

# PH 1, PH 2, PH 2-VK, PH-Axial

**DE** **Pneumatisk-hydraulisches Blindniet-Setgerät**  
Betriebsanleitung mit Ersatzteilliste

**GB** **Hydropneumatic blind rivet setting tool**

Operating manual with spare parts list

**FR** **Outil oléopneumatique pour pose de rivets aveugles**  
Mode d'emploi avec liste de pièces de rechange

**ES** **Remachadora neumática**  
Manual de instrucciones con lista de repuestos

**IT** **Rivettatrice pneumo-idraulica**  
Manuale per l'uso e la manutenzione ed elenco parti di ricambio

**NL** **Pneumatisk-hydraulisch blindklinkpistool**  
Bedienings- en onderhoudshandleiding met onderdelenlijst

**DK** **Pneumatisk hydraulisk blindniet-apparat**  
Betjeningsvejledning med reservedelsliste

**SE** **Pneumatisk-hydraulisk blindnietpistol**

Bruksanvisning med reservdelslista

**NO** **Pneumatisk hydraulisk blindnietapparat**

Bruksanvisning med reservedelsliste

**FI** **Pneumaattis-hydraulinen vetonittityökalu**

Käyttöohje ja varaosaluettelo

**PT** **Rebitadeira pneumática-hidráulica para rebites cegos**

Instrução de serviço com lista de peças de reposição

**CZ** **Pneumaticko-hydraulické nýtovací nářadí pro trhací nýty**  
Návod k obsluze se seznamem náhradních dílů

**GR** **Πνευματική-υδραυλική συσκευή τοποθέτησης τυφλών πριτσινιών**  
Οδηγίες χρήσης με λίστα ανταλλακτικών

**HU** **Pneumatikus-hidraulikus szegecszűző szerszám**

Üzemeltetési utasítás,alkatrészlistával

**PL** **Nitownica pneumatyczno-hydrauliczna do nitów jednostronnie zamykanych**  
Instrukcja obsługi wraz ze spisem cze,sci zamiennych

**CN** **气动液压式抽芯铆钉枪**

操作说明书及备件目录

**RU** **Пневмогидравлический заклепочник для установоки выгнанных заклепок**  
Инструкция по эксплуатации и ведомость заготовок



PH 1



PH 2



PH 2-VK



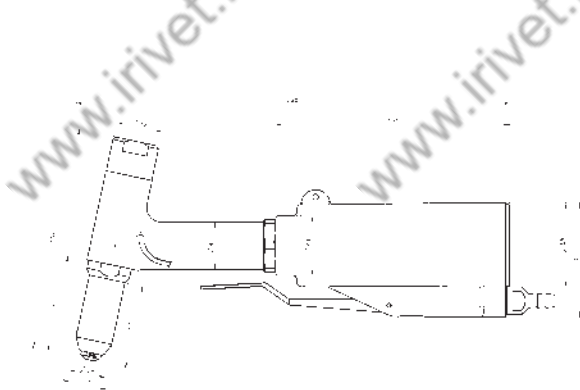
PH-Axial



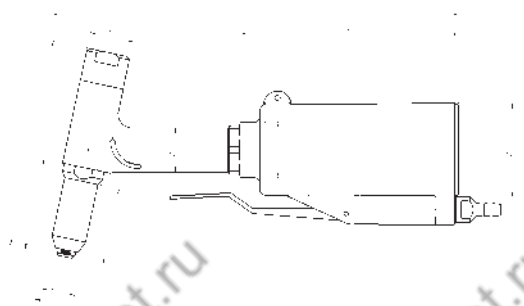
VAS (PH1, PH2)

<b>DE</b>	<b>Seite</b>	<b>7-16</b>	Zum Lesen der Bedienungsanleitung bitte die erste Umschlagseite herausklappen.
<b>GB</b>	<b>Page</b>	<b>17-26</b>	When reading these instructions, please open the inside cover.
<b>FR</b>	<b>Page</b>	<b>27-36</b>	Pour consulter le mode d'emploi, veuillez déplier la première page de couverture.
<b>ES</b>	<b>Página</b>	<b>37-46</b>	Para leer las instrucciones de uso, abrir la primera página de la cubierta.
<b>IT</b>	<b>Pagina</b>	<b>47-56</b>	Per leggere le istruzioni d'uso aprire la prima pagina.
<b>NL</b>	<b>Bladzijde</b>	<b>57-66</b>	Bij het lezen van de gebruiksaanwijzing deze bladzijde openslaan.
<b>DK</b>	<b>Side</b>	<b>67-76</b>	Slå den første side ud for bedre at kunne læse og forstå betjeningsvejledningen.
<b>SE</b>	<b>Sida</b>	<b>77-86</b>	Vik upp den första omslagssidan för att kunna läsa bruksanvisningen bättre.
<b>NO</b>	<b>Side</b>	<b>87-96</b>	Vennligst les forsiden først for å få en bedre rettleiding og forståelse av bruksanvisningen.
<b>FI</b>	<b>Sivu</b>	<b>97-106</b>	Kun luet käyttöohjetta, käännä esiin ensimmäinen kuvasivu.
<b>PT</b>	<b>Página</b>	<b>107-116</b>	Para ler as instruções de uso, favor abrir a folha no verso da capa.
<b>CZ</b>	<b>Strana</b>	<b>117-126</b>	Pro přečtení návodu k obsluze rozložte prosím první stranu obálky.
<b>GR</b>	<b>Σελίδα</b>	<b>127-136</b>	Για να διαβάσετε αυτές τις οδηγίες χρήσης, ξεδιπλώστε την πρώτη σελίδα του εξώφυλλου.
<b>HU</b>	<b>Oldal</b>	<b>137-146</b>	A kezelési útmutató elolvasásához kérjük nyissa fel az alsó borítódoldalt.
<b>PL</b>	<b>Strana</b>	<b>147-156</b>	Aby przeczytać instrukcję obsługi prosz, rozłożyć pierwszą stronę okładki.
<b>CN</b>	<b>页</b>	<b>157-166</b>	阅读这些说明书时，请先打开扉页。
<b>RU</b>	<b>Страница</b>	<b>167-176</b>	Чтобы прочитать инструкцию по эксплуатации, откройте вторую страницу обложки .

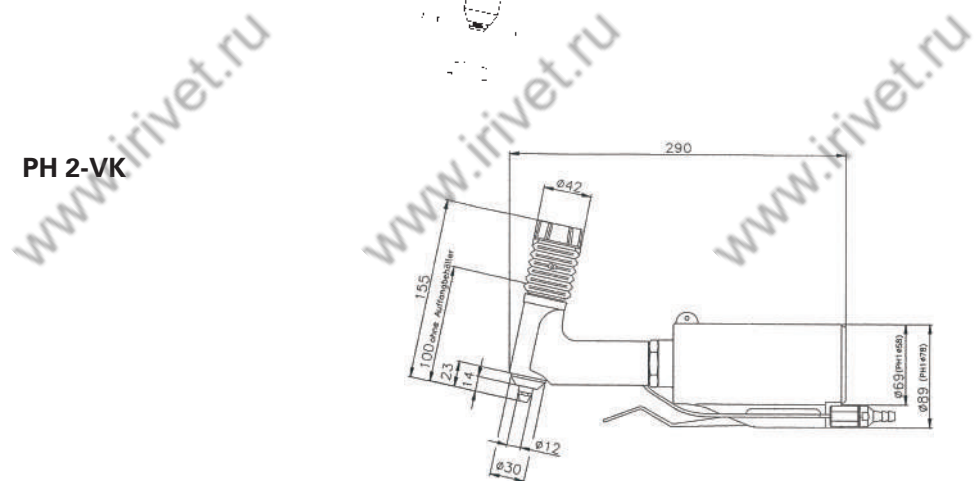
PH 1



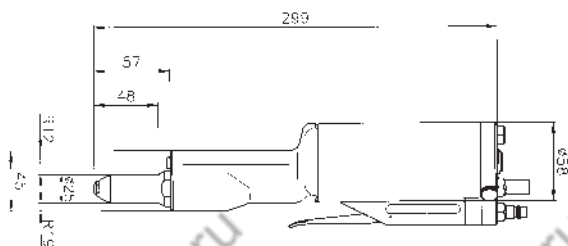
PH 2



PH 2-VK



PH-Axial



- DE** Ersatzteile
- GB** Spare Parts
- FR** Pièces de rechange
- ES** Piezas de repuesto
- IT** Lista dei pezzi di ricambio
- NL** Onderdelen

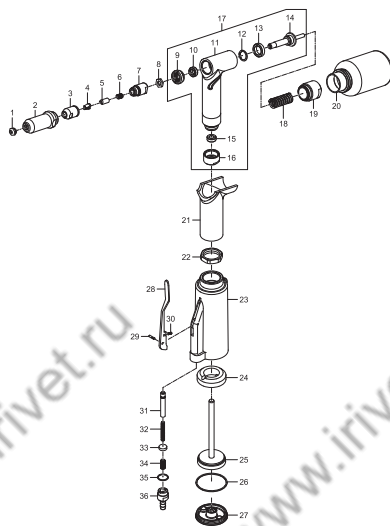
- DK** Reservedele
- SE** Reservdelar
- NO** Reservdeler
- FI** Varaosaluettelo
- PT** Peças sobressalentes
- CZ** Náhradní díly

- GR** Ανταλλακτικά
- HU** Alkatrészek
- PL** Części zamienne
- CN** 备件
- RU** Запчасти

## PH 1, PH 2

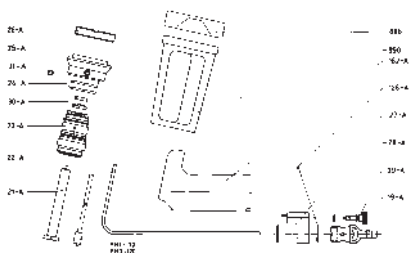
	<b>PH 1</b>	143 4285
	<b>PH 1, PH 2</b>	143 4288
	<b>PH 1, PH 2</b>	143 4289
1 *	<b>PH 1, PH 2</b>	143 4290
	<b>PH 2</b>	143 4291
	<b>PH 2</b>	143 4292
2		143 4105
3 *	<b>PH 1</b>	143 4243
	<b>PH 2</b>	143 4102
	<b>PH 1</b>	143 4071
4 *	<b>PH 1</b>	143 4241
	<b>PH 2</b>	143 4103
5 *	<b>PH 1</b>	143 4242
	<b>PH 2</b>	143 4319
6 *		144 5314
7		143 4320
8		143 4321
9 *		143 4318
10 *		143 4323
11		143 4315
12		144 5305
13 *		143 4324
14		143 4322
15 *		143 4326
16		143 4325
17		145 6792
18 *		144 5304
19		143 4327
20		144 5302
21		143 4343
22		143 4337

23	<b>PH 1</b>	143 4244
	<b>PH 2</b>	143 4328
24	<b>PH 1</b>	143 4246
	<b>PH 2</b>	143 4334
25	<b>PH 1</b>	145 6769
	<b>PH 2</b>	145 6791
26 *		143 4332
27	<b>PH 1</b>	143 4245
	<b>PH 2</b>	143 4331
28		143 4330
29		144 5307
30		144 5308
31		145 6785
32		144 5306
33 *		143 4329
34 *		144 5303
35		143 5258
36		145 6784
		143 5261
		143 5262
		145 6780
		143 4311



## VAS für PH 1/PH 2\*

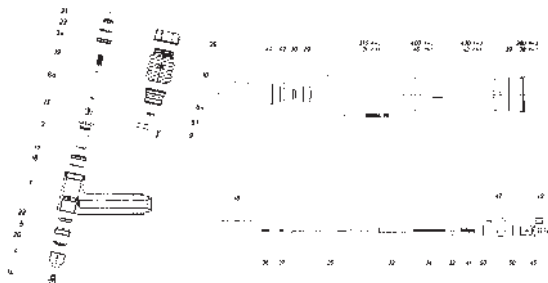
19-A	143 5248
21-A	143 5249
22-A *	143 5250
23-A	143 5251
24-A *	143 5252
25-A	143 5253
26-A	143 5254
27-A	143 5255
28-A *	143 5256
29-A	143 5257
30-A *	143 5259
31-A	144 5828
126-A *	143 5258
162-A	143 5260
890	143 4233
896	144 5295
70	143 5261
71	143 4270
170	143 5262
176	143 4311



\*nur als Ersatzteil lieferbar, \*\* Only available as spare part, \*\* disponible uniquement comme pièce de rechange, \*\* Suministrable solo como repuesto, \*disponibile solo come ricambio, \*alleen als reserveonderdeel leverbaar, \*fås kun som reservedel, \*Finns bara som reservdel, \*kun tilgjengelig som reservedel, \*saatavissa vain varaosana, \*apenas disponivel como peça sobressalente, \*k dodání jen jako náhradní díl, \*διατίθεται ως ανταλλακτικό, \*csak alkatrészként kapható, \*dostępne tylko jako część zamienna, \*仅作为备件提供, \*поставляется только в качестве запчасти

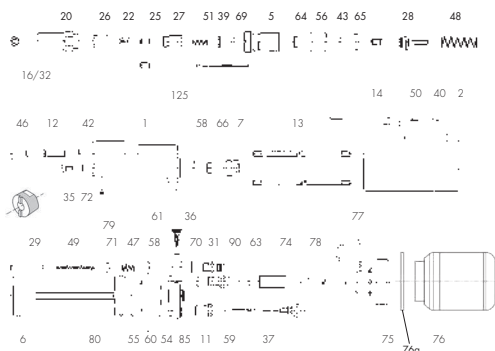
## PH 2-VK

1	143 4335	17 •	143 4354	33	145 6785	42	143 4337
2	143 4336	18	144 5305	34	144 5306	43	145 6769
3 α	143 4349	19 •	143 4339	35	143 4330	430	145 6791
4	143 4338	21 •	143 4341	36	144 5307	44	143 5260
5	145 6786	22 •	143 4342	37	144 5308	45	143 5248
6 α	143 4350	23 •	143 4229	38	143 4245	46	143 5250
8 α •	143 4351	26	144 5309	380	143 4331	47	143 5255
9	145 6788	29	143 4325	39 •	143 4332	49	144 5310
10	145 6789	30 •	143 4326	40	143 4246	50	143 5258
13 •	143 4071	31	143 4244	400	143 4334	51	143 4230
14 A •	143 4055	310	143 4328	41 •	144 5303		145 6780
14 B •	143 4061	32	143 4329				
14 C •	143 4062						



## PH Axial

1	143 6115	26 •	143 4102	51 •	144 5314	72	143 6140
2	143 6117	27	143 4320	54	143 6135	74	145 8068
5	145 8066	28	143 4322	55	143 6134	75 •	143 6141
	143 6114	29	145 6785	56	143 6136	76 •	144 6144
6	143 6118	31	144 6166	58	143 4497	76 α	143 6142
7	143 6119	35	144 5700	59	143 6137	77 •	144 5265
11	143 6123	36	143 5257	60	143 6116	78	143 6143
12	143 6124	37	143 6132	61	143 5256	79	144 5819
13	143 6125	39	143 4321	63	143 6138	80	145 8078
14	143 6126	40	144 5307	64 •	143 4323	85	145 8071
16/24 •	143 4388	42	144 6167	65 •	143 4324	90	145 8072
16/27 •	143 4289	43	144 5305	66 •	143 4326	95	145 8073
16/29 •	143 4290	46	144 6168	69	143 6139	100	145 8074
16/32 •	143 4291	47	143 6133	70	144 6169	125 •	143 6130
16/36 •	143 4292	48 •	144 5304	71 •	143 4329		145 6780
20	143 4105	49	144 5306				
22 •	143 4103	50	144 5308				
25 •	143 4319						



• Verschleißteile, wearing parts, pièces consommables, piezas consumibles, produzione di pezzi resistenti all'abrasione, sluitstukken, slijdende, slijtdeler, sulkuosat, peças consumíveis, spotřební materiál, παραγωγή ανταλλακτικών, κορό alkatrészek, zużycie części, 耐磨零件, износ детали

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## 1. Use for intended purpose

As described in these operating instructions, the blind rivet setting tool may only be used for the purpose of setting blind rivets.

**Observe the safety information!**

## 2. Safety information

- The blind rivet setting tool is to be used solely for the purpose of setting blind rivets.
- Never overload the tool; work within the specified working capacity.
- Do not use tool without material! The blind rivet could be flung from the device! Never turn the tool towards yourself or towards other persons.
- Regularly check the compressed air lines to ensure they are fitted correctly and airtight.
- When carrying out maintenance work on the blind rivet setting tool and when the tool is not in use, it should always be disconnected from the compressed air network.
- When working with the blind rivet setting tool, always wear protective goggles. Personal protective equipment such as protective clothing, gloves, safety helmet, non-slip footwear, ear protection and fall arresting device is recommended.
- The spent mandrel container must remain screwed on or attached during tool operation.
- Do not exceed the specified operating pressure for the tool.
- Dispose of the used hydraulic oil in accordance with valid environmental protection regulations.

### 3. Technical data

Tool type	PH 1	PH 2	PH 2-VK	PH-Axial	VAS (PH1, PH2)*
Weight (kg)	1.2	1.3	1.3	1.8	0.43
Operating pressure (bar)	5-7	5-7	5-7	5-7	4-6
Hose connection (Ø mm) ¼"	6	6	6	6	-
Spent mandrel container capacity	40-80	40-80	20-40	50-100	50-100
Air consumption (NI/rivet)	0.8-1.2	1.2-1.8	1.2-1.8	1.2-1.8	1.2
Compressed air quality (filtered)	✓	✓	✓	✓	✓
Setting force (N) at 5 bar	5200	7375	5200	7375	-
Stroke (mm)	15	15	14	15	-
Hydraulic oil (ml) Renolin Eterna 32	25	25	25	30	-
Noise emission $L_{pa}$ (dB) Measurement uncertainty $k = 3$ dB	83	83	83	82.5	84.5
Vibration ( $m/s^2$ ) (measurement uncertainty $k = 1.5 m/s^2$ )	<2.5	<2.5	<2.5	<2.5	-
Integrated spent mandrel evacuation	-	-	✓	✓	-

\* Only available as spare part



## 4. Equipment/accessories

Tool type	PH 1	PH 2	PH 2-VK	PH-Axial	VAS (PH 1, PH 2)*
Nosepiece in working position	16/24	16/32	10/24	16/24	-
Nosepiece, supplied	16/18 16/27 16/29	16/24 16/27 16/29 16/36	10/18 10/27	16/27 16/29 16/32	-
1 pair/set of jaws	Item 4	Item 4	Item 13	Item 22	-
1 spent mandrel container	Item 20	Item 20	Item 10	to order	Part No. 728 8913
1 wrench MSU	✓	✓	✓	-	✓
1 wrench MSZ	✓	✓	✓	-	-
1 nosepiece wrench	-	-	-	-	-
1 Allen key WAF 4	-	-	-	-	-
1 air deflector (Item 896)	-	-	-	-	-
1 jaw pusher with reducing tube in working position (Item 125) (for blind rivet up to Ø 4 Al, Cu)	-	-	-	✓	-

\* Only available as spare part

## 5. Working capacity

Tool type	PH 1	PH 2	PH 2-VK	PH-Axial
Standard blind rivet Ø (mm)	2.4 - 4	4 - 5 2.4 - 3.2*	2.4 - 4 (PG-Al, steel and aluminium)	4 - 5 (aluminium and steel) 2.4 - 3.2*
Material	all	all	all	all

## 6. Nosepiece assignment

Rivet Ø	Rivet material	PH 1	Part No.	PH 2	Part No.
2.4	Aluminium	16/18	143 4285	10/18*	143 4055
3.2	CAP® Al, CAP® Cu	16/18	143 4285	10/18*	143 4055
3 and 3.2	Al, Cu, steel, stainless steel, Stinox, Al, PG Al, PG steel	16/24	143 4288	10/24*	143 4061
4	Al, Cu, CAP® Al, CAP® Cu	16/24	143 4288	16/24	143 4285
4	PG Al, steel, Al	16/27	143 4289	16/27	143 4288
4	Stainless steel, Stinox, PG steel	16/29	143 4290	16/29	143 4289
4.8 and 5	Al, CAP® Al, CAP® Cu, PG Al	-		16/29	143 4290
4.8 and 5	Steel, Al	-		16/32	143 4291
4.8 and 5	Stainless steel, Stinox, PG steel	-		16/36	143 4292

Rivet Ø	Rivet material	PH 2-VK	Part No.	PH-Axial	Part No.
2.4	Aluminium	10/18	143 4055	10/18*	143 4055
3.2	CAP® Al, CAP® Cu	10/18	143 4055	10/18*	143 4055
3 and 3.2	Al, Cu, steel, stainless steel, Stinox, Al, PG Al, PG steel	10/24	143 4061	10/24*	143 4061
4	Al, Cu, CAP® Al, CAP® Cu	10/24	143 4061	16/24	143 4285
4	PG Al, steel, Al	10/27	143 4062	16/27	143 4288
4	Stainless steel, Stinox, PG steel	-		16/29	143 4289
4.8 and 5	Al, CAP® Al, CAP® Cu, PG Al	-		16/29	143 4290
4.8 and 5	Steel, Al	-		16/32	143 4291
4.8 and 5	Stainless steel, Stinox, PG steel	-		-	

\* Small jaw assembly required

- PH 1/PH 2 (Part No. 145 6783)
- PH-Axial (Part No. 145 8075)

## 7. Start-up

Before starting the blind rivet setting tool, read and observe the operating instructions and safety information and keep in a safe place. Have technical personnel connect the compressed air supply to the blind rivet setting tool.

### 7.1 Selecting and changing the nosepiece

Caution: 

Always fit the nosepiece corresponding to the size of the blind rivet (refer to table in Section 6).

#### To change the nosepiece:

- Disconnect the tool from the compressed air supply.
- Unscrew nosepiece from steel head sleeve.
- Screw in corresponding nosepiece and tighten.

### 7.2 To set a blind rivet

- Connect the blind rivet setting tool to the compressed air supply.
- Insert the blind rivet in the nosepiece and fit as far as it will go in the hole in the material to be joined.
- Press trigger until the mandrel breaks off.
- Release the trigger.
- The spent mandrel is conveyed into the spent mandrel container by tilting the tool back - automatically in tools with spent mandrel evacuation - (see 8).

## 8. Sucking in and holding a blind rivet

### 8.1 PH 2-VK

- Connect the riveting tool to the compressed air supply.
- The blind rivet is sucked in, held in the nosepiece and the spent mandrel conveyed automatically into the spent mandrel container.

### 8.2 PH-Axial

- Fit connection sleeve Item 74 with evacuation tube Item 78 on to screw-in nozzle Item 90; the user connects the end of the tube to a spent mandrel collection system.
- Connect the riveting tool to the compressed air supply.
- The suction and evacuation system is turned on by turning the valve screw Item 36 by  $\frac{1}{2}$  to 1 turn to the left. The blind rivet is sucked in, held in the nosepiece and the spent mandrel conveyed automatically into the evacuation tube Item 78.

### 8.3 PH 1 + VAS, PH 2 + VAS

- Connect the riveting tool to the compressed air supply.
- The suction and evacuation system is turned on by turning the valve screw Item 29-A by  $\frac{1}{2}$  to 1 turn to the left. The blind rivet is sucked in, held in the nosepiece and the spent mandrel conveyed automatically into the spent mandrel container.

## 9. Emptying the spent mandrels from the container

Caution: 

The spent mandrel container must be emptied regularly; overfilling will cause the riveting tool to malfunction.

- Disconnect the tool from the compressed air supply.
- Open the spent mandrel container, empty spent mandrels into suitable container and dispose of in corresponding recycling system.

## 10. Maintenance and care

The complete jaw mechanism must be maintained regularly.

### 10.1 To clean or change the jaws

#### 10.1.1 PH 2-VK

- Disconnect the tool from the compressed air supply.
- Detach spent mandrel container Item 10.
- Remove end screw Item 6a with reset piston Item 3a as well as compression spring Item 19 and jaw pusher Item 8a.
- Remove jaws Item 13, clean and oil sliding surfaces; replace if worn.
- Install in reverse order of removal.

#### 10.1.2 PH 1, PH 2, PH-Axial

- Disconnect the tool from the compressed air supply.
- Unscrew steel head sleeve Item 7 (PH 1, PH 2) or Item 20 (PH-Axial) and clean inside if necessary.
- Release jaw housing Item 3 (PH 1, PH 2) or Item 26 (PH-Axial).
- Release jaws Item 4 (PH 1, PH 2) or Item 22 (PH-Axial), clean and oil sliding surfaces; replace if worn.
- Install in reverse order of removal.

### 10.2 Storage

- Store the blind rivet setting tool in a dry place where there is no danger of frost.

**Regular maintenance will extend the service life of your high-quality GESIPA® tools and they should be serviced at least every 2 years by an authorised workshop or by GESIPA® Service. We recommend servicing tools that are subject to intensive use ahead of schedule.**

## 11. Repairs

Repairs under warranty are carried out by the manufacturer. Repairs outside the warranty period should only be carried out by skilled technical personnel. Failure to observe the assembly and setting procedures and operation by non-skilled personnel may result in serious damage to the riveting tool. In case of doubt, always send in the device to the manufacturer.

## 12. Troubleshooting

### 12.1 Blind rivet is not set

Cause	Corrective measures
Jaws soiled	Clean and oil sliding surfaces (see 10.1)
Jaws worn	Replace (see 10.1)
Insufficient compressed air	See operating pressure (see 3)

### 12.2 Spent mandrel is not conveyed automatically into the container

Cause	Corrective measures
Wrong nosepiece used	Exchange according to table (see 6)
Nosepiece worn	Replace
Spent mandrel jammed in jaws	Clean jaws and jaw housing and oil sliding surfaces; replace if worn (see 10.1)
Spent mandrel container full	Empty (see 9)

## 13. Warranty

The applicable terms and conditions of guarantee shall apply and can be viewed under following link: [www.gesipa.com/agb](http://www.gesipa.com/agb)

## 14. CE Declaration of conformity

We hereby declare that the design and construction of the tool named below, as well as the version that we have put on the market, complies with applicable fundamental health and safety requirements stipulated in EU directives. Tool modifications made without our authorisation shall render this declaration void. The safety information in the product documentation provided must be observed. This document must be retained.

**PH 1**

**PH 2**

**PH 2-VK**

**PH-Axial**

**VAS (PH 1, PH 2)**

- 2006/42/EG
- DIN EN ISO 12100:2011
- DIN EN ISO 11148-1:2012
- DIN EN 82079-1:2013

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pp Dr. Richard Gärtner

DE Ihr Fachhändler

DK Deres forhandler

GR Το ειδικό σας κατάστημα

GB Your dealer

SE Leverantör

HU Az Ön szaküzlete

FR Cachet du revendeur

NO Deres forhandler

PL Wasz dystrybutor

ES Proveedor

FI Jälleenmyyjä

CN 经销商

IT Rivenditore autorizzato

PT O vosso distribuidor

RU Ваш дилер

NL Uw vakhandelaar

CZ Váš prodejce