Hydraulic pneumatic blind rivet nut tool
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](image)

- ![Use safely goggles](image)

- ![Use hearing protection](image)

- ![Use safety gloves](image)

- ![Manometer](image)

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

- ![Should not be operated by people wearing electronic implants e.g. pacemakers.](image)

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

<table>
<thead>
<tr>
<th>A</th>
<th>Mandrel/anvil</th>
<th>E</th>
<th>Safety valve</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Trigger</td>
<td>F</td>
<td>Air supply closing valve</td>
</tr>
<tr>
<td>D</td>
<td>Release button</td>
<td>G</td>
<td>Air connection</td>
</tr>
</tbody>
</table>

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 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 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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Mandrel/Anvil</td>
</tr>
<tr>
<td>B</td>
<td>Stroke indicator</td>
</tr>
<tr>
<td>C</td>
<td>Trigger</td>
</tr>
<tr>
<td>D</td>
<td>Release button</td>
</tr>
<tr>
<td>E</td>
<td>Safety valve</td>
</tr>
<tr>
<td>F</td>
<td>Air supply closing valve</td>
</tr>
<tr>
<td>G</td>
<td>Air connection</td>
</tr>
<tr>
<td>H</td>
<td>Hydraulic body</td>
</tr>
<tr>
<td>I</td>
<td>360° revolvable air supply unit</td>
</tr>
<tr>
<td>J</td>
<td>Pneumatic body</td>
</tr>
<tr>
<td>K</td>
<td>Bracket</td>
</tr>
<tr>
<td>L</td>
<td>Manual</td>
</tr>
</tbody>
</table>

3.2 Mandrels/Anvils

The delivered box contains mandrels and anvils M4 - M8.

M3-M10-M12 mandrels and anvils are available separately.
4. Operation

4.1 Controls

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.

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

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 stroke value. Set the stroke according to the diagrams below.

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

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

1. Position the nipple (G 1/4")

2. Screw in correct ø mandrel

3. Screw on correct ø anvil

4. Set stroke indicator, (see 4.3)

5. Set the correct air pressure

6. Turn on the closing valve
Position the rivet nut, ensure one mandrel thread is exposed.

Press and hold the trigger until rivet nut has set.

If not correct (see 4.3)

Position the tool.

Release trigger, allow tool to spin off.

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.

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

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Corrective action</th>
</tr>
</thead>
<tbody>
<tr>
<td>The tool does not work</td>
<td>The tool has not been connected to the air connection</td>
<td>Connect the tool to the air connection</td>
</tr>
<tr>
<td></td>
<td>The air supply closing valve is still closed</td>
<td>Open the air supply closing valve</td>
</tr>
<tr>
<td></td>
<td>There is insufficient air pressure</td>
<td>Use the correct air pressure 5-7 bar</td>
</tr>
<tr>
<td>Air is coming out of the safety valve</td>
<td>The air pressure is too high</td>
<td>Use the correct air pressure 5-7 bar</td>
</tr>
<tr>
<td>The trigger does not work</td>
<td>There is insufficient air pressure</td>
<td>Use the correct air pressure 5-7 bar</td>
</tr>
<tr>
<td>The blind rivet nut cannot be placed onto the mandrel</td>
<td>The incorrect mandrel/anvil set has been installed</td>
<td>Install the correct mandrel/anvil set</td>
</tr>
<tr>
<td>The blind rivet nut is not set correctly</td>
<td>Stroke is not set correctly</td>
<td>Set correct stroke</td>
</tr>
<tr>
<td></td>
<td>There is insufficient air pressure</td>
<td>Use the correct air pressure</td>
</tr>
<tr>
<td></td>
<td>The capacity of the tool has been exceeded</td>
<td>Use the correct tool</td>
</tr>
<tr>
<td>The tool does not completely release from the set rivet nut after trigger is released</td>
<td>Rivet nut has not set correctly</td>
<td>Push release button</td>
</tr>
<tr>
<td>The air supply unit cannot be turned 360°</td>
<td>The tool is still under air pressure</td>
<td>Close the air supply closing valve and depressurize the tool by operating the trigger</td>
</tr>
<tr>
<td>The tool does not perform well consistently</td>
<td>Requires service</td>
<td>Contact a service centre</td>
</tr>
</tbody>
</table>
8. Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>270 mm</td>
</tr>
<tr>
<td>L1</td>
<td>285 mm</td>
</tr>
<tr>
<td>L2</td>
<td>260 mm</td>
</tr>
<tr>
<td>S</td>
<td>ø 23 mm</td>
</tr>
<tr>
<td>P</td>
<td>80 mm</td>
</tr>
<tr>
<td>D</td>
<td>ø 99 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>1.65 kg</td>
</tr>
<tr>
<td>Air Pressure</td>
<td>5-7 bar</td>
</tr>
<tr>
<td>Pull force (6 bar)</td>
<td>18.5 kN</td>
</tr>
<tr>
<td>Air consumption (per stroke)</td>
<td>1,5l</td>
</tr>
<tr>
<td>Max. operating stroke</td>
<td>7 mm</td>
</tr>
<tr>
<td>Capacity (standard blind rivet nuts)</td>
<td>M3 - M12 aluminium/steel</td>
</tr>
<tr>
<td></td>
<td>M3 - M10 stainless steel</td>
</tr>
</tbody>
</table>
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 warranty 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 responsibility that these products meet the following standards and directives:

- EN 792-1
- 2004/108/EG

[Signature]

Mr. A. Gyurik
Managing Director
Masterfix Products bv
Maastricht-Airport: 15-06-2010
The Netherlands (Head Office)
Masterfix Product b.v.
P.O. Box 21
6190 AA Beek
Phone: +31 (0)43 350 84 84
Fax: +31 (0)43 350 84 88

United Kingdom
Emhart Teknologies / Masterfix Products
Wallsal Road
Birmingham B42 1BP
Phone +44 (0) 121 331 2460
Fax +44 (0) 121 331 2354

Spain
Black & Decker Ibérica, S.C.A.
Business Unit Masterfix
Ctra. M-300, Km 29, 700
28802 Alcalá de Henares
Madrid
Phone: +34 (0)91 883 5730
Fax: +34 (0)91 880 8720

Poland
Masterfix Poland
ul. Daleka 16
60-124 Poznan
Phone: +48 (0)61 86 66 297/376
Fax: +48 (0)61 86 65 733

Website: www.masterfix.com