

Product Description and Specifications

The Classic, Rec and Nomad wings (buoyancy compensators) provides superior performance, reliability and durability, and range from a versatile design that can be used for single or double tanks to one with maximum lift for technical diving.

Note: For CE certification, theses wings were tested with the T3000 TransPac Harness System.

CE information

The PPE (Personal Protection Equipment) mentioned in this manual was tested and certified according to 89/686/EEC Directive, for a maximum depth of 50 meters (150 feet) by ITALCERT, Viale Sarca 336, 20126 Milano-Italy, Notified Body No. 0426. The device is in compliance with the EN250:2000+A1:2006 (PPE of category III in accordance with 89/686/EEC Directive) and EN1809:1997 (PPE of category II in accordance with 89/686/EEC Directive), and it is not a lifejacket. It does not guarantee a head-up position of the wearer on the surface. CE0426 is the conformity marking according to 89/686/EEC Directive. The number 0426 identifies the Notified Body ITALCERT for the controls on the product according to Article 11A of the 89/686/EEC Directive (only for PPEs of III category).

Note: The buoyancy values for each wing in Newtons are nominal values rounded to the nearest 10N, according to the reference standard EN 1809. These buoyancy values may be slightly different from the actual buoyancy of the wing.

CLASSIC WING (BC2030)



Classic wings provides up to 59-pounds (27kg/260N) of buoyancy, and are designed for use with higher-volume double tanks and stage bottles as often used by wreck or cave divers.. A 22-inch (56 cm) low-pressure inflator hose is standard. The Classic Wing is also available as a redundant bladder model (BC2040), which provides up to 59-pounds (27kg/260N) of buoyancy in the primary bladder and 51-pounds (23kg/ 220N) of buoyancy in the secondary bladder. The secondary bladder is

fitted with a 12-inch corrugated hose and inflator with a 22-inch (56 cm) low-pressure inflator hose. A protective nylon sleeve is included to prevent abrasion of this assembly. Outer bag is made of 1000 denier ballistic nylon that resists tears and abrasion, while the inner bladder(s) are constructed of thick, 15-mil polyether aromatic polyurethane which is resistant to abrasion and chemicals, has excellent strength and resists microorganism growth. Urethane flanges are welded in place, for easy switch-out of corrugated hoses and over-pressurization valves without tools. Two sets of three marine-grade 316 stainless steel grommet mounting holes are used to attach wing to harness and/or to double tanks and set diver trim. 2.81lbs (1.27kg/12N). Made in U.S.A.

NOTE: The Classic wing is designed for use with heavyweight double tanks and is not for use with single tanks.



REC WING (BC2074)



Rec wings provide up to 51-pounds (23kg/220N) of buoyancy. They can be used with both single and larger back-mounted double cylinders. Rec wings incorporate a built-in Gusset Control Cord system. A 27-inch (69 cm) low-pressure inflator hose is standard. The Rec wing is also available as a redundant bladder model (BC2075), which provides up to 51-pounds (23kg/220N) of buoyancy in the primary bladder and 50-pounds (22kg/210N) of buoyancy in the secondary bladder. The secondary bladder is fitted with a 12-inch corrugated hose and inflator with a 22-inch (56

cm) low-pressure inflator hose. A protective nylon sleeve is included to prevent abrasion of this assembly.

Outer bag is made of 1680 denier ballistic nylon that resists tears and abrasion, while the inner bladder(s) are constructed of thick, 15-mil polyether aromatic polyurethane which is resistant to abrasion and chemicals, has excellent strength and resists microorganism growth. Urethane flanges are welded in place, for easy switch-out of corrugated hoses and over-pressurization valves without tools. Comes equipped with choice of 16-inch rapid exhaust (pull dump), 16-inch or 12-inch elbow, or Rite-Source integrated octo corrugated hose along with either 15-inch, 22-inch or 27-inch low pressure inflation hose. Two sets of three marine-grade 316 stainless steel grommet mounting holes are used to attach wing to harness and/or to double tanks and set diver trim. 3.12lbs (1.41kg/14N). Made in U.S.A.

NOMAD WING (BC2083)



The Nomad wing provides up to 60-pounds (27kg/325N) of buoyancy and is designed to be used with the Nomad Expedition Harness. Nomad wings incorporate a built in gusset control cord at the upper portion of the wing. A 22-inch (56 cm) low-pressure inflator hose is standard.

Outer bag is made of 1680 denier ballistic nylon that resists tears and abrasion, while the inner bladder constructed of thick, 15-mil polyether aromatic polyurethane is resistant to abrasion and

chemicals, has excellent strength and will resist the growth of microorganisms. Urethane flanges are welded in place, for easy switch-out of corrugated hoses and over pressurization valves without tools. Comes equipped with choice of 16-inch rapid exhaust (pull dump), 16-inch or 12-inch elbow corrugated hose along with either 15-inch, 22-inch or 27-inch low pressure inflation hose. Corrugated hose come with 1000 denier sleeve to protect against punctures. Three marine-grade 316 stainless steel grommet mounting holes are used to attach wing to harness. Made in U.S.A.

Buoyancy Compensator Wings

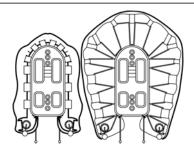
Using the Gusset Control System (GCS)

The Gusset Control cord on the Rec wing fulfills the following functions:

- When not inflated, the cord helps compress the BC to as small a profile as possible.
 This reduces drag and helps protect BC's from damage.
- By tightening the cord, users can limit lift capacity to only what's needed for a particular application (e.g. diving single cylinders generally requires less buoyancy than double cylinders). Reduced lift capacity also helps reduce the likelihood of uncontrolled ascents.
- Tightening the gusset control cord helps to prevent the BC from wrapping around the sides of single cylinders.

The Gusset Control cord on the Nomad wing performs a similar function, compressing the BC to as small a profile as possible to reduce drag and limit air-expansion across the upper portion.

You can tighten or loosen the gusset control cord by adjusting the clips at each side of the base of the BC. When doing so, adjust both cords evenly.



WARNING: Before using your Rec, Classic or Nomad wing in open water or other, more challenging environments, spend time in a controlled environment, such as a pool, practicing venting your wings in a variety of positions. The inability to vent such a high-capacity BC quickly and efficiently can lead to dangerous, uncontrolled ascents. Such ascents can result in *serious personal injury* or *death*.

Using a Redundant BC

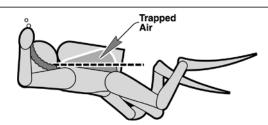
The Rec and Classic wings with a redundant bladder contain a primary bladder, which you inflate and deflate through the large diameter inflation/deflation hose located on the left side of the BC. In the event of bladder or air hose failure, these BCs also contain a back-up bladder. You inflate and deflate the back-up bladder with the inflation/ deflation hose located on the right side of the BC. The secondary bladder is not designed to be used at the same time as the primary bladder to increase buoyancy; the secondary bladder is a back-up to the primary bladder. Due to construction constraints, the secondary bladder has less buoyancy capacity than the primary bladder. Do not plan dives with equipment that requires the maximum buoyancy of the primary bladder.

Buoyancy Compensator Wings

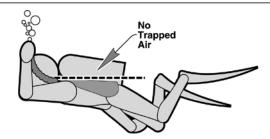
Keep the large-diameter inflation/deflation hose for the back-up bladder readily available as advised during training. We recommend that you keep a low-pressure inflator hose attached to this large diameter hose during each dive.

Eliminating BC tank wrap

Before using a back-inflation style BC with single cylinders, there are some things you should be aware of. The figure below shows the tendency back-inflation style BCs have when used in conjunction with single cylinders. Air inside the cell causes the BC to wrap around the tank. This traps air above the level of the BC hose elbow when the diver is in a normal swimming position, which may interfere with venting air (deflating) the BC.



The figure below shows the benefit of eliminating tank BC wrap. The entire BC is now below the level of the BC hose elbow, allowing the diver to vent air (deflate) the BC either by using the remote exhaust valve in the hose elbow or by holding the end of the hose up and depressing the oral inflation/manual deflation button. The Rec wing employs a method of helping divers avoid single-tank wrap, and by keeping the gusset control cord as snug as possible helps to keep single tank wrap to a minimum.



WARNING: Do not use the Classic wing with single cylinders. Doing so can prevent the venting of air from the BC and can lead to uncontrolled ascents. This can further result in serious personal injury or death.

Care and Maintenance

With proper care and service, your BC can provide you with years of safe, enjoyable use. Without proper care, your BC can become damaged and be either unserviceable or dangerous to use.

Note: Stainless steel can develop rust even when properly cared for.

Buoyancy Compensator Wings

General maintenance procedures

- The sun's ultraviolet rays can fade and damage the BC, shortening its life. Store the BC away from sunlight and excessive heat. Although the wings are designed for use in water as cold as 28 F (-2 C) and as warm as 104 F (40 C), Dive Rite recommends storing the wings between 0 and 104 F (-18 to 40 C).
- · Keep sharp objects from coming in contact with the BC.
- Take care when handling the BC. Do not rest heavy objects on the BC or drag it over rough surfaces.
- Periodically lubricate the low-pressure inflator hose coupling and quick-disconnect plug with silicone lubricant.
- Due to the type of material used in the construction of the BC, clean it only with fresh water and mild detergent. Chemicals, strong detergents, and cleaning solutions can damage the BC and shorten its life.
- Have the BC inspected yearly by your local, authorized Dive Rite dealer.
- Avoid excessive pool use. Excessive use in chlorinated water can lead to premature discoloration and shorten the products' life.
- Rinse the BC thoroughly after each use and allow it to dry completely before storing.
 Dive Rite recommends Salt-X for salt removal (www.salt-x.com).

WARNING: Do not disconnect the large-diameter inflation hose elbow/remote exhaust from the BC body. Detachment and re-attachment of this component should only be attempted by a qualified technician working under the supervision of an authorized Dive Rite dealer or distributor. Attempts to remove and/or replace this component without the necessary training and tools may result in permanent damage to the inflation hose assembly or BC.

Note: The greatest threat to the BC's long life is the presence of contaminants inside the BC. Salt water, when it evaporates, leaves behind razor-sharp crystals that can easily puncture BC fabric. Other substances can cause the inside surfaces of the BC to permanently stick to one another. To prevent this from happening, follow these steps:

- 1. Drain any water that may have collected in the BC during the dive. To do so, partially inflate the BC and then turn it over so that the hose elbow is at the lowest point. Depress the oral inflator/manual deflator button while squeezing gently on the BC. Continue to do so until all of the water is out.
- 2. Refill the BC with fresh water until it is approximately one-quarter full. Inflate the BC the rest of the way with air.
- 3. Turn the BC over and over, so that the fresh water has the opportunity to rinse all of the BC's interior surfaces.
- 4. Repeat step 1 to drain the fresh water from the BC.
- 5. Repeat steps 2, 3, and 4 one or two more times.
- 6. Rinse the exterior of the BC by immersing it in a tub or fresh water or spraying it gently with a hose.
- 7. Inflate the BC until it is nearly full and let it stand for 30 minutes. After 30 minutes, check the BC for loss of air.
- 8. Lay the BC out flat or hang it upside down for several hours to allow it to dry thoroughly.
- 9. Store the BC partially inflated in a dry, dark place.

BC2030/BC2040, BC2074/BC2075, BC2083 Buoyancy Compensator Wings

Warnings

Before using your BC, there are several things you must do and be aware of. These include:

- Obtain a minimum of entry-level open-water scuba diver training and certification from a recognized diver-training organization.
- As part of this training, you must master all the basic skills of buoyancy control, including proper weighting, ascents, descents, surface swimming and resting, and establishing neutral buoyancy under water. This training must also cover (both at the surface and underwater) the use of buoyancy control devices (BCs), oral inflation of BCs, low-pressure inflation of BCs, and deflation of BCs using a variety of methods.
- You must read and understand this owner's manual and all other warnings that accompany the product. If you do not understand some part of this manual, contact Dive Rite or your local authorized Dive Rite dealer.
- Misuse of the BC can result in uncontrolled ascents, descents, or loss of buoyancy control. This, in turn, can cause serious personal injury or death.
- Failure to follow the instructions given in this manual or to heed the warnings it provides can cause equipment loss or damage, serious personal injury, or death.
- These BCs are NOT a United States Coast Guard approved personal flotation device (PFD). They will not provide face-up flotation for all users and conditions.
- These wings are only to be used with standard air or enriched air nitrox with an oxygen concentration not to exceed 50%. Use with a greater concentration of oxygen may create a fire hazard and expose the user to risk of serious injury. For safety reasons, it is strictly forbidden to change from air to nitrox and vice versa unless the buoyancy compensator has been inspected and properly cleaned by competent personnel. Remember that the depth and the duration of the dive are strictly dependent by the percentage of oxygen in the breathing gas.
- In case of contamination with oil, the wing must be inspected and cleaned by competent personnel.
- Always open the cylinder valve slowly, especially when using nitrox.
- These wings must be used with compressed air compliant with the standard EN 12021.

Inflation and deflation warnings

- When using a remote exhaust pull-dump, DO NOT continue to pull if air is not coming out. Adjust your body position so that the exhaust valve is at the highest point and then LIGHTLY pull down on the exhaust again. Do not yank on the exhaust as doing so could cause damage to the BC.
- Do not attach the low-pressure inflator hose to a high-pressure air source, such as the HP (high pressure) port of a regulator. The BC's low-pressure inflator and its supply hose can only handle pressures of approximately 150 pounds per square inch (10 bar) over ambient pressure.



Buoyancy Compensator Wings

Note: Read your regulator manufacturer's instructions concerning the proper connection of low- and high-pressure hoses. Installing or changing hoses should only be done by trained technicians working for factory-authorized dive centers. Product damage can result from improper hose connection.

- Always inflate the BC slowly, both at the surface and underwater. Rapid inflation underwater can result in uncontrolled ascents. Uncontrolled ascents can cause serious lung overpressure injuries, such as Arterial Gas Embolism (AGE). Serious overpressure injuries can result in death.
- Maintaining a safe rate of ascent requires training and practice. The BCs' overpressure relief valve does not control or prevent uncontrolled ascents.
- These instructions do not incorporate all of the steps required to orally inflate the BC above or below the water. Oral inflation of BCs underwater requires special training and practice. This should first be attempted under controlled conditions and under the supervision of a certified instructor.
- Never breathe from the BC's oral inflator/manual deflator mouthpiece. The BC may contain contamination or gas residue that may be hazardous if inhaled.
- Use of the oral inflator/manual deflator or overpressure relief valve for deflation may allow water to enter the BC. Repeated deflation of the BC under water may allow enough water to enter the BC to substantially reduce the BC's lift capacity (buoyancy) or interfere with its ability to allow the user to control buoyancy.

Note: If you have questions regarding any of the information you find in this manual or — equally important — questions pertaining to information about the BCs you cannot find in this manual, contact your local authorized Dive Rite dealer. If there is no authorized Dive Rite dealer in your area, contact Dive Rite directly, using the contact information appearing in this manual.

Buoyancy Compensator Wings

Warranty Information

Dive Rite BCs carry a limited lifetime warranty. Dive Rite will — at its sole discretion repair or replace BCs proved to be damaged by faulty manufacture or material, at no cost, for the lifetime of the BC.

This warranty applies only to the original retail purchaser. It does not cover commercial or rental use, nor does it extend to units purchased from other than an authorized Dive Rite dealer.

This warranty specifically excludes color changes, light fastness, or fading. Dive Rite does not accept responsibility for stains or transference or bleeding of color to other items.

All BC bladders have a limited lifetime warranty against RF welded seam separation. No warranty exists for bladder punctures.

If we deem a BC to be beyond repair — through no fault of the user — then, and only then, will we replace the affected component(s).

To make a claim under this warranty, the owner must have registered his/her warranty using Dive Rite's website (www.diverite.com). All warranty repairs (international or domestic) must be accompanied by a copy of the purchase receipt. For warranty repairs (international or domestic), the product must be returned to the store where the item was purchased or directly to Dive Rite. Dive Rite and its authorized dealers are not responsible for shipping. Shipping charges are the responsibility of the purchaser. A Return Authorization must be obtained by calling Dive Rite corporate offices (386-752-1087) to send items to Dive Rite. No warranty service will be performed for other than registered owners. Dive Rite dealers and distributors are not responsible for service of items purchased from unauthorized dealers, internet dealers, or dealers from other territories.

This warranty becomes void if the BCs are damaged by anything other than normal recreational diving use, or if they have been serviced or repaired by other than authorized Dive Rite dealers.

Repairs made under this warranty will not extend the warranty period.

All further claims, especially for damage after diving accidents, are excluded from coverage under this warranty.

Dive Rite has no obligation to honor any extension of this warranty.

This warranty is in lieu of all other warranties, expressed or implied. No other person or representative is authorized to assume for Dive Rite any other liability in connection with the sale of this product.

Activating and utilizing your warranty

- 1. To activate your warranty, you must register your BC within 30 days of purchase through our online product warranty registration. This is located within our website at www.diverite.com/warranty.
- 2. Proof of original ownership is provided by your purchase receipt and should be retained for your records.
- 3. If you intend to receive your service directly from Dive Rite, you must first obtain a Return Merchandise Authorization (RMA) number by calling Dive Rite at 386-752-1087. Your RMA number is to be printed on the address label of your package.