

SPARE PARTS LIST

Spiromatic 90U



© 2006 Interspiro AB, Sweden. This publication contains or refers to proprietary information which is protected by copyright. All rights are reserved. Interspiro® and Spiromatic® are registered trademarks belonging to Interspiro.

This publication may not be copied, photocopied, reproduced, translated, or converted to any electronic or machine-readable form in whole or in part without prior written approval from Interspiro.

READ BEFORE USE

1. Only holders of a valid **INTERSPIRO SERVICE CERTIFICATE** may carry out service and repairs on **INTERSPIRO** breathing equipment. Unauthorized service may result in malfunction and users relying thereon could sustain severe respiratory injury or death.
2. When using the spare part list always refer to the equipments **SERVICE MANUAL** in regard to procedure and handling of the spare parts assembly and function.
3. Changes to this document – necessitated by typographical errors, inaccuracies of current information or improvements and changes of equipment – may be done at any time and without prior notice.
4. Some items include a character for identification purposes, ex. 4a and 4b. For some of these items a part number is not available. The identification character used for these items is intended to serve as a reference when following instructions in a service manual. They cannot be ordered as separate items.
5. The service kits contain replacement items used for preventive maintenance. The service kit description “1 singular item of each of #6” means that one single item from part number 6 is included – even if part number 6 is a 10 pack.
6. Always refer to **WWW.INTERSPIRO.COM** for product or document updates and for service bulletines.

CONTENTS

SPIROMATIC 90U SERVICE KITS	6
SPIROMATIC FACE MASK	7
SPIROMATIC BREATHING VALVE	8
SPIROMATIC BREATHING VALVE	9
MANIFOLD	10
PRESSURE REGULATOR	11
WHISTLE INSERT ASSEMBLY	12
BREATHING HOSE AND MANIFOLD	13
TWO TYPES OF CYLINDER VALVE	14
CYLINDER VALVE - TYPE I	15
CYLINDER VALVE - TYPE II	16
HARNESS	17

SPIROMATIC 90U SERVICE KITS

All service kits listed below are for 1 apparatus and do not include parts for cylinder and cylinder valve.

A. For SPIROMATIC 90U with blank cover (346 190 586), service kit 460 190 665 shall be used.

This service kit consists of:

- 460 190 404	Service kit face mask	See page 7
- 460 190 416	Service kit breathing valve	See page 9
- 460 190 321	Service kit manifold	See page 10
- 460 190 322	Service kit pressure regulator	See page 11
- 460 190 323	Service kit whistle insert assembly	See page 12

B. For SPIROMATIC 90U with blank cover and 3-way manifold (346 190 585), service kit 460 190 666 shall be used.

This service kit consists of:

- 460 190 404	Service kit face mask	See page 7
- 460 190 416	Service kit breathing valve	See page 9
- 460 190 321	Service kit manifold	See page 10
- 460 190 322	Service kit pressure regulator	See page 11
- 460 190 323	Service kit whistle insert assembly	See page 12
- 460 190 414	Service kit 3-way manifold	See page 13

C. For SPIROMATIC 90U with speech cone (97 745-01), service kit 460 190 667 shall be used.

This service kit consists of:

- 460 190 405	Service kit face mask	See page 7
- 460 190 416	Service kit breathing valve	See page 9
- 460 190 321	Service kit manifold	See page 10
- 460 190 322	Service kit pressure regulator	See page 11
- 460 190 323	Service kit whistle insert assembly	See page 12

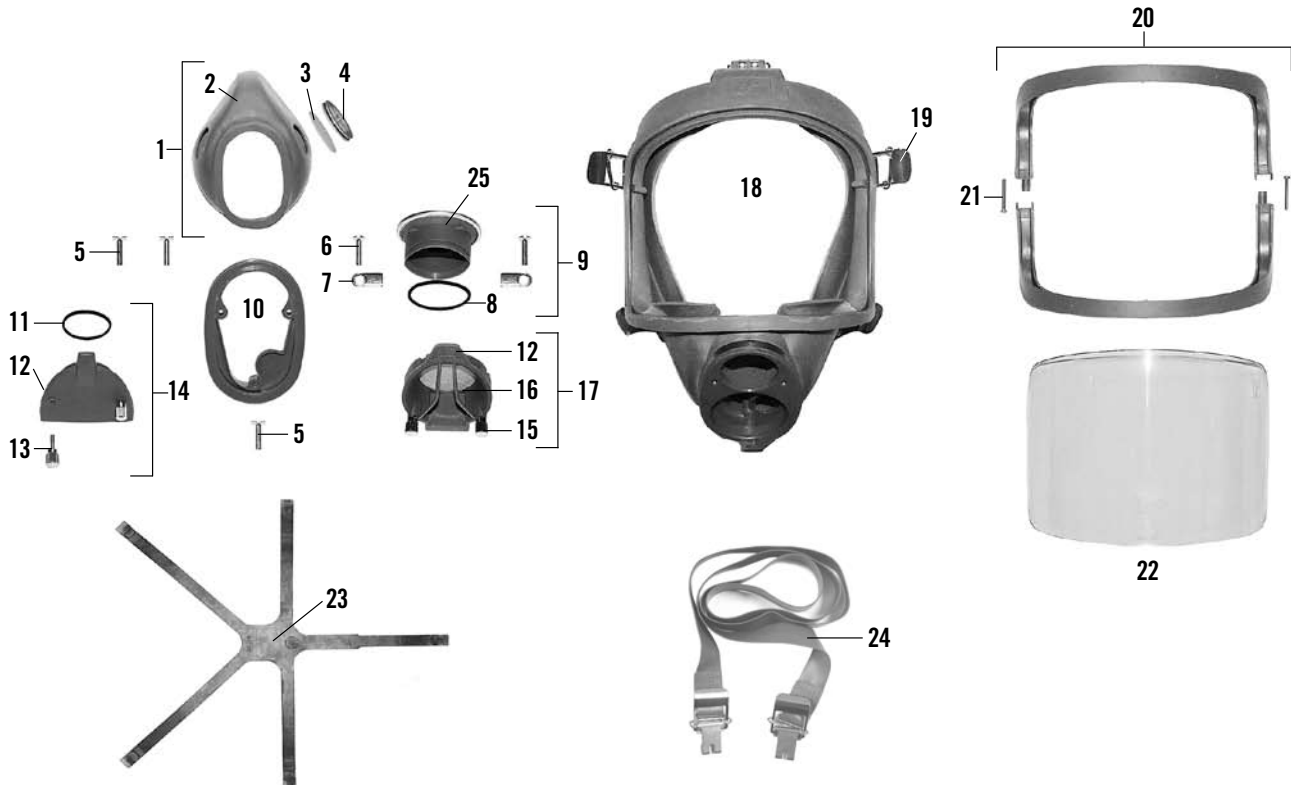
D. For SPIROMATIC 90U with speech cone and 3-way manifold (346 190 647), service kit 460 190 668 shall be used.

This service kit consists of:

- 460 190 405	Service kit face mask	See page 7
- 460 190 416	Service kit breathing valve	See page 9
- 460 190 321	Service kit manifold	See page 10
- 460 190 322	Service kit pressure regulator	See page 11
- 460 190 323	Service kit whistle insert assembly	See page 12
- 460 190 414	Service kit 3-way manifold	See page 13

NOTE! For **SPIROMATIC 90U** breathing apparatus with pressure regulators and whistle inserts that have been delivered before the beginning of 1999, with turquoise back-up rings or without back-up rings, refer to page 11 and 12 for correct ordering numbers of the service kits.

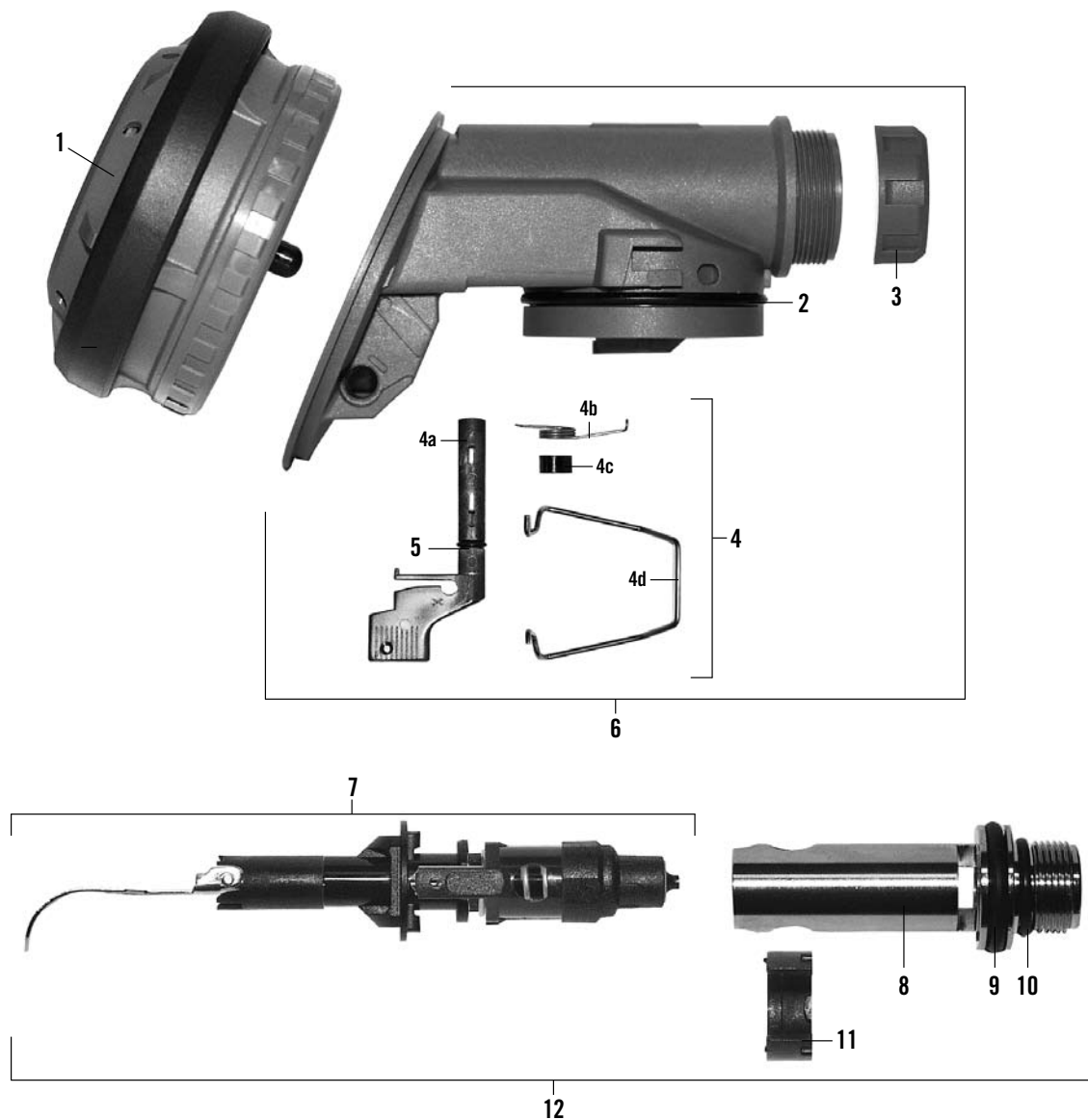
SPIROMATIC FACE MASK



#	DESCRIPTION	ORDERING NO.	NOTES
1	Inner mask assy	336 190 286	
2	Inner mask	460 190 397	
3	Non-return valve disc	336 190 264	10 pack
4	Non-return valve seat	460 190 221	10 pack
5	Screw	336 190 246	10 pack
6	Screw	460 190 276	10 pack
7	Locking plate	460 190 223	10 pack
8	O-ring	336 190 790	10 pack
9	Speech diaphragm assy	460 190 013	
10	Inner mask plate	460 190 398	
11	O-ring	336 190 222	5 pack
12	Circlip	336 190 255	10 pack
13	Hand screw	460 190 300	10 pack
14	Blank cover	336 190 017	
15	Hand screw	460 190 399	10 pack
16	Protective clip	460 190 401	10 pack
17	External speech cone	460 190 400	
18	Mask body assy	336 190 019	Incl. #24
19	Buckle	336 190 263	3 pack
20	Visor frame assy	460 190 297	Incl. #21
21	Screw	336 190 409	10 pack
22	Visor	460 190 350	
23	Head harness	460 190 402	

#	DESCRIPTION	ORDERING NO.	NOTES
24	Neck strap assy	460 190 403	
25	Speech cone	336 190 773	Incl. #8
#	SERVICE KIT	ORDERING NO.	
A	Service kit for 1 apparatus Spiromatic face mask, blank cover – 1 singular item of each of #11 – 2 singular items of each of #3	460 190 404	
B	Service kit for 10 apparatus Spiromatic face mask, blank cover – 10 singular items of each of #11 – 20 singular items of each of #3	460 190 675	
C	Service kit for 1 apparatus Spiromatic face mask, speech cone – 1 singular item of each of #8 – 2 singular items of each of #3	460 190 405	
D	Service kit for 10 apparatus Spiromatic face mask, speech cone – 10 singular items of each of #8 – 20 singular items of each of #3	460 190 676	

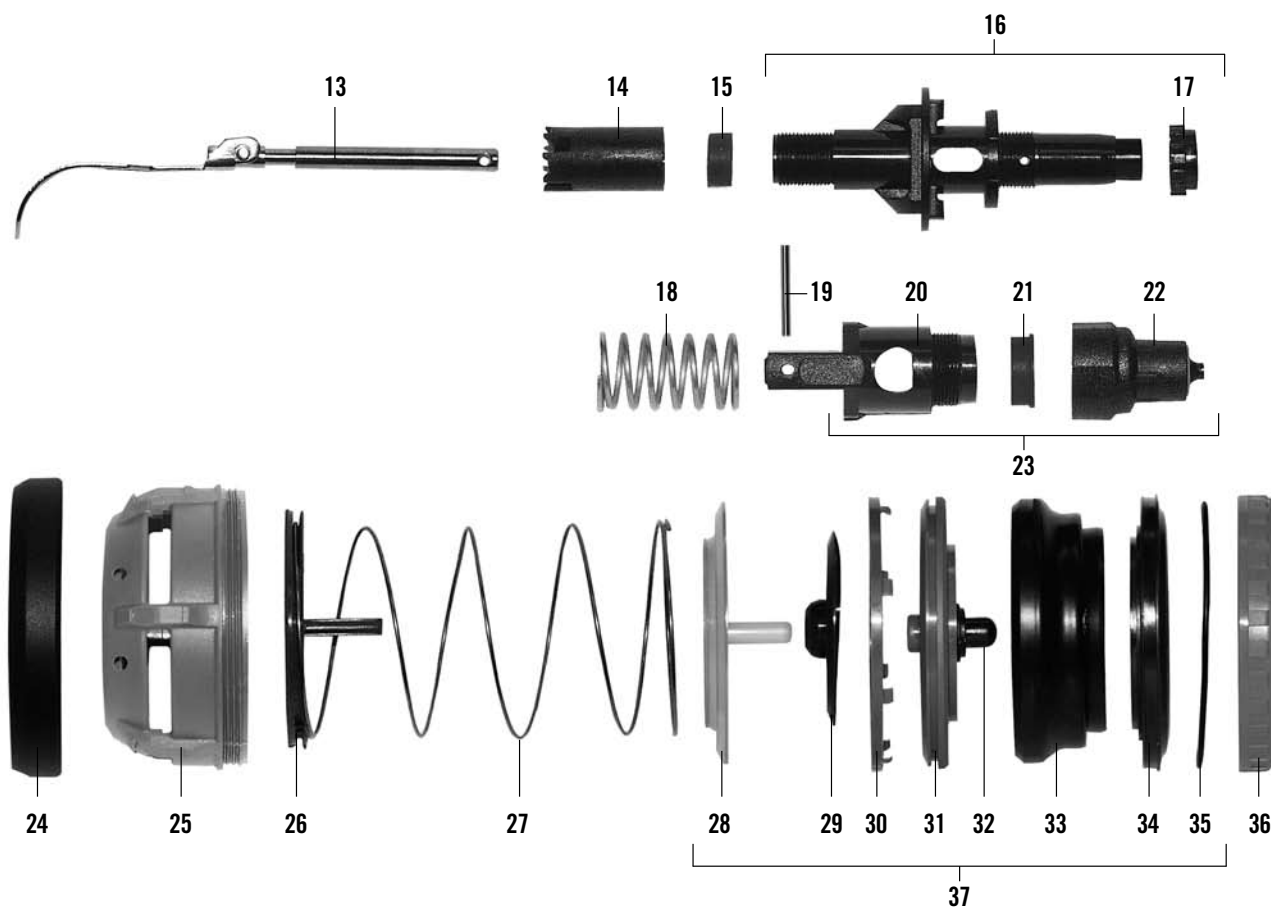
SPIROMATIC BREATHING VALVE



#	DESCRIPTION	ORDERING NO.	NOTES
•	Spiromatic breathing valve	336 190 002	
1	Positive pressure attachment	336 190 280	
2	O-ring	336 190 226	5 pack
3	Locking nut	346 190 201	5 pack
4	Lever assy	336 190 142	
5	O-ring	336 190 225	10 pack
6	Valve housing	336 190 282	
7	Valve insert	460 190 146	
8	Connection nipple	460 190 396	
9	O-ring	336 190 227	10 pack
10	O-ring	336 190 228	10 pack
11	Retaining ring	346 190 198	10 pack
12	Valve insert assy	336 190 281	

The SPIROMATIC BREATHING VALVE spare parts list continues on the next page.

SPIROMATIC BREATHING VALVE

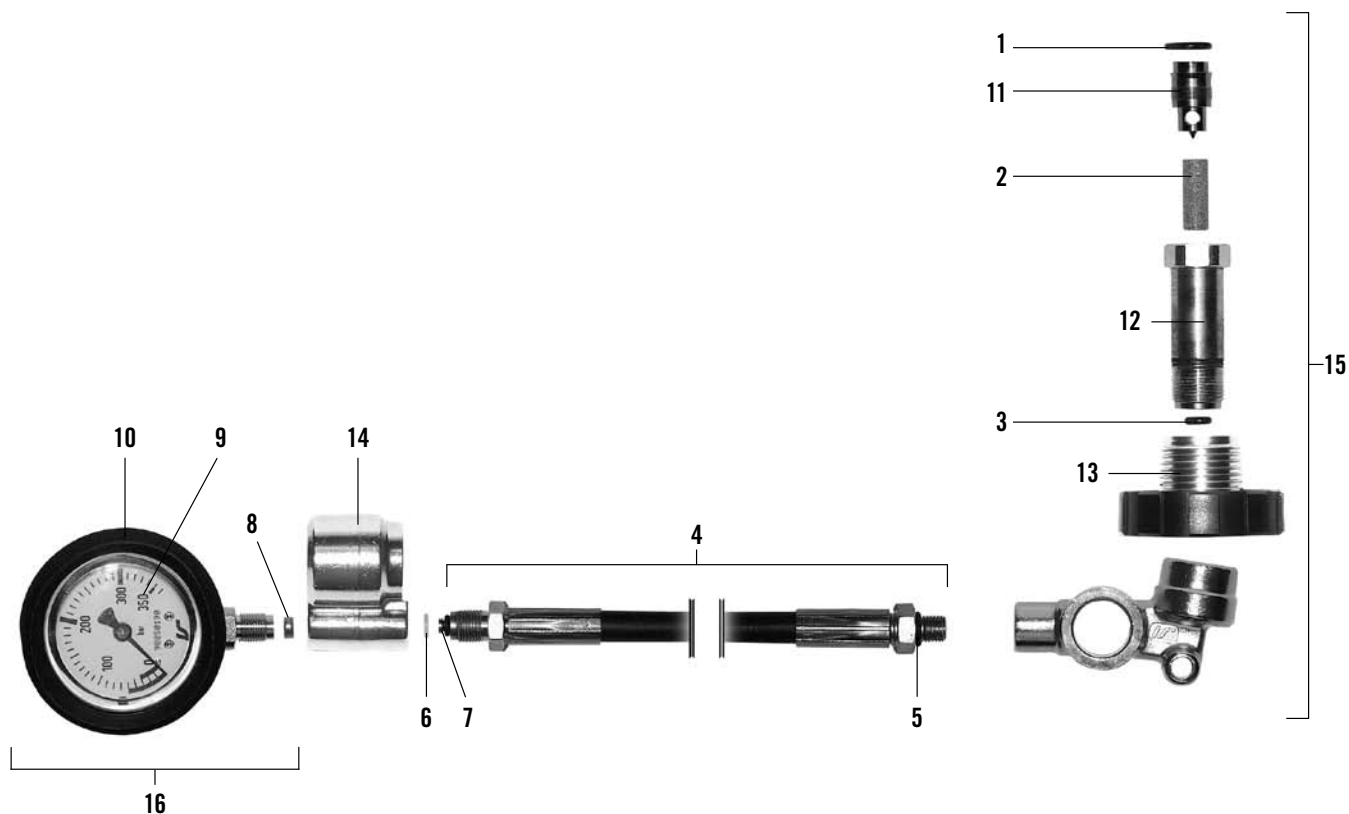


#	DESCRIPTION	ORDERING NO.	NOTES
13	Lever assy	336 190 285	
14	Lever support	460 190 391	10 pack
15	Sealing sleeve	346 190 246	5 pack
16	Centre spindle	460 190 406	Incl. #17
17	Adjusting nut	346 190 247	5 pack
18	Sealing spring	460 190 407	10 pack
19	Pin	336 190 258	10 pack
20	Lifting spindle	460 190 408	
21	Balancing diaphragm	460 190 409	5 pack
22	Valve cone	336 190 064	
23	Sealing piston	336 190 284	
24	Shield ring	346 190 197	5 pack
25	Cover	460 190 411	
26	Guide disc	460 190 412	
27	Positive pressure spring	460 190 392	5 pack
28	Sealing disc	460 190 393	5 pack
29	Valve disc	346 190 196	5 pack

#	DESCRIPTION	ORDERING NO.	NOTES
30	Diaphragm ring	460 190 413	10 pack
31	Valve seat	460 190 394	
32	Guide pin	346 190 194	10 pack
33	Diaphragm	460 190 140	
34	Diaphragm holder	460 190 395	
35	O-ring	336 190 224	5 pack
36	Locking ring	346 190 193	5 pack
37	Diaphragm assy	336 190 065	

#	SERVICE KIT	ORDERING NO.
A	Service kit for 1 apparatus Spiromatic breathing valve – 1 singular item of each of #2/4/7/9/10/37	460 190 416
B	Service kit for 10 apparatus Spiromatic breathing valve – 10 singular items of each of #2/4/7/9/10/37	460 190 677
C	Service kit for 1 apparatus – 1 singular item of each of #2/5/9/10/15/21/22/29/33/35	460 190 417

MANIFOLD

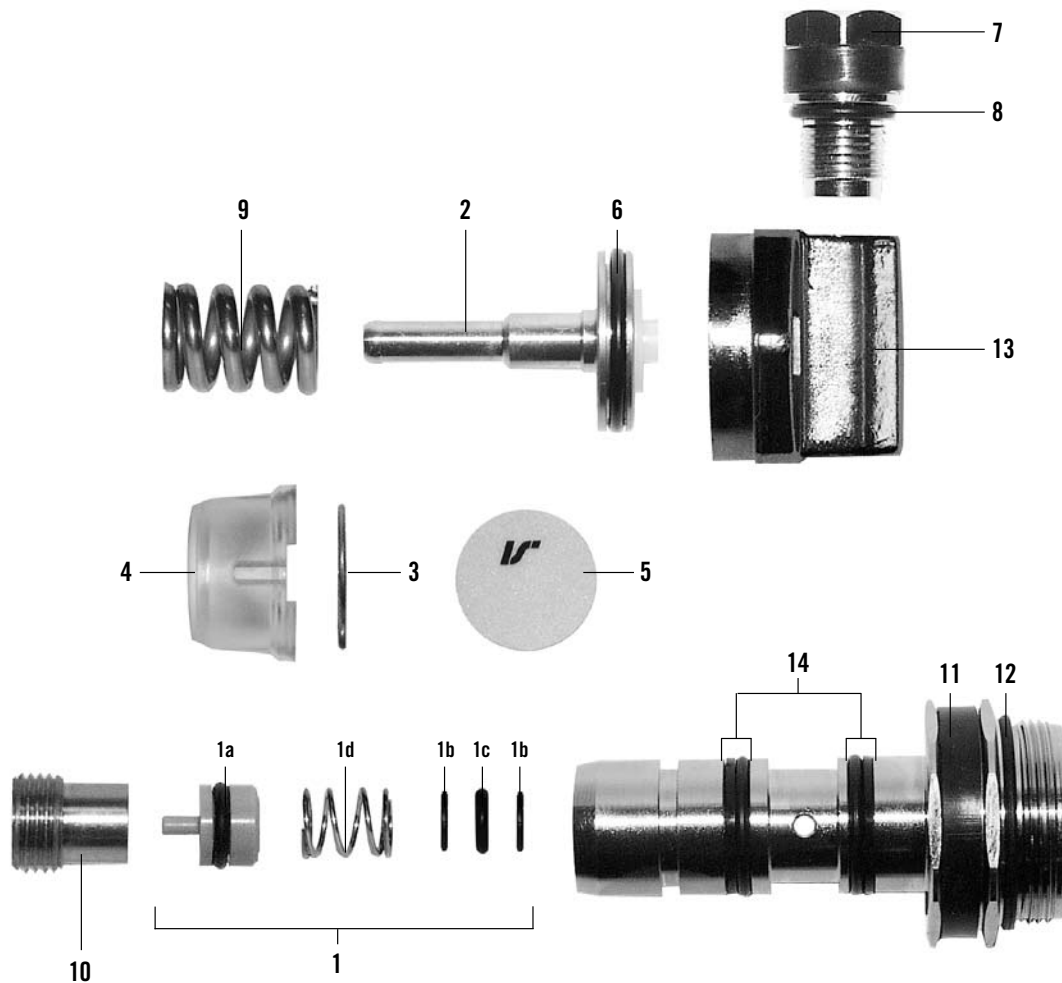


#	DESCRIPTION	ORDERING NO.	NOTES
•	Manifold unit	346 190 345	
1	a. O-ring	336 190 272	10 pack
	b. — —	460 190 237	100 pack
2	a. Inlet filter	346 190 643	10 pack
	b. — —	346 190 644	100 pack
3	O-ring	336 190 232	10 pack
4	High pressure hose	460 190 380	
5	O-ring	336 190 312	10 pack
6	Friction washer	460 190 192	5 pack
7	O-ring	336 190 235	10 pack
8	Gasket set	336 190 159	
9	Pressure gauge	460 190 381	
10	Rubber cover	96 548-51	
11	Nipple	460 190 382	

#	DESCRIPTION	ORDERING NO.	NOTES
12	Connection nipple	460 190 383	
13	Hand wheel	460 190 385	
14	Whistle manifold	95 905	
15	Regulator manifold	346 190 291	
16	Pressure gauge assy	336 190 158	Incl. #8-10

#	SERVICE KIT	ORDERING NO.
A	Service kit for 1 apparatus Manifold – 1 singular item of each of #1/2/5-7	460 190 321
B	Service kit for 10 apparatus Manifold – 10 singular items of each of #1/2/5-7	460 190 679

PRESSURE REGULATOR



#	DESCRIPTION	ORDERING NO.	NOTES
•	Pressure regulator	346 190 401	Not incl. #3-4
1	Valve seat set	346 190 023	
2	Piston	460 190 386	
3	Locking clip	346 190 293	10 pack
4	Protective cover	346 190 294	10 pack
5	Sealing label	346 190 295	25 pack
6	O-ring	346 190 022	10 pack
7	Safety valve	460 190 387	Incl. #8
8	O-ring	336 190 311	10 pack
9	Spring	346 190 026	5 pack
10	Adjusting screw	460 190 388	5 pack
11	Protective band	460 190 201	5 pack
12	O-ring	346 190 024	10 pack
13	Regulator cover	460 190 389	
14	a. O-ring and back-up rings	460 190 198	10 pack
	b. — —	460 190 199	50 pack

#SERVICE KIT	ORDERING NO.
A Service kit for 1 apparatus Pressure regulator – 1 singular item of each of #1/3-6/8/11/12 – 2 singular items of each of #14	460 190 322
B Service kit for 10 apparatus Pressure regulator – 10 singular items of each of #1/3-6/8/11/12 – 20 singular items of each of #14	96 867

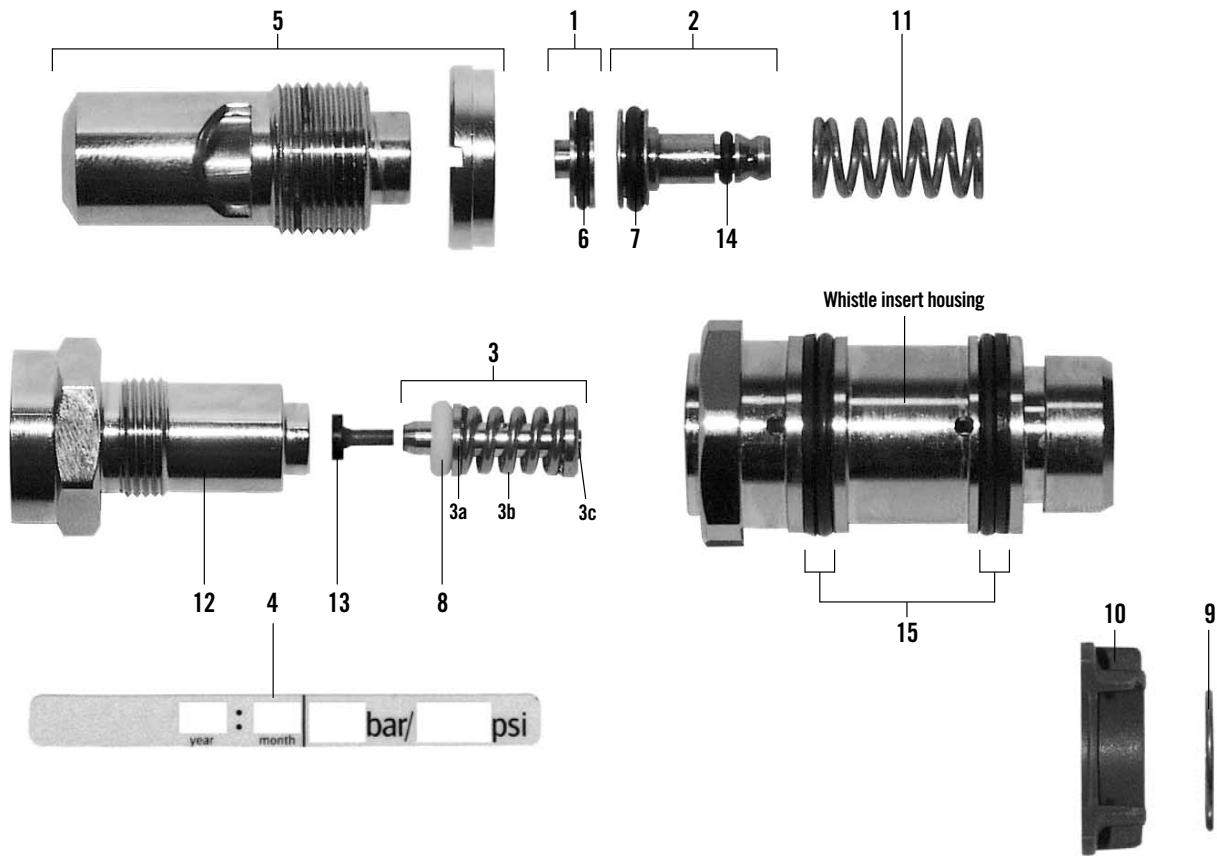
NOTE!

For regulators delivered before the beginning of 1999 with turquoise back-up rings – or regulators without back-up rings – the following part numbers apply:

#	DESCRIPTION	ORDERING NO.	NOTES
11	Protective band	346 190 187	5 pack
14	a. O-ring and back-up rings	460 190 135	20 pack
	b. — —	460 190 136	100 pack

#	SERVICE KIT	ORDERING NO.
A	Service kit for 1 apparatus Pressure regulator, before 1999 – 1 singular item of each of #1/3-6/8/11/12 – 2 singular items of each of #14	460 190 698
B	Service kit for 10 apparatus Pressure regulator, before 1999 – 10 singular items of each of #1/3-6/8/11/12 – 20 singular items of each of #14	460 190 699

WHISTLE INSERT ASSEMBLY



#	DESCRIPTION	ORDERING NO.	NOTES
•	Whistle insert assy (55 bar)	346 190 404	Not incl. #9-10
1	Nozzle with O-ring	346 190 220	Incl. #6
2	Regulating piston assy	346 190 219	Incl. #7/14
3	Piston assy	346 190 216	Incl. #8
4	Sealing label	346 190 296	20 pack
5	Whistle assy	346 190 221	
6	O-ring	346 190 251	10 pack
7	O-ring	346 190 249	10 pack
8	O-ring	336 190 240	5 pack
9	Locking clip	346 190 293	10 pack
10	Retaining ring	460 190 299	10 pack
11	Spring	346 190 218	5 pack
12	Whistle cylinder	346 190 248	
13	Sealing cone	346 190 217	10 pack
14	O-ring	460 190 269	10 pack
15	O-ring and back-up rings	460 190 200	10 pack

#	SERVICE KIT	ORDERING NO.
A	Service kit for 1 apparatus Whistle insert assembly – 1 singular item of each of #4/6-10/13/14 – 2 singular items of each of in #15	460 190 323
B	Service kit for 10 apparatus Whistle insert assembly – 10 singular items of each of #4/6-10/13/14 – 20 singular items of each of #15	96 868

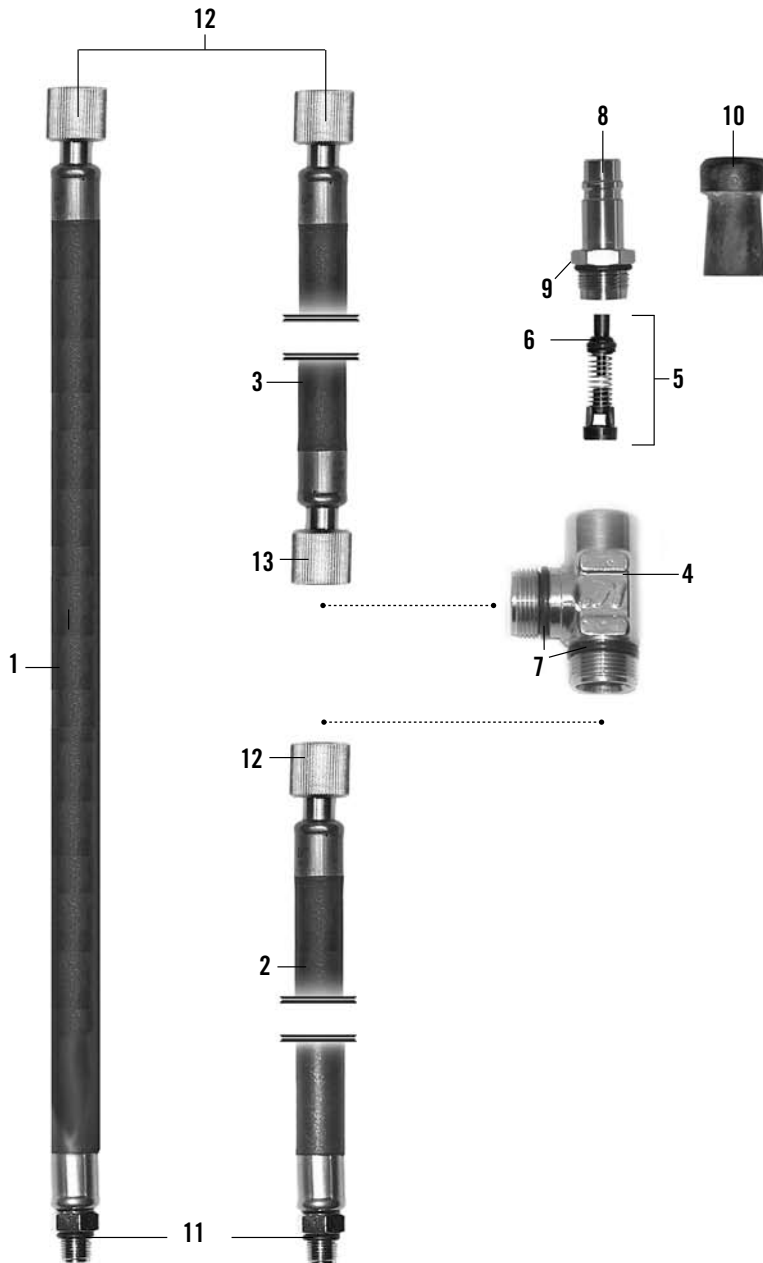
NOTE!

For regulators delivered before the beginning of 1999 with turquoise back-up rings – or regulators without back-up rings – the following part numbers apply:

#	DESCRIPTION	ORDERING NO.	NOTES
15	O-ring and back-up rings	460 190 137	20 pack

#	SERVICE KIT	ORDERING NO.
A	Service kit for 1 apparatus Whistle insert assembly, before 1999 – 1 singular item of each of #4/6-10/13/14 – 2 singular items of each of in #15	460 190 800
B	Service kit for 10 apparatus Whistle insert assembly, before 1999 – 10 singular item of each of #4/6-10/13/14 – 20 singular items of each of in #15	460 190 801

BREATHING HOSE AND MANIFOLD



#	DESCRIPTION	ORDERING NO.	NOTES
1	Breathing hose	460 190 360	L=1.35m
2	Breathing hose	460 190 363	L=0.82m
3	Breathing hose	336 190 287	L=0.55m
4	T-Manifold	460 190 264	
5	Non-return valve	346 190 223	
6	Cone with O-ring	460 190 369	
7	O-ring	336 190 228	10 pack

#	DESCRIPTION	ORDERING NO.	NOTES
8	Quick coupling	96 531-51	IS
9	O-ring	346 190 069	10 pack
10	Protective cap	336 190 257	3 pack
11	O-ring	336 190 311	10-pack
12	O-ring	336 190 237	10-pack
13	O-ring	336 190 236	10-pack

#	SERVICE KIT	ORDERING NO.
A	Service kit for 1 apparatus 3-way manifold – 1 singular item of each of #6/9 – 2 singular items of each of #7	460 190 414
B	Service kit for 10 apparatus 3-way manifold – 10 singular item of each of #6/9 – 20 singular items of each of #7	460 190 802

TWO TYPES OF CYLINDER VALVE

IMPORTANT NOTICE

There are two different types of cylinder valves.

Cylinder valves delivered under part numbers "98xxx" are Type II.

Deliveries of Type II cylinder valves commenced in July 2005.

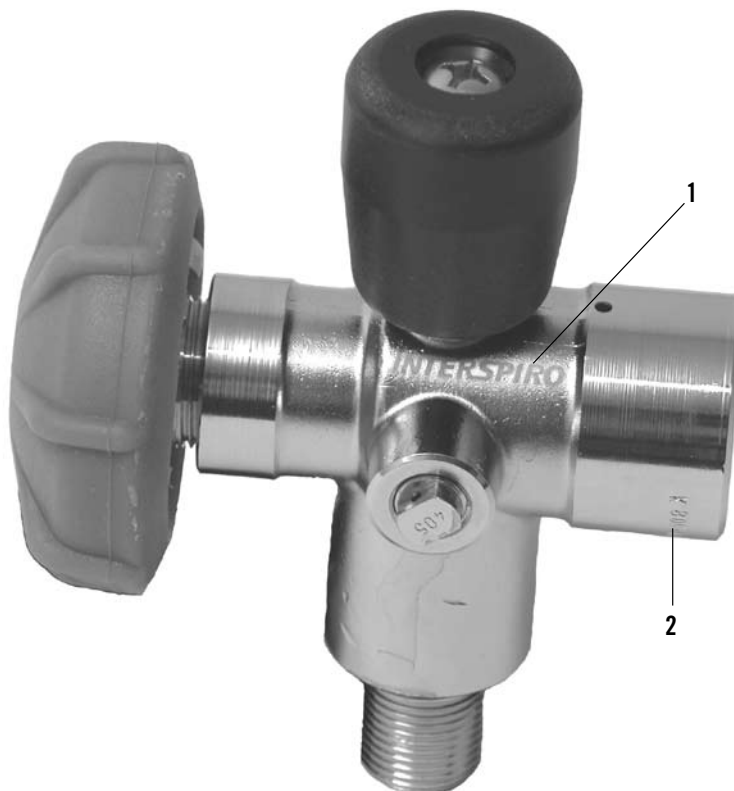
Type II cylinder valves can be identified by the marking with Interspiro logotype, see #1 in the picture below. Furthermore the marking #2 according to picture below always begins with "98xxx".

Type I cylinder valves have no logotype marking similar to #1 in the picture below.

Type I cylinder valves can have different markings according to #2 in the picture below, but never beginning with "98xxx".

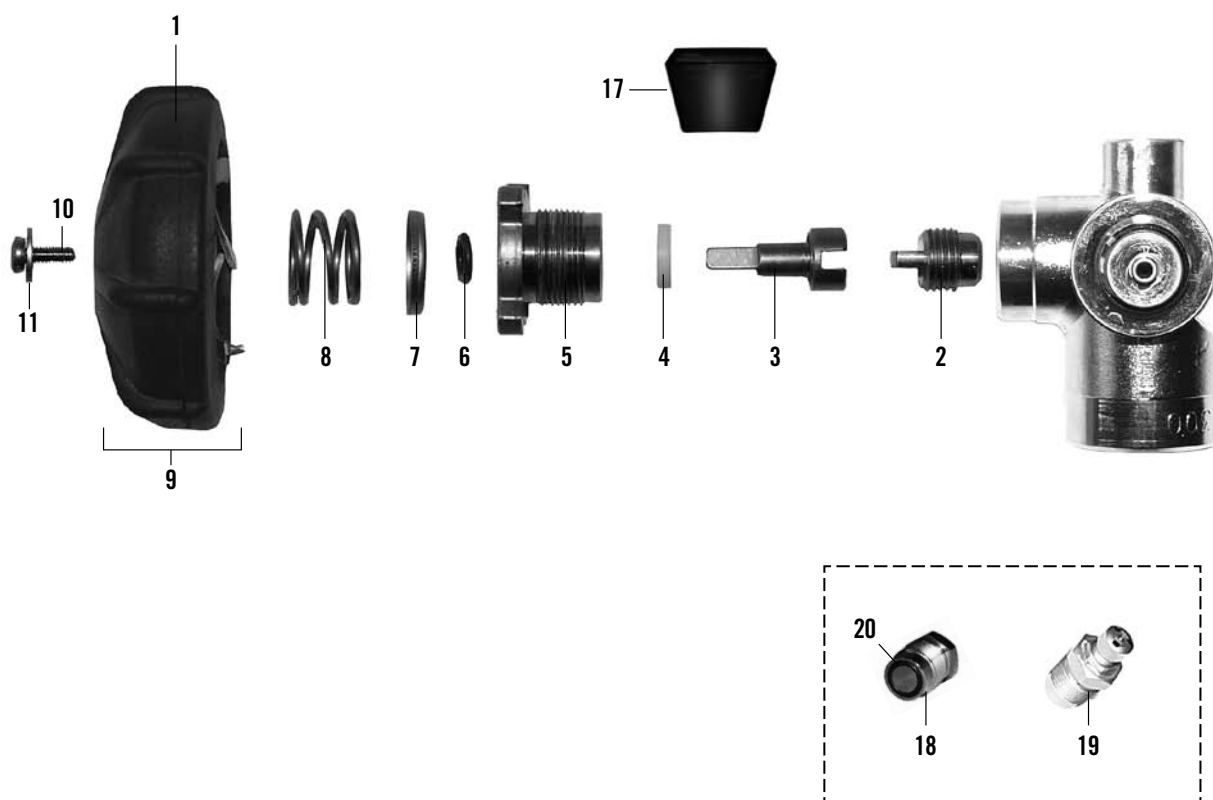
For Type I cylinder valve spare parts, see page 15.

For Type II cylinder valve spare parts, see page 16.



CYLINDER VALVE - TYPE I

Spare parts intended for organizations certified to perform periodic cylinder inspections are available in the separate spare parts list 98675.



#	DESCRIPTION	ORDERING NO.	NOTES
1	Hand wheel cover	460 190 359	5 pack
2	Valve slug	336 922 108	5 pack
3	Valve stem	460 190 355	
4	Gland seal	336 190 260	10 pack
5	Gland nut	460 190 356	
6	O-ring	336 190 221	10 pack
7	Washer	336 922 104	10 pack
8	Spring	336 922 105	10 pack
9	Hand wheel assy	460 190 243	
10	Screw	336 190 297	10 pack
11	Washer	336 190 296	10 pack
17	Cylinder support	346 190 230	5 pack
18	Blank plug with O-ring	460 190 220	Incl. #20

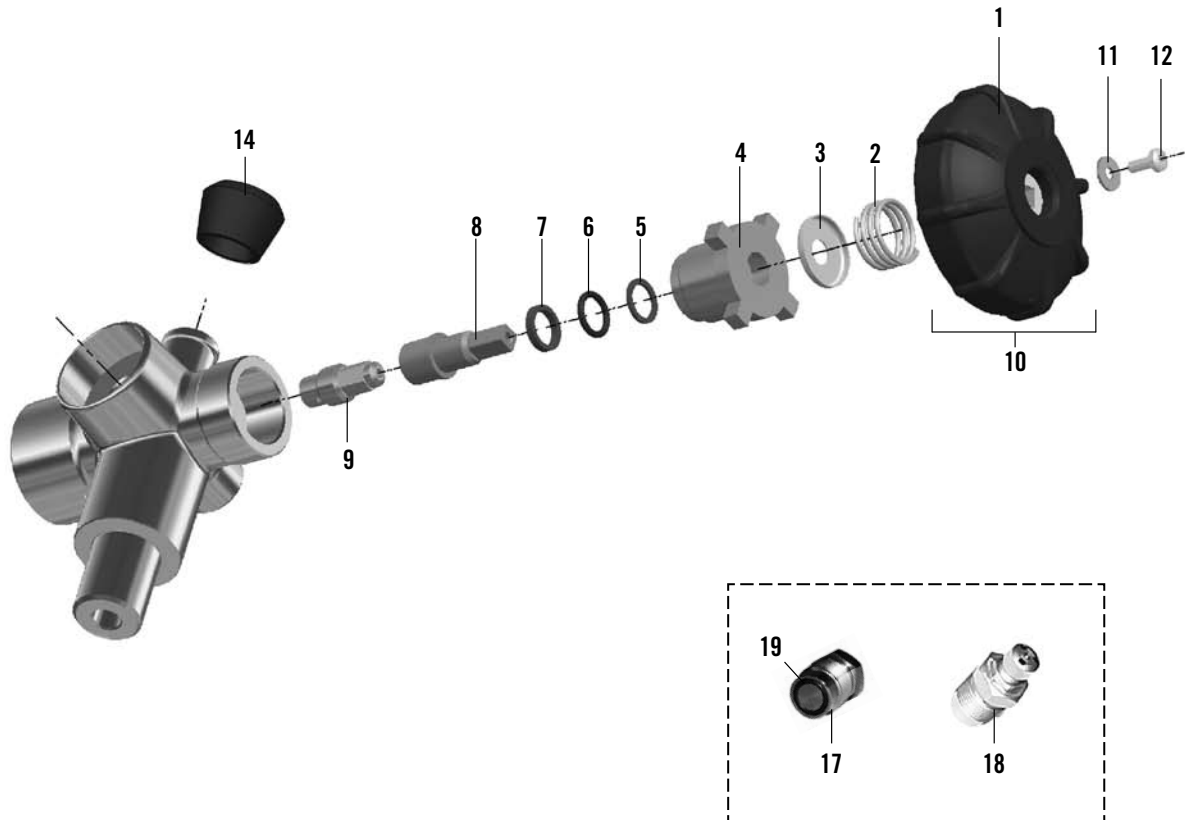
#	DESCRIPTION	ORDERING NO.	NOTES
19	Discharge plug	331 190 800	
20	O-ring	336 190 220	

#	SERVICE KIT	ORDERING NO.
A	Service kit for 1 apparatus Cylinder valve - Type I – 1 singular item of each of #2/4/6	460 190 390
B	Service kit for 10 apparatus Cylinder valve - Type I – 10 singular items of each of #2/4/6	460 190 683

The numbering is not consecutive in order to retain identical numbering in different spare parts lists.

CYLINDER VALVE - TYPE II

Spare parts intended for organizations certified to perform periodic cylinder inspections are available in the separate spare parts list 98675.

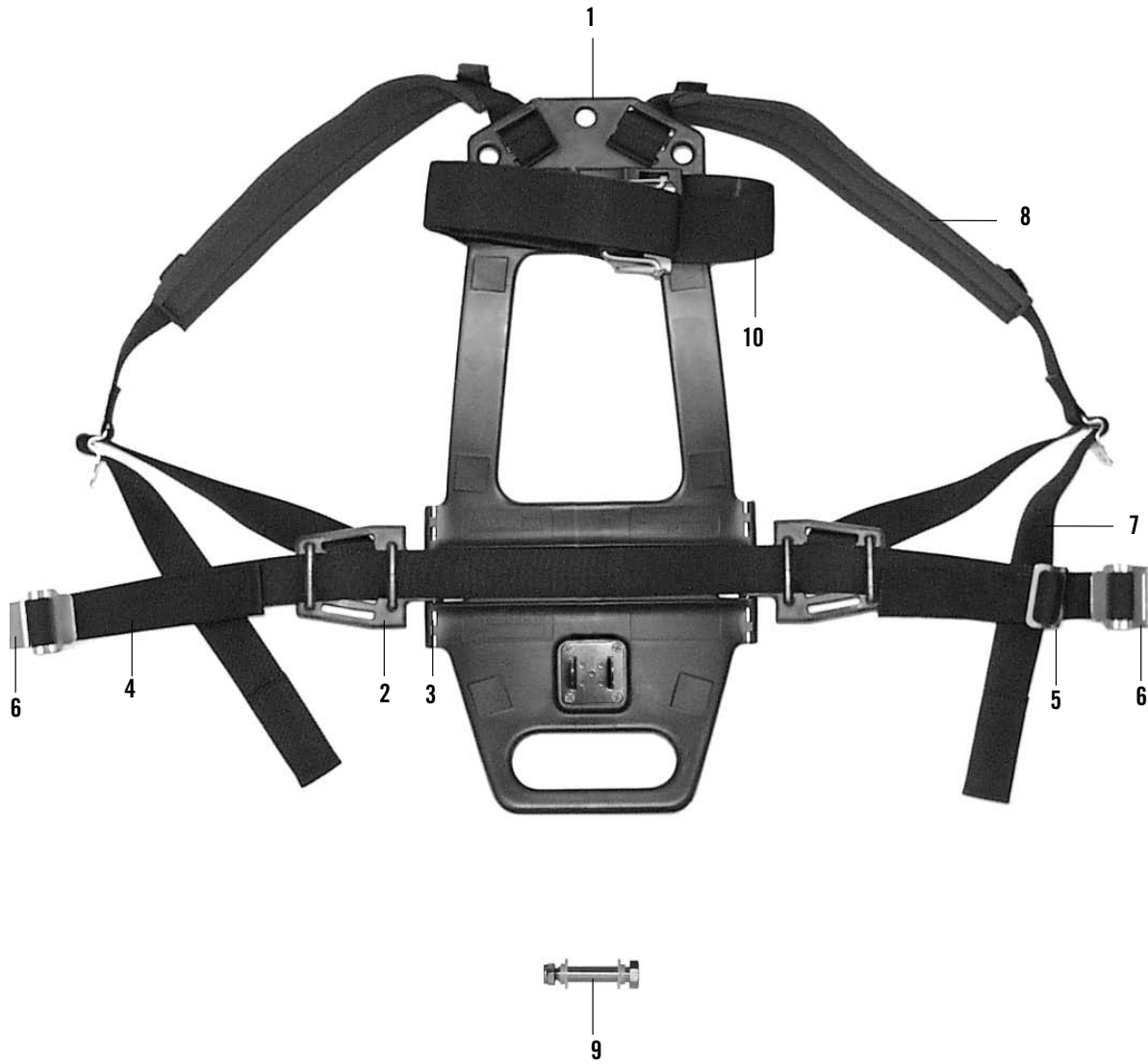


#	DESCRIPTION	ORDERING NO.	NOTES
1	Hand wheel cover	460 190 359	5 pack
2	Spring	336 922 105	10 pack
3	Washer	336 922 104	10 pack
4	Gland nut	97 852-51	
5	Back-up ring	97 847-51	10 pack
6	O-ring	97 851-51	10 pack
7	Glide washer	97 853-51	10 pack
8	Valve stem	97 849-51	
9	Valve slug	97 850-51	
10	Hand wheel assy	460 190 243	
11	Washer	336 190 296	10 pack
12	Screw	336 190 297	10 pack
13	Screw	460 190 684	10 pack

#	DESCRIPTION	ORDERING NO.	NOTES
14	Cylinder support	346 190 230	5 pack
17	Blank plug with O-ring	460 190 220	Incl. #19
18	Discharge plug	331 190 800	
19	O-ring	336 190 220	

#	SERVICE KIT	ORDERING NO.
A	Service kit for 1 apparatus Cylinder valve - Type II – 1 singular item of each of #5-7/9	460 190 686
B	Service kit for 10 apparatus Cylinder valve - Type II – 10 singular items of each of #5-7/9	460 190 687

HARNESS



#	DESCRIPTION	ORDERING NO.	NOTES
1	Back plate assy	346 190 350	
2	Side arm	460 190 692	
3	Pin	95 739	2 pack
4	Waist strap assy	460 190 693	
5	Webbing buckle	460 190 373	2 pack
6	Buckle (male & female part)	460 190 067	
7	Shoulder strap, lower	460 190 694	
8	Shoulder strap, upper	460 190 695	
9	Mounting set	346 190 113	
10	Cylinder strap	460 190 696	

INTERSPIRO

www.interspiro.com | info@interspiro.com

NORTH & SOUTH AMERICA

INTERSPIRO Inc. www.interspiro-us.com

10225 82nd Avenue PLEASANT PRAIRIE WI 53158-5801 USA

TEL +1 262 947 9000 FAX +1 262 947 9020 E-MAIL info@interspiro-us.com

CENTRAL EUROPE

AUSTRIA

INTERSPIRO GesmbH www.interspiro.de

Sternweg 20 A-8401 ZETTLING AUSTRIA

TEL +43 (0)313 557 333 FAX +43 (0)313 557 333 22 E-MAIL info@interspiro.de

GERMANY

INTERSPIRO GmbH www.interspiro.de

Postfach 1220 D-76691 FORST/BADEN GERMANY

TEL +49 (0)7251 8030 FAX +49 (0)7251 2298 E-MAIL info@interspiro.de

SWITZERLAND

INTERSPIRO AG www.interspiro.de

Güterstraße 47 CH-4133 PRATTELN SWITZERLAND

TEL +41 61 827 99 77 FAX +41 61 827 99 70 E-MAIL info@interspiro.ch

THE NETHERLANDS & BELGIUM

INTERSPIRO BV www.interspiro.nl

Televisieweg 113 NL-1322 BD ALMERE NETHERLANDS

TEL +31 (0)36 5363103 FAX +31 (0)36 5384809 E-MAIL infobv@interspiro.com

UNITED KINGDOM & IRELAND

INTERSPIRO Ltd. www.interspiro.com

7 Haworth Road Central Park TELFORD Shropshire TF2 9TU UNITED KINGDOM

TEL +44 (0)1952 200 190 FAX +44 (0)1952 299 805 E-MAIL infouk@interspiro.com

SCANDINAVIA, ASIA/PACIFIC, MIDDLE EAST & EXPORT

SWEDEN

NORDIC & EXPORT SALES DIVISION www.interspiro.com

Box 10060 S-181 10 LIDINGÖ SWEDEN

TEL +46 8 636 51 00 FAX +46 8 765 48 53 E-MAIL info@interspiro.com

MALAYSIA

NORDIC & EXPORT SALES DIVISION www.interspiro.com

305 & 305A Lorong Perak Taman Melawati 53100 KUALA LUMPUR MALAYSIA

TEL +60 3 4105 8122 FAX +60 3 4105 3122 E-MAIL interspiro.asiapacific@interspiro.com