oil the rollers or the tool with universal oil (Order No. 138648).

Depending on the construction type of the channel to be machined, a distinction is made between 2 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.

**Lock seam preparation**



Lock seam preparation

Fig. 13411

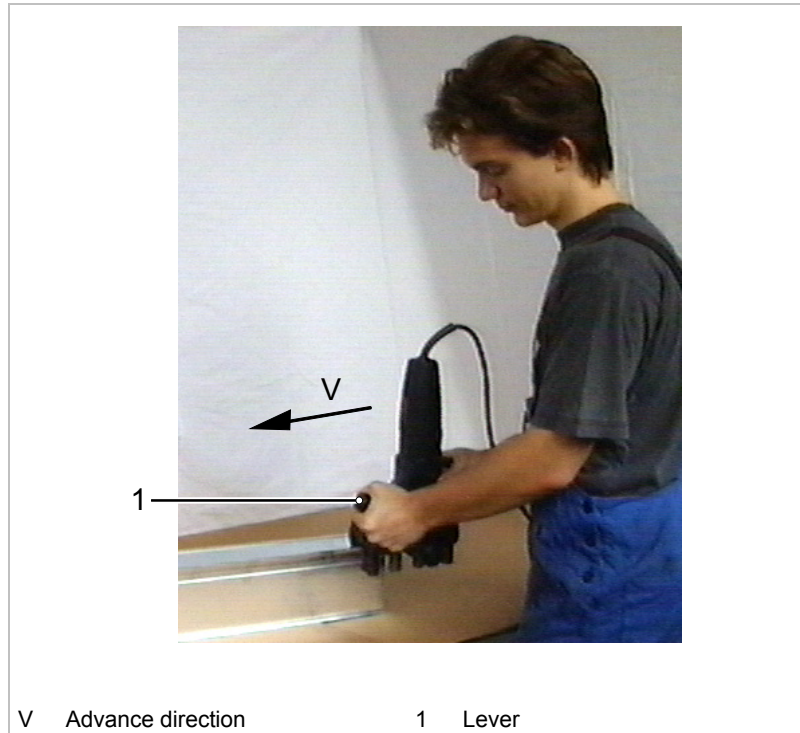


Fig. 13415

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 the channel

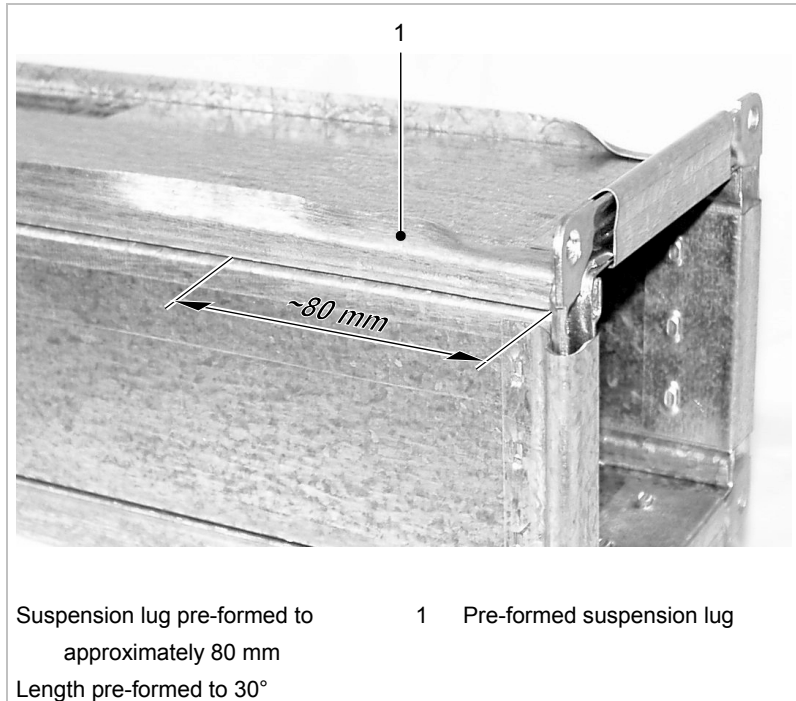


Fig. 18183

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. Move lever (1) into position against the direction of feed (Tool open).
2. Set machine up against desired (prepared) position on the channel.
3. Position lever (1) 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 (1) into tool open position.
7. Switch off machine and remove from the machining position.

#### Note

A minor refinishing operation (length approximately 130 mm) must be carried out manually at the end of the channel following the use of the lock seam closer.

### Switching off the TruTool F 301

- Move the On/Off switch upwards.

## 5. Maintenance



**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.

Maintenance point	Procedure and time interval	Recommended lubricants	Order No. Lubrication agents
Guide rail and driving pinion	Clean every 10 operating hours with a steel brush and apply a light coating of oil	-	-
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
Ventilation slots	Clean as needed	-	-

Maintenance positions and maintenance intervals

Table 4

### 5.1 Replacing carbon brushes

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

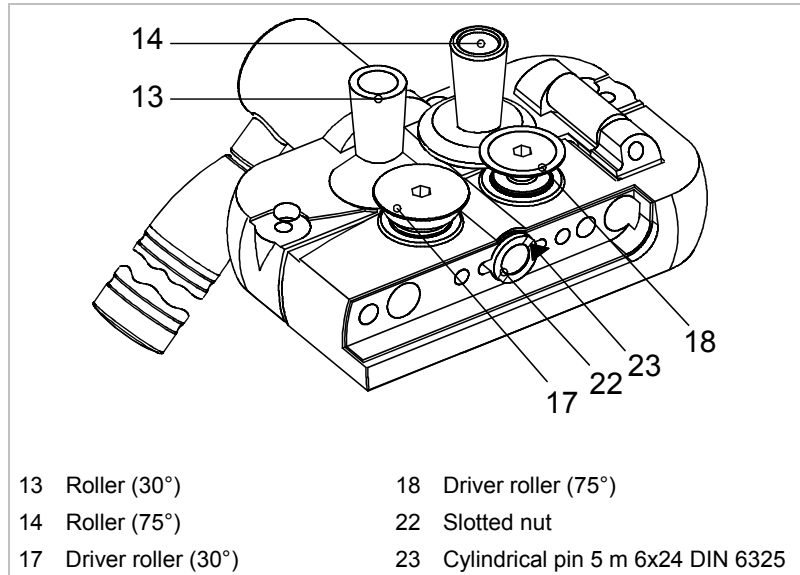
- Have the carbon brushes checked and replaced as needed by a trained technician.

**Note**

Only use original replacement parts and take note of the information on the rating plate.

## 5.2 Tightening screws with turning moment

If parts of the machine have been disassembled, then one must take care to ensure that the screws and nuts are tightened with the correct turning moment.



View of the TruTool F 301 lock seam stripper from below, the guide rail is dismantled.

Fig. 14423

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	6 Nm <sup>1</sup>	Loctite 262
Cylindrical pin 5 m 6x24 DIN 6325	-	-

Table 5

<sup>1</sup> Locking mechanism must be closed.

## 6. Original accessories and wearing parts

Designation	Original accessories delivered	Wearing parts	Optional	Material-number
Guide rail	+	+		920881
Driver roller 30°	+	+		145769
Driver roller 75°	+	+		135478
Roller (horizontal)	+	+		135791
Suspension eyelet	+			107666
Universal oil (0.1 litre)			+	138648
Case	+			982582
Operator's manual	+			1254076
Safety information (red document), other countries	+			125699
Safety information (red document), USA	+			1239438

Original accessories, wearing parts and optional items

Tab. 6

### 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.