

JETSTREAM MK3

ART. NMBR 0100-005

SERVICE MANUAL V1.0

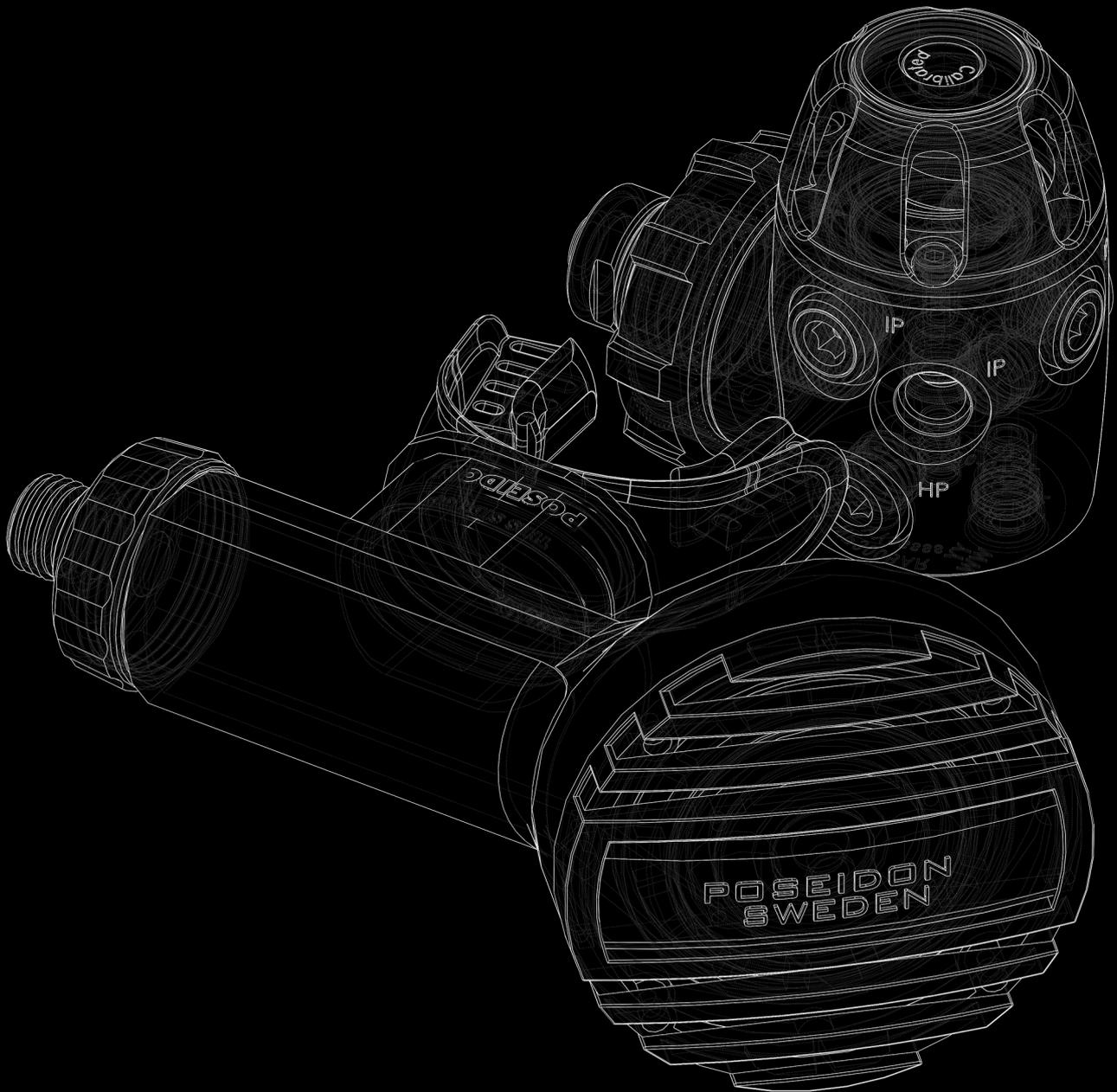


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1. IMPORTANT

This manual contains preliminary servicing instructions for the Poseidon breathing regulators. It is intended to serve as a guide for repairs and servicing carried out by Poseidon Diving Systems. The instructions given in this manual are based on the assumption that special tools are used and are based on our experience. The work should be done in the same order as shown in these instructions.

TYPE DESIGNATIONS

In all correspondence concerning breathing regulators, indicate the type designation and serial number. All products in this servicemanual that requires a CE-approval are of course CE-approved. CE approval represents only a minimum level of product quality and manufacturing standards. At Poseidon we put each new addition through rigorous testing procedures ourselves. This is the only proper method to ensure that your equipment will live up to our claims.

CLEANING

If corrosion or salt deposits occurs, place all metal parts in concentrated Hempodid* or 15% Hydrochloric acid for about 10 minutes. If available, all metal parts can be placed in an ultrasonic washer and cleaned in accordance with the instructions of the cleaning solution used.

Then, rinse the parts thoroughly and blow dry with air. The synthetic parts in the second stage must not be treated with solvent. They shall be cleaned in freshwater only.

**Hempodid = Acid Liquid Detergent Containing phosphoric acid (5 - 10%) and bactericid for disinfectant cleaning.*

LUBRICANTS USED

The following lubricant is used:

Regulator Lubricant: Art No: 8516

FUNCTION

POSEIDON breathing regulator is a two-stage regulator where the first stage is a diaphragm-actuated reducing valve, which reduces the primary pressure (Cylinder pressure) to approx. 123 PSI/8.5 BAR. The reduced pressure (the secondary pressure) then goes via the regulator hose to the second stage where the air supply is automatically regulated to the convenience of the diver.

The first-stage always holds the adjusted pressure above the ambient pressure which is necessary to the function of the breathing regulator. This is brought about by the outer springloaded diaphragm being in contact with the ambient pressure. It automatically responds to this pressure acting on it and thereby regulates all changes in pressure.

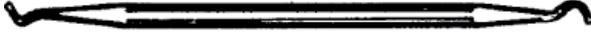
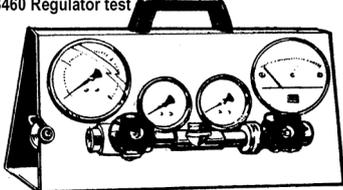
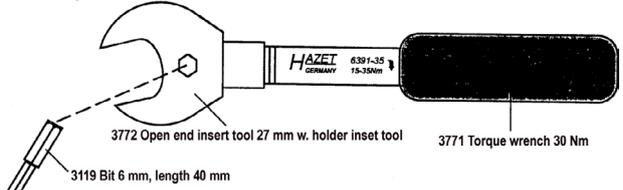
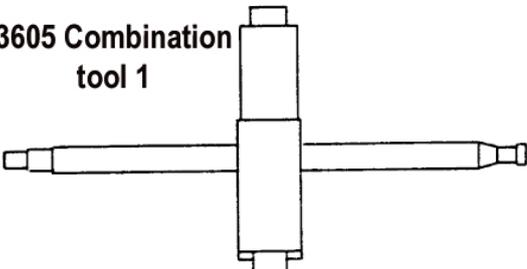
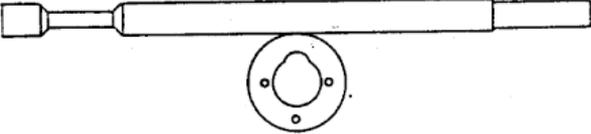
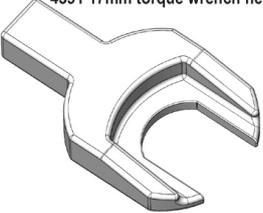
The second-stage functions in such a way that the underpressure created in the regulator housing during each inhalation influences a servo valve system, which will supply the necessary air as long as the inhalation phase lasts. The automatic pressure compensation takes place in the same way as in the first stage, the outer diaphragm surface being in direct contact with ambient pressure, and the pressure on the inside of the diaphragm must correspond to ambient pressure before the diaphragm can return to its position. The diaphragm returns to its rest position and shuts off the air flowing in as soon as the inhalation phase has been broken off and the air pressure in the regulator housing has become equal to ambient pressure.

The second stage has a built in purge button, for manual purging.

2. TOOLS

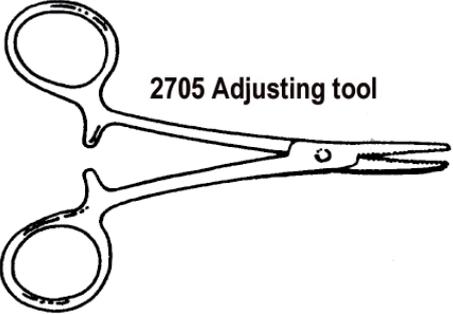
To service Poseidon Jetstream regulators, a mix of standard tools and specific Poseidon special tools are needed. The list below shows what specific Poseidon tools and what standard tools are needed.

Poseidon specific tools

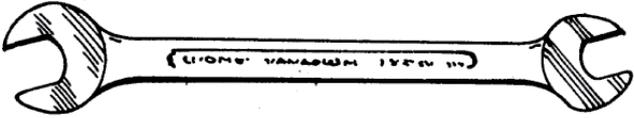
Article nمبر.	Description	Picture
2297	O-ring remover	<p>2297 O-ring remover</p> 
3460	Regulator test	<p>3460 Regulator test</p> 
3773	Torque wrench set	<p>3773 Torque wrench set, incl 3771, 3772, 3119</p>  <p>3772 Open end insert tool 27 mm w. holder inset tool 3771 Torque wrench 30 Nm</p> <p>3119 Bit 6 mm, length 40 mm</p>
2706	Allen key 1,5 mm	<p>2706 Allen key 1,5 mm</p> 
3605	Combination tool 1	<p>3605 Combination tool 1</p> 
3606	Combination tool 2	<p>3606 Combination tool 2</p> 
4591	Tool NV 17 Xstream	<p>4591 17mm torque wrench head</p> 

TOOLS LIST

Poseidon specific tools continues.

Article nmr.	Description	Picture
8516	Regulator lubricant	<p>8516 Regulator grease</p> 
2705	Adjustment tool	 <p>2705 Adjusting tool</p>

Standard tools

Article nmr.	Description	Picture
	Open end wrenches	
	Screwdriver, philips head	
	Allen keys 2,5, 4, 5 mm	

3. JETSTREAM Mk3

Art No 0100-005

BREATHING REGULATOR

Primary pressure.....Max 4351 PSI / 300 BAR
 Secondary pressure.....Max 145 PSI/ 10 BAR
 Inhalation resistance at 115 l/min.....Max. 40 mm of water
 Exhalation resistance.....Max. 20 mm of water
The above data apply when measuring at atmospheric pressure

FIRST STAGE XSTREAM DEEP G5/8

Art No 0110-000

Description..... Ball sealed 1st stage, approved for 21% Oxygen.
 Built in OPV with a release pressure of
 232 - 304 PSI (16 - 21 Bar.)
 Connection threads for primary pressure..... G5/8" - Max 4350 PSI / 30 MPa / 300 bar
 Five outlets marked IP..... UNF 3/8" - Low pressure
 Two outlets marked HP.....UNF 7/16" - High pressure

JETSTREAM SECOND STAGE VALVE

Art No 0120-005

Description.....Upstream diaphragm actuated. servo assisted
 with safety relief, fixed ejector system.
 Purge button for clearing.
 Sensivity switch for added control.

REGULATOR HOSE

Art No 0130-000

Length.....28 inch / 70 cm

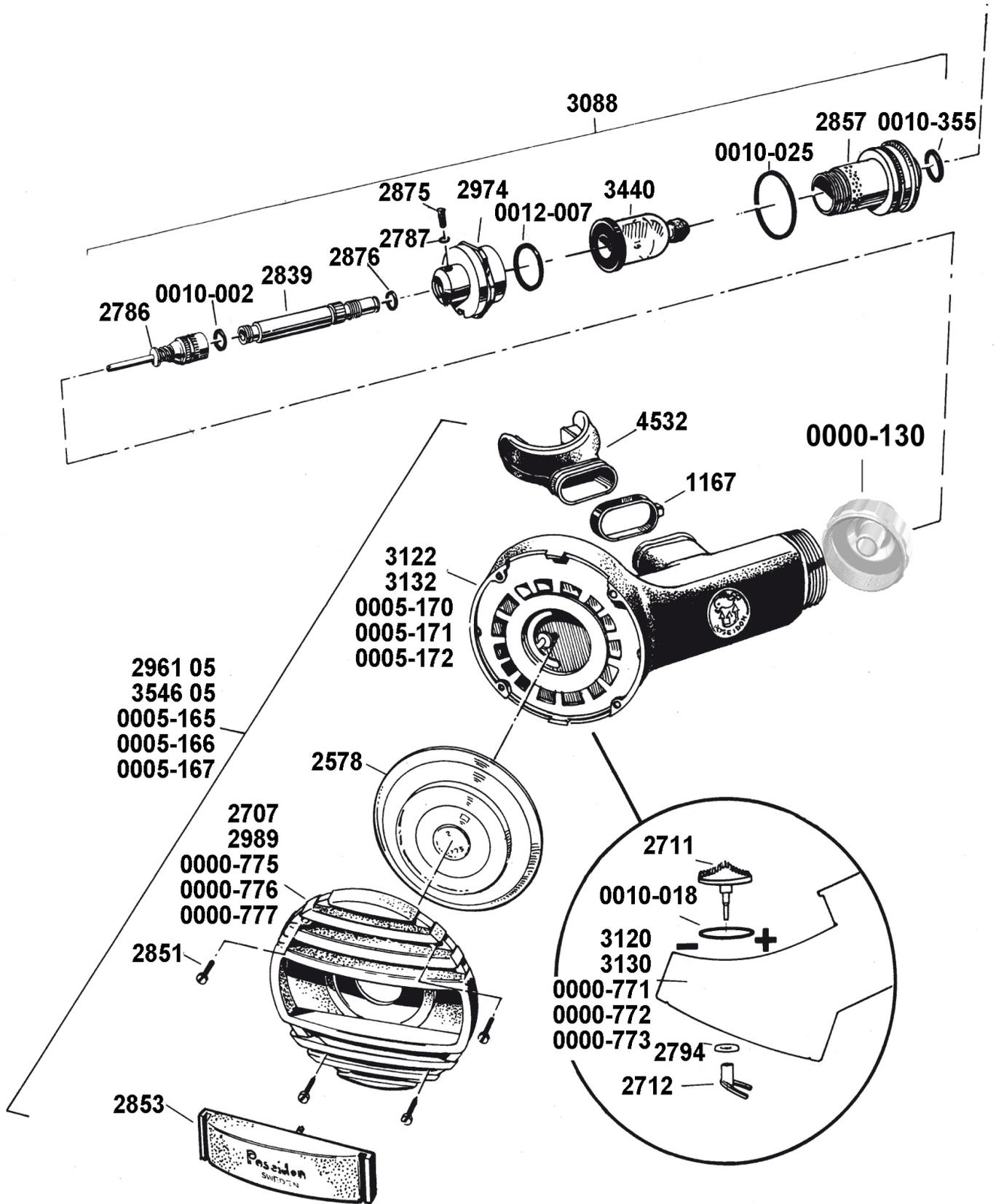
Art No 0130-002

Length.....35 inch / 90 cm

SERVICE KITS

First stage.....Art nr 4822
 Second stage.....Art nr 3549

EXPLODED VIEW - SECOND STAGE 0120-005 (and color variants)



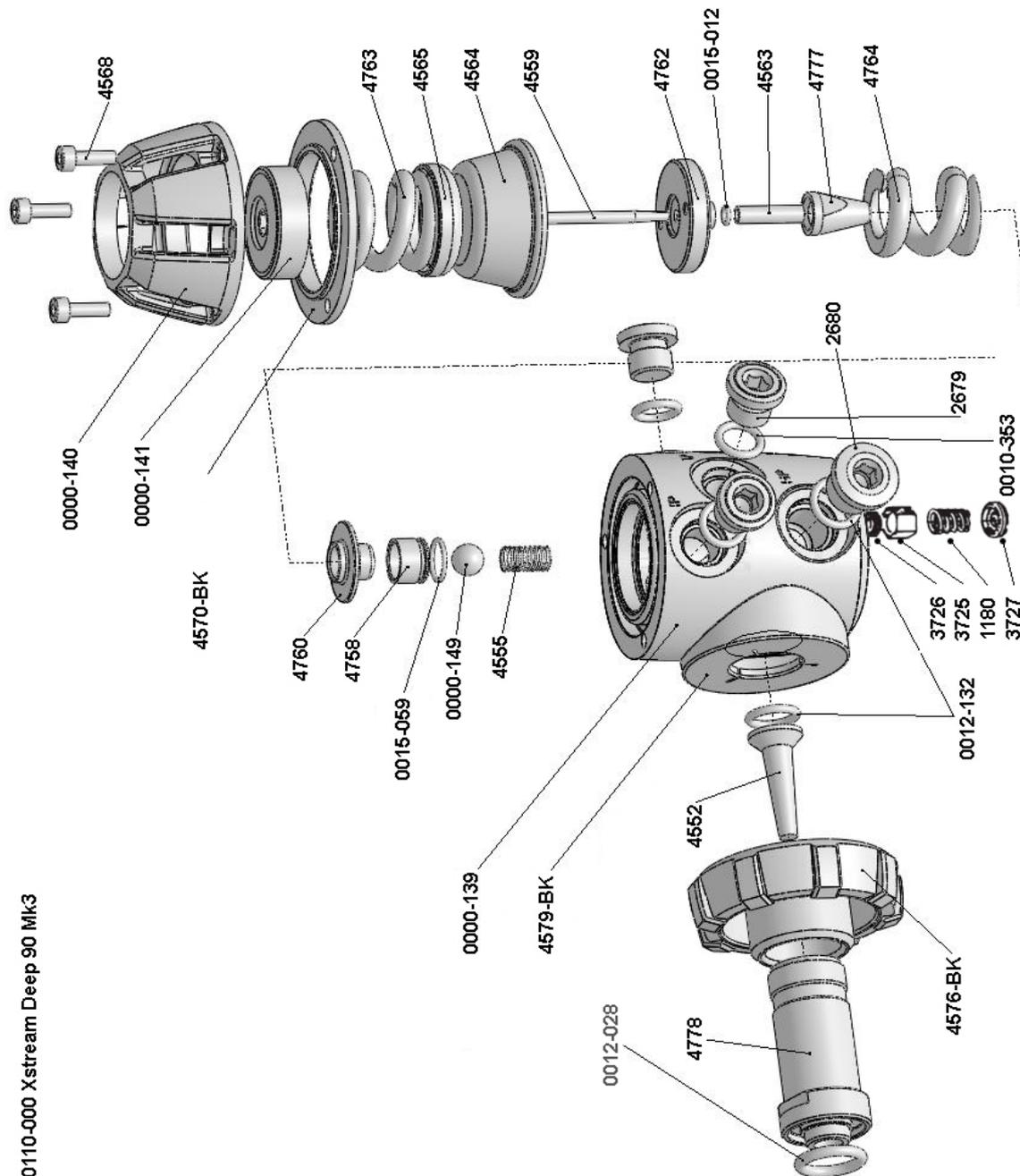
PARTS LIST SECOND STAGE 0120-005 (and color variants)

	Art. Nمبر.	Description
1	0010-353	(2782) O-ring
2	0000-130	LP hose adapter 9/16"
3	3088	Low pressure valve, complete
4	0010-355	(2856) O-ring
5	2857	LP valve house
6	0010-028	(1145) O-ring
7	3440	Valve insert
8	0012-007	(1233) O-ring
9	2947	Valve house nut
10	2875	Stop screw M3x4
11	2787	Rubber plate
12	0015-019	(2876) O-ring
13	2839	Valve tube, Jetstream
14	0010-002	(1896) O-ring
15	2786	Servo valve Jetstream, complete
16	4532	Mouthpiece
17	1167	Locking strap
18	3122	Housing with switch, Black
	3132	Housing with switch, Yellow
	0005-170	Housing with switch, Blue
	0005-171	Housing with switch, Red
	0005-172	Housing with switch, Grey
19	2578	Membrane with washer
20	2707	Cover 2nd stage Jetstream, Black
	2989	Cover 2nd stage Jetstream, Yellow
	0000-775	Cover 2nd stage Jetstream, Blue
	0000-776	Cover 2nd stage Jetstream, Red
	0000-777	Cover 2nd stage Jetstream, Grey
21	2851	Screw M2x8
22	2853	Purge button
23	2961 05	LP Valve Jetstream, Black
	3546 05	LP Valve Jetstream, Yellow
	0005-165	LP Valve Jetstream, Blue
	0005-166	LP Valve Jetstream, Red
	0005-167	LP Valve Jetstream, Grey
24	2711	Switch
25	0010-018	(1851) O-ring
26	3120	Demand valve housing, Black
	3130	Demand valve housing, Yellow
	0000-771	Demand valve housing, Blue
	0000-772	Demand valve housing, Red
	0000-773	Demand valve housing, Grey
27	2794	Lock washer
28	2712	Diaphragm cam

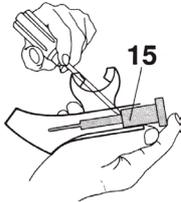
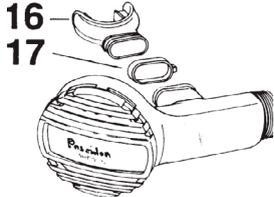
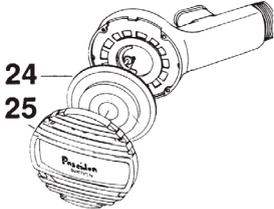
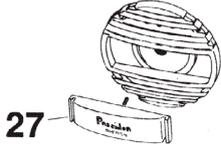
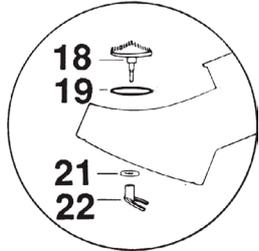
*Only hose with built in OPV can be used.

EXPLODED VIEW & PARTS LIST- FIRST STAGE 0110-000

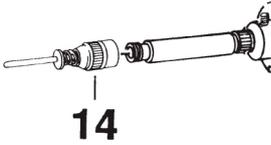
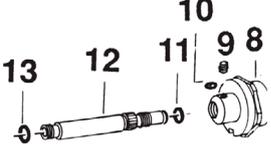
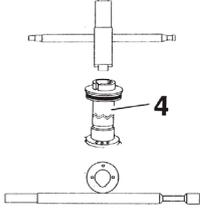
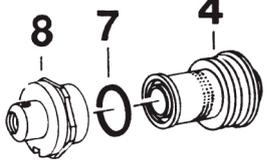
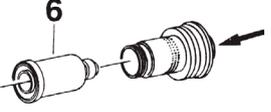
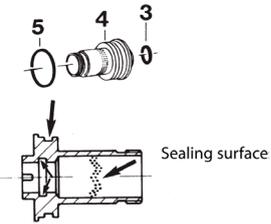
Item #	Description	Qty
0012-028	(1007) O-ring,	1
4778	Conn. stem 1.stage 90 Xstream	1
4552	Cup type filter long Xstream 90	1
0010-354	(2918) O-ring	3
6010-233	Line protector Xstream, black	1
4754-5IP	Housing 1.stage	1
4555	Spring for ball Xstream	1
0000-149	Ruby ball 1.stage Xstream	1
0015-059	(4557) O-ring	1
4758	Zyrel valve seat Xstream	1
4760	Valve seat holder Xstream	1
4761	Valve seat spring Xstream	1
4777	Lower pin guide Xstream	1
4563	Pin bushing 1.stage Xstream	1
0015-012	(4423) O-ring	1
4762	Upper pin guide Xstream	1
4559	Actuating pin, Xstream	1
4564	Roll diaphragm 1.stage Xstream	1
4565	Pressure plate 1.stage Xstream	1
4766	Adjust. spring 1.stage Xstream	1
4570-BK	Barrier 1.stage Xstream, black	1
0000-140	Cover Xstream 1st stage, satin	1
4568	Screw cover M3x10 Xstream	3
4798-CH	Adjustment screw, chrome	1
2680	Blindscrew UNF7/16	2
2679	Blindscrew UNF3/8	5
0010-353	(2782) O-ring	5
4576 BK	Wheel G5/8" Xstream, black	1
3726	Valve sealing	1
3725	Valve piston	1
1180	Pressure spring	1
3727	Locking screw	1



4. DISASSEMBLY INSTRUCTIONS - SECOND STAGE 0120-005

Step	Parts	Tools/Instructions	Replace	Picture
1	0000-130	Disconnect the low pressure hose from the LP hose adapter and remove the LP hose adapter		
2	3088	Remove the low pressure valve from the housing with a screwdriver. Make sure the servo valve needle is not bent. Be sure to hold the low pressure valve carefully, to avoid dropping it (see figure).		
3	3202 1167	Cut off the locking strap (17) with cutting pliers. Remove the mouth piece (16).		
4	2851	Unscrew the 4 screws (26) with a 3.5 mm screwdriver.		
5	2578 2989	Remove the cover (25) and the diaphragm (24).		
6	2853	Remove the purge button (27).		
7	2711 1851 2794 2712	<p>IMPORTANT The switch should not be removed if it is undamaged.</p> <p>Removal:</p> <ol style="list-style-type: none"> 1. Pull out the diaphragm cam (22). 2. Cut off the switch (18) with a pair of cutting pliers close to the locking washer (21). Remove the switch. 3. Remove the o-ring (19). 		

Service manual Jetstream Mk3 - V. 1.0 - 11-02-08 Approved by: JN

Step	Parts	Tools/Instructions	Replace	Picture
8	2786	Remove the servo valve (14).		
9	2875 2876 2839 1896 2787	Unscrew the stop screw (9) and remove the valve tube (12). Remove the o-rings (11) (13) with an o-ring remover. Make sure the sealing surfaces are not damaged. Remove the rubber plate (10).		
10	2857	Place the valve housing in the tool. Unscrew the valve housing (4) with a special spanner.		
11	1233	Remove the o-ring (7) with an o-ring remover. Make sure the sealing surfaces are not damaged.		
12	3440	Remove the valve insert.		
13	2856 1145	Remove the o-rings (5) (3) with an o-ring remover. Make sure the sealing surfaces are not damaged.		

5. CLEANING INSTRUCTIONS

Jetstream Mk3

If corrosion or salt deposits occurs on metallic parts, place them in an ultrasonic washer for the period of time recommended by the manufacturer of the liquid used or immerse part in concentrated Hempocid* or 15% Hydrochloric acid for about 10 minutes. Then rinse them thoroughly in fresh water and blow them dry with air. The synthetic parts must not be treated with solvents and must only be cleaned with fresh water.

**Hempocid=Acid Liquid detergent containing phosphoric acid (5-10%) and bactericide for disinfectant cleaning*



The safety of your customer and yourself depends on you carefully and strictly following these instructions. Negligence in any step can cause serious injury or even death.



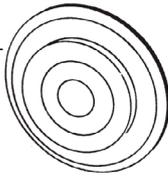
Make absolutely sure Hydrochloric acid is NOT poured into the ultra-sonic cleaner. It would then destroy the ultra-sonic cleaner and the parts attempted to be cleaned.

6. ASSEMBLY INSTRUCTIONS - SECOND STAGE 0120-005

! Lubricants shall be used sparsely. Excessive quantities of lubricant can trap particulate and other contaminants developing a potential fire hazard.

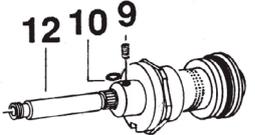
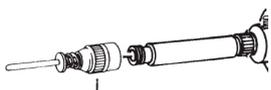
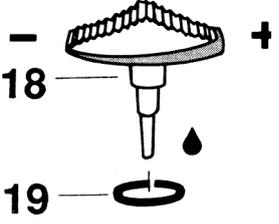
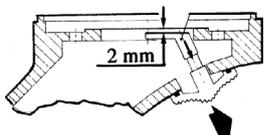
! Parts marked with the () symbol are parts that must be replaced at every service. New parts should be stored in its original packing until it is time for assembly.

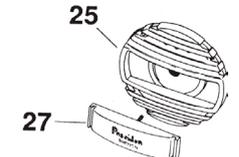
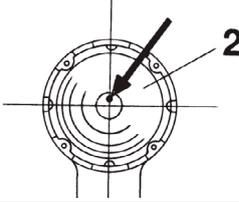
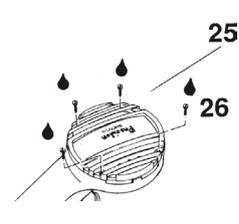
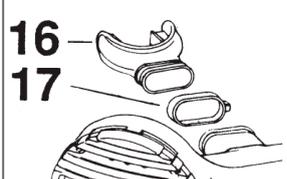
BEFORE ASSEMBLY, CHECK THE FOLLOWING

Step	Parts	Tools/Instructions	Replace	Picture
1	2578	Diaphragm (24). Check that the sealing surface of the diaphragm is even. Also check that there are no holes in the diaphragm and that the diaphragm washer is properly fixed in position.		 <p>24</p>
2	3202	The mouth piece (16). Make sure there are no cracks.		 <p>16</p>
3	2853	The purge button (27). Make sure there are no cracks. Check to make sure the spring is undamaged.		 <p>27</p>
4	2786	Servo valve (14). Check to make sure that the valve bar is not bent.		 <p>14</p>
5		The switch: Put the switch into - and + position. It should be moved rather slowly, control the position of the diaphragm and that it is properly tighten.		

ASSEMBLY

Step	Parts	Tools/Instructions	Replace	Picture
1	2856 2857	Mount the o-rings (5,3) on the valve housing (4). Use the tools. See picture.	(↻)	
2	2857 3440	Install the valve insert (6) in the valve housing (4). Do not use any lubricant on the valve insert (4), use only soap and water.		
3	2857 1233 2974	Place the o-ring (7) in the groove of the valve insert (6). Lubricate the thread. Install the valve housing nut (8). 	(↻)	
4	2857 2974	Place the valve housing in the handle. Tighten with a tool. See picture.		
5	2876 2839 1896	Install the o-rings (11,13) on the valve tube (12). Lubricate the threads and the o-rings. 	(↻)	
6	2839	Screw in the valve tube (12) until about 2 mm space remains as illustrated.		

Step	Parts	Tools/Instructions	Replace	Picture
7	2857 2787	Install the rubber plate (10). Screw in the stop screw (9). Tighten the stop screw to a point where you can still turn the valve tube (12).	(C)	
8	2786	Screw the servo valve (14) on to valve tube (12). Tighten up. Be careful not to bend the valve needle.		
9	2711 1851	SWITCH (Only if the switch is damaged) Fit in o-ring (19) and lubricate it. Fit in the switch with the narrow part against the - minus sign on the second stage valve. See Picture. 		
10	2711 1851 2794 2712	Install the locking washer (21) on the switch (18). Press it on a drift. Tighten the locking washer so that there is sufficient resistance when setting the switch. Fix the diaphragm cam (22) upon the switch (18). Set switch at - (minus), press the diaphragm cam into correct position per the diagram.		
11		The distance from the top of the diaphragm cam to the housing should be 2 mm, concerns diaphragm of silicone rubber, see diagram. Carefully push diaphragm cam into the right position. Note the cam should be pushed slowly on to the switch so that the switch is not moved.		

Step	Parts	Tools/Instructions	Replace	Picture
12	3088	Insert the low pressure valve in to the second stage housing and secure it with the LP hose adapter.		
13	2707 2853	Fit the purge button in the cover (25) for the second stage. Make sure that the spring is undamaged.		
14	2578	Position the diaphragm (24) with the diaphragm washer facing down wards and the hole positioned as illustrated.		
15	2989 2851 x 4	Position the cover (25) for the second stage according to the adjacent illustration. Lubricate the screw and tighten (27) with a screwdriver. 		
16	3202 1167	Install the mouth piece (16) and the locking strap (17). Tighten up and cut off with plastic band pliers.		
17		Checking the second stage for leaks: Place the mouth piece against your lips and cover the low pressure hose connection with your thumb and inhale lightly. This will create a partial vacuum inside the second stage. If the pressure does not equalize in 5 second stage leaks. Then you need to check to make sure you have mounted all o-rings.		

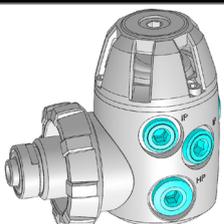
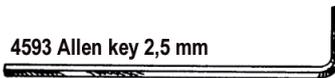
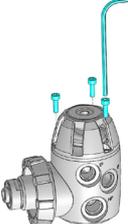
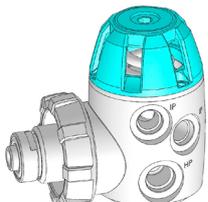
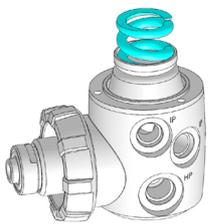
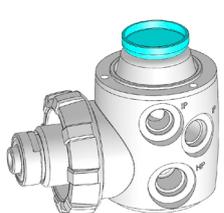
7. DISASSEMBLY INSTRUCTIONS - FIRST STAGE

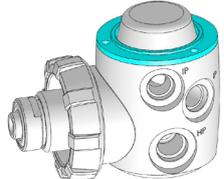
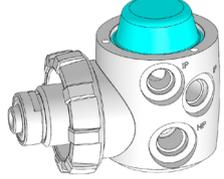
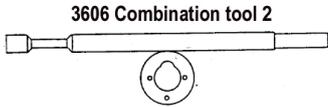
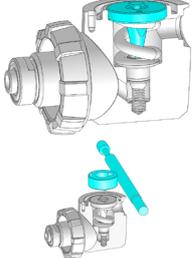
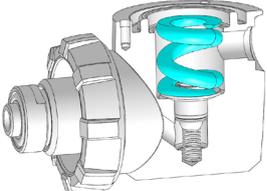
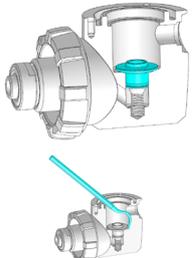
A service includes the following 5 steps:

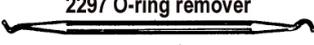
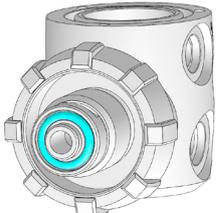
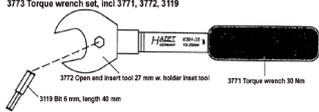
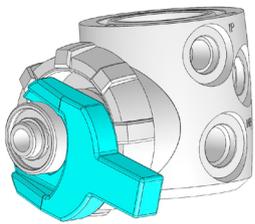
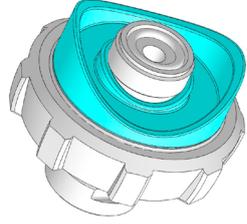
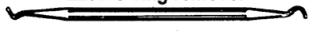
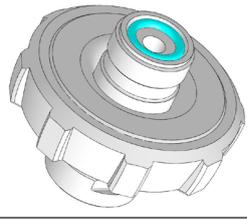
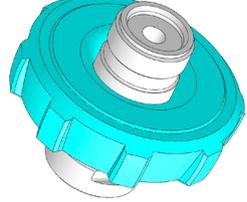
1. Complete disassembly of the first stage.
2. Inspection of disassembled parts.
3. Cleaning prior to assembly.
4. Assembly.
5. Final inspection and adjustment.

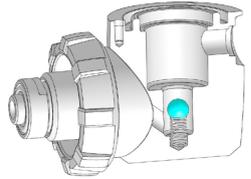
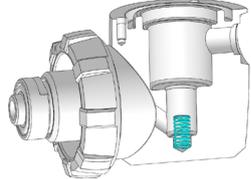
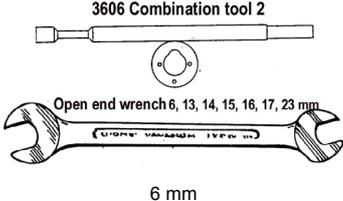
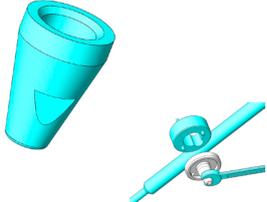
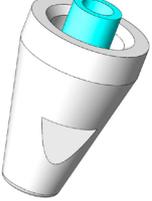
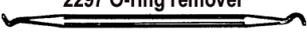
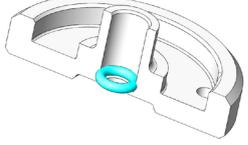
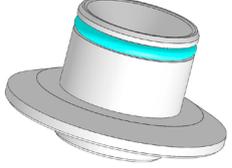
⚠ Do not disassemble the regulator in the clean room environment. All parts shall be taken to the clean room environment after inspection and after the pre-cleaning process if such is needed. Otherwise you risk to contaminate the clean room environment. New parts should be stored in it's original packing until it is time for assembly.

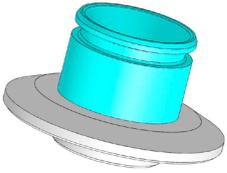
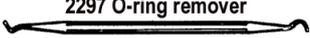
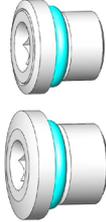
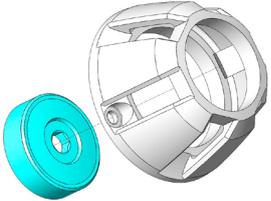
⚠ To remove o-rings, ONLY use o-ring remover tool 2297. Make sure not to damage o-ring and sealing surfaces!!

Step	Parts	Tools/Instructions	Replace	Picture
1	2680 Blindscrew UNF 7/16" 2 pcs 2679 Blindscrew UNF 3/8" 5 pcs	1246 Allen key 5 mm 		
2	4568 Screw M3x10 Xstream 3 pcs	4593 Allen key 2,5 mm 		
3	0000-140 Cover Xstream first stage satin			
4	4763 Press. spring 1.stage Xstream			
5	4565 Pressure plate 1.stage Xstream			

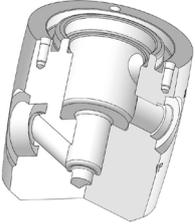
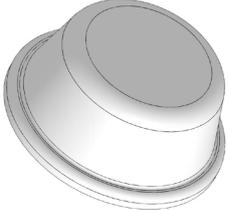
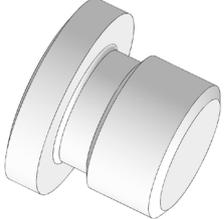
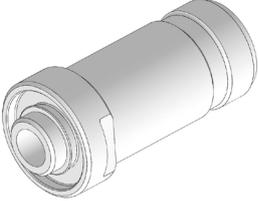
Step	Parts	Tools/Instructions	Replace	Picture
6	4570-BK Barrier 1.stage Xstream black			
7	4564 Roll. diaphragm 1.stage Xstream	Only use fingers. Tools may puncture the diaphragm		
8	Pin guide assembly	 <p>3606 Combination tool 2</p>		
9	4764 Valve seat spring Xstream			
10a	4760 Valve seat holder Xstream 4758 Zytel valve seat Xstream	 <p>2297 O-ring remover</p>		
10b	4760 Valve seat holder Xstream 4758 Zytel valve seat Xstream	The seat/seat holder may also be removed using compressed air, as shown in the picture.		

Step	Parts	Tools/Instructions	Replace	Picture
11	0012-028 O-ring			
12	4778 Conn. stem 1.stage 90 Xstream	  <small>3773 Torque wrench set, incl 3771, 3772, 3119</small> <small>3772 Open end insert tool 27 mm w. holder insert tool</small> <small>3119 Bit 6 mm, length 40 mm</small> <small>3771 Torque wrench 30 Nm</small>		
13	4576-BK Line protector, black			
14	0010-354 O-ring			
15	4576- BK Wheel G5/8" black			
16	4552 Cup type filter long			
17	<u>Over pressure valve</u> 3726 Valve sealing 3725 Valve piston 1180 Pressure spring 3727 Locking screw	1. Remove the locking screw with a 4mm Allen wrench. Remove the pressure spring and the valve piston. 2. Remove the valve sealing from the valve piston with an o-ring remover.	 	1.  2. 

Step	Parts	Tools/Instructions	Replace	Picture
18	0000-149 Ruby ball 1.stage Xstream			
19	4555 Spring for ball Xstream			
20	4559 Actuating pin, Xstream			
21	4777 Lower pin guide Xstream	 <p>3606 Combination tool 2</p> <p>Open end wrench 6, 13, 14, 15, 16, 17, 23 mm</p> <p>6 mm</p>		
22	4563 Pin bushing 1.stage Xstream Do not pull out nor replace the Pin bushing while servicing.			
23	0015-012 O-ring			
24	0015-059 O-ring			

Step	Parts	Tools/Instructions	Replace	Picture
25	4758 Zytel valve seat Xstream			
26	On blindscrew UNF 3/8" 0010-353 O-ring On blindscrew UNF 7/16" 0010-354 O-ring			
27	0000-141 Adjusting screw Note that the adjustment screw can only be un-screwed inwards!			

Inspection

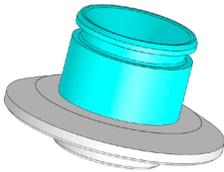
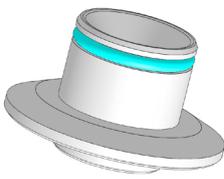
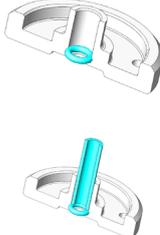
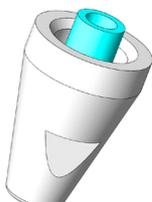
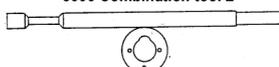
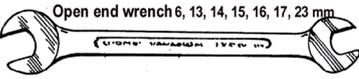
Step	Parts	Tools/Instructions	Replace	Picture
1	6010-233 Housing 1.stage 90 Xstream	1. Check sealing surfaces		
2	4564 Roll.diaphragm 1.stage Xstream	1. Check for wear and tear		
3	2680 Blindscrew UNF7/16 2679 Blindscrew UNF3/8,	1. Check O-ring sealing surfaces		
4	4778 Conn. stem 1.stage Xstream	1. Check O-ring sealing surfaces		

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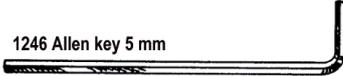
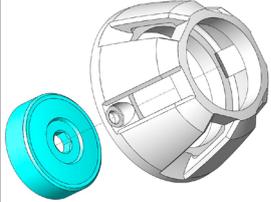
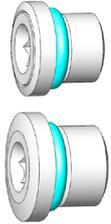
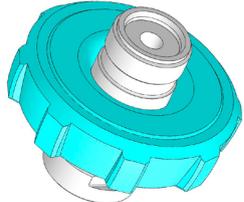
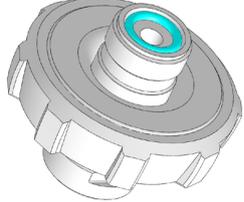
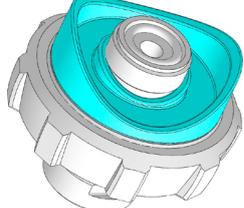
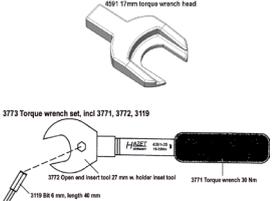
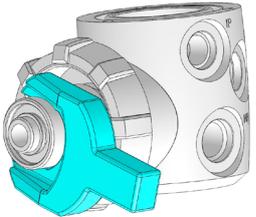
8. ASSEMBLY INSTRUCTIONS - FIRST STAGE

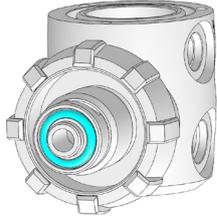
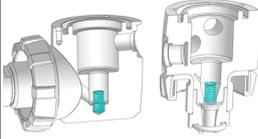
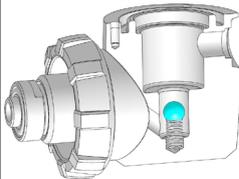
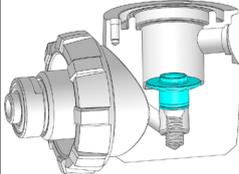
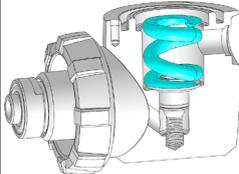
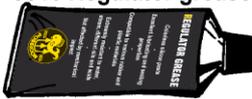
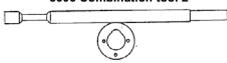
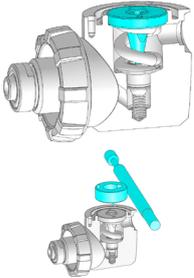
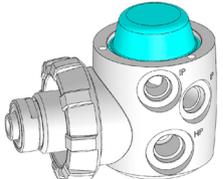
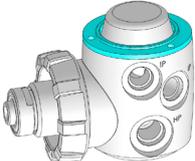
⚠ Lubricants shall be used sparingly. Excessive quantities of lubricant can trap particulate and other contaminants developing a potential fire hazard.

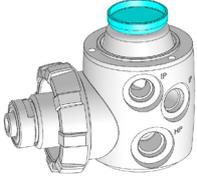
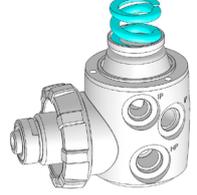
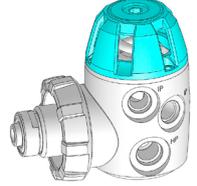
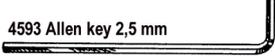
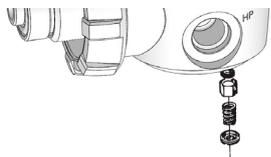
⚠ Parts marked with the () symbol are parts that must be replaced at every service. New parts should be stored in it's original packing until it is time for assembly.

Step	Parts	Tools/Instructions	Replace	Picture
1	4758 Zytel valve seat Xstream		()	
2	0015-059 O-ring	8516 Regulator grease 	()	
3	0015-012 O-ring	Use bushing 4563 to install o-ring		
4	4763 Pin bushing 1.stage Xstream	Make sure fully to the bottom		
5	4777 Lower pin guide Xstream	3606 Combination tool 2  Open end wrench 6, 13, 14, 15, 16, 17, 23 mm  3 +/- 1 Nm		
6	4759 Actuating pin, Xstream	8516 Regulator grease  Lubricate pin at top section only. Leaving lower end dry. Wipe off excessive grease under the hat.		

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Step	Parts	Tools/Instructions	Replace	Picture
7	0000-141 Adjusting screw	 <p>1246 Allen key 5 mm</p>		
8	<p><u>On blindscrew UNF 3/8"</u> 0010-353 O-ring, 5 pcs</p> <p><u>On blindscrew UNF 7/16"</u> 0010-354 O-ring, 2 pcs</p>	 <p>8516 Regulator grease</p>	☺	
9	4552 Cup type filter long		☺	
10	4576-BK Wheel G5/8" black			
11	0010-354 O-ring	 <p>8516 Regulator grease</p>	☺	
12	4576-BK Line protector, black			
13	4778 Conn. stem 1.stage 90	 <p>4591 17mm torque wrench head</p> <p>3773 Torque wrench set, Incl 3771, 3772, 3119</p> <p>3772 Open and insert tool 27 mm w. holder insert tool</p> <p>3119 BK 6 mm, length 40 mm</p> <p>3771 Torque wrench 30 Nm</p> <p>Ensure line protector is correctly positioned, with one slot facing to the bottom of the housing Torque setting 30 Nm</p>		

Step	Parts	Tools/Instructions	Replace	Picture
14	0012-028 O-ring			
15	4555 Spring for ball Xstream	 Wide end facing upwards, towards the ball.		
16	0000-149 Ruby Ball			
17	4760 Valve seat holder Xstream 4758 Zytel valve seat Xstream			
18	4764 Valve seat spring Xstream			
19	Pin guide assembly	8516 Regulator grease  3606 Combination tool 2  6 +/- 1 Nm		
20	4564 Roll. diaphragm 1.stage Xstream			
21	4570-BK Barrier 1.stage black	 You should see the marking "This side up" on the barrier.		

Step	Parts	Tools/Instructions	Replace	Picture
22	4565 Pressure plate 1.stage Xstream			
23	4763 Adj. spring 1.stage Xstream			
24	0000-140 Cover Xstream first stage, chrome			
25	4568 Screw cover M3x10 Xstream 3 pcs	<p>8516 Regulator grease</p>  <p>4593 Allen key 2,5 mm</p>  <p>6 +/- 1 Nm</p>		
26	2680 Blindscrew UNF 7/16" 2 pcs 2679 Blindscrew UNF 3/8" 5 pcs	 <p>1246 Allen key 5 mm</p>		
27	<p><u>Over pressure valve assembly</u></p> <p>3726 Valve sealing 3725 Valve piston 1180 Pressure spring 3727 Locking screw</p>	<p>1. Attach the new valve sealing to the valve piston and place the valve piston in the OP valve hole with the seal towards the housing.</p> <p>2. Place the pressure spring in the valve piston and tighten the locking screw with a 4 mm Allen key.</p>		

9. SETTINGS AND ADJUSTMENTS

Property 1st stage	Setting common units	Setting US units
P1	300 bar	4351 psi
P2	> 7.5 bar	>109 psi
P3	20 bar	290 psi
P4@p1,	8.5bar	123 psi
P5	> 7.5 bar	>109 psi
i	+/- 1.1 bar	+/-16 psi
R	max 1 bar	max 15 psi
Q	2 L/min	0.07 ft ³ /min
Internal leaktightness	12 ml/h* * Corresponds to a pressure climb of 0,01 bar/min for a regulator with a 70 cm hose.	

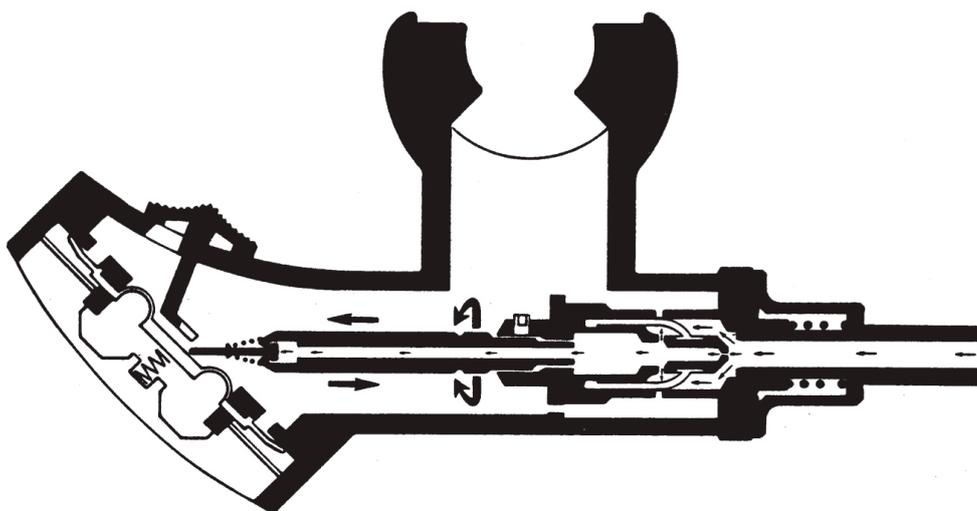
FIRST STAGE ADJUSTMENT

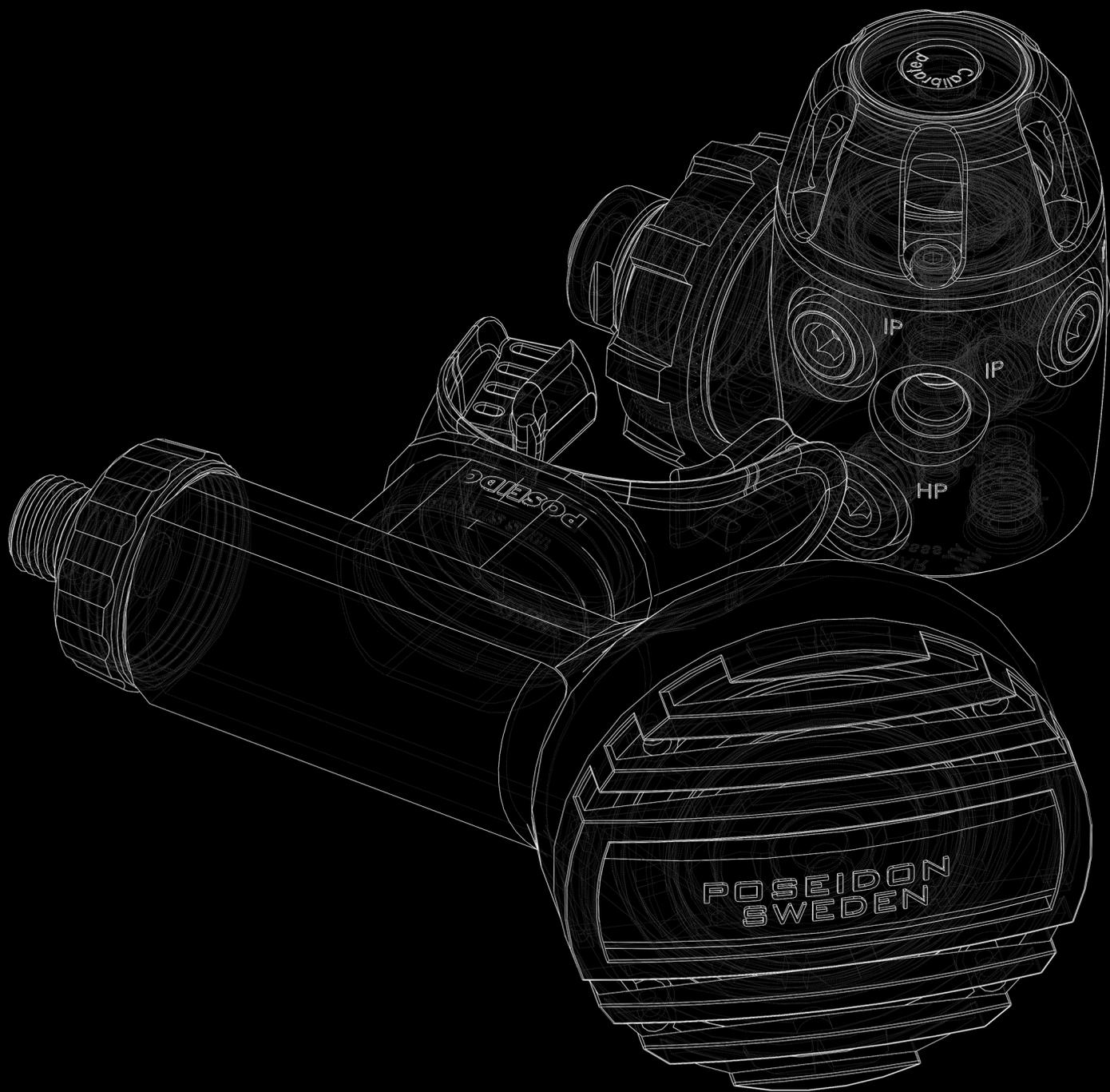
- 1) Open right valve HP (200-300bar)
- 2) Purge
- 3) Check IP (go to item 10 if OK)
- 4) Purge
- 5) Adjust IP (1/2 turn = 1.5 bar)
- 6) Open right valve
- 7) Check IP (loop to 4)
- 8) Close right valve
- 9) Purge
- 10) Open left valve (20 bar)
- 11) Check IP
- 12) Close left valve
- 13) Purge



ADJUSTMENT OF THE INHALATION RESISTANCE - SECOND STAGE

Step	Tools/Instructions
1	<p>Connect the Xstream 1st stage to the test equipment.</p> <p>Connect the test manometer hose to one of the low pressure outlets..</p> <p>Connect the Jetstream 2nd stage to one of the low pressure outlets on the Xstream 1st stage.</p>
2	<p>Pressurize the 1st stage at maximum tank pressure.</p>
3	<p>Connect the oval connecting pipe on the inhalation resistance gauge to the mouth-piece on the Octopus.</p> <p>Test-breathe very carefully. Check the reading of the gauge needle, which should rise to 1.37-1.57 inch (35-40mm)/vp and then move back. The turning point reading equals the inhalation resistance. If the reading is too low, screw the valve tube away from the diaphragm as shown in the picture below. If the reading is too high, screw the valve tube towards the diaphragm.</p> <p>Tighten up the stop screw.</p> <p>Repeat the inhalation test again to verify that the inhalation resistance remains the same after the stop screw has been tightned.</p>





Issue 1.0

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Service manual Jetstream Mk3 Art. Nnbr. 0100-005.