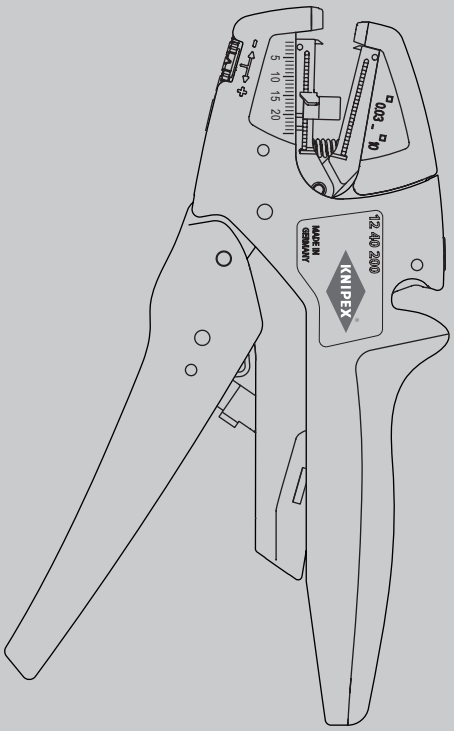
KNIPEX Quality – Made in Germany

Operating instructions

12 40 200

EN **Automatic insulation strippers**
for stripping finely stranded to solid round cables



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1 General

1.1 Notes on operating instructions

These operating instructions are designed to enable you to use your tool safely and efficiently. The tool may only be used if it is in technically perfect condition. As a consequence of technical developments, the illustrations and descriptions contained in these operating instructions may differ slightly from the tool actually delivered. We do not accept any liability for damage caused by failure to observe these operating instructions.

1.2 Symbols used

All safety instructions in these operating instructions are indicated by corresponding symbols. The signal words at the beginning of each safety instruction express the extent of the Hazard.

Danger!

Level 1 risk source

This combination of symbol and signal word indicates an imminently hazardous situation that will result in death or serious injury if not avoided.

Warning!

Level 2 risk source

This combination of symbol and signal word indicates a possibly hazardous situation that may result in death or serious injury if not avoided.

Caution!

Level 3 risk source

This combination of symbol and signal word stands for important information that will assist in preventing damage to property or the environment.

1.3 Copyright

1.4 Guarantee and warranty

The manufacturer grants a statutory warranty in accordance with the current sales and delivery conditions. No further warranties or assurances are granted. Within the warranty period, the warranty covers the rectification of all defects that can be traced back to material faults or manufacturing errors. Wearing parts are excluded from the warranty. The repair or replacement of a tool shall not result in an extension of the warranty period. Tools shall only be repaired or replaced with "as new" parts, whose function corresponds to that of the old parts. All defective and hence replaced parts are the property of the manufacturer.

Warranty claims shall expire in particular if:

- Damage is caused through improper operation, use for purposes other than those specified by the manufacturer, or poor maintenance.
- Repairs or conversions are carried out by unauthorized persons.
- Original accessories or spare parts from KNIPEX are not used.
- Defective components are not repaired immediately to minimise the extent of the damage and so as not to impair the safety of the tool (obligation to repair).

For the rest, reference is made to the liability and warranty regulations of the current sales and delivery conditions.

In view of the wide variety of possible insulation materials with different properties, such as material hardness and material thickness, it is not possible to guarantee perfect stripping results in every application.

It is therefore the responsibility of the user to independently check the suitability and selection of the appropriate tool for the specific requirements. We are happy to offer advice and support on request.

2 Safety

2.1 Intended use

The tool is intended for the following uses:

- Stripping of finely stranded conductors to solid round cables from 0.03 to 10 mm²/AWG 32 – 8
- Cutting copper and aluminium conductors up to max. 6 mm² (solid) and 10 mm² (finely stranded)

The tool must **not** be used for the following applications:

- Cutting steel

Any use beyond the intended purpose or any unauthorized modification shall be considered improper. The operator shall be liable for damages resulting from improper use.

Intended use also includes adhering to these operating instructions. They must be read in full before use.

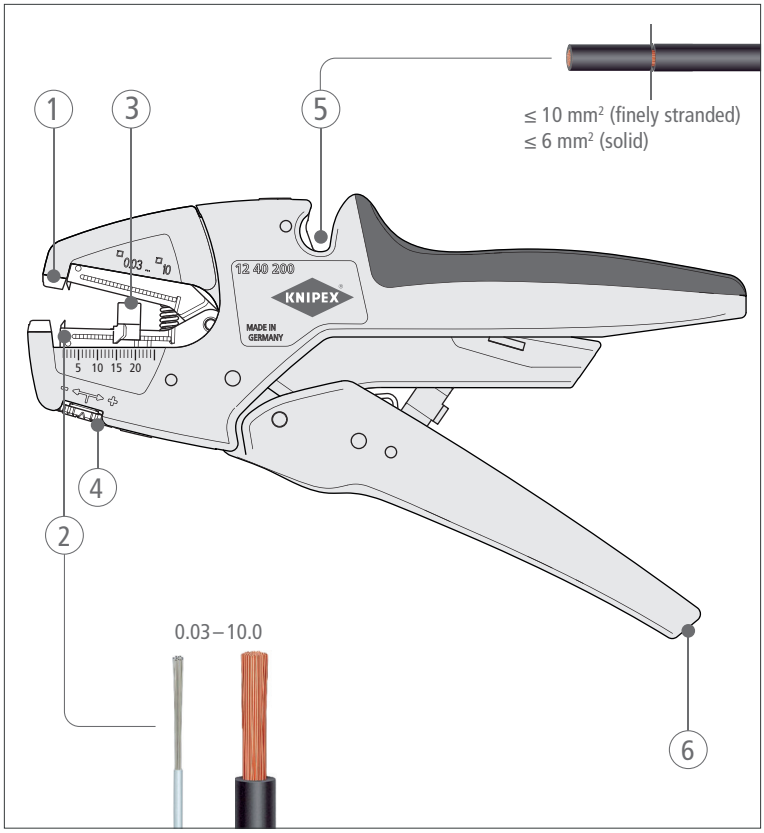
Warning!

Warning: Sharp blades!

Handling sharp blades is dangerous. For this reason, make sure to handle your tools with care when working.

3 Design and function

3.1 Design



Design of the stripping tool

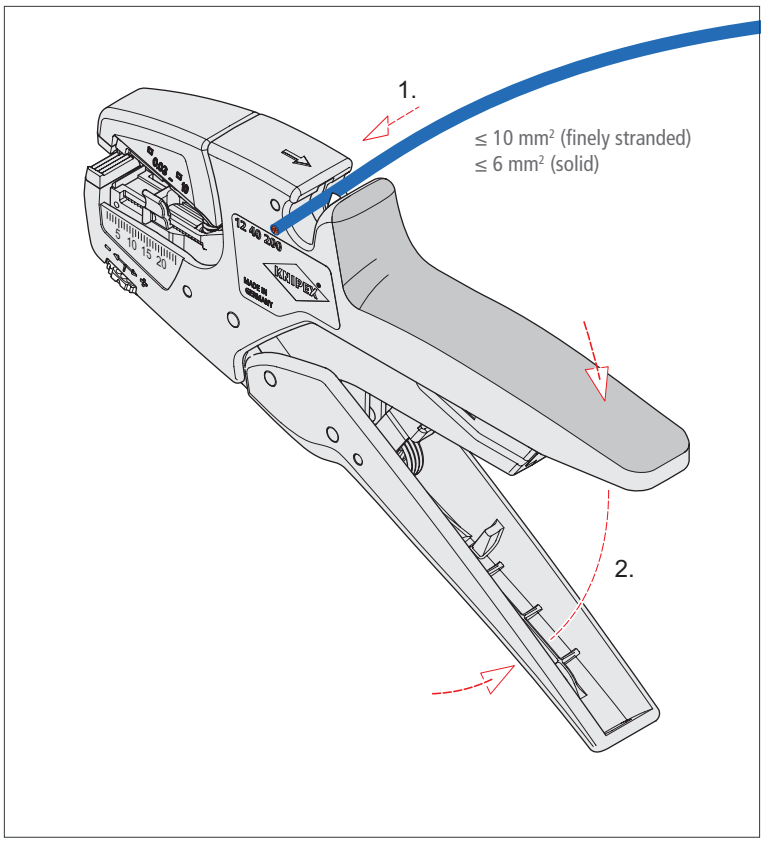
1 Holder for cables / conductors with robust clamping jaws
2 Blade unit with straight blades for stripping
3 Adjustable length stop (5.0 to 22.0 mm)
4 adjusting wheel with its tactile locking positions for optimum fine adjustments
5 Cable cutter for finely stranded copper and aluminium conductors (max. 10 mm² finely stranded, max. 6 mm² solid)
6 Tether attachment point for KNIPEX Tethered Tools accessories

3.2 Function

Solid, stranded and finely stranded conductors are shortened and stripped with the automatic insulation stripper.
The automatic system automatically adapts to cross-sections from 0.03 to 10 mm².
The cutting depth of the blades can be adjusted in fine increments for special operating conditions (insulation material, temperature).

4 Operation

4.1 Cutting cables

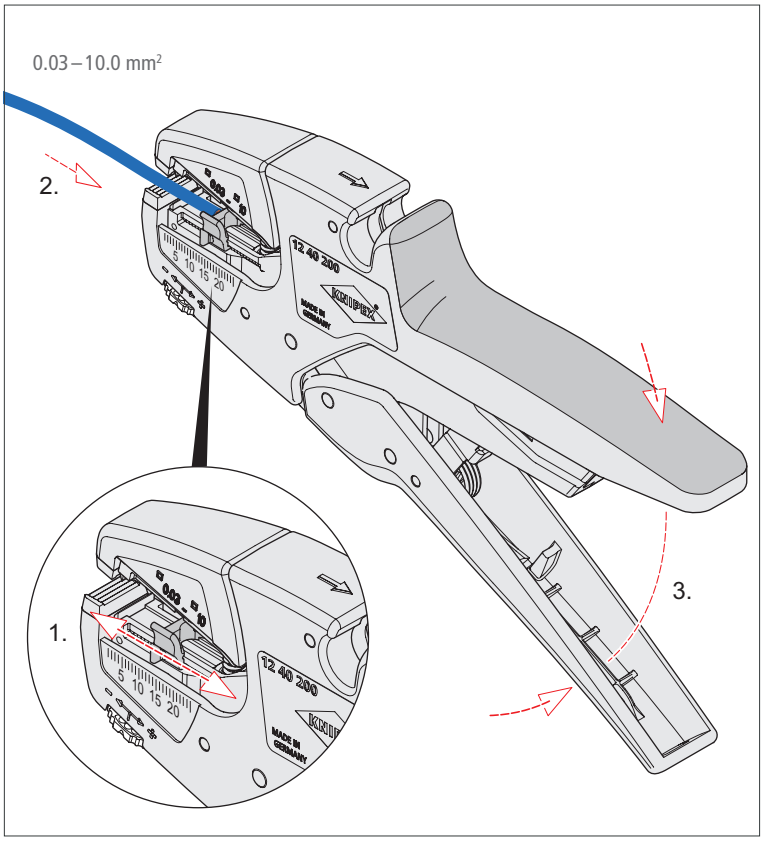


Cutting cables

1. Insert the end of the cable to be shortened between the two blades of the cable cutter.
2. Firmly press the two handles together.

4.2 Stripping cables (with single, multi and finely stranded conductors)

» Set the length stop to the required length (5 to 22 mm). If you remove the length stop, you can strip a maximum length of 25 mm.
» Insert the end of the cable into the holder.
» Firmly press the two handles together.



Stripping single conductors

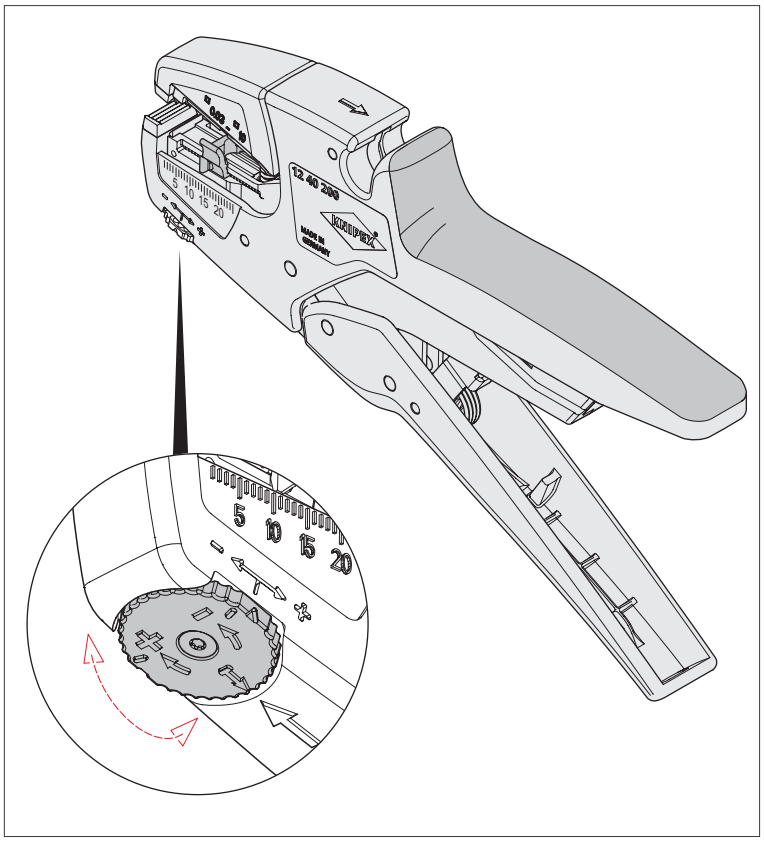
» Pull the stripped cable out of the holder.

4.2.1 Fine adjustment of the cutting depth

With special materials or temperature conditions, it may be necessary to readjust the cutting depth.

» To do this, turn the adjustment wheel in the direction of '+' (increase cutting depth) or '-' (reduce cutting depth) for optimum fine adjustment.

» To achieve the optimal setting, start at the zero position and turn the adjusting wheel in small steps in the '+' or '-' direction.



Readjusting the cutting depth – the position of the adjusting wheel indicates the zero position.

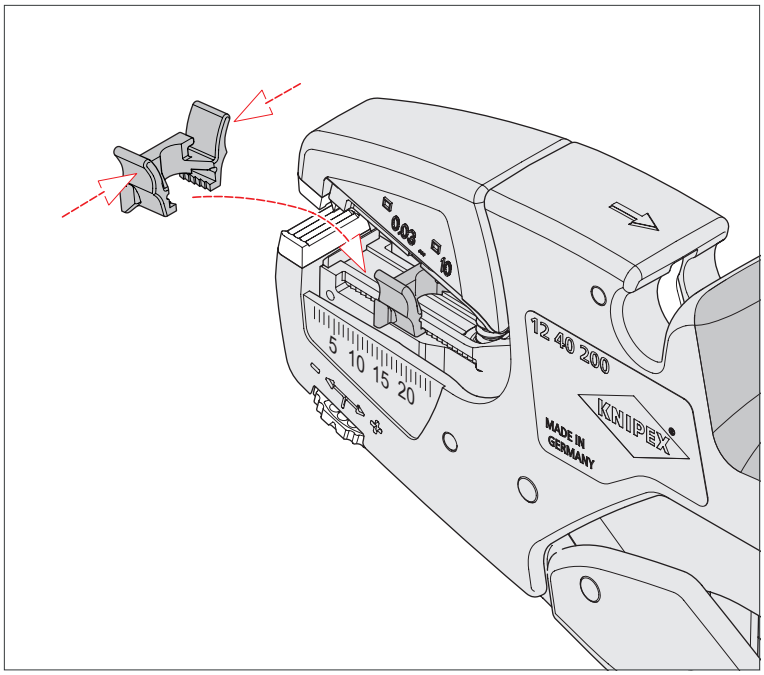
» After each locking, carry out a stripping test.

» Continue turning the adjusting wheel until the desired stripping result is achieved.

5 Maintenance

Tip:
To increase the service life of the insulation stripper, oil the moving parts and the opening spring regularly.
Use a thin liquid maintenance oil (e.g. maintenance oil for sewing machines or bicycles).

5.1 Changing the length stop



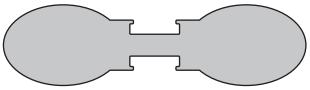
Replacing the length stop

1. Press the length stop together lightly and pull it off the guide.
2. Place the new length stop onto the guide and gently press it together until it clicks into place.
3. Check whether the length stop can be moved.

5.2 Changing the stripping blades

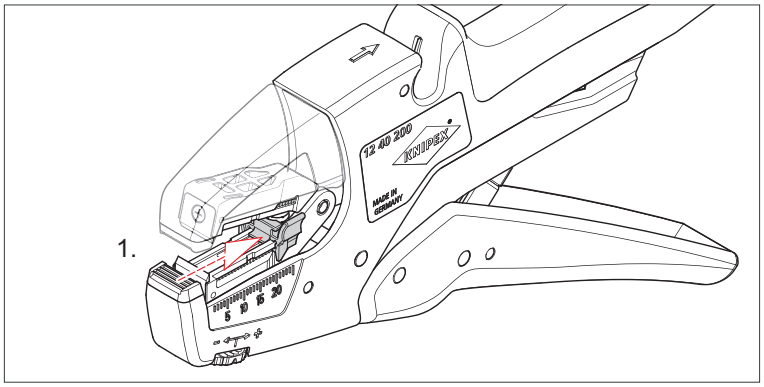
5.2.1 Inserting the assembly aid

To change the blades, you will need the assembly aid in addition to the replacement blades.



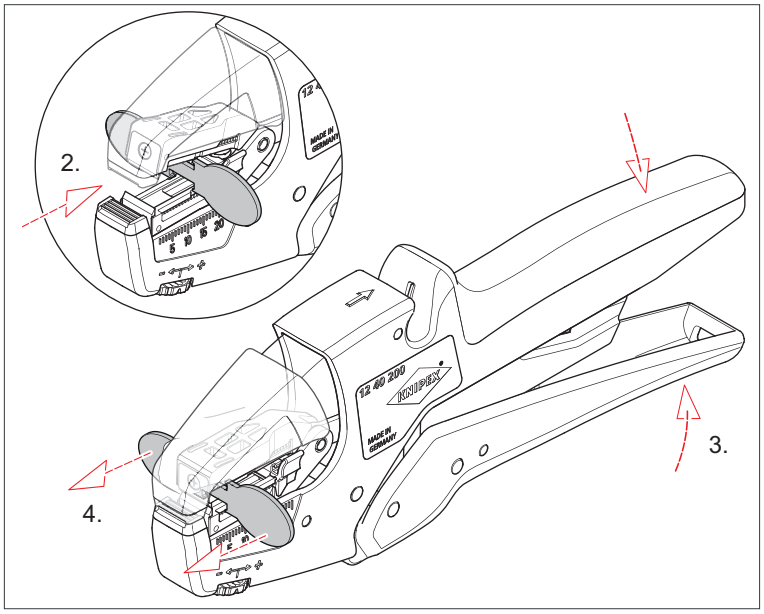
The assembly aid is used to connect the upper and lower blade units. The entire blade unit can be pushed up and down to change the relevant blade.

1. Push the length stop all the way back.



Pushing the length stop all the way back

2. Insert the assembly aid into the recess in the centre of the blade unit.
3. Close the blade unit by lightly pressing the handles together.



Inserting the assembly aid

4. Push the assembly aid forwards.

The blade unit is now blocked by the assembly aid and can be pushed up and down in the holder to access the blades.

5.2.2 Replacing blades

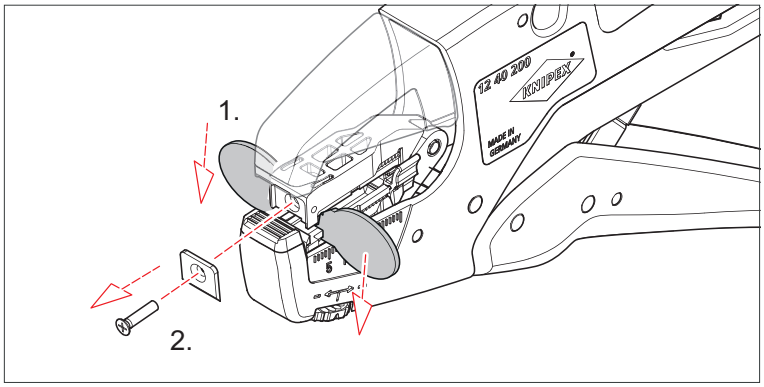
Now pull the handles completely apart to open the cable holder. In this position, you can push the blade unit up and down with the assembly aid to be able to exchange both blades.

Warning!

Warning: Sharp blades!

Handling sharp blades is dangerous. For this reason, make sure to handle your tools with care when working.

1. Push the blade unit downwards using the assembly aid.
2. Unscrew the screw of the upper blade and remove the old blade.

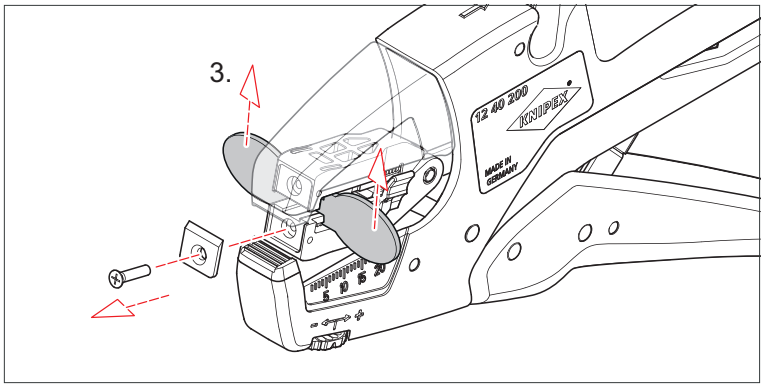


Removing the upper blade

Tip:

Carefully lever the blade out of the holder using a magnetic screwdriver.

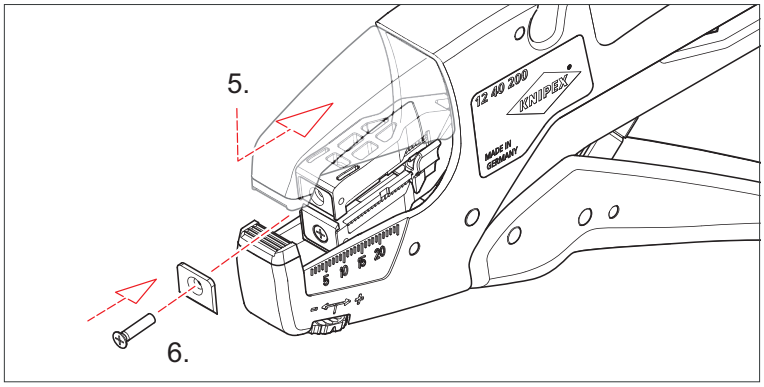
3. Press the assembly aid upwards and remove the lower blade in the same way.



Removing the lower blade

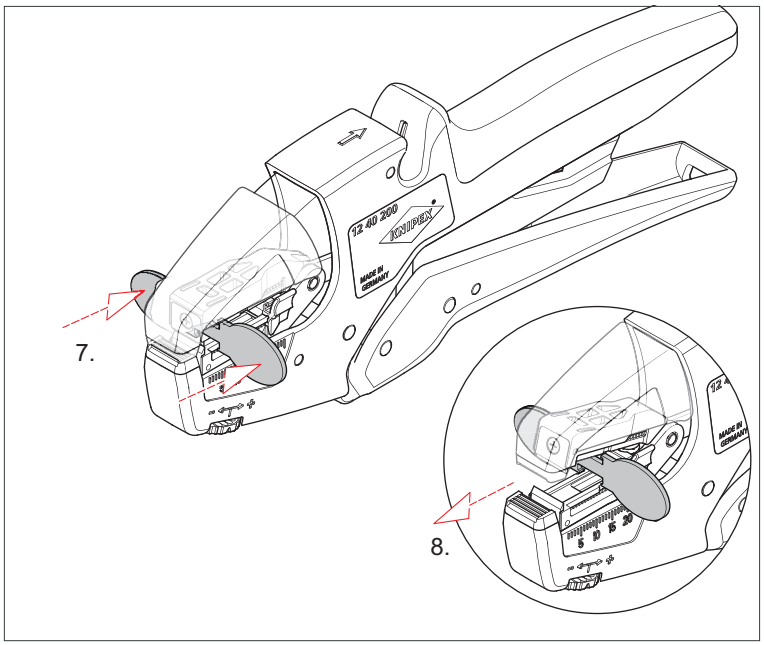
4. Insert the new lower blade and secure it with the new screw.

5. Close the assembly aid and push it slightly to the back.
6. Insert the new upper blade and secure it with the new screw.



Inserting the upper blade

7. Push the assembly aid to the back with the tool closed.
8. Open the tool and remove the assembly aid.

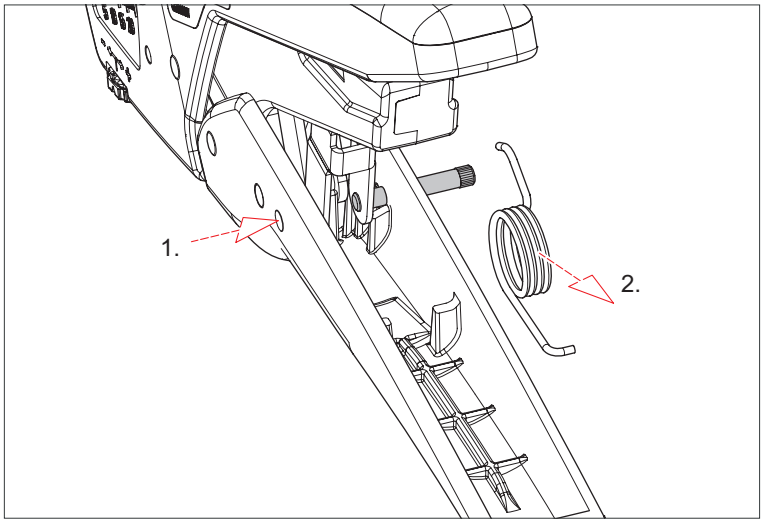


Removing the assembly aid

9. Check that the wire stripper is working correctly by stripping a cable.
10. Dispose of the old blades properly.

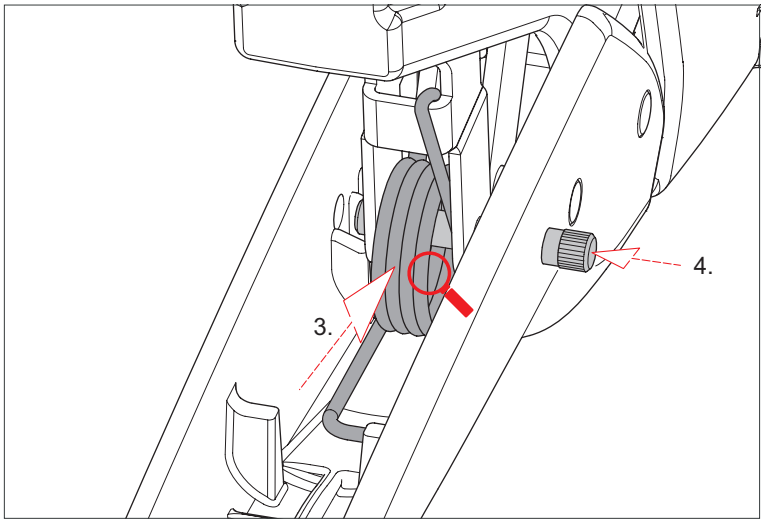
5.3 Changing the torsion spring

1. Push the knurled pin in the "direction of the knurl" using a pin punch. Do not push the knurled pin all the way through, but leave it slightly engaged in the pressure handle!
2. Remove the torsion spring.



Removing the old torsion spring

3. Push the new torsion spring into the intermediate space in the pressure handle. Keep the torsion spring under constant pressure.



Inserting a new torsion spring

4. Push the knurled pin back in. The bolt must be guided through the torsion spring.
5. Fully insert the knurled bolt into the handle housing. Use a hammer if necessary.

6 Malfunction

6.1 Causes of malfunction and troubleshooting

The following table provides an overview of the most common faults:

Error	Cause	Remedy
Blades slide over the insulation	The cutting depth of the stripping knives is not set correctly	Use the slider to set the cutting depth of the stripping blades. To do this, refer to point 4.2.1 of this operating manual.
	The knives are worn	Replace the blade unit (spare part item no.: 12 49 01)
Stripping result not acceptable	This pliers is not suitable for the cable's insulation material (e.g. multi-layered solar cable or rubber cable)	Use another pliers from the KNIPEX range
	The knives are worn	Replace the blade unit (spare part item no.: 12 49 01)

7 Technical data

Technical data	Unit	
Part number pliers	–	12 40 200
Part number spare blade	–	12 49 01
Part number spare length stop	–	12 49 23
Part number torsion spring	–	12 49 04
Length	mm	190
Weight	g	150
Housing material	–	glass fibre reinforced plastic
Blade material	–	special tool steel, oil-hardened
Stripping capacity	mm^2	0.03 – 10.0
Stripping capacity	AWG	32 – 8
Cutting capacity	mm^2	max. 10 for finely stranded cables max. 6 for solid cables

8 Disposal

The tool can be disposed of as household waste.

KNIPEX-Werk
C. Gustav Putsch KG

42337 Wuppertal

Tel.: +49 202 – 47 94-0
Fax: +49 202 – 47 74 94

info@knipex.com
www.knipex.com