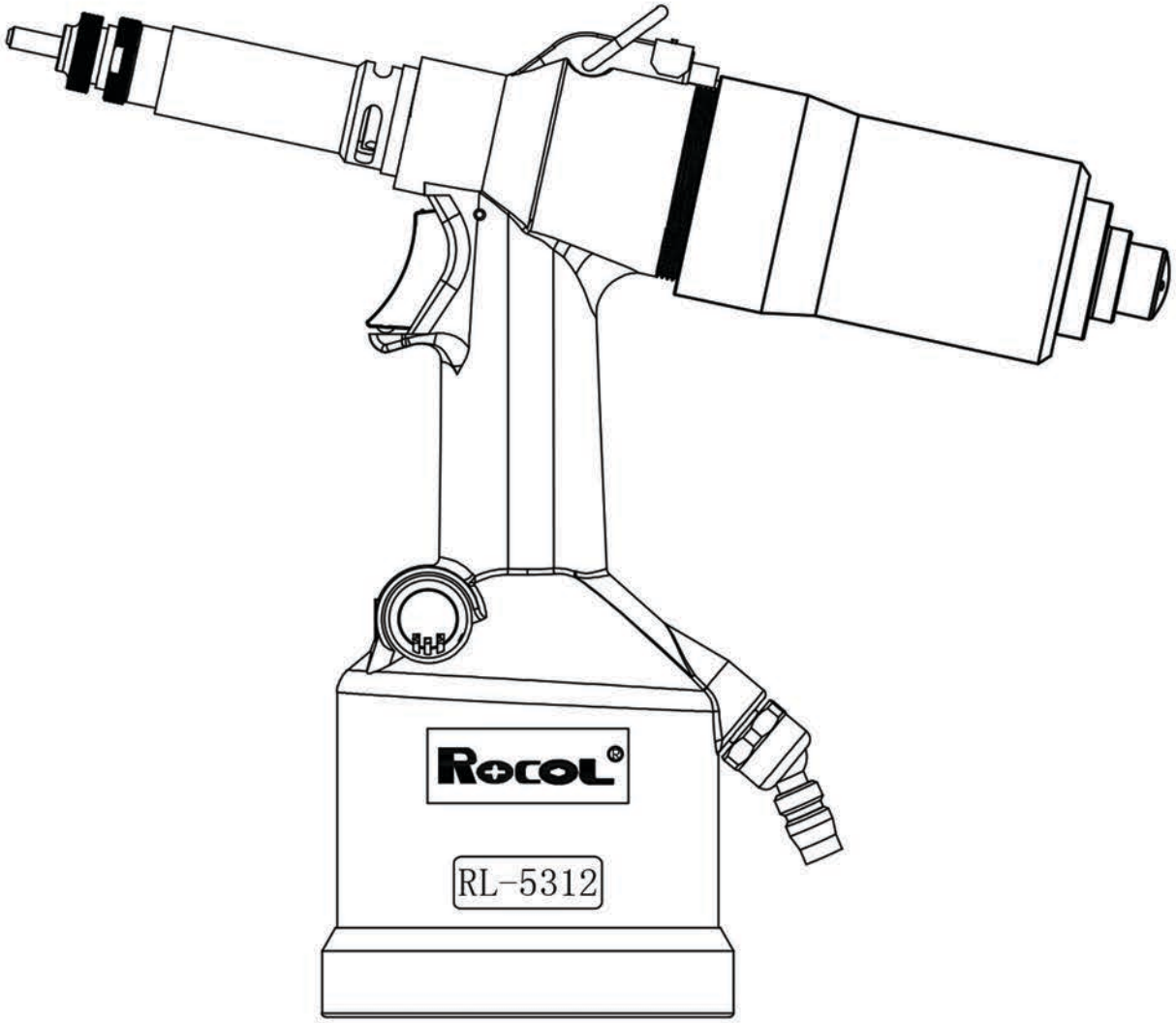
CE

Instruction Manual

RL-5312 Pneumatic rivet nut tool



ROCOL®

RIVET FASTENING EXPERT AROUND YOU

英文/ENGLISH

RL-5312 Pneumatic rivet nut tool
Instruction Manual

Content

A professional pneumatic rivet nut tool

- Thank you very much for choosing our full automatic rivet nut tool, to ensure the correct operation, please read this instruetion manual carefully and place it in a safe area for reference.
- This instruction has included how to use rivet nut tool
  Make sure the instruction manual is the right one for the product you are using.

Disclaimers:

- The air pressure should not exceed 7 bar.
- We accept no responsibility for the damages of any violation operation and trouble caused by operation with other devices.
- We accept no responsibility for any damage caused by Nonobservance of instruction manual.

Safety Instruction

Read safety instruction carefully before installing, operating, maintenance this product.

1. Dont use exceed the designed range.

2. Please use the assembly and disassembly equipment provided by our company.

3. Clients should take all responsibilities of any losses cause by unauthorized alteration of tool, nose assembly, spare parts provided by our company.

4. The tool should be used in a favorable environment, maintenance and check the damage and performance situation by professional person regularly.

5. Cut off the air supply before adjusting, installing or changing the pull rod.

6. Do not let tool head aim at yourself or anyone else when turning on the tool.

7. Stand in appropriate place before operating the tool.

8. Make sure the air path unimpeded, there is no congestion or shelter of air valve.

9. The air pressure should not exceed 7 bar.

10. Do not operate when there is no pull rod or oil seal screw or oil leak from oil seal screw in case of any accident.

11. When operating the tool, we advise operators wear goggles just in case something may come into eyes, wear gloves if the workpieces have sharp edges or corners.

12. Avoid the tool twine with clothes, air, strip of clothes, putzwolle,etc. Keep the removable spare parts dry and clean to ensure the best riveting result.

13. Do not touch the trigger when removing the tool, avoid turning on the tool unconsciously.

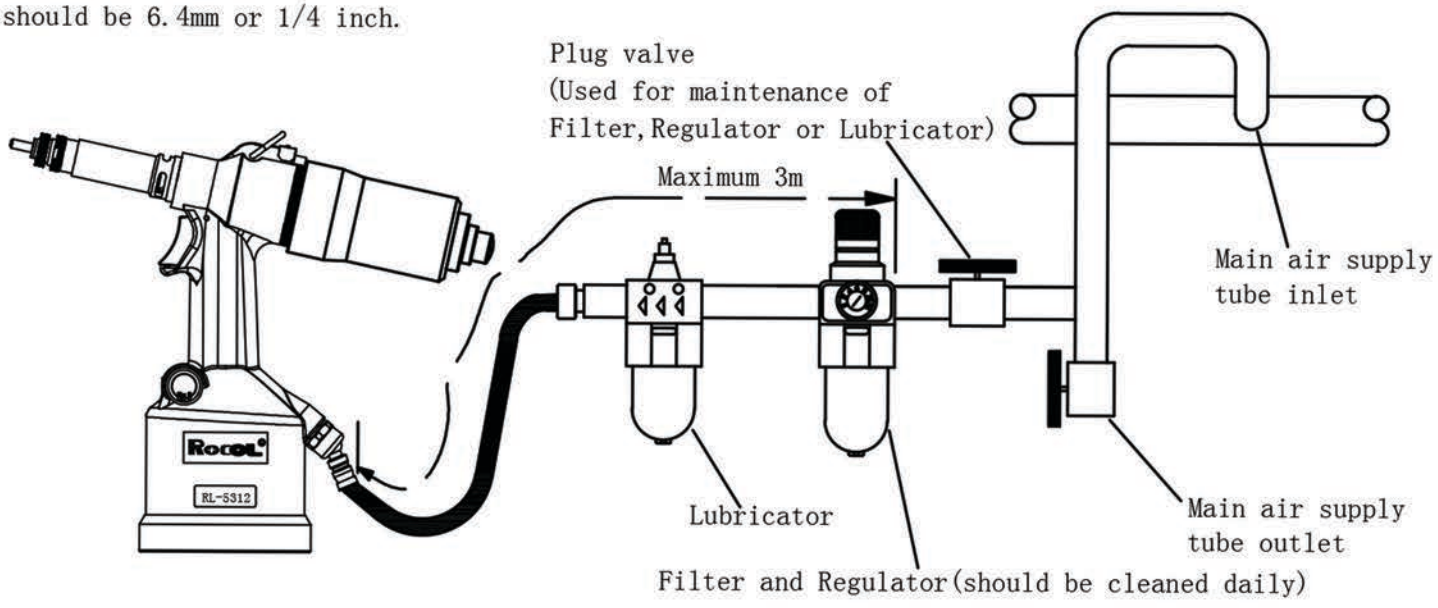
14. Avoid the tool touch hydraulic oil to much, rinse it thoroughly to avoid erosion from oil.

Application

Pneumatic rivet nut tool is used for riveting nuts of various materials, such as aluminum, cuprum, steel, stainless steel, riveting range from M3-M12. The main body is made of high quality synthetic material, which has the advantages of light hand weight, easy operation, fast riveting speed, tight riveting and no crash, etc. It is an ideal tool for riveting nut.

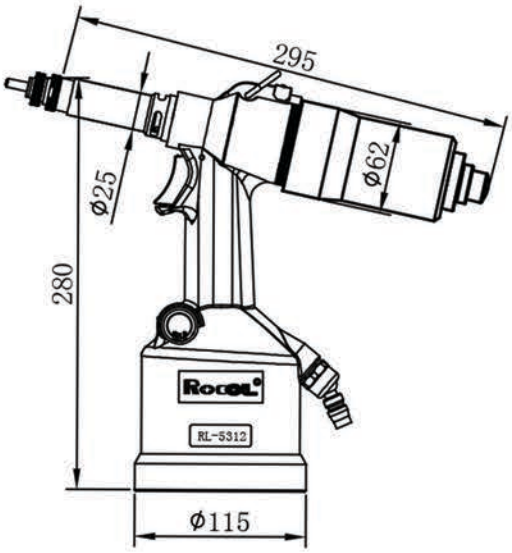
Air Supply Requirements

Use compressed air as power, the lowest air pressure is 5.5 bar, we advise to add filter, pressure regulating valve and auto lubricating filtration system in main air supply tube. To ensure the service life and minimum maintenance requirements, the above equipment should be installed within 3 meters of the tool's location, the effective pressure in the air tube should be 10 bar or 150% of the pressure produced in system, the air tube should be oil proof, the outer layer should be wear proof, all the air tubes' minim um inner diameter should be 6.4mm or 1/4 inch.



Technical Specification

Work range: M3-M12
Pressure of air supply: 5-7bar
Nominal pressure: 5.5bar
Tool stroke: 7mm
Motor speed: 3500rpm
Work force: 24-34KN(5800-8200ibf)
Noise: <75dB
Weight: 2.47kg
Dimension: 280*295*115



Put into use

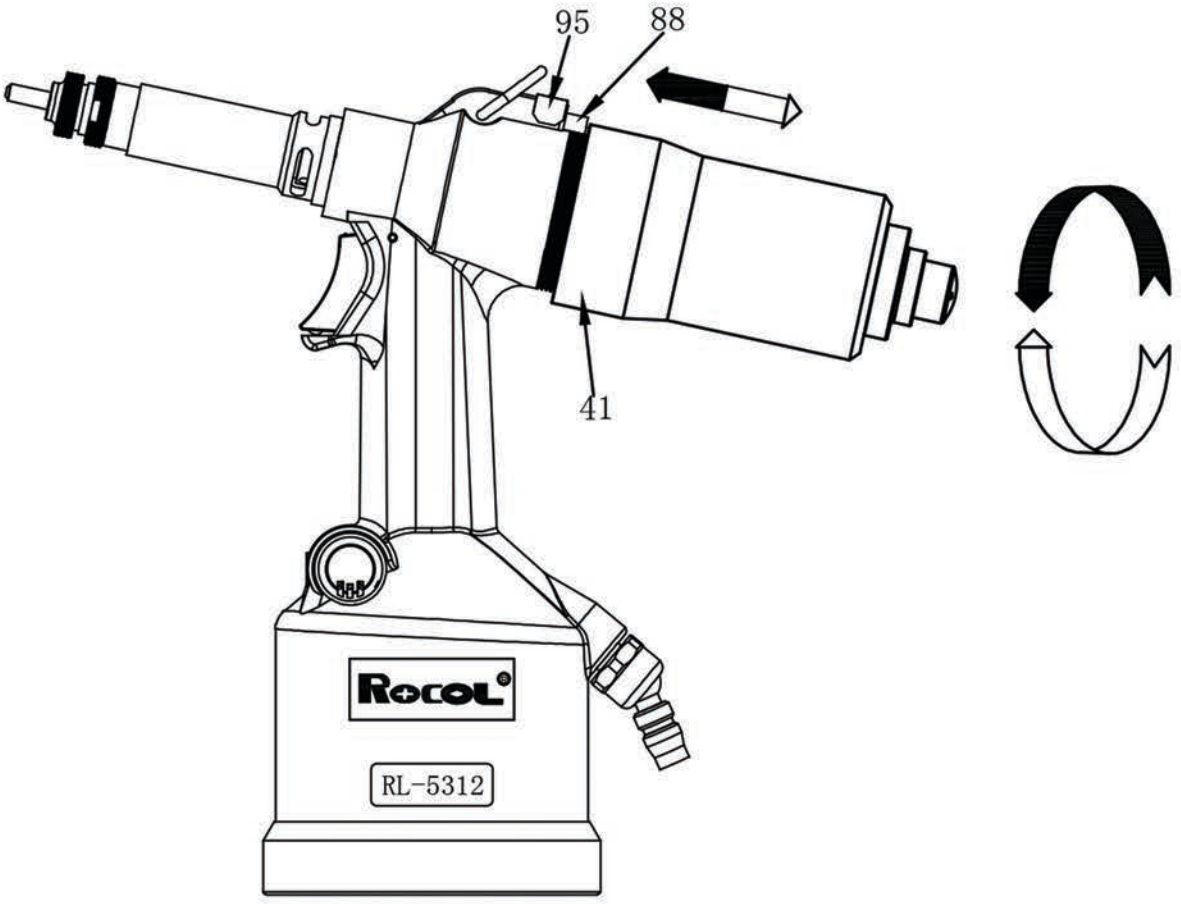
Tool Stroke Adjustment

In order to ensure the best riveting effect, stroke adjustment is very important. Prior to riveting, it is recommended that a test plate with the same thickness and aperture as the workpiece be used as a pre-machine adjustment plate.

If the stroke is too short, riveting nut deformation is insufficient, the workpiece will not riveting tight;

If the stroke is too long, rivet nut deformation is too much and easy to damage the rivet nut and screw thread on pull rod.

Stroke is adjusted by Stroke sleeve(41). When adjusting the stroke, first loosen Bridge washer(95) and Locating pin(88). If the plate is very thin, counterclockwise rotate Stroke sleeve to increase the stroke; if the plate is thick, clockwise rotate Stroke sleeve to decrease the stroke until the stroke is the best; Counterclockwise rotate Stroke sleeve from top of thread by no more than 5 turns. After achieving the best riveting effect, lock Stroke sleeve with Locating pin(88).



Operating Procedure

1. Connect the tool to air supply;
2. Adjust stroke;
3. Screw rivet nut into nozzle screw by 1-2 turns and press gently. Rivet nut will automatically be screwed into pull rod and stop;
4. Put rivet nut into the hole of the workpiece and press it against the workpiece;
5. Hold down the trigger, rivet nut will automatically rivet on the workpiece and automatically reverse out, and then loosen the trigger, riveting is finished.

Replace Nose Assembly

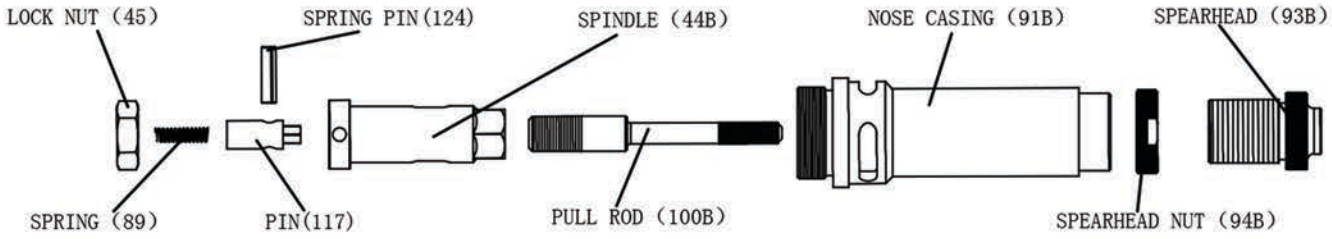
It is very important to properly install nose assembly prior to operation.

IMPORTANT

Unless otherwise specified, Air supply must be cut off before installation or disassemble

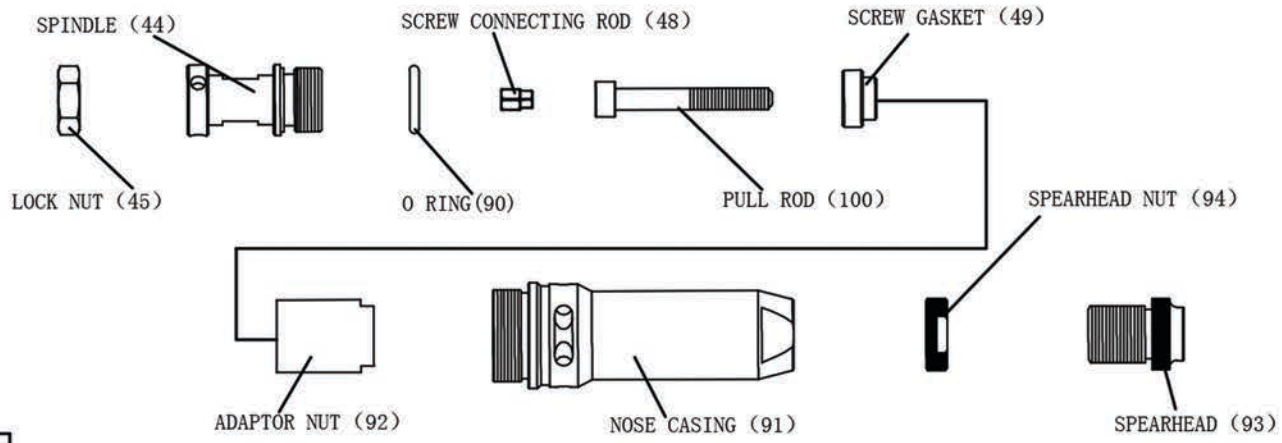
Replacement procedure of Fast change Nose assembly :

1. Disconnect the air supply;
2. Clamp Nose casing(91B) with 23mm wrench. Counterclockwise loosen Spearhead nut(94B) with 22mm wrench and remove Spearhead(93B), then remove Nose casing(91B);
3. Hold both ends of Spring pin(124) by hand and reverse back, turning counterclockwise out of Pull rod(100B). Turn Pull rod to be replaced clockwise to the bottom of Spindle(44B), loosen Spring pin and turn Pull rod until it is jammed by Pin(117);
4. Tighten Nose casing(91B) after Pull rod is installed, then assemble corresponding Nose assembly. Adjust the exposed length of Pull rod according to the length of rivet nut, and lock Spearhead nut(94B).



Replacement procedure of Common Nose assembly(Optional) :

1. Disconnect the air supply;
2. Clamp Nose casing(91) with 19mm wrench. Counterclockwise loosen Spearhead nut(94) with 17mm wrench and remove Spearhead(93), then remove Nose casing(91);
3. Jam Adaptor nut(92) and Spindle(44) respectively with 17mm and 12mm wrench, and open counterclockwise Adaptor nut(92);
4. Take out Pull rod(100), Screw connecting rod(48), Screw gasket(49);
5. Replace with new Pull rod(100), Screw connecting rod(48), Screw gasket(49), and clockwise tighten Adaptor nut(92);
6. Tighten Nose casing(91) after Pull rod is installed(Be sure to screw tight otherwise may damage the thread of Nose casing). Install Spearhead(93) to be replaced;
7. Loosen Spearhead nut(94) with 17mm wrench. Adjust the exposed length of Pull rod according to the length of rivet nut, and lock Spearhead nut(94).



Maintenance

IMPORTANT

The maintenance of the tools shall be carried out by designated personnel, unless the operator of the tools is well trained, there is no need to carry out maintenance and repair of the tools.Tools should be periodically checked for damage and performance status.

Daily maintenance

1. Do maintenance before daily using, if air supply system didnt install oil-water separator, please add few drops clean and superior lubricating grease in the air inlet, if using the tool continuously, cut off air supply and lubricate it every 2-3 hours.
2. Check if there is any air lealkage, if the air tube or connector damaged, change them immediately.
3. If there is no filtrator installed in regulate valve, use air pressure to clean dust and water in air passage before connecting air supply. if already installed filtrator, just clean it.
4. Ensure you are using the right pull rod.
5. Check tool stroke.
6. Check pull rod, change it if it has get damaged or worn out (the disassembly procedure is reversed from assembly procedure).
7. Maintain tool weekly (check if there is oil or air leakage of body).

Inject Hydraulic Oil

IMPORTANT

All operation should be done in a clean environment, with clean hands
Make sure using clean oil without bubble.
Maintain tools regularly to prevent debris from entering or damaging them

Operation procedure

1. Put tool flat, Oil plug(42) upward.
2. Push Locating pin(88) and loosen Stroke sleeve(41) by hand by rotating it 5 times at most from the inside position.
3. Loosen Oil plug(42) and Oil seal washer(43) by hexagon wrench.
4. Pour hydraulic oil slowly to discharge bubbles in the tool.
5. Re-tighten Oil seal washer(43) and Oil plug(42) after filling up.
6. Ensure Oil plug is tightened.

Fault Diagnosis

Symptom	Cause	Solution
Difficult to snap the rivet	Air leak from motor	Check worn seals and replace
	Low air pressure	Adjust
	Airway blockage	Clear block
	Worn drive screw	Replace
	Vanes jamming	Lubricate tool through air inlet
Rivet nut is not deformed enough	Incorrect stroke	Adjust
	Low air pressure	Adjust
	Low hydraulic oil	Supplyment
	Incorrect workpiece thickness	Chek nut and workpiece thickness
Pull rod rotates continuously	Gas vent of End cover(131) blocked	Clear
	Micro-valve sleeve(134) and Piston(138) loosed	Retight
	Marbles(86) broken	Replace
Rivet nut cannot be automatically screwed into the pull rod	Improper insert of rivet nut	Replace nut
	Wrong rod installation	Replace rod
	Old or broken rod	Replace
	Wrong gun head installation	Re-install
	Too short Push rod(78)	Replace
	Not enough distance between Lock nut(45) and Return spring nut(46)	Adjust distance to 1.5mm-2mm
	Lock nut(45) is separated from Spindle(44)	Adjust distance to 1.5mm-2mm
Pull rod stuck in the workpiece	Too long stroke	Adjust to 0 and hold the trigger
	Defective nut	Replace nut
	Wrong or broken rod	Replace
Broken pull rod	Too long stroke	Re-set stroke
	One side of pull rod is stressed	Parallel the tool to the nut
Nut tool has no riveting stroke	Spindle(44B) and Lock nut(45) loosed	Tight
	Air supply is not connected	Connect air supply
	Insufficient hydraulic oil	Supplyment hydraulic oil
	No stroke of Stroke sleeve(41)	Re-adjust stroke
Fail to press trigger	Static friction force	Press and hold trigger for some seconds
	Low air pressure	Adjust air pressure
	Trigger parts stuck	Lubricate tool through air inlet and press trigger several times. If failed, disassemble the trigger, clean and lubricate the parts.
	O-Ring(60) worn	Replace
	O-Ring(31) worn	Replace
	O-Ring(30) worn	Replace