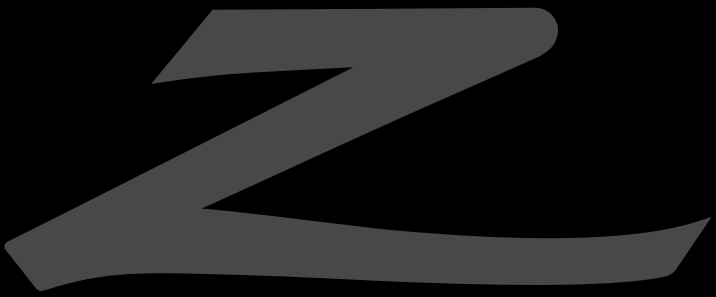
Zeagle



BUOYANCY COMPENSATOR OWNERS MANUAL

ULTIMATE PERFORMANCE
IN ANY CONDITION

Zeagle BC Owners Manual Doc. # ZE.02.05.0001

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CE Certification

All Buoyancy Control Devices sold by Zeagle in the EU (European Union) meet the following Personal Protective Equipment requirements, and compliance with the following where applicable:

EN1809:2016 Diving Equipment - Buoyancy Compensators – Functional and safety requirements

Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment.

EN250:2014 - Respiratory equipment - Open-circuit self-contained compressed air diving apparatus. (As Applicable)

The following BC products have been CE Certified to EN1809 by DGUV: Zena, Express Tech (EN 1809;1997); Base +, Resort +, and Halo (EN 1809:2016)

⚠ WARNING ⚠

This manual contains information that may affect your safety. Please read it completely before attempting to use the product. If you do not understand this information, contact your Authorized Zeagle Dealer for more information.

This manual contains information that includes intended use, warnings of possible hazards, maintenance z service and additional information that will make your diving experience more enjoyable and safer.

Zeagle offers a wide range of BC styles including back – inflated and jacket style models.

This manual includes information for the following models:

Halo, Bravo, Marina, Resort +, Focus, Base +, Covert XT, Ranger, Ranger LTD, Stiletto, Scout, Ranger Jr., Zena, Express Tech Deluxe, Code 3, Rescue 911, SAR

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INTRODUCTION

Thank you for choosing Zeagle!

We value your decision to invest in a Zeagle Buoyancy Control System.

It is in your best interest to consult with an **authorized Zeagle Dealer** in order to set up your new product and to fully understand and appreciate its features and benefits. Before using this product for the first time, be sure that your dealer has performed an initial service in accordance with the Dealer Prep Check List.

Certain information present requires direct attention with regard to safety. Use of these symbols indicates the following:

⚠ WARNING ⚠

Indicates situation that may, if not avoided or uncorrected, result in serious injury or death.

⚠ CAUTION ⚠

Indicates situation that may, if not avoided or uncorrected result in minor injury or significant damage to the product.

⚠ NOTE ⚠

Used to call attention to or to emphasize an important detail.

WARRANTY INFORMATION

NOTE

LIMITED LIFETIME GUARANTEE TO THE ORIGINAL OWNER:

Your BC is guaranteed against defects in materials and workmanship. This guarantee does not cover damages from accident, abuse, neglect, alterations, improper usage, normal wear and tear or failure to provide reasonable care. To validate your warranty you must register online within 30 days of purchase. All warranty claims will be handled through Zeagle, or an authorized Zeagle Dealer.

This warranty covers all Zeagle BCs with the exception of the Sport line, which is covered by at 2-year Limited Warranty.

Product Warranty Registration: **www.zeagle.com/registration**

⚠ WARNING ⚠

You must receive training and certification from a nationally-recognized or internationally-recognized scuba training agency before you attempt to use this product. Failure to obtain proper training could result in serious injury or death. Training must include buoyancy control skills and emergency weight ditching training. If you are uncertain as to the meaning of this statement, contact Zeagle Systems, Inc. for clarification.

Proper use of any BC requires that you **adjust any weight that you add to yourself and the equipment** you intend to use **to be neutrally buoyant** or nearly neutrally buoyant at the surface of the water with approximately 500 psi (35 bar) in your diving cylinder. Configuring your equipment in this way will minimize the frequency and degree of adjustments to buoyancy you will have to make as you dive. If you are unsure as to how this is done, consult with a professional diving instructor for advice.

⚠ WARNING ⚠

Your Zeagle BC is not a lifejacket or a PFD (Personal Flotation Device). The BC will not guarantee face up flotation for a disabled diver and should not be relied upon to prevent drowning on the surface of the water. Failure to be able to control your position or to receive assistance under these conditions may result in serious injury or death.

⚠ WARNING ⚠

Do not use your BC to perform the task of a lift bag. Attempting to lift objects by inflating the BC that you are wearing can result in a sudden change in buoyancy and cause either ascent or descent issues that may result in serious injury or death.

⚠ WARNING ⚠

Diving in cold water at temperatures below 50° F (10°C) requires special training. This training is beyond the scope of this manual and you are advised not to use this product in cold water unless you have received proper instruction and accept the possible added risk associated with cold water conditions. Failure to use this product appropriately under these conditions may result in serious injury or death.

SCUBA CYLINDER SELECTION AND CONFIGURATION

Your overall buoyancy depends on a combination of the buoyancy of all your diving equipment added to your own body's buoyancy. Please refer to the BCD Lift, Weight & Cylinder chart for your BCD's model and size. You can also find the information for your specific BCD on the BCD label inside the vest.

Most Zeagle systems are designed to work with a variety of tank configurations; however, the SPORT line is designed for single-cylinder use only.

⚠ WARNING ⚠

Failure to comply with the following information may result in an improper buoyancy configuration. You must maintain neutral buoyancy while diving to prevent injury or death.

⚠ WARNING ⚠

DO NOT attach a scuba cylinder to your model and size BCD that is larger than recommended by Zeagle. Doing so could cause a diver to be negatively buoyant even with a fully inflated BCD, possibly leading to injury or death

⚠ WARNING ⚠

At a depth of 99ft/30m and deeper, the pressure of the surrounding water reduces the buoyancy qualities of a 7mm wetsuit significantly. This change in buoyancy characteristics could result in a negatively buoyant situation that cannot be overcome by the lift capacities of X-Small and Small size BCD's. Zeagle strongly advises wearers of X-Small and Small BCD's to not dive below 99ft/30m with a wetsuit thicker than 6mm.

⚠ NOTE ⚠

The maximum single and double cylinder size specifications (in liters) for the BC are found on the tank pictogram on the warning label. This label is found on the BC, inside the vest. If the double cylinder pictogram has a "XX" in it, then the BC has been designed for single cylinder use only. If the single and double cylinder pictograms have numbers in them, then the BC has been designed for either single or double cylinder use. The number in the pictogram indicates the largest cylinder size recommended, in liters.

Operating Temperature Range

Air -4°F to +122°F (-20°C to +50°C)
Water +28°F to +104°F (- 2° to +40° C)

Shelf Life

The shelf life for a new, unused BC when deflated and stored in a dry place at room temperature, with no exposure to ultraviolet (UV), light is seven years. Refer to page 44 for Storage and Post Dive BC Cleaning information.

Vest

The vest portion of the system should fit so that it wraps partially around the front of the diver. See the Illustration on page 16. You should be able to tighten the waist strap so that the vest fits quite snuggly around the waist, in order to prevent the BC from shifting during the dive. If you can draw the two sides of the vest together and the fit is still not snug, you need a smaller size vest. If the Vest is uncomfortably tight when the fully extended strap is fastened, you need at larger vest. The ZENA women's BCD is different from other models, in that the vest portion is fastened to the body of the BCD with two adjustable straps and is closed by a front zipper. The ZENA is worn so that the top strap is at the narrowest part of the waist, above the hips.

Side Panels (Cummerbund)

The side panels should fit around the waist (top of the hip) NOT over your rib cage or diaphragm, with at least a four inch overlap on the touch fastener (Velcro) closure. The side panels are attached using six (6) plastic screw fasteners, and can be adjusted by moving the side panels to a different set of grommets on the vest section. See the Illustration on page 16. It is imperative that the BC not be worn too high on the body as this will create an undesirably high center of gravity and could restrict the ability of your diaphragm to move freely, resulting in discomfort or shortness of breath. Side Panel Extenders are available.

NOTE

The following models feature Velcro-adjustable side panels:
Focus and **HALO**

Shoulders

Length of the shoulder strap depends on personal comfort and the length of your torso. Take into consideration different suits you may be wearing with the system, and be sure to allow enough length so the pack may be worn low as described above. The sternum strap should be just above the breast line as shown on page 16. You should easily be able to reach the quick re- lease buckles. The sternum straps have high and low attachment loops. The BCD leaves the factory with the sternum straps attached to the higher loops. If this position puts the strap too close to the neck or the strap is covering a Dry Suit inflator, then the strap can be moved to the lower attachment points.

Bladder Assembly (Back-inflate models)

The bladder assembly for most back-inflation BCs attaches to the vest section via four stainless steel slotted fasteners sewn to the inner edge of the bladder assembly. Each of these slotted fasteners slides over the two Single-Tank Bands. This fastens the Bladder to the Tank Bands. If the BC is to be used with double tanks, then the Single Tank Bands are removed and the optional Double Tank Straps (p/n 7019T) slide through the webbing slots at the back of the vest just as the removed Single Tank Bands did (see cylinder band illustration on page 15). The stamped metal ends of the straps are threaded through the eye of the metal tabs on the Bladder Cover (see illustration on page 15).

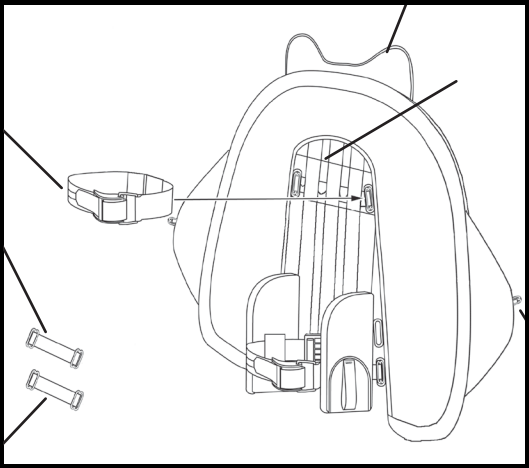
There are two plastic buckles on the Bladder Cover Winglets, which clip over the weight pockets to hold the buoyancy forward. Do not dive with the two forward small side release buckles detached! The shoulder straps should pass through the collar at the top of the bladder assembly.

⚠ WARNING ⚠

Do NOT dive with the two winglet side release buckles detached!

FUNCTION OF THE ZEAGLE SYSTEM

The Tank Bands and the optional double tank straps go through the same back- plate webbing slots. Shoulder strap goes through the collar, Surface Buoyancy Label Location.



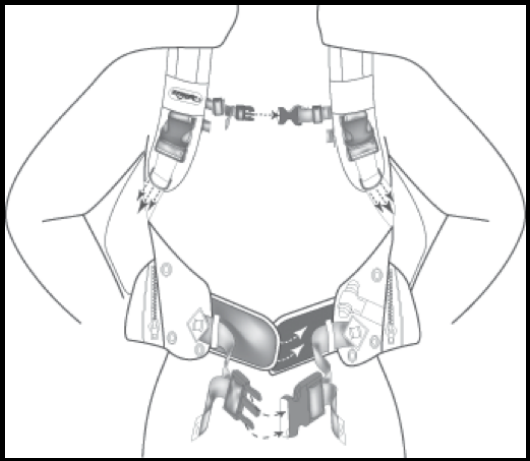
Optional double-tank Straps are required IF Double Tanks are mounted to the BC. p/n 7281M (2 required), The Winglet Side Release Buckles must be attached to the vest.

Proper Fit

The Zeagle Personal Fit System *(not applicable on the SPORT line)* allows the diver to size each component of the buoyancy system independently, for a true custom fit. For proper performance, please be sure that your system fits as described below. Put the BC on (before attaching it to a SCUBA cylinder) and adjust the shoulders and waist as follows.

NOTE

While the BCs of the SPORT line do not incorporate the PFS, they offer adjustability in shoulder, waist and cummerbund.



FITTING AND ASSEMBLY

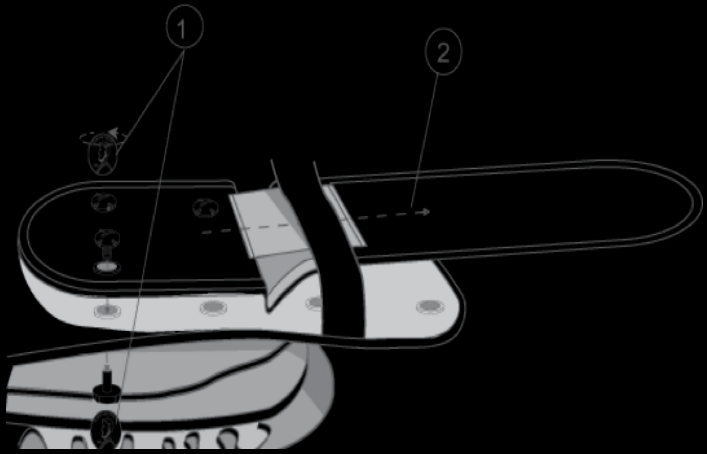
1) Loosen the shoulder straps before donning. Put it on like you would a jacket. If your system is equipped with cummerbund side panels, stretch the elastic by extending each side panel as far as possible before wrapping it around you and fastening the Velcro.
2) The system should be worn low with the bottom of the vest at the top of your hips. Once the cummerbund side panels are secure, fasten the waist strap and tighten it snuggly.
3) Fasten the sternum strap. It should be just above the breast line. If you are wearing a dry suit, be sure that the sternum strap does not obstruct the drysuit inflator hose or valve. There are two sets of loops for the sternum strap. If the sternum strap is too high, the strap can be moved to the lower loops.
4) Adjust the shoulder straps.

⚠ WARNING ⚠

NEVER breathe from the bladder assembly. The bladder assembly was not designed as an auxiliary air source and may contain harmful contaminants, which if inhaled, may cause injury or death.

Adjusting the Side Panels (Back-inflate models)

1) Use a coin, unscrew the plastic barrel-screw fasteners.
2) Move the side panel to different set of grommets on vest and reinstall.



3) Please note that one extra plastic barrel-screw is installed in an unused grommet hole when the BCD leaves the factory. This extra screw can be used if one is lost.

NOTE

On the models Base +, Resort +, Focus, HALO, the side panels can be adjusted by Velcro.

Threading The Standard Single Cylinder System

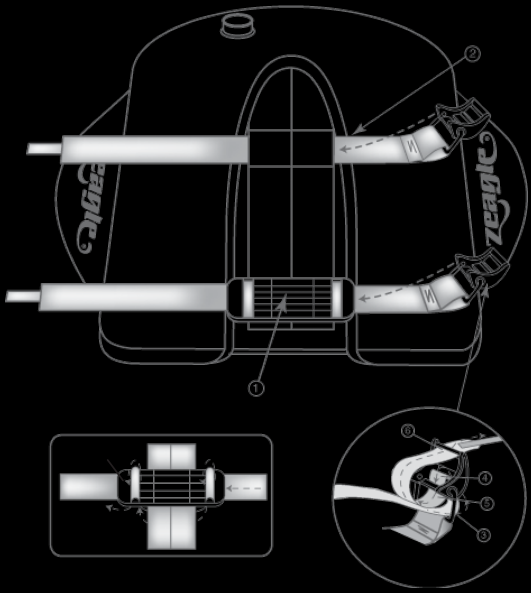


ILLUSTRATION 'A'
(Single Cylinder Band Assembly)

ILLUSTRATION 'B'
(Standard System Only)

FITTING AND ASSEMBLY

NOTE

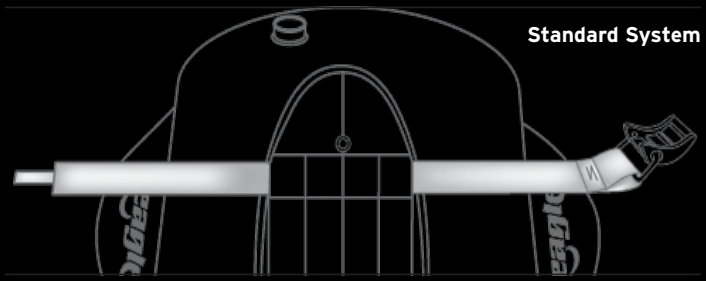
Tank bands expand and lengthen when wet. For this reason, you will get a tighter fit if you make your initial adjustments with tank bands that have been wet for at least 20 minutes.

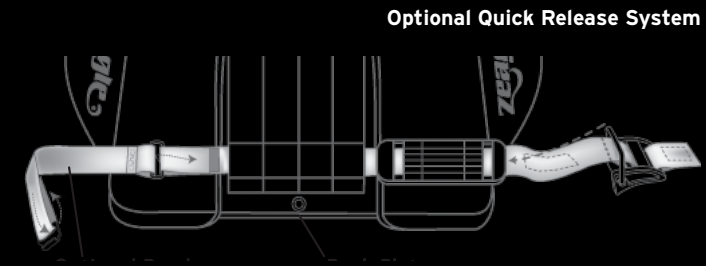
1) Thread the lower cylinder band through the non-slip plate and then under the bottom center backplate straps as shown in Illustration "A."
2) Thread the upper cylinder band under the top center backplate straps on the BC as shown in "A".
3) After threading the bands through the BC, thread the bands through the buckle as per illustration "B".
4) Threading instructions are also embossed on the side of the plastic buckle.
5) After Looping the webbing through final slot in the buckle, check to be sure that your cylinder is lined vertically on the BC. "Cam" the buckle over for extra tension.
6) Lock the buckle by engaging the Velcro material on the tank band.

NOTE

All models of the SPORT line come standard with one tank band. A second tank band can be added as an option.

Threading the Standard & Quick Release System on a Twin Cylinder Back Plate (Back-inflate models)



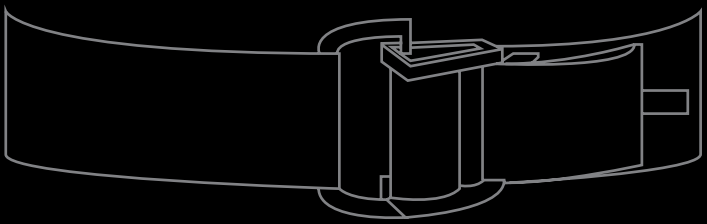


An alternate method of attaching twin cylinders with steel bands is by bolting through the back plate grommets.

Optional band extension used only with quick release band for twin cylinder use.

FITTING AND ASSEMBLY

There are only minor differences on a twin cylinder model. The rubber "non-slip" plate should be completely installed on the bottom band opposite the touch fastener (Velcro) material on the band, before inserting the band under the webbing on the pack. The bands go under the vertical webbing on the back plate. If your system has only two pieces of vertical webbing, it is not a twin cylinder model and should not be used with twin cylinders. If you are setting up a double pack for single cylinders, please note that the single size cylinder bands only go under the center 4 inches (10.2 cm) of vertical webbing on the back plate and the non-slip plate is installed as illustrated on page 22.



Quick Release Full Closed

Mounting Optional Backplate for use with Double Tanks

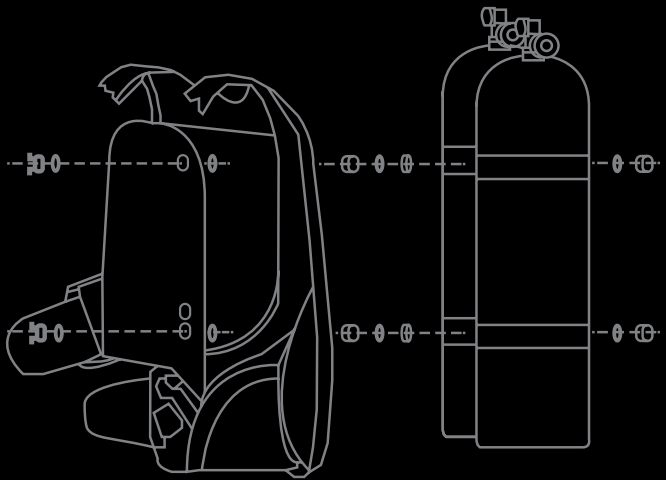
NOTE

Not applicable for models of the SPORT line and HALO

Backplate Available in:

Black Anodized Aluminum	**p/n 519-BP01A**
Stainless Steel	**p/n 519-BP01S**
Titanium	**p/n 519-BP01T**

911 and SAR BCDs



For Ranger, Ranger LTD, 911 and SAR BCDs.

For Ranger, Ranger Ltd. Require modification of built-in.

Pre-Dive Assembly

⚠ WARNING ⚠

Adjust the BC so that it does not restrict your breathing. Restriction of normal breathing while wearing your BC could result in injury or death. Before each dive, check all bands, straps, clips, and/or waist panels for proper adjustment.

Over Pressure Valve (OPV)

The over pressure / dump valve is typically located on the lower front of the bladder assembly. Some models have two OP Valves. As its name implies, the OP Valve prevents over inflation of the bladder. The valve automatically releases air when the internal bladder pressure exceeds the valve's spring pressure. The valve will automatically close when the internal bladder pressure becomes less than the valve's spring pressure. This valve may also be used to "dump" air when you are diving, by pulling the knob / string that is attached to the valve.

The OP Valve should be inspected before every dive for proper operation.

Remote Exhaust Valve (RE Valve)

Your BC may be equipped with a remote exhaust valve. If it is, it is located on the upper left, just behind the shoulder, on the bladder assembly. The RE Valve allows you to "dump" or exhaust air manually as you adjust for neutral buoyancy. The RE Valve operates by simply pulling on the power inflator mechanism and corrugated rubber hose.

NOTE

The RE Valve should be inspected before every dive for proper operation. Also, inspect that both threaded caps on the RE Valve, are tightened securely. The exhaust cap must be tightened a minimum 1 1/2 turns (3/8 inch) after it first contacts the body. The RE Valve was designed to be serviced periodically. Without proper tightening of these caps, they may loosen over time and be lost.

Bx Power Inflator/ Oral Inflator Mechanism

Your BC will also be equipped with a power inflator/oral inflator mechanism. This unit consists of a Bx Coupler, Oral Valve Mouthpiece, Oral Valve Button, and Pneumatic Inflation Valve (PIV) and connects directly to the RE Valve via a steel cable (inside the corrugated hose). The PIV operates over a pressure range of 6.5-13.8 bar (95-200 psi). To inflate the BC using the PIV, attach a low pressure hose to the quick disconnect (QD) fitting and depress the PIV button. To inflate the BC using the oral inflator, depress the Oral Valve Dump Button and breathe into the Oral Valve Mouthpiece.

CHECK ALL MECHANISMS BEFORE EVERY DIVE FOR PROPER OPERATION AND LEAKS.

NOTE

Before diving, make sure that the Bx Coupler is hand tightened onto the Power Inflator to avoid water getting into the BC.

Weight System Inspection

WARNING

Before entering the water check the weight system to be certain that it will not release without your intentional action. Unintended release may cause an uncontrolled ascent and possible serious injury or death.

Pull-Out release system - check buckles of weight system to ensure it is properly snapped in and there is no fabric caught between the male and female buckle.

NOTE

There are several types of weight systems available on Zeagle BCs. Compare your BC with the following pictures to determine which type of weight release system you have. When you see your BC's weight system, follow the directions shown.

WARNING

Check to see that the weight release system is secure.

Trim Weight™ Velcro Touch Fastener System - Check to see that the touch fastener material flap on the bottom and sides of each weight pocket completely overlaps and is secure.

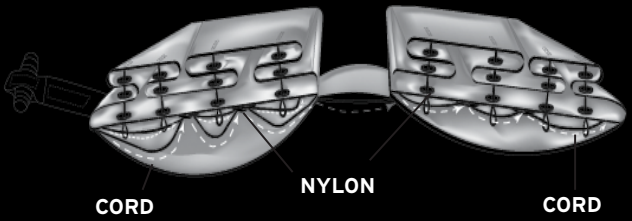
Pull-out Weight System (applicable on models of the SPORT line, except Base +)

Weights Properly loaded into removable pouch (see page 33), insert into pocket as shown. Make sure the plastic release buckle is completely fastened with no fabric pinched in the buckle.

Re-threading the Ripcord System

If the Ripcord is not completely secure, re-thread using the following procedure.

1) Lay the BC out in front of you. The Ripcord handle should be to your right side (on a table works best if possible).
2) Return the Ripcord handle to the secure position by pushing the cords back through the red webbing and secure the handle by velcro.
3) The shorter cord will be used on the right side.
4) Starting with the one closest to the Ripcord handle, thread the white nylon loop through the 3 grommets that sit directly above it. The orange cord is then threaded through the end of the white loop. Move on to the next white loop.
5) Thread the cord under the black webbing between the grommets where necessary.
6) Repeat for all remaining loops on this side.
7) Push the end of the cord up between the vest and the pocket.
8) If necessary, push the longer orange cord until it comes all the way out on the left side.
9) Repeat steps 4-7 on the left side.
10) After re-threading is complete, make sure to check that the Ripcord cable moves freely through the white loops without hinderence.



RIPCORD WEIGHT SYSTEM

Loading the Zeagle Integrated Weight System

NOTE

The following is required for proper BC performance

- Weights can be loaded before or after the system is donned. Considerations include the amount of weight and the distance to enter the water. Ask your buddy for help in either case. To load the weight system:
- Unfasten the buckles securing the bladder assembly winglets to the side of the vest to allow easy access to the weight pockets (where applicable).
- Ripcord™ - load your weights through the RED zippered opening on the pocket top. Be sure the RED zipper is fully closed after loading.
- Pull-Out Weight System – pull the pouch out of its pocket and load it through the zippered opening. Close the zipper and load the pouch into pocket according to illustration, make sure it snaps in with an audible click.
- Refasten the buckles securing the bladder winglets to the side of the vest.
- Be sure to load in the weights in the Ripcord pocket closest to the diver. The outer zipper pocket is a utility pocket, it is NOT designed for weights. The outer zipper pocket is NOT releasable with the Ripcord system. The outer zipper pocket is for carrying other items like gloves, small lights, mesh catch bag, etc.

PULL OUT WEIGHT SYSTEM

- The Ripcord weight system is designed to accept block weights, shot pouches and the recommended Zeagle zippered weight pouch (# 8042- 12 pound and #8043-18 pound capacity each). It is recommended that small weights of 2 pounds or less are not used loose in the Ripcord systems as they may fall out the bottom of the pockets.
- To load the weights, unzip the weight pockets (with red zipper pull tab) and insert weights. Do not overfill pockets. Zipper should zip close easily. Use equal amount of weight in each side of vest to ensure proper balance.
- To release the weights pull the red ripcord handle fully to stop.

⚠ CAUTION ⚠

Do not attempt to pull past the ripcord stop. The handle and cable are not designed to be completely separated from the system. The stop is designed to prevent you from losing the handle and pull cable. Pulling too hard past the stopping point may cause damage to the system.

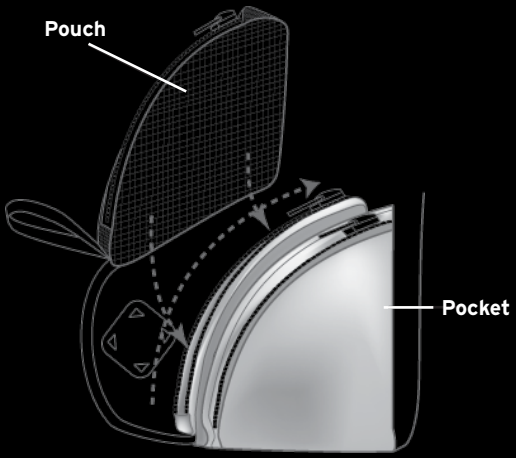
⚠ WARNING ⚠

Dropping your weights at depth may cause an uncontrollable assent resulting in possible injury or death.

PULL OUT WEIGHT SYSTEM

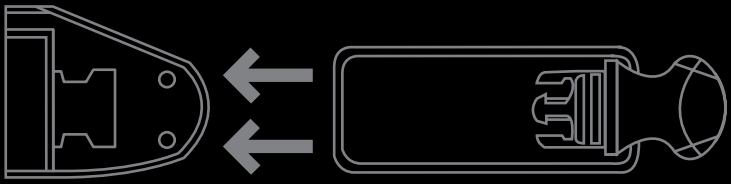
- When returning to the boat from a dive you may want to remove the weight before boarding the boat. In this case, you can unzip the weight pocket **on the back-inflate Zeagle BCs, or pull the pull-out weights on the Jacket-style SPORT line models**, and hand weights to an assistant on the boat or place weights on diving platform before climbing onboard.

Installing the Weight Pouch into the Ripcord™ Weight System

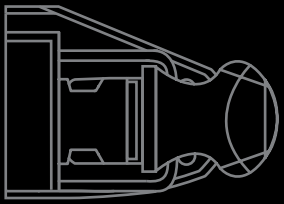


PULL OUT WEIGHT SYSTEM

Pull Out Weight System Assembly Procedure



Pocket **Pouch**



Pocket

⚠ WARNING ⚠

Diving equipment is heavy! To avoid injury or fatigue and to become familiar with each other's equipment, have your buddy assist you! Take this opportunity to be sure your buddy understands how your weight release works.

DONNING PROCEDURE

Be sure you have read and performed the Proper Fit page in the Fitting and Assembly section of this manual first.

- Open the cylinder band buckle(s) and loosen the band(s).
- Align the system so that the top of the bladder assembly is even with the cylinder valve (slightly higher or lower may be required depending on the diver's size and the type of tank, but this is a good starting point).
- Make sure that the two sets of bands are in vertical alignment with your tank and not twisted to one side.
- Pull the bands snug and close the buckles. Secure the loose end of the bands on the Velcro touch fastener.
- Connect the regulator to the cylinder valve and finish assembling the system per manufacturer's instructions.
- Be sure you are familiar with the low pressure inflator system on your Zeagle BC. Inflate the system and check for leakage.
- Weights can be installed in the weight pockets before the BC is donned or after. It may be easier to add your weights after you have the system on to avoid lifting the tank and weights together. Considerations include the amount of weight and the distance to enter the water. Ask your buddy for help in either case.
- Loosen the shoulder straps.
- Have your buddy balance the system while you put it on like a jacket.
- Remember, the system should be worn low with the bottom of the vest at the top of your hips.

DONNING PROCEDURE

- Fasten the side panels and/or the waist band. Extend the cummerbund side panels (where applicable) as far as possible before wrapping them around your body. Be sure to get the waist tight.
- Fasten the sternum strap and adjust it. If you are wearing a drysuit. be sure that the sternum strap does not obstruct the drysuit inflator hose or valve.
- Adjust the shoulder straps.
- Fasten the split saddle strap if your system is so equipped.

PREDIVE CHECK

NOTE

Prior to each dive, always check to make certain your BC has no obvious leaks by inflating the bladder until the over pressure relief valve vents. Listen for air leaks. If any are found, then service is necessary by an authorized Zeagle technician.

- Scuba diving is an adventurous activity and it is inherently dangerous. Even if you do everything right, some risks are involved. To lessen those risks (and to make diving more enjoyable) always follow the manufacturer's recommendation as to the maintenance of your gear and dive within your abilities.

NOTE

Abort any dive if any part of your live support system (including regulator, BC, drysuit, etc.) is not functioning correctly. Have any malfunctioning problem resolved before beginning your dive. Any parts or areas with excessive wear should be checked out by a qualified technician before diving.

PREDIVE CHECK

- Be familiar with all your gear as wells as your dive buddy's equipment.
- Periodically gear up completely with all the equipment (including air supply cylinder) you will be diving with and test each part of it for proper and unencumbered function.
- Test the power/oral inflator for proper function and check it for leaks.
- Inflate the buoyancy compensator fully and check it for leaks.
- Over-inflate the buoyancy compensator and check for proper re-sealing of the overpressure valves.
- With weight system loaded as it would be for diving, check for easy access to the release mechanism. Practice removing the weights as if you were returning to the boat or in an emergency. Making sure the weights drop free from you whether you are using a weight belt or other integrated weight system.
- With a Ripcord type system, when fully geared up, periodically pull the release handle to the stop and re-thread cable. Be sure nothing is hindering the movement of the cable through the release loops or channel and that nothing is hindering the release of weights from the diving vest.
- With your regulator installed on an air cylinder and with the air turned on, check for leaks and test for proper function.
- If you are diving with a full face mask or any other technical gear, be sure you have received certified training and that you fully understand and are competent in its proper use and emergency procedures.

Diving with your Zeagle BCD

- Your final buoyancy is primarily affected by your body, your thermal suit, your diving cylinder, and your lead weights. It is adjusted with your BCD. Both too little and too much lead ballast can be dangerous. To determine the proper amount of lead ballast weight needed for your system, go (with another diver) to a shallow safe location with the type (fresh or salt) of water you will be diving in later. During the test, wear a near empty cylinder of the same size and material you will be using. With a safety diver present, carefully add or remove weights from your system until you float vertically at the surface at eye level with a full breath of air (and a near empty cylinder). The near empty cylinder is important. Many divers weight themselves for a full cylinder, and then have trouble staying down later in the dive as the cylinder gains buoyancy.
- Start your descent by releasing air slowly either through the power inflator by holding the exhaust over your head and pushing on the exhaust button or by pulling gently (approximately 1/2 inch) on the inflator to open the remote exhaust valve on the shoulder if your system is so equipped.

NOTE

Do not use excessive force as this could seriously damage the system.

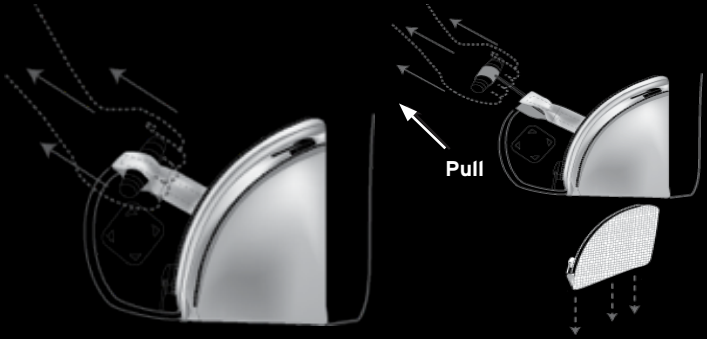
- Let out just enough air to start your descent. As you descend and when you reach your desired depth you will need to add air to your Zeagle BC by pressing on the air inlet button of your low pressure inflator to attain "neutral" buoyancy.
- It may be necessary to adjust the waist during the dive due to the compression and expansion of your diving suit.
- You will need to add air to the BC as you descend and exhaust air from the BC as you ascend, to maintain neutral buoyancy throughout your dive.
- When you begin your ascent at the termination of your dive, you must release air from your BC either through the exhaust on the inflator or through the remote exhaust. Be sure you are vertical with your left side slightly higher than your right side to vent the BC. You should release air so as to maintain a rate of ascent of one foot per second or less. To maintain a safe ascent rate, you must swim to the surface. Do not use your BCD to pull you to the surface, as this may result in fast ascents. Control your Ascent Rate!
- Inflate your Zeagle BC when you reach the surface to attain a comfortable degree of buoyancy and lay back against the tank. Do not overinflate the BCD.

Emergency Procedures

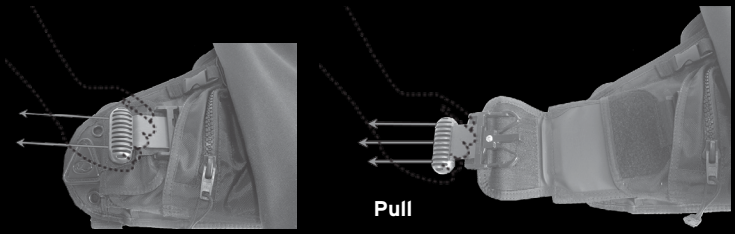
⚠ WARNING ⚠

If you are diving with a buoyant wet or drysuit, be aware that releasing weights at depth should only be done if absolutely necessary (for example, if your drysuit has flooded, making you extremely negative). Without weights, it may be very difficult to control your ascent rate as you near the surface. Weight release at depth should only be done according to the standards set by your certification agency.

Emergency Weight Release



Ripcord System



Pull Out System

Problem Management

Inflator problem
Inflators may fail due to foreign material in the mechanism, damage from impact by tanks or weights, or other causes. Practice the procedures below (in a safe location with your buddy) for your safety.

Inflator fails to operate
Check to see that the low pressure hose is properly connected. Orally inflate the bladder if necessary to establish proper buoyancy.

Inflator valve sticks open
Should the inflator valve stick open, causing an uncontrolled filling of the bladder and/ or excessive leakage of air at the inflator, hold exhaust valve open and over your head to vent excess air as you disconnect the low pressure hose from the inflator. Abort the dive.

Exhaust valve or over pressure valve sticks open
If the exhaust valve on the inflator sticks open, hold the inflator in the lowest position possible, to allow the bladder to hold air from that level up. Abort the dive and attempt to swim slowly, 1 ft per 2 sec (0.3 m per 2 seconds), or less, to the surface. Should excessive negative buoyancy be created, your weights may need to be released.

Weight release at depth should only be done according to the standards set by your certification agency.

Failure to hold air
If for any reason the system should fail to hold an adequate amount of air to provide necessary buoyancy, abort the dive and attempt to swim slowly, 1 ft per 2 seconds (.3 m per 2 seconds) or less, to the surface. Should excessive negative buoyancy be created, your weights may need to be released. Weight release at depth should only be done according to the standards set by your certification agency.

The above is based on recreational not decompression diving. Decompression divers must have complete redundant systems to handle all problems underwater.

NOTE

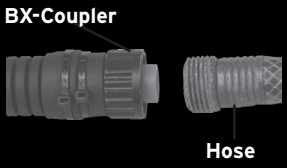
If at any time abnormal performance or malfunction is experienced, the system must be serviced by an authorized Zeagle Dealer prior to any further use.

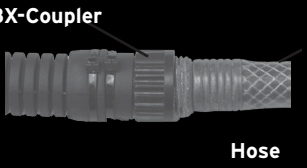
NOTE

The reliability and correct functioning of your equipment depends on the care it receives.

Post Dive BC Clean

- Rinse the BCD thoroughly with fresh water after each use.
- Rinse the inside of the bladder using the Bx Coupler (Note: The models of the SPORT line are not equipped with this feature). Simply unscrew the Bx Coupler from the Power Inflator, and screw onto a standard garden hose





- Turn the water on and super rinse and clean the inner bladder.

MAINTENANCE

- Hang the BCD upside down and allow it to dry while partially inflated. Drain any residual water through the exhaust hose while the BCD is hanging upside down.
- Store the BCD partially inflated in a cool dry place.

NOTE

When screwing on the Bx Coupler to the garden hose, **DO NOT** OVER TIGHTEN. Some water leakage here is normal during rinsing. Over tightening may cause damage to the coupler.

Inspection and Service Interval

Your BCD (including the Inflator) should be inspected and maintained by an Authorized Zeagle Dealer at least once a year, and more often if you dive frequently. This is a required action to keep your warranty in effect. There is a Service Record in the back of this manual for the Dealer to record the service performed.

NOTE

Check that the Bx connection is snug (or hand tight) before EACH DIVE! Periodically check ALL threaded connections such as OPV Flanges and Shoulder Dump Cap for tightness.

Installation of New Parts / Alterations

⚠ WARNING ⚠

Use of non-factory parts or accessories, or any change to the product not specifically authorized by Zeagle Systems, Inc., or performed by an unauthorized repair facility, may cause improper operation, damage, or leakage of the BC resulting in a loss of buoyancy control or air holding capability. This could result in injury or death, plus will void your warranty. Replace worn or damaged items with approved, factory supplied or specified parts ONLY.

Attach the original or a copy of your purchase receipt to this booklet and store it in a safe place. Your receipt may be needed for warranty validation if you take your BCD to a different Zeagle Dealer for service.

Location and Service Support

The Dealer that sold you your BC will be able to assist you with additional questions regarding product operation, warranty, and service. Go to **www.zeagle.com** for dealer locations near you.

Date	Service Record

SIZING, LIFT AND BALLAST

	Lift lb/N	Ditchable weight (lb)	Ditchable weight (kg)	Non-ditchable weight (lb)	Non-ditchable weight (kg)	Max tank size (L)	Double tanks? Y/N	CE? Y/N
Marina								
XS	20/90	20	9.07	6	2.7	15	N	*
S	22/100	20	9.07	6	2.7	15	N	*
M	26/120	20	9.07	10	4.5	18	N	*
L	33/150	20	9.07	10	4.5	18	N	*
Bravo								
S	26/120	20	9.07	6	2.7	15	N	*
M	33/150	20	9.07	10	4.5	18	N	*
L	33/150	20	9.07	10	4.5	18	N	*
XL	40/180	20	9.07	10	4.5	18	N	*
XXL	42/190	20	9.07	10	4.5	18	N	*
Covert XT								
XS	26/120	*	*	*	*	15	N	*
S	26/120	*	*	*	*	15	N	*
M	26/120	*	*	*	*	18	N	*
L	26/120	*	*	*	*	18	N	*
XL	35/160	*	*	*	*	18	N	*
XXL	35/160	*	*	*	*	18	N	*

* Pending

SIZING, LIFT AND BALLAST

	Lift lb/N	Ditchable weight (lb)	Ditchable weight (kg)	Non-ditchable weight (lb)	Non-ditchable weight (kg)	Max tank size (L)	Double tanks? Y/N	CE? Y/N
Halo								
S	31/137	20	9.07	10	4.5	15	N	Y
M	36/160	20	9.07	10	4.5	18	N	Y
L	41/182	20	9.07	10	4.5	18	N	Y
XL	45/200	20	9.07	10	4.5	18	N	Y
XXL	45/200	20	9.07	10	4.5	18	N	Y
Ranger								
S	44/196	36	16.33	16	7.3	15	N	Y
M	44/196	36	16.33	16	7.3	18	N	Y
L	44/196	36	16.33	16	7.3	18	N	Y
XL	44/196	36	16.33	16	7.3	18	N	Y
XXL	44/196	36	16.33	16	7.3	18	N	Y
Ranger LTD**								
S	44/196	36	16.33	20	9.1	15/15 x2	Y	Y
M	44/196	36	16.33	20	9.1	18/15 x2	Y	Y
L	44/196	36	16.33	20	9.1	18/15 x2	Y	Y
XL	44/196	36	16.33	20	9.1	18/15 x2	Y	Y

** Double tank conversion kit p/n 7281M (x2) required

SIZING, LIFT AND BALLAST

	Lift lb/N	Ditchable weight (lb)	Ditchable weight (kg)	Non-ditchable weight (lb)	Non-ditchable weight (kg)	Max tank size (L)	Double tanks? Y/N	CE? Y/N
Zena								
XS	31/138	24	10.89	16	7.3	15	N	Y
S	31/138	24	10.89	16	7.3	15	N	Y
M	31/138	24	10.89	16	7.3	18	N	Y
L	31/138	24	10.89	16	7.3	18	N	Y
XL	31/138	24	10.89	16	7.3	18	N	Y
Stiletto								
XS	35/156	24	10.89	16	7.3	15	N	Y
S	35/156	24	10.89	16	7.3	15	N	Y
M	35/156	24	10.89	16	7.3	18	N	Y
L	35/156	24	10.89	16	7.3	18	N	Y
XL	35/156	24	10.89	16	7.3	18	N	Y
XXL	35/156	24	10.89	16	7.3			
Scout								
S	24/107	None	None	16	7.3	15	N	N
M	24/107	None	None	16	7.3	18	N	N
L	24/107	None	None	16	7.3	18	N	N
XL	24/107	None	None	16	7.3	18	N	N

SIZING, LIFT AND BALLAST

	Lift lb/N	Ditchable weight (lb)	Ditchable weight (kg)	Non-ditchable weight (lb)	Non-ditchable weight (kg)	Max tank size (L)	Double tanks? Y/N	CE? Y/N
Express Tech DLX								
S	*	*	*	*	*	*	N	Y
M	*	*	*	*	*	*	N	Y
L	*	*	*	*	*	*	N	Y
XL	*	*	*	*	*	*	N	Y
Ranger Jr.								
XS	24/107	16	7.26	16	7.3		N	N
Resort +								
XS	18/80	*	*	*	*	15	N	*
S	20/90	*	*	*	*	15	N	*
M	25/110	*	*	*	*	18	N	*
L	29/130	*	*	*	*	18	N	*
XL	36/160	*	*	*	*	18	N	*
XXL	36/160	*	*	*	*	18	N	*

* Pending

SIZING, LIFT AND BALLAST

	Lift lb/N	Ditchable weight (lb)	Ditchable weight (kg)	Non-ditchable weight (lb)	Non-ditchable weight (kg)	Max tank size (L)	Double tanks? Y/N	CE? Y/N
Base +								
XS	18/80	*	*	*	*	15	N	*
S	20/90	*	*	*	*	15	N	*
M	25/110	*	*	*	*	18	N	*
L	29/130	*	*	*	*	18	N	*
XL	36/160	*	*	*	*	18	N	*
XXL	36/160	*	*	*	*	18	N	*
**Rescue 911 ** **								
S	65/290	36	16.33	20	9.1	15/15 x2	Y	Y
M	65/290	36	16.33	20	9.1	15/15 x2	Y	Y
L	65/290	36	16.33	20	9.1	18/15 x2	Y	Y
XL	65/290	36	16.33	20	9.1	18/15 x2	Y	Y

* Pending

** Double tank conversion kit p/n 7281M (x2) required

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