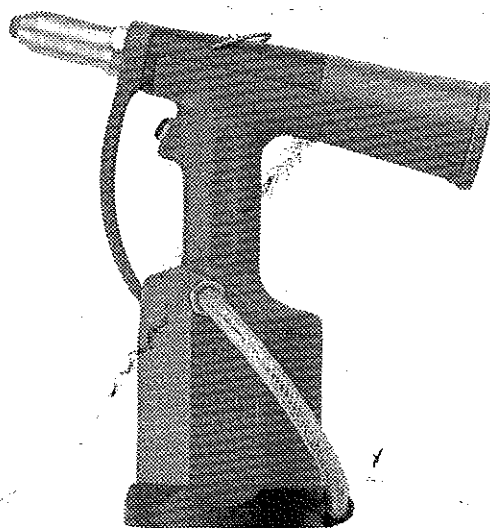
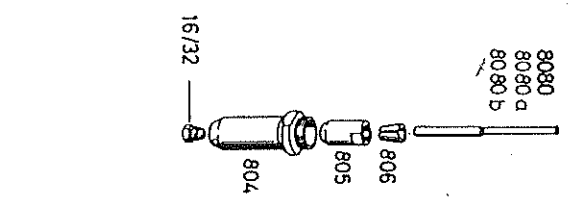
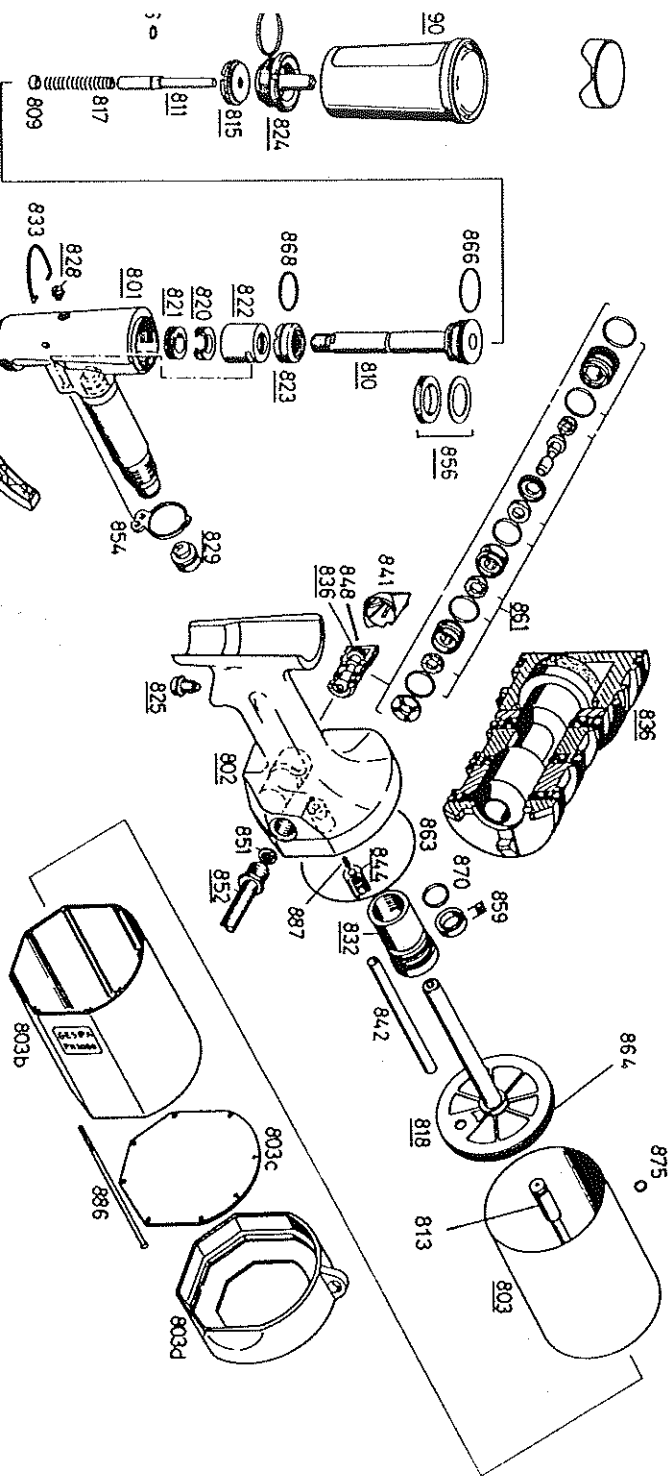


PH 2000

PH 2000-BT

(D) Pneumatisch-hydraulische Blindnietpistolen Betriebsanleitung mit Ersatzteilliste	Seite	3-4	(N) Pneumatisk-hydrauliske blindnagleverktøy Bruksanvisning med reservedelliste	Side	17-18
(DK) Pneumatisk-hydraulisk blindnietepistol Betjeningsvejledning med reservedelsliste	Side	5-6	(PL) Pneumatyczno-hydraulicznych nitownic Instrukcja obsługi, z spis części zamienne	Strona	19-20
(GB) Pneumatic-hydraulic Riveting Tools Operating instructions with spare parts list	Page	7-8	(P) Pistolas pneumático-hidráulicas para rebitem Manual de instruções com lista de de peças de reposição	Página	21-22
(FIN) Pneumaattis-hydrauliset sokkonietuspistoolit Käyttöohje ja varaosalista	Sivut	9-10	(S) Pneumatisk-hydrauliske blindnitverktyg Bruksanvisning med reservedelslista	Sida	23-24
(F) Pistolets à riveter oléo-pneumatiques Mode d'emploi avec liste de pièces de rechange	Page	11-12	(E) Remachadoras neumático-hidráulicas para remaches ciegos Manual de instrucciones con lista de repuestos	Página	25-26
(I) Rivettatrice Oleopneumatica Istruzioni per l'uso con elenco parti di ricambio	Pagina	13-14	(CZ) Pneumatisko-hydraulická pistole pro slepé nýtování Navod k použití a seznam náhradních dílů	Strona	27-28
(NL) Pneumatisch-hydraulische blindklinkpistolen Bedienings- en onderhouds Handleiding met onderdelenlijst	Bladzijde	15-16	(H) Pneumatikus-hidraulikus vakszegecs-anya pisztolyok Használati útmutató alkatrész listával	Oldal	29-30





801	7158017	+ 829
802	7158025	+ 836, 841, 844, 848
803	7158033	+ 875
803 b	7158005	
803 c	7158013	
803 d	7158021	
804	7102216	
805	7158068	
806	7102151	
806/9	7102208	
8080	7151454	
8080 a	7151241	≥ 4.8 Ø Blindniete
8080 b	7151268	≥ 6.4 Ø Blindniete
809	7158092	
810	7158106	+ 856, 866
811	7158114	+ 876
813	7272340	
815	7158157	+ 875
16/24	7171234	
16/27	7171277	
16/29	7171293	
16/32	7171323	
16/36	7171366	

16/40	7171390	
16/45	7171455	
16/26BT	7171471	
16/32BT	7171498	
16/42BT	7171501	
16/48BT	7171528	
817	7158173	
818	7158181	+ 864
820	7158203	
821	7158211	
822	7158238	
823	7158246	+ 868
824	7158254	+ 865
825	7158262	
828	7158289	
829	7158297	
832	7158327	+ 859, 870
833	7142277	
836	7158378	+ 861
841	7158416	
842	7158424	
844	7158440	
848	7158483	
851	7158513	
852	7158521	
854	7158548	
856	7158564	
859	7158599	
861	7158610	
863	7158637	
864	7278640	
865	7158653	
866	7158661	
868	7158688	
870	7158718	
875	7158750	
876	7158769	
886	7158866	
887	7278861	
889	7158890	
890	7158904	
894	7158947	
895	7158955	
896	7158963	
898	7158971	
106/8	7171527	
176	7171773	

...ing to specification
 ing tool PH 2000 must be used only for the setting of
 rivets, in accordance with the instructions.
 The safety instructions must be observed.

2. Safety Instructions



- The riveting tool must be used exclusively for the setting of blind rivets.
- Do not overload the tool; work within the stated power range.
- Never operate this tool without placing the blind rivet in the proper hole of the workpiece or the rivet could come off the tool! Do not direct the tool head towards yourself or anyone else.
- Regularly check the compressed air connections for 'play' and leakage.
- Before maintenance operations are carried out and when the tool is not in use always disconnect the tool from the compressed air mains.
- While working with the riveting tool safety glasses should always be worn. The use of any personal protective clothing is always recommended.
- The spent-mandrel container should always be screwed tightly on the tool whilst in operation.
- Do not exceed the air pressure limit of the tool.
- Dispose of the used hydraulic fluid according to local environmental protection regulations.

3. Technical Data

Weight	1,9 kg
Operating air pressure	6 - 8 bar
Air connecting hose	6 mm Ø (1/4")
Volume spent mandrel container	{ approx. 100 - 200 pcs. depending on size
Air consumption	1,8 Li. per setting operation
Quality compressed air	filtered
Setting power	15700 N (1.600 kp)
Stroke	22 mm
Hydraulic oil	approx. 30 ml ISO VG 46
Noise emission	L _{PA} 78 dB
Vibration	< 2,5 m/s ²

4. Equipment / Accessories

4.1. PH 2000

Nosepieces:	16/32 in operating position 16/27; 16/29; 16/36; 16/40; 16/45 enclosed
Jaws:	1 set (No. 806)
Jaw pusher:	No. 8080a (implemented)
Hydraulic oil:	1 bottle (100 ml) (No. 895)
Tools:	MSU-mounting key, (No. 176) Ball-headed screwdriver (No. 894)

4.2. PH 2000-BT

Nosepieces:	16/32 BT in operating position 16/26 BT; 16/42 BT; 16/48 BT enclosed
Jaws:	No. 106/8 (implemented)
Jaw pusher:	No. 8080a (implemented)
Jaw pusher:	No. 8080b (enclosed)
Hydraulic oil:	1 bottle (100 ml) (No. 895)
Tools:	MSU mounting wrench, (No. 176) Ball screwdriver (No. 894)

5. Rivet specifications

5.1. PH 2000

Standard Blind Rivet from Ø 4 to Ø 6,4 all materials
 For operating smaller blind rivet diameters the smaller jaw unit 898 must be used.
 MEGA GRIP® blind rivet up to Ø 6,6 aluminium, steel and stainless steel.
 Plastic blind rivet Ø 4; 5 and 6

5.2. PH 2000-BT

GB

6. Specification for equipment/re-tooling

6.1. PH 2000

Rivet-Ø	Rivet Material	Nosepiece	Jaw pusher	Jaws
3 & 3,2	Alu, PG-Alu, PG-steel, Cu, Steel,Stainless Steel, Stinox, Alu/Alu	small jaw unit no. 898 required. *)		
4	Alu, Cu, Cap-Alu u.-Cu	1624	8080	8080 a 806
	steel, Alu-Alu, PG-Alu	16/27		
	Stainless Steel, Stinox, PG-Stahl	16/29		
5 & 4,8	Alu,Cap-Alu u. CAP-Cu, PG-Alu	16/32		
	Steel, Alu-Alu			
6	Stainless Steel, Stinox, PG-Steel	16/40		
	Alu			
6,4	Steel	16/45	8080 b*)	806/9*)
	Alu			
	Steel, Alu/Alu			

for MEGA GRIP

4,9	all MEGA GRIP	16/31 MG	8080 a	806
6,6	all MEGA GRIP	16/41 MG	8080 b*)	806/9*)

6.2. PH 2000-BT

4	BULB-TITE, all materials	16/26 BT	8080 a	106/8
5,2	ditto.	16/32 BT		
6,3	ditto.	16/42 BT	8080 b	
7,7	ditto.	16/48 BT		

= standard equipment

*) = special accessories
 Further special accessories, e.g. universal nosepiece, special nosepiece, small jaw assembly, extension unit, can be delivered ex stock, on request.

7. Operation start-up



- Before start-up read, observe (!) and carefully keep the operating instructions as well as the safety instructions.
- Ensure compressed air supply is connected to the riveting tool by a specialist.

7.1. Selecting and exchanging nosepieces



Attention: Always use a blind rivet size corresponding to the nosepiece (selection according to table point 6.)

Exchanging nosepieces

- Disconnect the tool from the compressed air.
- Unscrew the nosepiece from the steel sleeve/socket
- Screw-in and tighten the replacement nosepiece.

7.2. Setting a blind rivet

- connect the tool to the compressed air.
- Insert the blind rivet into the nosepiece and place the rivet (held by the tool) into the materials to be riveted.
- Action button (trigger) until mandrel breaks.
- Release button (trigger).
- The mandrel is automatically transported to the mandrel container.

8. Suction and Holding of a Blind Rivet (Special function VAS)

- Use the ball-headed screwdriver to reach the adjusting screw
- By rotating clockwise 1 to max. 1,5 times, suction air is produced to hold the blind rivet in the nosepiece.
- Open the adjusting screw just until the air flow is strong enough to maintain the blind rivet while holding the tool

9. Emptying of mandrel container

- The mandrel container must be emptied regularly; overfilling causes the tool to malfunction.
- Disconnect tool from compressed air.
- Rotating the container cover opens the mandrel container, dispose of spent mandrels according to valid recycling procedure.

10. Maintenance and Care

The complete jaw assembly must be maintained regularly.

10.1. Cleaning or exchange of part 806 (jaws)

- Disconnect tool from compressed air.
- Screw off part 804 (steel tube) and clean the inner section, if necessary.
- Loosen part 805 (jaw housing) from part 810 (draw piece) using the open-end wrenches SW 17 and SW 14, clean, or exchange if worn out.
- Take out, clean and lubricate rubbing surface part 806 (jaws); exchange, if necessary
- Check part 8080 a (jaw pusher) for wear - exchange, if necessary.
- Assemble jaw unit in reverse order; tighten bolt parts 805/810; firmly tighten part 804.

10.2. Refill oil

- unscrew head no. 804 and jaw housing no. 805
- with trigger button no. 825 pressed, disconnect the tool from compressed air (air plunger in upper end position)
- remove oil-refill screw and push the traction rod by hand backwards to its end position
- top up oil avoiding air bubbles using the attached refill bottle; place filling pipe deeply into the hole
- tighten the refill screw with washer moderately
- connect tool to compressed air
- by loosening the refill screw 828, discharge surplus oil, then tighten moderately again
- mount jaw housing 805 and tighten firmly head 804 while pressing trigger button 825

10.3. Storage

- PH 2000 should be kept in a dry and frost-proof area.

11. Repairs

In principle, repairs under guarantee should be carried out by the manufacturer only.
Repairs after expiration of warranty should only be carried out by trained personnel. Failure to correctly carry out assembly and setting instructions and incorrect handling of part 828 can lead to serious tool defects. When in doubt, the tool should be returned to the manufacturer.

12. Troubleshooting

12.1. Blind rivet is not set

Cause



Solution

- Part 806 (jaws) dirty
- Part 806 (jaws) blunt
- Compressed air insufficient

clean and lubricate sliding surfaces (see 10.1)
replace (see 10.1)
see operating air pressure Point 3.

12.2. Spent mandrel is not transported automatically to the container

Cause



Solution

- | | |
|--|--|
| - wrong part 16/... used (nosepiece) | exchange according to table (see 6.) |
| - part 16/... worn-out | replace |
| - spent mandrel jammed in part 805 (jaw housing) | Clean or replace jaw unit (see 10.1) |
| - Spent mandrel container full | empty container (see 9.) |
| - wrong part 8080... used. (jaw pusher) | exchange according to table (see 6.) and observe point 10.1. |

13. Warranty

This riveting tool has a six-month warranty from the date of delivery (to be proven by invoice or delivery note). Damage caused by wear, over-loading or improper handling is excluded from the warranty.

Damage 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 riveting tool (not dis-assembled) is returned to the distributor or to GESIPA.

14. CE Conformity declaration

We hereby declare that the construction of the pneumatic hydraulic blind riveting tools

PH 2000; PH 2000-BT

when used in accordance with the operating instructions meets the following standards, laws and regulations:

- Machinery-directive 98/37 EEC
Appendix I, II, III and V
- Noise emission according to
91/368 EEC Abl. EU No. L 198-16
91/392 EEC Abl. EU No. L 183-9
PrEN 31200 Edition. 06/93
PrEN 31204 Edition 06/93
ISO 3744 Edition. 1981
- Vibrations according to ENV 28662-1;
9. GSGV; 91/368 EEC
as well as the cited directives
- Applicable national technical specifications GSG
(Appliance safety law; Accident prevention regulations)

H.U. Harder

H.U. Harder
(Safety officer)