



BOUÉES D'ÉQUILIBRAGE

BUOYANCY COMPENSATORS / TARIERJACKETS

CHALECOS HYDROSTÁTICOS / COLETES COMPENSADORES

GIUBBETTI EQUILIBRATORI / TRIMJACKS / KAMIZELKI WYPORNOSCIOWE

ÚSZÓKÉPESSÉG SZABÁLYOZÓK / КОМПЕНСАТОРЫ ПЛАВУЧЕСТИ



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Buoyancy compensators

> User guide

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Introduction

1. Models in the product range

The BCs in the product range can be divided into four categories:

A > BCs with chest adjustment:

Due to their frontal adjustment feature, these BCs are extremely comfortable.

B > Integrated system BCs:

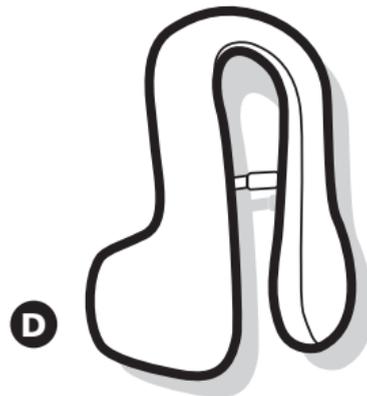
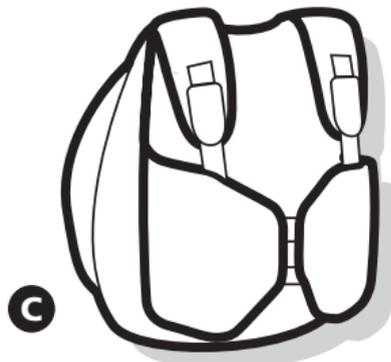
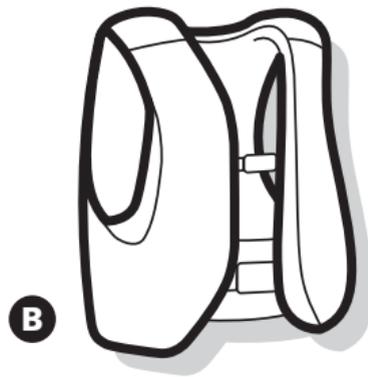
This type of BC offers maximum buoyancy. There is no shoulder adjustment feature.

C > Back inflation BCs:

These BCs place all inflation behind the diver. They are designed to offer complete freedom of movement. The harness has an adjustable chest strap.

D > Combined Buoyancy Compensator-Life Jackets:

This BC, specially designed for the needs of the Navy, can be used with all sorts of dive suits. Its large volume assures both impressive buoyancy and optimal surface safety.



2. Technical description

Depending on the type of BC, the air bladder can be integrated into a jacket or can be attached to an independent harness.

A > The air bladder:

The watertight bladder is made of 420 or 840 denier polyamide material with a polyurethane coating, bound together at a high frequency.

The different inflation and air dump systems, as well as the backpack, are placed around the bladder. There are also adjustable straps, pockets, and convenient accessory attachment rings.

B > The backpack:

Independent at the rear of the BC, the backpack holds the tank firmly in place with an adjustable strap. This backpack offers additional lumbar support that adjusts to fit the diver's chest height.

3. Buoyancy compensator (BC) features

The Buoyancy compensator (BC) allows the user to:

A > While diving:

- find neutral buoyancy at all depths using the inflation and air-dump systems,
- control buoyancy while resurfacing using the power inflator.

B > At the surface:

- easily and effortlessly put on and take off equipment in the water,
- safely maintain surface buoyancy without having to fin kick.

Implementation

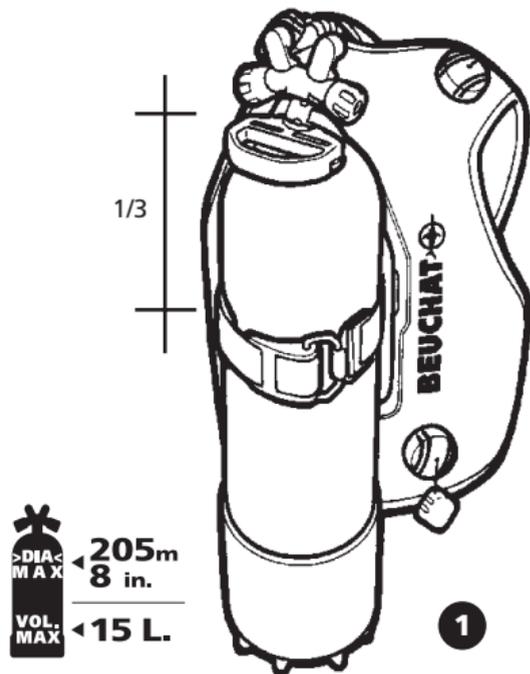
1. Attaching the BC to the tank:

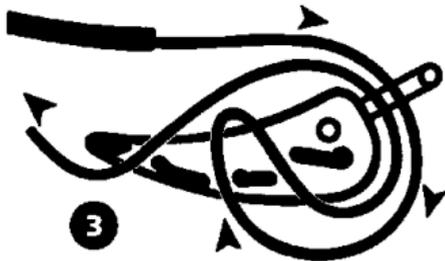
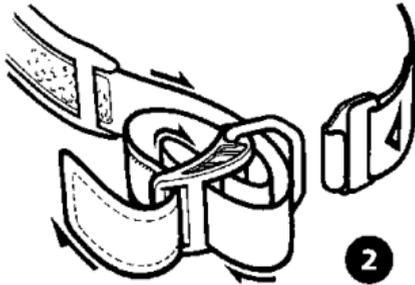
The BC is securely fixed to the tank by a tank band equipped with a cam buckle that locks tightly in place once adjusted.

This tank band is equipped with a quick release buckle that allows for easy handling without affecting the adjusted settings.

Putting the BC on the tank:

- Hang the BC over the tank's valve by its rear clamp.
- Place the tank band around the upper third of the tank, using the suspension clamp at the back of the BC to adjust to the desired height (see figure 1).
- Pass the tank band through the buckle, as shown.





- Tighten the tank band by pulling on its end.
- Close the buckle by pushing it back towards the tank and press the remaining strap end onto the Velcro security band (**see figures 2 and 3**).

Note 1: wet the tank band before mounting it on the tank, if possible.

Note 2: it is not necessary to completely undo the tank band from the buckle after each use. After having released the buckle, loosen the tank band enough to allow it to slide up the tank.

Note 3: use of the "quick release" buckle does not require you to retighten the tank band after each use. To allow for tightening and loosening, you simply need to put the hook through, or remove it from, the metallic ring.

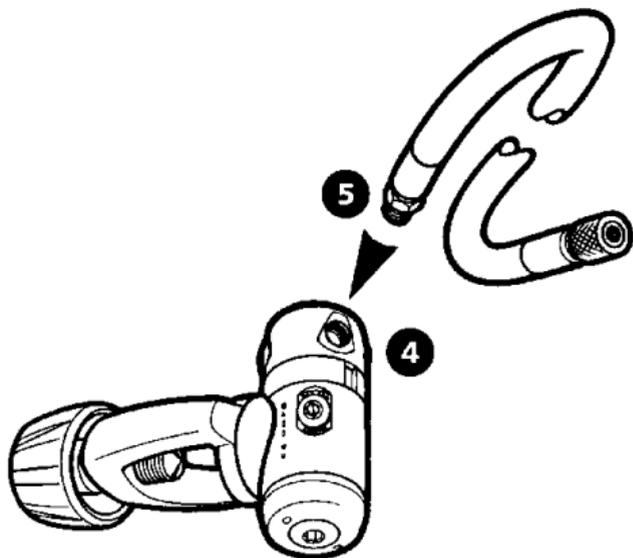
WARNING: ensure that your BC is securely attached to your tank before diving by lifting it up a couple of times. There should not be any slippage.

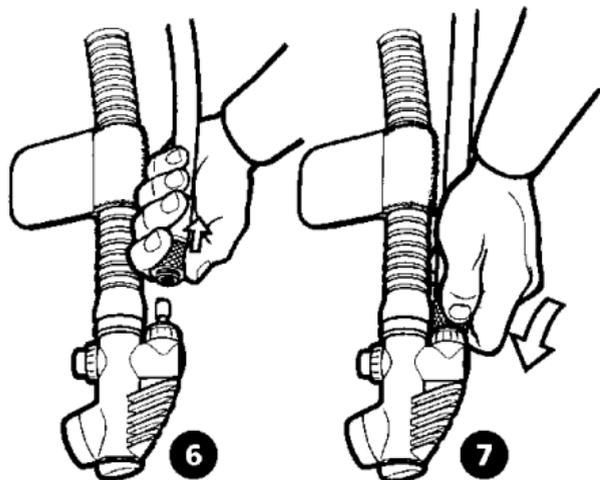
2 - Connecting the regulator:

The BC is manually inflated using the power inflator; this power inflator may also be referred to as a direct-system. The power inflator is supplied with air at intermediate pressure by a tube attached to the first stage of the regulator and connected to the power inflator by a quick connector.

A > Connecting the regulator's first stage:

- Undo one of the intermediate pressure valves (see figure 4) on the first stage.
- Ensure that the screws are compatible (3/8" - 24 UNF).
- Screw the hose into place (see figure 5) and tighten, but not excessively, with a size 14 flat spanner.
- After you've connected the regulator to the tank, open the air flow and ensure that there are no leaks.



**B > Connecting the power inflator with the quick connector:**

- Complete this operation before putting the hose under pressure.
- Push back the moveable ring on the quick connector **(see figure 6)**.
- Place the end of the power inflator into the connector.
- Bring the connector's ring back toward the front **(see figure 7)**.
- Ensure that it is properly connected by pulling lightly on the hose.
- Place the hose under pressure by opening the air flow and ensure that there are no air leaks.

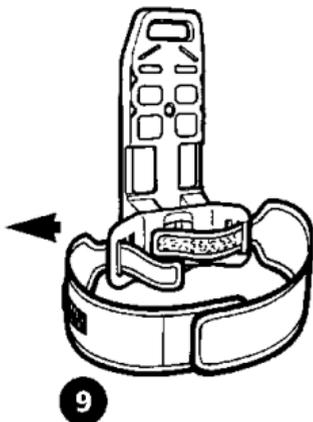
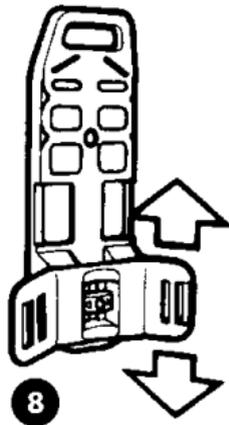
WARNING: *if you are unsure or detect a leak, have your equipment inspected at a specialized scuba centre.*

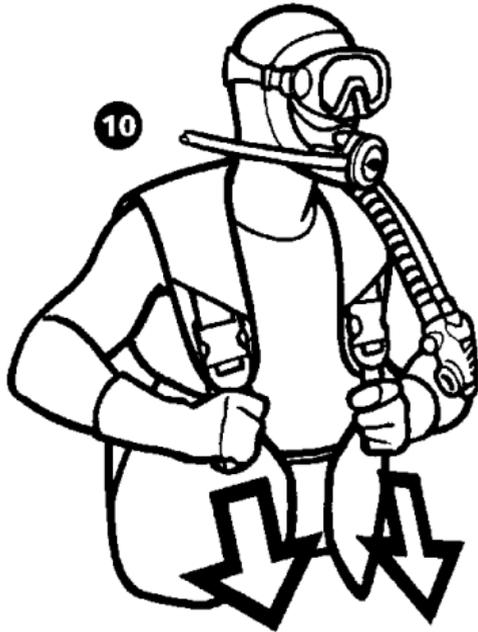
3 - Settings - Adjustments:

A > Adjusting the backpack (figure 8):

The backpack offers lumbar support that adjusts height-wise to fit the diver's chest height:

- Do not undo the main fastening screw.
- Lightly fold the horizontal part forward to release the adjustable notches.
- Adjust the backplate to the desired height, trying it both with and without the tank connected to the BC.
- Replace the flap





B > Adjusting the cummerbund (figure 9):

- Adjust the cummerbund by adjusting the length of the straps with the plastic buckles.
- Ensure that there are 15 to 20 cm of Velcro covering around the waist.

C > Adjusting the chest straps (figure 10):

- Adjust the length of the chest straps by simultaneously pulling the ends of both straps.
- To lengthen the straps, lift the front part of the buckle.
- To undo, simultaneously press on both sides of the buckle.

Note 1: for ideal comfort, do not over-tighten the straps.

Note 2: use of the quick release buckles allows for easy equipment removal.

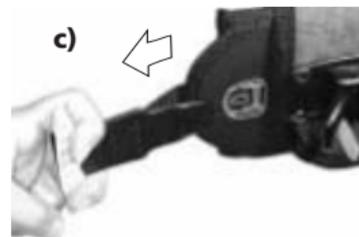
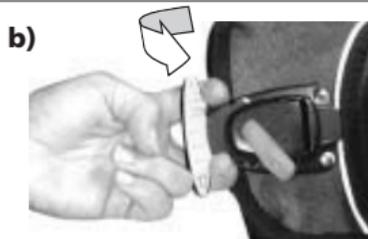
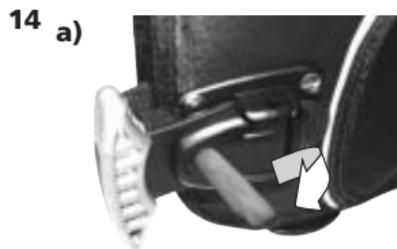
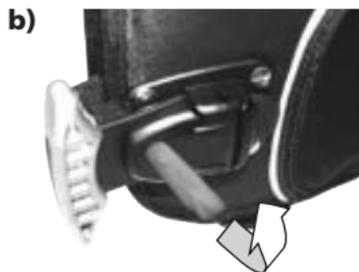
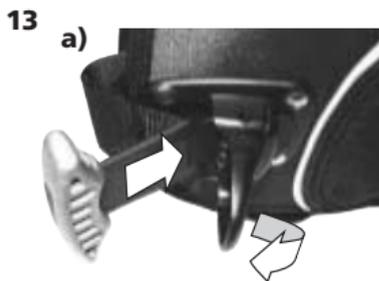
38 > Instructions for use / Implementation

11. Position the weights (traditional or integrated) in the removable pockets and close the flaps.

12. Position the removable pockets in the BC's integrated weight system as shown in the diagram.

13. Fasten and secure the removable pockets in place as indicated below.

14. To remove the pockets, unbolt and first pull the handle to the side and then tug forward firmly.





4 - Auxiliary inflation system:

This inflation system exists only on the Océane model. It consists of a 0.4 liter tank and valve attached to the BC and allows for very fast emergency inflation by manually opening the valve (**see figure 15**). Ensure that the auxiliary tank is properly filled before diving.

WARNING: as 0.4 liter tanks do not undergo re-testing, it is imperative that you have your tank visually inspected at least once a year.

To check before diving

It is important to be sure of the good condition and proper functioning of your entire BC:

- Ensure that the hose is properly attached to the regulator and in good condition.
- Once you have inflated the BC using the power inflator, activate the purge valves.
- Ensure that the tank is properly mounted.
- Once in the water, ensure that the harness straps are correctly adjusted.



Use

It is recommended that you use a BC only after having fully learned from a certified instructor.

1 - Inflation features:

A > Inflation with the power inflator:

This type of inflation is used in all circumstances.

It allows for precise adjustment of buoyancy.

It is easy to use and quick, making it preferable to oral inflation.

- Take the power inflator in your left hand, as shown (see figure 16).
- Repeatedly press the lateral button to inject the desired amount of air.

B > Oral inflation:

A procedure preferably executed at the surface to reduce the risk of breathlessness or hyperventilation.

- Take the inflator in your left hand and bring it to mouth level.
- Take a deep breath from the regulator.
- Place the oral inflator piece against your lips and start to blow, simultaneously pushing on the button at the inflator's end (**see figure 17**).
- Repeat as much as necessary, until the desired buoyancy has been obtained.

WARNING: do not breathe in air from the BC's air bladder. Control your ascent speed. Not respecting your ascent speed while resurfacing can be very dangerous.



2 - Air dump instructions:

There are numerous ways of dumping air from your BC. The choice of air dump method depends on the diver's situation during the course of the dive and the degree of urgency needed to control buoyancy. All of the purge valves installed on models in the Beuchat product range are overpressure relief valves; therefore they prevent all risk of bursting due to over-inflation or uncontrolled ascent.

A > **Slow deflation:** integrated in the power inflator.

This procedure is done preferably in an upright position (see figure 18).

- Take the power inflator in your left hand.
- Raise the inflator.
- To deflate, press the button at the inflator's end.

The buoyancy adjustment obtained during this procedure is very precise.

B > **Upper exhaust valve:** found on the right shoulder.

This procedure allows for a very fast air dump, from a horizontal or vertical position (see figure 18).

- Take the dump valve in your right hand.
- Pull, but not excessively, toward the bottom of the BC.



C > Lower exhaust valve: found at the back on the lower right-hand side of the BC.

This valve allows for air dump from a head-down position (see figure 19).

- Take the dump valve in your right hand.
- Pull, but not excessively.

D > Purging with the Dump Valve :

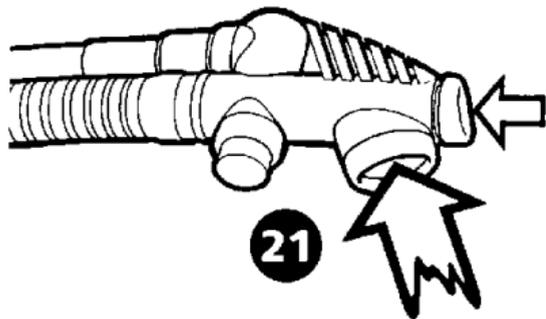
This purge feature, integrated in the power inflator, allows you to control your buoyancy with a single hand (inflation and air dump) (see figure 20).

This procedure may be executed in a vertical or horizontal position.

- Take the main part of the power inflator in your left hand.
- Pull, but not excessively, the whole inflator system downward.
- Air will release from the upper part of the BC.



Maintenance / Storage



- Rinse fully in fresh water after each use.
- Inject fresh water into the BC via the inflator's oral inflation piece while pressing the purge button **(see figure 21)**.
- Distribute water evenly inside the BC by shaking gently.
- With the BC turned upside down, use the inflator to empty the water.
- Dry the BC, slightly inflated and out of direct sunlight.
- Store in a dry place.

Warranty conditions

All our products are guaranteed in compliance with current laws in the country of purchase from the date of purchase by the user for non-professional, recreational sporting use. The warranty covers parts recognized as defective by our technical services, and manufacturing and material defects with the exception of parts worn by use. The warranty does not cover damages caused by rough handling, dropping, or incorrect use at the surface or while diving. The warranty does not cover defects in appearance or function that are due to normal wear of the product or to its ageing. The warranty shall not be valid if the product was not cared for or used as stipulated in the user guide or if the product was opened or maintained by a person lacking adequate technical training and not using the proper maintenance equipment. The responsibility resulting from the sale of our products is limited exclusively to the above warranty and excludes all possibility of recourse to penalties or damages. To benefit from the present warranty, the product must be returned along with proof of purchase.



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