



# **BUOYANCY COMPENSATOR**

**OWNER'S  
MANUAL**

### WARNING / DISCLAIMER

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**WARNING:** This manual provides some basic guidelines for certain buoyancy control techniques using your XS Scuba Buoyancy Compensator (BC), but it is not a substitute for training from a professional diving instructor. If you are unsure how to weight yourself in order to achieve optimum buoyancy underwater and on the surface, do not dive with your XS Scuba BC until you have obtained the necessary instruction from your diving instructor or Authorized XS Scuba Dealer. Failure to weight yourself properly can create a hazardous condition that could lead to serious injury or death.

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**IT IS VERY IMPORTANT TO READ ALL INSTRUCTIONS AND WARNINGS PRIOR TO USING YOUR XS SCUBA BOUYANCY COMPENSATOR.**

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### DEFINITIONS OF WARNINGS, CAUTIONS AND NOTES:



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



A **CAUTION** indicates a 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 or reminders.



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**WARNING:** This manual provides essential information for the proper use and care of your XS Scuba Buoyancy Compensator (BC). XS Scuba BC's are designed with many features that are unique from other manufacturers. Therefore, it is very important to carefully read the instructions provided in this manual in order to understand how to correctly use your BC. Improper use of your BC can result in serious injury or death.

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## GENERAL PRECAUTIONS AND WARNINGS



- Do not use this Buoyancy Compensator (BC) if you have not received supervised 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 SERIOUS INJURY OR DEATH.**
- Before using this BC, it is important to completely read and understand all of the instructions provided in this owner's manual, any accompanying inserts, and labels or markings affixed to the BC. **IF YOU HAVE ANY QUESTIONS OR DO NOT COMPLETELY UNDERSTAND THESE INSTRUCTIONS, CONSULT YOUR AUTHORIZED XS SCUBA DEALER.**
- Before diving with this BC in open water, it is important to familiarize yourself with it first in confined shallow water with the assistance and supervision of an instructor or experienced buddy. **DO NOT ENTER OPEN WATER UNTIL YOU HAVE WEIGHTED YOURSELF PROPERLY AND HAVE BECOME COMFORTABLE WITH USING ALL OF ITS FEATURES AND ADJUSTMENTS.**
- Before every dive, perform a complete pre-dive inspection following the instructions provided in this manual. Check to ensure that all valves are functioning properly and no signs of damage or leaks are present. **IF ANY SIGNS OF DAMAGE OR MALFUNCTION ARE FOUND, DO NOT DIVE WITH THE BC UNTIL IT HAS RECEIVED SERVICE FROM AN AUTHORIZED XS SCUBA DEALER.**
- Before entering the water, check to ensure that you can remove and ditch your weight quickly and easily, without any obstruction or entanglement with any hoses or accessories. **IN THE EVENT OF AN OUT OF AIR EMERGENCY OR UNCONTROLLED DESCENT, DO NOT HESITATE TO REMOVE AND DITCH WEIGHT.**
- **DO NOT USE YOUR BC TO LIFT HEAVY OBJECTS TO THE SURFACE.** Doing so may cause permanent damage to the BC, and could easily result in an uncontrolled ascent.
- DO NOT over inflate your BC or rely on using the power inflator to lift yourself toward the surface. Control all ascents. **A RAPID, UNCONTROLLED ASCENT MAY CAUSE ARTERIAL GAS EMBOLISM OR DECOMPRESSION SICKNESS, AND COULD LEAD TO SERIOUS INJURY OR DEATH.**
- **IN THE EVENT OF AN UNCONTROLLED, RAPID ASCENT, IT IS IMPORTANT TO IMMEDIATELY VENT AS MUCH AIR AS POSSIBLE FROM THE BC TO SLOW YOUR ASCENT RATE. CONTINUE VENTING AIR TO SLOW YOUR ASCENT RATE IF NEUTRAL BUOYANCY CANNOT BE REESTABLISHED.**
- DO NOT attempt to modify your XS Scuba BC for use with more than one cylinder. Doing so could damage the structural integrity of the BC's backpack and harness system, and could lead to its failure underwater.
- **DO NOT INHALE FROM YOUR ORAL INFLATOR.** The BC air cell may contain harmful contaminants or gasses, which could cause suffocation, serious injury, and infection of the lungs.
- It is important to obtain factory prescribed service for this BC from an Authorized XS Scuba Dealer at least once each year, or according to the same scheduled intervals for your regulator. Annual service consists of a complete overhaul of the power inflator, and a general air leak inspection of the air cell and valve connections.
- Disassembly, repair, or lubrication must only be performed by persons who are factory trained and authorized by XS Scuba. **UNAUTHORIZED SERVICE WILL RENDER THE WARRANTY NULL AND VOID, AND COULD CAUSE THE BC TO MALFUNCTION.**

## **INTRODUCTION**

Thank you for choosing XS Scuba. Your new BC has been designed, manufactured and individually tested to ensure that it consistently meets the highest performance and safety standards possible. This Owner's Manual describes the unique functions and features of XS Scuba's BC equipment and various optional accessories. By following the instructions in this manual, you will understand how your BC works, how to make best use of its features, and how to ensure that it lasts a long time. It is very important to take the time to read the instructions provided in this manual. If you have any questions, please consult your Authorized XS Scuba Dealer.

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## **INTENDED USE & FUNCTION OF YOUR BC**

The main purpose for wearing a Buoyancy Compensator is to achieve and maintain neutral buoyancy at all times while you are underwater, regardless of changes in depth or cylinder pressure. This allows you to be much more relaxed while you dive – and safer – since you won't need to struggle against the forces of positive and negative buoyancy. Modern jacket and back inflation style BC's provide the most effective and streamlined buoyancy control, since they are specifically designed to support the diver in a comfortably balanced, face-down position while swimming underwater. Stress and exertion can now be minimized, if not eliminated altogether.

Since the introduction of the jacket style and back inflation designs, the modern BC has evolved into a consolidated harness and pack system that carries the cylinder and serves as a fixture point for first stage regulators, instrumentation, and accessories. For even greater convenience and comfort, many models are now available with integrated weight systems that can supplement or replace the weight belt.

Your BC can also provide you with non-emergency flotation to help you rest on the surface, but you should never rely on it to function as a life preserver or personal flotation device (PFD). In order to meet approval by U.S. Coast Guard regulations, a PFD must be designed so that it automatically rights you to a face-up position and supports your head out of the water on the surface to prevent drowning. The design characteristics and intended function of a PFD are therefore very different from those of a BC, since a PFD is specifically designed to function on the surface and a BC is primarily designed to function underwater.

It is important to remember that other equipment you wear in addition to your BC, including your cylinder, exposure suit, or weight system, will also affect your position in the water. An empty cylinder, for instance, can create counter-buoyancy that could roll you into a face down position if you were to lose consciousness.

For this reason, XS Scuba recommends that you always dive with a buddy, and remain close enough to them to be able to render assistance to each other in the event of an emergency. Do not depend on your BC, exposure suit, or any other equipment to hold your face above the surface in the event that you are rendered unconscious in the water while diving.

## STANDARD FEATURES



**WARNING:** A Buoyancy Compensator (BC) is NOT a life jacket! It is not designed to provide face-up flotation in all situations, and 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 assist, you may suffer serious injury or death from drowning.

## OVERVIEW OF STANDARD FEATURES & ADJUSTMENTS

Please take the time to acquaint yourself with your BC's features, including standard inflation/deflation valves and adjustments that can be found on every model of an XS Scuba BC. Specific instructions for using these features will be provided throughout this manual. Additional options and special features will be explained in the section titled *Optional Accessories & Special Features*.

### ■ VALVES

**Integrated Inflator System** – With this system, you have two methods to inflate the BC, two methods to deflate the BC, and automatic venting of excess pressure. Be sure to read and understand these instructions describing how this system operates before attempting to dive with your XS Scuba BC.



**Power Inflator** – This assembly is actually made up of two different valves. The oral inflation valve can be used to manually inflate or deflate your BC. The power inflation valve is connected directly to your regulator's first stage, and can be used to inflate your BC with the push of a button.



**Overpressure Relief Valve (OPV) / Rapid Exhaust Valve (REV)** – The integrated Overpressure Relief Valve (OPV) vents excess pressure from the BC during ascent or if over-pressurized from the power inflator. This component of the Integrated Inflator System operates automatically so no instructions for its manual use are necessary.

The Rapid Exhaust Valve (REV), located within the upper shoulder unit of the integrated inflator, is connected to the lower Power Inflator by a cable located inside the corrugated hose. This valve can be opened to

vent air by pulling the power inflator straight down. It works best while you are in a vertical heads-up position or in a face-down swimming position.



**WARNING:** The OPV in the Integrated Inflator is set at a lower relief pressure than the optional OPV located on the back of some BC models to prevent damage to the material of the BC air cell. It is imperative that the Integrated Inflator System be the only inflator used with this BC. Never dive with the BC if the inflator does not function properly, or if it has been tampered with, modified, or replaced with an inflator, airway assembly, or shoulder dump of a manufacturer other than XS Scuba.



**Rear Dump Valve** – This valve can be used to dump air by pulling on the ball and cord. This Rear Dump Valve works best while you are in a heads-down position or in a face-down swimming position.

## PRIMARY ADJUSTMENT POINTS



### Shoulder Straps

The shoulder straps of your BC are connected with side-squeeze fasteners, and can be easily adjusted by pulling upward on the buckle to loosen, or downward on the D-ring at the end of the strap to tighten.



### Cummerbund Waistband

The cummerbund is designed to provide a wide range of adjustment to hold your BC snug and secure below your rib cage and above your hips. All XS Scuba cummerbunds feature a high quality Velcro® touch fastener, and can be adjusted for length at the backpack. Some models feature an elastic stretch cummerbund that can compensate for the contraction of your wetsuit at depth. To fasten the cummerbund, simply pull the left side containing the loop Velcro® snug across your waist, and then pull the right side snug over it. Finally, press firmly down to fasten the hook Velcro®.

## Cylinder Band with Buckle



This mechanism attaches your BC to your cylinder so that it is securely held at the desired height, without slipping. Some models are equipped with the exclusive Micro Pac™ and two cylinder bands for extra support.

The nylon webbing should already be woven through the buckle(s), but instructions for re-weaving are provided in the following section, titled *Preparation & Setup*.



## Tank Locator Strap

To ensure that your BC is set at the correct height on the cylinder, simply loop this strap over the cylinder valve and adjust it to raise or lower the BC. Then, fasten the cylinder band(s).



## Sternum Strap

Most models are equipped with this feature, or it can be purchased separately as an accessory option. Using two dimes, you can disassemble the post pin on the female buckle to reverse the strap's direction, or remove it altogether.

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## ■ INTEGRATED WEIGHT SYSTEMS

Some XS Scuba BC models are equipped with built-in compartments and pockets to hold X-Lock™ Integrated Weight System and trim weights. Either “soft weight” (pouches filled with lead shot) or solid weight can be used, but soft weight is strongly recommended, since it will fill the weight compartment to its fullest capacity and provide the maximum comfort.

If your XS Scuba BC is a weight integrated model, it is very important to read the following instructions in order to understand the difference between these two types of weight pockets and how to use them correctly. For installation and removal instructions, see the following section, titled *Preparation & Setup*.





### Releasable Trim Weights

If your BC is equipped with this feature, you will find two releasable weight compartments located on the backside of either the air cell or the harness – on opposite sides. These are each designed to hold up to 5 pounds (10 pounds total) of weight to supplement and counter-balance the weight that you wear on your weight belt or X-Lock™ Integrated Weight System. The weight in these pockets can be “dumped” by grasping the strap on the bottom of the pocket and pulling downward firmly.



### X-Lock™ Integrated Weight System

Some XS Scuba models are also equipped with two X-Lock™ weight pockets, located inside the front lower portions of the BC. These pockets can be easily identified by their plastic pull handles that face toward the center of the waistband. The X-Lock™ pockets are designed to each hold a maximum weight of 10 lbs., for a combined total of 20 lbs.

Experiment with different sizes of weight until you arrive at the configuration that best suits your personal preference and provides maximum comfort.

## PREPARATION & SETUP

XS Scuba recommends that you bring your BC, together with your regulator, to your Authorized XS Scuba Dealer for the installation of the low pressure (LP) quick disconnect inflator hose that is provided with your BC. If it is not possible to return with your regulator to your Authorized Dealer, you may install the LP inflator hose by carefully performing all the steps in the following procedure.

### ■ LP INFLATOR HOSE INSTALLATION



**WARNING:** DO NOT attach the low pressure inflator hose to a high pressure (HP) port (greater than 200 psi / 13.6 bar). This may cause the hose to burst when pressurized, which can result in serious injury.

The LP hose has a 3/8" (9.5mm) male fitting that will only fit the standard LP ports found on most first stages, and is smaller than the standard 7/16" (11mm) HP port. Some older regulators have HP and LP ports that are the same size (3/8"-9.5mm). All XS Scuba regulators, and most provided by other manufacturers, have a high-pressure port that is clearly marked "HP," with a small restrictive orifice that is visible when the plug is removed.

If your regulator has all 3/8" ports and you cannot decide if a port is LP or HP, bring it with the hose to your dealer for installation.

If you can identify your regulator's LP ports, follow this procedure:

1. To select the best LP port, mount the first stage on a cylinder valve to determine the correct orientation and hose routing.
2. Remove the port plug from a low-pressure port on the regulator using the appropriate size wrench or key.
3. Your BC was shipped with the LP hose connected to the power inflator. Remove the inflator hose from the power inflator body by sliding the grooved sleeve back while pulling the fitting off the QD nipple.
4. Check the male end of the LP hose to ensure the O-ring is present and in good condition, and screw the threaded end of the hose into the port. Tighten the hose to 50-60 inch pounds (7 kg/cm) with a 9/16" wrench.

### ■ CYLINDER MOUNTING

#### THREADING THE CYLINDER BAND & BUCKLE



**NOTE:** All XS Scuba BC's are shipped with the nylon band pre-threaded through the buckle. If rethreading is necessary, follow these steps:



1. Ensure that the metal bale of the buckle is as close to the rear of the BC as possible. This provides the greatest range of adjustment.
2. With the buckle fully open, thread the cylinder band up the middle slot and back down through the slot closest to the metal bale. Pull the end to increase the tension in the band.
3. Loosely thread the webbing through the open slot in the end of the buckle, but do not cinch it tight at this time.

## ■ ATTACHING THE BC TO THE CYLINDER



**NOTE:** Some models are equipped with the Micro Pac™ and two cylinder band assemblies.

1. First, wet the cylinder band(s) and then fit the BC over the cylinder. Loop the tank locator strap over the cylinder valve and adjust it as needed to hold the BC at the desired height and position.
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 halfway to hold the cylinder band taut, and thread the end of the band through the open slot in the end of the buckle.
4. Pull the cam buckle closed so that it snaps down against the cylinder. Fasten the end of the webbing securely over the loop Velcro® on the cylinder band.
5. Test the tightness by vigorously pulling and shaking the BC by the shoulder straps.



**WARNING:** The cylinder band may initially stretch after it becomes wet. Always wet the band prior to attaching your BC to the cylinder and apply enough tension to ensure that the cylinder is held completely secure. Test this connection before every dive. If the cylinder is allowed to slip free from the BC while you are diving, you could become separated from your air supply, which could result in serious injury or death.

## INTEGRATED WEIGHT SYSTEM

### ■ RELEASABLE TRIM WEIGHTS

To install weight in each compartment, unfasten the Velcro® to open each flap. Insert the desired weight and refasten the Velcro® flap.

**It is important to remember at all times that weight installed in these compartments MAY NOT be easily released during an emergency situation.** Before diving with trim weight installed in your BC, it is extremely important to check your buoyancy in shallow water while wearing the BC attached to a fully charged cylinder. While standing in chest deep water, completely deflate the BC and verify that you can easily achieve positive buoyancy by ditching your X-Lock™ Integrated Weight System pockets. For more information about weighting and performing a buoyancy check, refer to the section titled, *Diving with Your XS Scuba BC.*



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**WARNING:** The trim weight compartments should only be loaded with weight that supplements the releasable weight carried on your weight belt or your BC's X-Lock™ Integrated Weight System pockets. Do not install weight into the trim weight compartments unless you are certain you can achieve positive buoyancy at depth by ditching your releasable weight while your BC is completely deflated. You may otherwise experience difficulty ascending to the surface in an emergency situation, which could lead to serious injury or death due to drowning.

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## X-LOCK™ INTEGRATED WEIGHT SYSTEM

### ■ FILLING THE WEIGHT POCKETS

To fill the X-Lock™ Integrated Weight System pockets with weight, it will be necessary to first remove each one from its respective compartment by firmly pulling the release handle straight out, toward the opposite side of the BC.



Open the sealed flap, and fold it back out of the way. While holding the pocket fully open, insert the weight and then close the flap. When each pocket has been loaded with weight, firmly run your hand over the flaps to seal the Velcro® fastener securely in place.

When filling the X-Lock™ Integrated Weight System pockets, it is important to fill each pocket with the

same amount of weight in order to provide optimum balance in the water. You may otherwise experience a tendency to roll to one side if one pocket is more heavily loaded than the other.

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## X-LOCK™ INTEGRATED WEIGHT SYSTEM POCKET INSTALLATION

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**WARNING:** Before every dive, it is important to inspect the condition of all connections between the X-Lock™ Integrated Weight System pockets and the BC to ensure that they are clean and free of any wear or damage that may impair their function. Carefully follow the instructions provided below to install the pockets correctly and ensure that all connections are securely sealed. Accidental release of the weight pockets may otherwise result in an uncontrolled ascent, which could lead to serious injury or death due to embolism or decompression sickness.

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The weight pockets should be installed while the BC is fully deflated, either before or after it has been donned. It is easier, however, to install them before donning the BC. If the weight pockets are filled to their maximum capacity and installed into the BC, XS Scuba strongly recommends that you seek the assistance of a buddy before attempting to don the BC. You may otherwise risk injury, due to muscle strain or a temporary loss of balance.



**NOTE:** If the amount of weight being used does not fill the pocket to capacity, turn the pocket over to slide the weight as far forward inside the pocket as possible, toward the closure flap. After the X-Lock™ pocket has been correctly installed, a Velcro® connection inside the BC compartment will hold the end of the pocket closed to prevent the weight from shifting.

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To install either pocket, slide the closed end into the opening of the compartment, with the band of loop Velcro® facing up. Guide it firmly inward until the Velcro® connection has fully engaged near the end of the compartment. Then, fold the pocket's retaining flap over the Velcro® connection on the outside of the BC, and firmly run your hand over the flap. Finally, secure the release buckle.

For information about using the X-Lock™ Integrated Weight System and ditching weight, refer to the section titled, *Diving with Your XS Scuba BC*.

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## DONNING THE BC

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**CAUTION:** To avoid possible injury and/or damage to your equipment, XS Scuba recommends that you should always don your BC with assistance from a buddy.

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1. Ensure that the side-squeeze buckles of both shoulder straps are securely fastened. Fully extend each strap to its maximum length by pulling up on the tab of the lower slide buckle, and then pulling the webbing down until the D-ring slides up near the buckle.
2. While your dive buddy holds the cylinder supported behind you, reach back to place your arms through the shoulder straps.
3. While your buddy continues to hold the cylinder, fasten the cummerbund snug around your waist (not hips). The best positioning is between your hips and your rib cage. The weight of the cylinder should rest on the lumbar region (lower part) of your back.
4. 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 shoulder straps to a comfortable length by pulling straight down on the D-rings.



**NOTE:** Remember, adjusting the shoulder straps too tightly will transfer the cylinder weight from the hips onto the shoulders, and may restrict your arm movement.

5. Readjust the cummerbund, if necessary, so that it is comfortably snug but not restricting, with an overlap of at least 3 inches. Fasten together the male and female side-squeeze buckles of the outer waist strap over the cummerbund.



**NOTE:** Your BC is equipped with an elastic outer waist strap. It can be adjusted inside the BC, behind the cummerbund, so that it will be snug when fastened. This will help your cummerbund to remain snug when your wetsuit becomes compressed at depth, and can also help prevent squeeze when your BC is inflated on the surface.

6. Fasten the sternum and waist straps, if equipped, and pull the free ends until they are comfortably snug but not restricting.



**WARNING:** Be sure to avoid over tightening your BC's adjustments. Check to ensure that you can move your arms comfortably and take deep, full breaths. Over tightening can restrict your respiration and blood circulation, which can lead to serious injury or death.

## PRE-DIVE INSPECTION

Before each use, the BC must be visually inspected and tested. NEVER dive with a BC that shows any signs of damage to its air cell or valves until it has been serviced by an Authorized XS Scuba Dealer.

### Inspection Checklist:

1. Connect the power inflator to a clean air source via the LP 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. Ensure that the air cell does not contain any water from a previous dive or from internal rinsing. An excessive amount of water inside the air cell can reduce the BC's internal air volume and lift capacity.
3. Manually operate the lower overpressure valve (OPV) by pulling on the attached ball and cord to release air from inside the BC, and then fully inflate the BC until the shoulder OPV valve opens. Examine the operation of the shoulder OPV valve by repeatedly inflating the BC to ensure that it opens to relieve excess pressure, yet close immediately afterward to allow the air cell to remain fully inflated.

4. Check the function of the oral inflator button, rapid exhaust valve (REV), and OPV to ensure a rapid and unobstructed exhaust from each valve. Fully inflate the BC once again, and disconnect the Power Inflator to listen for any leakage.



**CAUTION:** If any leakage can be heard, or if the air cell begins to deflate within 5-10 minutes, DO NOT attempt to use the BC until it has received service from an Authorized XS Scuba Dealer.

5. Make a final check of the cylinder band's tension to ensure that it is as tight as possible and the cylinder is securely held without any noticeable slippage. Retighten if necessary.
6. Before entering the water, check the trim weight compartments to ensure they are closed, and the X-Lock™ Integrated Weight System pockets to ensure that they are correctly installed into the BC. Refer to *X-Lock™ Weight System Pocket Installation* for details.



**WARNING:** The X-Lock™ Integrated Weight System pockets may fall out unexpectedly if the buckle connections are not securely fastened. Involuntary release of both weight pockets can cause a sudden increase in buoyancy and rapid ascent, and could lead to serious injury or death due to arterial gas embolism or decompression sickness.

## DIVING WITH YOUR XS SCUBA BC

### ■ RULES FOR PERSONAL WEIGHTING

Before diving with your new XS Scuba BC, it is important to establish the correct amount of weight you will need to wear to achieve neutral buoyancy, without being too heavy (negatively buoyant) or light (positively buoyant). While following the procedures taught in an open-water training course, it is important to observe some basic rules for properly weighting yourself:

1. Be aware of the factors that can cause your personal buoyancy to change, including personal weight loss or gain, the type and thickness of the exposure suit you wear, and the buoyancy characteristics of your cylinder when it is full and empty.
2. Weight yourself in chest deep water while wearing all your equipment, including your exposure suit and BC, and with the cylinder you will be using while it contains no more than 500 psi.
3. Experiment with different amounts of weight until you are able to float at eye level on the surface while holding your breath, and slowly begin to sink as you exhale.
4. Conduct a personal buoyancy check whenever your body weight has changed,



or if you use a different cylinder, BC, or exposure suit.

## ■ DIVING WITH AN X-LOCK™ INTEGRATED WEIGHT SYSTEM

It is important to remember that the X-LOCK™ Integrated Weight System pockets are connected to the BC independently of each other, unlike a weight belt that has only one release mechanism, and must be released accordingly. This feature provides you with the advantage of being able to ditch only half your weight initially, and thereby maintain better control of your ascent rate in an emergency.

In the event of an emergency that requires you to ditch your weight, firmly pull the release handle of each weight pocket towards the opposite side of your waist. When the pocket is completely disengaged from its compartment, hold it out and away from your body before dropping it.



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



**WARNING:** Always ensure that your X-LOCK™ Integrated Weight System is not obstructed by any straps, lines, etc. DO NOT add weight to your BC anywhere other than the designated weight compartments, since doing so may prevent you from being able to ditch weight in an emergency. Failure to ditch weight in an emergency may lead to serious injury or death due to drowning.

Before diving with a BC that features a X-LOCK™ Integrated Weight System, it is very important to explain its function and design to your dive buddy. This will ensure that they are as familiar with it as you are so they can assist you in case of an emergency.

## ■ INFLATING YOUR BC



### Oral Inflation

To orally inflate your BC, hold the oral inflator mouthpiece to your mouth and depress the oral inflator button while exhaling into the mouthpiece. Release the button when done or while taking another breath, and repeat this procedure until the BC is satisfactorily inflated.



**NOTE:** Oral inflation of your BC underwater is a practiced skill that must be achieved under the supervision of your diving instructor, since it requires the removal of your second stage regulator from your mouth.

## Power Inflation

To connect the LP hose, grip the grooved sleeve at the connection fitting between your thumb and forefinger, and slide the sleeve back. Place the fitting over the inflator valve QD nipple, and firmly push inward while releasing the sleeve. Check to ensure that the hose is securely attached.

To inflate your BC, depress the power inflator button. 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 for inflating your BC. It is important to maintain proficiency in the skill of orally inflating your BC. You may otherwise be unable to achieve positive buoyancy in an emergency situation, which could lead to serious injury or death.

## VENTING & DUMPING AIR

Throughout the course of a dive, it will be necessary to vent or dump 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, and is designed either to vent air or dump it very quickly. The method you should choose will depend on whether you are descending feet-first, head-first, maintaining neutral buoyancy underwater, or controlling your ascent. To release air as effectively as possible, remember to utilize the valve that is at the highest point on the BC and nearest to the surface, depending on your position in the water.



**WARNING:** Whenever you ascend, whether intentionally or accidentally, you must simultaneously vent air from the BC as needed to maintain buoyancy control. If air is allowed to expand inside the BC unchecked, you may experience a rapid, uncontrolled ascent, which could lead to serious injury or death due to arterial gas embolism, decompression sickness, or drowning. To regain buoyancy control during an uncontrolled ascent, you must dump air from the BC as quickly as possible until you have stopped ascending.

### ■ VENTING WITH THE ORAL INFLATOR

Air can be vented through the inflator by holding the inflator above your head and depressing the oral inflator button. This method is recommended for making an initial feet-first descent, but is not as effective while you are in a facedown swimming position.



**NOTE:** Depressing the oral inflator while the BC is empty may allow water to enter the air cell.

## ■ VENTING WITH THE REV

Inside the power inflator's corrugated hose is a cable that attaches the power inflator to the rapid exhaust valve at the top of the airway assembly. You can thus vent air from the BC by pulling straight down on the power inflator.

The amount of air vented depends on how far open the exhaust valve is (i.e., the distance you pull the inner cable) and how long it is open. Short pulls vent small amounts of air for minor changes in buoyancy, and a long pull will vent the entire BC in a matter of seconds.

You retain just as much control over your buoyancy using the Rapid Exhaust Valve as with the oral inflator button. You also get the benefit of eliminating water entry even if the exhaust valve remains open after release of all the air. This valve provides an effective and convenient way to vent air from the BC while you are in either an upright or face-down swimming position, and is more convenient to use than the oral inflator.

**Rear Dump Valve** – If your BC has a Rear Dump Valve located on the lower rear portion of the air cell, it can be opened manually to quickly dump air by pulling on the ball and cord assembly. This valve works best while making a head-first descent, or in a face-down swimming position.



**CAUTION:** The proper function of the overpressure relief valve is essential to prevent damage to the BC air cell. Unauthorized service or tampering may render this valve inoperable, and could cause the air cell to leak or burst. This type of damage is not repairable, and is not covered under the terms and conditions of the XS Scuba Warranty.



**NOTE:** 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.

## ■ RIGHT SHOULDER OPV / DUMP VALVE (NOT FEATURED ON ALL MODELS)



Some models may feature a redundant OPV/Dump valve, located at the top of the right shoulder. A ball and cord assembly extends to the shoulder buckle assembly for quick dumping of air.

## POST DIVE CARE & MAINTENANCE

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

- 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 seams of the BC's air cell.
- Avoid repeated or prolonged use in heavily chlorinated water, which can cause the BC fabric to discolor and decay prematurely.
- Do not allow the BC to chafe against any sharp objects or rough surfaces that could abrade or puncture the air cell. Do not set or drop heavy objects such as block weights on the BC.
- Avoid any contact with oil, gasoline, aerosols, or chemical solvents.
- To preserve the life of the air cell, thoroughly rinse it inside and out with fresh water after every day of use, following these steps:
  1. Pressurize the power inflator with low pressure air via the LP hose.
  2. Using a garden hose, direct water through the oral inflator to flush the interior of the air cell, and then thoroughly rinse the exterior of the BC. Before rinsing, ensure that the power inflator is pressurized with air. This will prevent debris and contaminants from entering the inflator valve if the inflator button is accidentally depressed.
  3. Completely drain the air cell of water through the lower OPV/dump valve by pulling the ball/cord assembly.
  4. Fully inflate the BC, and allow it to dry inside and out. Then store it 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 it may be exposed to temperatures below 0° F (-18° C) or above 120° F (49° C).
  5. To avoid stress on the air cell or harness assembly, remove all weight from the trim weight and X-Lock™ releasable compartments before storing the BC. Soft weights especially, can discolor the BC over time.



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**CAUTION:** DO NOT attempt to perform any disassembly or service of your XS Scuba BC. Service requiring disassembly must only be performed by a factory trained XS Scuba technician. To obtain any service or repair, it is important to bring your BC to an Authorized XS Scuba Dealer.

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## OPTIONAL ACCESSORIES & SPECIAL FEATURES

You can purchase the following accessories for your new BC from your Authorized XS Scuba Dealer:

**Safety Tube (part no. AC190)**

This high-visibility surface signal device can be inflated to a length of 6', and is carried inside a compact 5"x35" nylon mesh bag that can be clipped to your BC or stored in a pocket.

**AirWave Inline™ Octopus (part no. RG325)**

To streamline your system with fewer hoses and keep your octopus where you'll always be able to find it, you'll want the AirWave Inline™ Octopus – a backup second stage regulator that is worn on your BC connected by your power inflator. This option is available separately from your Authorized XS Scuba Dealer, and can be added to any XS Scuba BC.

**DEALER INSPECTION & SERVICE**

1. Do not assume that a BC is in good working condition just because it has had little use since its last servicing. Prolonged or improper storage can still result in internal corrosion and/or deterioration of O-ring seals and valve springs, as well as air cell seam degradation.
2. You should obtain factory-authorized service for your BC at least once a year from an Authorized XS Scuba Dealer, regardless of the amount of use it has received. This service includes a general air leak inspection and complete overhaul of the power inflator and OPV valve(s). Your BC may require this service more frequently, depending on the amount of use and quality of maintenance that it receives.
3. If the BC is used for rental or training purposes, it will require complete overhaul and service every three to six months. Chlorinated swimming pool water is an especially damaging environment for SCUBA equipment, due to the high level of chlorine and pH balance chemicals which cause certain parts to rapidly deteriorate.
4. DO NOT attempt to perform any disassembly or service of your BC. Doing so may cause the BC to malfunction, and will render the XS Scuba Warranty null and void. All service must be performed by an Authorized XS Scuba Dealer.

**HAVE YOUR BC SERVICED AT LEAST ONCE A YEAR FROM AN AUTHORIZED XS SCUBA DEALER. YOUR PERSONAL SAFETY AND THE MECHANICAL INTEGRITY OF YOUR BC MAY DEPEND ON IT.**

## LIMITED TWO-YEAR WARRANTY

XS Scuba, Inc. warrants to the original owner, this product to be free of defects in materials and/or workmanship for a period of two years from date of original purchase. Warranty applies only under normal sport and skin diving use and with proper care and maintenance. This warranty is non-transferable and limited to repair or replacement at the discretion of XS Scuba. BC must be returned with proof of purchase.

### WHAT IS COVERED

All non-wearing valve parts and the welded seams of the BC air cell are covered under this warranty. Should any part of your XS Scuba BC be found defective, XS Scuba, at its discretion, will repair or replace the component at no charge to you.

### WHAT IS NOT COVERED

1. This warranty does not extend to abrasion, punctures, or tears of the air cell, or seam separation caused by chemical attack; including, but not limited to prolonged exposure to chlorine or other pool chemicals.
2. This warranty does not extend to damages caused by improper use, improper maintenance, neglect, unauthorized repairs, modifications, accidents, fire, or casualty.
3. Cosmetic damage, such as scratches, fraying, and nicks are not covered by this warranty.
4. This warranty does not extend to equipment used for rental, commercial, or military purposes.

### WHAT YOU NEED TO DO

1. Keep a copy of the original purchase receipt and subsequent inspections with this manual.
2. Your XS Scuba BC should be inspected and serviced by an authorized XS Scuba repair facility at least once a year.
3. Provide proof of original purchase and annual servicing by an Authorized XS Scuba Dealer in the form of receipts/invoices.

### DISCLAIMERS / EXCLUSIONS

This warranty is nontransferable from the original owner. No salesperson, dealer or representative is authorized to make any modification to this warranty.

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.

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

XS SCUBA 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, consequential, or indirect costs, expenses, or damages incurred while using this product, so this may not apply to you.

### **RETURNING YOUR BC FOR SERVICE**

Whenever your BC requires annual service or warranty repair, it is important to bring it to an Authorized XS Scuba Dealer. Be sure to provide the dealer with photocopies of your original sales receipt and service records. For the location of the dealer nearest you or additional information, visit our website at: **www.XSscuba.com**.

## **SERVICE RECORD**

Model: \_\_\_\_\_ Serial Number: \_\_\_\_\_ Purchase Date: \_\_\_\_\_

XS Scuba Dealer: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_ Phone: \_\_\_\_\_

### **SERVICE #1**

XS Scuba Dealer: \_\_\_\_\_

Technician Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### **SERVICE #2**

XS Scuba Dealer: \_\_\_\_\_

Technician Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### **SERVICE #3**

XS Scuba Dealer: \_\_\_\_\_

Technician Signature: \_\_\_\_\_ Date: \_\_\_\_\_



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