

zeagle®

SYSTEMS, INC.

**Octo-Z, Regulator/Inflator
Owner's Manual**



This owner's manual uses signal words recommended by the American National Standards Institute (see ANSI Z535.4) to designate levels of hazard seriousness. These signal words and their designations are as follows:



DANGER: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.



WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

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Congratulations on your Zeagle Regulator Purchase!

Your Zeagle Octo-Z is a combination Regulator and BC Inflator. It has been designed and manufactured to the highest possible standards of performance and reliability. With the reasonable care outlined in this manual it will provide you with many years of diving enjoyment.

Since 1979, Zeagle Systems Inc. has been providing divers with Scuba equipment and Buoyancy Control Devices. Zeagle Systems and our worldwide network of authorized dealers are always ready to serve you. For more information on our products, and for the dealer nearest you, visit our web site at www.zeagle.com. Thank you for choosing Zeagle!

Safety Information

Read these instructions carefully before using your regulator, and keep this manual for future reference.

Following the care and maintenance section at the end of this booklet will help ensure reliable service.

Limited Lifetime Warranty To The Original Owner

1. Your Octo-Z is guaranteed against defects in materials and workmanship. This guarantee does not cover normal wear, or damage from accident, abuse, neglect, alterations, improper usage, or failure to follow reasonable care and maintenance as outlined in this manual.



Limited Lifetime Warranty (contd.)

Under this limited warranty, Zeagle will either repair or replace, at its sole option, any original equipment or parts that fail to perform as intended. Shipping and Labor charges are not included and must be paid by you. To validate your warranty, you must fill out and return your registration card by mail, or register your Octo-Z at www.zeagle.com within 30 days of purchase. This Limited Lifetime Warranty excludes hoses, O-rings, diaphragms and mouthpieces, which are warranted for two years from the regulator's date of purchase. Filling out the mail-in card requires printing the serial numbers CLEARLY.

The Octo-Z serial number is stamped on the front edge of the body (fig. 1). Each serial number consists of a pre-fix letter followed by six numbers. A bright light held at an angle can make the numbers easier to read on the light yellow colored housings.



All of these digits must be ACCURATELY printed during your product registration for your warranty to be activated.

2. **IMPORTANT:** For proof of original ownership, you must save the original purchase receipt. It is your record of when and where the regulator was purchased. If you bring your Octo-Z to a different Zeagle Dealer, they will ask to see your receipt to begin warranty service. The receipt also lets you know when your annual service should be performed.



3. To keep the original-owner Limited Lifetime Warranty in effect, you must have your regulator inspected and serviced annually, within 30 days before or after the anniversary of the purchase date. Failure to do so will invalidate your warranty. This servicing must be performed by an authorized Zeagle dealer. Save the receipts from this servicing for your records. The receipt will be needed if you move to a different dealer.

4. The required work at the Dealer will alternate between test and inspection one year, followed by a disassembly and complete service the next year. Bring this booklet to your dealer so they can look at the “Records” on Page 15 to determine if it is time for a simple inspection or a complete overhaul. The simple inspection should take less time than the complete overhaul.

5. This limited warranty applies only to the original purchaser, and then only to certified divers.

6. Sometimes products from other manufacturers are attached to Zeagle Equipment. This warranty does not cover those other products or make any claims as to the performance or suitability of those other products.

7. This limited warranty applies only to regulators sold in the USA through authorized Zeagle Systems dealers.

8. This warranty gives you specific legal rights. You may also have other rights that may vary from state to state.

9. Warranty coverage in countries other than the US varies. Outside the US your dealer will be able to get further Warranty information from their Authorized Zeagle Regional Distributor.

Disclaimer And Limitation On Remedy

(Some states do not allow limitations on how long an implied warranty lasts or do not allow exclusion of incidental or consequential damages, so the following limitations or exclusions may not apply to you.)

Zeagle expressly limits any and all warranties, expressed or implied, to the terms of the limited warranty as set forth above. Your remedies are limited to those contained herein and are in lieu of all other remedies, whether based on breach of warranty or contract, negligence, strict product liability or other tort. Zeagle specifically disclaims liability for any consequential, special or indirect damages arising out of the use of Zeagle Equipment.





CAUTION

Scuba products are subject to conditions of extreme wear and corrosion. Inspection and maintenance are required to ensure continued performance. Zeagle recommends that you have your regulator inspected and serviced once a year on the anniversary date of its purchase at any authorized Zeagle dealer worldwide. Zeagle Scuba equipment should be used by certified Scuba divers only.



WARNING

1. Scuba diving is an adventuresome activity that involves a degree of risk. Zeagle Systems Inc. Self Contained Underwater Breathing Apparatus (SCUBA) equipment is only to be used by those trained and certified by a nationally recognized scuba training agency. Diving without the necessary training in safe diving procedures, or without observing the practices outlined by your training agency for your level of certification, is extremely hazardous and could result in serious personal injury or death. This owner's manual is in no way meant to be a substitute for the instruction received from a certified scuba training agency.

2. Zeagle regulators must be serviced only by dealers or technicians trained and authorized to service Zeagle Scuba equipment. At no time should any unauthorized person attempt to repair the regulator or adjust any nuts, bolts or screws other than those used to mount the regulator to, or dismount it from the tank valve. Scuba equipment that is not properly serviced might malfunction during use, putting the diver at risk of serious personal injury or death.





WARNING

1. Like all connections on your Scuba set-up, the connection between the corrugated hose and the Octo-Z should be checked for tightness before each dive. The Collar should be tightened using the fingers, with enough force so that it will not become accidentally loosened during the dive. RECHECK THE COLLAR FOR TIGHTNESS DURING YOUR EQUIPMENT CHECK AT THE BEGINNING OF EVERY DIVE!

2. During initial installation, the O-ring on the Inflator-hose-to-1st-stage-Fitting will seal with hand-tight pressure, but may come loose during use if not tightened carefully with a small wrench. Proper torque for the hose fittings is 40-45 in lbs. (4.5 - 5 joules) Excessive tightening will not help the seal and may damage the parts (see DEMA Guidelines No. 101, Low Pressure Hose Installation Caution Statement; ANSI American National Standard for Underwater Safety, paragraph 9.3.1).





WARNING

Extreme cold water diving such as diving under ice requires specialized training and procedures. Do not attempt these activities unless you are fully qualified and properly equipped to do so safely.

NITROX USE

Zeagle regulators are manufactured using materials suitable for use with oxygen enriched gases (i.e., Nitrox, etc.) providing the oxygen content does not exceed 40%. The regulator must be kept “Oxygen Clean” and used only with certified clean air mixtures to maintain this status. Once the regulator is used with air not certified to be clean for enriched air use, the regulator will have to be cleaned again for enriched air use by a certified technician.



DANGER

Using nitrox (i.e., gas mixtures containing oxygen in excess of 21%) requires special training and procedures. Improper use of nitrox can lead to personal injury, convulsions, drowning, and death.





DANGER

Use of gas mixtures containing oxygen in excess of 40% with this regulator, can lead to fires and explosions, causing severe personal injury and death.

Using your Octo-Z

The biggest cause of premature failures in BC Inflators and Regulator/Inflator combination units (like the Octo-Z), is dirt and salt water entering the delicate valve mechanism through a DISCONNECTED QD Fitting . The Zeagle Octo-Z offers a unique solution to this common problem. Although the Octo-Z has the typical QD Fitting for the inflator hose, the user should try to keep this fitting connected at all times. Your Octo-Z has a large Threaded Coupling that attaches the large Corrugated Hose to the Octo-Z Body. Prior to setting up your gear for a dive, your Octo-Z will be in your regulator bag with your primary regulator, not dragging in the dirt at the end of your Corrugated BC hose like other Reg/Inflator Combination units. (See Fig. 2 on next page)





When you have set up your regulators, tank and BC, the Octo-Z can be attached to the corrugated hose. Make this connection by bringing the coupling on the corrugated hose to the male thread on the Octo-Z and screwing the two together by hand. Tighten the collar (clockwise) snugly with your fingers, not a wrench. (See Fig. 3) **CHECK BEFORE EVERY DIVE TO MAKE SURE THIS CONNECTION IS TIGHT AND SNUG.**



USING YOUR OCTO-Z

Once your Octo-Z is attached to your regulator and BC, the tank valve can be turned on to feed air to all of your systems. At this time you should ***listen for any unusual leaks and check all connections for tightness.*** If any unusual leaks are heard or any connections are loose, do not dive with your gear until these problems have been corrected.

Your Octo-Z is both a BC Inflator and an “Octopus” or “Safe-second” regulator. You should practice learning the purpose and use of all the controls on the Octo-Z in safe shallow water before venturing into more challenging conditions.

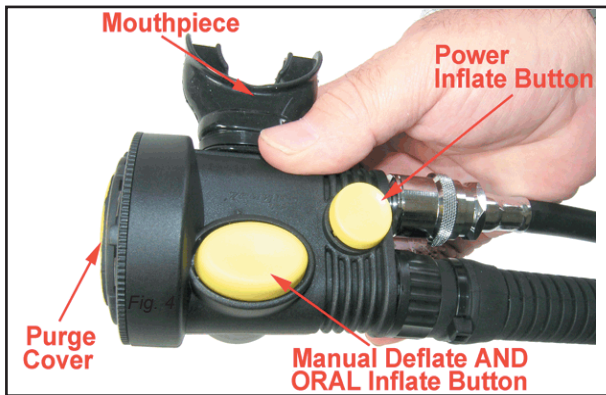
Breathing on the Octo-Z:

The Octo-Z is a high performance regulator that will deliver plenty of breathing air when needed. Because the Octo-Z spends the greatest portion of the dive out of your mouth, the inhalation effort is deliberately set higher than your primary breathing regulator. This is to reduce the chance of free-flow if a wave or current hits the diaphragm while it is out of your mouth. This means that the Octo-Z will breath slightly harder than your Zeagle primary 2nd stage, but this does not reduce its ability to deliver a high volume of air if required.

To begin breathing on the Octo-Z, put the mouthpiece in your mouth. If you are underwater and you do not have enough air in your lungs to blow the water out of the Octo-Z, push the Purge Cover gently inwards to allow compressed air to blow the water out of the Octo-Z for you. Once the housing is clear of water, you can begin breathing normally.

The rotating couplings on the corrugated hose and the inflator hose will allow the Octo-Z to comfortably position itself.





Because the Octo-Z is attached to your corrugated hose, in air-sharing situations you will most likely be using the Octo-Z yourself while handing your primary regulator off to the person in need of air. However, the rotating couplings on both the corrugated hose and the QD fitting means that unlike most Reg/Inflator combinations of this style, you can easily rotate the mouthpiece outwards to make the Octo-Z more accessible to another diver if you prefer to hand off your Octopus (Safe-second) regulator instead of your primary regulator.

Inflating and Deflating your BC:

Usually you will want to inflate your BC by filling it with air from your diving cylinder. To do this, simply press the round Power Inflate Button (See Fig 4). The inflate valve in the Octo-Z is balanced against changes in inlet pressure and flow. This means that you can smoothly fill your BC with an easy push of the button. Release the button when you have enough air in the BC bladder.



You can also inflate your BC manually using the Octo-Z. If you are underwater, inhale from the Octo-Z and then push the oval Oral Inflate button (see Fig. 4). While depressing the button, exhale into the Octo-Z. Your breath will be directed into the bladder of your BC. At the end of your exhalation, release the oval Button. If you are at the surface, inhale the surrounding air through your mouth, put the Octo-Z mouthpiece into your mouth, press the oval Oral Inflate Button and exhale into the Octo-Z. When you have finished exhaling, release the oval Inflate Button. Repeat as necessary.

To deflate your BC, you can pull the Octo-Z out away from you BC to apply tension to the cable release on your BC's shoulder mounted Dump Valve (if equipped). You can also deflate your BC by holding the Octo-Z extended above the position of your BC's bladder while pressing the same oval Oral Inflate/Deflate button you used to inflate the BC. In this case, air will exit the Octo-Z from the BC bladder.

POST-DIVE CARE

After the dive, disconnect your Octo-Z from the corrugated hose (see Fig. 3). Keep your Octo-Z with your main regulator at all times and if possible NEVER disconnect it from the Inflator Hose QD (see Fig. 1). Run fresh clean water into the mouthpiece until it runs out of the Exhaust Valve. DO NOT PRESS THE PURGE COVER WHILE DOING THIS.

After rinsing, reconnect the regulator to an air supply and thoroughly shake all excess water from the Octo-Z. Press the Purge cover (with the regulator attached to a pressure source) and the round inflate button several times to blow the rinse water out of the inner mechanism. Allow the entire regulator to air dry before storing. For reasons of hygiene, equipment subjected to frequent use in training, rental, etc. should finally rinsed in water containing a suitable sterilizing agent. The best sterilizing solutions for your regulator are soap based. If any stronger chemicals are used, make the immersion very brief and rinse the regulator out again thoroughly.



Failure to rinse sterilizing chemicals out of the regulator will cause serious damage to plastic parts of the regulator. This will result in cracking of hard plastic parts and shrinking or swelling of soft plastic parts. NOTE: DO NOT USE SOLVENT CHEMICALS TO CLEAN THE REGULATOR

Store the clean dry regulator in a clean bag or storage box, away from

The coupling on the corrugated hose is designed to connect to the typical garden hose. After your dive, LOOSELY attach the connection to a garden hose (Fig. 5) and turn the fresh water valve on to a slow controlled flow. The water will flow into the bladder of your BC and when the bladder is full, the excess water will push open the Over Pressure Valve

(OPV) and flow through the inner bladder flushing out salt and minerals. Pull both OPV strings occasionally. When the BC is flushed out, turn the water off and disconnect the garden hose from the coupling. Excess water can be drained out of the corrugated hose or from the Over Pressure Valves by pulling the release strings. DO NOT OVER TIGHTEN THE COUPLING. It is not designed to seal completely against a garden hose. A LITTLE LEAKAGE IS OK.



MAINTENANCE

It is essential that your Octo-Z is checked at least annually by an authorized Zeagle regulator technician. Unusually heavy use, or use in dirty or contaminated water may result in the need for more frequent service. A service record has been provided at the end of this manual to assist you in keeping your regulator's service up to date.



ZEAGLE REGULATOR/INFLATOR

MODEL: **Octo-Z** p/n 320-7200Y (Yellow), or 320-7200K (Black)

FEATURES:

- High-Flow QD Connection for Supply Air.
- Corrugated Hose Disconnect (so Octo-Z can easily be stored with regulator)
- Corrugated Hose Rinse Connection (Garden Hose can be connected to BC for easy effective rinsing.
- Light, but rugged design
- Balanced Inflation Valve, for easy use and precise BC fill-rate control.
- The BC can be orally inflated through the Octo-Z's mouthpiece.
- Both QD and Corrugated Hose Fittings rotate (even under pressure) for easy comfortable placement of the Octo-Z's body
- Ergonomic placement and contrasting colors, make the Inflate and Deflate buttons easy to find, distinguish and operate.
- The high performance design of the Octo-Z's regulator section provides easy comfortable breathing at all Sport-Diving depths.

WEIGHT

HOSE LENGTH

.5 lb. (.23 kg) (w/o hose)
27 in. (69 cm)

MATERIALS:

Cover

Case

Poppet Seat

O-Rings

Diaphragm

Exhaust Valve

Mouthpiece

Flexible Thermoplastic

Thermoplastic

Elastomer

Buna-N

Elastomeric Polymer

Elastomer

Silicone



Service Record

Date:

Service: _____

Work Done by:

Year 1, Simple Inspection:

Year 2, Complete Overhaul:

Year 3, Simple Inspection:

Year 4, Complete Overhaul:

Year 5, Simple Inspection:

Year 6, Complete Overhaul:

Year 7, Simple Inspection:

Year 8, Complete Overhaul:

Year 9, Simple Inspection:

Year 10, Complete Overhaul:

Year 11, Simple Inspection:

Year 12, Complete Overhaul:

Year 13, Simple Inspection:

Year 14, Complete Overhaul:

Year 15, Simple Inspection:

Date Purchased: _____

Staple the original or a copy of your receipt to this manual. You will need it to prove you are the original purchaser to maintain warranty coverage if you move away from your original dealer.



Notes:

The date of purchase, dive store, and contact information at the store should be written on this page. A copy of the receipt could also be stapled to this page for future records.





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