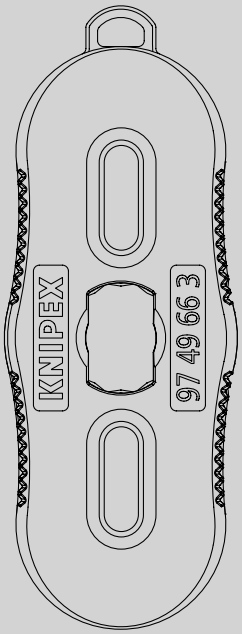
KNIPEX Quality – Made in Germany

Operating instructions

97 49 66 3



EN Assembly wrench set

for tightening the housing screw connections and unlocking the plug connection on MC4® and MC4®-Evo 2 plug type connectors

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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

These operating instructions and all documentation supplied with this tool are protected by copyright and remain the property of KNIPEX.
The reprinting of these instructions, even in extract form, is only permitted with the written consent of C. Gustav Putsch KG.

1.3.1 Copyright protection of other manufacturers

This manual refers to the products ‚MC4®' and ‚MC4®-Evo 2', which are registered trademarks of Stäubli Electrical Connectors GmbH.

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.

2 Safety

2.1 Intended use

The tool is intended for the following uses:

- For tightening the housing screw connections on MC4® plug type connectors with a specified torque
- For tightening the housing screw connections on MC4® Evo 2 plug type connectors with a specified torque
- For unlocking MC4® plug type connectors
- For unlocking MC4® Evo 2 plug type connectors

The tool is not approved for the following applications:

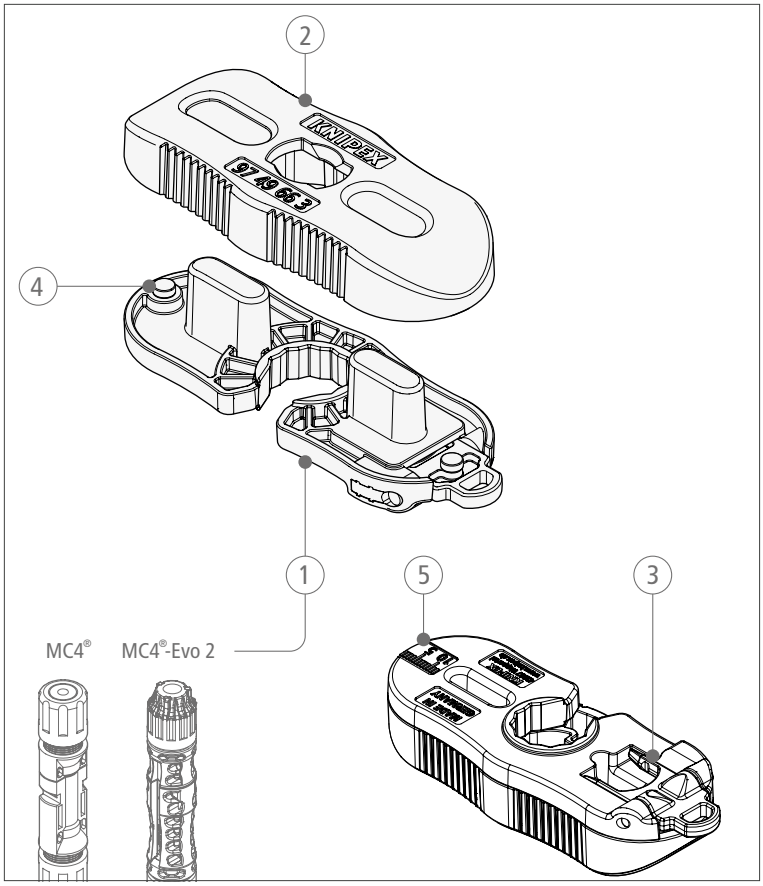
- For tightening the housing screw connections on other types of
- photovoltaic plug type connectors (e.g. MC3, Solarlok, etc.)
- For unlocking plug type connectors on other types of photovoltaic plug type connectors (e.g. MC3, Solarlok, etc.)

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.

3 Design and function

3.1 Design



Assembly wrench set for MC4® and MC4®-Evo 2 plug type connectors

1 Tool half with open-end wrench
2 Tool half with counter-holder
3 Foldable release tips
4 Magnets for connecting the tool halves
5 Scale for checking the stripping length

3.2 Function

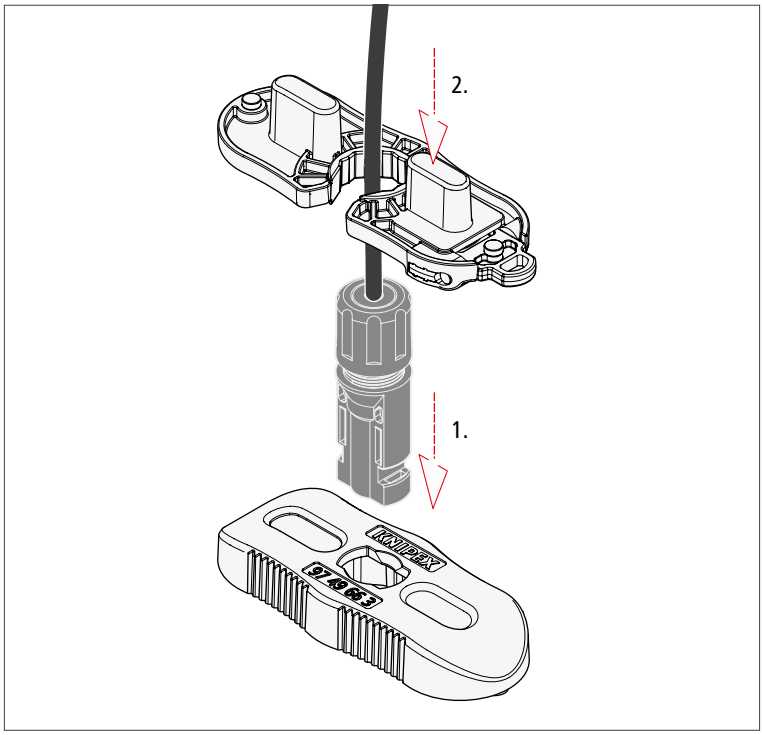
The assembly wrench set, specially designed for MC4® and MC4®-Evo 2 solar plug type connectors, is used to tighten and loosen the housing screw connections of these plug type connectors.
When screwing, one half is used for countering.
To unlock, the release pins are folded out and inserted into the locking openings of the plug type connectors in order to release the locking tabs and disconnect the plug type connector.

4 Operation

4.1 Screwing and unlocking MC4® plug types

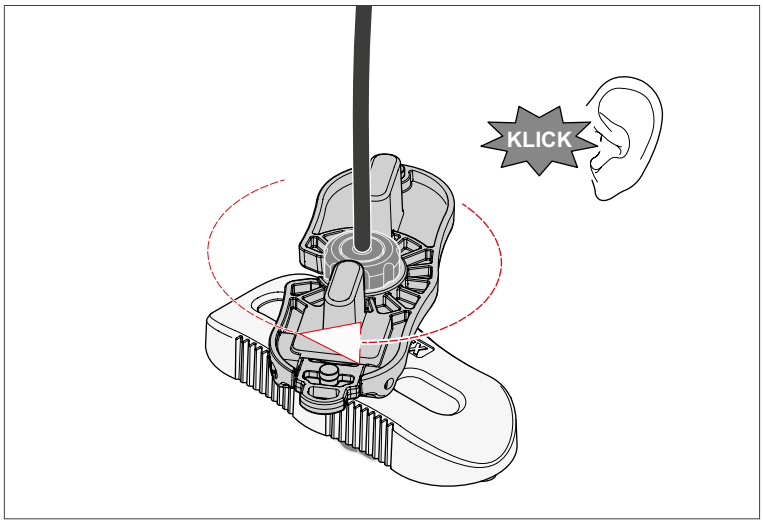
4.1.1 Screwing MC4® plug type connectors

» Insert the MC4® plug or socket into the tool half with holder as shown in the illustration.
» Then place the tool half with open-end wrench on the screw connection of the plug/socket.



Positioning the tool for MC4® plug type connectors

» Tighten the screw connection with the open-end spanner until the specified torque is reached and an audible click is heard.



Screwing together MC4® plug type connectors

4.1.2 Unlocking MC4® plug type connectors

Danger!

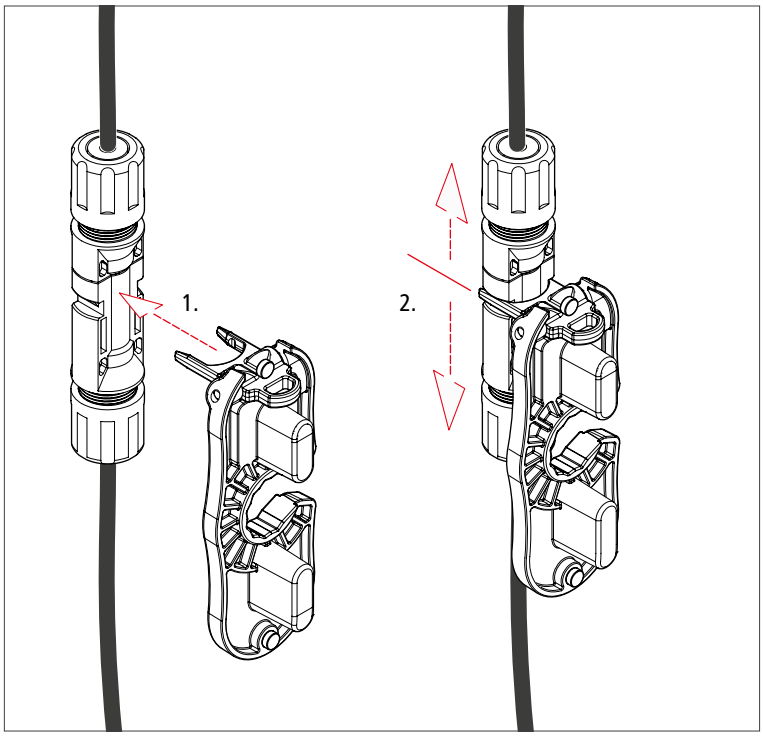
Danger of death due to electric current!

Never disconnect the connector under load.

Disconnect the system from the power supply before starting work!

» Fold out the release tips. These are located in the half of the tool with the open-end wrench.

» Insert the release pins into the recesses of the locking tabs, as shown in the illustration.



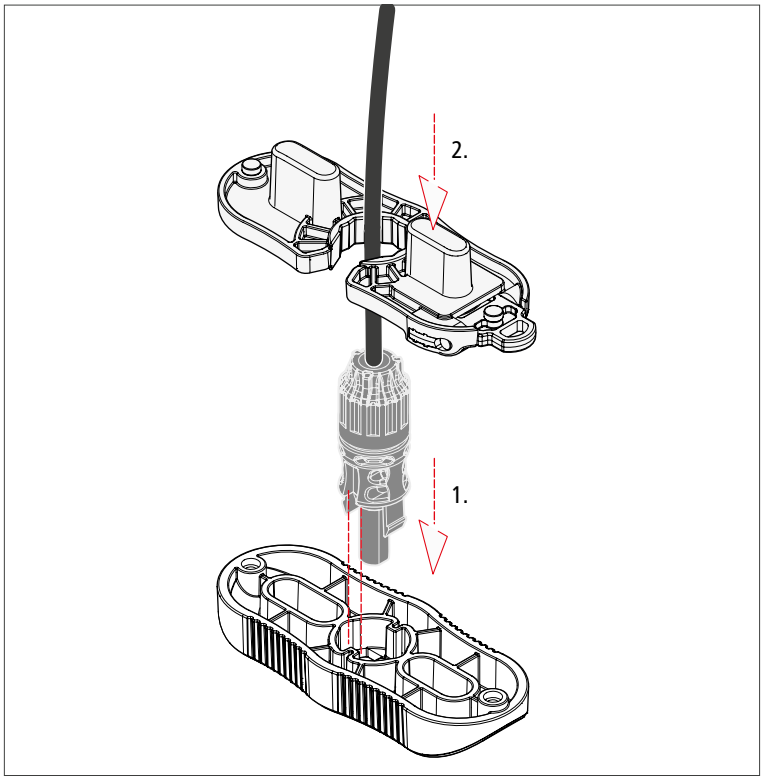
Unlocking MC4® plug type connectors

» Pull the plug and socket apart.

4.2 Screwing and unlocking MC4® plug types

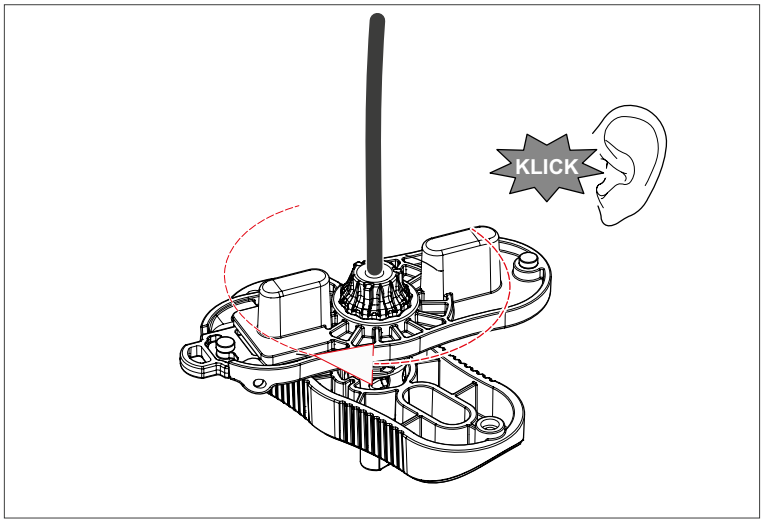
4.2.1 Screwing MC4®-Evo 2 connectors together

» Insert the MC4® plug or socket into the tool half with holder as shown in the illustration.
» Then place the tool half with open-end wrench on the screw connection of the plug/socket.



Positioning the tool for MC4® Evo 2 connectors

» Tighten the screw connection with the open-end spanner until the specified torque is reached and an audible click is heard.



Screwing MC4®-Evo 2 connectors together

4.2.2 Unlocking MC4®-Evo 2 connectors

Danger!

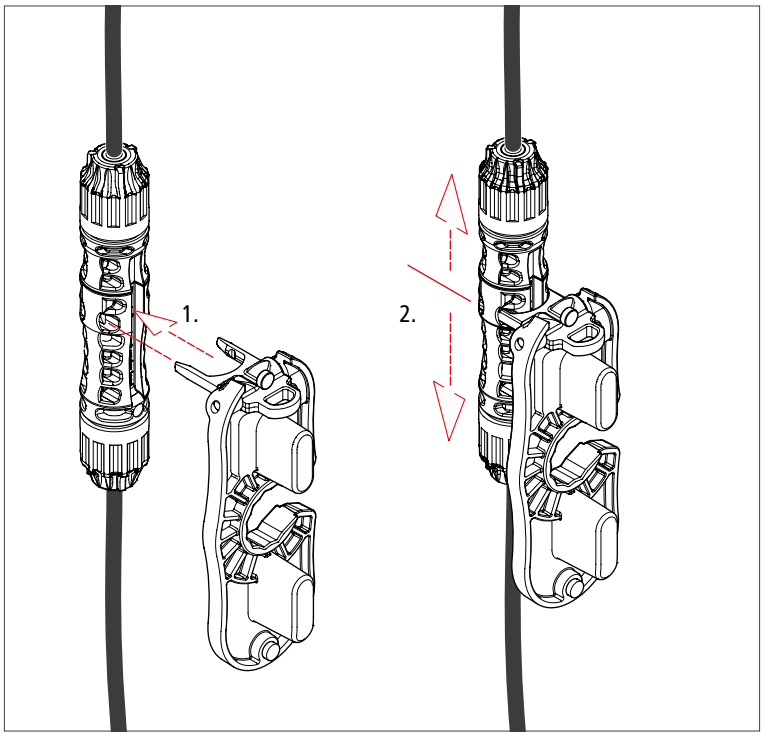
Danger of death due to electric current!

Never disconnect the connector under load.

Disconnect the system from the power supply before starting work!

» Fold out the release tips. These are located in the half of the tool with the open-end wrench.

» Insert the release pins into the recesses of the locking tabs, as shown in the illustration.



Unlocking MC4®-Evo 2 connectors

» Pull the plug and socket apart.

5 Maintenance

The tool is maintenance-free.

6 Technical Data

6.1 Technical Data

Technical Data	Unit	
Item Number	–	97 49 66 3
Length	mm	107
Width	mm	40
Height	mm	20
Weight approx.	g	67
Features	–	Robust plastic housing
Application	–	MC4® and MC4®-Evo 2 solar connectors
Capacity	mm^2	2,5/4/6/10
AWG		14/12/10/8

7 Disposal

The tool can be disposed of as household waste.

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