

EFA air-operated carving knife



EFA 800

EFA 802



Translation of the original operating instructions

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Any changes or amendments to these operating instructions are only allowed to be made by us; otherwise any warranty claim against us will be void.

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1 Introduction and general information

Important!

**Operating instructions
cannot prevent misuse in
every case!**

1.1 Information on the operating instructions

These operating instructions are part of the technical documentation of the machine and comply with the Machinery Directive.

The machine has been designed and built according to the careful selection of the harmonising standards to be observed as well as other technical specifications.

The operating instructions are intended to describe the operation and handling of the EFA air-operated carving knife and provide the necessary safety instructions.

These operating instructions are intended for the machine operator and contain the details of the intended use and important information:

- for safe handling of the machine,
- for maintenance,
- for cleaning.

If the instructions are followed, the EFA air-operated carving knife will be operated safely, properly and economically and its operational capability will be maintained.

Observance of these instructions helps to avoid dangers, minimise repair costs and downtimes, and increase the reliability and service life of the machine.

A prerequisite for safe handling and trouble-free operation of the machine is observance of the following:

- the operating instructions,
- the company directives (safety signs and danger warnings),
- the legal provisions on occupational safety,
- the applicable laws and regulations.

These operating instructions must always be kept accessible at the machine for all work to be carried out.

Note!

If the existing operating instructions have been damaged or lost, you can request a replacement by stating: machine designation, part number, serial number and year of production, see *section 3.2 Nameplate*.

If you have any questions, or if you cannot solve a problem with the help of these operating instructions, please contact our Service department.

1.2 User group

Only instructed and/or trained personnel over 16 years of age are allowed to set up or operate the **EFA air-operated carving knife**. Furthermore, it is imperative that everyone working with and on the machine has read and understood the operating instructions, and observes them.

The operation of the carving knife by persons who are under the influence of alcohol, medication, or drugs is strictly prohibited.

Instructed person

Persons over 16 years of age who have been instructed and trained by a qualified person (specialist) in the tasks assigned to them and about possible dangers in the event of improper behaviour, as well as in the handling of the necessary protective devices and protective measures, are considered to be instructed persons.

Trained person (specialist personnel)

Persons who have obtained a professional qualification and have demonstrated this by checking the results or passing an examination are considered to be trained persons.

1.3 Scope of supply

Upon receipt of the delivery, check immediately whether the scope of supply corresponds to the accompanying documents.

Submit a complaint in the event of:

- apparent transport damage immediately to the supplier,
- apparent defects/missing items, to **Schmid & Wezel GmbH**.

These operating instructions describe the **EFA carving knife** with all possible options. Options are not necessarily included in the scope of supply and can only be retrofitted to a limited extent.

1.4 Intended use

Danger!

Never point the device at people!

Danger!

Never reach into the cutting area of the blade, you could injure yourself!



Wear eye protection such as protective goggles when working!

Areas of application

The **EFA 800** and **EFA 802** carving knives are suitable for professional use in the food industry for cutting meat, fish, cheese, fruit, vegetables and baked goods, depending on the version.

These machines are not equipped for a different type of use. Should the user desire to use the equipment for a different purpose than intended, please contact **Schmid & Wezel GmbH (S&W)**. For all other types of use, the user must be advised of the inherent accident hazard and increased wear. **In the event of non-compliance, the liability shall be borne by the user alone.**

The carving knife is only allowed to be used:

- in a fully functional and perfect technical state, in line with the intended use, in consideration of all of the safety- and hazard-relevant aspects,
- with properly functioning safety devices,
- with the equipment approved by the manufacturer.

Do not use materials harmful to health.

If, contrary to the intended use, materials harmful to health are to be processed then **Schmid & Wezel GmbH** must be informed in writing about the planned use and the protective measures taken by the customer/operating company.

The customer/operating company is solely responsible for suitable protective measures (e.g. extraction devices, respiratory protection, protective suits, etc.) and company directives.

If the **EFA carving knife** is not used as intended or is modified without the approval of **Schmid & Wezel GmbH**, persons could be injured and the machine damaged.

The operating permit is invalidated.

The intended use includes in particular that you:

- Observe the operating instructions and company directives,
- Observe maintenance instructions and intervals,
- Immediately rectify any faults that impair safety,
- Do not operate the knife if safe working with it is not possible,
- Do not make any structural changes to the knife without authorisation.

Danger!

The blade can be hazardous if it is used by untrained persons, in an improper manner, or for purposes that are not in line with the intended use.

Residual hazards

There is an injury hazard on the knife blades. Remain focused and act with caution when working. Wear personal protective equipment

For this reason, always make sure to lay the machine down flat to prevent the switch from being accidentally actuated and the machine from starting up.

If the compressed air connection is faulty and there is a high water content in the compressed air, a water jet can escape at the connection point. Therefore, make sure that the hose connection is correct and that there is as little water content as possible in the compressed air (empty the water separator regularly). The water separator is not part of the machine but must be installed upstream.

1.5 Claims for defects, liability, warranty

Warranty and liability claims for personal injury and damage to property are excluded in particular in the following cases:

- Improper use or unsuitable use,
- Improper transport or storage,
- Improper assembly and/or initial start-up,
- Improper operation (operating errors),
- Disregarding of operating instructions/company directives,
- Faulty or negligent handling,
- Improper maintenance/repair,
- Unsuitable equipment or spare parts that are not approved by **Schmid & Wezel GmbH** Maschinenfabrik,
- Natural wear and tear,
- Improper or unprofessional rectification of defects by the customer/operating company or third parties,
- Unauthorised structural changes to the machine without written permission from **Schmid & Wezel GmbH**,
- Chemical, electrochemical or electrical influences – unless they are the responsibility of **Schmid & Wezel GmbH**.

Liability

The manufacturer accepts no liability for accidents, machine damage and consequences of machine failure resulting from failure to observe the operating instructions. In addition, the local accident prevention regulations and general safety regulations for the area of application of the machine apply.

Limitation of liability

All technical information, data and instructions for the operation of the machine contained in the operating instructions are up to date at the time of delivery. They are provided to the best of the manufacturer's knowledge, taking into account previous experience and knowledge. The manufacturer reserves the right to make technical modifications in the course of further development of the machine described in these operating instructions. No claims can therefore be derived from the information, figures and descriptions in these operating instructions. The manufacturer shall be liable for any errors or omissions within the scope of the warranty obligations entered into in the contract, to the exclusion of further claims.

Claims for damages are excluded, irrespective of the legal basis on which such claims are derived. Only the text of the **original operating instructions** is authoritative.

The textual and graphical representation in the operating instructions does not necessarily correspond to the scope of supply or a spare parts order. Illustrations in these instructions are not to scale.

Technical changes

The manufacturer **Schmid & Wezel GmbH** reserves the right to make technical changes within the scope of improving the usage properties and further development without prior notice. Figures are for basic understanding and could differ from the actual design of the system.

Copyright

The manufacturer reserves the copyright to these operating instructions. These operating instructions are intended for assembly, operating, maintenance and monitoring personnel.

Transferring the operating instructions to third parties without the written consent of the manufacturer **Schmid & Wezel GmbH** is not permitted. Duplication in any kind and form – in whole or in part – as well as the use and/or communication of the contents are not permitted without written declaration of the manufacturer.

Note!



All content, texts, drawings, pictures and other representations are protected by copyright and are subject to industrial property rights.
Any improper use may be punishable!

2 Safety

Everyone who is involved in the installation, start-up, operation, set-up, equipping and maintenance of the machine in the operating company must have read and understood the operating instructions, in particular the "Safety" chapter.

Safe operation of the machine is only guaranteed if:

- Unauthorised persons are kept away from the working area of the machine,
- Safe working with awareness of the dangers involved is regularly checked in accordance with the operating instructions,
- No working methods are employed that could compromise safety,
- Malfunctions in the machine are eliminated immediately,
- Maintenance work is carried out regularly.

Important!



The operating instructions must be accessible at all times during the entire period of use of the machine for the operating, maintenance and cleaning personnel.
Therefore, always keep these operating instructions close to the machine.

First aid!

Important!



In the event of an accident, provide **FIRST AID!**






- Keep calm!
- Remove injured persons from the danger area without endangering yourself!
- Inform other employees (first-aiders, paramedics) or request help!

2.1 Safety instructions



During the use of the machine, dangers could arise in certain situations or through certain behaviour.

The measures described to protect against dangers must be observed.

The safety instructions are identified as shown in the following tables (pictograms).






Symbol/ pictogram	Signal word	Damage/ injury to . . .	Definition	Possible consequences of disregarding the safety instructions
	Danger	Persons	Imminent danger	Death, serious bodily injury or substantial damage to property
	Warning	Persons	Potentially dangerous situation	Death or serious bodily injury could occur
	Caution	Persons	Less dangerous situation	Slight or minor injuries
	Attention	Property	Potentially harmful situation	Damage to the product or its environment
	Information	-	Application tips and other important/useful information and notes	No dangerous/harmful situation

2.1.1 Other safety signs








Symbol	Meaning
	Mark of conformity! The machine complies with the applicable regulations of the EC Machinery Directive.
	Recyclable materials! Ensure that the materials are recycled properly!

2.1.2 Warning signs


Warnings and symbols used in the operating instructions and documentation are intended to help you to recognise and assess the dangers more easily.

Symbol	Meaning
	Warning: Dangerous electrical voltage! Touching live parts can result in immediate death. Covers or cabinets marked with this sign are only allowed to be opened by qualified electricians after the machine has been switched off.
	Warning: Sharp cutting tool! Contact with the running cutting tool will lead to extremely severe cutting injuries involving permanent or even fatal injury. Ensure that a sufficient safety distance is maintained. Contact with the stationary cutting tool could lead to severe cutting injuries involving permanent injury. Wear safety gloves. Ensure that a safety distance is maintained.
	Warning: Hand injuries! There is a danger of hands being pinched, pulled in or otherwise injured. Keep your hands away from places that bear this warning sign!
	Warning: Noise with high sound pressure level! If the sound pressure level at the workplace is above 85 dB(A). Remaining for a relatively long period can cause permanent hearing damage. Only enter the area if wearing the correct hearing protection.
	Warning of hot surface! It is not always possible to notice the presence of hot machine parts, containers or materials, as well as hot liquids. If such a safety sign is affixed to a component, care must be taken. Do not touch hot surfaces without protective gloves.

2.1.3 Mandatory instruction signs

Symbol	Meaning
	General mandatory instruction sign! Observe company directives, notes in operating instructions and generally applicable safety regulations.
	Wear cut-resistant gloves! Cutting injuries possible. Provide information about suitable cut-resistant gloves.
	Use safety shoes! Safety shoes form part of the personal protective equipment and provide protection for the health of the worker. They prevent accidents and injuries such as crushing by heavy objects.
	Wear a protective helmet! Head injuries are possible due to objects falling, tipping over or being thrown out, or due to swinging loads; bumping into obstacles also represents a danger. A suitable protective helmet must always be worn on the head when in the indicated area.
	Wear protective goggles! Eye injuries (loss of vision) possible when working due to flying solid objects.
	Wear hearing protection! If the continuous sound pressure level of the machine/system is above 85 dB(A), hearing protection must be worn to prevent permanent hearing damage.
	Wear protective clothing! Protection against contact with auxiliary or working equipment. Find out about suitable protective clothing.

2.1.4 Prohibition sign

Symbol	Meaning
	General prohibition sign! The red signal border/prohibition stripe indicates an immediate danger and is overlaid diagonally over the self-explanatory symbol. The general prohibition sign must always be used in conjunction with another sign.

2.2 Personal protective equipment

Some work requires protective equipment.

This protective equipment must be made available to the operator.

Lifecycle phase	Protective equipment
Transport	<ul style="list-style-type: none"> Protective gloves Safety shoes
Assembly, start-up and maintenance	<ul style="list-style-type: none"> Cut-resistant gloves Safety shoes Protective goggles Hearing protection Hairnet (for long hair)
Operation	<ul style="list-style-type: none"> Hairnet (for long hair) Cut-resistant gloves Safety shoes Protective goggles Hearing protection Protective clothing
Storage	<ul style="list-style-type: none"> Protective gloves Safety shoes
Disposal	<ul style="list-style-type: none"> Protective gloves Safety shoes

2.3 Conduct at the workplace

The workplaces must be designed in such a way that each employee has at least 1.5 m² of freedom of movement. Ensure proper lighting of the workplace (at least 500 lux).

No other workplace should protrude into this area, otherwise there is an injury hazard due to the actions carried out with the knife.

The floor must minimise the danger of slipping on wet, greasy or dirty surfaces.

The workplace must comply with local hygiene and workplace regulations.

- Keep your workplace tidy and in good working condition. A cluttered or messy workplace can lead to accidents.
- Take environmental influences into account.
- Keep other persons away from your workplace. Focus on the job in hand when working.
- Do not use the EFA carving knife when you are tired and/or unfocused.
- Store the carving knife in a safe manner. Store unused devices in a dry place.
- Avoid wearing loosely fitting items of clothing and jewellery that can be caught by moving parts. Wear sturdy shoes during your work. Always wear a hairnet!
- Ensure that your workplace has a correct, ergonomic set-up and make sure that you are standing securely.
- Do not leave any tool keys connected. Check that all keys have been removed before switching on.
- Look after your tools with care. Use only sharp and undamaged blades so that you can work better and more safely.
- Only use genuine EFA accessories/spare parts.
- Changes and modifications to the machine are not permitted and, if any such changes are made, **S&W's** guarantee and liability shall be invalidated.

The use of other equipment, accessories or spare parts can endanger you and other persons.




Non-compliance will void the warranty.

3 Technical description

Tab. 3.1 – Technical data

Description		EFA carving knife	
		EFA 800 100280000	EFA 802 100280020
Operating pressure	bar	6	
Air consumption (at full load)	m ³ /min	0.65	0.18
Power	W	300	250
Stroke	mm	8	7
Frequency of stroke	rpm	22000	11200
Connection of the oil mist lubricator	inch	R 3/8"	
Hose length	m	5.0	
Sound pressure level	dB(A)	L _{pA} = 75	L _{pA} = 58
Sound power level	dB(A)	L _{WA} = 86	L _{WA} = 69
Peak sound pressure level	dB(A)	L _{pCpeak} = 97.8	L _{pCpeak} = 77.6
Hand-arm vibration	m/s ²	a _{hd} = 5.784	a _{hd} = 4.875
		K = 0.22	K = 0.259
Weight	kg	0.93	0.50

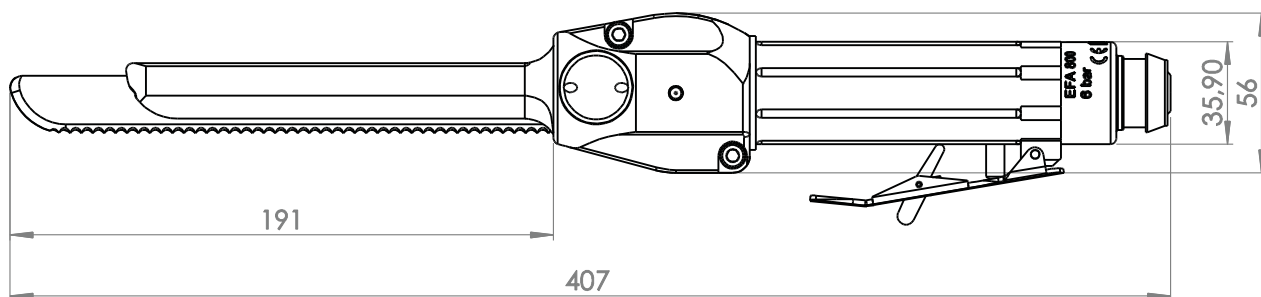
Tab. 3.2 – EFA carving knives – overview

EFA carving knife	Usage	Application
EFA 800 100280000 		Air-operated carving knives Depending on the model, the carving knives are suitable for professional use in the food industry for cutting meat, fish, cheese, fruit, vegetables and baked goods. The carving knives made by Schmid & Wezel (S&W) comply with the relevant safety regulations.
EFA 802 100280020 		

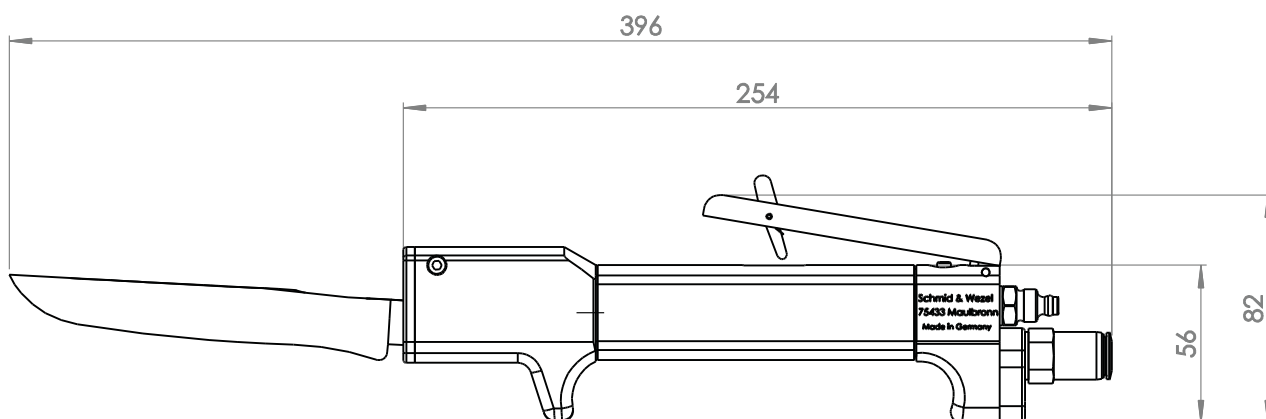
3.1 Dimensions

The following figures give you an overview of the dimensions of the machine.

Carving knife EFA 800 – part no. 100280000




Carving knife EFA 802 – part no. 100280020



3.2 Nameplate

The nameplate is attached to the machine and contains information on the machine performance.
 The following figure shows an example of the nameplate for the EFA machines.

		Schmid & Wezel GmbH Maschinenfabrik Maybachstraße 2 75433 Maulbronn Made in Germany	
Machine designation	Masch.-Bez.: XXXX		Bj.: XXXX
Part number	Art.-Nr.: XXXX		Typ: XXXX
Serial number	S/N: XXX	min ⁻¹	V
	A	W	Hz
	kg	IP	bar
			CE

4 Transport and storage

The machine has been tested and carefully checked in our factory before shipment.

The test ensures that the machine is working properly.

Despite all care taken, there is a possibility that the machine could be damaged during transport.

Therefore, check the machine for possible transport damage when unpacking it.

Warning!



Safety instruction!

Do not remove the cutting edge guard (on the EFA 800) until just before start-up.

Unpacking the machine

- Remove all packaging materials and dispose of them in a professional and environmentally friendly manner.
- Check the machine for possible transport damage.
- Information on *disposal and recycling* can be found in *chapter 11*.

Storage of the machine

For safe storage of the machine, it is essential to observe the following instructions:

- Only store the machine in a dry, ventilated room.
- Only store the machine in a clean and dry condition.
- Protect the machine from corrosion.

5 Connection and start-up

5.1 Installation

Danger!



Installation work is only allowed to be carried out by authorised specialist personnel.

Danger!



Disconnect the device from the compressed air network prior to performing any installation work!

Caution!



Tripping hazard!

We recommend that the lines are led away upwards. Lines that run along the floor can be a tripping hazard for the operator!

Attention!



Device damage!

Operate the carving knife only with clean, water-free and oiled air!

Warning!



Wear cut-resistant gloves and safety shoes during all installation work.

Attention!



Observe the assembly sequence.

5.1.1 Preparing the carving knife for use

With the EFA 802 carving knife, the blade must first be mounted on the drive.

See *chapter 6.2*.

EFA 800 (see Fig. 5.1)

- 1) Push on the air hose (1) as far as it will go. Push the hose clamp (2) to shortly before the end of the hose and clamp it with suitable pliers. Perform a tension test on the air hose (1), to check for sufficient clamping.
- 2) Push on the air-outlet hose (3) and move the O-ring (4) to the clamping position. Check the clamp connections before connecting.

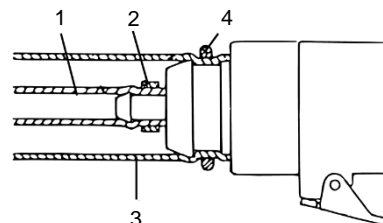


Fig. 5.1 – Compressed air connection (EFA 800)

EFA 802 (see Fig. 5.2 and Fig. 5.3)

- 1) Insert the air-outlet hose (1) into the quick coupling (2).
- 2) Insert the air hose with quick coupling (3) into the coupling plug (4) until it engages.

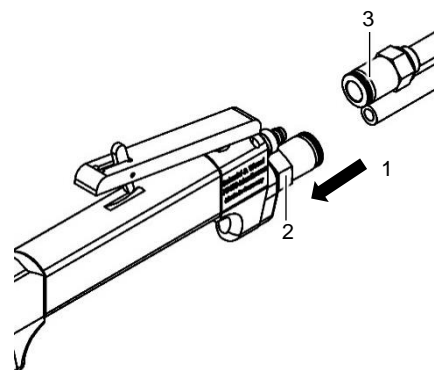


Fig. 5.2 – Compressed air connection (EFA 802)

5.1.2 Connection of the oil mist lubricator

Oil mist lubricator

For proper functioning and to maintain the appropriate service life of the carving knife, the oil mist lubricator must be checked at regular intervals.

Remove the condensation min. 1x per week and top up with special oil.

To ensure lubrication of the pneumatic motor, the oil mist lubricator must be set to 1 – 2 drops of oil per minute (or one drop of oil for approx. 15 cuts). If there is a high water content in the compressed air, water may enter the drive.

Therefore, make sure that the hose connection is correct and that compressed air with a low water content is used (the water separator must be emptied regularly). If no dried air is available, a water absorber must be installed by the customer. Blow through the air hose with a compressed air gun before connecting it, to remove impurities.

The air from pneumatic systems is usually contaminated and enriched with moisture.

A filter pressure reducer with water separator must therefore be installed between the pneumatic system and the tool. This not only regulates the operating pressure, but also cleans and dries the compressed air. The utility and service life of the carving knife are thus considerably increased. The filter pressure reducer should be installed as close as possible to the carving knife.

- Set an operating pressure of max. 6 bar at the filter pressure reducer.

You can purchase a suitable filter pressure reducer from **Schmid & Wezel GmbH** on request, through our Sales department.

Connection

- Screw the rapid action coupling (6) – (with sealing ring) into the oil mist lubricator (7).
 Make sure that the oil mist lubricator is assembled in the following sequence: water separator (8), pressure gauge (9), oil mist unit (10).
- Insert the plug connection (11) of the air hose into the coupling until it engages.

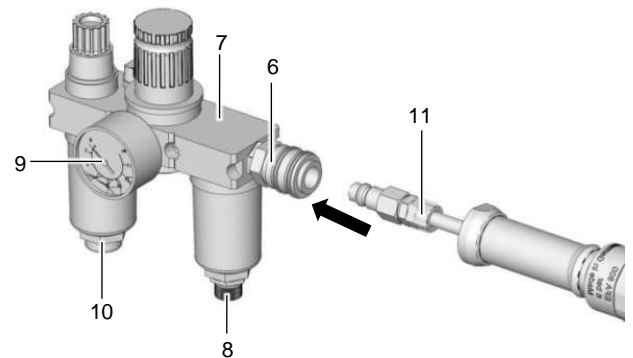


Fig. 5.3 – Pneumatic connection

6 Handling

6.1 Switch operation

Warning!



Risk of injury!

Only switch on the carving knife when the blade is firmly mounted.

Important!



The carving knife must not be used before the operator has read these operating instructions and the knife has been connected correctly!

The carving knife is equipped with a valve lever (1) for switching the compressed air flow, see Fig. 6.1.

Switching on

- 1) Hold the device securely.
- 2) Make sure that the knife is connected to the local compressed air network (supply pressure 6 bar).
- 3) Push the locking lever (1) forward – the operating lever is released.
- 4) To switch "ON", press the operating lever.

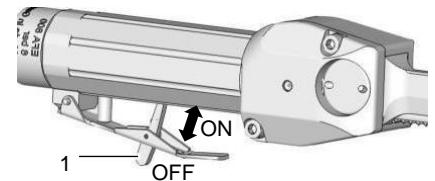


Fig. 6.1 – Operating lever (EFA 800)

Switching off

- 1) Release the operating lever (1) "OFF".

Because of its return spring, the locking lever automatically switches the knife off, at the same time securing the machine so that it cannot be switched on accidentally.

After switching off, the machine stops immediately.

The machine can be switched on and off at any time.

6.2 Working with the air-operated carving knife

Danger!



Never point the device at people!

Danger!



Never reach into the cutting area of the blade, otherwise you could cut off limbs!

Caution!



Vibration can be transmitted to the whole body, especially the arms and hands, and cause nerve and vascular disorders!
Observe prescribed breaks when working with double-bladed knives. Shorten exposure per shift (e.g. by changing tools at times).

Warning!



Wear eye protection or protective goggles when working!



Wear cut-resistant gloves when working!

Caution!



Tripping hazard!

We recommend that the lines are led away upwards. Lines that run along the floor can be a tripping hazard for the operator!

Danger!



Disconnect the device from the compressed air network prior to performing any assembly work!

Preparation

Check before using the device whether:

- the operating data of the compressed air supply and the device match,
- the carving knife is operational;
- the general safety instructions are observed, see *section 2.1*.

EFA 802 (see Fig. 6.2, 6.3 and 6.4)

The **EFA 802** carving knife can be operated with various blades. Therefore, it is delivered with the handle and the blade separated, and the blade must first be mounted.

- 1) Loosen the screw (1) with an Allen key.
- 2) Remove the shield (2) completely.
- 3) Clamp the blade in a vice.
- 4) Loosen the screw (3) max. 2.5 turns with an Allen key.
- 5) Push the handle (4) onto the knife as far as it will go.
- 6) Tighten the screw (3) with a torque wrench (torque = 3 Nm).
- 7) Remove the device from the vice.
- 8) Refit the shield. To do this, push the shield (2) completely with the cylindrical pins into the holes on the knife head.
- 9) For locking, tighten the screw (1) firmly.

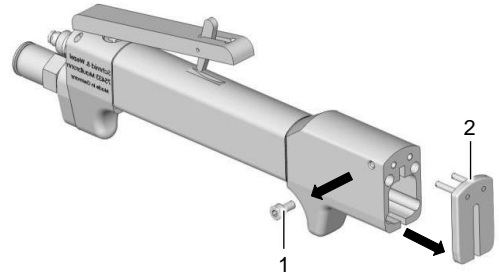


Fig. 6.2 – Preparing the handle

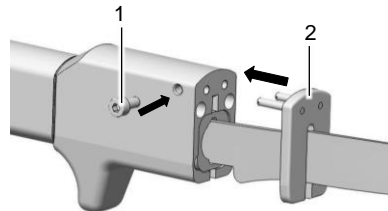


Fig. 6.4 – Mounting the shield

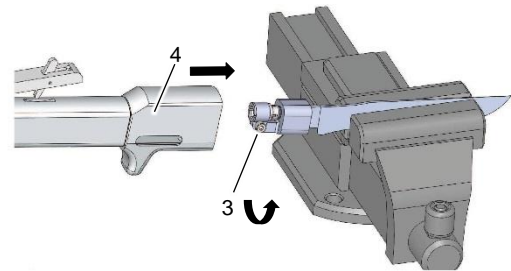


Fig. 6.3 – Connecting the handle to the knife

Operation of the carving knives

- Hold the carving knife securely by the handle and switch on.
- Guide it into the material to be cut while it is running.
- Only remove the knife from the piece of meat while it is running and only switch it off afterwards.
- When you interrupt work, place the carving knife flat to the side so that the operating lever is not under load.

If work is interrupted for a longer period of time, disconnect the machine from the compressed air network.

6.2.1 Operational safety

Caution!



Risk of jamming!

Do not stop double-bladed knives (serrated) during the cutting process.

- Be especially careful when switched on.
- Never operate the operating lever when the device is not in use.
- Hold the machine securely.
- Do not tilt or jam the blade.
- Do not remove protective devices from the carving knife for breaking carcasses.

7 Assembly

Danger!



Assembly work is only allowed to be carried out by authorised specialist personnel.

Danger!



Disconnect the device from the compressed air network prior to performing any assembly work!

Warning!



Wear cut-resistant gloves and safety shoes during all assembly work.

Attention!



Observe the assembly sequence.

7.1 Change of blades

Danger!



Never reach into the cutting area of the moving blades, otherwise you could cut off limbs!

Warning!



Only use genuine EFA blades!

Blunt, worn blades must be replaced.

EFA 800 (see Fig. 7.1 to 7.8)

- 1) Insert the leg spring (1) – (included in the scope of supply) into the openings on the cover (2).
- 2) Loosen and remove the cover with a ¼ turn.
- 3) Remove the stop (3).
- 4) Loosen 2 screws (4) with an Allen key and remove it together with the spring washers (5).
- 5) Remove the housing cover (6).
- 6) Carefully move the upper and then the lower connecting rod head (7) with a suitable tool (8) – (e.g. screwdriver) to expose the blade gaps (9).
- 7) Pull the double blade (10) together with the guide pin (11) forwards out of the knife carrier (12).

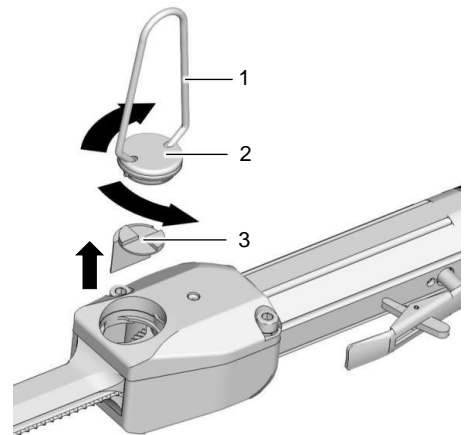


Fig. 7.1 – Removing cover and stop

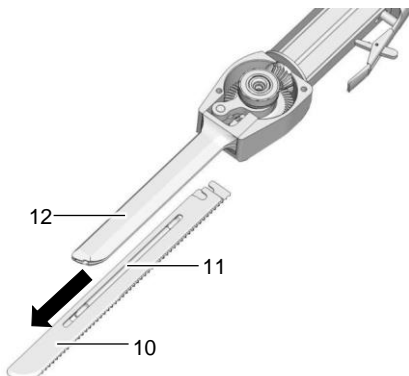


Fig. 7.4 – Removing the blades

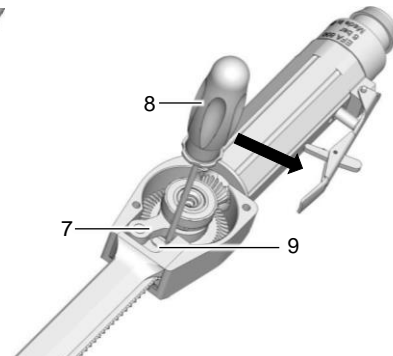


Fig. 7.3 – Moving the connecting rod

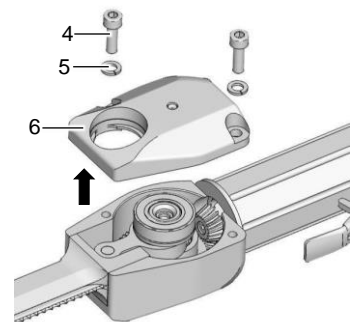


Fig. 7.2 – Removing the housing cover

- 8) Lightly grease knife blades with suitable lubricant.
- 9) Position the guide pin (11) and new blades (10) correctly.
- 10) Reinsert the double blade together with the guide pin into the knife carrier.
- 11) Engage the lower and then the upper connecting rod head (7) in the respective blade gap (9) using a suitable tool (8) – (e.g. screwdriver).
- 12) Mount the housing cover (6).
- 13) Insert the stop (3) into the cover (2).
- 14) Insert the cover together with the stop into the housing (14). Position the adapter sleeves (15) of the cover in the corresponding notch (16).
- 15) Tighten the cover with the leg spring. The adapter sleeves engage in the corresponding groove (17) of the housing.
- 16) After the change of blades, the housing must be greased at the grease nipple (18) with 1 – 2 strokes of the grease gun.

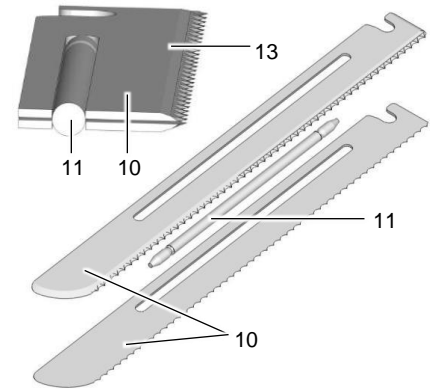


Fig. 7.5 – Change of blades / cut blade position

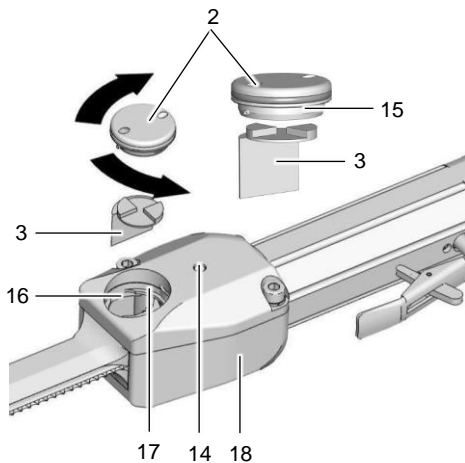


Fig. 7.8 – Mounting the stop and cover

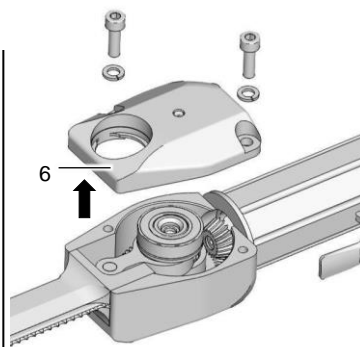


Fig. 7.7 – Mounting the housing cover

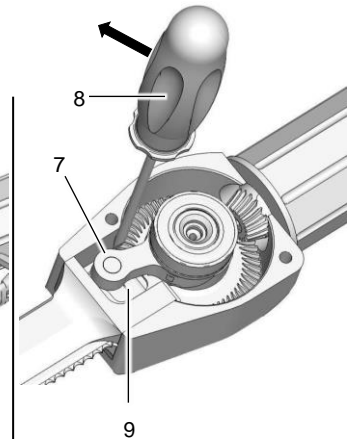


Fig. 7.6 – Positioning the connecting rod

EFA 802 (see Fig. 7.9 and 7.10)

- 1) Loosen the locking mechanism (1) and remove the shield (2).
- 2) Clamp the knife blade together with the drive unit in a vice.
- 3) Loosen the hexagon socket screw (3) with max. 2.5 turns on the connecting clamp.
- 4) Separate the handle with drive unit from the knife by pulling.
- 5) Mount a new blade.

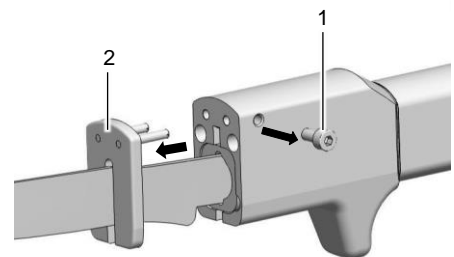


Fig. 7.9 – Positioning the connecting rod

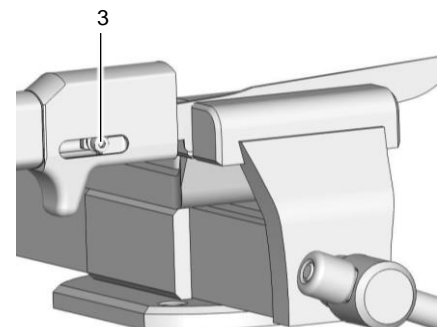


Fig. 7.10 – Positioning the connecting rod

8 Cleaning and lubrication

Danger!



Only carry out cleaning work when the device is disconnected from the compressed air network.

Danger!



Observe the safety and hygiene requirements!

Important!



Clean the cutting device in hot water with a cloth or sponge. However, the motor must not come into contact with water!

Warning!



Risk of contamination!

Cleaning, maintenance and lubrication work must not be carried out in the immediate vicinity of foodstuffs!

Warning!



Wear cut-resistant gloves and safety shoes when cleaning the device.

During daily cleaning, please check whether parts of the carving knife are worn out. Timely renewal of worn parts saves costs!

8.1 Daily cleaning after completion of the slaughtering

At the end of slaughtering, the carving knife must be cleaned.

Trouble-free continuous operation can only be guaranteed if the EFA carving knife is kept perfectly and hygienically clean at all times. In the normal course of events, the device should be disinfected before each use.



Also observe the safety instructions in the product data sheets of the cleaning agents.

To clean the device after working with it, use a cloth, brush and warm water (40 – 55 °C). Stubborn or encrusted dirt must be soaked.



Do not use any aggressive solvents! Do not use a steam blaster or high-pressure cleaner! Do not immerse the opened device in water!

8.1.1 Cleaning and lubrication of the carving knife

Lubrication

Please use only lubricants that are safe for contact with foodstuffs.

Suitable grease and oil for your machine can be purchased from **Schmid & Wezel GmbH** through our Sales department.

EFA 800

- 1) Disconnect the carving knife from the compressed air network.
- 2) To ensure the lubrication of the ball bearings and the gear unit, the machine must be greased at the grease nipple (1) with 1 – 2 strokes from the grease gun.

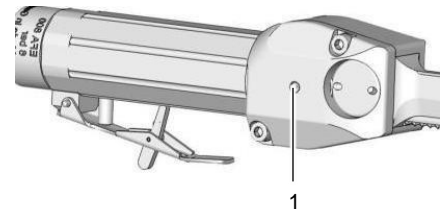


Fig. 8.1 – Grease nipple
(EFA 800)

EFA 802

The reciprocating motor is lubricated via the oil mist lubricator.
The carving knife does not require any additional lubrication.

- After each cleaning, lightly oil the blades with acid-free EFA special oil.

9 Maintenance

Important!



All work must be carried out by qualified instructed specialist personnel only.

During operation, it is possible that the function can be disrupted, but in most cases, troubleshooting is relatively easy.

The malfunctions are listed in Table 9.1 with possible causes and resulting remedies.

Tab. 9.1 – Troubleshooting

Malfunction	Possible cause	Remedy
The device does not start when the operating lever is actuated.	Air filter on oil mist lubricator dirty.	Change the air filter.
	Loose hose connection.	Check correct connection of the hoses.
	Rotor blade defective.	Return to manufacturer for maintenance.
The handle cannot be pressed down or only with great difficulty.	Valve spring broken. Valve blocked by dirt.	Return to manufacturer for maintenance.
Handle iced up.	Air pressure set too high.	Regulate to 6 bar.
Device does not start.	Parts of the motor or gear unit are defective.	Return to manufacturer for maintenance.
Device parts rusted.	Water in supply line. Oil mist lubricator defective.	Renew oil mist lubricator if necessary or return to manufacturer for maintenance.

10 Maintenance and repair

10.1 Maintenance

Note

Observe all safety instructions

Warning!

Maintenance work is only allowed to be carried out by qualified and instructed personnel.

Warning!

Cutting hazard!
Disconnect the device from the compressed air network prior to performing any maintenance work!

Oil mist lubricator

Check the oil mist lubricator at regular intervals, however at least 1x per week, remove the condensation and top up with special oil.

EFA special oil for maintenance system:

- Special oil 0.5 l (part. no. 001365611)
- Special oil 5.0 l (part. no. 001365612)

EFA special grease for gear units and ball bearings:

- Gear unit 0.8 kg (part. no.: 001365644)
- Gear unit 1.0 kg (part. no.: 001365623)
- Gear unit 5.0 kg (part. no.: 001365624)

10.1.1 Extended maintenance

To ensure the longest possible service life and low wear and tear, the carving knife must be checked and serviced regularly.

If the performance decreases or after approx. 400 operating hours, the rotor blades of the pneumatic motor must be checked for wear and replaced if necessary (in this case we recommend sending the carving knife to our Service department).

A soiled sound absorber must be cleaned or replaced.

Only use genuine spare parts or spare parts recommended by **Schmid & Wezel GmbH** Maschinenfabrik.

10.1.2 Sharpening the knife blades

Sharpening can also be carried out on commercially available automatic sharpening machines or on our blade sharpening device "ES 60 F" or our blade grinding machine "KSE 74", which are available as accessories.

The blades of the **EFA 800** are resharpened on the grinding machine "FMS 800-1", see Fig. 10.1.

Warning!



Knife blades that are not properly sharpened will result in loss of production and endanger the user.

Note!



If your equipment needs to be resharpened, please contact the sharpening service at your nearest authorised service centre or our head office.

Sharpening the EFA 800 blade

- 1) Clamp the serrated blade (1) in the grinding machine (3) with the ground side facing the grinding wheel (2).
- 2) Switch on the grinding machine (4).
- 3) Turn the adjusting screw (5) to bring the blade into contact with the grinding wheel (2).
- 4) Grind the blade.



Fig. 10.2 – EFA blades

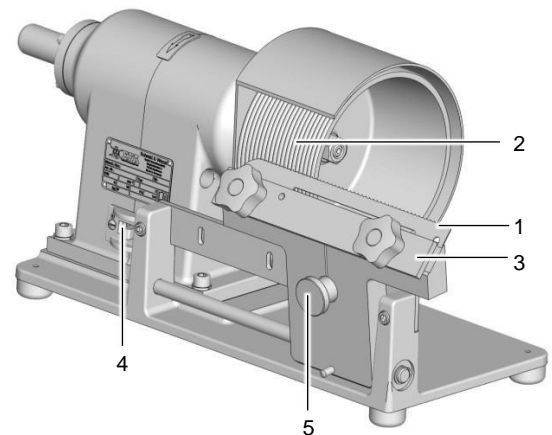


Fig. 10.1 – Sharpening serrated blades

Sharpening the EFA 802 blade

- 1) Insert the blade together with the knife guide (1) into sharpening holder (2).
- 2) Tighten the screw (3) on the clamp (4) of the sharpening holder until the knife guide is firmly seated in the sharpening holder.

The blade can now be sharpened on standard grinding belts. The sharpening service of our Service department is also available for professional sharpening.

More detailed information on sharpening the knife blades is available on request from our Service department.

Warning!



Do not use force, as parts could be damaged!
 Only use genuine EFA spare parts!

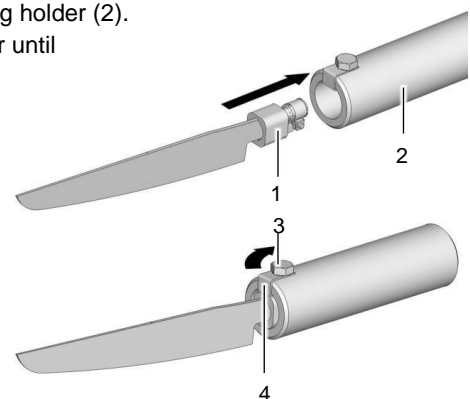


Fig. 10.3 – Clamping the blade in the sharpening holder

10.2 Repair by customer service

Warning!

Repairs are only allowed to be carried out by qualified and instructed personnel.

Danger!

Disconnect the device from the compressed air network prior to performing any repair work!

Warning!

Only use genuine spare parts.

- The **EFA Service department of Schmid & Wezel GmbH** is at your disposal for repairs. If your equipment needs to be repaired, please contact the nearest authorised service centre or our head office.
- Upon request, spare parts lists can be provided to any authorized service center.
- In the event of malfunctions that cannot be clearly localised, the device should be returned to **S&W** for repair.

10.2.1 Return

Return your waste electrical equipment to our head office.

**Schmid & Wezel GmbH
Maschinenfabrik**

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@ efa-verkauf@efa-germany.de

Internet: <http://www.efa-germany.de>

11 Waste disposal – recycling

The machine must be disposed of in accordance with the valid legal regulations of the respective countries.

11.1 Disassembly and disposal



Old and used machines contain reusable materials that can be recycled.

During disposal, it is essential to observe regional and local environmental protection regulations.

- 1) Disconnect the machine from the mains power and/or the pneumatic/hydraulic supply.
 - 2) Disassemble the machine completely.
 - 3) Degrease the machine completely.
 - 4) Dispose of used oil and components and materials contaminated with oil in accordance with the applicable environmental conditions.
 - 5) Separate all reusable materials according to type.
 - 6) Sort the individual reusable materials for recycling and disposal.
 - 7) Dispose of the hazardous waste at a local hazardous waste disposal site.
- Or
- 8) Return your waste electrical equipment to our head office.



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