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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:

WARNINGS: Indicate a procedure or situation that may result in serious injury or death if instructions are not followed correctly.

CAUTIONS: Indicate any situation or technique that will result in potential damage to the product, or render the product unsafe if instructions are not followed correctly.

NOTES: *Are used to emphasize important points, tips and reminders.*

WARNING: This manual provides essential instruction for the proper fitting, adjustment, inspection and care of your new BC. Because Apeks is utilizing patented BC technology, it is very important to take the time to read these instruction 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.



SAFETY INFORMATION

General Precautions & Warnings

This manual provides essential instruction for the proper fitting, adjustment, inspection and care of your new BC. Because Apeks is utilizing patented BC 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 Apeks 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 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.

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Factory prescribed service for this BC must be performed at least once annually by a factory trained technician who is employed by an Authorized Apeks 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 Apeks. 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 has successfully passed all the tests required by EN 1809 and EN 250:2000 standards. The maximum operating depth limit as defined by EN 250:2000 is 50 meters / 164 feet.

TEMPERATURE LIMITATIONS: This BC should be used in 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.

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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 Apeks Dealer or Distributor. Distributor information is available on the Apeks website at: www.apeks.co.uk

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 Apeks Dealer or Distributor.

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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 Apeks technician. To obtain service or repair, such as power inflator service or replacement of the bladder, see an Authorized Apeks 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 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 Apeks Dealer or Distributor.

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

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ANNUAL SERVICE & INSPECTION RECORD

Purchase Date: _____

Store Name: _____

Country: _____

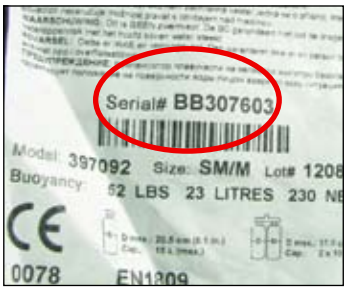
BC Model: _____

Serial Number: _____

Black Ice serial # is located on tag in pocket.



Black Ice serial #



DATE	DEALER NAME	CITY, STATE	COUNTRY	TECH INITIALS

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WARRANTY INFORMATION

All warranty transactions must be accompanied by proof of original purchase from an Authorized Apeks Dealer or Distributor. Be sure to save your sales receipt, and present it whenever returning your BC for warranty service.

LIMITED LIFETIME WARRANTY

Warranty coverage on buoyancy compensators covers the product throughout its useful life, subject to the conditions listed below and utilizes a pro-rated replacement policy*.

Apeks warrants to the original purchaser for the useful life of the product, from the date of purchase, that the product will be free from defects in materials and workmanship, provided that it receives normal use, proper care and prescribed dealer service subject to the limitations listed below. The Limited Lifetime Warranty is extended only to the original purchaser for purchases made from an Authorized Apeks Dealer or Distributor and is not transferable. This warranty is limited to repair or replacement only at the discretion of Apeks.

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* PRODUCT REPLACEMENT ON A PRORATED BASIS

Products under the Limited Lifetime Warranty that malfunction due to material or manufacturer defects that have also had a significant amount of use will be replaced on a prorated basis. Prorating will be determined by a percentage factor based on the condition of the product and how long the product was used prior to the warranty claim. This can be useful to evaluate Limited Lifetime Warranty claims since the warranty period is for the “useful life of the product” and not a set length of time. The following guidelines should be used in determining what prorated percentage will be used.

NOTE: *This can be a subjective evaluation. Fair and reasonable judgment should be used.*

Prorated Values of Products Sold at Retail	Apeks Pays	Customer Pays
Like new and less than 2 years old	100%	0%
Slightly used and less than 5 years old	75%	25%
Very used and /or more than 5 years old	50%	50%
Worn out	0%	100%

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WARRANTY LIMITATIONS

Warranty coverage does not extend to damage(s) caused by improper use, improper maintenance, neglect, unauthorized repairs, modifications, accidents, fire, casualty or normal wear and aging.

Cosmetic damage(s), such as scratches, nicks and fraying are not covered under warranty except when the product is new, out of the original packaging.

This warranty does not extend to equipment used for rental, commercial or military purposes.

This warranty gives you specific legal rights. You may have rights which vary from state to state and country to country.

APEKS DISCLAIMS AND EXCLUDES ANY LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES IN THE U.S. AND CERTAIN FOREIGN COUNTRIES DO NOT ALLOW EXCLUSIONS OR LIMITATIONS OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS MAY NOT APPLY TO YOU.

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WARNING: It is dangerous for untrained and uncertified persons to use the equipment covered by this warranty. Therefore, use of this equipment by an untrained person renders any and all warranties null and void. Use of SCUBA equipment by anyone who is not a trained and certified diver, or receiving training under the supervision of an instructor, could lead to serious injury or death.

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FEATURES

Wrapture™ Harness System with Valve Strap

The Wrapture Harness with valve strap allows the cylinder to be pulled in close to the body and remain in a perfectly vertical position. This allows the diver to stand straight up in total comfort without the cylinder pulling backwards.

Adjustable Waistband - Nut and Bolt System

The BC waistband is adjustable to three different sizes through the nut and bolt system. This adjustment system allows divers to customize the BC to accommodate different diving environments and exposure suit options.

Adjustable Shoulder Strap Design - Nut and Bolt System

In addition to the standard webbing shoulder adjustments, the BC shoulder straps can be fitted into two different positions using the nut and bolt system. This will shorten or lengthen the BC to accommodate different diving environments and exposure suit options.

Chest Strap

The chest strap fits across your sternum and keeps the shoulder straps from slipping to the sides, ensuring a comfortable and secure fit. The chest strap has the option of being removed for those divers who find it unnecessary.

Quick Release Waistband

The BC waistband has a simple to use, quick release clip. Web-slides allow for ease of adjustment by simply pulling forward on the waistband D-rings. The D-rings can easily be removed from the web-slides for extra waist adjustment.

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GripLock™ Cylinder Band

The GripLock cylinder band allows for quick and easy adjustment when securing your cylinder. The GripLock cylinder band will accommodate all standard size cylinders. There is no need to wet the cylinder band prior to putting it on the cylinder, simply adjust it once until changing to a different diameter cylinder.

SureLock II™ Weight System and Trim Pockets

The SureLock II weight system has two pockets that will each hold up to 16 lbs. of releasable weight. The two rear trim pockets will each accommodate an additional 5 lbs. of non-releasable weight. A track system allows the SureLock II pockets to be inserted easily into the BC and “click” securely into place.

Powerline Inflator and Flat Valves

The weather-proven Powerline inflator is included on the Black Ice. Also, streamlined, low profile flat valves offer additional options of releasing air from the BC.

Drop Down Utility Pocket

A drop down utility pocket provides additional space for dive accessories such as lights, masks, etc. to be stored securely.

Removable Back Pad

The back pad in the Black Ice is considered optional and can be removed. It is held in place by simple hook and loop attachments.

Knife Grommets

Located on the left side pocket are two grommets which can accommodate an optional knife.

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BASIC SETUP

Apeks recommends that you bring your buoyancy compensator, together with your regulator, to your Authorized Apeks Dealer or Distributor 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" are used throughout this manual. Hook & Loop is commonly known as Velcro®, which is a trademarked brand of hook & loop. Some of the BC components have hook & loop attachments, including the cylinder band, 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.

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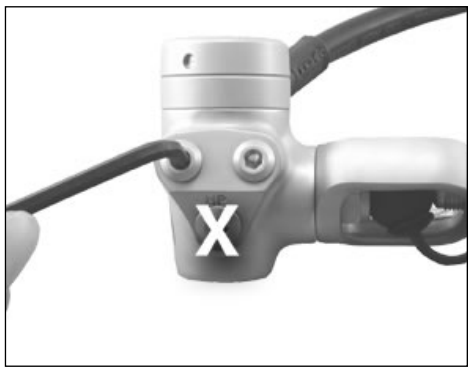


ATTACHING THE MP HOSE TO THE FIRST STAGE

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 a 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.

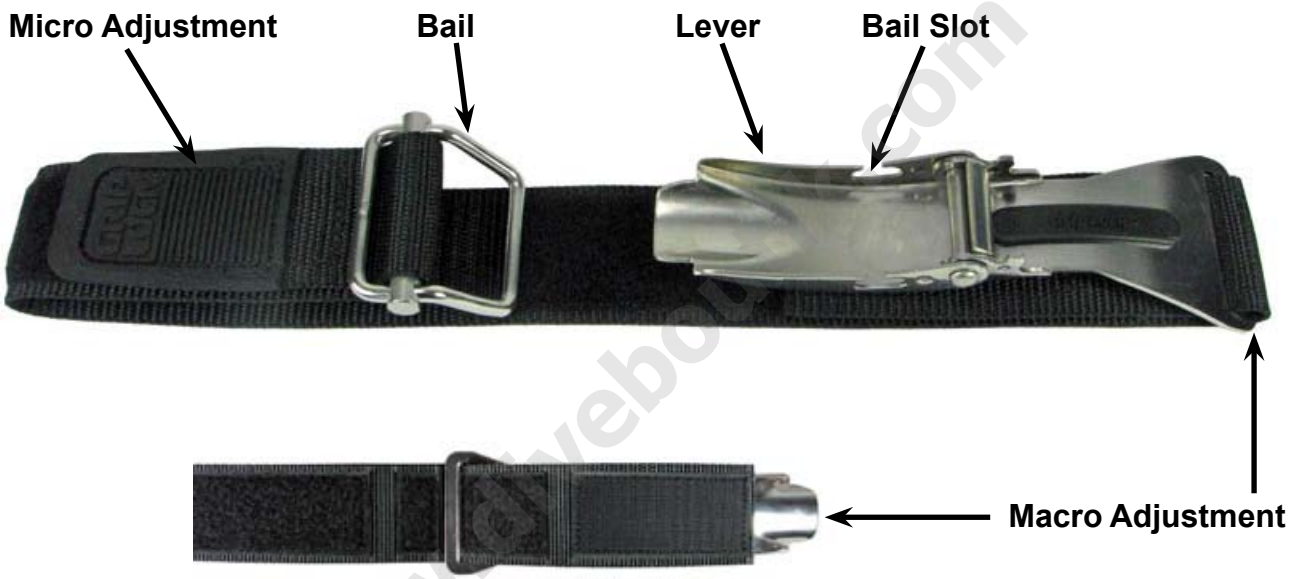


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GRIPLOCK™ CYLINDER BAND COMPONENTS



THREADING THE GRIPLOCK™ CYLINDER BAND

If the GripLock cylinder band has been removed from the bail, re-thread using the following procedure:

Insert the open end of the cylinder band into the large opening of the bail, around the slide bar and out the small opening of the bail. Secure the hook and loop on the band to hold the bail on place.





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ADJUSTING THE GRIPLOCK™ CYLINDER BAND

WARNING: The BC must be completely deflated of air before adjusting the GripLock cylinder band. Failure to do so may result in the cylinder slipping during the course of a dive.

NOTE: *The GripLock cylinder band adjusts for all standard cylinder diameters and is ready for use with an aluminium 80 cf (7.25 inch / 184 mm) cylinder when the BC leaves the factory.*

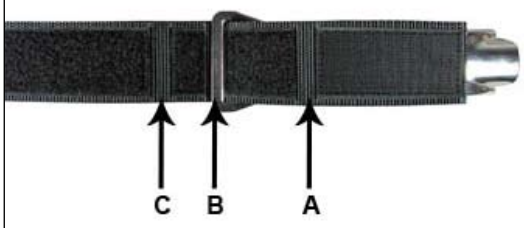
1. There are three macro settings for cylinder size.

A. Larger cylinder

B. Al 80 cf (7.25 in/184 mm)

C. Smaller cylinder

Macro Presets



2. Adjust the macro adjustment for the proper cylinder size.



3. Secure the hook and loop after cylinder size is selected.



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SECURING THE GRIPLOCK™ CYLINDER BAND

NOTE: *There is no need to wet the GripLock cylinder band prior to securing it to the cylinder. When properly adjusted, the cylinder band will retain it's tension. If adjustment is necessary for a larger or smaller size cylinder (pre-set for use on an aluminum 80 cf cylinder 7.25 inch / 184 mm), follow the procedure in the section:* ***Adjusting the GripLock Cylinder Band.***

WARNING: Check that the macro adjustment is set for the appropriate size cylinder. Failure to do so may result in the cylinder slipping during the course of a dive.

NOTE: *Pull the micro adjustment* ***only until it is snug*** *against the cylinder. If the lever is difficult to close, the micro adjustment is too tight. Loosen the micro adjustment and close lever to secure GripLock band to cylinder. If it is difficult to remove the GripLock band from the cylinder, this is an indicator that the micro adjustment was too tight when installed.*

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.*

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1. 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. It does not need to be cinched all the way, just enough to keep the cylinder vertical and the back of the BC straight, parallel with the cylinder.



NOTE: *Over-tightening the valve strap can result in the BC being drawn in towards the cylinder which may be uncomfortable to wear.*

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2. For optimum cylinder retention, center the GripLock buckle assembly on the curve of the cylinder. Connect the bail into the bail slot of the lever. Hold the lever and pull the webbing to tighten the micro adjustment. Secure the hook and loop webbing on the micro adjustment.



3. Push the lever forward until it stops in the ***pre-locked position.***



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NOTE: *The **pre-locked position** ensures your fingers do not get caught in the lever.*

4. Push the lever down into the ***locked position***. Verify the lever is secured in the ***locked position***. Once the cylinder band is set up, further adjustment is typically not needed.



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5. Check that the cylinder band is secure by pulling on the band while holding down the cylinder at the valve. If the cylinder band moves, it is too loose. Check that the macro adjustment is set for the correct size cylinder. Repeat steps 1-4 to tighten and secure the cylinder band.

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.

2. Disconnect the waist buckle.

NOTE: *If additional length is needed in the waistband, remove the webbing from the webslides.*



3. Ensure that the quick release buckles 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.

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5. While your buddy continues to hold the cylinder, connect the waist buckle. Pull forward on the D-rings to tighten the waistband. The weight of the cylinder should rest on the lumbar region (lower part) of your back.

> ***NOTE:*** *If the webbing has been removed from the webslides, pull the waistband D-rings to the side until snug.*

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.

> ***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 waist buckle so that they are comfortably snug, but not restricting.

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ADJUSTING WAISTBAND LENGTH - NUT AND BOLT SYSTEM

Your BC waistband is connected to the harness with two stainless steel nut and bolt combinations. There are three positions that allow you to lengthen or shorten the waistband, with the outer grommets being the longest setting. If necessary, the waistband can easily be remounted onto one of three grommet attachment points by performing the following procedure:

1. Disconnect the chest strap buckle, shoulder strap buckles and waist buckle.

2. To remove the bolts which fasten each section to the harness, hold the nut with a 3/8” box wrench and unscrew the bolt with a medium sized Phillips screwdriver.



3. Align the grommet holes in the waistband with the holes in the harness. Insert the bolt through the front of the harness, through the waistband, and thread the nut onto the bolt from behind the waistband. Hold the nut securely with a 3/8” box wrench and tighten the bolt with a medium size Phillips screwdriver.



4. Don the BC over your exposure suit to check the fit.

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ADJUSTING SHOULDER STRAP LENGTH - NUT AND BOLT SYSTEM

Each of the BC shoulder straps are connected to the harness with two stainless steel nut and bolt combinations. There are two positions that allow you to lengthen or shorten the shoulder straps, with the outer grommets being the longest setting. If necessary, the shoulder can easily be remounted onto one of two grommet attachment points by performing the following procedure:

1. Disconnect the chest strap buckle and shoulder strap buckles.

2. Slide back the shoulder retainer sleeve until the hook and loop strap is exposed.

3. Separate the hook and loop cover to expose the nut and bolt system. Remove the bolts which fasten the shoulder strap to the harness by holding the nut with a 3/8” box end wrench and unscrew the bolt with a medium sized Phillips screwdriver.



4. Align the grommet holes in the shoulder strap with the holes in the harness. Insert the bolt through the front of the harness, through the shoulder strap and thread the nut onto the bolt from behind the shoulder strap. Hold the nut with a 3/8” box wrench and tighten the bolt with a medium size Phillips screwdriver.



5. Secure hoop and loop cover. Slide the shoulder retainer sleeve back in place and connect shoulder strap buckle.

6. Don the BC over your exposure suit to check the fit.

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ADJUSTING THE CHEST STRAP

The chest strap fits across your sternum and keeps the shoulder straps 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 D-rings until the BC fits comfortably. Your BC offers a vertical adjustment of the chest strap. Become familiar with the adjustment of this strap so that you can perform this adjustment in the water if necessary.



REMOVABLE CHEST STRAP

The chest strap on your BC is removable. To remove the chest strap, unweave the straps from the male and female parts of the chest buckle. For each strap, pull the free end through the plastic rings connected to the strap. Pull the strap through the plastic rings that are connected to the BC.

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WEIGHT INTEGRATION FEATURES

SureLock II™ Integrated Weight Release System

Your BC features the SureLock II Integrated Weight System. The SureLock II weight pouches are secured with a mechanical locking mechanism. The SureLock II weight system either supplements or replaces a conventional weight belt. This unique feature allows you to quickly jettison either one or both weight pouches in the event of an emergency, thereby maintaining better control over your rate of ascent. The weight pouches can be easily reloaded into the BC while you are wearing the BC.

> ***NOTE:*** *It is very important to read the following instructions and become thoroughly familiar with the correct methods for installing and releasing weight before you dive with your BC.*

Maximum Weight Capacity

The SureLock II weight system features two interchangeable weight pouches which can be filled with either block weights or “soft weight” (pouches containing lead shot), in increments of 4 pounds or less. For ease of operation, low-profile block weights are strongly recommended. Refer to the ***Black Ice Weight Capacity Chart*** for maximum weight pouch capacity.



> **WARNING: The lift capacity may not exceed the weight pouch carry capacity. The negative buoyancy of the weight plus the negative buoyancy of the cylinder (when full), should not exceed the BC’s positive buoyancy. The inability to achieve neutral buoyancy while at depth or positive buoyancy on the surface may lead to a hazardous situation that could lead to serious injury or death. Refer to the model-specific label, usually found in the pocket of your BC, to find the designated lift capacity, and load weight pouches accordingly (see photo above).**

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WEIGHT INTEGRATION FEATURES

Loading Weight into the SureLock II™ Weight Pouches

NOTE: *Your BC may not be able to float by itself on the surface if your BC is loaded with weight at or near its maximum buoyancy. In water, the weight of cylinders and other equipment may contribute to negative buoyancy of your full set of SCUBA equipment.*

Black Ice Weight Capacity Chart

Black Ice			
BC Size	**Trim Weight**	**Releasable Weight**	**Weight Pocket Type**
S/M	10 lb/4.5kg	32 lb/14.5kg	16 lb (7.25) X 2
ML/L	10 lb/4.5kg	32 lb/14.5kg	16 lb (7.25) X 2
XL/XXL	10 lb/4.5kg	32 lb/14.5kg	16 lb (7.25) X 2

WARNING: The non-releasable weight pockets are intended strictly for containing non-releasable weight, used in addition to releasable weight. Do not fill either pocket with weight unless you are certain you can achieve positive buoyancy at depth by releasing your weight pouches or weight belt while your BC is completely deflated.

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WEIGHT INTEGRATION FEATURES

Loading Weight into the SureLock II™ Weight Pouches

Apeks recommends that each pouch is loaded with equal amounts of weight for optimum balance, preventing the tendency to roll to one side during the dive. Also, it is strongly recommended that each weight pouch is fully loaded with four separate block weights. For example, if you want to load a 16 lb. pouch with 16 pounds of weight, use four separate 4 pound blocks.

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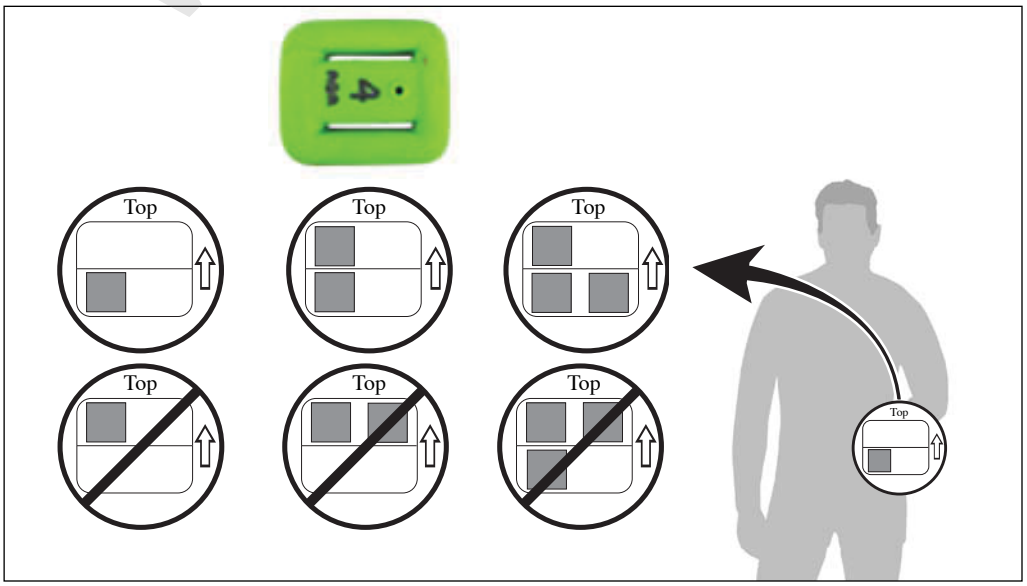
Loading Weight into the 16 lb. SureLock II™ Weight Pouches

Lift up each pouch's flap **(a)**, and lay it back over the handle **(b)**. While holding the pouch fully open, insert the weight (horizontally) into the upper and lower weight compartments, then close the flap. When each pouch has been loaded with weight, firmly run your hand over the flaps to securely fasten the hook & loop **(c)**.



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Apeks recommends that the pouches be completely filled with four separate block weights (two per compartment); however, if you need to partially fill the pouch, load the bottom compartment first. Use the diagram for proper weight placement.



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Loading Soft Weight into the SureLock II™ Weight Pouches

Apeks recommends block weights be used in the SureLock II weight pouch for the best fit and ease of insertion. Soft weights may be used, but it is critical that the weights be loaded and secured correctly. The procedure for loading soft weights is the same as block weights, but it is important to ensure the soft weights are completely fitted into the weight pouch. This will ensure that the SureLock II locking mechanism can properly engage.



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NOTE: *Some weight pouches are specially pre-formed to fit the contour of your waist. Do not attempt to bend or straighten a pre-formed pouch.*

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Installing the SureLock II™ Weight Pouches on your BC

CAUTION: Apeks strongly recommends that you do not attempt to don your BC when it is fully loaded with weight. You may otherwise risk injury due to muscle strain or a temporary loss of balance.

The SureLock II pouches are installed with the plastic panel facing outward (pouch flap facing toward the BC). To install either pouch, slide the closed end of the pouch into the opening of the holster. Insert the male portion of the SureLock II buckle **(a)** into the female receptacle **(b)** on the BC until you can hear/feel it click into place.

WARNING: Before every dive, it is important to make sure each weight pouch is secure, in order to prevent the pouches from falling out. Involuntary release of both weight pouches underwater can cause a sudden increase in buoyancy causing a rapid ascent, which could lead to serious injury or death due to arterial gas embolism, decompression sickness, or drowning.



WARNING: Ensure the soft weight is inserted all the way into the SureLock II pouch. If any portion of the soft weight is protruding out of the weight pouch, it can prevent the SureLock II pouch from being properly secured. Involuntary release of both weight pouches underwater can cause a sudden increase in buoyancy causing a rapid ascent, which could lead to serious injury or death due to arterial gas embolism, decompression sickness, or drowning.



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Releasing SureLock II™ Weight Pouches

Unlike a weight belt, which has only one release mechanism, each weight pouch is connected to the BC independently of the other and must be released separately. This provides you with the option of being able to jettison one pouch at a time, thereby maintaining better control of your ascent rate in an emergency.

In the event that you need to jettison weight, simply pull the release handle of each pouch towards the center of the waist buckle. When the pouch is completely disengaged from its holster, hold it out and away from your body before dropping it.

WARNING: Ensure that your weight pouches are not obstructed by any straps, lines, etc. DO NOT add weight to the BC pockets, as this may interfere with the removal of the pouches in an emergency. Failure to ditch weight in an emergency may lead to serious injury or death due to drowning.



WARNING: To avoid injuring other divers, always look below you before dropping weight.

NOTE: *In addition to becoming familiar with the weight system yourself, it is very important to explain its function to your dive buddy so that he/she is equally familiar with it.*

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Non-Releasable Weight

To supplement the releasable weight, some BC's are designed to carry non-releasable weight in two fixed pocket locations.

To install weight into the non-releasable weight pockets, simply disconnect the flap buckle, slide in the block weight, fold the flap over the pocket, and reconnect the buckle. Weight should be added to the non-release (trim) pockets after the BC has been secured to the cylinder.

The non-releasable weight pockets are designed to hold single rectangular block weights. To avoid accidental loss of weight, Apeks strongly advises against using small bullet-shaped weights and shot weight.

Refer to the Weight Capacity Charts for maximum non-releasable (trim) weight capacity.

Because the weight is non-releasable, it must not be used as your primary source of ballast. After filling the fixed pockets with weight, it is extremely important to check your buoyancy in the water while wearing the BC attached to a fully charged cylinder and your exposure suit. While standing in chest deep water, deflate the BC completely and check to ensure that you can easily achieve positive buoyancy by jettisoning your releasable weight.

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WARNING: The non-releasable weight pockets are intended strictly for containing non-releasable weight, used in addition to releasable weight. Do not fill either pocket with weight unless you are certain you can achieve positive buoyancy at depth by releasing your weight pouches or weight belt while your BC is completely deflated.

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INFLATION METHODS USING A POWERLINE INFLATOR

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 fitting **(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.

To inflate your BC with medium 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.

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DEFLATION METHODS USING A POWERLINE INFLATOR

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 **(a)** to start venting air. This method is most effective on the surface when starting the initial descent.



Deflation Via Powerline Dump Valve

Inside the power inflator's 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 facedown swimming position.

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Deflation Via Flat Valve

Your BC comes equipped with flat valves on the right shoulder and lower rear right and left sides of the BC. Their primary function is to relieve excess air pressure inside the bladder. A knob and cord assembly can manually open the flat valve by pulling on the knob to quickly dump air.

To dump air as quickly as possible, always use the flat valve at the highest point in the water column. For example, the lower rear valve work best while making a headfirst descent, or swimming in a facedown position; the right shoulder valve works best when in an upright position.



Flat Valve

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SPECIAL FEATURES - Knife Grommets

Your BC has two grommet holes designed to accept many of the specialty BC knives available from Apeks. For information on available knife models, consult with your Apeks Authorized Dealer or Distributor. To attach or remove the knife and sheath from the BC, refer to the instructions provided with the knife.



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SPECIAL FEATURES - Drop Down Utility Pocket

Your BC has a drop down utility pocket to provide additional space for dive accessories such as lights, masks, etc. to be stored securely.





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SPECIAL FEATURES - Double Cylinder Setup - Using Apeks Twin Tank Kit

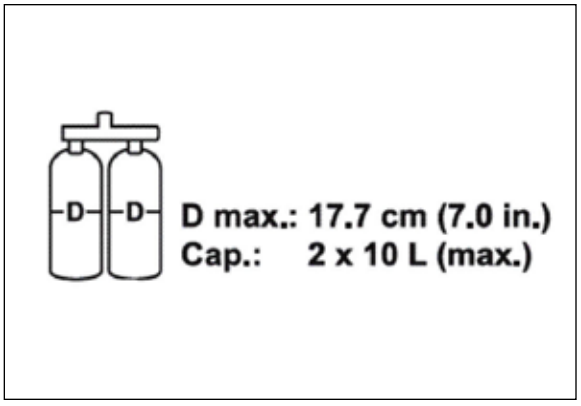
The Black Ice Twin Tank Kit (P/N 427106) allows mounting of twin cylinders to your BC in all sizes. Please see mounting instructions provided with the kit.

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 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 BC.

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WARNING: When fully charged and worn together as doubles, some cylinders may create enough negative buoyancy to counteract the amount of lift 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 double cylinders may also lead to structural failure of the wrapture harness. Such an event while diving may separate you from your primary air source, and could lead to serious injury or death.

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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 Apeks Dealer or Distributor.

INSPECTION CHECKLIST

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 each Flat 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 Apeks Dealer or Distributor.

4. Make a final check of the cylinder band's tension to ensure that it is securely fastened to the cylinder. Retighten if necessary.

5. Before entering the water, check both weight pouches, 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.

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POST-DIVE CARE & 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.

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.

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

STORAGE

After rinsing, inflate the BC, and allow it to dry inside and out. 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 0ºF (-18ºC) or rise above 120ºF (49ºC).

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