

RHP P2

OPERATING MANUAL



CONTENTS

1. TOOL DESCRIPTION	3
2. SAFETY PRECAUTIONS	3
3. BASIC TECHNICAL DATA	5
4. DESCRIPTION OF TOOL BASIC EQUIPMENT	5
5. OPERATION	6
6. INSPECTIONS AND MAINTENANCE	6

1. Tool Description

Riveting tool RHP P2 with 1 riveting heads operates on basis of pneumatic-hydraulic amplifier. It is used for seating blind one-sided rivets with diameter from 4 to 6,4 mm of any type and material. The riveting tool consists of pneumatic-hydraulic amplifier RHP-P2 (Pict.1a) and riveting head (Pict.1b) connected to the amplifier by high-pressure hydraulic hose. The riveting head is fitted by pneumatic exhaust system intended for holding a rivet and consequent removal of ripped off rivet shank.

The tool can be delivered in the following options:

- I. Amplifier - RHP-P2 with air-operated main valve and one riveting heads.
- II. Amplifier - RHP-P2 with motor-operated main valve and one riveting heads.

The exhausting can be controlled directly by the separate valve.

2. Safety Precautions

A/ Description of used signs

In this Manual, some sections contain the following signs. Please remember their meaning well.



WARNING Hazard of personal injury! Warning of a danger.



CAUTION Material damage! Warning of activities that can cause damage to riveting jaws or to the product.



NOTE Important information.

B/ General Safety

The riveting tool should be used only for seating one-sided blind rivets.
Any change to the riveting equipment is an exclusive responsibility of the user!



Caution: Material damage! Operating pressure is 7 bars as maximum. Fitting the air distribution system with pressurized air service unit is recommended to increase the tool lifetime.

Ensure that the riveting tool is supplied only with clean and dry air conforming to Class 2 of ISO 8573-1. Humidity and impurities can cause the tool damage.

C/ Safety Principles

Do not use the tool if you are not concentrated on the work.

Do not use the tool if it is incomplete or has visible mechanical defects.

Never aim with the riveting head to any person.

Follow safety regulations valid in your country.

The riveting tool should be used within operating temperature from 5 °C to maximum 45 °C.

Use only valves and hoses that are approved for operating pressure of 10 bars for air, and 300 bars for hydraulics.

Before using the tool, read and understand the operating manual and familiarize with operation of the tool.

Disconnect the pressurized air from the tool before any adjustment or replacement of tool parts.

For each rivet diameter only use required front nose piece.

Always wear protecting clothing.

D/ Safety Principles for Given Type

Place the amplifier only to required position, i.e. the can should be with a vessel in vertical position.

Make sure that the riveting head is always fitted with ripped shank removal hose whose other end should be fastened to waste container.

3. Basic Technical Data

- Total mass: approx. 7.5 kg
- Dimensions: Amplifier: length – 360 mm, width – 120 mm, height – 195 mm
- Range of application: rivets 4,0 to 6.4 mm, all materials
- Maximum force for 0.6 MPa input air pressure: 18,9 kN
- Maximum travel: 16 mm
- Air consumption per rivet – 2.4 liters/1 rivet
exhausting for one riveting head – 20 liters /min
- Power source pressurized air 0.5 - 0.7 MPa, 24 V DC
- Connection to the source – air attachment thread G1/4”
- Noise: acoustic pressure level Lw - 86 dB
sound power level Lo – 103 dB

(measured under conditions according to standard ČSN ISO 8744:1996: ČSN EN ISO 12201:1997)

- Lube oil and grease – hydraulic oil according to standard ISO HN 32
e.g. OH-HM 32
- grease according to standard ISO XCCHB-2 e.g.

LV2EP

4. Description of Tool Basic Equipment

The tool is delivered by the customer specifications:

- the tool is controlled by electric-magnetic valve
- exhausting is connected electric-magnetic valve (pict.7)

5. Operation

A/ Procedure for preparation of tool operation:

- Place riveting head into operation position and set the amplifier
- Connect the shank removal hose to the riveting head
- Connect pressurized air to the amplifier

B/ Tool Set-up

- Select front nose piece (8, Pict.2) appropriate for rivet used
- Change the nose piece on riveting head

C/ Operation

- Insert rivet into the front nose piece
- Place the material being riveted
- Perform riveting

6. Inspections and Maintenance

A/ What, when, and how to inspect

1	Check for mechanical damage, tool completeness, oil leaks	Before any use	Visually
2	Check oil filling	Each week	Visually in storage can (2. Pict.1a)
3	Check for jaws contamination and wear *	Each 4 weeks After 20 000 rivets	Visually, after jaws disassembly (7, Pict.2)
4	Check front nose piece	Each 4 weeks After 200 000 rivets	Visually (8, Pict.2)
5	Check for air system leaks	Yearly	By hearing

* Depending on rivet quality

B/ What maintenance and when to perform

1	Oil make-up	When oil level drops under the controll place
2	Cleaning or replacement of jaws	When the jaws are contaminated or worn
3	Adjustment of „X” distance	In case of jaws replacement
4	Replacement of front nose piece	When worn; in case of use of different rivet

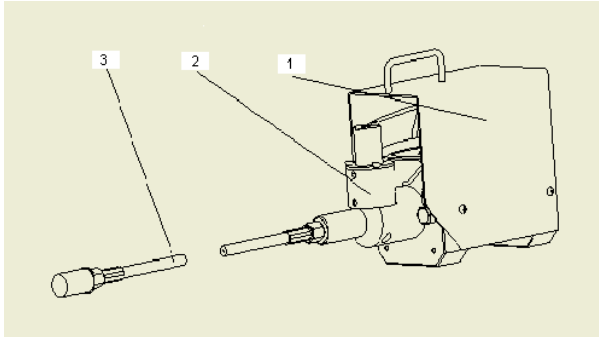


1. Jaws
2. Jaw case
3. Middle piece
4. O-ring
5. Locking nut

C/ Maintenance Procedure

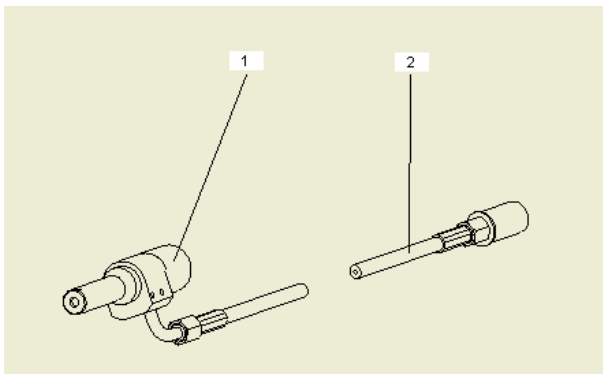
1	Jaws cleaning and replacement (Pict.2)	<ul style="list-style-type: none"> - When the riveting tool is inactive disconnect the pressurized air supply - Unscrew the nose piece (6) and remove it carefully - Unscrew nut (3) from middle piece (4) and screw the piece together with jaw case (5) - On assembling workplace unscrew and disassemble the middle piece (4) from jaw case (5), then the jaws (7) can be removed from the case - Clean all parts including jaws (7) or replace the jaws with new ones - Insert jaws (7) slightly lubricated by hydraulic oil into jaw case - Put leader tube (2) with spring (13) on jaws (7) and screw the case (5) together with middle piece (4) and tighten - Screw the case (5) with piece (4) onto piston (15) all jaws (7) must equally protrude from jaw case (5) - Adjust the "X" distance - Lube O-ring (14) on middle piece by grease; replace O-ring in case it is damaged - Carefully put nose piece (6) and tighten
2	Adjusting "X" distance (Pict.2)	<ul style="list-style-type: none"> - When the riveting tool is inactive disconnect the pressurized air supply - Unscrew the nose piece (6) and remove it carefully - Unscrew nut (3, Fig. 6) from middle piece (4) - Measure distance between jaw case face and tool face, and adjust the "X" distance 91 mm by rotating the middle piece. - Hold the middle piece (4) and tighten locking nut (3) - Carefully put nose piece (6, Fig. 6) and tighten
3	Front nose piece replacement (Pict.2)	<ul style="list-style-type: none"> - When the riveting tool is inactive disconnect the pressurized air supply - Unscrew front nose piece (8) from nose piece - Screw another front nose piece and tighten

Pict. 1a – Amplifier RHP P2



Position	Pieces	Name
1	1	Amplifier RHP P2
2	1	Oil collector
3	1	high-pressure hydraulic hose

Pict. 1b – Riveting head



Position	Pieces	Name
1	1	Riveting head
2	1	high-pressure hydraulic hose

Pict.2



Riveting head – replacement part.

Position	Name	Order No.
1	Front nose piece 6,4 mm	10-0252
1	Front nose piece 6 mm	10-0253
1	Front nose piece 5 mm	10-0254
1	Front nose piece 4 mm	10-0255
2	Nose piece	10-0970
3	Jaw case	10-0259
4	Jaws	30-0274
5	Leader tube	10-0101
6	Spring	30-0145
7	Middle piece	10-0260
8	O-ring	30-0210
9	Locking nut	10-0104