MC 25

OPERATING INSTRUCTIONS

START UP



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GLW
CRIMPING TECHNOLOGY

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General information

This chapter describes general information on these operating instructions.

About these operating instructions

Read these operating instructions carefully and keep them in a safe place.

These operating instructions contain important information on the safe and hazard-free use of the device.

Before using this device, the operating personnel must familiarise themselves with these operating instructions and the product.

Compliance with the safety instructions is a basic requirement when using the MC 25.

The operating instructions are part of the product and must be supplied with the product if it is moved to another location.

The original operating instructions are in the German language.

Storage of these operating instructions

These operating instructions must be kept in the immediate vicinity of the product and must be accessible to operating personnel at all times.

These operating instructions must be kept until the product has been returned to GLW.

Target group

These operating instructions are intended for the operating personnel of the device operator.
Only trained personnel may operate the device.

Limitation of liability

The following are generally excluded from liability:

- Non-observance of these operating instructions
- Non-intended use
- Use of unauthorised spare and wear parts
- Operation by untrained personnel
- Maintenance by untrained personnel
- Troubleshooting and fault rectification by untrained personnel

Unauthorised modification of the device is not permitted for safety and liability reasons

Validity

The operating instructions are valid for the complete MC 25.

The operator must:

- make the operating instructions accessible to the operator and
- make sure that the operator has read and understood them.

Authorised operators

Only authorised and trained operators may work on the MC 25.
The operator is responsible to third parties in the operating area.

Symbols

The following symbols are used in these operating instructions:


indicates a possible **risk of accident and injury** or possible **damage** to the MC 25.


correct usage or setting


indicates **instructions for use**.

Basic information

In simple terms, only the article description MC 25 is used in the following.
The basic prerequisite for safe handling and trouble-free operation of the MC 25 is knowledge of, and compliance with, the safety instructions.

It's about your safety!

The safety instructions must be observed by **all** persons working with the MC 25.

In addition, the rules and regulations applicable to the place of use, in particular those relating to accident prevention, must be observed.

Guarantee

In principle, our "General Terms and Conditions of Sale and Delivery" apply. These are available to the operator at the latest upon conclusion of the contract.

Warranty and liability claim for personal injury and damage to property are excluded in the event of infringement of the following points:

- Improper use of the MC 25.
- Improper operating places.
- Improper use beyond that described in the operating instructions.
- Unauthorised structural modifications to the MC 25.
- Continued operation of the MC 25 if faults are detected.
- Improperly carried out repairs.


Only use original spare parts.

Safety

This chapter describes the general instructions for the safe operation of this device.

General safety instructions

The MC 25 is built in accordance with recognised safety regulations.

It is equipped with safety devices.

Nevertheless, incorrect operation or misuse can pose a risk to

- life and limb of the operator,
- the machine.

The MC 25 is only to be used

- for its intended use and
- in perfect condition in terms of safety.

All persons involved in the commissioning, operation and maintenance of the MC 25 must

- be appropriately qualified and
- follow these operating instructions carefully.

Intended use

WARNING:

Use the MC 25 only for automatic stripping and crimping.

End sleeves with cross-sections ranging from 0.5 to 2.5 mm² and a strip length of 8 mm must be used

Only the intended PVC insulated cables may be inserted into the funnel guide of the MC 25. Never insert solid metal parts or items. The stripping knifes would be damaged.

Third party reconstruction and changes of the MC 25 beyond retooling are not allowed because of safety!

WARNING:

The removal of warning notices and safety stickers is not permitted.

WARNING:

Use is only permitted in dry and clean production facilities.

ATTENTION: Observance of all instructions and compliance with the prescribed operating conditions are part of the intended use.

WARNING: The MC 25 may only be used

- for its intended use and
- in perfect condition in terms of safety.

Any other use or use beyond this is considered improper use.
GLW shall not be liable for any resulting damages.

WARNING:

All persons involved in the commissioning, operation and maintenance of the MC 25 must

- be appropriately qualified and
- follow this user manual carefully.

Non-intended use

- The device is not being used as intended if it is operated outside the specifications.
- The use of non-specified materials.
- Use of the device in the event of strong vibrations in the area of the installation site.

Foreseeable misuse

Misuse can include:
- Non-observance of these operating instructions
- Stripping of unauthorised conductor cross-sections
- Blowing out the device with compressed air
- Cleaning with solvents or cleaners

Hazard area

WARNING:

Use the MC 25 only when the cover is closed.

Before carrying out any work at opened cover (e.g. retooling, maintenance work) disconnect the MC 25 from the mains supply.

Make sure that no strange objects are inside the case.

Behaviour in the event of danger

In the event of danger, disconnect the device from the power supply to switch it off.

Responsibility of the operator

An operator is anyone who operates a machine or system for commercial or economic use. Transfer to third parties is not permitted.

This results in the following obligations for the operator:

- be familiar with and implement the health and safety regulations
- carry out a risk assessment
- train staff at regular intervals and inform them about hazards
- create operating instructions for the operation of the device
- clearly regulate and define the responsibilities of staff
- the authorised personnel must have read the operating instructions before commissioning

In addition, there are obligations from other regulations that apply locally.

Safety devices

The MC 25 is switched off by

- pressing the mains switch
- unplugging the mains plug
- sliding back the cover (by two micro switches)

WARNING:

The cover is built in for safety. It may not be changed, removed or by-passed by reconstructions.

A label points to existing dangers.



Personnel qualifications

Only trained and instructed personnel may work with the equipment.

Instructed person:

An instructed person is a person who has been briefed in detail and verifiably by the operator about the tasks assigned to them and the possible dangers.

WARNING Risk of injury due to insufficient qualification.

Improper handling may result in severe personal injury and damage to property.

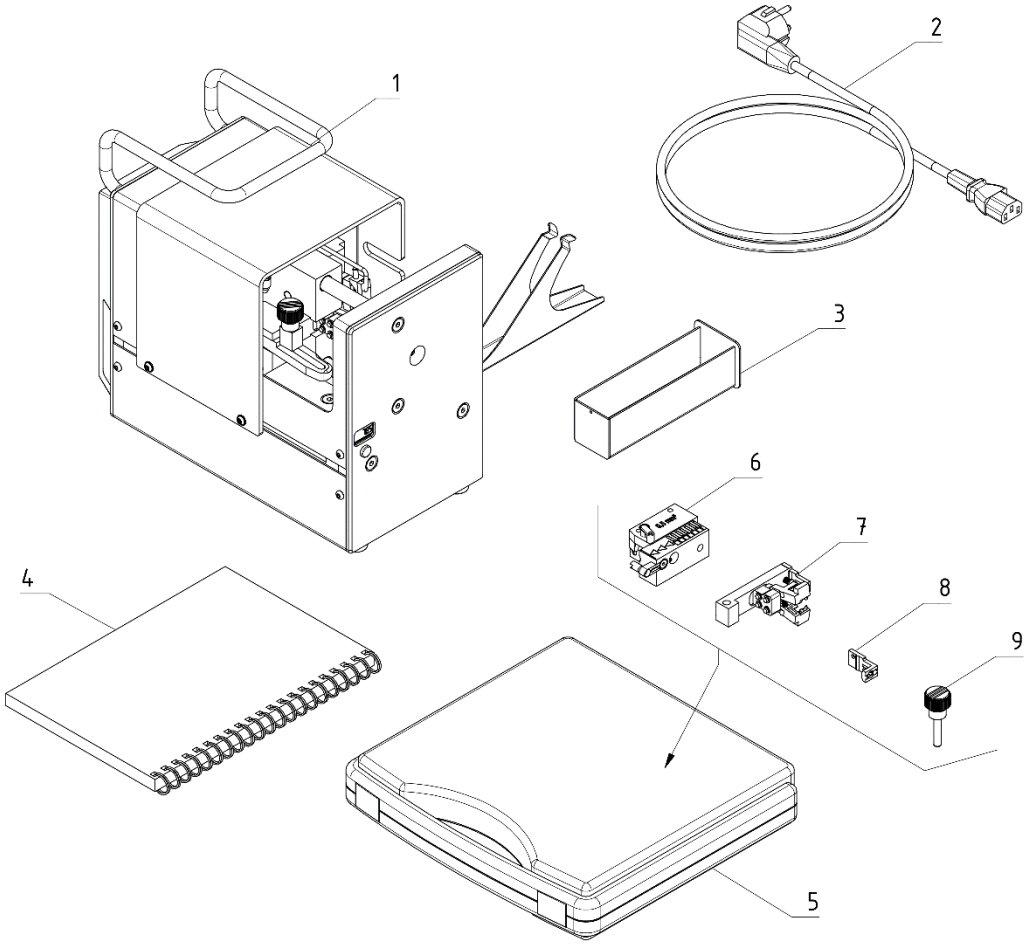
For your safety

WARNING:

For safety reasons, it is not permitted to open the device or dismantle sub-assemblies, with the exception of designated wearing parts.

MC 25 machine description

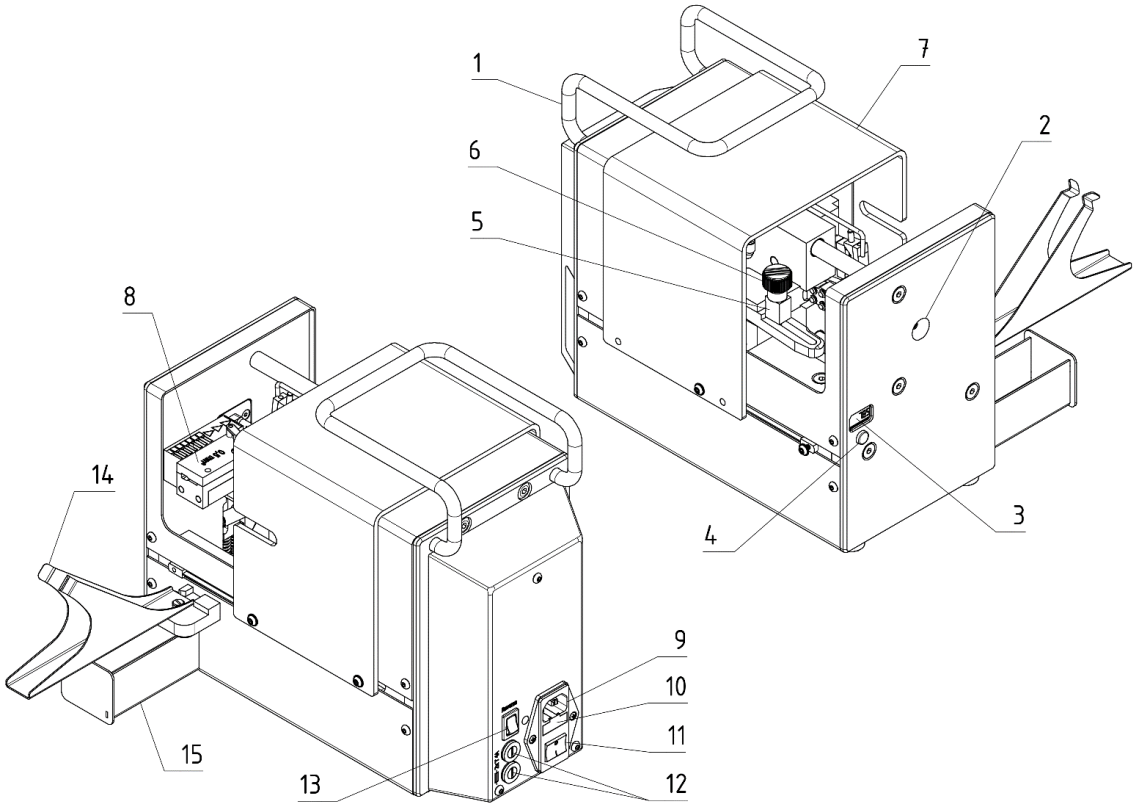
Contents



Type	Contents
MC 25	1. MC 25
	2. Mains cable
	3. Container for insulation scrap
	4. Operating instruction
	5. Accessories box
	6. Feeder blocks for end sleeves (5 piece)
	7. Tool inserts for 0.5 to 2.55 mm^2 (5 piece)
	8. Locator (reserve) (5 piece)
	9. Bolt, 6 mm^2 in diameter

The parts 6, 7 and 8 have the same colour code as end sleeves complying with DIN.

Overview of the operating controls



1. Grip: For transport of the MC 25.
2. Funnel guide: The cable to be processed is inserted into the MC 25 through the funnel guide. Once it has been inserted, work commences automatically.
3. Counter (000000 bis 999999): The counter counts the number of end-sleeves used. The MC 25 performs automatically a reset to 0 at power-off.
4. Reset button: This button resets the counter to 0.
5. Tool insert (farbcodiert): Positions the end sleeve and strips the cable. The appropriate tool insert must be installed for every cross-section.
6. Bolt: Secures the tool insert.
7. Cover: Protects the user from moving parts inside the MC 25. The MC 25 will only operate when the cover is properly closed.
8. End-sleeve feeder (farbcodiert): The end-sleeve feeder positions the end sleeves. The appropriate end-sleeve feeder must be installed for every cross-section.
9. Mains connection: The mains cable must be connected to the input connector.
10. Mains fuses: Fine wire fuses integrated into the mains connection.
11. Mains switch: Switches the power supply to the MC 25 on (position 1) or off (position 0).
12. Transformer fuses: One 4.0 A/T/250 V fine wire fuse for secondary device.
13. Reverse button: Pressing this button puts the MC 25 in the maintenance position. Pressing again will put the MC 25 in start position.
14. End-sleeve dispenser holder: Holds the end-sleeves reel dispenser.
15. Container: The container collects the insulation scrap. It must be emptied regularly.

Workplaces

ATTENTION: For operation and storage avoid:

- damp or dusty places and
- locations which are exposed to high levels of heat, direct sunlight or low temperatures (operating range: 15 °C to 35 °C).

ATTENTION:

- Do not spill any liquids on the MC 25.
- Do not expose the MC 25 to strong vibrations or shocks.

ATTENTION:

- Condensation can form when moving from a cold to a warm place.
- Open cover to evaporate condensation before using the MC 25.

Usage

The MC 25 is for fully automatic stripping of flexible PVC insulated cables and subsequent pressing on of insulated end sleeves on reels.

It uses end sleeves complying with DIN 46228 Part 4 with cross-sections ranging from 0.5 to 2.5 mm^2 with a stripping length of 8 mm. Due to the short cycle times (1.5 s) and simple changing of cross-sections (below 10 s) the MC 25 is not only suitable for use in workshops but also in complex cable production systems.

The following end sleeves can be used by the MC 25:

End sleeves bands inside the dispenser

Cross-section mm²	Length mm	DIN colour code	Packaging unit	Artikel-Nr.
0.5	8	white	1000	005611
0.75	8	grey	1000	005660
1.0	8	red	1000	005720
1.5	8	black	1000	005767
2.5	8	blue	500	005823

Transport and storage

Transporting the device

The packaging may be a pallet, a cardboard pallet box or a cardboard box, depending on the type and size of the components to be transported.

NOTE

In the case of overseas transport, packaging suitable for overseas transport must be used. It is recommended to keep the original packaging for the return shipment.

The device may only be lifted using the carrying handle provided for this purpose.

NOTE

The waste tray must be completely emptied before moving the device.

Store the device:

- in dry and clean places
- in places that are **not** exposed to high levels of heat, direct sunlight or low temperatures (operating range: 15 °C to 35 °C).

Commissioning

Selecting an installation site

ATTENTION:
The installation site must be level and horizontal and able to support the weight of the device.

ATTENTION:
The device must be placed on a flat, solid surface and the ventilation slots must not be covered.

ATTENTION: For operation and storage avoid:

- damp or dusty places and
- locations which are exposed to high levels of heat, direct sunlight or low temperatures (operating range: 15 °C ... 35 °C).

NOTE:

The conditions in chapter "General safety instructions" must be observed.

Electrical installation

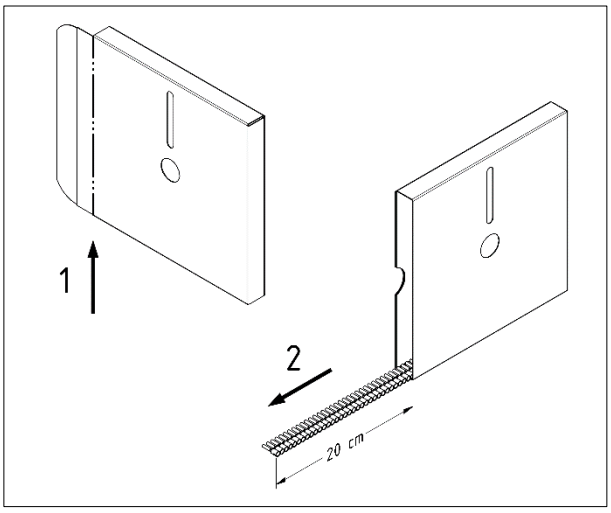
DANGER: Risk of injury due to electric shock.

There is a possibility of burns and even fatal injuries.

- Before you start working, make sure that all cables are disconnected.
- Secure the cables to ensure they do not get connected again.

Check the correct position of the cables to avoid malfunctions in the system.

Preparing the device for operation



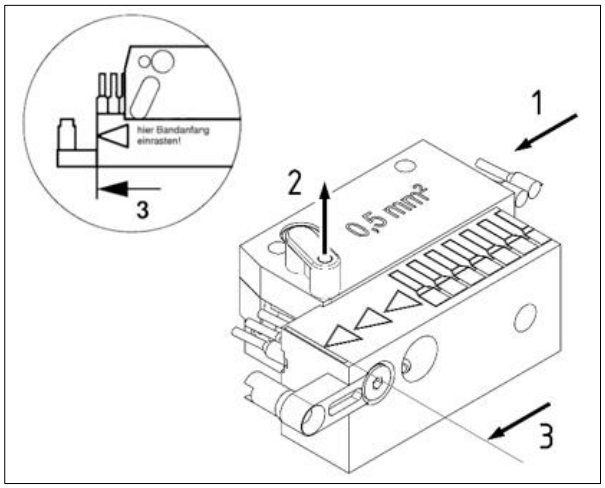
Prepare the dispenser

- Open the dispenser and tear-off the strap at the edge (1).
- Pull out the end-sleeves band (2) approximately 20 cm.

Prepare the end-sleeve feeder

- Take end-sleeve feeder with proper cross-section from the accessories box.

Observe to the colour code of the end-sleeve feeder

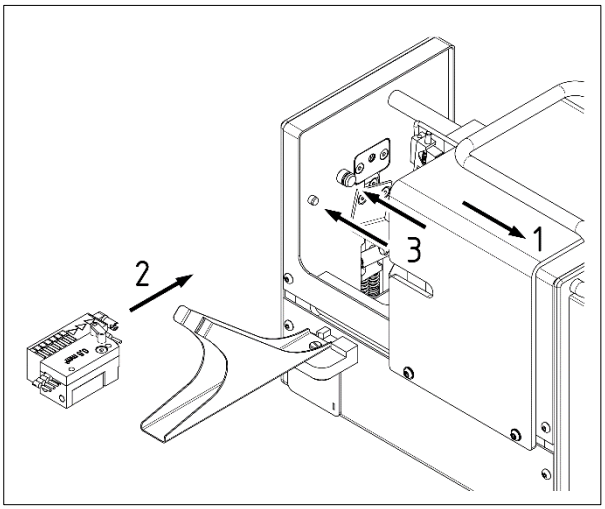


- Insert the end sleeves (1) in the guide sideways until the stop pin is reached.
- Pull the pin (2) upwards, move the end sleeves to the mark (3) and let the pin go.

Check that the pin has clicked properly into place.

Fit the end-sleeve feeder

Verify that the tool insert is not installed yet



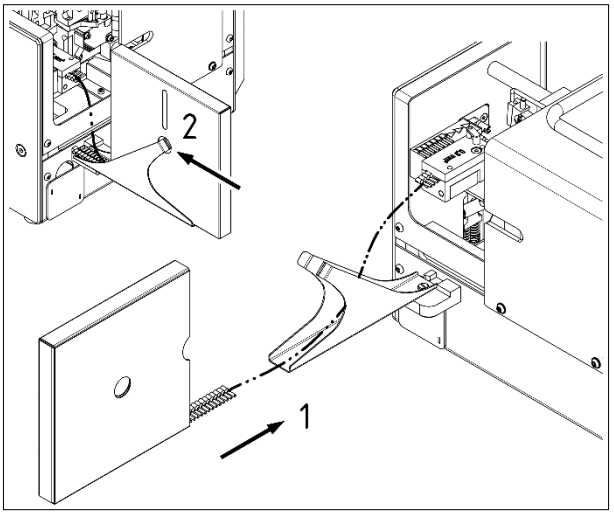
- Slide the cover (1) back.
- Insert the end-sleeve feeder (2) sideways and place it on the bolts (3).

Check that the end-sleeve feeder has clicked properly into place.

Mount the dispenser

- Mount the dispenser (1) on the holder until it clicks into place (2).

Check that the dispenser has clicked properly into place.

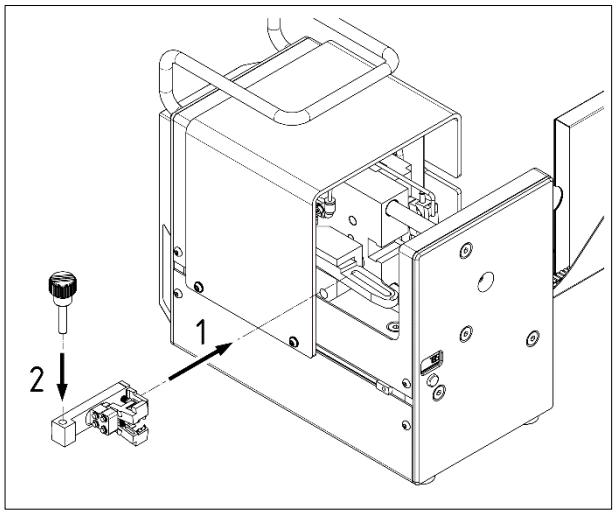


Mount the tool insert

- Take the tool insert with proper cross-section and bolt from the operation box.

Observe to the colour code of the tool insert.

- Mount the tool insert (1) sideways.
- Fit the bolt (2) into the hole until it stops.

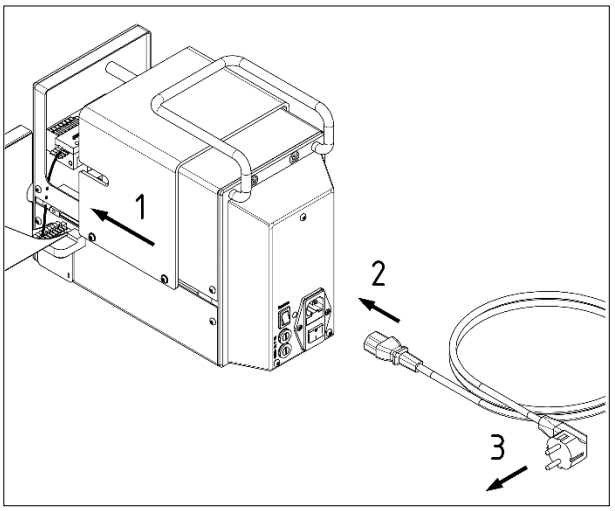


Place to operation mode

- Close the cover (1).

Be sure that the end-sleeves band is fed properly.

- Connect the mains cable with the appropriate connectors (2, 3) to the MC 25 and the mains supply.

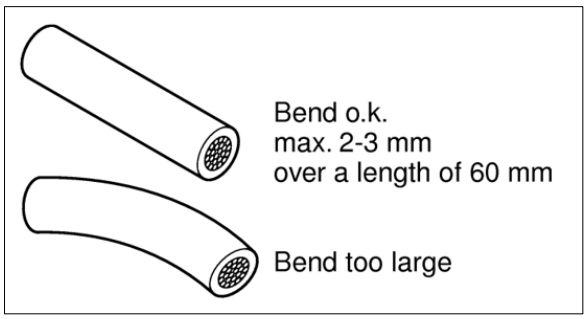


The MC 25 is now ready for **operation**.

Operation

Prepare the cable

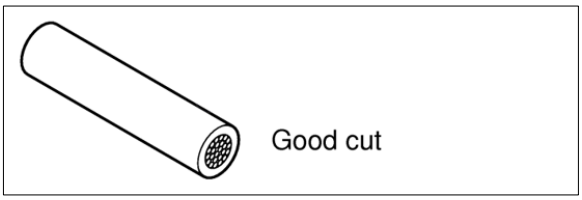
- Before crimping cable must be aligned as straight as possible.

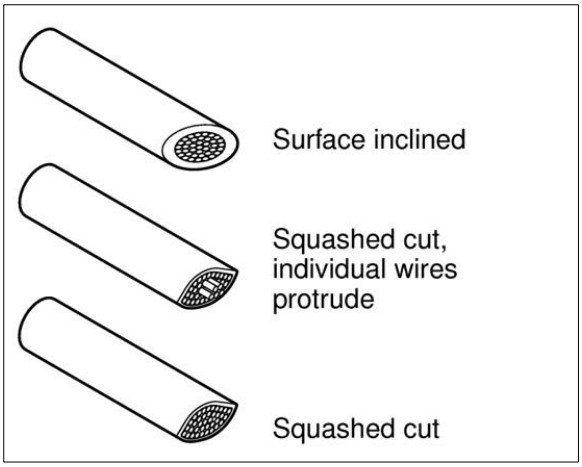


Cut the cable

- Cut the cable clean and straight.

Poor cut frequently results in unsuccessful crimping

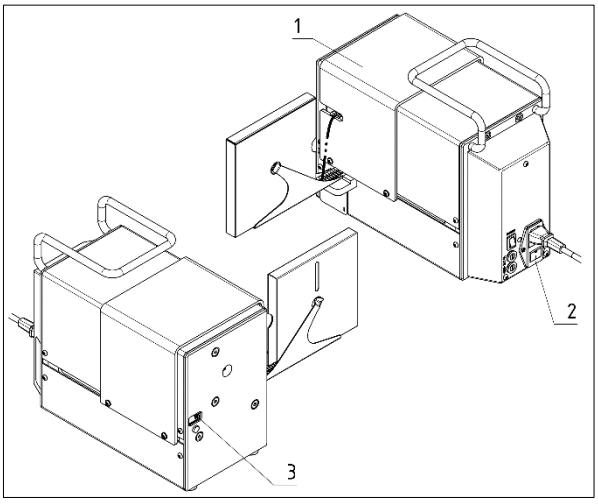




Start the MC 25

- Check that the cover (1) is closed.
- Turn on (position I) the MC 25 with the mains switch (2).
- Check that counter (3) is at 0.

If the counter is not at 0 refer to chapter faults.

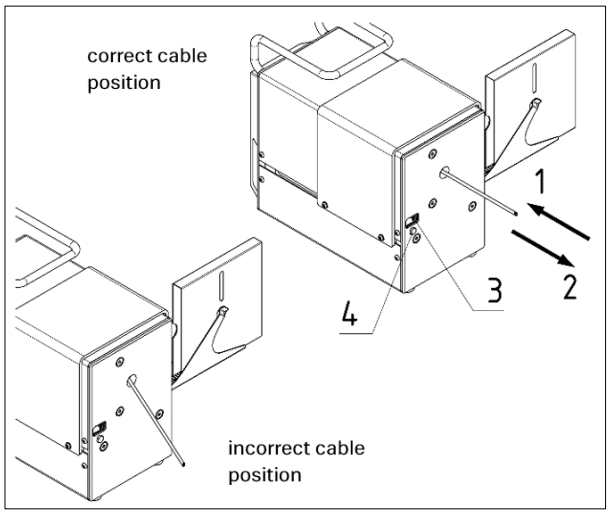


Crimping cables

- Insert the cable (1) straight into the funnel guide until it stops.
- Crimping and stripping work automatically.
- Pull out the cable (2) straight when the MC 25 has stopped.

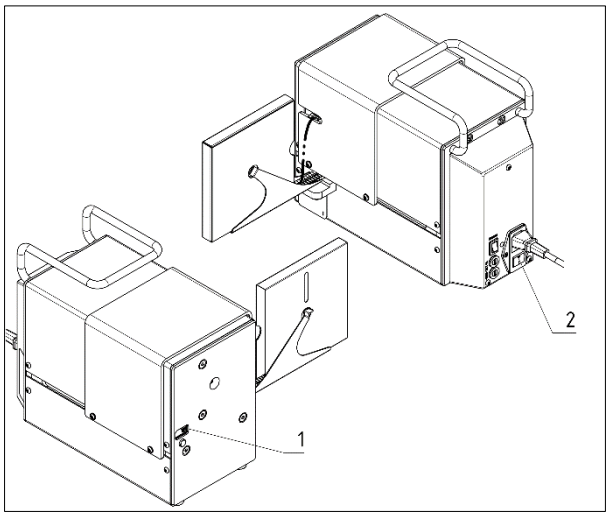
Refer to chapter faults when operating faults or unsuccessful crimping occurs.

- Read counter (3) if required and set it to 0 with the reset button (4).



Stop operation

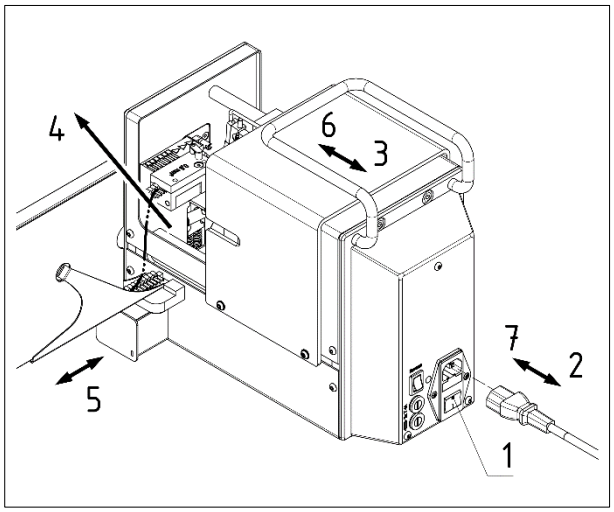
- Read counter (1) if required.
- Turn off (position 0) the MC 25 with the mains switch (2)



Daily maintenance

Disconnect the mains supply from the MC 25 and open cover!

- Turn off (position 0) the MC 25 with mains switch (1).
- Disconnect mains cable (2).
- Slide the cover (3).
- Remove (4) insulation scraps inside the MC 25.
- Pull out the container (5).
- Dispose insulation scraps and insert container.
- Close the cover (6).
- Connect mains cable (7).

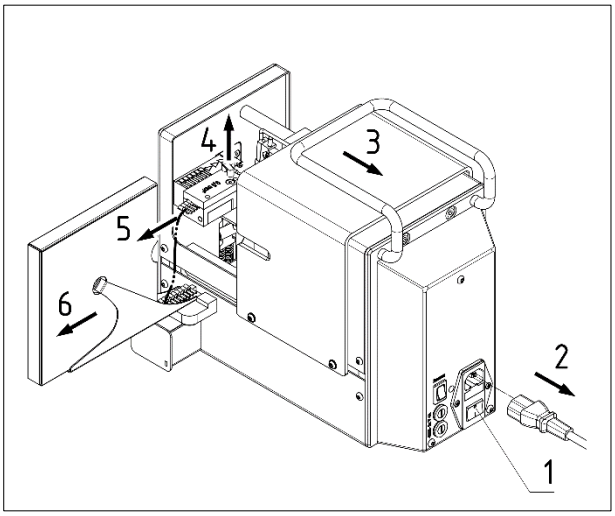


Retooling

Prepare the retooling

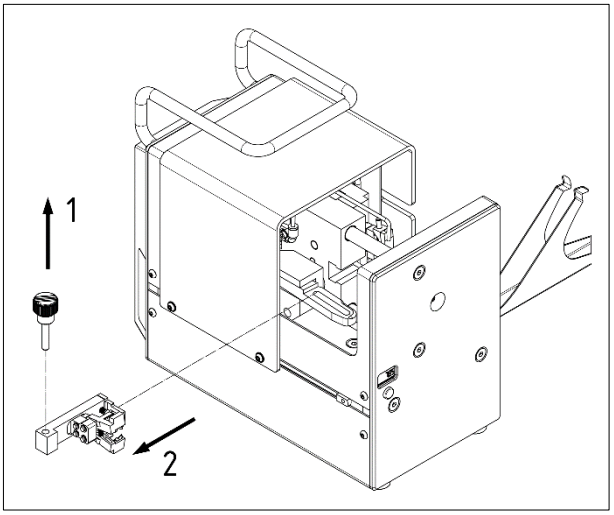
Disconnect the mains supply from the MC 25 and open cover!

- Read counter if required.
- Turn off the MC 25 with mains switch (1).
- Disconnect mains cable (2).
- Slide back the cover (3).
- Pull the pin (4) upwards and pull out the end sleeves (5).
- Remove the dispenser (6) and roll up the remaining end sleeves.



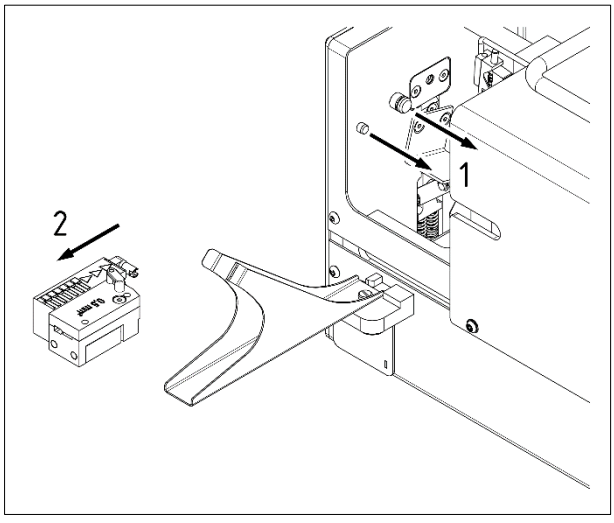
Remove the tool insert

- Pull out the bolt (1).
- The tool insert (2) must be removed sideways.
- Put the tool insert and the bolt into the accessories box.



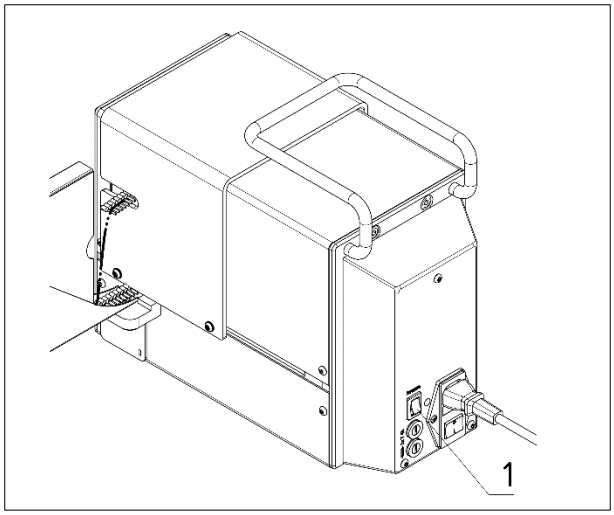
Remove the end-sleeve feeder

- Pull the end-sleeve feeder (1) towards the rear and remove it sideways (2).
- Put the end-sleeve feeder into the accessories box.



Continue as described in chapter **commissioning**.

Malfunctions



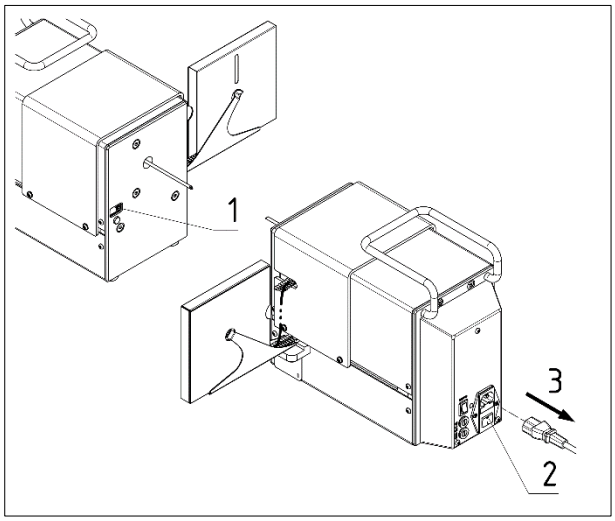
Cable cannot be inserted

Cable can only be inserted in start position (front) and not in maintenance position (rear).

- Press the reverse button (1),
- MC 25 moves into start position.
- Cable can be insert.

Crimping has not been completed

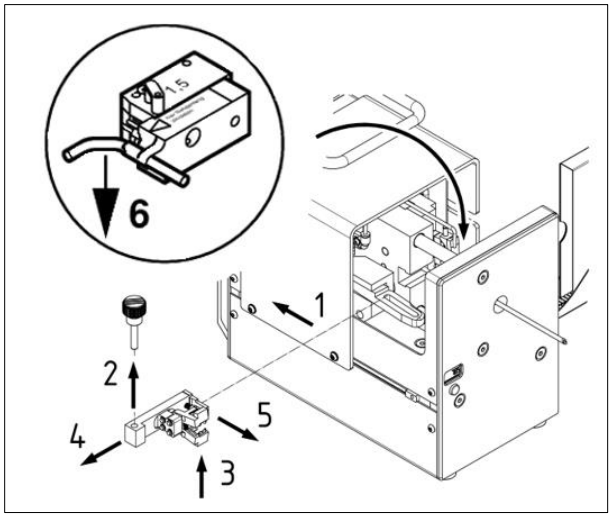
Disconnect the mains supply from the MC 25 and open cover



1. Stop operation

- Read counter (1) if required.
- Turn off (position 0), the MC 25 with mains switch (2).
- Disconnect mains cable (3).

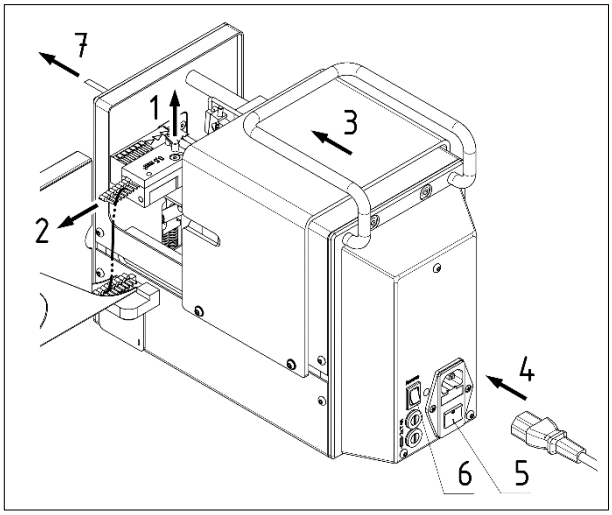
2. Remove the tool insert



- Slide back the cover (1).
- Pull out the bolt (2).
- Press lower stripping cutter (3) upwards and remove the tool insert (4) sideways.
- Remove end sleeve (5).
- Bend cable aside (6).

3. Remove the cable

- Pull the pin (1) upwards and pull out the end sleeves (2).
- Close the cover (3).
- Connect mains cable (4).
- Turn on (position 1) the MC 25 with the mains switch (5).
- Press the reverse button (6) to move the MC 25 into start position.
- Pull out the cable (7).



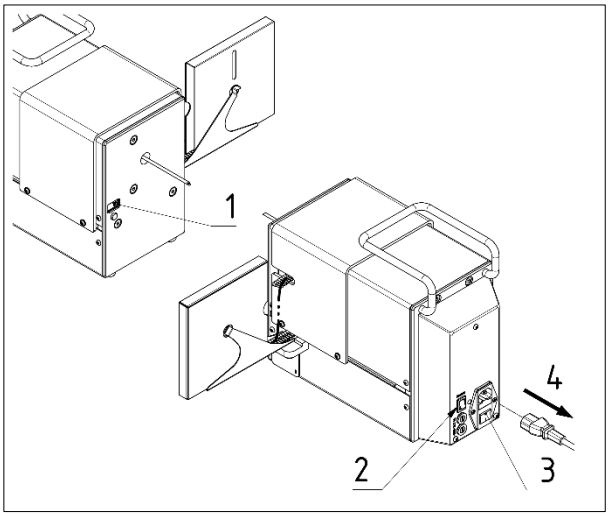
After **mounting the tool insert** and **insertion of the end sleeves** the MC 25 is ready for operation.

Crimping is completed. Cable cannot be pulled out.

Disconnect the mains supply from the MC 25 and open cover.

1. Stop operation

- Read counter (1) if required.
- Press the reverse button (2) to move the MC 25 into start position.
- Turn off (position 0) the MC 25 with mains switch (3).
- Disconnect mains cable (4).

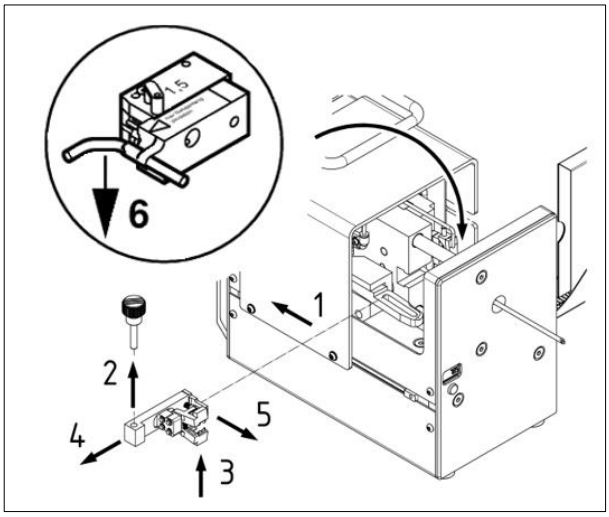


2. Remove the tool insert

- Slide back the cover (1).
- Pull out the bolt (2).
- Press lower stripping cutter (3) upwards and remove the tool insert (4) sideways.

I fit is impossible to remove the tool insert then carry out step 4, else carry on with step 3

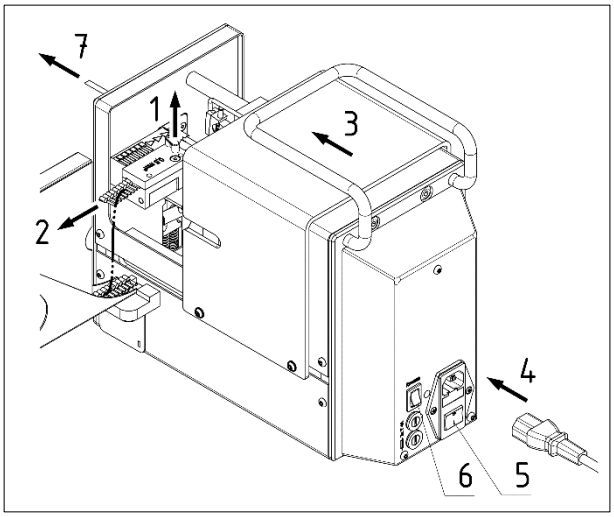
- Remove end sleeve (5).
- Bend cable aside (6).



3. Remove the cable

- Pull the pin (1) upwards and pull out the end sleeves (2).
- Close the cover (3).
- Connect mains cable (4).
- Turn on (position I) the MC 25 with the mains switch (5).
- Press the reverse button (6) to move the MC 25 into start position.
- Pull out the cable (7).

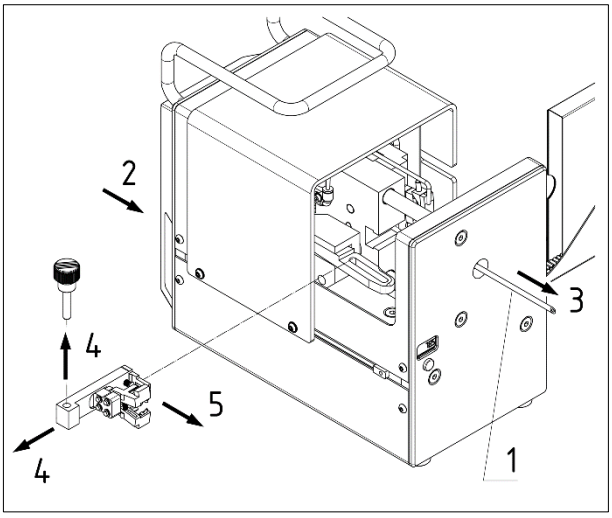
After **mounting the tool insert** and **insertion of the end sleeves** the MC 25 is ready for operation.



4. Remove the cable

- Press the reverse button (2) and pull the cable (1) at the same time, the MC 25 moves into start position.
- Pull out the cable (3).
- Remove the tool insert (4).
- Remove end sleeve (5).

After **mounting the tool insert** the MC 25 is ready for operation.



Cable insulation is not completely removed

Disconnect the mains supply from the MC 25 and open cover!

1. Check the cross-section informaton

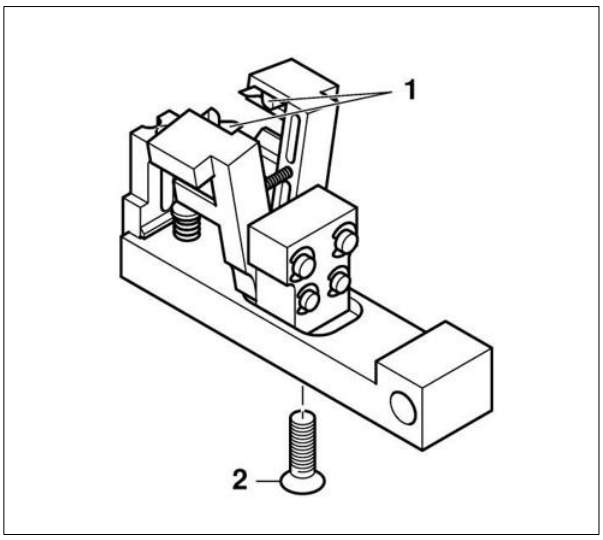
If stripping is faulty, check whether the selected cable cross-section corresponds to the cross-section size of the tool insert and the end-sleeve feeder block. The tool inserts must be adapted to the cable cross-section if the MC 25 has not been properly tooled. The cross-section of the cable must also be checked.

2. Check the stripping cutter

After checking the cross-section size remove the tool insert (see also chapter retooling) and check the stripping cutters (1).

Replace the stripping cutters of the tool insert if they are worn or damaged.

Remove the allen screw (2) at the bottom and insert new stripping cutters with the same cross-section. The corresponding article number is stated in chapter **spare parts**.



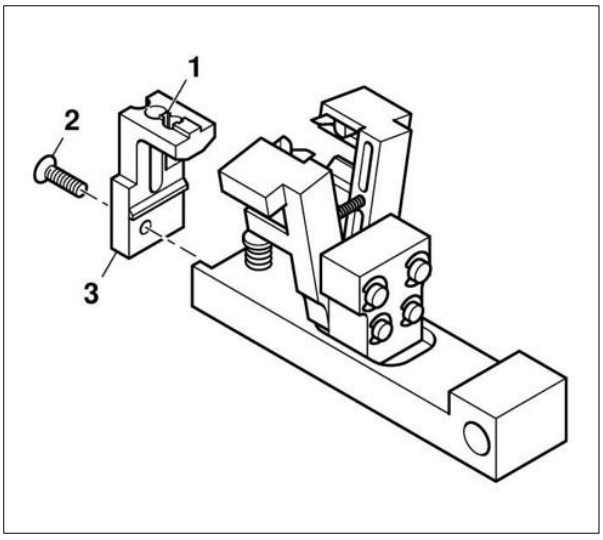
The end sleeve is not separated from band

Open the cover and disconnect the MC 25 from mains supply!

If the cutter (1) is damaged or broken off, the cable crimped with the end sleeve will not be separated from the band

In this case remove the tool insert (see also chapter **retooling**) and check the cutter (1). When the cutter (1) is defective, the end-sleeve locator (3) must be removed by unscrewing the cross-head screw (2) and a new locator for the corresponding cross section must be fitted.

The corresponding article number is stated in chapter **spare parts**.



Counter respectively MC 25 do not work.

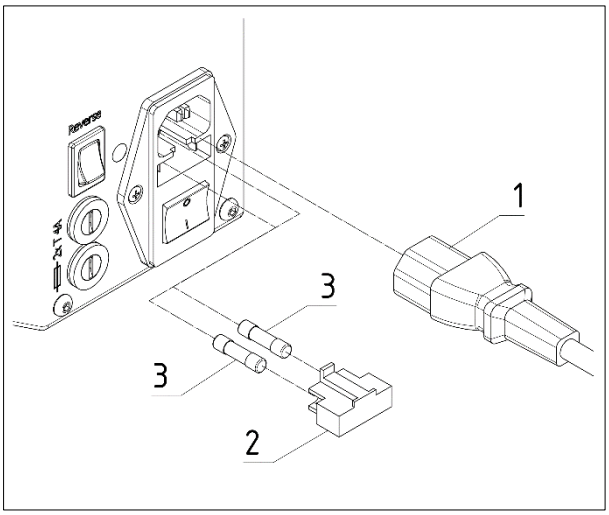
1. Check mains connection

Check that the mains cable is connected with the appropriate connectors to the MC 25 and the mains supply. Make sure that you have supply to the plug socket is properly.

2. Check mains fuses

Mains connection must be disconnected, disconnect the MC 25 from mains!

- Pull out mains plug (1).
- Pull out the fuse holder (2).
- Check the mains fuses (3).
- Replace defective mains fuses.
  The corresponding article number is stated in chapter **spare parts**.
- Put the mains fuses into fuse holder.
- Insert the fuse holder.

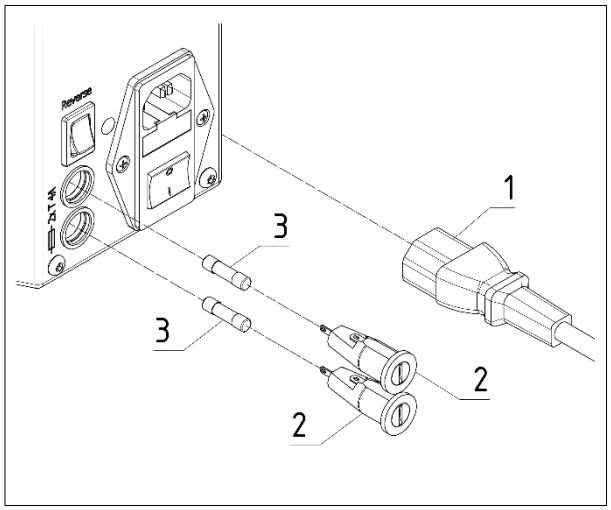


Fuse holder must click into place!

The MC 25 works too slow but counter works.

Remove mains fuses, disconnect the MC 25 from mains!

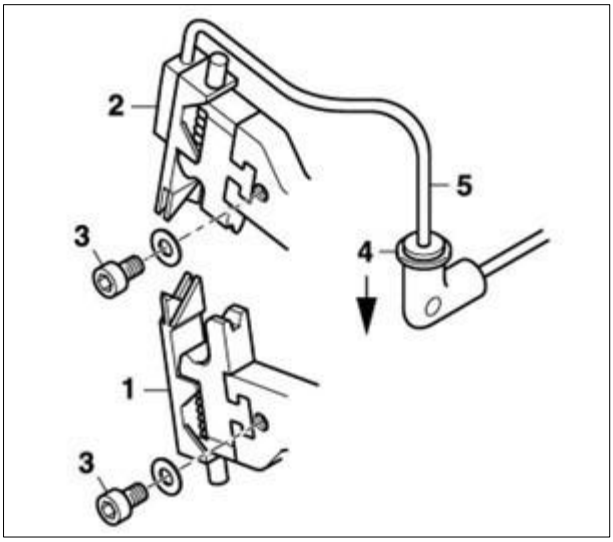
- Pull out mains plug (1).
- Unscrew the fuse holder (2).
- Check the device fuses (3).
- Replace defective device fuses.
  The corresponding article number is stated in chapter **spare parts**.
- Insert device fuses into the fuse holder.
- Insert the fuse holder.



Crimp stamp or crimp forging die is defective.

Open the cover and disconnect the MC 25 from mains supply!

- Pull out mains plug.
- Remove tool insert and end-sleeves feeder (see also chapter **retooling**).
- Unscrew the Allen screw (3) at defective crimp stamp (2) or crimp forging die (1).
- Press the ring (4) down and remove the hose.
- Replace the defective part.
  The corresponding article number is stated in chapter **spare parts**.



Plastic parts must be clean and free of grease!

Technical appendix

Technical data

Mains supply	230 V/50 Hz (115 V/60Hz)
Power consumption	80 VA
Working range	0,5 - 2,5 mm² / 20 - 14 AWG
End sleeves	in Bandform nach DIN 46228 Teil 4
Press form	trapezförmig
Cycle time	1,5 s
Control system	microprozessorunterstützte Kurvensteuerung
Counter	LCD-Anzeige
Retooling	unter 10 s
Sizes (B x H x T)	165 x 270 x 320 mm
Weight	ca. 12 kg
Acoustic pressure emissions L_{pA}	< 70 dB (A)

Type plate



EU Declaration of Conformity

Manufacturer:	GLW GmbH
Address:	Steinbeisstrasse 2, 88353 Kisslegg, Germany
Product group:	Stripping and crimping machine
Product description:	**MC 25** **MC 25 US (120 V)**
Valid from SN:	182393

The above mentioned product is in line with the essential requirements of the below directive(s) and their modification directive(s):

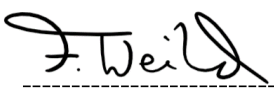
Machinery (MD)	**2006/42/EG**
Electromagnetic compatibility (EMC)	**2014/30/EU**
Restriction of the use of certain hazardous substances (RoHS)	**2011/65/EU**

For evaluation of the conformity following relevant standards were consulted:

EN ISO 13854:2019	**EN ISO 12100: 2010**	**EN ISO 13857:2019**
EN IEC 63000:2018	**EN 60204-1: 2018**	**EN IEC 55014-1:2021**
EN IEC 55014-2:2021	**EN IEC 61000-3-2:2019**	**EN 61000-3-3:2013 + A1:2019**

This declaration certifies the conformity with the essential requirements of the indicated directive(s), it does not, however, covenant any characteristics. The instructions for safety and installation of the enclosed product documentation have to be observed.

Kisslegg, 18.10.2024



Felix Weiland
Steinbeisstr. 2, 88353 Kisslegg, Germany
Managing Director
Responsible for the technical documentation

UK Declaration of Conformity

Manufacturer:	GLW GmbH
Address:	Steinbeisstrasse 2, 88353 Kisslegg, Germany
Product group:	Stripping and crimping machine
Product description:	**MC 25** **MC 25 US (120 V)**
Valid from SN:	182393

The product described above complies with the essential requirements of the following directive(s) and their amending directives:

Machinery (Safety) Regulations 2008	**S.I. 2008/1567**
Regulation on electromagnetic compatibility 2016	**S.I. 2016/1091**
Ordinance on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment 2012	**S.I. 2012/3032**

The following relevant standards were used to assess compliance:

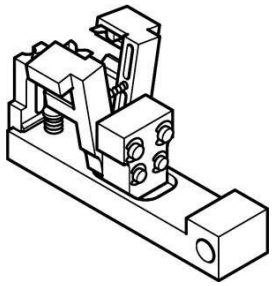
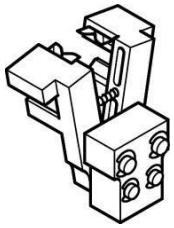
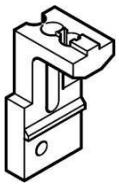
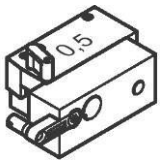
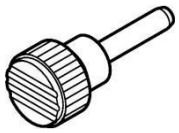
EN ISO 13854:2019	**EN ISO 12100: 2010**	**EN ISO 13857:2019**
EN IEC 63000:2018	**EN 60204-1: 2018**	**EN IEC 55014-1:2021**
EN IEC 55014-2:2021	**EN IEC 61000-3-2:2019**	**EN 61000-3-3:2013 + A1:2019**

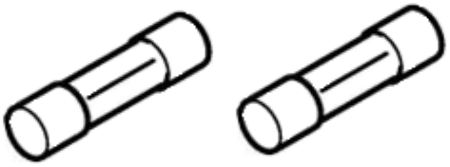
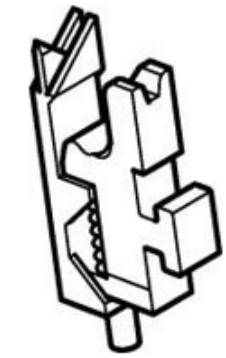
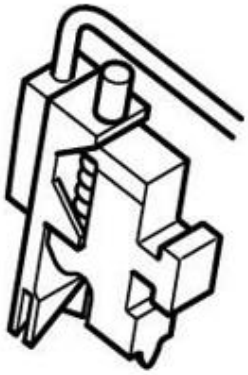
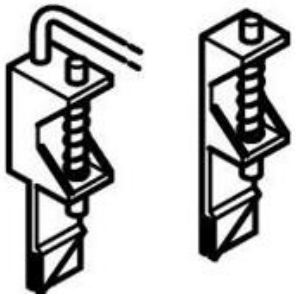
This declaration certifies conformity with the essential requirements of the said Directive(s), but does not constitute a guarantee of characteristics. The safety and installation instructions in the supplied product documentation must be observed.

Kisslegg, 18.10.2024

Felix Weiland
Steinbeisstr. 2, 88353 Kisslegg, Germany
Managing Director
Responsible for the technical documentation

Spare parts

Part	Cross Section	Art. - No.	Packing unit
Tool insert 	0.5 mm² 0.75 mm² 1.0 mm² 1.5 mm² 2.5 mm²	004943 004944 004945 004946 004947	1 1 1 1 1
Stripping cutter 	0.5 mm² 0.75 mm² 1.0 mm² 1.5 mm² 2.5 mm²	004938 004939 004940 004941 004942	1 1 1 1 1
Locator 	0.5 mm² 0.75 mm² 1.0 mm² 1.5 mm² 2.5 mm²	006568 006569 006570 006571 006572	3 3 3 3 3
End sleeve feeder 	0.5 mm² 0.75 mm² 1.0 mm² 1.5 mm² 2.5 mm²	004948 004949 004950 004951 004952	1 1 1 1 1
Wire guiding feeder 	0.5 mm² 0.75 mm² 1.0 mm² 1.5 mm² 2.5 mm²	006749 006750 006751 006752 006753	2 2 2 2 2
Bolt 		004935	1

Part	Art. – No.	Packing unit
Main fuse 250 V: T 0,63 A  115 V: T 1,25 A 	006202 006494	1 Set 1 Set
Device fuse T 4,0 A 	006492	1 Set
Crimp die 	004932	1
Crimp stamp 	004933	1
Centering fork set 	006621	1 Set

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