EZM4000

Hydraulic pneumatic blind rivet nut tool

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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 safely goggles

Use hearing protection

Use safety gloves

Manometer

Magnetic field - may influence operation or damage implants/devices.

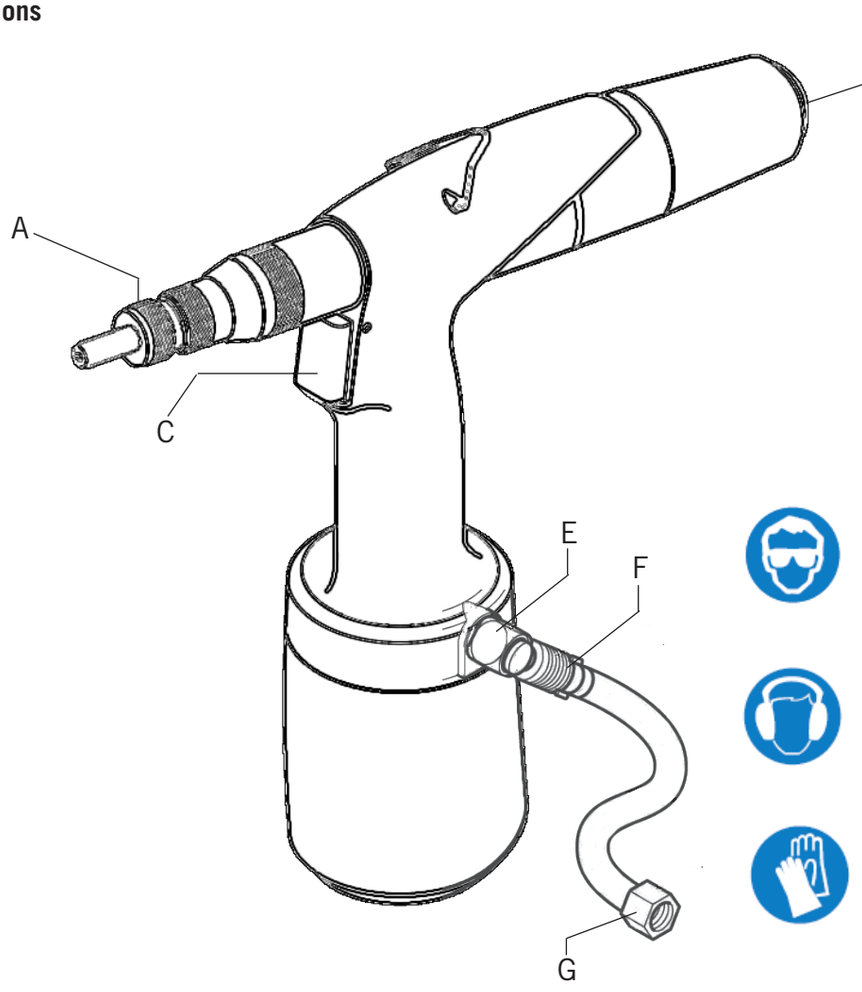
Should not be operated by people wearing electronic implants e.g. pacemakers.

1.3 Discarding and the environment

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

2. Safety

2.1 Safety instructions



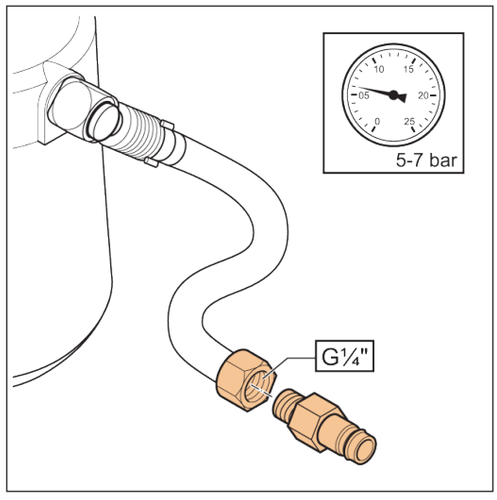
A	Mandrel/anvil	E	Safety valve
C	Trigger	F	Air supply closing valve
D	Release button	G	Air connection

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.
- Keep your fingers away from the front when connecting the compressed air.
- Never direct the tool at persons.

2.3 Work environment

- Keep the work environment clean and neat.
- Use dry, filtered and with anti-corrosive oillubricated 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 G¼“. A connection nipple has not been included. Provide an appropriate solution yourself.

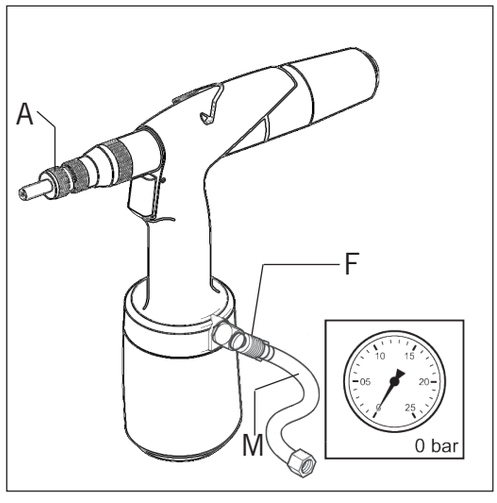


Set a constant air pressure to 5 - 7 bars (maximum 7 bars).

2.4 Tools

Never use the tools
- when the anvil (A) is missing;

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

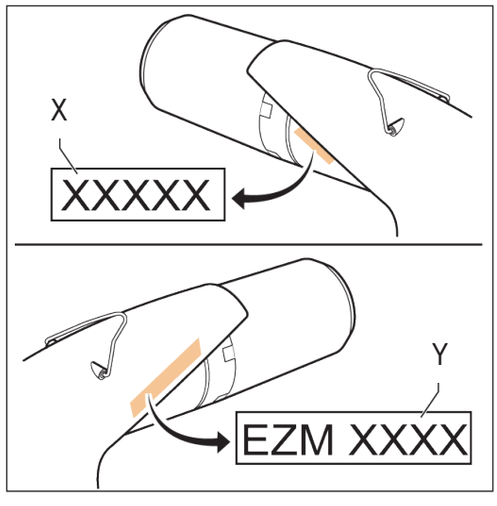


2.5 Serial number

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

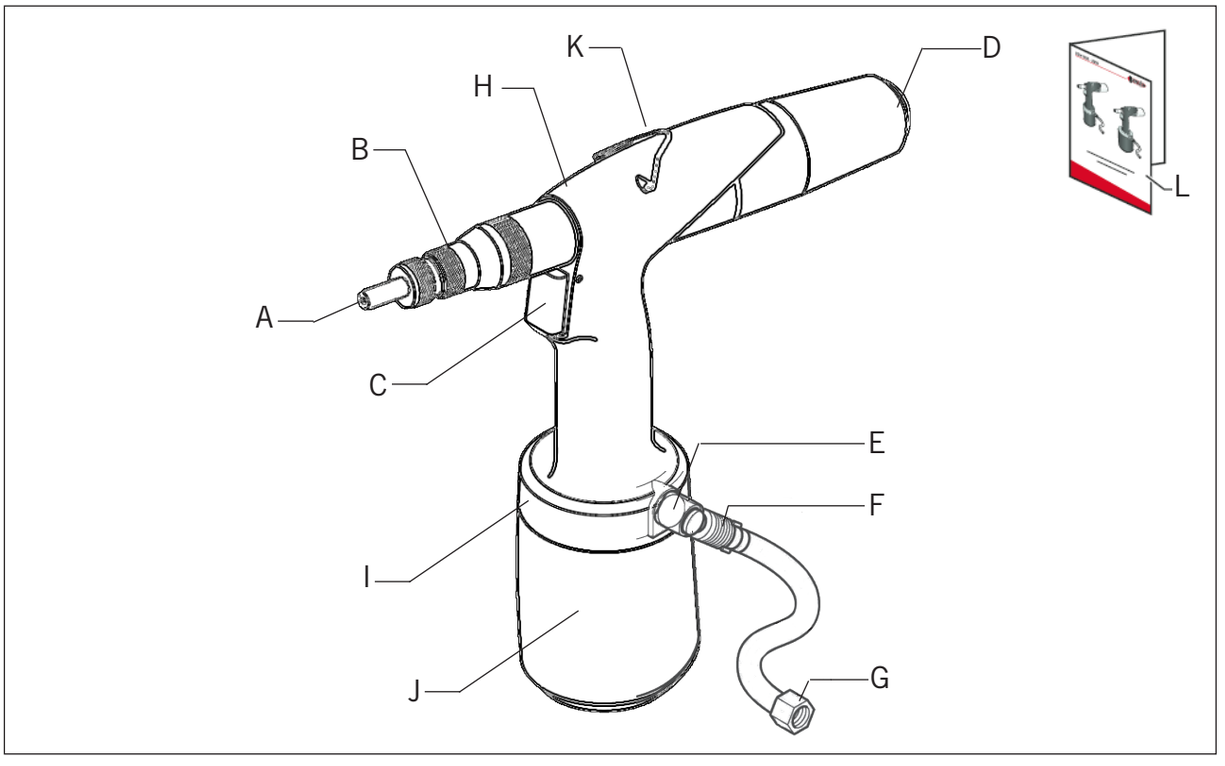
2.6 Type identification

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



3. Main components

3.1 Components



A	Mandrel/Anvil	G	Air connection
B	Stroke indicator	H	Hydraulic body
C	Trigger	I	360° revolvable air supply unit
D	Release button	J	Pneumatic body
E	Safety valve	K	Bracket
F	Air supply closing valve	L	Manual

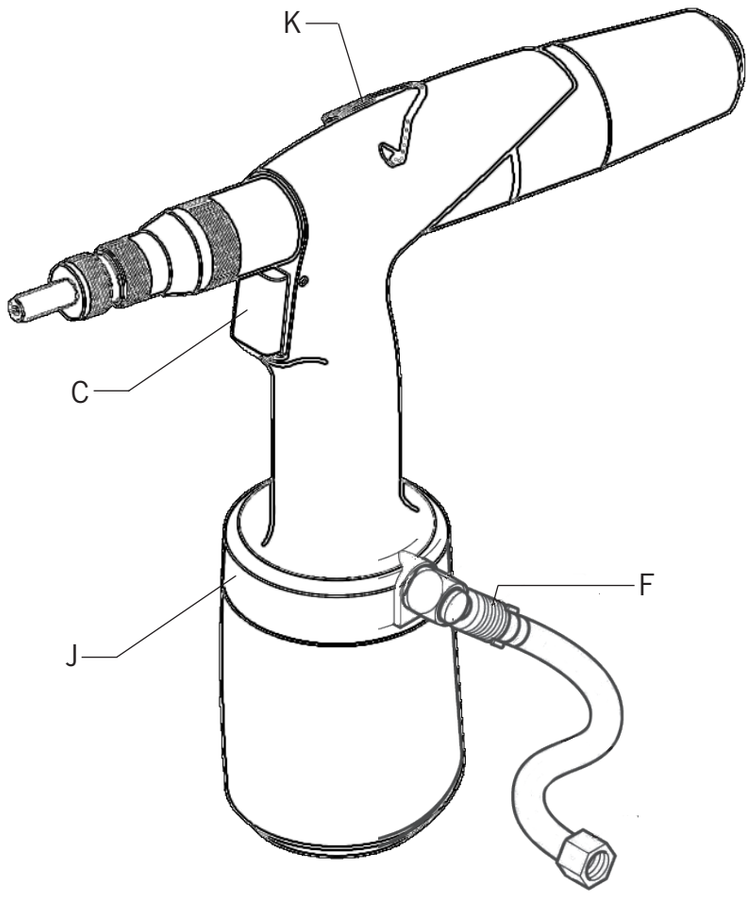
3.2 Mandrels/Anvils .

The delivered box contains mandrels and anvils M4 - M8.

M3-M10-M12 mandrels and anvils are available seperately.

4. Operation

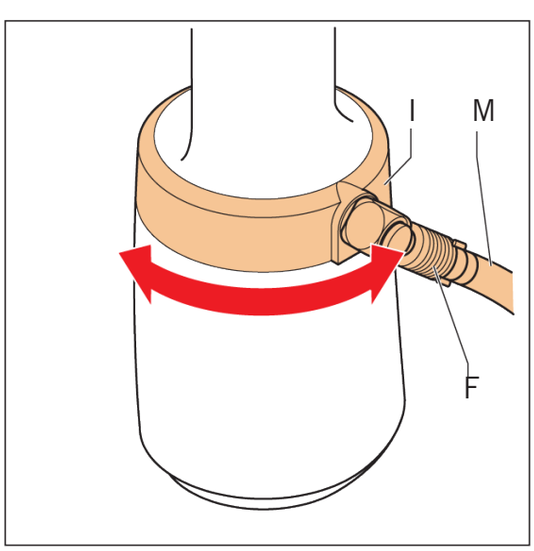
4.1 Controls



C	Trigger	I	360° revolvable air supply unit
F	Air supply closing valve	K	Bracket

4.2 360° Revolvable air supply unit

When the air hose (M) obstructs work during use, turn off closing valve (F). The 360° revolvable air supply unit (I) can then be rotated to a more suitable position.



4.3 Setting tool stroke:

To set the stroke turn the stroke indicator [see fig. 3.1-B), this shows stoke value. Set the stroke according the diagrams below.

- Maximum stroke is available when the stroke indicator is turned clockwise until it locks, see diagram below.

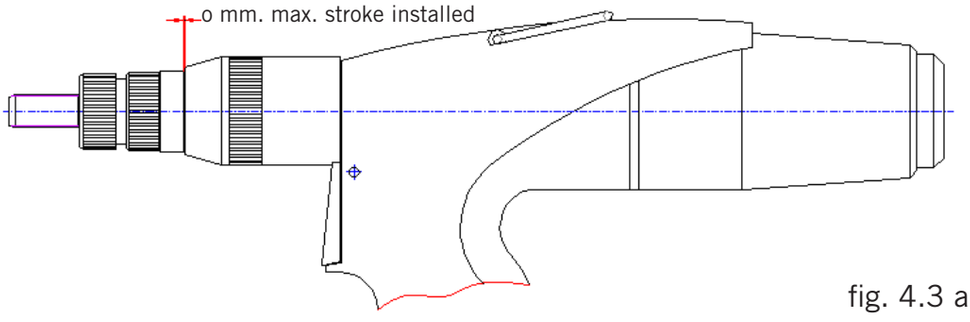


fig. 4.3 a

- Minimum stroke is achieved by turning stroke indicator anti clockwise until the last scale line is covered. see diagram below.

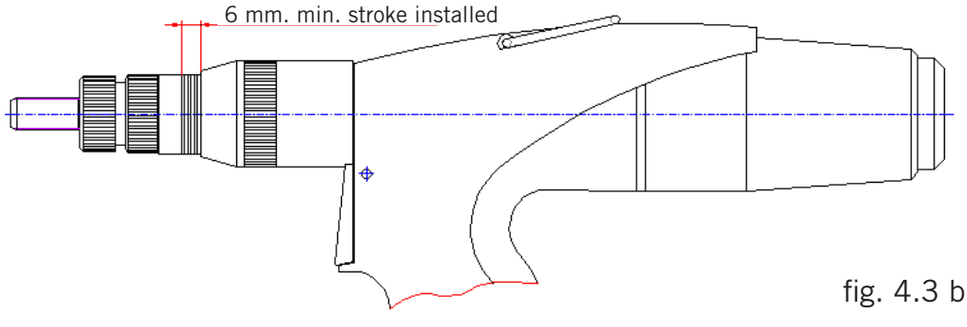
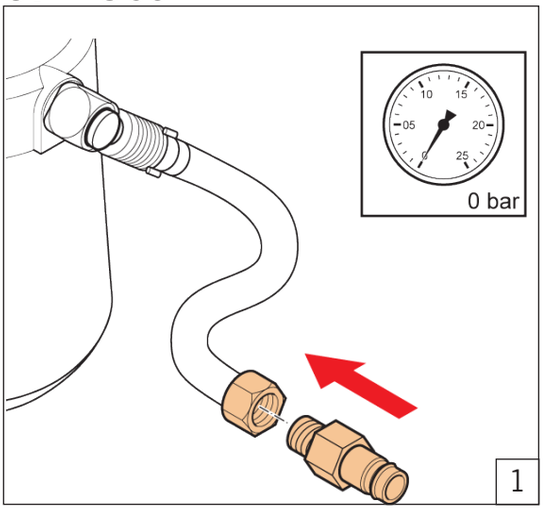
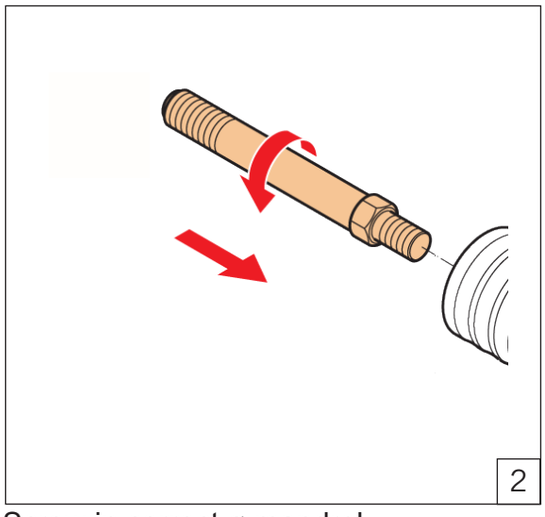


fig. 4.3 b

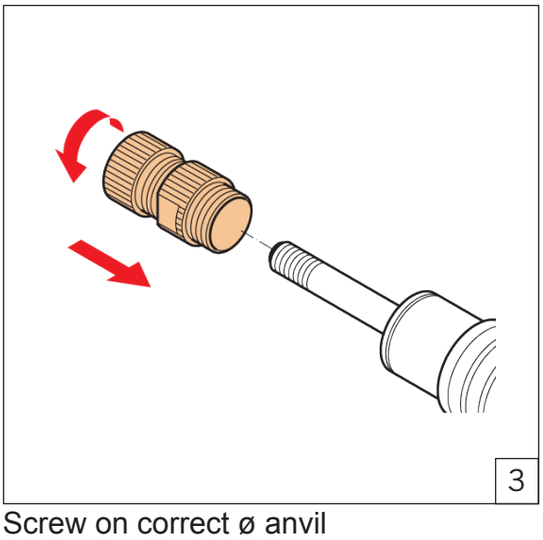
5. Use



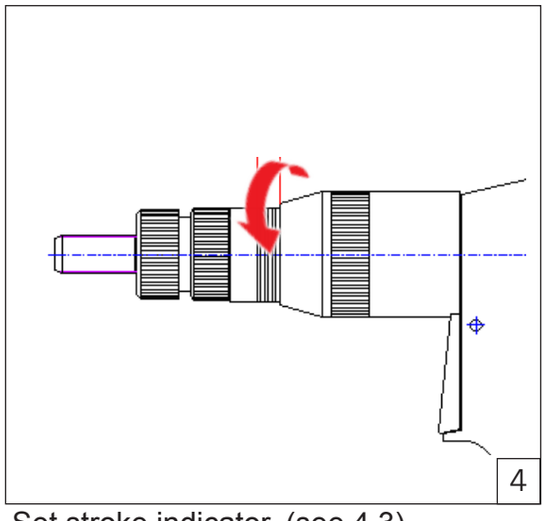
Position the nipple (G 1/4”)



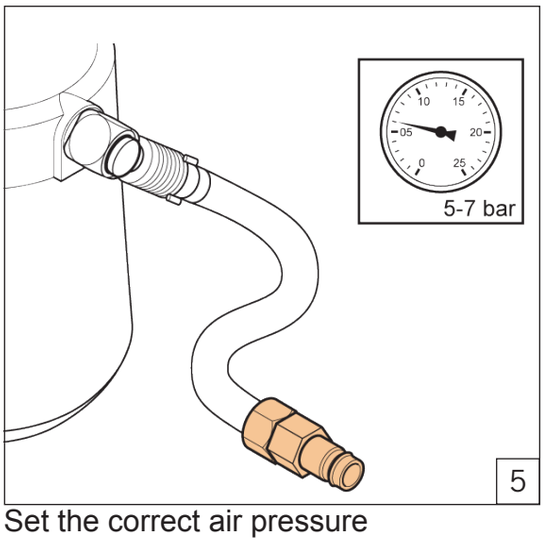
Screw in correct ø mandrel



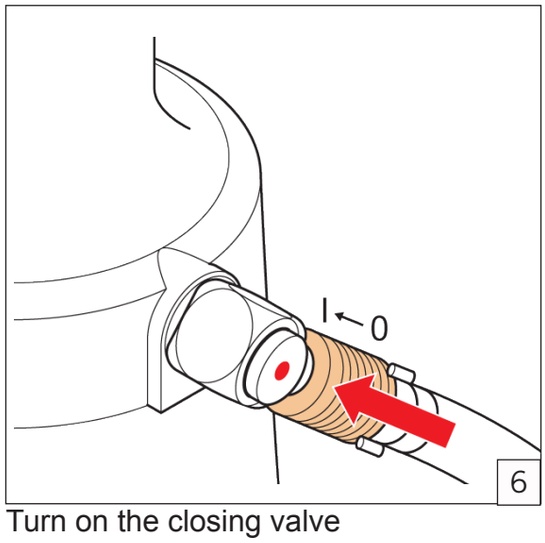
Screw on correct ø anvil



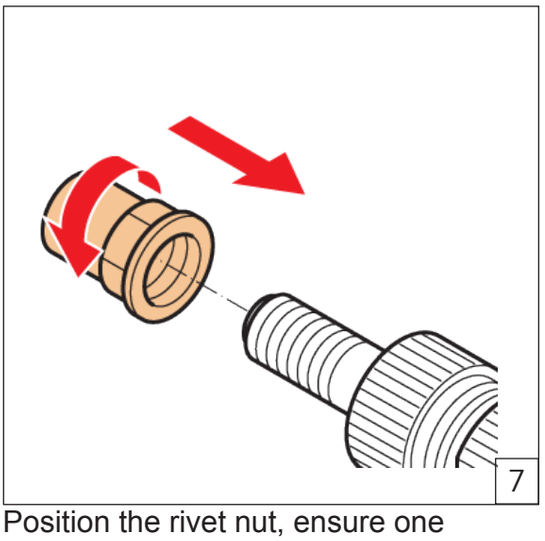
Set stroke indicator, (see 4.3)



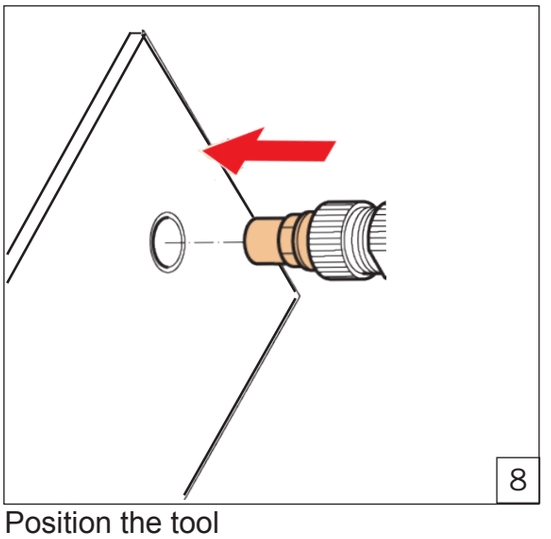
Set the correct air pressure



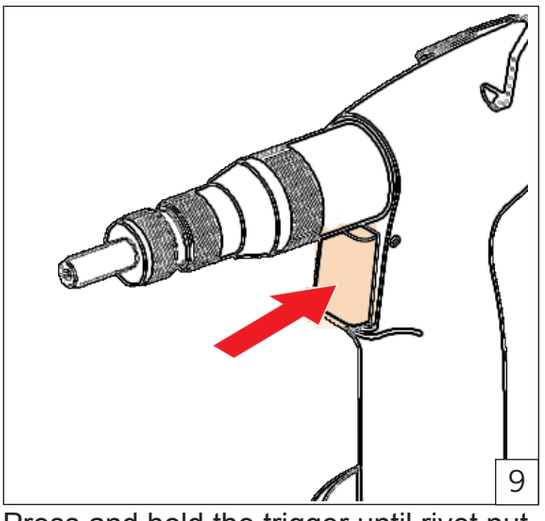
Turn on the closing valve



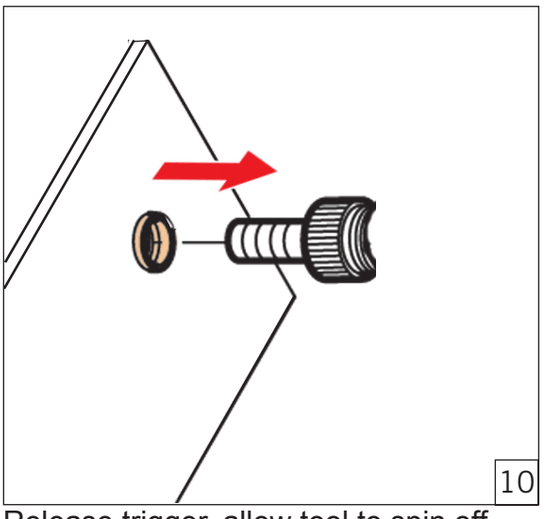
Position the rivet nut, ensure one mandrel thread is exposed



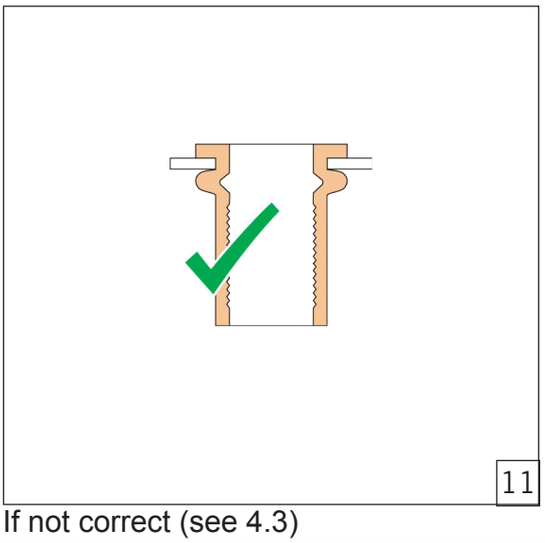
Position the tool



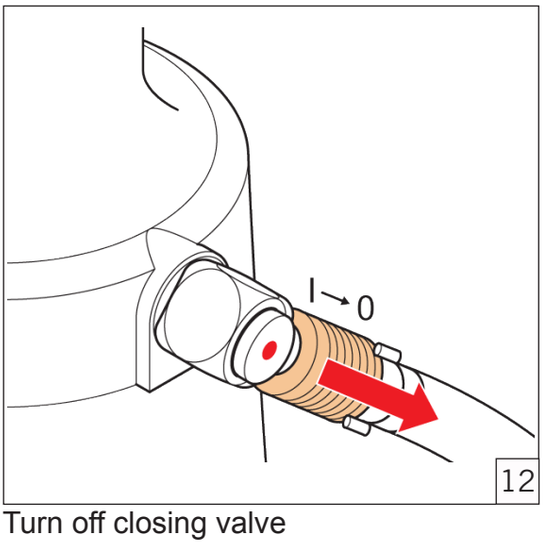
Press and hold the trigger until rivet nut has set



Release trigger, allow tool to spin off



If not correct (see 4.3)



Turn off closing valve

6. Maintenance

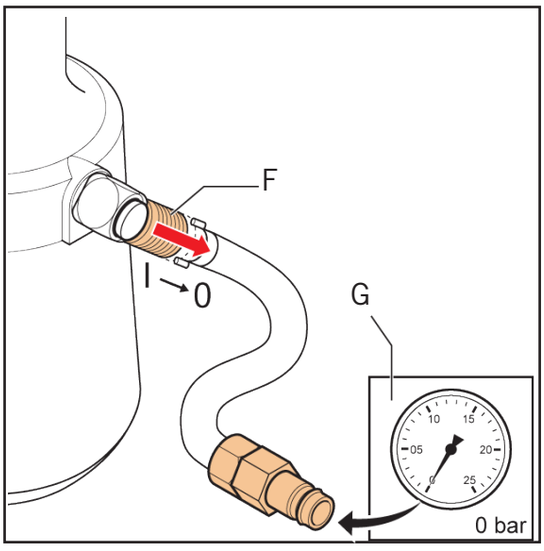
Use safety goggles

Use hearing protection

Use safety gloves

6.1 Regular maintenance

Turn off the closing valve (F) and disconnect the air supply (G).



- Dismantle anvil(see fig 6.1.a). then Clean using an air blow gun and soft cloth.
- Dismantle the mandrel (see fig 6.1.b) Clean using an air blow gun and soft cloth.
- Clean front sleeve (see fig. 6.1.c) using an air blow gun and soft cloth.
- Lubricate mandrel after reassembly.

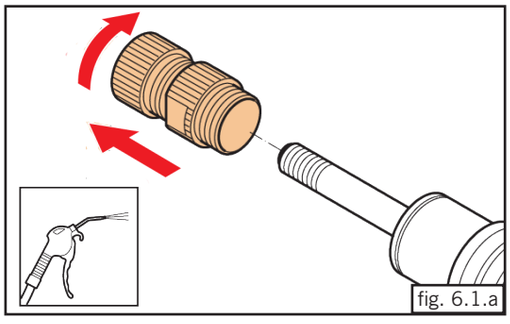


fig. 6.1.a

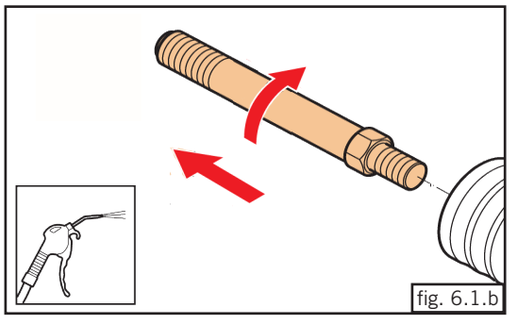


fig. 6.1.b

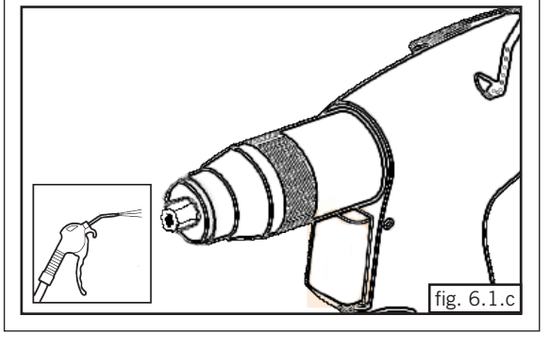


fig. 6.1.c

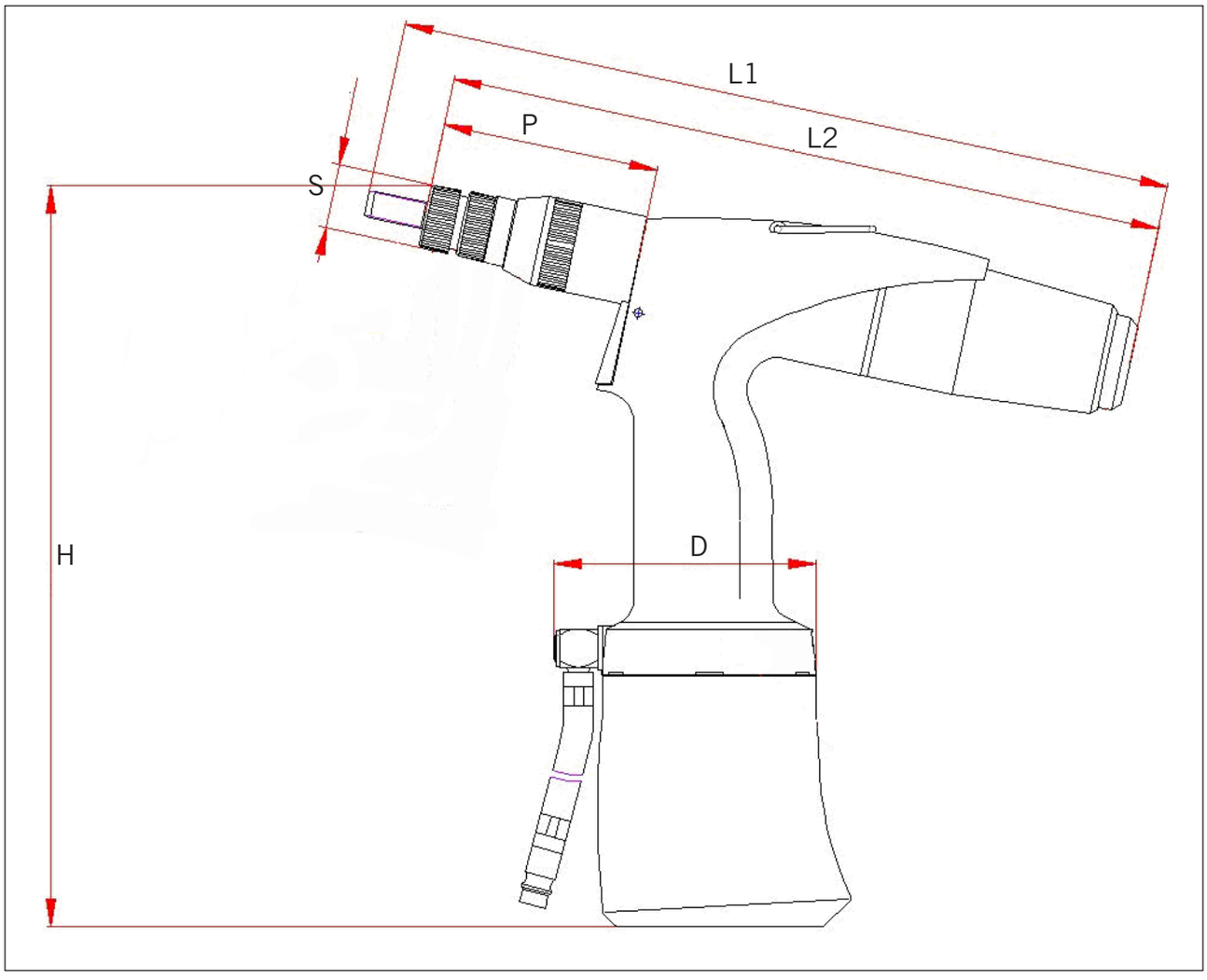
6.2 Major maintenance

Every 100.000 cycles tool must be completely dismantled and all seals and worn parts must be replaced. This must be done only by a trained engineer or listed service center.

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
The trigger does not work	There is insufficient air pressure	Use the correct air pressure 5-7 bar
The blind rivet nut cannot be placed onto the mandrel	The incorrect mandrel/anvil set has been installed	Install the correct mandrel/anvil set
The blind rivet nut is not set correctly	Stroke is not set correctly There is insufficient air pressure The capacity of the tool has been exceeded	Set correct stroke Use the correct air pressure Use the correct tool
The tool does not completely release from the set rivet nut after trigger is released	Rivet nut has not set correctly	Push release button
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 operating the trigger
The tool does not perform well consistently	Requires service	Contact a service centre

8. Technical data



H	270 mm
L1	285 mm
L2	260 mm
S	ø 23 mm
P	80 mm
D	ø 99 mm
Weight	1,65 kg
Air Pressure	5-7 bar
Pull force (6 bar)	18,5 kN
Air consumption (per stroke)	1,5l
Max. operating stroke	7 mm
Capacity (standard blind rivet nuts)	M3 - M12 aluminium/steel M3 - M10 stainless steel

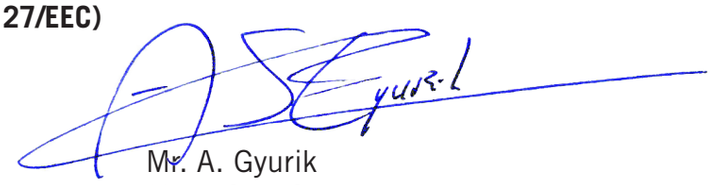
9. Warranty

This rivet nut tool has a 12 month warranty from the day of delivery (to be proven by invoice or delivery note). Damage caused by common wearing, overloading or improper handling are excluded from the warranty. Damages caused by material or manufacturing faults will be covered by this waranty and will be repaired or replaced at no cost. Claims can only be accepted if the complete rivet nut tool (not stripped) is returned to the distributor.

10. CE conformity declaration

We hereby declare under our sole responsibilty that these products meet the following standards and directives:

- **2004/108/EEC (+2009/127/EEC)**
- **EN 792-1**
- **2004/108/EG**



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