Pneumatic Blind Rivets Setting Tool

N250

Operation Manual

Read this manual carefully before use the tool !

It is **IMPORTANT** to follow the safety instructions for adequate protection against injuries.

- This tool should be used exclusively to apply blind rivet nuts prescribed as TOOL CAPACITY. It can not be used for other purposes, such as hammer, etc;

- This tool should be always operated with compressed air supply within the air pressure range 0,5Mpa ~ 0,7Mpa;

- To DISCONNECT the air supply from the tool before changing the tool parts, such as mandrel, etc;

- DO NOT use the tool in the environment described as below:

  fuel and combustion air;
  temperature rapidly rising;
  humidity, rain, water, storm and thundering;

- When the tool is suspended by the operation hook during use, be sure the tool will not fall;

- When using the tool, always carry protective goggles, protective gloves, safety helmet, and other necessary protections. It is highly recommended for safety reason;

- To use only genuine spare parts for repairs;

- The repair work must be carried out by skilled personnel, when in doubt, always return the tool to the distributor.

TOOL CAPACITY

blind rivets 3,0/3,2mm – 4,0mm – 4,8/5,0mm standard;

TOOL SPECIFICATIONS

air supply pressure:	0,5Mpa ~ 0,7Mpa
output traction power:	10,300 N ~ 14,420 N
stroke:	19 mm
net weight:	1,37 kgs

GETTING START TO WORK

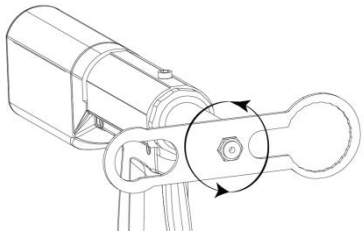
Please refer to the TOOL EXPLOSIVE ILLUSTRATION and the PARTS LIST in this manual in order to have a good understanding of the tool parts described. The descriptions of the tool parts appear in this manual are in ***italics*** with the parts position ***numbers*** corresponding to the tool explosive illustration.

1) This pneumatic powered tool should be worked with compressed air supply. It is recommended to use the air hose with diameter bigger than 8 mm;

2) To check the compressed air pressure within the specified range between 0,5Mpa and 0,7Mpa, and to connect the air hose adaptor onto the tool *air adaptor (#49)*. The air adaptor has its different versions in different countries and areas, normally the tools are equipped with the correct version as default, in case the air adaptor does not apply in your air supply hose adaptor, contact the tool distributor(s);

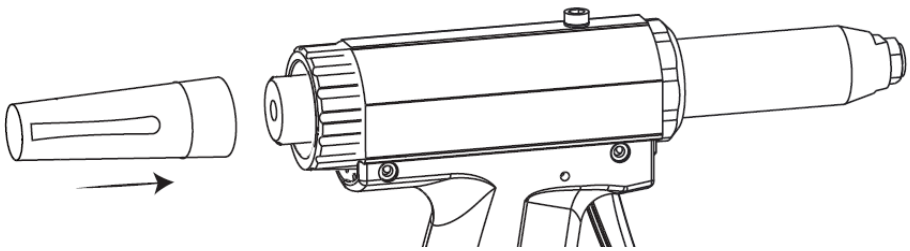
3) To change and use correct *nosepiece (#1)* according to the size of the rivet to be set. This tool is equipped with nosepieces 3,0/3,2mm, 4,0mm and 4,8/5,0mm (on the tool) in the tool kit. Follow the steps below to change the nosepiece (#1):

    a) To remove the air supply hose from air adaptor (#49);
    b) To use the *wrench (in accessories pack)* to remove the *nosepiece (#1)* from the tool:



c) To select the correct *nosepiece* in accessories pack and screw on to the tool, using the *wrench* to fix it firmly on the tool.

4) To install the *mandrel release protector (in accessories pack)* on the back of the tool.



TOOL OPERATION FOR SETTING BLIND RIVETS

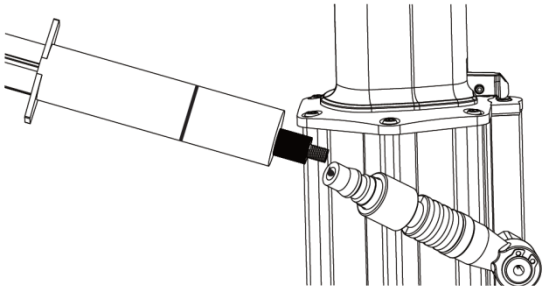
1) After start-up preparations, to put the rivet into the nosepiece with the rivet mandrel, and holding the tool to insert the rivet into the pre-drilled hole of the work pieces where the work pieces needs to be fastened;

2) To pull the tool *trigger (#45)* to set the blind rivet in its position on work piece;

3) After setting the rivet, to tilt the tool to the front in order to release the rest mandrel inside the tool or to tilt back the tool and the rest mandrel will be released from the back of the tool into the *release mandrel protector*. While using the tool, be sure always with the *mandrel release protector* on the tool, in case the rest mandrel shooting out from the back and hurting people.

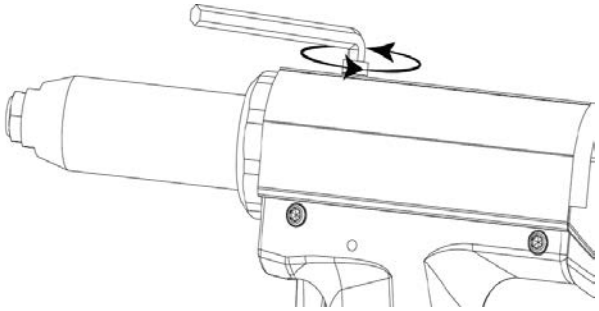
TOOL MAINTAINANCE

Normally after several weeks of working, for better performance of the tool, to add a few drops of hydraulic oil on the inlet of the *air adaptor (#49)* of the tool in order to reduce the fictions of the tool parts since the oil will be blown inside the tool when tool operates.

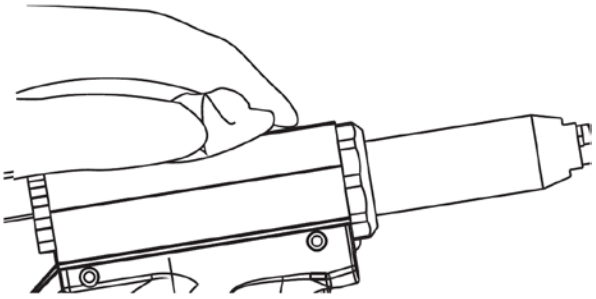


After certain period of use, the tool stroke might be reduced, it shows the hydraulic oil of the pneumatic tool is necessary to be refilled or changed:

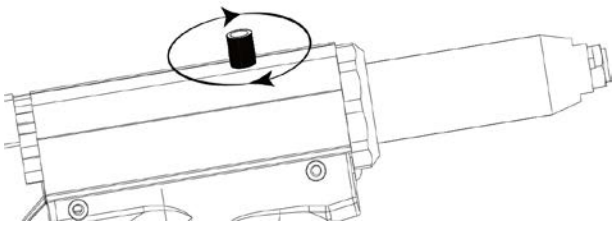
1) To remove the screw (#11) by hexagon wrench:



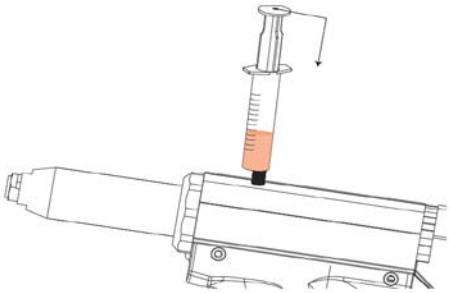
2) To connect the air supply and to cover some cloth over the hole where the screw (#11) removed, then to pull the trigger (#45) and the oil will be leaked out from the tool:



3) To screw the *oil inject adaptor (on oil injector set in the accessories pack)* into the hole where screw (#11) removed:

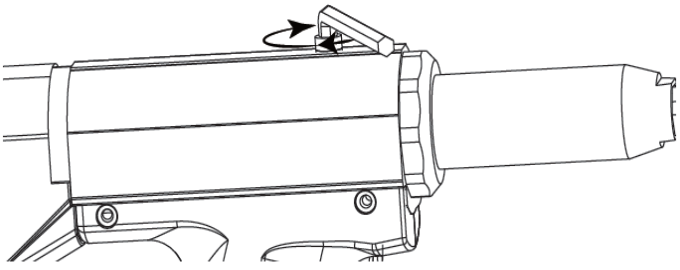


4) To use the *oil injector (in the accessories pack)* to inject the oil slowly until not able to refill (approx. 15ml), to remove the injector and its adaptor, then clean the oil on the tool and tightly screw on the screw (#11) back to the tool:



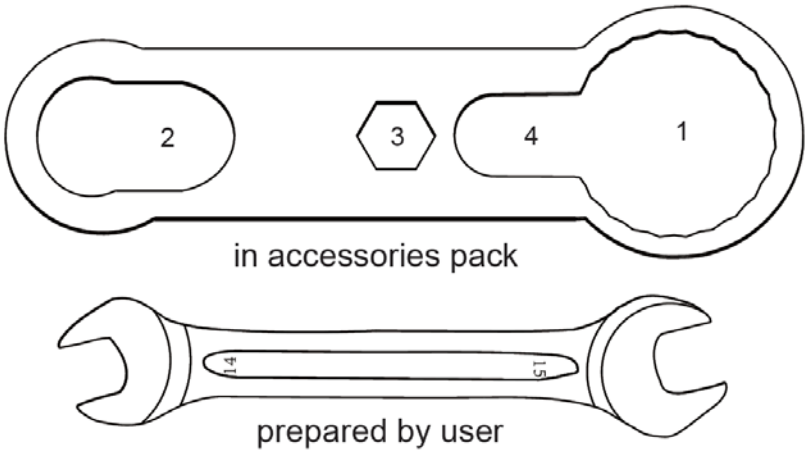
5) To test the tool stroke. If the stroke still not enough as it should be, it means there could be some air in the *oil cylinder (#13)* when you refilling the oil to the tool. Then the extra air needs to be released from the tool.

   To connect the tool with air supply, to pull the tool trigger (#45) 6 or 7 times, then loosen the screw (#11), let the extra air leaking out, then screw on the screw (#11) tight again:



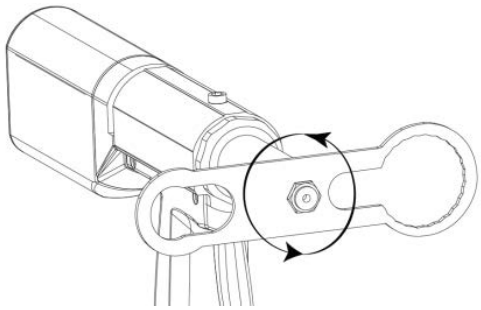
After long time use of the tool, it could be possible that the metal chips from rivets setting remains in the nose assembly of the tool and the tool efficiency will be influenced, therefore it is recommended to have the nose assembly parts cleaned or the parts changed periodically:

1) To use the *wrench (in accessories pack)* and a spanner prepared by tool user:

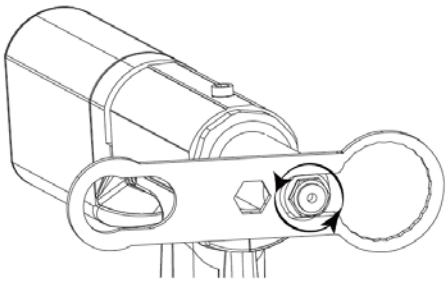


Wrench hole 1 for *compressed spring pedestal (#21)*;
Wrench hole 2 for *clamping sleeve (#3)*;
Wrench hole 3 for *nosepieces (#1)*;
Wrench hole 4 for *front sleeve (#2)*;

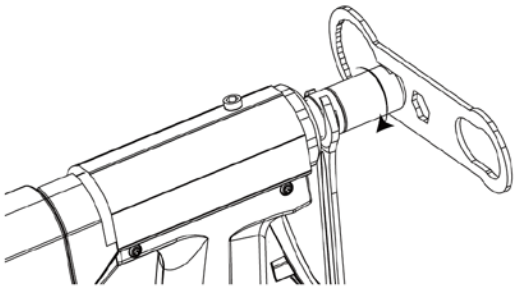
2) To disassemble *nosepiece (#1)* on the tool by *wrench*:



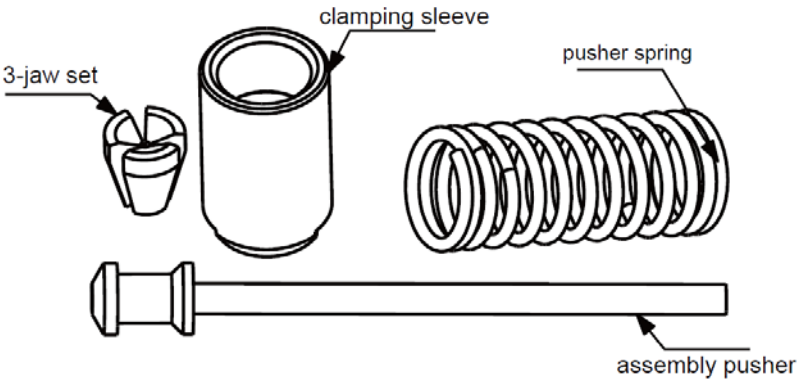
3) To disassemble *front sleeve (#2)*:



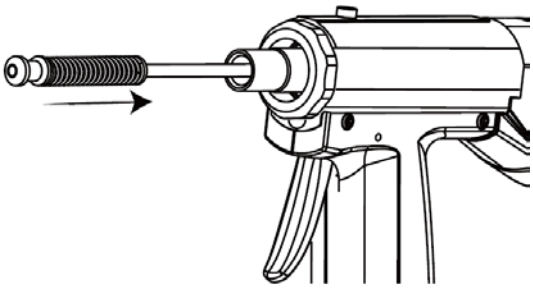
4) To disassemble *clamping sleeve (#3)*:



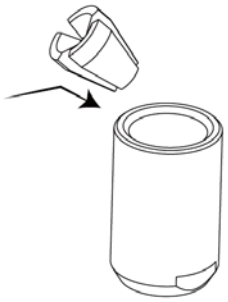
5) To take out the *3-jaw set (#4)* from the *clamping sleeve (#3)*, and take out the *assembly pusher (#5)* and the *pusher spring (#6)* from the tool, and clean them all. Meanwhile to check the parts, if any worn or damaged, to change the new parts:



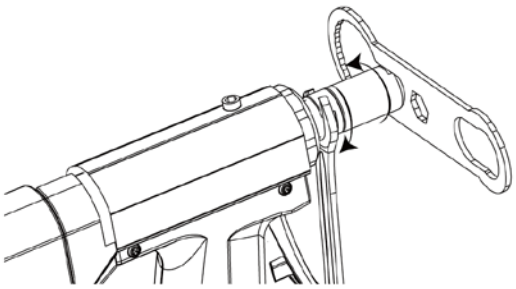
6) To re-assemble the cleaned parts or new parts back to the tool. To put the *pusher spring (#6)* onto the *assembly pusher (#5)*, and insert it back to the tool where *assembly oil cylinder (#13)* located:



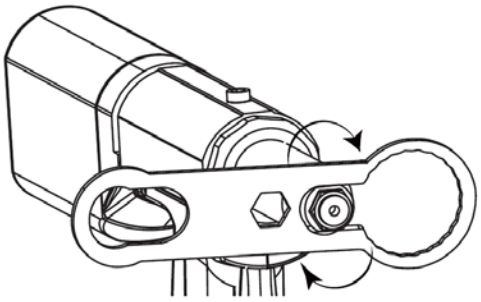
7) To put *3-jaw set (#4)* into the *clamping sleeve (#3)*, be sure the 3 jaws are seated in it correctly in the position:



8) To put the *clamping sleeve (#3)* with *3-jaw set (#4)* inside it onto the *assembly pusher (#5)* in their position, to be sure it is assembled firmly:



9) To assemble the front sleeve (#2) and nosepiece (#1) back to the tool:

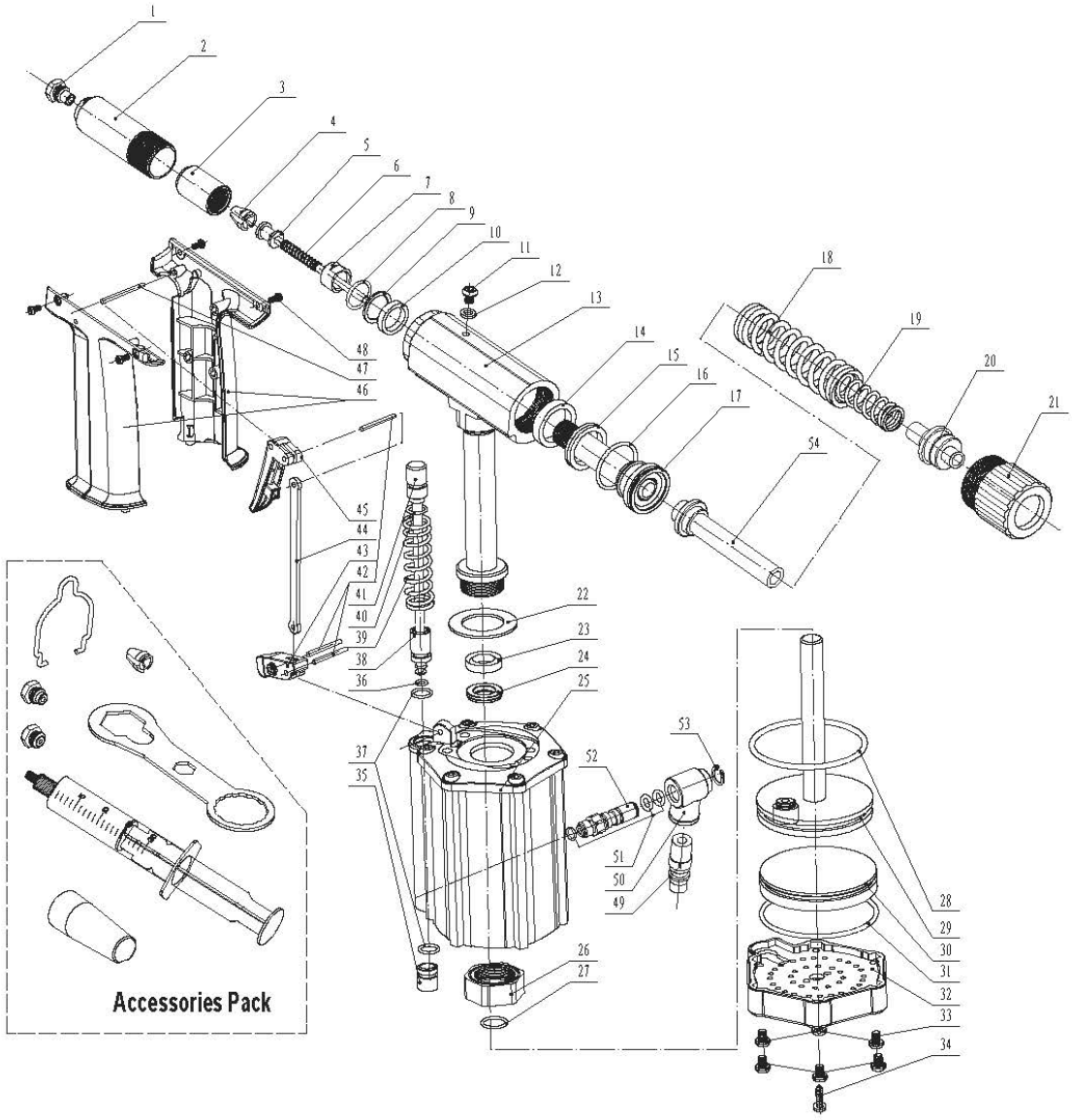


TROUBLES SHOOTING

Troubles	Possible Causes	Solutions
Rivet mandrel does not break	1. 3-jaw set worn off or damaged; 2. Hydraulic oil in tool not sufficient; 3. Air supply with low pressure;	1. Change 3-jaw set; 2. Refill hydraulic oil; 3. Increase air supply pressure within the specification range;
Jaws slippery on rivet mandrel	1. 3-jaw set worn off; 2. Metal chips between jaws; 3. Pusher spring fatigued;	1. Change 3-jaw set; 2. Clean the jaws; 3. Change pusher spring;
Rivet mandrel can not be put into nosepiece	1. Nosepiece size chosen not correct; 2. Jaws get stuck by rest mandrel not released;	1. Change correct size of nosepiece; 2. Take out the remained rest mandrel by disassembling front sleeve and clamping sleeve;

TOOL EXPLOSIVE ILLUSTRATION

N250



PARTS LIST

Parts Positions in Tool Illustration	ART CODE	Descriptions	Parts Quantities in Tool Kit
1	P09005-00	nosepiece E/3.3 - 4,8/5,0mm	1
2	A00001-00	assembly front sleeve	1
3	P00252-00	clamping sleeve	1
4	P00405-00	3-jaw set	1
5	A00002-00	assembly pusher 5,0	1
6	P00007-00	pusher spring	1
7	P00173-00	clamping sleeve locknut	1
8	F00021-00	O-ring	1
9	P00047-00	piston pin washer	1
10	F00022-00	U-ring	1
11	P00009-00	screw	1
12	F00002-00	washer	1
13	A00010-00	assembly oil cylinder	1
14	F00003-00	U-ring	1
15	P00010-00	piston pedestal washer	1
16	F00004-00	O-ring	1
17	A00061-00	assembly piston	1
18	P00118-00	outer return spring	1
19	P00014-00	inner return spring	1
20	P00212-00	compressed spring seat	1
21	P00016-00	compressed spring pedestal	1
22	P00017-00	oil cylinder washer	1
23	F00006-00	U-ring	1
24	P00018-00	piston shaft washer	1
25	A00011-00	assembly air cylinder	1
26	P00022-00	assembly oil cylinder locknut	1
27	F00007-00	O-ring	1
28	F60085-00	O-ring	1
29	A00071-00	assembly air cylinder piston-shaft	1
30	P00054-00	piston pedestal	1
31	F00024-00	O-ring	1
32	P00055-00	air cylinder pedestal	1
33	P00021-00	air cylinder screw	6
34	P00029-00	air cylinder pedestal screw	1
35	P00030-00	switch lower base	1
36	F00010-00	O-ring	1
37	F00011-00	O-ring	2
38	P00031-00	switch upper base	1

Parts Positions in Tool Illustration	ART CODE	Descriptions	Parts Quantities in Tool Kit
39	P00032-00	switch shaft spring	1
40	F00012-00	O-ring	1
41	A00013-00	assembly trigger shaft	1
42	F00013-00	pin	3
43	P00057-00	lever	1
44	P00035-00	connecting rod	1
45	P00058-77	short trigger	1
46	A00008-00	assembly grips	1
47	F00014-00	pin	1
48	P00039-00	screw	4
49	F00015-00	air adaptor standard	1
50	P00040-00	adaptor joint	1
51	F00016-00	O-ring	3
52	P00164-00	assembly air adaptor joint	1
53	F00048-00	A-circlip	1
54	A00062-00	assembly mandrel release tube	1
Accessories Pack	P09002-00	nosepiece B/2.3 - 3,0/3,2mm	1
Accessories Pack	P09003-00	nosepiece C/2.7 - 4,0mm	1
Accessories Pack	P00405-00	3-jaw set 20deg	1
Accessories Pack	P09050-00	mandrel release protector	1
Accessories Pack	P09051-00	hook	1
Accessories Pack	P09052-00	wrench	1
Accessories Pack	A00009-00	oil injecter set	1

Remarks: position #49 air adaptor, optional F00147-00 air adaptor EU version.