



**ALPHA
SECOND STAGE
SERVICE
PROCEDURE
DOC. 12-6465**

This ALPHA Service Procedure conveys a list of components and service procedures that reflect the ALPHA as it was configured at the time of this writing (09/21/17).

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GENERAL PROCEDURES

REFER TODOC. 12-2202

SPECIFICATIONS

Torques

LP Hose	35 - 40 in-lb (4 - 4.5 N-m)
Valve Housing Spacer	25 - 27 in-lb (2.8 - 3.0 N-m)
Diaphragm Retainer Ring	11 - 12 in-lb (1.24 - 1.35 N-m)

Opening Effort IP = 140 psi (9.65 BAR)

Recommended Setup Range (Primary)	1.1 to 1.5 inches of Water
Recommended Setup Range (Octopus)	1.5 to 2.2 inches of Water
Acceptable Setup Range (Primary and Octopus)	1.0 to 2.5 inches of Water

TOOLS REQUIRED

Standard Tools

Wire Snip
11/16" Open End Wrench
5/8" Open End Wrench
5/32" Hex Key
Standard Screwdriver - small
Cotton Swab (Q-Tip)

Specialty Tools

Oceanic approved Halocarbon Based Lubricant
(See General Procedure Document 12-7202 for approved list)
Inch Pounds Torque Wrench
Intermediate Pressure Gauge
In-line Adjustment Tool
O-ring Tool Kit
Balance Shaft Tool
5/64" Pin Punch

TROUBLE SHOOTING		
SYMPTOM	POSSIBLE CAUSE	TREATMENT
Freeflow or leakage present.	<ol style="list-style-type: none"> 1. Excessive LEVER (6) height. 2. Excessive intermediate pressure from first stage. 3. Lever (6) bent. 4. Damaged or worn Poppet Seat (4). 5. Damaged ORIFICE SEAT(19). 6. POPPET WASHER (7) bent or distorted. 7. POPPET SPRING (11) weak-ened, worn, or incorrect part. 8. ORIFICE SEAT(19) incorrectly adjusted. 	<ol style="list-style-type: none"> 1. Adjust ORIFICE SEAT(19) to arrive at correct spring load tension and Lever (6) height. Refer to Tuning section. 2. Refer to First Stage Trouble-shooting chart. 3. Replace with new. 4. Replace with new. 5. Replace with new. 6. Replace with new and readjust. Refer to Tuning section. 7. Replace POPPET WASHER (7), with new. 8. Replace with new.
Excessive inhalation resis-tance.	<ol style="list-style-type: none"> 1. Lever (6) bent. 2. ORIFICE SEAT(19) incorrectly adjusted. 3. Insufficient intermediate pressure from First Stage. 	<ol style="list-style-type: none"> 1. Replace with new and readjust. Refer to Tuning section. 2. Tighten to correct spring load and Lever (6) height. Refer to Tuning section. 3. Replace with new. 4. Adjust to correct contact. Re-fer to Tuning section. 5. Refer to First Stage Trou-ble-shooting chart.
Rattle heard inside Second Stage.	<ol style="list-style-type: none"> 1. Lever (6) slack present. 	<ol style="list-style-type: none"> 1. Tighten ORIFICE (19). Refer to Tuning section.
Little or no air flow when Purge Button is depressed.	<ol style="list-style-type: none"> 1. Lever (6) slack present. 2. Lever (6) bent. 3. ORIFICE SEAT(19) incorrectly adjusted. 	<ol style="list-style-type: none"> 1. Tighten ORIFICE SEAT(19). Refer to Tuning section. 2. Replace with new. 3. Adjust ORIFICE SEAT(19) to correct contact. Refer to Tuning section.
Water entering Second Stage.	<ol style="list-style-type: none"> 1. Tear in MOUHPIECE (31, 34, 36). 2. EXHAUST VALVE (21) distorted or damaged. 3. DIAPHRAGM (25) distorted or damaged. 4. DIAPHRAGM RETAINING RING (27) not tight on HOUSING (1). 5. Cracked or damaged HOUSING (1). 6. Mouthpiece Tie Wrap (32) loose or missing. 	<ol style="list-style-type: none"> 1. Replace with new. 2. Replace with new. 3. Replace with new. 4. Tighten until secure. 5. Replace with new. 6. Tighten or install.

DISASSEMBLY PROCEDURE



NOTE: Beginning late 2017, all Oceanic Regulator Service Kits will contain new O-Rings for ALL O-Rings found in the Regulator. DO NOT retain any old o-rings for re-use. Dispose of ALL O-Rings removed during service.



NOTE: Be sure to perform the steps outlined in the General Service Procedure (Doc. No. 12-2202-r02) prior to disassembling the Alpha second stage. Review the Troubleshooting section on page 3 to better understand which internal parts may need replacing, and to better advise the customer of the service required.

1. Carefully snip the Tie Wrap (32) (schedule A) on the Mouthpiece (31, 34, 36); remove Mouthpiece (31, 34, 36) and inspect for holes, tears or deformation. Discard if any found.
2. Pull back the LP Hose Cover (37) and remove the LP Hose from the Valve Housing (2) using an 11/16th open end or adjustable wrench. (*Fig. 1*)
3. Remove the Top Cover Ring Alpha (30), Purge Button Assy (29,33, 35) and Purge Button Retainer (28) by turning Top Cover Ring Assy (30) counter clockwise. All 3 parts above should come out as an assembly. If not, pull them out individually and set aside.
4. Remove the Diaphragm Retaining Ring (27) by unscrewing it counter clockwise.
5. Remove the Diaphragm Washer (26) and Diaphragm (25) by grasping the raised edges of the diaphragm center and lift with a slight upward twist to remove. Hold up to the light and inspect for holes, tears or deformation; discard if any found.
6. Carefully pry the Adjustment Cap (17) from the Adjustment Screw (12).
7. Remove the Adjustment Screw (12) with a 5/32" hex wrench, Turning the Adjustment Screw (12) counterclockwise (*Fig. 2*); The Lever (6) will drop as you loosen the Adjustment Screw.



NOTE: The Adjustment Screw (12) subassembly is under spring load and may pop out when the Adjustment Screw (12) is removed; be careful not to lose any components during disassembly.

8. Remove the Poppet Spring (11) and discard.
9. Remove the O-Ring (13) from the Adjustment Screw (12) and discard.
10. Using an 11/16th Open End Wrench, unscrew the Housing Valve Spacer (18), turning counter-clockwise.
11. Carefully push the Valve Housing (2)/Adjustment Shaft (9) Assembly out through the Housing (1), being careful not to damage the Lever (6) and set the Housing (1) aside (*Fig. 3*).



Fig. 1



Fig. 2



Fig. 3

12. Holding the Valve Housing (2) Adjustment Shaft (9) Assembly in your hand, remove the Adjustment Tube (9) from the Valve Housing (2) using a 5/8" Open End Wrench, turning the Adjustment Tube (9) **clockwise**. **The Adjustment Tube (9) is a left-handed thread.** (Fig. 4). Set the Adjustment Tube (9) aside.
13. Slide the Venturi Tube Switch (15) off the Adjustment Tube (9).
14. Remove the Poppet (5) by tilting the Valve Housing (2) opening downward and put it aside. If the Poppet (5) did not come out with the removal of the Adjustment Tube (9), push the poppet out through the Adjustment Tube (9) with cotton swab (Fig. 5).
15. Remove the Venturi Tube Switch O-ring (26) by pinching the o-ring and rolling off (Fig. 6); inspect for any damage and discard if found.
16. 13. Remove the Adjustment Tube (9) O-ring (16) from the Adjustment Tube (9) and discard.
17. Remove the Balance Shaft O-Ring (8) using a 5/64" Pin Punch.
18. Remove the Ratchet Detent (22) and O-ring (23) from the Housing (1) with a small flat blade screwdriver; discard and **DO NOT REUSE** (Fig. 7).
19. Remove the Valve Housing O-ring (3) by squeezing with your fingers discard.
20. Examine the Demand Lever (6) to insure that it is not bent or deformed. If the Demand Lever (6) is deformed, remove by pulling outward on one leg of the lever with your fingers until it is removed from the hole in the side of the Valve Housing (2); repeat with the other side.



Fig. 4



Fig. 5



Fig. 6



NOTE: It is not necessary to remove the Demand Lever (6) unless it is damaged. The Valve Housing (2) may be cleaned with the Demand Lever (6) attached.



CAUTION: If the Demand Lever (6) is bent or damaged in any way, it **MUST** be replaced. **DO NOT** attempt to repair the damaged part.



21. Remove the Poppet Seat (4) with your fingers and discard . DO NOT REUSE (*Fig. 8*).
22. Remove the two Poppet O-rings (7) by squeezing them with your fingers and working them over the end of the Poppet (5) (*Fig. 9*). DO NOT use a dental pick or any tool to remove them. Discard the O-rings (7). DO NOT REUSE.
23. Using a narrow flat blade screwdriver, carefully remove the Orifice Seat (19) by turning it counter clockwise in the Valve Housing (2) until the threads disengage. Once the threads are fully disengaged, press out the Orifice Seat (19) with a cotton swab. (*Fig. 10*) Remove the Orifice O-ring (20) and discard. DO NOT REUSE.

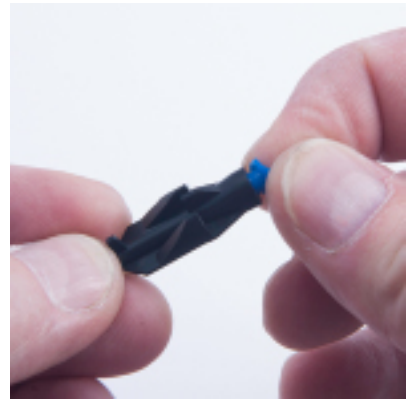


Fig. 8



NOTE: When removing the Orifice Seat (19), be careful not to damage or nick the knife edge sealing surface; doing so will result in a leak upon reassembly requiring its replacement. Examine the knife edge with a magnified light source for any nicks or dents; discard if any found.

24. Remove the Exhaust Cover (24) by grasping the upper corner and pulling downward (*Fig. 11*).
25. Examine the overall condition of the Housing (1) and Exhaust Cover (24) to insure there are no stress fractures or deformation. Insure that all threading on the Housing (1) is in good condition and free from sand or debris. Discard either if any damage is found.
26. Examine the Exhaust Valve (21) with a soft probe to insure that it is resilient and no holes or tears are present; discard if any found. Inspect the sealing surface under the Exhaust Valve (21) on the Housing (1) to insure there is no debris or damage.



Fig. 9



NOTE: It is not necessary to remove the Exhaust Valve (21) if it is in good condition; the Housing (1) may be cleaned without removing it.



Fig. 13

Fig. 10



REASSEMBLY PROCEDURE



NOTE: Prior to Reassembly, it is important to inspect all parts, both new and those being reused, for defects and damage. Inspect to insure that all o-rings are clean and supple, and all parts and components have been thoroughly cleaned and dried in accordance to the General Service Procedure (Doc. No. 12-2202). Inspect all critical sealing surfaces for scratches or imperfections.



WARNING: Use only genuine Oceanic parts, subassemblies and components whenever assembling Oceanic products. DO NOT substitute any Oceanic part with a part from another manufacturer, regardless of any similarity in shape, size or appearance. Doing so may render the product unsafe, and could result in serious injury or death.

1. If it was removed, install a new Exhaust Valve (21) into the Housing (1) by gently pulling the valve stem through the Housing (1) with a hemostat or needle nose pliers, insuring that the retaining nipple is pulled inside the Housing (1) and properly seated. Installation may be aided with the use of soapy water. (Fig. 12).



WARNING: DO NOT use Christo-Lube or any other lubricant on the Exhaust Valve (21) to install; doing so may result in the Exhaust Valve (21) slipping from the Housing (1) rendering the product unsafe, and could lead to serious injury or death.

2. Reinstall Exhaust Cover (24) by engaging the top corners of the Housing (1) first, then pressing downward until bottom lip of the Exhaust Cover (24) snaps over the lower ledge of the Housing (1). If necessary, the Exhaust Cover (24) can be heated in water to 140 degrees F. to make it more pliable.
3. Install a new Ratchet Detent O-ring (23) onto the Ratchet Detent (22) (Fig. 13).
4. Install the Ratchet Detent (22) into the Housing (1) by placing it onto a flat pick and then press fitting into the slot near the large housing opening with your fingers (Fig 14).
5. If the Demand Lever (6) was removed, reinstall by holding the Valve Housing (2) with the small flat molded onto the housing tube facing upwards. Carefully insert one leg of the Demand Lever (6) without excessively bending it into the square broached hole on one side of the Valve Housing (2) tube (Fig. 15); pull the opposite leg of the Demand Lever (6) outwards and insert the end into the square broached hole in the opposite side of the Valve Housing (2) tube. The Demand Lever (6) should now rest on the flat molded on top of the housing tube; this will insure that the square aspirator hole on one side of the tube will face the mouthpiece opening inside the Housing (1).



Fig. 12



Fig. 13



Fig. 14



Fig. 15

6. Lubricate and carefully work the Valve Housing O-ring (3) onto the Valve Housing (2) tube until seated into the groove.
7. Lightly lubricate and install the Adjustment Tube O-ring (16) onto the narrow groove in the middle of the Adjustment Tube (9) (*Fig. 16*).
8. Lightly lubricate and install a new Balance Shaft O-ring (8) into the small opening of the Adjustment Tube (9) by pressing it into place with the narrow end of the Balance Shaft (10) shaft or a 5/64" pin punch. Remove the Balance Shaft (10) and look into the small opening of the Adjustment Tube (9); you should be able to see clear through. If not, remove o-ring and reinstall until correctly seated.
9. Lightly lubricate and install the Adjustment Screw O-ring (13) onto the Adjustment Screw (12).
10. Install the Balance Shaft (10) into the Adjustment Tube (9) using a Balance Shaft Placement Tool. Install the Poppet Spring (11) into the Adjustment Tube (9).
11. Screw the Adjustment Screw (12) into the Adjustment Tube (9) using a 5/32 Hex wrench attached to a in/lb torque wrench. Torque to 3-4 in/lbs.
12. Lightly lubricate and install the Venturi Tube Switch O-Ring (16) onto the Venturi Tube Switch (15).
13. Inspect and install a new Poppet Seat (4) onto the Poppet (5), large flat end facing out until it is fully seated and flush with the edge of the Poppet (5) (*Fig. 17*). Examine the hole in the center of the Poppet Seat (4) to insure that it is clear and not plugged. Do not use any adhesive or lubricant.
13. Lightly lubricate and install both Poppet O-rings (7) into the two narrow grooves of the shaft of the Poppet (5) (*Fig. 18*).
14. Insert the Poppet (5) seat end first and poppet fins opposite the Demand Lever (4) into the round opening of the Valve Housing (2). Pressing the Poppet (5) into place with a cotton swab (*Fig. 19*). The Demand Lever (4) should pop up momentarily. Make sure the side of the poppet with 2 "fins" face downward (away from the Demand Lever (4) to insure that the poppet engages the legs of the Demand Lever (4).

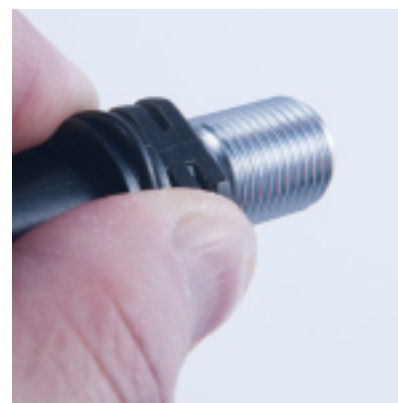


Fig. 16




Fig. 17




Fig. 18



 NOTE: When installing the Poppet (5) into the Valve Housing (2), it must be orientated with the side of the Poppet (6) having 2 fins facing down; the side with no fins facing up (*Fig. 20*).

 **CAUTION:** Failure to align the components precisely as described may prevent the Poppet (5) from engaging the legs of the Lever (6) rendering the unit inoperable.

15. While holding the Venturi Tube Switch (15) against the Valve Housing (2), insert the Adjustment Tube (9) / Adjustment Screw (12) assembly through the Venturi Tube Switch and begin screwing the Adjustment Tube (9) into the Valve Housing (2) by hand **counter clockwise; the thread is left handed**. Using a 5/8" open ended wrench attached to a calibrated torque wrench onto the flat surface of the Adjustment Tube (9) and torque counter clockwise to 16-17 in/lbs while holding the square end of the Valve Housing (2) with an 11/16" open end wrench (*Fig. 21*).

 NOTE: You will need to hold the vane of the Venturi Tube Switch (15) so it does not spin and hit the Lever (6) while you are tightening the Adjustment Screw (9) onto the Valve Housing (2). Failure to do so could possibly damage the Lever (6).

16. Insert the Valve Housing/Adjustment Tube Assembly through the round hole of the Housing (1) while depressing the Lever (6) (*Fig. 22*) and push until fully seated; the square broach of the Valve Housing (2) will engage the square hole of the Housing (1) and the Lever (6) will face upwards (*Fig. 23*).

17. Install the Spacer Valve Housing Nut (18) onto the Valve Housing (2) by turning clockwise with an 11/16 Open End Wrench attached to a calibrated torque wrench and torque to 25-27 in/lbs (*Fig 24*).

23. Install the Adjustment Cap (17) onto the Adjustment Screw (12) by pushing the Adjustment Cap (17) down onto the Adjustment Screw (12) until you hear it snap in place. (*Fig. 25*).



Fig. 20



Fig. 21



Fig. 22



Fig. 23



Fig. 24



Fig. 25

24. Carefully examine the knife sealing edge of the Orifice Seat (19) for nicks or imperfections. Lightly lubricate and install a new Orifice O-ring (20) onto the groove of the Orifice Seat (19). Insert the Orifice Seat (19) into the Valve Housing (2) knife edge first (*Fig. 26*).



CAUTION: Be careful to protect the knife edge sealing surface of the Orifice Seat (19) during installation.

25. Using a narrow flat blade screwdriver, engage the slotted head of the Orifice Seat (19) and slowly turn in clockwise into the Valve Housing (2) until the knife edge of the Orifice Seat (19) barely makes contact with the Poppet Seat (4). This will be indicated by the slight drop of the Demand Lever (6); when this occurs depress the Demand Lever (6) and slightly turn the Orifice Seat (19) out counter clockwise, bringing the Demand Lever (6) upright.



CAUTION: Continuing to turn the Orifice Seat (19) inward any further may result in damage to the Poppet Seat (4), requiring its replacement.

26. Install the Diaphragm (25) into the Housing (1) with the raised center facing up and the smooth strike plate facing the Lever (6). Examine the raised lip of the Diaphragm (25) edge to insure it is fully seated into the groove at the base of the threads of the Housing (1). (*Fig. 27*).
27. Install the Diaphragm Washer (26) on top of the Diaphragm (25) making sure it lays flat (*Fig. 28*).
28. Thread the Diaphragm Retainer (27) clockwise until snug; torque to 11-12 in/lbs (*Fig. 29*).
29. Install the Purge Button Retainer (28) and Purge Button (29,33, 35) onto the Top Cover Ring Assy (30). Check that the logos are correctly oriented (*Fig 30*).
30. Install the Front Cover Ring Assembly into the housing by turning clockwise until fully seated and secure. Logo should be aligned along the centerline of the Housing (1). Do not cross thread while installing. Do not over tighten.



Fig. 26



Fig. 27



Fig. 28



Fig. 29



Fig. 30

FINAL TUNING AND TESTING



NOTE: Adjustment and testing of the Alpha second stage is done with an inlet Intermediate Pressure of 140 psi (+/- 3 psi) and supply pressure of 3000 psi.

1. Connect the second stage LP Hose (Not shown) to an LP Port of a properly adjusted first stage; connect a LP QD Inflator Hose to another LP port. Install port plugs to seal all the other ports of the first stage.
2. Connect the first stage to a pure supply air source of 3000 psi (207 BAR). Connect a calibrated Intermediate Pressure Gauge to the LP QD Inflator hose (make sure that there is an overpressure relief device connected to the IP Gauge to relieve pressure in excess of 175 psi). Slowly open the supply valve to pressurize the regulator, purging the second stage several times to cycle the first stage to stabilize the IP. Check the IP Gauge to insure that the intermediate pressure is 140 psi (+/- 3 psi).



NOTE: If the Intermediate Pressure is other than recommended, readjust the first stage IP to specification. If necessary, refer to the Trouble Shooting section of the first stage to determine possible cause and resolution.

3. Prior to Adjusting the second stage, check the following items: The Front Cover Ring Assy is on tight and secure; the Venturi Tube Switch (15) is set negative (switch lever towards mouthpiece tube); the mouthpiece has been removed.



CAUTION: To avoid cutting the Poppet Seat (4) with the knife edge of the Orifice (19), always depress the Purge Button (29, 33, 35) while adjusting the Orifice (19); failure to do so will result in damaging the Poppet Seat (4), requiring its replacement.

4. Lever Height Adjustment: If available, attach an Inline Adjustment Tool between the second stage and the LP Hose (not shown) to adjust the lever height. Pressurize the regulator and listen to determine that no air flow is present; if none present, engage the slotted head of the Orifice (19) with the Inline Adjustment Tool and turn the Orifice (19) counterclockwise in small increments while depressing the Purge Button (29, 33, 35) until a slight leak is present. Now turn the Inline Adjustment Tool clockwise until the leak just stops, then turn in an additional 1/12 turn more. Make sure to depress the Purge Button (29, 33, 35) while turning the Orifice (19) to prevent damaging the Poppet Seat (4). If a leak was present upon initial pressurization, turn the Inline Adjustment Tool clockwise in small increments until the leak just stops, then turn in an additional 1/12 turn more.

5. If no Inline Adjustment Tool is available, fully depressurize the regulator and remove the LP Hose (not shown) from the second stage. Use a narrow flat blade screwdriver and adjust the Orifice (19) as outlined in step 4 above.



NOTE: Turning the Orifice (19) clockwise in further than necessary to stop air flow will result in excessive Lever (6) slack and excessive spring tension, preventing peak performance.

6. After attaining correct lever height, install the LP Hose (not shown) by attaching a 11/16ths Open End Wrench to a calibrated torque wrench and turning clockwise; torque to 50-60 in/lb.

7. Pressurize the regulator again and listen for leaks or air flow; none should be present. If a leak is present, repeat steps 3 through 5.

8. Hold the second stage with the Top Cover Ring Assy facing downwards; gently shake up and down, listening for any rattle sound indicating excessive lever (6) slack. If a rattle sound is found, readjust the Orifice (19) as outlined in steps 4 and 5.

9. Inhalation Effort Test with Magnehelic Gauge & IP Gauge: Attach the correctly adjusted second stage to a *Magnehelic Gauge via the mouthpiece adapter; slowly inhale on the mouthpiece while watching the IP Gauge. The moment the needle of the IP Gauge moves left from 140 psi indicating the precise moment the first stage has opened, look at the Magnehelic Gauge and record the Inhalation Effort in Inches Water Column (IWC); this is also referred to as Cracking Effort. Inhalation Effort is not to exceed 1.2 IWC. *(Magnehelic is a registered trademark of Dwyer Instruments).

10. Inhalation Effort Test with Flowmeter: Attach the correctly adjusted second stage to a flow meter that is connected to a Magnehelic Gauge via the mouthpiece adapter. Initiate airflow through the flow meter with the needle valve while watching the IP Gauge. The moment the IP Gauge needle moves left from 140 psi indicating the precise moment the first stage has opened, look at the Magnehelic Gauge and record the Inhalation Effort in IWC. Inhalation effort is not to exceed 1.2 IWC.

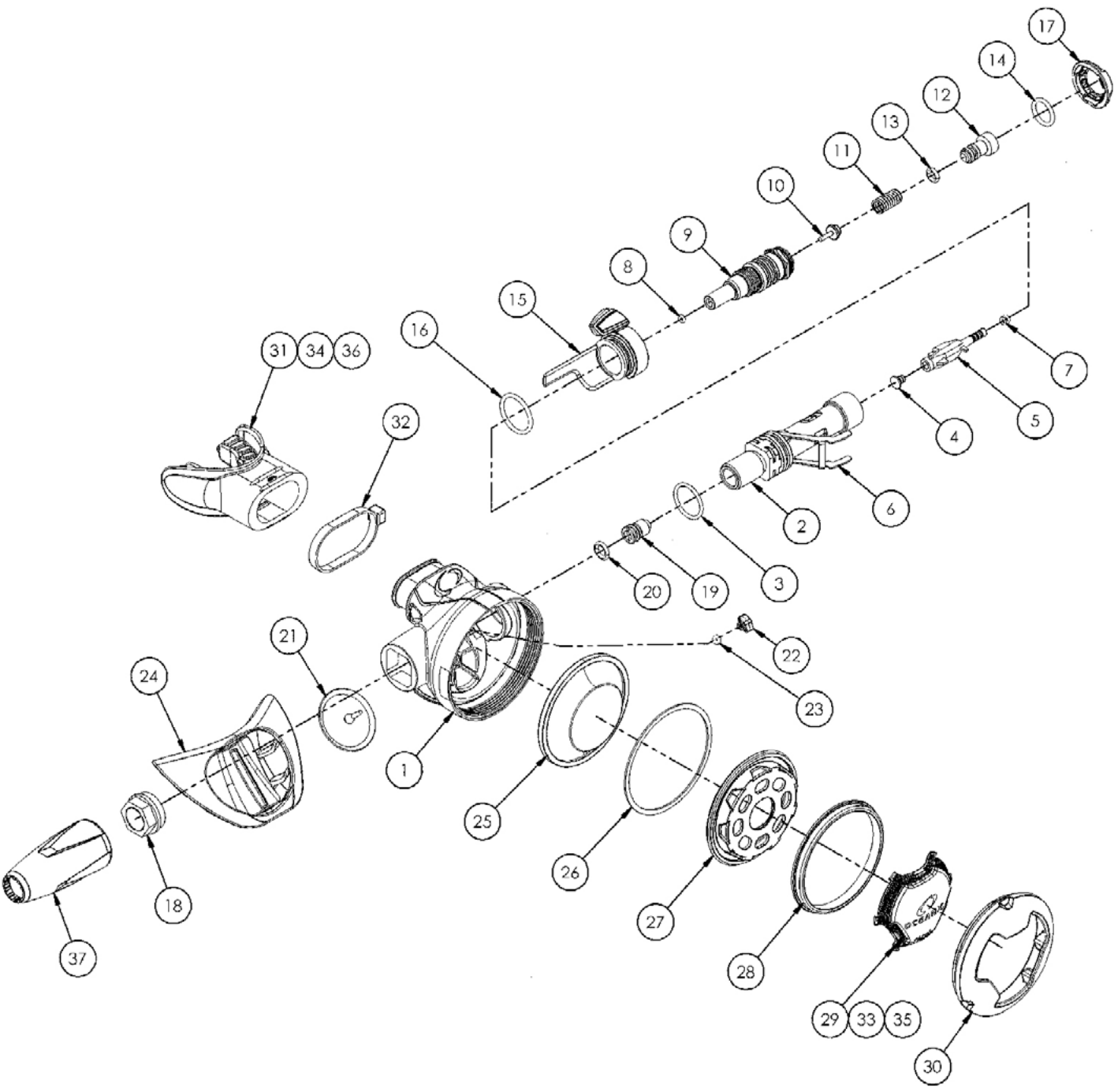


NOTE: If the inhalation effort is greater or less than specification, refer to the Trouble shooting section on page 3 to determine the possible cause and resolution.

11. Depressurize and remove the second stage from the Magnehelic Gauge. Attach a clean Mouthpiece (31, 34, 36) to the mouthpiece tube and secure with a Tie Wrap (32).

12. Install the protector cap on the first stage yoke retainer and tighten down with the yoke screw. Making sure that all other ports on the first stage are sealed close, lightly inhale on the second stage to determine vacuum integrity; you should not be able to draw air through the second stage. If you can, refer to the Trouble Shooting section on page 3 to determine the possible cause and resolution.

13. Check all fittings to insure none are loose and are correctly torqued before returning the regulator to the customer.



SERVICE PARTS KIT

PART#	DESCRIPTION	NOTES
See Note	KIT, SVC, ALPHA	Contact Service for latest Part Number

DOCUMENTS

PART#	DESCRIPTION	NOTES
12.6465	Procedure, SVC, ALPHA	
12.2202	Procedure, Regulator General	

ALPHA SECOND STAGE PARTS

DIA.	P/N	DESCRIPTION	NOTES
1	9890.07	HOUSING ASSY	
2	7097	VALVE HOUSING	
3	2-017	O-RING	
4	5465	POPPET SEAT	
5	5464	POPPET	
6	5463	LEVER	
7	5474	O-RING	
8	5473	O-RING	
9	7113	ADJUSTMENT TUBE	
10	5468	BALANCE SHAFT	
11	7822	POPPET SPRING	
12	7114	ADJUSTMENT SCREW	
13	2-008	O-RING	
14	2-014	O-RING	
15	9830	VENTURI TUBE SWITCH	
16	2-018	O-RING	
17	9873	ADJUSTMENT CAP	
18	5469	HOUSING SPACER VALVE	
19	6621	ORIFICE SEAT	
20	V2-010	O-RING VITON	
21	6326	EXHAUST VALVE	
22	7051	RATCHET DETENT	
23	2-003	O-RING	
24	9697	EXHAUST COVER	
25	5236	DIAPHRAGM ASSY	
26	7045	DIAPHRAGM WASHER	
27	9826	DIAPHRAGM RETAINING RING	
28	9870	RETAINER PURGE BUTTON	
29	9872.07	PURGE BUTTON W/INSERT	
30	9869	TOP COVER RING	

DIA.	P/N	DESCRIPTION	NOTES
31	7031.07	MOUTHPIECE	
32	1978-07	TY-WRAP	
33	9872.18	PURGE BUTTON W/INSERT	
34	7031.18	MOUTHPIECE	
35	9872.99	PURGE BUTTON W/INSERT	
36	7031.99	MOUTHPIECE	
37	9730	HOSE PROTECTOR	
38	6946	BAR CODE LABEL	