



FX3.0

Instruction Manual

Compressed-air grinder FX 3.0

Order no. 0 750 705

1

List of contents

1	List of contents	Page 02
2	Tips on using the manual	Page 02
3	Safety instructions	Page 03
4	Warranty / Identification	Page 04
5	Operation / use /maintenance unit	Page 05
6	Technical data	Page 07
7	Troubleshooting	Page 07
8	Care and maintenance	Page 08
9	Telefax form	Page 09

2

Tips on using the manual

We congratulate you on purchasing this device.

This manual has been written for the device user to ensure a problem-free operation, care and maintenance. Important instructions and information concerning safety and operational reliability have been highlighted.

The symbols used in the manual have the following meanings:



Working and operating processes which must be observed to the letter to exclude any risk to persons.



Working and operating processes which must be observed to the letter to avoid any damage to the device.



Technical information to which the device operator must give special attention.

The illustrations and diagrams are numbered in sequence within each chapter. Some of these illustrations have keys. References to illustrations within the text e. g. (5.1/2) have the following meaning:

5.1 = Figure 5.1

2 = Position 2 in the key to the figure.

Our service department is available at all times in case of technical problems not addressed in this manual:

Telephone	+49 (0) 22 04 / 8 39 - 0
Telefax	+49 (0) 22 04 / 8 39 - 60
Internet	www.joke.de

Safety instructions

This device has been built according to the latest technical standards and generally accepted safety regulations. Nevertheless, it can constitute danger to life and limb for operator or third parties and a hazard to the device itself or other equipment during use.

1. Only use the device if in perfect working order and for its intended purpose. You must always pay attention to the instruction manual and safety instructions therein and be aware of the risks! Repair any faults which could affect the device's safety immediately by yourself or have these repaired.

The device is designed exclusively for grinding, polishing and deburring with the tools listed and approved in the joke catalogue. Any other use will be deemed to be contrary to its intended purpose. The manufacturer cannot be held liable for any resulting damages. The risk is borne solely by the user. Correct use also includes compliance with the instruction manual and an observation of the care and maintenance conditions. Keep the instruction manual handy at the device's place of use.

2. Pay attention to and observe generally applicable statutory and otherwise binding regulations relating to accident prevention and environmental protection in addition to the information provided in the instruction manual!
3. All personnel commissioned to work on or with the device must have read this instruction manual, and particularly the safety instructions chapter, before starting work. This applies especially for personnel who only work with the device occasionally.
4. Stop the device immediately should you notice changes to the device or its operating behaviour that are relevant to its safety. Have these remedied before restarting work.
5. Do not carry out any modifications, additions or conversions to the device! This also applies to the installation and adjustment of safety equipment.
6. Spare parts must meet the technical requirements specified by the manufacturer. This can only be guaranteed with original JOKE spare parts.
7. Wear safety goggles, protective gloves and hearing protection when working with the handpiece. If noise generation (sound pressure level) at the workplace exceeds 85 dB (A), sound protection and hearing protection measures for the user are required.
8. Personnel undergoing training or in a general apprenticeship should only be allowed to work with the machine under the constant supervision of an experienced operator!
9. Restrain from any type of work that could jeopardise your safety.
10. Never aim the device at a person.
11. The device may only be used if all protective and safety equipment is in place and in proper working order.
12. Long hair or loose clothing may become entangled or drawn into the compressed-air grinder.
13. Do not leave the device unattended when switched on!

15. The compressed-air grinder must be switched off before clamping a new tool and any adjustment. In case of malfunctions immediately shut down and safeguard the device! Faults must be remedied at once.
16. Stop and secure the device immediately in the event of malfunctions! Faults must be remedied at once.
17. The construction of the compressed-air grinding machine is designed for an air pressure of 5 bars. If the device is operated with a higher air pressure, undesirable vibrations may occur that do not necessarily damage the device, but place stress on the user. The air pressure should not exceed 5 bars; otherwise damage can no longer be ruled out.
18. Use a pressure control valve that can be adjusted to 5 bars.
19. Check all lines for condensation water and contamination before starting work. The compressed air should be dry and clean. It is advisable to install a filter upstream.
20. The compressed-air grinder is not to be used near explosive substances/gases.
21. The device is not insulated against contact with electric current.
22. Accumulated compressed air may result in damage to the compressed-air grinder.
23. Always keep the compressed-air grinder such that grinding sparks cannot cause any damage.
24. Watch out with the pulsating pressure line.

4

Warranty

joke Technology GmbH warrants the correct manufacture of every joke product which is delivered in accordance with the terms of contract and delivery.

This warranty does not cover damages caused by normal wear and tear, incorrect handling, negligent use, the fitting of non-original spare parts, inadequate care and/or a failure to comply with this technical manual.



The device may only be used by appropriately trained personnel. If it is not, all warranty claims will be forfeited according to the terms of delivery.

Device identification

The series number can be found on the handle sleeve.

Operation / use /maintenance unit

Notes on operation

- The recommended air pressure for operating the compressed-air grinder is 5 bars. An increased air pressure may result in damage to the compressed-air grinder.
- The spindle must be treated particularly carefully when immobile. Under no circumstances must the spindle be knocked, since parts which are important for function will be damaged. The spindle must be treated particularly carefully when immobile. Under no circumstances must the spindle be knocked, since the high precision bearings which are important for function will be damaged.
- Pay attention to the permissible cutting speeds and the tool manufacturer's guidelines before using the tools.
- Check that the tool is firmly seated and safely tighten.



Check the maintenance unit regularly. If condensation water and dirt are present, drain the condensation water and clean the filter (refer to section on Care/Maintenance).



Wear protective goggles and hearing protection!



**Pay attention to proper handling of the device. Do not exert any pressure on the tools. The tools should only be guided over the surfaces.
Correct clamping of the tools is indispensable.**

Connecting the compressed-air grinder

1. Connect the air supply line of the pneumatic compressed-air grinder to the maintenance unit.
2. Set a pressure of max. 5 bars on the maintenance unit.
The handpiece is maintenance-free.
3. Insert the tool in the collet and tighten with the chuck key and locking pin supplied.
4. The device can be switched on and off using the rotary controller.



Oiled compressed air must be used in order to guarantee optimum function.

Tool receptacles

- The compressed-air grinder is only intended for manual use.
- The tool receptacle is designed such that tools with a round shaft \varnothing of 3 mm can be received by the collets.



See the current joke catalogue for usable, permissible tools.

Compressed-air maintenance unit and air connection



The compressed-air required in order to drive the compressed-air grinder must be supplied through a maintenance unit.

The maintenance unit must consist of the following functional units:
water and dirt separator, pressure gauge, oil mister (micromister)



Optimum function of the compressed-air grinder is guaranteed by using the joke Oiljet maintenance unit (order no. 0 004 050). Further accessories and the installation package can be found in the current joke catalogue.

The joke Oiljet maintenance unit consists of:

- Manual water separator
- Filter 25 µm
- Pressure reducer
- Micromister
- Pressure gauge
- and wall fixing.



Figure 5.1 joke Oiljet maintenance unit (Order no. 0 004 050)



See the current joke catalogue for further accessories and the installation package.

Functional principle of the oil mister

The micro oil mister guarantees an even, rapid and precisely dispensable lubrication of the hand grinder.

The oil mister is adjusted to approx. 1-2 drops per minute. Only a fraction of the falling drops are misted and partly flow back into the reservoir.

Owing to the special air supply, it is possible to reduce the size of the oil particles. The latter can be transported over long distances as micromist in the air flow. They are hardly deposited. All surfaces with which they come into contact are intensively and very uniformly wetted. An even, stable oil film forms immediately at the bearing sites, the thickness of which can be rapidly and precisely adjusted.

Setting up and connecting the maintenance unit

1. Check on the maintenance unit whether
 - the condensation-water bleed screw is closed; closing is performed by turning clockwise,
 - the pressure controller screw is open; opening is performed by turning anticlockwise
2. Fill the oil container up to the mark with joke high performance lubricant X 73012.



The oil level must not rise higher than the baffle plate of the micro oiler.

3. Connect the line of the external air supply to the maintenance unit.



Take care that the air flows through the housing in the direction indicated by the arrow.

6

Technical data

Compressed-air grinder FX 3.0	
Speed	max. 65,000 1/min
Air pressure:	max. 5 bars
Air consumption	90 litres / min
Exhaust air	backwards
Noise level:	< 75 dB (A)
Dimensions	Ø 22.5 x 150 mm
Weight	78 g
Lubrication	continuously by oil mist

Scope of supply:

Collet Ø 3.0 mm, wrench, air tube 1.5 m, ¼" connecting sleeve including filter

joke Oiljet maintenance unit	
max. volumetric flow:	1200 l/min
max. input pressure	max. 16 bars
Adjustment range	0-12 bars
Air connection	1/4"

7

Troubleshooting

Malfunction	Possible cause	Remedy
Tool does not work	Compressed-air grinder not switched on at the rotary controller.	Turn rotary controller to "ON".
	Hose line kinked.	Eliminate the kink.
	Air pressure controller on the maintenance unit not opened.	Set air pressure controller to max. 5 bars.
	Maintenance unit faulty.	Change maintenance unit.

Care

Clean the compressed-air grinder FX 3.0 if necessary with a soft brush/paintbrush or a dry cloth. Store the machine in a clean, dry place.

Maintenance

The compressed-air grinder is maintenance free.

Emptying condensate from the air filter of the maintenance unit:

1. Render the maintenance unit free of pressure. We recommend a ball cock from the current joke catalogue, which is to be mounted laterally.
2. The condensate must be bled off through the drain valve before the maximum filling level is reached. The bleed screw is to be turned clockwise ($\sim 90^\circ$) and pushed upwards.
3. Screw out the air filter and change or clean. Take care that the filter frame and the loose seal are reinstalled with their position unchanged.
4. Screw in the condensate container again and perform a functional test. After emptying and changing the filter, loosen the bleed screw and rotate anticlockwise ($\sim 90^\circ$).
5. Supply the maintenance unit with pressure.



Take care that the filter frame and the loose seal are reinstalled with their position unchanged

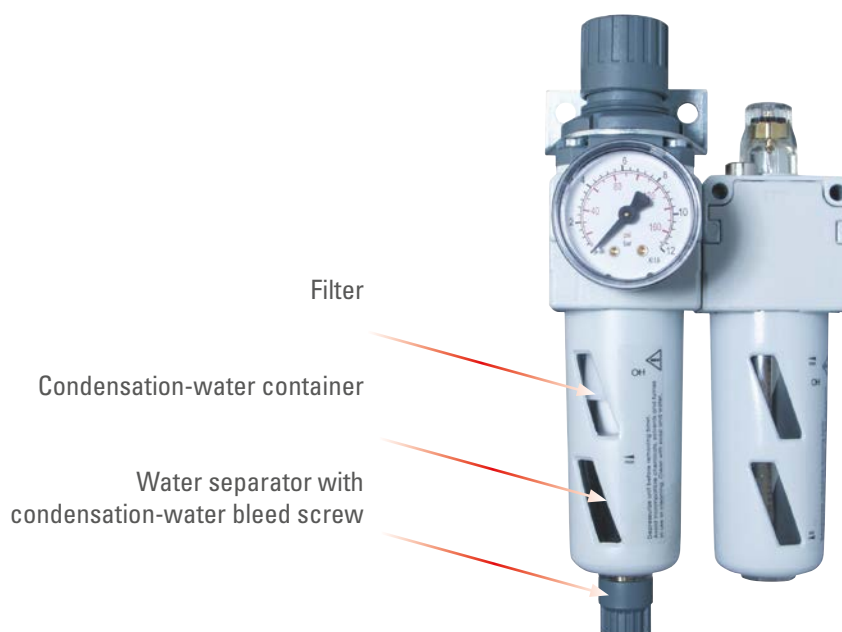


Figure 8.1 joke Oiljet maintenance unit
(Order no. 0 004 050)

To
 joke Technology GmbH
 Service Department
 Fax +49 (0) 22 04 / 8 39-60



Sender:

Company _____

Name/Department _____

Customer no. _____

Street _____

Postcode town/city _____

Please send us the spare parts drawing with the spare parts list for the following equipment:

- ☐ as a printout (see address above),
☐ by Fax,
☐ as a pdf file to my e-mail address

Compressed-air grinder FX 3.0	Order no. 0 007 705	<input type="checkbox"/>
joke Oiljet maintenance unit	Order no. 0 004 050	<input type="checkbox"/>
joke Oiljet accessories		
Ball cock ¼", 1 x ¼" internal and external thread respectively	Order no. 0 004 053	<input type="checkbox"/>
Double nipple ¼"	Order no. 1 722 246	<input type="checkbox"/>

Lubricant			
High-performance lubricant X 73012,	1.0 l litre	Order no. 0 580 601	<input type="checkbox"/>
High-performance lubricant X 73012,	1.0 litre	Order no. 0 580 602	<input type="checkbox"/>
High-performance lubricant X 73012,	5.0 litres	Order no. 0 580 603	<input type="checkbox"/>

Date

Signature



Brilliant solutions for perfect surfaces

joke Technology GmbH
Asselborner Weg 14 -16
D-51429 Bergisch Gladbach
Tel. +49 (0) 22 04 / 8 39-0
Fax +49 (0) 22 04 / 8 39-60
Email info@joke.de
Web www.joke.de