

Operator's manual



TruTool C 160 (1A3), (1A4)
TruTool C 160 (1A3), (1A4)

english



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Guarantee

Replacement parts list

Addresses

1. Safety

1.1 General safety rules

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 safety instructions (Material number 125699, red document) in their entirety before starting up the machine and follow precisely the directions contained therein.

➤ The safety regulations in accordance with DIN VDE, CEE, AFNOR and other directives valid in the individual countries should be adhered to.



Warning

Risk of injury from the battery

- Disconnect the battery from the machine prior to all maintenance work.
- Check the machine for damage prior to each use.
- Keep the machine dry and do not operate in damp rooms.
- Do not charge the exchangeable batteries of the Akku 3000 System except with the Akku 3000 System recharger.
- Do not attempt to open the exchangeable batteries or the recharger.
- Do not dispose of the exchangeable batteries in fire nor in domestic refuse.



Warning

Danger of injury due to improper handling!

- When working with the machine, wear safety glasses, hearing protection, protective gloves and work shoes.

1.2 Specific safety rules



Warning

Risk of injury to the hands!

- Do not place your hand into the processing line.



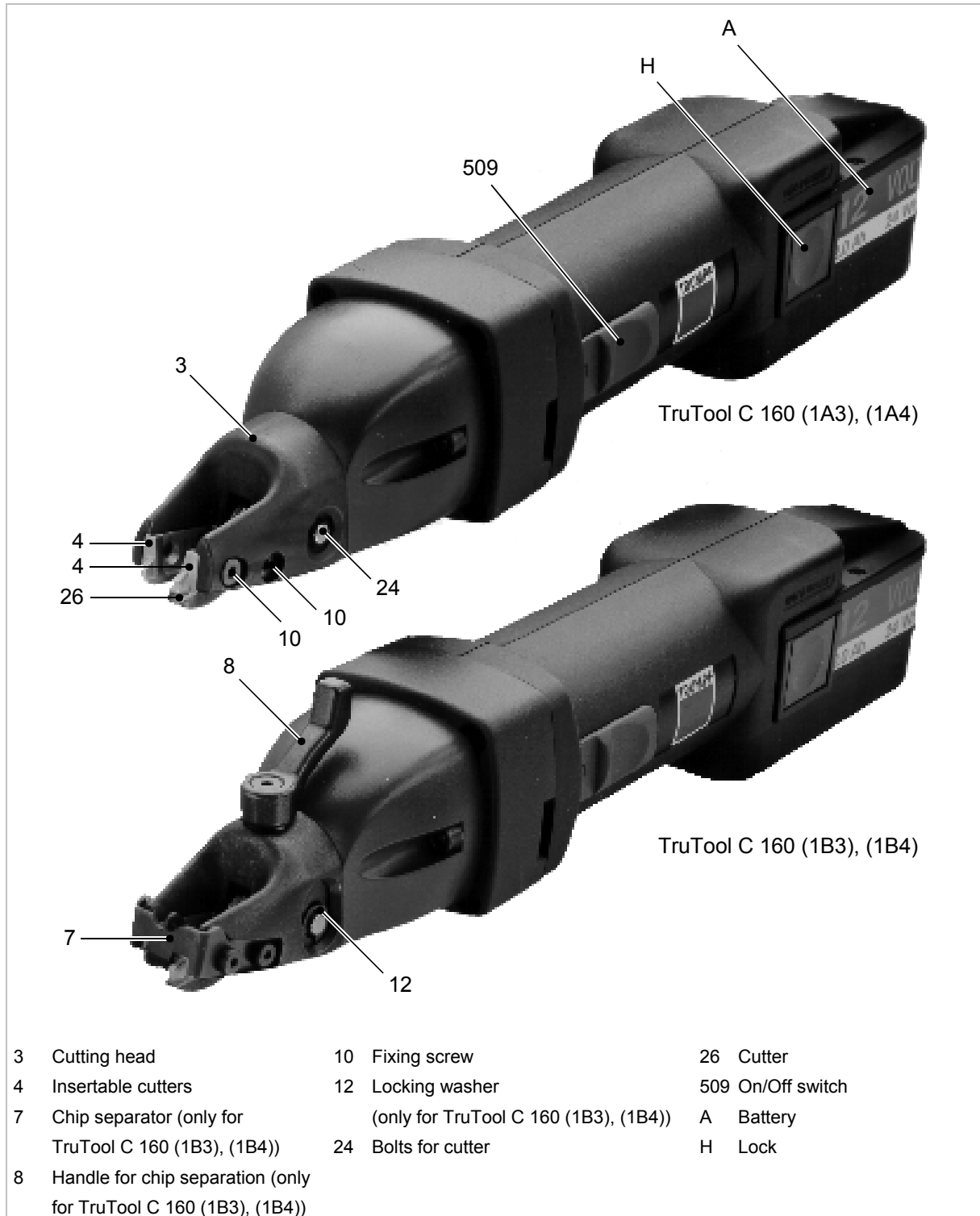
Caution

Damage to property due to improper handling!

The machine will be damaged or destroyed.

- Arrange for startups and checks on manual electric tools to be carried out by a trained technician. Only use the original accessories provided by TRUMPF.
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2. Description



Slotting shears TruTool C 160 (1A3), (1A4) and TruTool C 160 (1B3), (1B4)

Fig. 54310

2.1 Correct use



Warning

Risk of injury!

- Use machine only for the processing and materials which are described under "Correct use".

The TRUMPF TruTool C 160 slotting shears are an electric hand tool used for the following applications:

- Slitting of plate-shaped workpieces made of steel, aluminum, plastic, etc.
- Slitting straight or curved exterior and interior cutouts.
- Slitting along scribed lines.

The TRUMPF TruTool C 160 (1B3), (1B4) also offers the option of cutting away chips which are produced while machining within the workpiece as required.

2.2 Technical data

	Rest of the world	USA
	Values	Values
Voltage	12 V	12 V
Operating speed	6-10 m/min	20-33 ft/min
Stroke rate with idle run	3700/min	3700/min
Weight	1.9 kg	4.2 lbs
Start hole diameter	8 mm (Cr) 15 mm (straight cutter)	0.32 in (Cr) 0.6 in (straight cutter)
Smallest radius with curved cuts	40 mm (curve cutter) 90 mm (straight cutter) 160 mm (Cr)	1.57 in 3.5 in 6.3 in

Technical data

Table 1

	Permitted material thicknesses		
	Steel up to 400 N/mm ²	Steel up to 600 N/mm ²	Aluminum 250 N/mm ²
Straight cutter	1.6 mm (0.063 in)	1.2 mm (0.048 in)	2.0 mm (0.075 in)
Curve cutter	1.0 mm (0.039 in)	0.8 mm (0.031 in)	1.2 mm (0.048 in)
Cutter Cr	2.5 mm (0.098 in)	1.2 mm (0.048 in)	2.0 mm (0.075 in)

Table 2

Noise and vibration	Measured values in accordance with EN 50144
A-weighted sound level	Typically 65 dB (A)
A-weighted acoustic power level	Typically 85 dB (A)
Hand-arm vibration	Typically less than or equal to 2.5 m/s ²

Measured values for noise and vibration

Table 3

3. Tool assembly

3.1 Cutting parallel strips



Parallel stop

Fig. 17756

The parallel stop can be used to process parallel strips 35-300 mm wide.

1. Remove the bolts for the cutter.
2. Mount the parallel stop.

Note

The rod of the parallel stops adopts the function of the cutter bearing arrangement.

3.2 Selection of tools

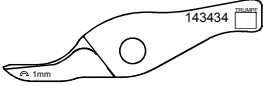
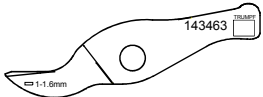
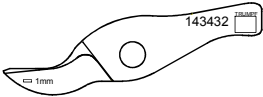
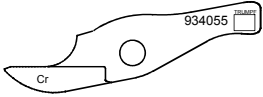
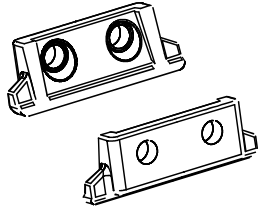
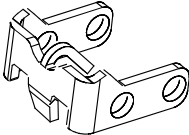
Note

The cutters have 2 cutting edges. These cannot be resharpened.

Different types of cutter are required according to the thickness or tensile strength of the workpiece. (see Table 4, Pg. 9)

If the cutter is not selected as specified.

- The quality of cut will be severely impaired.
- If the feed power increases significantly.
- The cutter will break.

Tool type	Designation	Order No.	Sheet thickness (mm)
	Curve cutter 1.0 mm	143434	Aluminum max. 250 N/mm ² 0.3 to 1.2 Steel max. 400 N/mm ² 0.3 to 1.0 Stainless steel max. 600 N/mm ² 0.3 to 0.8
	Straight cutter 1.0 - 1.6 mm	143463	Aluminum max. 250 N/mm ² 1.0 to 2.0 Steel max. 400 N/mm ² 1.0 to 1.6 Stainless steel max. 600 N/mm ² 0.8 to 1.2
	Straight cutter 1.0 mm	143432	Aluminum max. 250 N/mm ² 0.3 to 1.2 Steel max. 400 N/mm ² 0.3 to 1.0 Stainless steel max. 600 N/mm ² 0.3 to 1.0
	Cutter Cr	934055	Aluminum max. 250 N/mm ² 1.0 to 2.0 Steel max. 400 N/mm ² 1.0 to 1.6 Stainless steel max. 600 N/mm ² 0.8 to 1.2
	Insertable cutters (1 set = 2 pieces) with screws	For TruTool C 160 (1A3), (1A4): 927708 For TruTool C 160 (1B3), (1B4): 913520	All materials
	Chip separator TruTool C 160 (1B3), (1B4)	143950	All materials

Cutter selection

Table 4

4. Operation



Warning

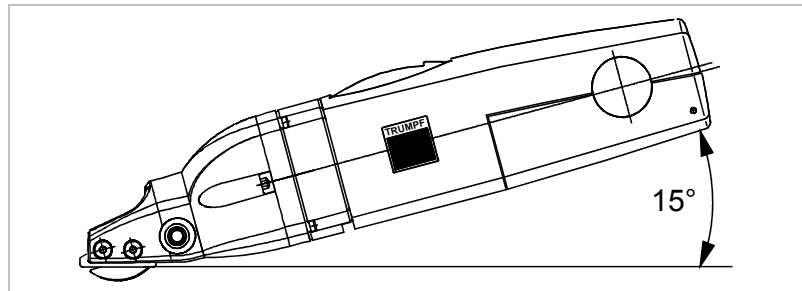
Danger of injury due to improper handling!

- 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.

4.1 Working with the TruTool C160

Switching on

- Move the On/Off switch to the front.



Move the machine forward at an angle of about 15° to the sheet surface.

Fig. 17562

- Do not move the machine towards the workpiece until full speed has been reached.

Separating chips for TruTool C 160 (1B3), (1B4)



Damage to property from interrupted chip brake!
The machine may no longer be used.

- Replace the chip separator.

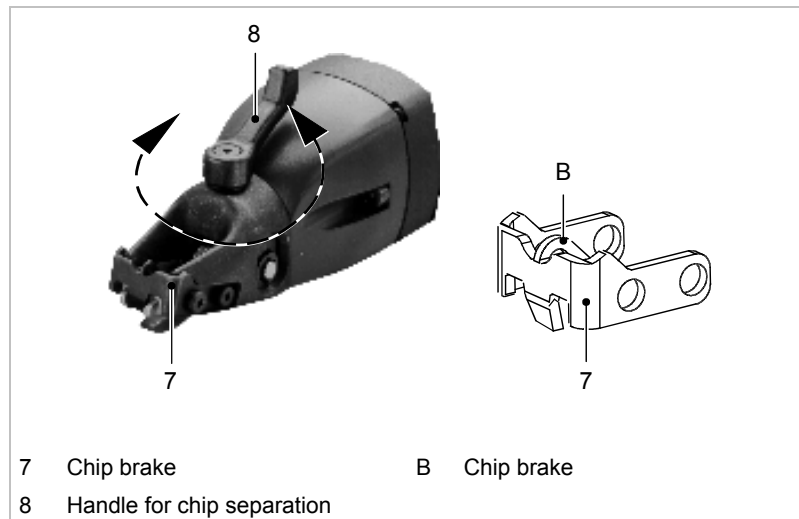


Fig. 17626

1. Separate the chips: turn the handle by a 3/4 clockwise rotation while the machine is running.
2. Continue the operating procedure: turn the handle to the starting position.

Note

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

For safe operation and a good cut performance:

- Ensure that cutters are sharp.
- Turn insertable cutters in when it is time to do so.
- Replace insertable cutters when it is time to do so.

The following specifications apply when cutting radiuses:

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

Switching off ➤ Move the On/Off switch to the rear.

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
Bolts	Lubricate when replacing cutter	"G1" lubricating grease	139440
Cutter	Lubricate when replacing cutter	"G1" lubricating grease	139440
Gearbox and gear head (2)	After 300 operating hours, arrange for a trained specialist to relubricate or to replace the lubricating grease	"G1" lubricating grease	139440
Insertable cutters	Turn as needed	-	-
Insertable cutters	Replace as needed	-	-
Cutter	Replace as needed	-	-

Maintenance Table

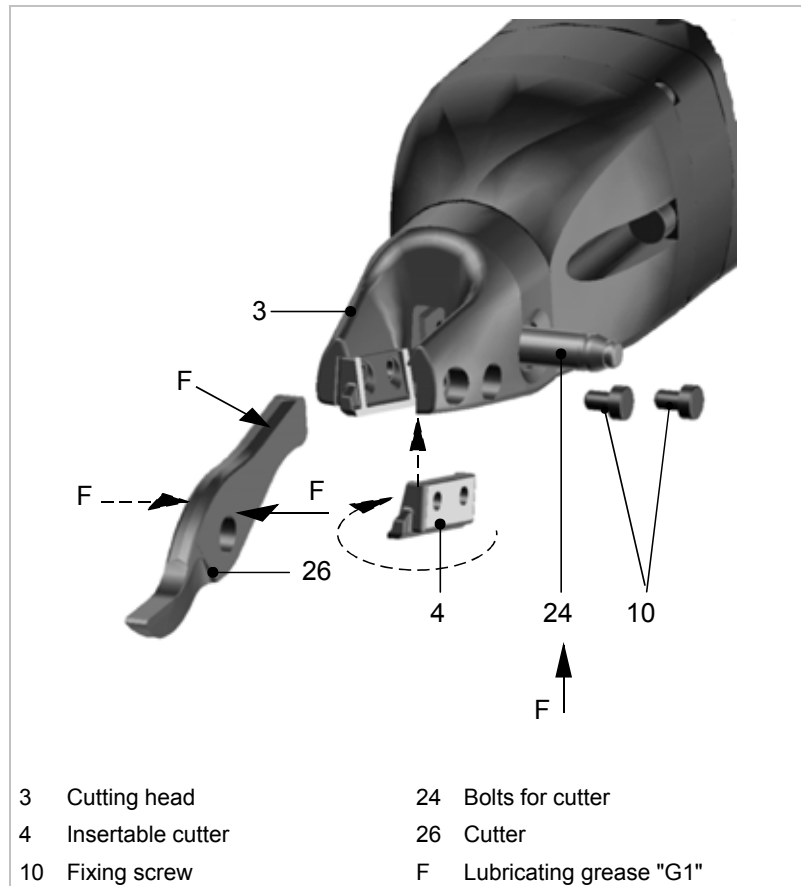
Table 5

5.1 Replacing the TruTool C 160 (1A3), (1A4)



Risk of possible injury from the battery!

- Remove battery when changing tools and before performing any maintenance work on the machine.



Changing the tool

Fig. 17576

Replacing the cutter



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 cutters provide good cutting performance and are easier on the machine. Replace cutters promptly.

When both cutting edges of an insertable cutter are blunt, replace the cutter.

1. Push out bolts (24) which have locked into place.
2. Pull the cutter out of the cutting head.
3. Lightly grease the new cutter and the bolt.
4. Insert the new cutter.
5. Push the bolt into the bore hole until it locks into place.

Turning or replacing the insertable cutters

1. Unscrew the fixing screws.
2. Check the insertable cutters;
 - When a cutting edge is blunt, turn the insertable cutters 180°.
 - or**
 - When both sides of the cutting edges of an insertable cutter are blunt, replace both insertable cutters.
3. Tighten the fixing screw.

5.2 Replacing the TruTool C 160 (1B3), (1B4)



Danger

Risk of injury from the battery!

- Remove battery when changing tools and before performing any maintenance work on the machine.

Replacing the cutter



Caution

Damage to property due to blunt tools!

Overloading of the machine.

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

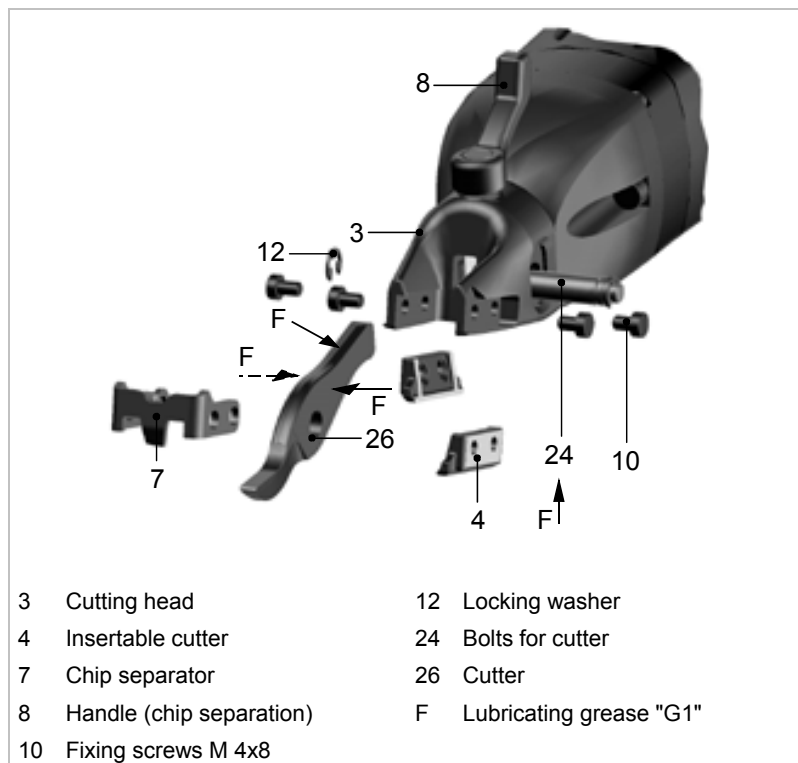


Fig. 17577

When both cutting edges of an insertable cutter are blunt, replace the cutter.

1. Remove the locking washer using a screwdriver.
2. Push out the bolt.
3. Pull the cutter out of the cutting head.

4. Lightly grease the bolt and the new cutter.
5. Insert the cutter.
6. Push the bolt through the bore hole of the cutter until it reaches the stop.
7. Insert the locking washer into the specified notch of the bolt.

Turning or replacing the insertable cutters

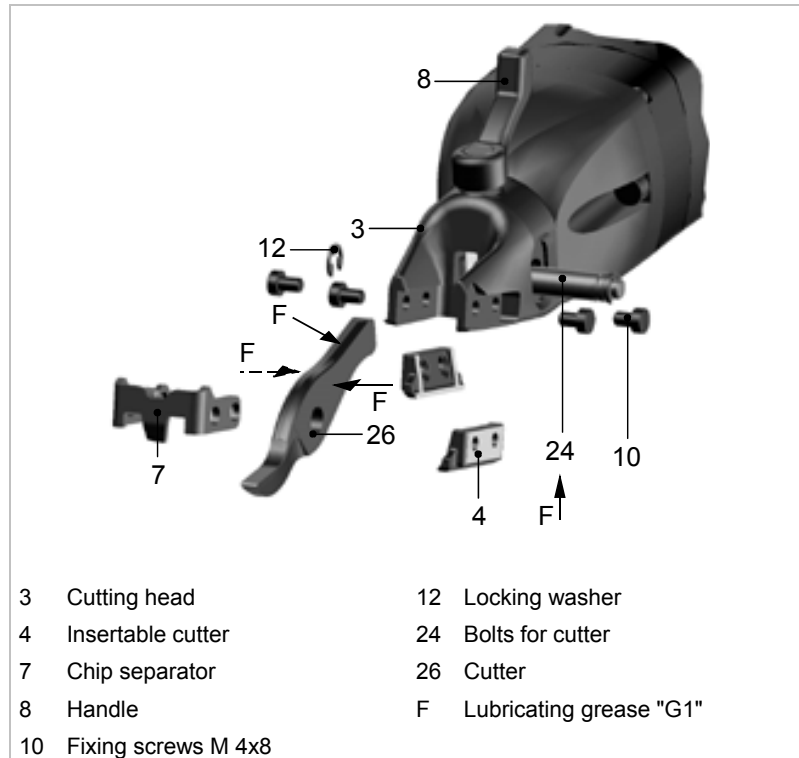


Fig. 17577

1. Unscrew the fixing screws.
2. Check the insertable cutters:
 - When a cutting edge is blunt, turn the insertable cutters 180°.
 - or**
 - When both sides of the cutting edges of an insertable cutter are blunt, replace both insertable cutters.
3. Turn the handle by a $\frac{3}{4}$ rotation to the right, in order to bring the cutter into the cutting position.
4. Push the chip separator onto the cutting head until the chip separator is positioned over the front edge of the cutter.
5. Hold down the chip separator and insertable cutters in this position.
6. Tighten the fixing screw.
7. Turn the handle to the left to the working position.

5.3 Changing the battery

Before using the Akku electric tool, a new exchangeable battery or one which has not been used for a long time needs to be charged.

Note

The full capacity will be reached after 4-5 charges.



Fig. 12642

Removing exchangeable battery

- Press locking mechanism together and pull out exchangeable battery in the direction of the arrow.



Fig. 12641

Loading exchangeable battery

- Slide exchangeable battery into the mounting device of the machine from the rear until the battery engages.

Note

Thanks to a mechanical coding, only exchangeable batteries which are intended for the machine can be inserted.

6. Wearing parts

Designation	Material No.
Insertable cutters for TruTool C 160 (1A3), (1A4) (1 set = 2 pieces) with screws	927708
Insertable cutters for TruTool C 160 (1B3), (1B4) (1 set = 2 pieces) with screws	913520
Straight cutter -1-1.6 mm	143463
Straight cutter -1 mm	143432
Curve cutter	143434
Cutter Cr (For processing high-tensile sheets)	934055
Chip separator (Only for TruTool C 160 (1B3), (1B4))	143950

Table 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:
 - Voltage data.
 - Number of pieces.
 - Machine type.
3. Specify complete shipping information:
 - 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.

7. Original accessories

Designation	Material No.
1 Straight cutter -1-1.6 mm	143463
2 Insertable cutters 1 chip separator (only for TruTool C 160 (1B3), (1B4))	143950
Allen key DIN 911-2,5	067822
Operator's manual	949067
Battery	133863
Safety instructions (red document), other countries	125699
General safety rules (red document), USA	1239438

Table 7

8. Options

Designation	Material No.
Parallel stop	143439
Lubricating grease "G1" tube (25 g)	344969
Lubricating grease "G1" can (900 g)	139440

Table 8