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### **Pro**





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## WARNINGS, CAUTIONS AND NOTES

Pay special attention to information provided in warnings, cautions and notes that are accompanied by one of these symbols:



**A WARNING** indicates a procedure or situation that, if not avoided, could result in serious injury or death to the user.



**A CAUTION** indicates any situation or technique that could cause damage to the product and could subsequently result in injury to the user.



**A NOTE** is used to emphasize important points, tips and reminders.



## SAFETY INFORMATION

This manual provides essential instruction for the proper fitting, adjustment, inspection and care of your new BC. Because Aqua Lung BC's utilize patented technology, it is very important to take the time to read these instructions in order to understand and fully enjoy the features that are unique to your specific model. Improper use of this BC could result in serious injury or death.

Before using this buoyancy compensator (BC), you must receive instruction and certification in SCUBA diving and buoyancy control from a recognized training agency. Use of SCUBA equipment by uncertified or untrained persons is dangerous and can result in injury or death.

Read this owner's manual completely before attempting to use your BC and become familiar with it first in a controlled environment such as a swimming pool, in order to weight yourself properly and to become comfortable with using its many features and adjustments.

Before every dive, perform a complete pre-dive inspection according to the procedure prescribed in this manual, to ensure that all components are functioning properly and no signs of damage or leaks are present. If you find that your BC is not functioning properly or is damaged, remove it from service until it can be repaired by an Authorized Aqua Lung Dealer or Distributor.

Your BC is not a lift bag. **DO NOT** use it to bring heavy objects to the surface. Doing so may cause permanent damage to the BC and could also result in serious injury or death due to embolism or decompression sickness.

In an emergency such as an out of air situation or uncontrolled descent, it is important to remove and jettison weight immediately. **DO NOT** depend solely on using your BC's power inflator to lift you to the surface.

In the event of an uncontrolled, rapid ascent, it is important to immediately begin venting air from the BC. Continue venting air to slow your ascent rate if neutral buoyancy cannot be reestablished.

**DO NOT** inhale from your oral inflator. The BC may contain harmful contaminants or gases, which could cause suffocation or injury.

Factory prescribed service for this BC must be performed at least once annually by a factory trained technician who is employed by an Authorized Aqua Lung Dealer or Distributor. Annual service consists of a complete overhaul of the power inflator and a general air leak inspection of the bladder and valve connections.

Disassembly, repair or lubrication must not be attempted by persons who are not factory trained and authorized by Aqua Lung. Unauthorized service will render the warranty null and void.

This BC is designed for use with compressed air or Nitrox/EAN (enriched air nitrox) mixtures not exceeding 40% oxygen. Any use of gas mixtures with increased oxygen content or the addition of helium or other substances may cause corrosion, deterioration and/or premature aging of the BC leading to component failure of the metal and rubber parts. The component failures could lead to a loss of buoyancy control and/or pressure integrity of the BC resulting in injury or death. Non-standard breathing mixtures may also present a risk of fire or explosion. The use of Nitrox/EAN requires additional training. Failure to observe this warning may result in injury or death. Use only nitrogen/oxygen mixtures containing no more than 40% oxygen.

CE Conformity - This BC conforms to EN 1809: 2014.

It was controlled by the l'Institut National de Plongée Professionnelle, organisme notifié n°0078, entrée n°3 port de la pointe rouge 13008 Marseille -France.

TEMPERATURE LIMITATIONS: This BC should be exposed to temperatures no lower than -4°F (-20°C) and no higher than 150°F (65°C).



**WARNING:** This is NOT a life jacket: It does not guarantee a head up position of the wearer at the surface. It is not designed to provide face-up flotation in all situations; therefore it does not meet U.S. Coast Guard regulations for a life preserver or personal flotation device (PFD). If you become unconscious in the water without a buddy present to immediately give assistance, you may suffer serious injury or death from drowning.

Your buoyancy compensator is primarily designed to help you maintain neutral buoyancy while in a comfortably balanced, face-down swimming position underwater. It is also designed to provide you with flotation so that you can rest on the surface, but it is not designed to function as a life preserver or personal flotation device (PFD). In order to meet U.S. Coast Guard regulations, a PFD must be designed so that it automatically rights you to a face-up position and holds your head out of the water on the surface. The design characteristics of a personal flotation device are different from those of a buoyancy compensator. The ability of any flotation device to float you in a face-up position can also be affected by other diving equipment you wear, including a cylinder, weight or exposure suit and whether it can be inflated before you lose consciousness.

For this reason, it is important to always dive with and maintain close proximity to your buddy at all times. Do not depend on any flotation device to hold your face above the surface in the event that you are rendered unconscious in the water while diving.

If you have any questions regarding your Buoyancy Compensator or the information found in this manual, please contact your regional Aqua Lung Dealer or Distributor. Distributor information is available on the Aqua Lung website at: [www.aqualung.com](http://www.aqualung.com)



**WARNING:** Although this manual provides some basic guidelines for certain buoyancy control techniques, it is not a substitute for training from a professional diving instructor. Failure to weight yourself properly may create a hazardous condition that could lead to serious injury or death. If you are unsure how to weight yourself in order to achieve optimum buoyancy underwater and on the surface, do not dive until you have obtained the necessary instruction from your diving instructor or an Authorized Aqua Lung Dealer or Distributor.



## DEALER INSPECTION AND SERVICE



**WARNING: DO NOT attempt to perform any disassembly or service of your BC. Service requiring disassembly must only be performed by a factory-trained Aqua Lung technician. To obtain service or repair, such as power inflator service or replacement of the bladder, see your local Authorized Aqua Lung Dealer or Distributor.**

1. It cannot be assumed that the BC is in good working order on the basis that it has received little use since it was last serviced. Remember that prolonged or improper storage can still result in internal corrosion and/or deterioration of o-ring seals and valve springs, as well as bladder seam degradation.
2. It is imperative that you obtain prescribed dealer service for your BC at least once a year from an authorized dealer, including a general air leak inspection, visual inspection of the SureLock weight pouch handles (if equipped) and complete overhaul of the power inflator and OPR valve. Your BC may require this service more frequently, depending on the amount of use it receives and the environmental conditions it is used in.
3. If the BC is used for rental or training purposes in salt, chlorinated or silted fresh water, it will require prescribed dealer service every three to six months. Use in chlorinated water will greatly accelerate the deterioration of most components and require more frequent service.
4. **DO NOT** attempt to perform any disassembly or overhaul service of your BC. Doing so may cause the BC to dangerously malfunction and will render the warranty null and void. All service must be performed by an Authorized Aqua Lung Dealer or Distributor.



**NOTE:** *It is important to obtain prescribed dealer service for your BC at least once annually, from an Authorized Aqua Lung Dealer or Distributor, your personal safety and the mechanical integrity of your BC depends on it.*

## WARRANTY INFORMATION

Product registration and warranty information can be found on the Aqua Lung website at

[www.aqualung.com](http://www.aqualung.com)



## BASIC SETUP

Aqua Lung recommends that you bring your buoyancy compensator, together with your regulator, to your authorized dealer for the installation of the MP inflator hose and other accessories. The retailer can also answer any questions you may have pertaining to the information in this manual.



**NOTE:** The terms “hook”, “loop” and “hook & loop” are used throughout this manual. Hook & Loop is commonly known as Velcro®, which is a trademarked brand of hook & loop. Many of the BC’s components have hook & loop attachments, including the waistband, cylinder bands, weight pouch flaps and inflator hold down.

If it is not possible to return the BC with your regulator to your authorized dealer, you may install the MP quick disconnect inflator hose by carefully performing the steps in the following procedure.

### Attaching the MP Hose to the First Stage

1. Remove the inflator hose from the power inflator body by gripping the grooved sleeve over the quick disconnect coupling with your thumb and forefinger. Slide the sleeve back.



2. Remove the port plug from an MP port on the regulator using an appropriately sized wrench.



**WARNING:** DO NOT connect the inflator hose to a high pressure (HP) port (greater than 200 psi / 14 bar). This may cause the hose to burst when pressurized, which can result in serious injury. If you are unsure which regulator port is medium pressure (MP) or high pressure (HP), consult your regulator owner’s manual or your dealer before attaching the hose.

3. Check to ensure the o-ring is present and in good condition. Screw the threaded end of the hose into the port and tighten to 40 in-lbs (4.5 Nm) with a 9/16” wrench.





## Threading the Cylinder Band

Your BC ships from the factory with the cylinder band already threaded, but in the event it becomes unthreaded, please follow the directions below:

1. Firmly grasp the metal D-ring with your left hand.



2. While firmly holding the metal D-ring, rotate the back towards the webbing. The buckle should form an angle with the metal D-ring as shown in the top view.



3. Insert band through the metal D-ring, then through the middle slot.



4. Insert band through the inside slot.





## Securing the Band to the Cylinder



**NOTE:** BC cylinder bands adjust for all standard cylinder diameters: 6.9 in (17.5 cm), 7.25 in (18.5 cm) and 8.0 in (20.3 cm). The cylinder bands are properly threaded to the buckles when the BC leaves the factory. If rethreading is necessary, follow the procedure in the section: **Threading the Cylinder Band**.



**WARNING:** The cylinder band will initially stretch as it becomes wet. Always wet the band before making the final adjustment; apply enough tension to ensure that the cylinder is completely secure. Test this connection before every dive. If the cylinder slips free from the BC during the dive, you may lose your air supply, which could lead to serious injury or death.



**NOTE:** Your BC comes equipped with a valve strap. This strap allows you to place the BC in the proper position for perfect tank placement. Place the valve strap over the cylinder valve and adjust as needed.

1. Wet the cylinder band and then slide it over the cylinder so that the BC is at the desired position in relation to the cylinder valve. Make sure the cylinder valve air outlet is facing the back of the BC. Secure the valve strap around the base of the cylinder valve.



2. While holding the cylinder secure, pull the free end of the cylinder band until there is a very tight fit between the pack and the cylinder.



3. Close the buckle half way to hold the cylinder band taut and thread the free end of the band through the open slot in the end of the buckle.



4. Pull the cam buckle closed so that it lies flat against the cylinder. Secure the end of the cylinder band with the hook & loop attachment.

5. Test the tightness by pushing/pulling the back frame and cradle.



**WARNING:** Verify the tension of the cylinder band prior to every dive. Failure to do so may result in the cylinder slipping during the course of a dive.



## DONNING AND ADJUSTMENT PROCEDURES

1. Remove the weight pouches from the BC, if applicable.
2. Disconnect the waist buckle and waistband.
3. Ensure that the quick release buckles (if equipped) on both torso straps are securely fastened. While firmly holding the torso strap where it connects to the BC lobe, fully extend each torso strap to its maximum length by pushing straight up on the slide buckle.
4. While your dive buddy lifts and holds the BC/cylinder behind you, place your arms through the BC torso straps as if you were putting on a jacket.
5. While your buddy continues to hold the cylinder, connect the waistband and / or waist buckle. Pull on the D-rings to tighten the waistband (if equipped). The weight of the cylinder should rest on the lumbar region (lower part) of your back.
6. Connect the chest strap buckle. Pull on the free end of the strap to tighten. The chest strap should feel comfortable across the chest; it should not be overtightened so that it feels restrictive.
7. After your buddy has released the cylinder and the BC feels comfortably supported on your hips and shoulders, bend forward at the waist and adjust the torso straps to a comfortable length by pulling on the torso strap D-rings (if equipped).



**NOTE:** *Adjusting the shoulder straps too tightly will transfer the cylinder weight from the hips to the shoulders, restricting your arm movement and decreasing comfort.*

8. If necessary, readjust the waistband and waist buckle so that they are comfortably snug, but not restricting.



## Adjusting the Waistband Length - Hook and Loop System

Lay your BC so that the front of the BC is facing you. Disconnect the waistband buckle, the waistband and shoulder straps so you have open access to the back pad.

1. There is a retaining flap located on the bottom backside of the back pad. Disconnect the flap and lift up the back pad to expose the waistband.



2. For each side of the waistband, detach the hook & loop and adjust to the desired position, then re-secure the hook & loop. The hook and loop must overlap a minimum of four inches, but not extend past the end of the loop.



3. Re-secure the back pad and try on the BC to make sure the waistband length is correct. Repeat this procedure until the proper length is achieved.

## Adjusting the Chest Strap

The chest strap fits across your sternum and keeps the two shoulders from slipping to the sides, ensuring a comfortable and secure fit. Before donning the BC, loosen and disconnect the chest strap. After donning the BC, connect the chest strap and tighten by pulling on the free ends of the straps. The chest strap should feel comfortable across the chest; it should not be overtightened so that it feels restrictive. Once the shoulder straps are in position, adjust the shoulder strap length by pulling down on the adjustment D-rings until the BC fits comfortably. Some BC models also offer vertical adjustment of the chest strap. Become familiar with the adjustment method on your particular model so that you can perform this adjustment in the water if necessary.





## INFLATION METHODS

Your BC has been fitted with a Powerline Inflator. This section covers inflation using this system.

### Power Inflation using a Powerline Inflator

For the power inflator to operate, the MP inflator hose must be connected. To connect the MP hose, grip the grooved sleeve at the connection fitting with your thumb and forefinger and slide the sleeve back. Place the fitting over the quick disconnect plug (c) and firmly push inward while releasing the sleeve. Check to ensure that the hose is securely attached. After the hose is attached to the power inflator, pressurize the first stage regulator by slowly opening the cylinder valve.

The working pressure of the power inflator is as follows: 103 PSI (7 BAR) minimum - 294 PSI (20 BAR) maximum.

To inflate your BC with low pressure air, depress the power inflator button (d). Do not hold the inflator button depressed continuously underwater, as this could cause you to become excessively buoyant. Instead, depress the button in short bursts until you become neutrally buoyant.



**WARNING:** Do not rely on the power inflator as the only means to inflate your BC. It is important to practice the technique for orally inflating your BC so that you are prepared for any type of malfunction or out of air situation that could render the power inflator inoperable. You may otherwise be unable to achieve positive buoyancy in an emergency, which could lead to serious injury or death.

### Oral Inflation using a Powerline Inflator

To orally inflate your BC, place your lips on the oral inflator mouthpiece (a) and exhale a small amount of air into the mouthpiece to purge any water that may still be in the housing. While continuing to exhale into the mouthpiece, depress the oral inflator button (b) to inflate the BC. Immediately after exhaling, release the oral inflator button to prevent air from escaping.



## DEFLATION METHODS

Throughout the course of a dive, it will be necessary to release air from the BC using one of the three methods described in the following instructions. Each method uses a valve that is in a different location. The method you choose at any time may depend on whether you are making your initial descent feet first, headfirst or maintaining neutral buoyancy underwater. Always remember to utilize the valve that is at the highest point on the bladder, depending on your position in the water.

### Deflation via Oral Inflator

To deflate the BC using the oral inflator, lift the Powerline inflator body to its highest possible position (above the head). Press the oral inflator button **(b)** to start venting air. This method is most effective on the surface when starting the initial descent.

The deflation rate of the bladder is as follows: 20 Newtons per second.

### Deflation via Powerline Dump Valve

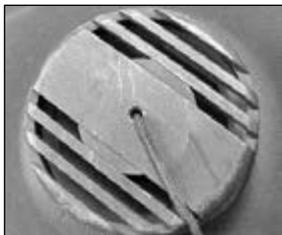
Inside the power inflator's corrugated hose is a cable that attaches the power inflator to the Powerline Dump Valve at the top of the airway assembly. You can vent air from the BC by firmly pulling straight down on the power inflator. This dump valve provides an effective and convenient way to vent air from the BC while in either an upright or face-down swimming position.



### Deflation via Dump Valve / Flat E-Valve / Flat Valve

BC's have either one, two or three additional Dump Valves / Flat E-Valves / Flat Valves, depending on the specific BC model. Their primary function is to relieve excess air pressure inside the bladder, but some may be equipped with a knob and cord assembly and can be opened manually by pulling on the knob and cord assembly to quickly dump air.

To dump air as quickly as possible, always use the dump valve / Flat E-Valve / Flat valve at the highest point in the water column. For example, the lower rear valve works best while making a headfirst descent or swimming in a face-down position; the right shoulder valve works best when in an upright position.



Dump Valve



Flat E-Valve



Flat Valve



**CAUTION:** The proper function of the over pressure relief (OPR) valve is vital to prevent damage to the BC bladder. Unauthorized service or tampering may render this valve inoperable and could cause the bladder to leak or burst. This type of damage is not repairable and is not covered under warranty.



**WARNING:** Most training agencies recommend that you should descend in an upright, feet-first position, in order to maintain a slower and more controlled descent. This is especially true if you experience difficulty equalizing your ears or if you are descending in low visibility conditions.



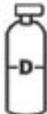
### BC BUOYANCY AND CYLINDER CAPABILITIES

A tag attached to each BC contains specific information regarding the characteristics of your particular model BC, such as buoyancy and cylinder capabilities. It is important to review this information in order to know the proper cylinder sizes that may be used and to ensure the amount of weight being used does not exceed the buoyancy of the BC.



**NOTE:** The BC tag above is an example only. Reference the specific tag located on your model BC.

### BC SPECIFICATIONS CHART

Pro	
BC Size	Cylinder Capacity
XS	 <p>D max.: 20.5 cm (8.1 in.) Cap.: 15 L (max.)</p>  <p>D max.: 17.7 cm (7.0 in.) Cap.: 2 x 10 L (max.)</p>
SM	
MD	
ML	
LG	
XL	



## Double Cylinder Setup - Using After-Market Twin Band Kits

Aqua Lung does not offer a twin cylinder kit for your BC. If you want to adapt twin cylinders to your BC, you must consult with your professional dive retailer about after-market twin band kits that would work with your specific model.

Before adapting your BC for use with double cylinders, it is important to compare the lift capacity of your particular BC size and model with the buoyancy specifications of the cylinders, the amount of weight you will carry and the type of exposure suit you will wear.

Your BC backpack may also have certain weight limitations depending on the size and model, as double cylinders vary in both size and weight. To ensure your safety, refer to the tag located on the inside BC pocket prior to attaching double cylinders to confirm the approved double cylinders for your particular backpack.



**WARNING:** When fully charged and worn together as doubles, some cylinders may create enough negative buoyancy to counteract the amount of buoyancy your BC can provide. At depth, this can lead to a dangerous situation if your wetsuit becomes compressed and you can no longer achieve positive buoyancy by jettisoning weight. The excess weight of some twin cylinders may also lead to structural failure of the backpack or harness. Such an event while diving may separate you from your primary air source and could lead to serious injury or death.

## PRE-DIVE INSPECTION

Before each use, the BC must be given a thorough visual inspection and functional test. NEVER dive with a BC that shows signs of damage to its bladder or valves until it has received a complete inspection and service from an Authorized Aqua Lung Dealer or Distributor.

1. Connect the power inflator to a source of clean, compressed air via the MP quick disconnect hose. Depress and release the inflator button intermittently to ensure that the airflow is unobstructed and that the airflow stops completely when the button is released.
2. Manually operate the overpressure relief (OPR) valve by pulling on the attached knob and cord to release air from inside the BC and then fully inflate the BC until the OPR valve opens. Examine the operation of the OPR valve by repeatedly inflating the BC to ensure that it opens to relieve excess pressure, yet closes immediately afterward to allow the bladder to remain taut and fully inflated.
3. Check the function of the oral inflator button and Powerline Dump Valve, to ensure a rapid and unobstructed exhaust from each valve. Fully inflate the BC once again and disconnect the power inflator from the compressed air supply and listen closely for any leaks.



**WARNING:** If you can hear any leaks or if the bladder begins to deflate within 10 minutes, DO NOT attempt to use the BC until it has received service from an Authorized Aqua Lung Dealer or Distributor.

4. Make a final check of the cylinder band's tension to ensure that been secured properly. Re-tighten if necessary.
5. Before entering the water, check both weight pouches, if applicable, to ensure that they are correctly fastened to the BC.



**WARNING:** Loss of the releasable weight pouches can occur if they are not properly secured. Involuntary release of both weight pouches can cause a sudden increase in buoyancy causing a rapid ascent and could lead to serious injury or death due to arterial gas embolism, decompression sickness or drowning.



## POST-DIVE CARE AND MAINTENANCE

With proper care, your BC will provide many years of reliable service. The following preventive maintenance must be performed to extend the life of your BC:

1. Avoid prolonged exposure to direct sunlight and extreme heat. Nylon fabric can quickly fade when exposed to the sun's ultraviolet rays and extreme heat may damage the welded bladder seams.
2. Avoid repeated or prolonged use in heavily chlorinated water, which can cause the BC fabric to discolor and decay prematurely.
3. Do not allow the BC to chafe against any sharp objects or rough surfaces that could abrade or puncture the bladder. Do not set or drop heavy objects such as block weights on the BC.
4. Avoid any contact with oil, gasoline, aerosols or chemical solvents.
5. To preserve the life of the bladder, rinse it inside and out with fresh water after every day of use, using the following procedure:
  - a) Pressurize the power inflator with medium pressure (MP) air via the MP hose.



**CAUTION:** Before rinsing, ensure that the inflator is pressurized with air. This will prevent debris and contaminants from entering the valve mechanism if the inflator button is accidentally depressed.

- b) Using a garden hose, direct water through the oral inflator mouthpiece to flush the interior of the bladder and then thoroughly rinse the exterior of the BC.
  - c) Completely drain the bladder of water, either through the oral inflator or through the over-pressure relief valve.
  - d) After rinsing, inflate the BC and allow it to dry inside and out.
6. Store the BC partially inflated, away from direct sunlight and in a clean, dry area. Do not store the BC in an enclosed space, such as a car trunk, where temperatures may fall below 0°F (-18°C) or rise above 120°F (49°C).