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# **Operating Instructions**



### Pneumatic Blind Stapler Type TOP SP P, TOP B P Series V04/ 1096 Light - easy to handle - compact - balanced

Pneumatic carton stapler for the fast and stable blind stapling of filled folding boxes made of corrugated cardboard. Loading capacity 120 TOP-staples

### IMPORTANT

Before the first commissioning read this manual thoroughly and completely and keep it in a safe place. Observe and follow the safety instructions and only use the machine if you are sure that you have completely understood all the instructions. Failure to comply can lead to injuries!

If you have any questions, contact the manufacturer

#### MEZGER Heftsysteme GmbH Saganer Straße 24 90475 Nürnberg Germany



### **Pneumatic Blind Stapler**

Type/description: Serial number: Year of construction:

### See the labeling on the machine

#### Preface

It is necessary to acquire the knowledge conveyed by this ORIGINAL OPERATING INSTRUCTION for a safe operation. The information is presented in brief and clear form. The chapters are sorted by numbers

#### Copyright

The copyright of this operation manual remains with MEZGER Heftsysteme GmbH

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### 1 Conformity

This machine was built in conformity with the following EU guidelines: Machinery directive 2006/42/ EG



### 2 Safety instructions

Safety instructions and important explanations, are labeled with the following pictograms. The symbols used in the operating instructions have the following meaning:

Symbol	Signal word	Meaning
	Warning notice	Warning of possible injuries to persons or possible damage to property Warning of possible defects or destruction of the machine
$\bigcirc$	Prohibition	Indicates general Prohibitions!
	Warning notice	Risk of fingers being crushed!
	Prohibition	Protect from moisture!

Read all these instructions before using the stapler and keep the safety instructions in a safe place. Safety on the well.

The operating personnel must be trained in the handling of the stapler and they must have fully read and understood the operating instruction.

To avoid injury or damage, the operator must additionally observe the company's internal safety guidelines!

In addition, we would like to refer to further national rules and safety provisions which are not contained in this manual.



Keep persons who are not instructed, especially children, away from the machine and from your work area!

If damage to the stapler is determined by the operator during production, the machine may no longer be used and must be repaired by a professional!

Only original parts may be used as spare parts!



### 3 Warranty and liability

Our "General Terms of Sale and Delivery" shall generally apply" These terms were made available to the operator by the time of contract award at the latest.

Any warranty and liability claims in the case of personal and material damage shall be excluded, if such damage occurred as a result of:

- Improper use of the tool (not in compliance with intended use).
- Non-compliance with the specification provided in the operating instructions as regards transport, storage, assembly, commissioning, operation, maintenance and setup of the equipment.
- Operation of the tool with defective safety equipment or improperly installed or nonfunctional safety and protection facilities.
- Improper monitoring of tool parts which are subject to wear and improperly executed repair work.
- Any type of manipulation of the tool.

### 4 Intended use

The machine is **only** to be used as intended. It may only be used, operated and maintained according to the information contained in this operating manual.

Only materials and staples defined for this machine may be used, as this could otherwise lead to malfunctions. The stapling machine may only be used as specifically described in this operating manual. Any other application is only permitted after a prior written approval from the manufacturer.

Any other usage is not regarded as intended use and can lead to damage to persons or property. The operator of the machine is solely liable for damages deriving from any non-intended use.

The operator must ensure that the stapling machine is only operated as intended and that all types of hazards to life and health for the user or third parties are avoided. In addition, a compliance with the accident prevention regulations and other safety regulations and laws must be observed.



If the stapler is abused for purposes other than the specified usage scenarios, this can lead to accidents



#### 4.1 Application area/designated use

Pneumatic blind stapler TOP SP P and TOP B P are used for stapling filled folding boxes made of single and double corrugated cardboard. The TOP blind staplers are also available as manually operated machines (single and two-handed). The TOP staple to be used is selected for the respective cardboard quality. The staple should be bent within and the lowest cardboard layer without puncturing it. This prevents a damaging of the packaged goods. If there is no danger of damaging the packaged goods it is also possible to perform a stapling through all layers, meaning that the staple is bent over outside of the lowest cardboard layer.

**TOP SP P** (TOP SPECIAL - labeled on the machine with TOP SP) is primarily used for applications involving double corrugated cardboard. The correct staple for this is the TOP SP 18. But to be able to also staple single corrugated cardboard, TOP SP 11 staples can be used without making changes to the machine.

**TOP B P** (labeled on the machine with TOP B) is primarily used for applications involving single corrugated cardboard. For this, the following staples varieties with different leg lengths are available: TOP B 10, TOP B 12.

But to be able to also staple double corrugated cardboard, TOP SP 15 staples can be used without making changes to the machine.

With the TOP blind stapler a bottom stapling of empty boxes is also possible. The machine is hereby introduced into the empty box and stapled from the inside outwards, or the empty carton is placed over a buck and stapled from the outside inwards. After the empty carton is filled and the top stapled, the bottom side can also be stapled just like the top after turning it over.

#### 4.2 Ambient conditions

The machine should be operated at room temperature, protected against environmental influences. Use within an explosive atmosphere is permitted only with prior consent and written permission of the manufacturer.

#### 4.3 Operating personnel

#### Only trained and knowledgeable staff is permitted to operate the machine.

<u>Note:</u> Competent, is someone who based on his training and experience has sufficient knowledge in the field of stapling machines and is familiar with the relevant government industrial safety regulations, accident prevention regulations and the generally accepted rules of technology (e.g. DIN standards, VDE regulations) to the extent that he can assess the secure state of machines and in particular the state of stapling machines.

### 5 Transport and initial commissioning

The stapling machine is delivered completely assembled and can be transported as a whole. Transportation equipment can also be used for transporting the machine.

Before the stapler is put into operation, please read all instructions in this manual. This stapling machine may only be put into operation by trained personnel.



To make the stapler ready for operation after delivery, the following tasks must be carried out:

- Check the equipment for completeness
- Insert the staples.
- Connect the pressurized air and set it to 4 (min.) 6 bar (max.)

The stapler is delivered ready for operation.

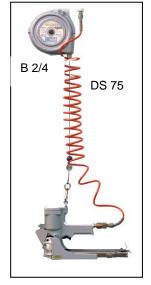


When the stapling machine is ready for operation, it is prohibited to touch the stapling ejection opening or the running stapler! DANGER OFINJURY!



Oxygen or combustible gases may not be used as a propulsion source for pressure driven machines.

The machine should only be operated with an interstaged maintenance unit (filter, water extractor, oil vaporizer, manometer; not contained within the scope of delivery) since dirt and water in the pressurized air can lead to damages. We recommend suspending the stapling machine on a balancer (weight equalization), for example, the B 2/4. A spiral compressed air hose DS 75 is used to supply the compressed air.



### 6 Functionality description

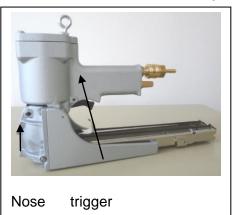
The machine is placed on the cardboard box to be stapled and then triggered. The trigger time should not be less than 0.5 seconds, since this could otherwise lead to malfunctions. The staple is hereby ejected from the staple opening and penetrates the box, where it is bent and anchored.

The machine may only be lifted from the cardboard box after the staple has been bent in the box meaning that

the staple has completely been ejected from the machine, since this could otherwise lead to malfunctions.

The stapling will be more rigid if the machine is pressed onto the cardboard box harder. The nose and the two markings on the head piece to serve as a guide and mark the ejection point of the staple. The machine should be pressed onto the cardboard box in a slightly top-heavy way.

The penetration depth of the staples is determined by the respective staple type. It is not intended for adjustments to be made on the machine.





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### USER GUIDE Pneumatic Blind Stapler TOP SP P, TOP B P

### Fundamental notes on the work technique and handling

Before the operator starts to use the machine he must acquire information about the application scenario and check if the machine is suitable for it. Carefully follow all safety instructions!



Check to make sure that the stapling machines are not damaged and that they can be operated in a safe way.

The operating safety of the stapling machine must be checked before starting the work and constantly rechecked!

Safety devices may not be bypassed or rendered ineffective!

Keep your work area in order.

Disorder in the work area can cause accidents.

- Use only ORIGINAL TOP staples that are made specifically for this quality equipment. Third-party staples can cause considerable damage and malfunctions.
- Never perform a stapling without cardboard. Only lift the machine from the cardboard box after the stapling process has been completed.
- Do not staple on a hard underlay.
- Should a staple failure arise, correct it immediately and do not trigger any further stapling.
- Shut down the machine after use. If possible, the TOP blind stapler should be suspended over the packaging center. Available accessories:

B 2/4 Balancer (weight equalization) with a swivelling load hook

DS DS 75 spiral compressed air hose with an extended length of 7.5 m

W/EINH maintenance unit consisting of a pressure regulator, water separator and an oil vaporizer

• Periodically clean the cardboard dust from the TOP blind stapler - preferably with a blowgun.

### 8 Decommissioning

If the unit is not used for a prolonged period of time, disconnect the air supply and extract the staples. Notice of residual risks



Protect the machine from moisture! Do not operate the machine in a humid environment! Only operate the machine within buildings!

Compressed air connections should be checked regularly.



When working on pressurized air connections and hoses the stapler must be depressurized.



#### 9 Maintenance and care

The stapling machine does not require a great deal of care, but should be cleaned and maintained on a regular basis. Soiling should be removed directly by the operator after the machining processes.

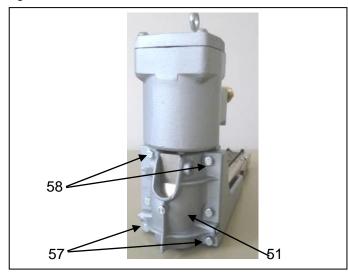


## Any alterations to the stapling machine especially to the safety equipment - are prohibited!

Before the start of all major maintenance and cleaning, all safety precautions must be taken and the pressurized air supply must be switched off and disconnected.

The following work processes/inspections should be performed by knowledgeable personnel on a regular basis:

- Regular cleaning of the stapling machine
- Regular oiling of the movable parts (no graphite oil!) on a weekly basis
- Check the maintenance unit for condensation. If necessary remove the condensation.
- The maintenance unit should be set to 1 drop of oil per 30 stapling cycles. (1/8 turn)
- In case of sluggishness or blockage of the driver, loosen the screws (57 and 58) on the head piece (51) thus releasing any possibly present stress in head-piece and then tighten these screws firmly again.



• Cleaning of cardboard dust

#### Only ORIGINAL spare parts may be used. (see "spare parts list") Failure to comply will void any guarantee claim and exclude any liability!

Only original spare parts are subjected to our quality control. To ensure a safe and reliable operation, only spare parts from the manufacturer may be used.

All technical equipment, especially the safety equipment, must be inspected by professional staff after a modification or repair.



#### 9.1 Reloading of TOP staples

Pull the transport puck (9) back and upwards until it snaps in. After inserting the 3 staple strips (120 staples) gently press down the transport puck (excessive force will cause a rupture of the transport bands and a breaking of the staple strips) and bring it into a tensioned position.



### **10** Error detection



During any kind of defect, the machine is to be shut down and separated from the pressurized air supply until the flawless operation is ensured again. Please do not try to dismantle or repair the machine.

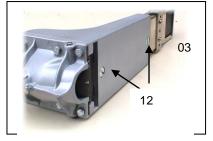
#### 10.1 Removing jammed staples

If there is a malfunction or staples are jammed proceed as described in the following.



In the event of a malfunction, which is more extensive than just some jammed staples, please contact us. The machine will be examined by our specialists and the malfunction will be remedied.

- Interrupt the air supply.
- Remove any staples still present in the staple repository.
- Remove the two screws (12) and extract the staple repository (03)
- Remove <u>all</u> the staples from the unit and clean the machine from dirt and debris.
- After the staples have been removed, the repository is to be inserted again.
- Reconnect the air supply.

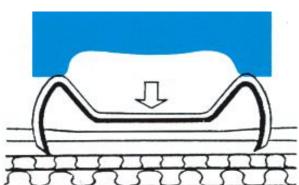


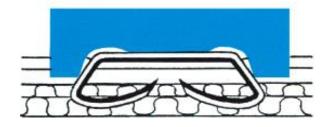


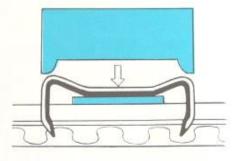
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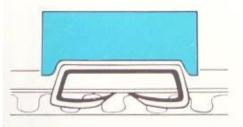
### 11 Technical Data

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Machine:	TOP SP P, TOP B P	
Air pressure during the stapling process:	4 to 6 bar, cylinder max. 7 bar	
Air consumption during the stapling:	0.48-0.72 NL/stapling	
Stapling speed	approx. 0.2 s/stapling	
Weight without the staples	approx. 2.9 kg	
Length x Width x Height	350mm x 85 mm x 188 mm	]
Air supply connection:	6mm = ¼"	
Staple for TOP SP P	TOP SP 11, TOP SP 18	
Staple for TOP B P	TOP B 10, 12 und TOP B 15	
Capacity:	120 staples	]
Noise emission:	< 70 dB(A)	
1.1 Versions		
Blind stapler TOP SP P	for staples TOP SP 11 and TOP SP 18	
Blind stapler TOP B P	for staples TOP B 10, 12 and 15	
TOP SPECIAL	TOP B	











### 12 Service

#### Repairs performed by:

#### MEZGER Heftsysteme GmbH Saganer Straße 24 90475 Nürnberg Germany

or

authorized professional companies

Damages which are caused in particular by natural wear and tear, overloading, misuse or damage caused by the user or other use contrary to the operating instructions will be excluded from the warranty.

Keep the operating instructions, safety instructions, parts list and proof of purchase in a safe place.