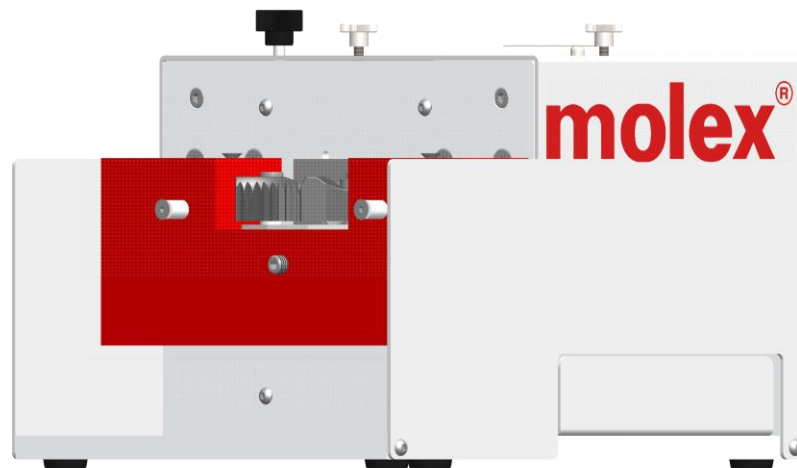


OPERATING INSTRUCTION



AKM - 405

Pneumatic Stripping Machine

Version 03/2022_REV.C

Item-No. 63817-1800

Errors and technical modification subject to change

Operating Instruction

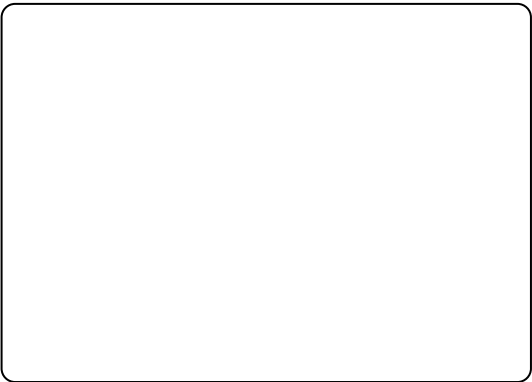
Instruction 1 of 2
Operation

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1. Instruction

1.1. Product description

The AKM-405 pneumatic stripping machine is a bench-top universal stripping machine. A matching centering guide bush and the suitable knife are mounted to match the cable / wire. The foot switch triggers the stripping process.

1.2. Conformity

The machine is CE compliant.

The original of the following declaration of conformity was supplied together with the operating instructions of the machine.



Zutreffende EU Richtlinien Applicable EU directives	2006/42/EG	Maschinenrichtlinie Machinery Directive
Angewandte harmonisierte Normen Applied harmonized norms	EN ISO 12100; EN ISO 13849-1; EN ISO 13854; EN ISO 13857	
Wir erklären, dass die oben genannte Maschine in ihrer Konzipierung und Bauart und in der von uns in Verkehr gebrachten Ausführung allen einschlägigen Bestimmungen der Maschinenrichtlinie sowie den weiteren oben aufgeführten Richtlinien entspricht. Bei Änderungen der Maschine verliert diese Erklärung ihre Gültigkeit.		
We declare that the above-mentioned machine, with its design and type of construction, as well as the version produced by us, complies with all relevant regulations of the Machinery Directive as well as the above-mentioned harmonized standards. This declaration will lose its validity in case of any modifications.		

Fig. 1.2

1.3. Dealing with the operating instruction

The operating instruction contains all information concerning operating elements, operation, commissioning, and maintenance work as well as technical data.

The operating instruction must be constantly within reach of the machine.

The producer as well as the distributor decline to accept any liability for damages that are incurred because the instructions on the machine or in the operation instruction have been disregarded.

The user is responsible for supplementing the operation instruction with any instructions resulting from current national regulations for accident prevention and protection of the environment.

The German original version is legally binding.

The operating instructions must be kept for future reference.

2. Safety

2.1. Warning and Safety instructions

The following warnings and safety related cautionary notices in the individual chapters alert you to various levels of danger:

DANGER

DANGER indicates a hazard with a high level of risk, which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazard with a medium level of risk, which, if not avoided, may result in death or serious injury.

CAUTION

CAUTION indicates a hazard with a low level of risk, which, if not avoided, may result in minor or moderate injury.

ATTENTION

If this information is not observed, this may lead to deteriorations in the operating process or damage to the machine.

Specific dangers are indicated by the following pictograms:

	Warning against hand injuries
	Warning against cuts

Additional notes are highlighted as follows:

INFO

These texts provide additional information and tips.

2.2. General safety instructions

- + The national regulations concerning the legal minimum age must be observed when operating the machine. It is strictly forbidden to allow younger persons access to the machine.
- + The employer is responsible for the selection, provision, and use of personal protective equipment, in compliance with national legislation.
- + Everyone who is assigned to work on the machine must have read and understood the operating instructions. He must observe these operating instructions while carrying out work on or with the machine.
- + Do not operate the machine before you have read and understood all instructions.
- + Before each start-up, check that all safety devices and an adapter approved by the manufacturer are in place and working properly.
- + The machine may only be operated with the specified operating pressure of 6 bar.
- + The machine may only be operated with mounted knives approved by the manufacturer.
- + The machine may only be set up and operated in a technically perfect condition and in a safety- and hazard-conscious manner.
- + If defects are found on the machine, the work must be interrupted, and the malfunction must be eliminated before further work is carried out with the machine.
- + Only one person may work on or with the machine.
- + Only trained personnel may work on the machine.
- + When working with the machine, do not wear loose clothing, loose jewelry or long, open hair, which can get caught in the parts of the machine.

2.3. Responsibilities

The machine may only be operated by suitably trained and authorized personnel.

The user of the machine is responsible for making sure that all persons involved in any way, either in the installation or in maintenance of the machine, have been thoroughly trained on the system using this operating instruction.

The user is also responsible for the training of operators and the instruction must include the following aspects:

- + Purpose of the machine
- + Hazard zones
- + Safety rules and regulations
- + Functionality of the various components of the machine
- + Proper operation of the machine

To assure full familiarization with the system, the training must be conducted in the native language of the operators involved.

Staff qualifications required in conjunction with the use of the machine:	
Installation Set-up Disposal Instruction	Technical personnel with language proficiency in either English or German, in addition to the native language of the operator.
Operation	Qualified persons trained by technical experts.
Maintenance Service Repair	Only personnel provided or trained by the manufacturer.

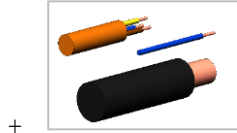
The safety instructions, warnings and precautions contained in the individual chapters must be strictly observed by all users and operators!

2.4. Intended use

The machine is designed for stripping cables and wires.

The maximum cross-section to be processed depends on the respective material.

The following guide values serve for standard applications:



+ Ø 4 - 15 mm (Ø 0,16 – 0,6 inch) resp. 6 - 70 mm²; AWG 9 – AWG 2/0

2.5. Predictable misuse

The manufacturer or distributor is not liable for damage resulting from improper use: **the risk for this is borne solely by the user.**

Examples of predictable misuse:

- + Processing of round material of steel, aluminum or wood.
- + Using wires with the wrong knife insert.
- + Using wires with the wrong centering guide bush.
- + Use of not approved knives for the machine.
- + Using the machine to press in parts.
- + Using the machine for embossing.

2.6. Hazardous area



WARNING

Risk of cutting and crushing fingers and hands.
Always operate the machine with the safety cover.

There is a risk of cutting and crushing fingers and hands. Never bridge the query switch of the safety cover. Always operate the machine with the safety cover mounted.

Never reach into the cutting edges when changing the knives.

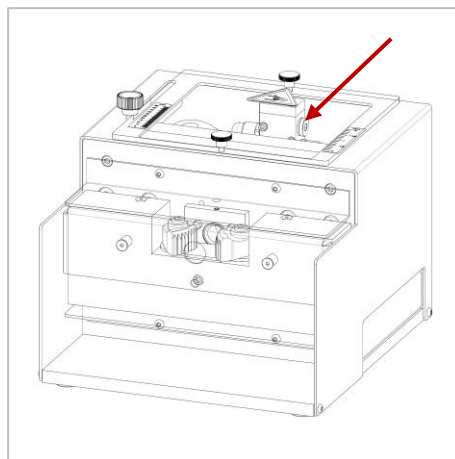


Fig. 2.6.1

3. Delivery

3.1. Packing

Retain the original packaging for later shipping and storage of the machine.

Dimension:

Length:	560 mm (22,05 inch)
Width:	350 mm (13,8 inch)
Height:	350 mm (13,8 inch)
Total Weight:	approx. 23 kg (50,7 lbs)
(wooden box + machine)	

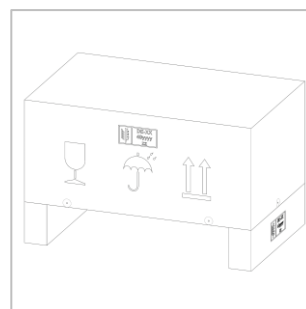


Fig. 3.1

3.2. Scope of delivery

- | | |
|--------|--|
| 1 pc. | Pneumatic stripping machine AKM-405 |
| 1 pc. | Foot switch with protective cover |
| 1 pc. | Knife set (3-fold à 4 cutting edges; Ø 4 – 15 mm) |
| 1 pc. | Centering guide bush set Ø 6, 8, 10, 12, 14, 16mm. |
| 2 pcs. | PU compressed air hose Ø 8 mm à 2 Meter (without quick coupling) |
| 1 pc. | PU compressed air hose Ø 6 mm à 2 Meter |
| 1 pc. | Operating instruction |
| 1 pc. | Declaration of Conformity |

4. Technical description

4.1. Machine overview

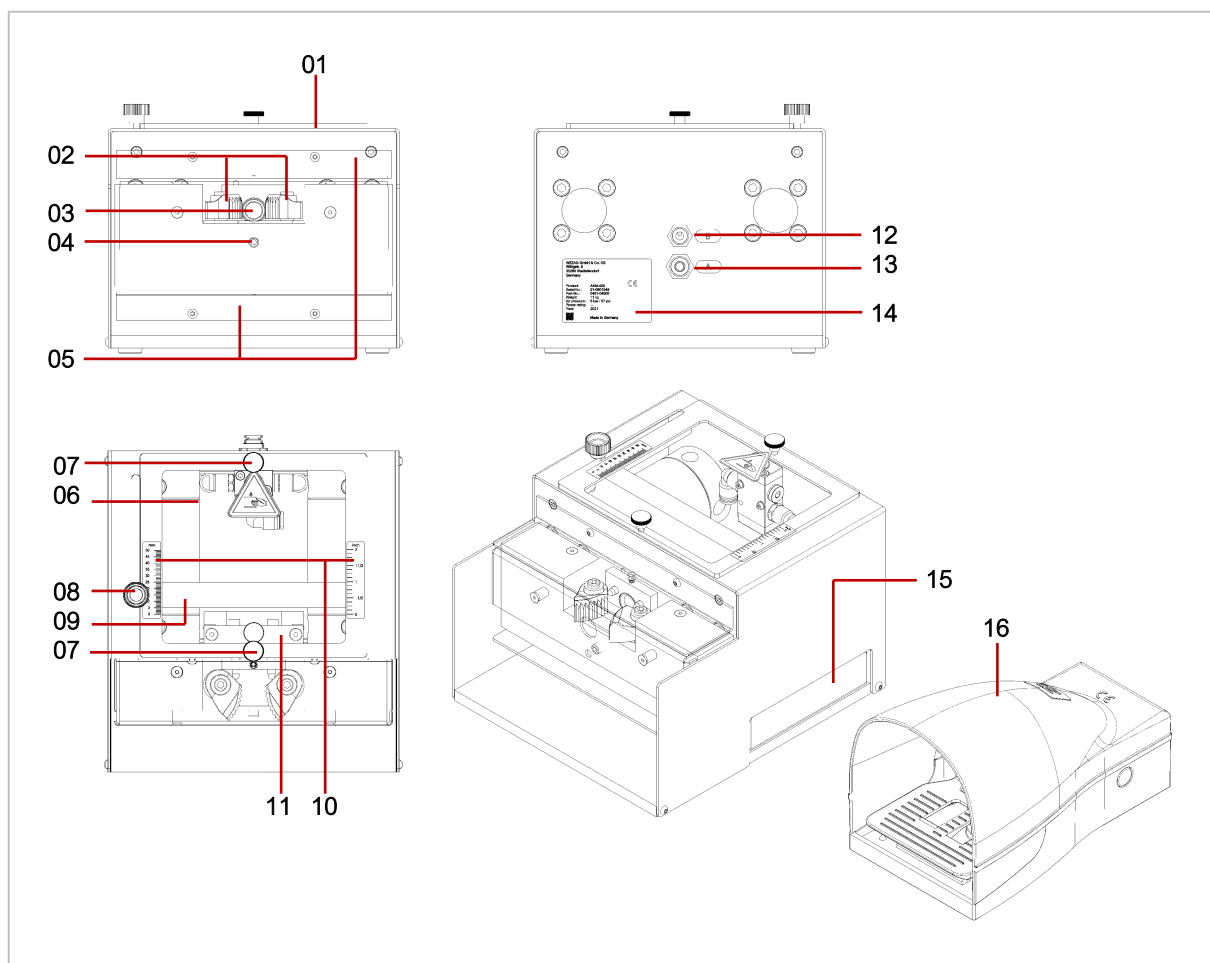


Fig. 4.1

Pos. Designation

01	Pneumatic stripping machine AKM-405
02	Cable clamps
03	Centering guide bush
04	Adjusting screw f. knife opening
05	Intervention guard top + down
06	Safety cover
07	Knurled screws f. safety cover
08	Knurled screw f. stripping length

Pos. Designation

09	Stop f. stripping length
10	Stripping length indicator mm + inch
11	Knife block
12	Ø 6 / B = control pressure
13	Ø 8 / A = control pressure
14	Nameplate
15	Tray f. insulation waste
16	Foot switch with protective cover

4.2. Machine identification

Pos.	Designation
1	Machine type
2	Serial number
3	Item number
4	Weight
5	Operating air pressure
6	Electrical connection
7	Year of manufacture



Fig. 4.2

4.3. Technical data

Dimension:

Length: 265 mm (10,43 inch)

Width: 235 mm (9,25 inch)

Height: 200 mm (7,87 inch)

Weight: approx. 11 kg (24,25 lbs)

Operating air pressure: 6 bar / 87 psi

Air consumption: 4,2 L

Cable cross-section: Ø 4 – 15 mm (Ø 0,16 – 0,6 inch)
resp. 6 – 70 mm² (AWG 9 – 2/0)

Insulation diameter: max. Ø 16 mm (Ø 0,63 inch)

Stripping length: 5 – 50 mm (0,2 – 2 inch)

Emission noise level LpA: < 79 dB

4.4. Functional and operating elements

4.4.1. Safety cover

The machine is equipped with a safety cover. This is designed to cover the moving parts of the machine.

The safety cover is interrogated by pressing a pneumatic button. The machine cannot be operated when the safety cover is removed.

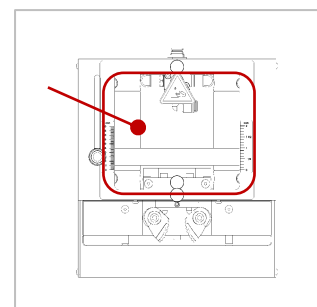


Fig. 4.4.1

4.4.2. Stripping length

The stop of the stripping length is set to the desired length with a knurled screw.

- + Loosen the knurled screw.
- + The stop can be set to the desired length by sliding the screw. The length can be read on the right (inch) and left (mm).
- + Retighten the knurled screw.

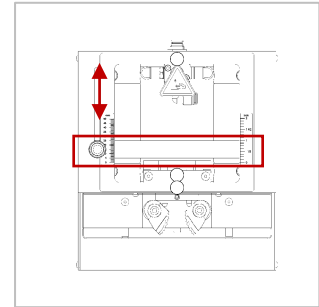


Fig. 4.4.2

4.4.3. Knife opening

The knife opening is adjusted to the cable outer diameter using a 4 mm hexagonal pin wrench (not included).

Larger opening: turn clockwise.

Smaller opening: turn counterclockwise.

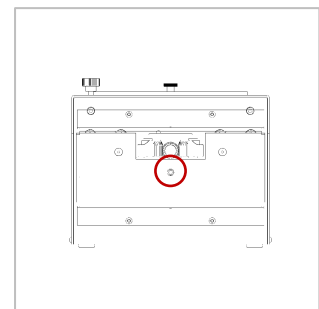


Fig. 4.4.3

5. Transport, Storage

5.1. Transport



WARNING

Danger of crushing if the machine falls down.

Wear suitable safety shoes when transporting and setting up the machine.

5.2. Storage



ATTENTION

Corrosion of the machine due to incorrect storage.

Store the machine and accessories at 5 - 55 °C and max. 90 % relative humidity (non-condensing) in the original packaging.

6. Assembly and Connection

WARNING

Risk of injury

In the event of defects or damage to the machine, it must be shut down immediately and secured against unintentional or unauthorized startup. The machine may only be put into operation if it is in perfect technical condition.

6.1. Assembly

WARNING

Danger of crushing due to the machine falling down / over.

Wear suitable safety shoes when transporting and setting up the machine.

Set up the machine on a level surface and ensure that the machine is stable.

CAUTION

Slip, trip and fall due to incorrectly routed cables.

Place the foot switch on the floor, any other placement of the foot switch than on the floor is prohibited!

Do not lay the foot switch and cables in traffic routes!

CAUTION

Disturbance of the musculoskeletal system due to insufficient access to the control parts.

The access to the actuating parts of the machine must be kept free. This applies in particular to the foot switch.

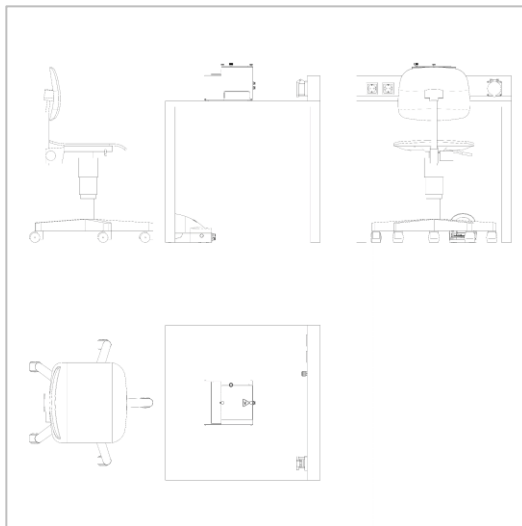


Fig. 6.1.1

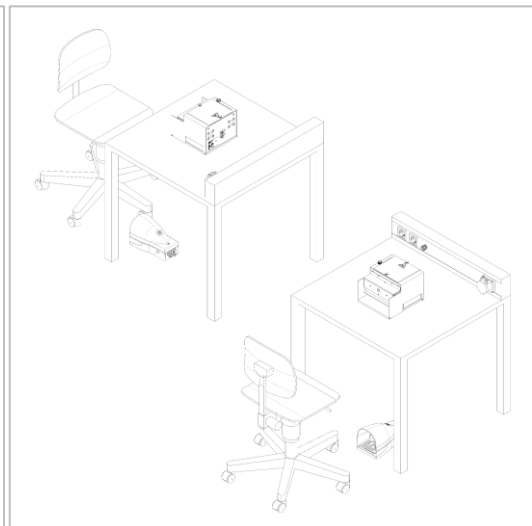


Fig. 6.1.2

INFO

To reduce the operating noise, you can place the machine on a non-slip rubber base.

6.2. Connection

WARNING

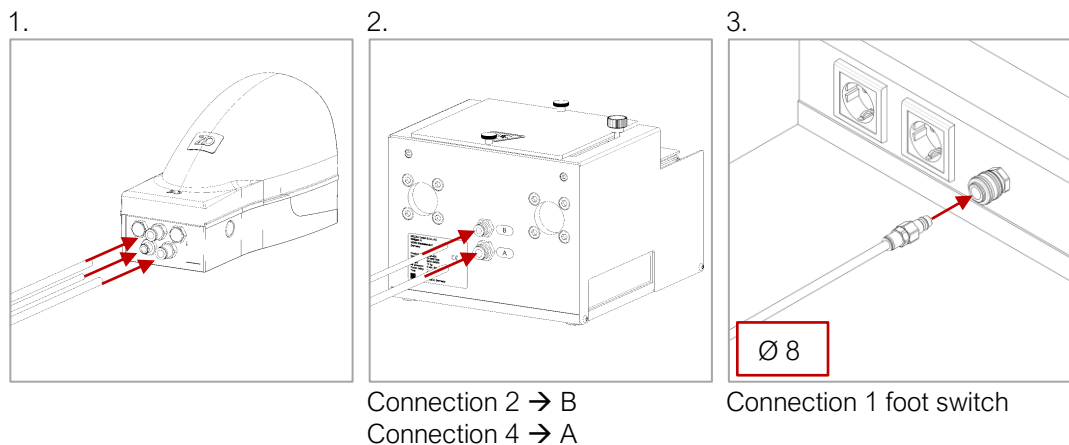
Seizure of the compressed air hose due to non-observance of the connection sequence. Observe the connection sequence. The machine can only be completely depressurized via the quick coupling (not included in the scope of delivery) on the main air supply line.

ATTENTION

Malfunction

Operate the machine only with clean, dry and oil-free compressed air.

Operating pressure: 6 bar (pressure gauge not included).



7. Setting up / Changeover

WARNING

Risk of cutting and crushing due to unintentional start-up caused by human error. Before starting setup and changeover work, the machine must be safely disconnected from the energy supply.

ATTENTION

Malfunctions due to mounting errors.

Mounting errors can lead to damage during operation.

Check the correct combination of centering guide bush and knife. The knife edges must match each other.

7.1. Equipment

Centering guide bush set
Item-No.: 1881-04021 / 63817-1803

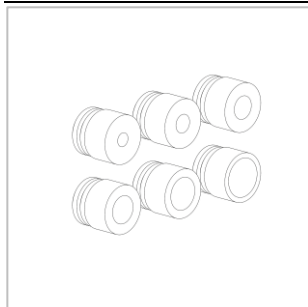


Fig. 7.1.1

Knives set
Item-No.: 1881-04022 / 63817-1804

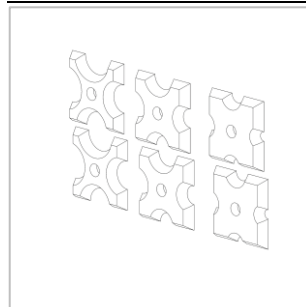
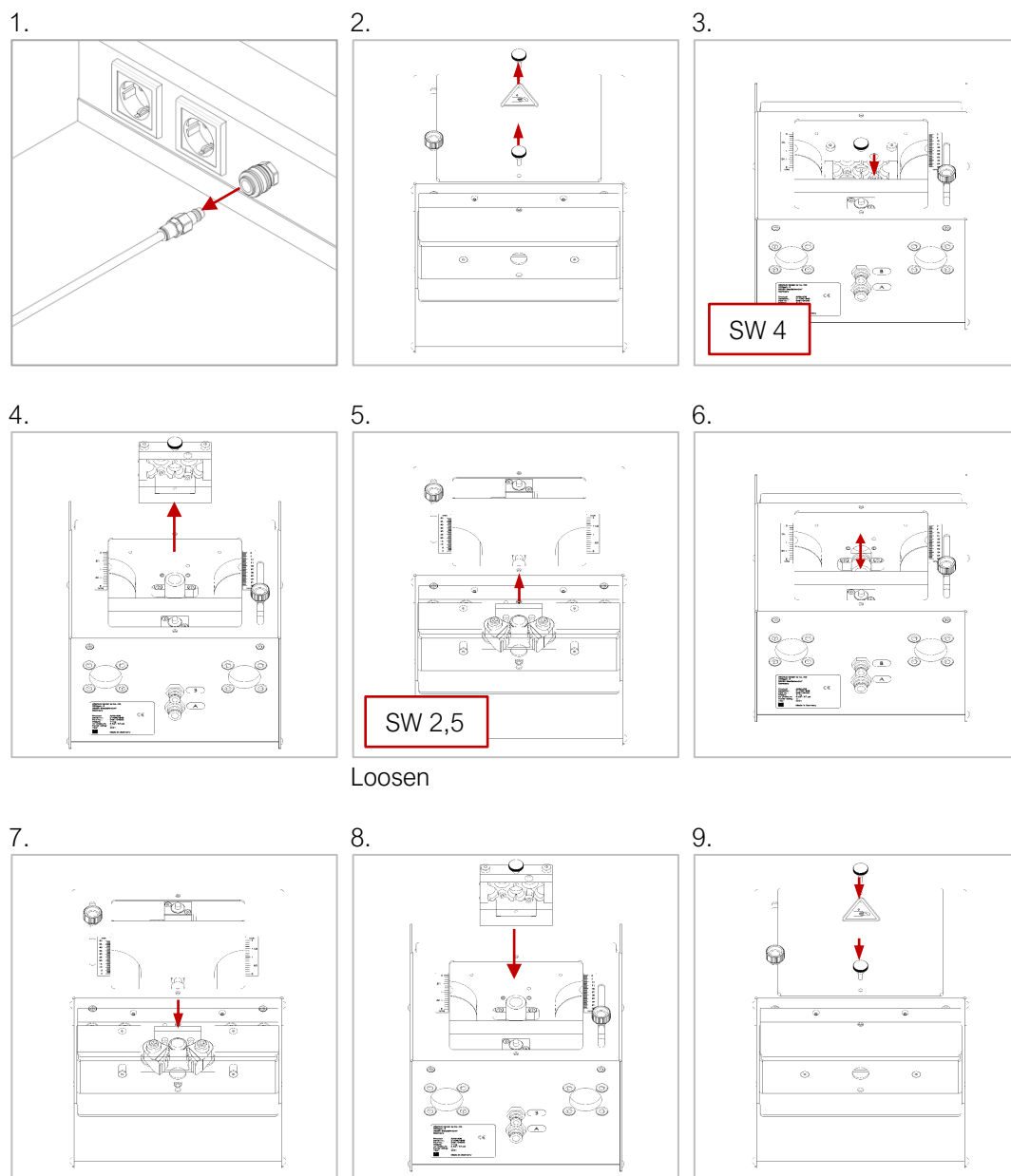


Fig. 7.1.2

7.2. Change centering guide bushes



Loosen

Fix lightly

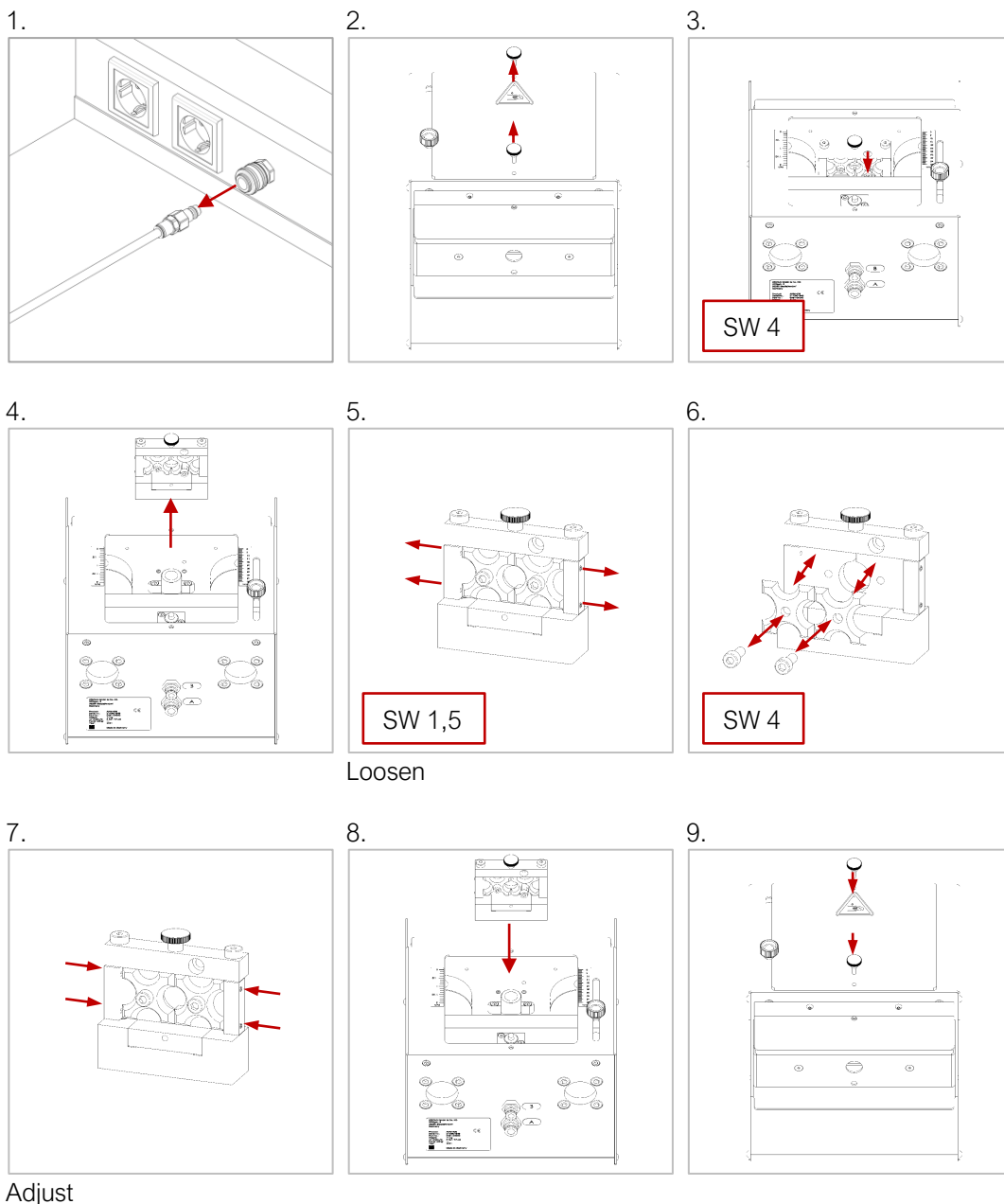
7.3. Converting the knife



WARNING

Risk of cutting fingers in the knife area.

Do not insert your fingers into the knife edge. Follow the operating instructions exactly when changing the knife.



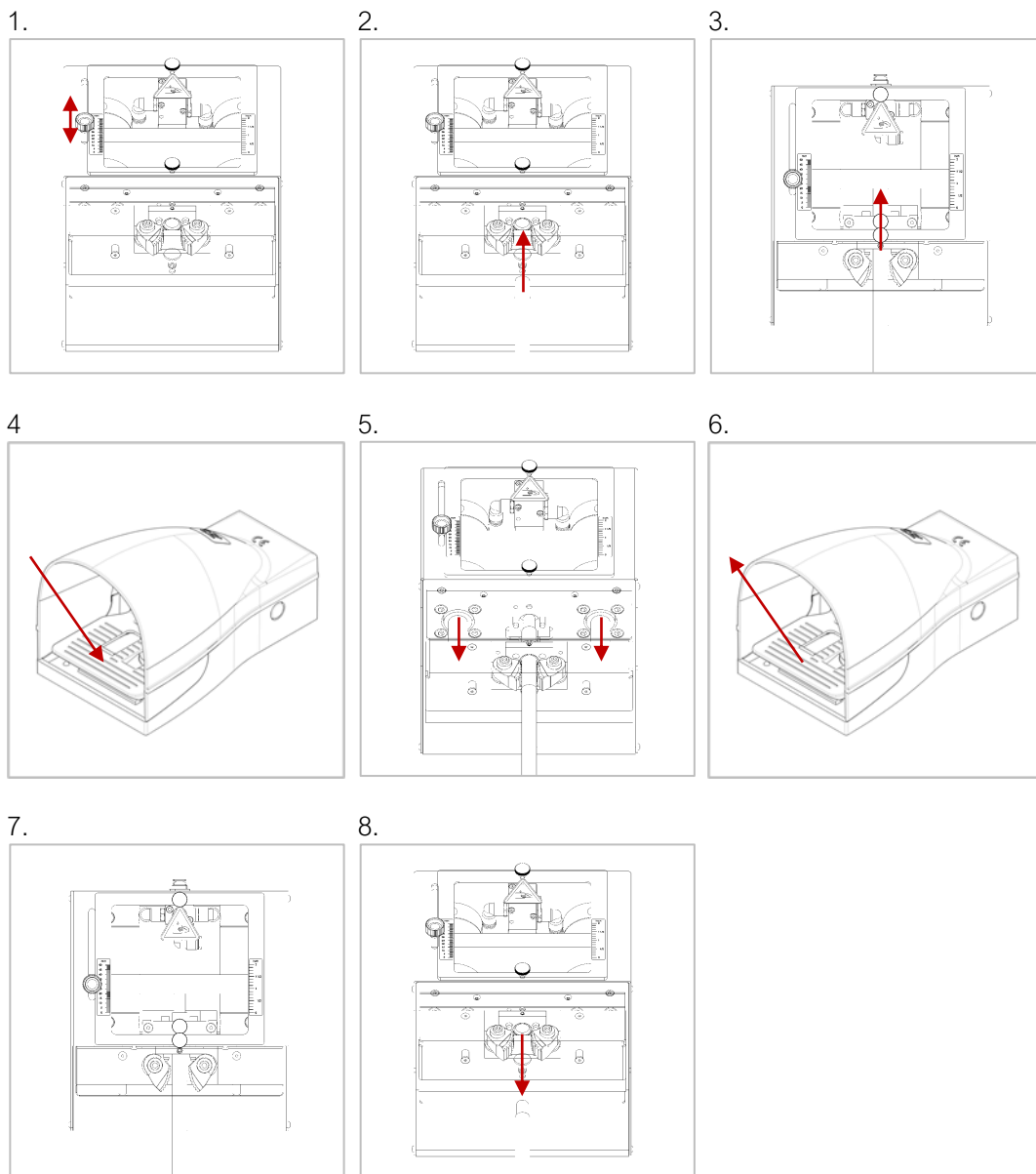
INFO

The knives can be adjusted by 0.5 mm towards the center by screwing in the screws on the side for each side of the knife.

8. Production operation



Discomfort caused by the stripping process towards the operator.
Keep as large a distance as possible in front of the machine.



9. Maintenance / Service

9.1. Maintenance plan



Risk of crushing due to unintentional start-up caused by human error.

Before starting maintenance and servicing work, the machine must be safely disconnected from the power supply.

To ensure a long service life and optimum use, the following maintenance and lubrication specifications must be observed. The manufacturer accepts no liability for damage caused by neglect of the specified maintenance and lubrication specifications.

Regular cleaning and maintenance of the parts accessible from the outside maintains the operational readiness of the machine.

The machine or machine parts must not be cleaned with:

- + compressed air,
- + hard objects such as spatula, steel wool or similar,
- + fibrous materials such as cleaning wool or similar.

Vacuum coarse dirt and abrasion.

9.1.1. Daily



Malfunction due to wrong cleaning.

Do not blow out insulation and cable residues with compressed air, otherwise the smallest residues will be blown into the machine housing. This increases wear and tear and impairs accuracy and function.

- + External visual inspection of the machine.
- + The machine's connection hoses must be checked regularly. Defective hoses must be replaced immediately.
- + Check compressed air (6 bar) at house unit (pressure gauge not included in the scope of delivery).
- + Remove insulation and cable residues in the machine.

9.1.2. Weekly



Danger of cutting fingers in the knife area.

Do not put your hands into the knife edge. Follow the operating instructions exactly when changing the knife.

Maintenance work may only be carried out by authorized persons who have been trained for this activity.

- + Check cut material for a clean cut.
- + Check knife for damage and wear.

10. Troubleshooting and fault analysis

WARNING

Risk of injury

If defects or damage to the machine are detected, it must be shut down immediately and secured against unintentional or unauthorized startup.

Faults and malfunctions may only be rectified by authorized persons who have been trained for this activity.

Error / Fault	Remedy and Explanation	
Poor cutting quality	Worn knives	+ Replace new knife or complete knife set.
	Knives adjusted badly	+ Realign knife.

In case of problems, the customer service is at your disposal. The service address can be found on page 2 of these operating instructions.

Please have all necessary information ready for the conversation, including:

- + Machine type
- + Serial number of the machine
- + Photos / Videos

11. Decommissioning, Dismantling, Disassembly

WARNING

Danger of crushing if the machine falls down.

Wear suitable safety shoes when transporting and dismantling the machine.

WARNING

Seizure of the compressed air hose due to incorrect connection.

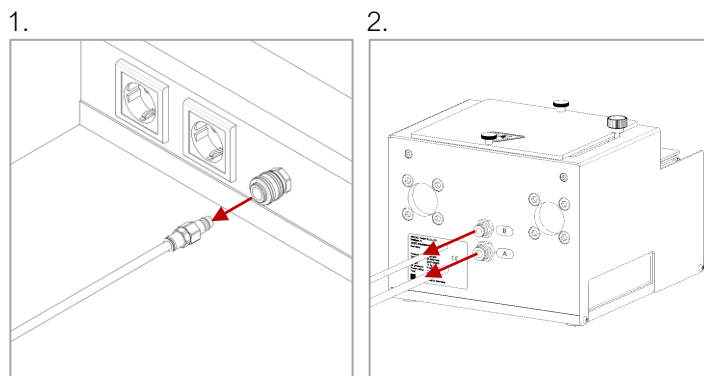
Observe the disconnection sequence.

The machine is to be completely depressurized only through the main air supply line.

ATTENTION

Corrosion of the machine due to incorrect storage.

Store the machine and accessories at 5 - 55 °C and max. 90 % relative humidity (non-condensing) in the original packaging.



12. Disposal



Environmental hazard

Operating fluids that are not disposed of properly can cause short- and long-term environmental damage!



Skin irritations due to contact with greases or oils.

Wear suitable protective gloves and glasses as well as safety shoes. Observe the safety instructions in the "Safety data sheet" of the grease or oil.

It is the responsibility of the machine operator to ensure that the machine and its operating materials are disposed of in an environmentally compatible and professional manner. In doing so, observe the national and local legal requirements and regulations.

The machine is disposed of as follows:

1. Properly decommission the machine.
2. Disassemble the machine.
3. Drain off operating materials (oils, greases, etc.) or remove them from the machine components and have them disposed of in an environmentally compatible form by a specialist company.
4. Sort materials by category and take each material category to a suitable recycling point.

13. Accessories overview

Foot switch	Order-No.: 1481-04023 / 63817-1807
Connection hose set	Order-No.: 1881-01021 / 63817-1806
Centering guide bush set	Order-No.: 1881-04021 / 63817-1803
Knives set	Order-No.: 1881-04022 / 63817-1804

14. Repair

Repairs to the machine may only be carried out by the manufacturer himself or by qualified personnel trained by him. Only original spare parts from the manufacturer may be used.

If the machine is sent to the manufacturer for repair, the following points must be observed:

- + The machine must be sent in the original packaging.
- + All parts necessary for operation and function must be returned.
- + Additional accessories as well as processing sample material must be enclosed.