BREAKAIR

CE

PNEUMATIC PICK HAMMER

CH-58

OPERATION MANUAL

ver. 10.25.2016
www.diaber.nl

Equipment

Do not blindly follow the rules.

Read through the chapter to learn why personal protective equipment is important.

LABOUR SAFETY - WARNINGS

Every person to work with or service the hammer must read or be familiarized with these instructions so as to understand them completely.

Always wear safety shoes, goggles, ear defenders, gloves and other safety equipment prescribed for the given task.

⚠ WARNING Noise hazard

Prolonged exposure to noise produced by hammer operation puts the operator at risk of health issues.

- Do not stay in a noisy environment without effective ear defenders.

⚠ WARNING Vibrations

Frequent use of hand-held vibrating tools may trigger onset of the Hand-Arm Vibration Syndrome (HAVS).

- Take short breaks from work and always keep your hands warm.
- Immediately report any issues like numbness in fingers to your superior.

⚠ WARNING Dust hazard

The hammer operation may be accompanied by high dust nuisance.

- Use respirators where dust nuisance exceeds levels prescribed by relevant hygienic regulations.

⚠ WARNING Flying debris

Rock chips and debris can be projected in at high velocities as the hammer operates.

- Wear safety goggles.

SAFETY INSTRUCTIONS

The priority of labour safety always prevails over any other operation demands.

As the following instructions cannot cover all possibly occurring cases, sound common sense must be employed when working with the hammer and in the vicinity of this machine.

- Do not touch the trigger until you are ready to operate.
- Always hold the hammer with both hands while operating.
- Stay on a safe and stable platform while operating.
- Do not put the hammer close to your face.
- Do not use your leg to push the hammer down while operating.
- Compressed air is dangerous! Do not aim an air hose at yourself or other people. Do not use pressurized air to clean the site or your clothing.
- Make sure all hose connections are firm and airtight and secure hoses to prevent loss of air or injury if a hose gets loose or bursts.
- Secure hoses using the prescribed number of recommended hose clips and sockets prescribed for the type of hose.
- Do not release any joints that are under pressure. Always switch off the air supply and bleed hoses first.
- Only operate the hammer with recommended, approved tools. Work using an appropriate air pressure and avoid heavy impacts.
- If you use a cleaning agent or a solvent to clean the hammer, make sure it meets all relevant safety regulations and that its application does not cause environmental damage.
  When cleaning, observe instructions provided by the manufacturer of the cleaning agent.

- Do not get distracted – risk of accident is always present.
- Make sure there is no plumbing or wiring (electricity, gas, ...) in place of operation.
- If you come across a foreign object while operating, put the hammer aside and uncover the object carefully to identify it.

Air pressure

The hammers are constructed for operating air pressure of 0.4 – 0.7 MPa.

TECHNICAL DESCRIPTION

Compressed air is distributed to in turns fill spaces below and above a floating piston head in the hammer cylinder, setting piston into linear reciprocating motion. In power stroke, piston transfers its kinetic energy to tool, which disrupts the material. Exhaust air leaves the hammer through a series of holes in silencer.

APPLICATION

The chipping hammer is a versatile tool. It is used in construction work (light chipping and breaking, slotting, cleaning), foundries (degating castings, removing risings) and masonry.

Technical data and main dimensions	ISO unit	CH-58 #19x50
Weight	kg	5.9
Impact energy	J	9.5
Impact frequency	Hz	29.5
Air consumption	m^3min^{-1}	0.82
Operating air pressure	MPa	0.4 – 0.7
Effective value of weighted acceleration	$m.s^{-2}$	9.87
Measured sound power level	dB	103.2
Guaranteed sound power level	dB	104
Length	mm	407
Width	mm	191
Supply hose	mm	Js 13
Connecting thread	"	G 1/2" Claw Coupling
Tool shank size	mm	#19x50

Mean values (±10% tolerance) at 0.6 MPa air pressure.

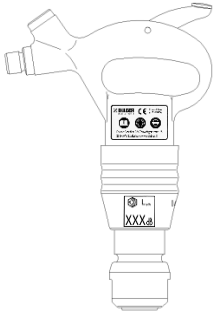
MODEL LABELLING

Machines are fitted with labels containing important information. Keep these labels clean and readable at all times and order new ones as necessary.

The main label should be found on the handle.

- Maximum permitted compressed air pressure is stated in the top left corner.
- The 'CE' symbol states that the product is EC-approved (see EC-Declaration of conformity).
- The opened book symbol states that user has to read and understand the manual before using the machine for the first time.
- The headset symbol reminds user to wear effective ear defenders.
- The last symbol reminds user to wear safety goggles.
- Guaranteed noise level in accordance with Directive 2000/14/EC is indicated by a label under silencer, and a mark on the silencer marks the group and category the machinery falls under in accordance with Directive 94/9/EC – ATEX.

Machine type and serial number are embossed on the main label on the handle.



Low temperatures

Presence of condensate in air coupled with low temperatures can cause the hammer to freeze up.

Add a water separator before the hammer and as far away from the compressor unit as possible.

MAINTENANCE PRINCIPLES

Always observe all relevant hygiene and safety regulations.

Only personnel properly acquainted with the structure and function of the hammer can service the tool.

All repairs are to be performed by the manufacturer or authorised trained personnel.

- Dry, clear air of appropriate overpressure (see Technical data) must be available in sufficient volumes.
- Supply hose must match the prescribed dimensions. To avoid excessive frictional pressure loss, do not use hoses of over 15 metres in length (when using a Js13 hose).
- Protect the hammer from dirt and other harmful particles getting in. Always keep the input and output openings clean.
- Blow the hose clear to get rid of potentially harmful particles before attaching it to the hammer.
- Properly tighten all joints and re-tighten after 3-5 hours of first operation.
- Check-up on the state of the hammer regularly.

LUBRICATING

The hammer must be in good condition and lubricated properly to provide maximum performance, service life and proper functionality. Ensure sufficient lubrication with an oiler or a lubricator/water separator unit.

The lubricant not only serves to slow down wear but also to properly seal the compressed air distribution system. Insufficient lubrication can lead to damage on piston and cylinder.

Alternatively, pour about 50 ml of oil into the air supply hose (at the entry point) by the compressor unit and 5 ml into the air inlet at the beginning of each work shift and repeat every 2-3 hours of operating.

- Do not use hydraulic oils or unstabilized coleseed oils for lubrication.
- Before storing the tool for over three weeks, conserve it using mineral oil (see Storing).
- Do not use ecological oils for conservation.

Recommended ecological oils:

BP BIOHYD SE 46, ÖMV BIOHYD M 32,
TOTAL HYDROBIO 46

Recommended mineral oils:

PARAMO PNEUMAT 46

STORING

Before storing the tool for over three weeks, it needs to be conserved.

- Conserve the hammer by pouring cca. 5 ml of mineral oil into the air inlet and running it shortly to coat its internal parts with oil.
- Store the hammer in dry conditions – protected from weather factors and relative humidity below 75%.
- Do not store the hammer close to corrosive chemicals or gases.

In proper storage conditions, the hammer can be stored for a year and spare parts for a year and a half without re-conservation.

DELIVERING

The hammer is delivered separately, including this manual and a certificate of warranty.

Following items are also for sale:

- tools
- oilers, water separators
- recommended ecological oils
- hoses and hose ends, adapters, nuts, sockets, clips

Ordering spare parts

All hammers are manufactured in accordance with drawing documentation to ensure interchangeability of all components.

Please state the hammer type, name, quantity and item no. of the desired component in your order form.

NO.	Part No.	Part Name	Qty	Standard
	9470 870	BreakAir CH-58 Pick Hammer		
1	1418 230	Trigger	1	J
2	5259 612	Handle	1	J
3	311 222	Cylindrical Pin 6x22	1	J
4	5003 523	Piston	1	J
5	1730 190	Silencer	1	J
6	4087 210	Threaded Socket G1/2"	1	J
7	414 209	Quick Coupling 1/2"D	1	J
7*	4023 480	Socket Js 13	1	N
7**	0640 260	Cap Nut	1	N
8	273 064	Ring O 12x8	1	J
9	3011 213	Trigger Rod	1	J
10	315 007	Spring 4500-240	1	J
11	0026 060	Plug	1	J
12	1511 301	Cover	1	J
13	3908 070	Distribution Ring	1	J
14	315 129	Spring 4501 890	1	J
16A	8042 400	Screw Retainer - open	1	J
16B	8042 390	Screw Retainer - closed	1	N
17	273 049	Ring O 50x40	1	J
	8324 061	Cylinder Assy.	1	J
V	5097 121	Cylinder	1	J
P	2090 531	Chuck	1	J

J = Standard N = On Demand