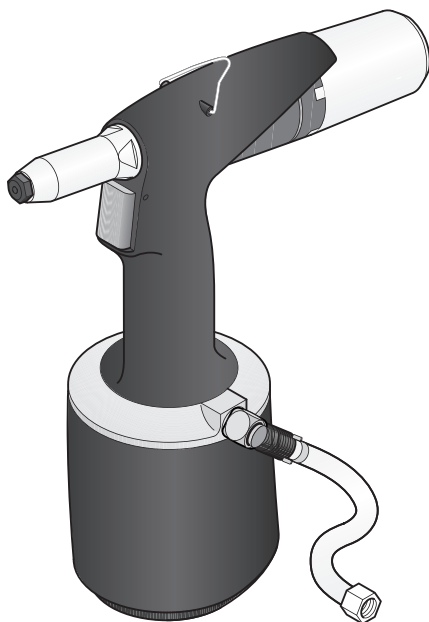


EZM1000



EZM2000

**Manual hydraulic / pneumatic
blind riveting tools**

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1 General

1.1 This manual

This manual describes the daily use of the tools. Carefully read this manual. Every user must be acquainted with the contents of this manual. Strictly follow the instructions in this manual. Always carry out the activities in the correct order. Keep this manual at a fixed place. If the manual gets lost, you can download it from www.masterfix.com.

1.2. Icons in this manual

The following icons and symbols have been used in this manual:



CAUTION!
Procedures requiring extra attention.



Read the manual



Use safety goggles



Use hearing protection



Use safety gloves



Use spanner



Manometer

1.3 Discarding and the environment



Discarded tools are to be disposed of in accordance with the local regulations.

1.4 Service and maintenance

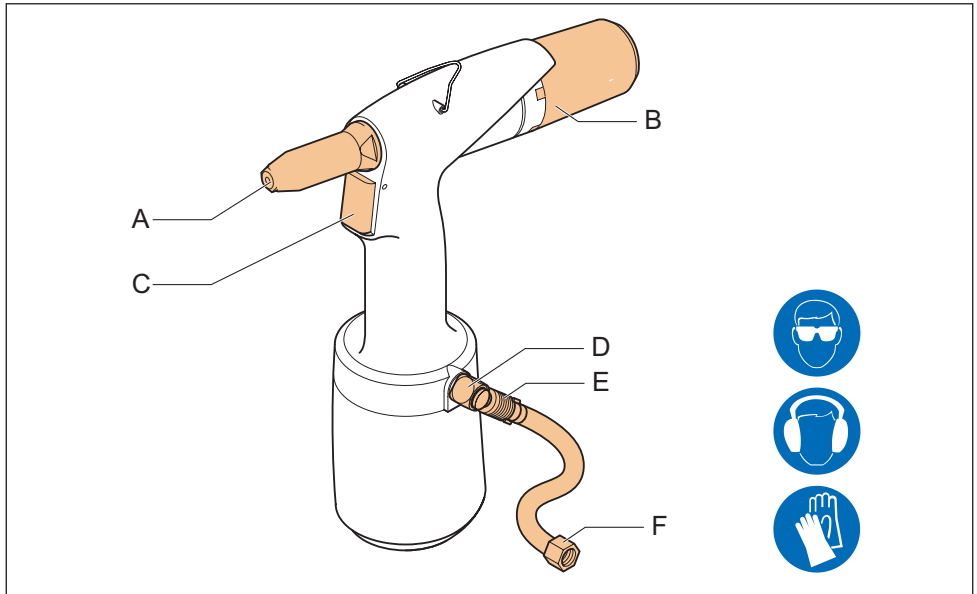
Masterfix Products bv does not accept any liability for damage that results from non-observance of the mentioned safety instructions (EEC directive 85/374).

1.5 Guarantee conditions

See the Masterfix Products bv guarantee conditions attached.

2 Safety

2.1 Safety instructions



A Nose piece/front sleeve

B Mandrel collector

C Trigger

D Safety valve

E Air supply closing valve

F Air connection

2.2 Persons

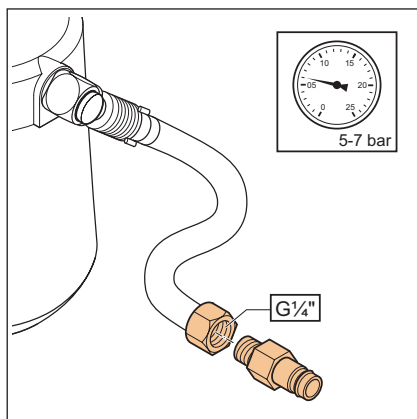
- Use safety goggles. This also applies to persons in the immediate surroundings.
- Use hearing protection when the sound level exceeds 85 dB(A).
- Use safety gloves, certain blind rivets can become very warm at some places.
- Keep your fingers away from the front when connecting the compressed air.
- Do not look straight into the tool (front and rear).
- Never direct the tool at persons.

2.3 Work environment

- Keep the work environment clean and neat.
- Use dry, filtered and with anti-corrosive oil lubricated air. If not available, put 0.1 ml (approximately 5 drops) of anti-corrosive lubricating oil in air connection of tool three times each operating day.
- Work in a frost-free environment.
- The connection to the tools is G $\frac{1}{4}$ ".
A connection nipple has not been included.
Provide an appropriate solution yourself.



Set a constant air pressure to 5 - 7 bars (maximum 7 bars).



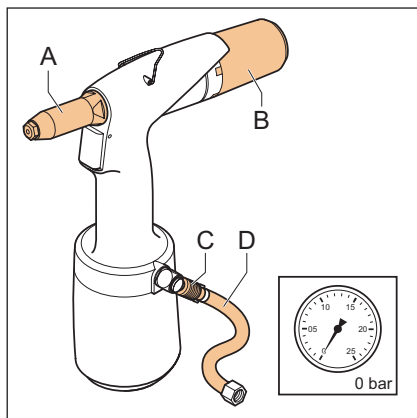
2.4 Tools



Never use the tools

- when the nose piece/front sleeve (A) is missing;
- when the mandrel collector (B) has not been positioned

- Check the tools for damage before connecting the air pressure.
- Keep the tools in an optimum condition.
- Switch off the closing valve (C) when the tools are not used.
- Make sure that the flexible connection hose (D) is not pressurised when disconnecting.
- Do not modify the tools in any way.
- Only use the device for appropriate purposes.

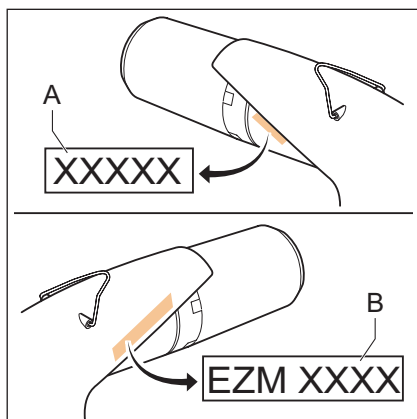


2.5 Serial number

This is the place of the serial number (A) of the tools.

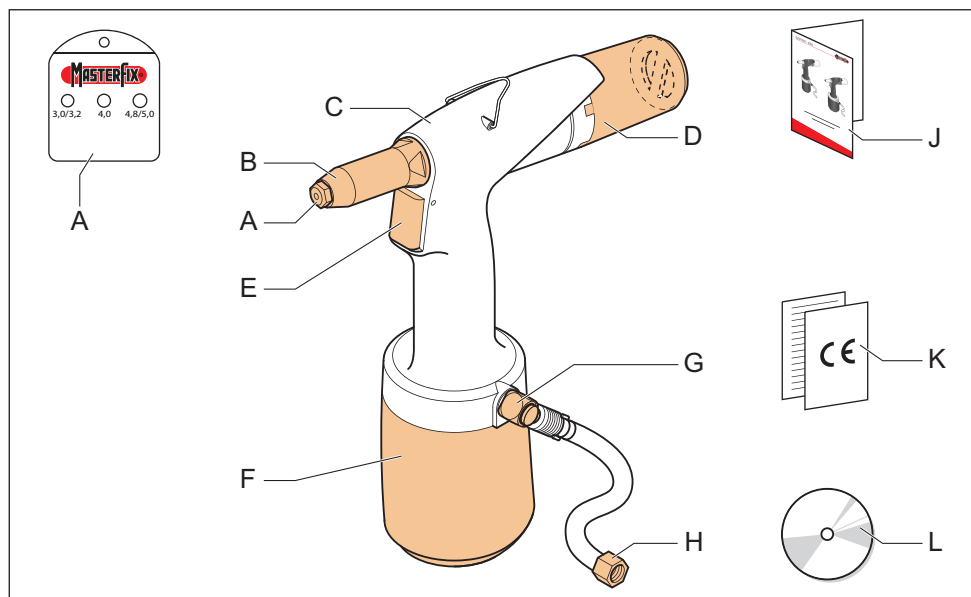
2.6 Type identification

This is the place of the type identification (B) of the tools.



3 Main components

3.1 Components



A Nose pieces**

B Front sleeve

C Hydraulic body

D Mandrel collector

E Trigger

F Pneumatic body

G Safety valve

H Air connection

J Manual

K CE and guarantee form

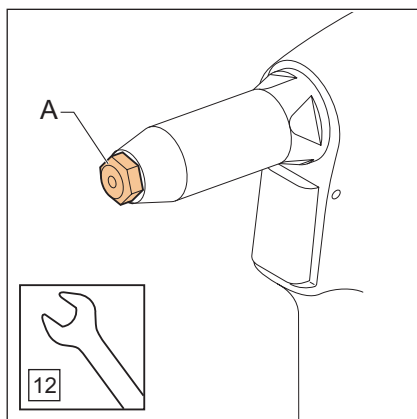
L CD with manual in various languages

3.2 Nose pieces

The delivered box contains various nose pieces.

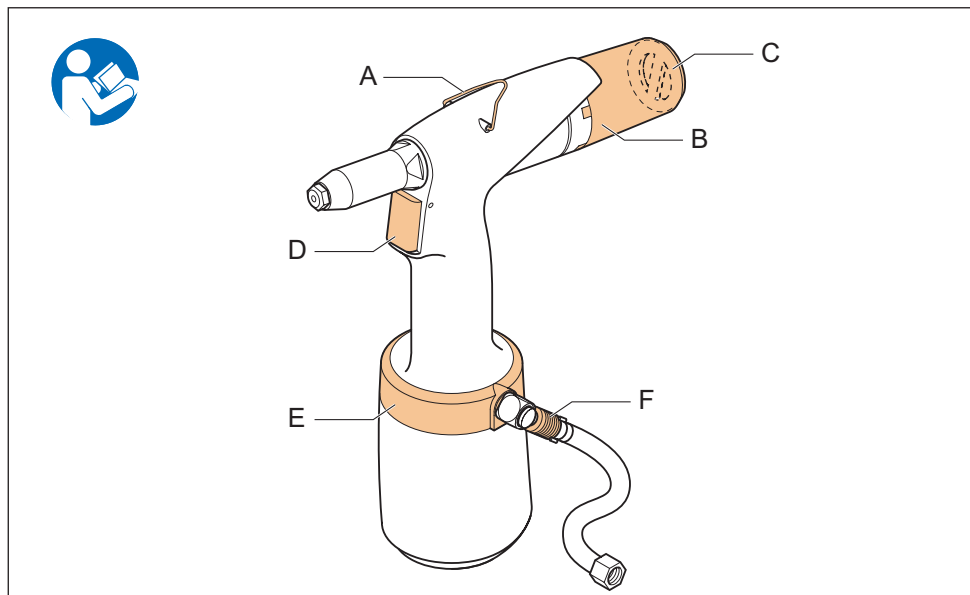
** EZM 1000: 3.0 – 5.0 mm

** EZM 2000: 4.0 – 6.4 mm



4 Operation

4.1 Controls



A Bracket

B Mandrel collector

C Air outlet

D Trigger

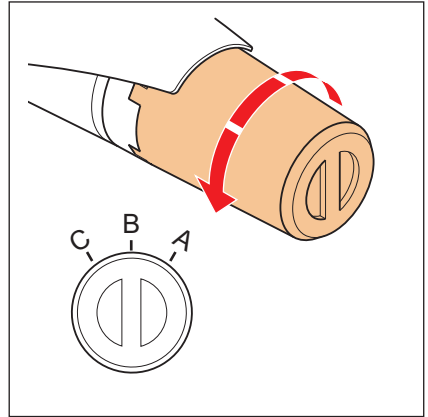
E 360° Revolvable air supply unit

F Air supply closing valve

4.2 Mandrel collector

The purpose of the mandrel collector is to collect the rest mandrel. The collector can be placed in three positions.

- A Position/remove.
- B Lock – without extraction. Tilting the tools will make sure that the mandrel will end up in the collector.
- C Lock – with extraction. The rest mandrel is automatically blown into the collector.

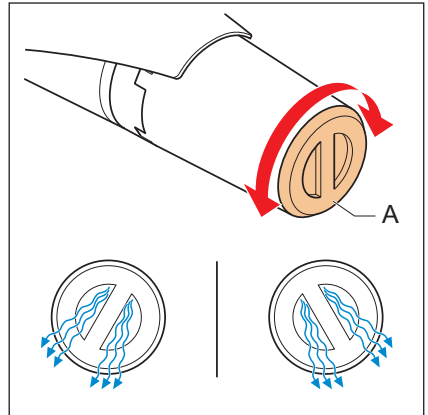


4.3 Revolvable air outlet

The escaping airflow can be set using the revolvable air outlet (A) such, that people experience a minimum of discomfort during work.

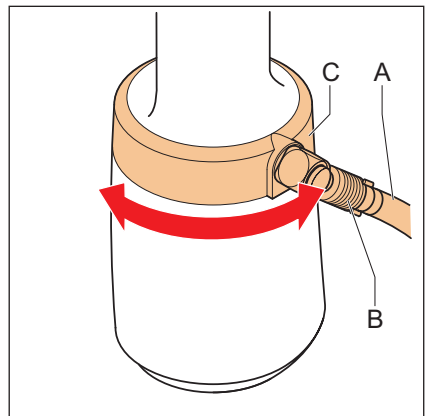


Do not remove this air outlet from the mandrel collector.

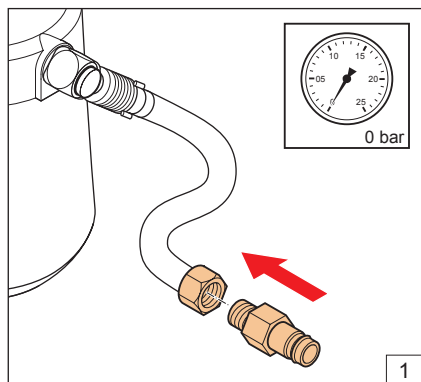


4.4 360° Revolvable air supply unit

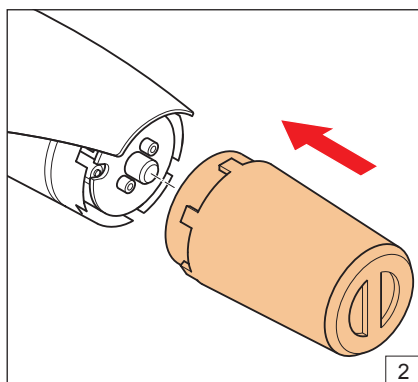
When the air hose (A) causes discomfort during work, turn off closing valve (B). After this the 360° revolvable unit (C) can be turned into any required position.



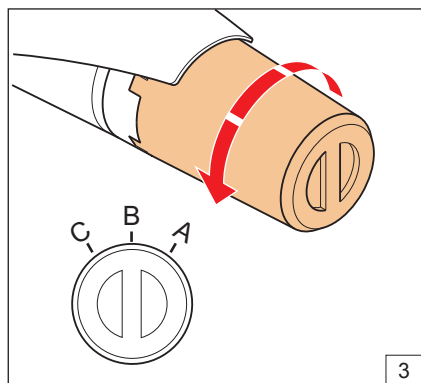
5 Use



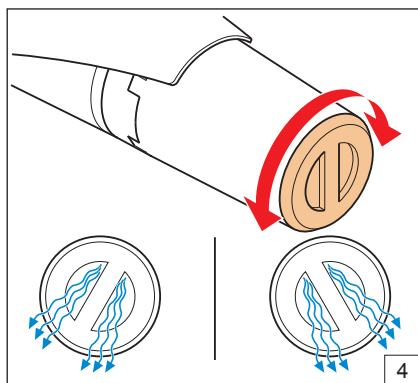
Position the nipple (G1/4").



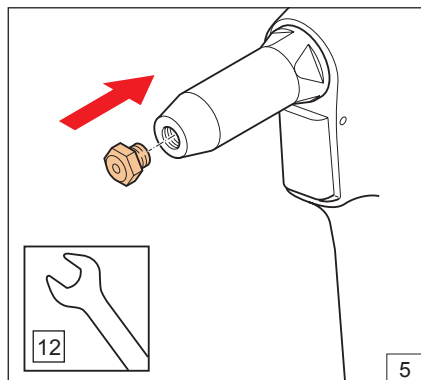
Position the mandrel collector.



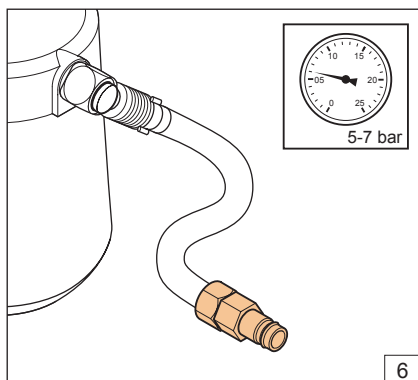
Set the mandrel collector (see 4.2).



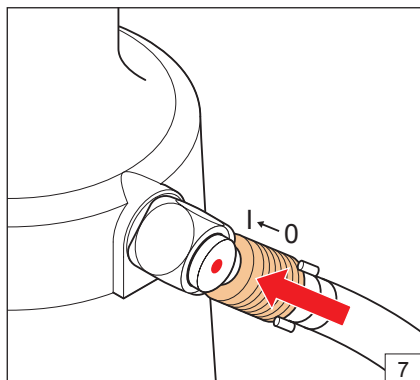
Set the revolvable air outlet (see 4.3).



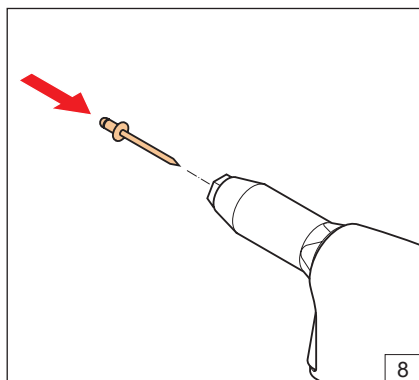
Mount the correct nose piece.



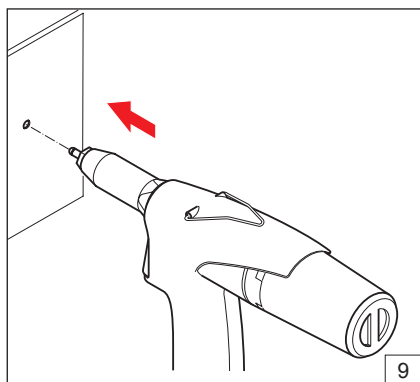
Set the correct air pressure (see 2.3).



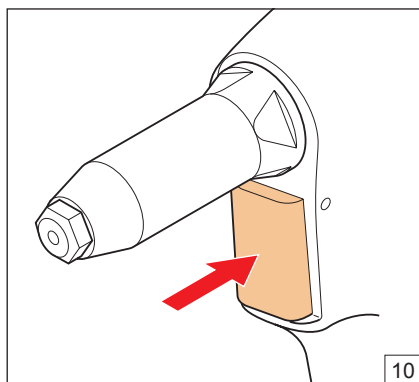
Turn on the closing valve.



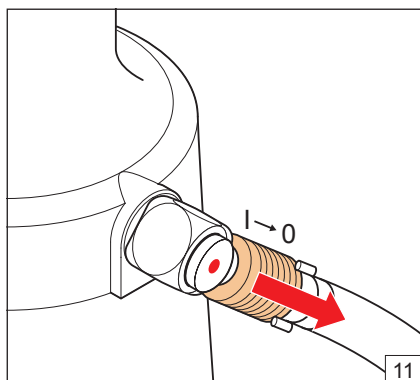
Position the blind rivet.



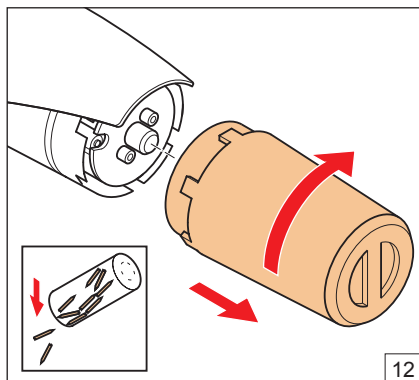
Position the tools.



Press the trigger.



Turn off the closing valve.



Empty the mandrel collector after use.

6 Maintenance



Use safety goggles



Use hearing protection



Use safety gloves

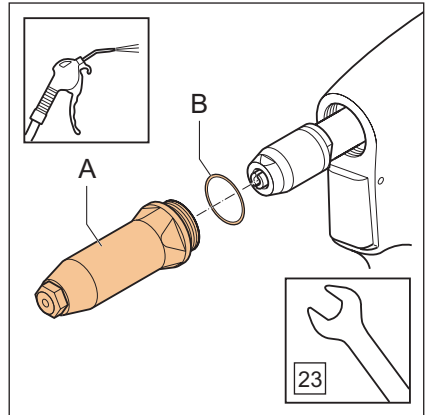
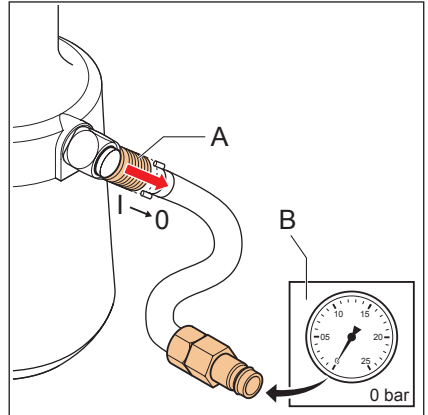
6.1 Front sleeve

Turn off the closing valve (A) and disconnect the air supply (B).

- Remove the front sleeve (A).
- Pay attention to the o-ring (B).



Clean the inside using an air blow gun.



6.2 Clamping jaws

Remove the front sleeve, see 6.1.

Remove the clamping sleeve (A) and the Teflon ring (B), the 2 clamping jaws (C) and the jaw pusher (D).

Clean the clamping jaws and the jaw pusher or replace them.



Make sure that the spanner does not slip off the locking nut (E). This may damage the hydraulic piston rod (F).



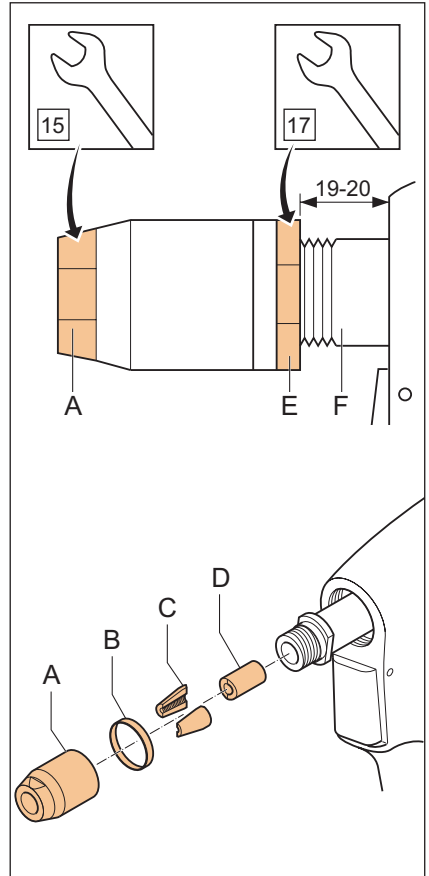
Mounting is done in reverse order.



When mounting, lightly spray the inside of the clamping sleeve with Teflon spray.



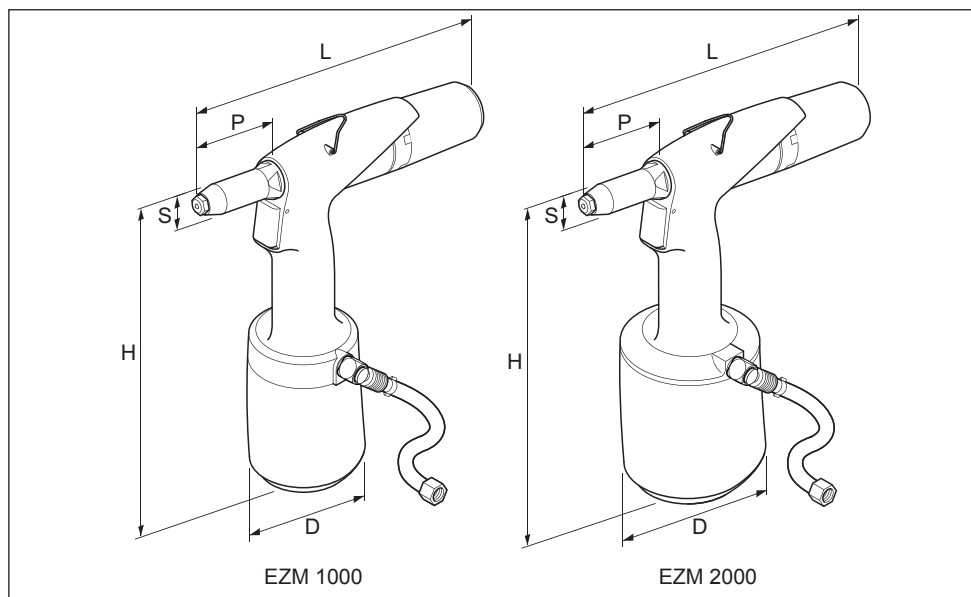
Make sure that the locking nut is positioned between 19-20 mm from the hydraulic body.



7 Trouble shooting

Problem	Cause	Corrective action
The tool does not work	The tool has not been connected to the air connection The air supply closing valve is still closed There is insufficient air pressure	Connect the tool to the air connection Open the air supply closing valve Use the correct air pressure 5-7 bar
Air is coming out of the safety valve	The air pressure is too high	Use the correct air pressure 5-7 bar
There is no or insufficient extraction	The extraction has not been turned on There is insufficient air pressure The mandrel collector is full The tool is blocked by rest mandrels	Check the position of the mandrel collector Use the correct air pressure 5-7 bar Empty the mandrel collector Remove the rest mandrel
The trigger does not work	There is insufficient air pressure	Use the correct air pressure 5-7 bar
The blind rivet cannot be placed into the nose piece	The incorrect nose piece has been mounted The tool is blocked by rest mandrels	Mount the correct nose piece Remove the rest mandrel
The blind rivet is not set correctly	Contaminated or worn clamping jaws There is insufficient air pressure The capacity of the tool has been exceeded	Clear or replace the clamping jaws Use the correct air pressure Use the correct tool
The rest mandrel does not release from the nose piece	The incorrect nose piece has been mounted The tool is blocked by rest mandrels	Mount the correct nose piece Remove the rest mandrel
During setting the rivet mandrel does not break	There is insufficient air pressure The capacity of the tool has been exceeded	Use the correct air pressure Use the correct tool
The rest mandrel is not extracted into the mandrel collector	The incorrect nose piece has been mounted The tool is blocked by rest mandrels The mandrel collector is full	Mount the correct nose piece Remove the rest mandrel Empty the mandrel collector
The air supply unit cannot be turned 360°	The tool is still under air pressure	Close the air supply closing valve and depressurize the tool by turning on the extraction or by operating the trigger
The tool does not perform well consistently		Contact a service centre

8 Technical data



	EZM 1000	EZM 2000
H	264 mm	275 mm
L	272 mm	272 mm
ø D	102 mm	125 mm
P	70 mm	70 mm
ø S	23 mm	23 mm
Weight	1,25 kg	1,65 kg
Air pressure	5-7 bars	5-7 bars
Pull force (6 bars)	7.3 kN	12.5 kN
Air consumption (per stroke)	1.5 l	2.0 l
Stroke	17 mm	21 mm
Capacity (standard blind rivet)	ø 3.0 – 5.0 mm (stainless steel)	ø 4.0 – 6.4 mm (stainless steel)

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