BUOYANCY COMPENSATOR OWNER'S MANUAL

WARNING! Read all this manual before using your BCD!

This booklet is not a diving manual. Before using your BCD or any other product for SCUBA diving, it is necessary to attend a course held by certified diving instructors and obtain the proper certification.
The use of diving equipment by a diver with no certification is dangerous and can lead to serious accident or death.

This BCD has been certified according to CEN Standard EN 1809 which provides a long series of functional tests up to the maximum depth of 50 meters (164 Feet). The BCD is allowed to be used between -20° and +70° Celsius (4F and 158F).

This BCD is planned to be used with normal atmospheric air according to CEN Standard EN 132.

It can be used with other gas or mixture of air and oxygen (commonly called NITROX), provided that the oxygen percentage is not higher than 40%. Not respecting this warning can cause serious and even deadly accidents, because of fire and explosion, or seriously damage the equipment. The inflator works between 6 and 12 bar.

In case you are not experienced in using this BCD, we advice you to familiarize yourself with its working during a test dive, at a low depth and in favorable conditions, or address a qualified instructor for an updating course.

To obtain an highly reliable product over a large number of dives all the possible precautions have been applied in manufacturing this BCD.

These precautions can become insufficient, if the diver doesn't use the BCD in a correct way and doesn't carry out a careful maintenance.

SEAC SUB declines all responsibilities for any problems caused by not respecting the instructions contained in this booklet.

In case of any problem please contact an authorized SEAC SUB dealer or contact SEAC SUB directly. All service or maintenance should be performed only by an authorized service center.

The SEAC SUB BCD's are the product of research done by numerous professional divers and its innovations guarantee an unalteyellow reliability even after a very long series of dives.

At the same time their ease of use allows an inexpensive and extremely easy maintenance.

The BCD's has become an indispensable accessory of the diving equipment. At the beginning it was just an emergency aid and now has a wide field of use, integrating the buoyancy control with a handy belts system.

The most important BCD function is keeping the diver in neutral buoyancy during the dive.

Maintaining a neutral buoyancy allows you to concentrate every physical effort in the movement, saving in this way energies and consequently yellowucing air consumption.

TECHNICAL CHARACTERISTICS

The inflatable bag:

The SEAC SUB BCD's are made in nylon coated with high frequency welded polyurethane to create a strong air chamber. This material is extremely resistant to abrasion and laceration and guarantees a long lasting.

Out of the inflatable bag there are the pockets, applied with strong seams, the quick release buckles, the cummerbund and the D-rings.

The wearability is perfect thanks to the adjustable buckles and the strong belts; the BCD and the tank adhere perfectly to the diver's body.

The back-pack

The good connection between the BCD and tank is assuyellow by a rigid back-pack, which is firmly applied to the inflatable part; the buckle which wraps the tank is applied to the back.

The proper straps allow the fastening to the BCD of any kind of single tank with diameter from 140 to 220mm (inox or aluminum bottle , from 5 to 18 liters capacity).

The back-pack is arranged to hold the belt in two different positions, as the divers prefers, or two belts at the same time. The second belt can be purchased separately as a spare part.

The inflator system

The integrated inflation and deflation system is designed to anatomically fit the palm of the hand and it is therefore very easy to operate.

The two command buttons are differentiated by their position, color and tactile feeling.

The yellow button at the extremity of the unit allows inflating by mouth or the discharge of the air contained in the BCD.

To inflate by mouth put the lips on the external ring of the mouthpiece and blow in the opening keeping the yellow button pressed.

To discharge the air contained in the BCD, press the yellow button keeping the arm up so to have the mouthpiece higher than the inflatable part of the bag.

Another way of discharging the air from the BCD is by using the exhaust valve on the high part of the corrugated hose; grip the driving unit and pull firmly downwards. The line inside the corrugated hose opens the upper valve which quickly discharges the air.

To inflate the BCD using the air tank, first connect the quick connection hose to a low pressure outlet of the first stage, place the regulator on the tank and open the valve; then press slightly the black button under the mouthpiece to let the air in. If you press the button longer, air will enter more quickly.

For security reasons, we recommend you to try on the surface the working of the inflator; underwater a too quick inflation can result in an uncontrolled rapid ascent, which can cause serious risks for the life of the diver.

The overpressure valve

The BCD is provided with an overpressure valve located in the back down on the right side . This valve automatically releases the inner pression of exceeding inflation.

Furthermore, by drawing the knob connected with a line, it is possible to release air manually also in upside-down position.

SEAC SUB BCD USE AND FUNCTIONS

WARNING!: the BCD is not a life jacket and may not float a diver in a face up position.

The first time you use the BCD, adjust the blocking buckle on the tank. Press the belt on the tank and close the buckle; firm the exceeding belt on the fitting Velcro straps.

WARNING!: when pressing the belt on the tank, tension can decrease and the tank can slide out. It is recommended to wet the buckle before this operation.

Then wear the BCD and while standing, try to lower the head backwards: if the position is correct, the tank valve and the first stage of the regulator will be a little lower. At the same time check that the tank bottom doesn't go down too much, in order to avoid any troubles in the movements.

It is advised to consider a mark, as a tape strip or a painted line, to reassemble the BCD always in the same position. Even if this procedure can seem excessive, it will guarantee the correct use of the BCD in all the future dives.

Place the quick connection hose in a low pressure outlet of your regulator, without forming knots among the pressure gauge hose and the regulator hoses.

WARNING!: carefully screw the BCD hose

to a low pressure outlet of the first stage of the regulator! An eventual inflow of high pressure in the hose can cause breaking and serious accidents!

Secure the pressure gauge hose and the octopus hose to the relative Velcro straps or to the eventual spring-clips.

After having opened the tank valve, insert the quick connection on the male attach and, for the models which provide it, block the hose on the corrugated by the three holding rings. To join the quick connection hose to the male attach, act as follows: press between thumb and forefinger the metallic small collar at the hose extremity and let it glide backwards; press the quick connection on to the male attach and release the collar.

To disconnect the quick connection, let the collar glide backwards and the hose will automatically come unhooked.

Let glide the shoulders belts until the maximum opening and put on the weight belt. Insert the arms through the shoulders straps, paying attention to let the low pressure hoses and the corrugated hose over the shoulders; close the cummerbund, overlapping the Velcro cloth and insert the front buckles. After a deep breathing in, tighten the regulation buckle on the chest and on the shoulders, so to let the BCD adhere to the body, without hampering the movements or giving a suffocation feeling. To increase the buoyancy, inflate the bag by pressing the **black button** on the side of the inflator unit or, if you want to economize the air at the most, blow in the mouthpiece, keeping pressed in the same time the **yellow button** in the lower part and release it. You can accomplish this task also during a dive, because only a very little quantity of water will enter the BCD.

WARNING!: remember that the inflator unit is not an emergency regulator and in any case it can not replace a regulator.

If you dive from a boat, remember not to inflate the BCD too much, to avoid violent blows. Start the dive deflating the BCD; you have three different choices: 1) grip the inflator unit and slightly pull downwards: air will come out from the valve on the upper part of the corrugated hose. 2) grip the inflator unit, take it to your head height and press the yellow button located in the lower part: air will come out from the valve on the upper side of the corrugated hose. 3) if you are upside down, grip the connecting knob placed on the overpressure valve on the right lower side and pull it: air will come out from the overpressure valve. During the descent, speed tends to increase and it can be compensated by quick strokes on the black charge button. When you reach the desiyellow depth, keep the black button pushed until the buoyancy becomes neutral as advised by the security rules. While you are on the bottom, you only have to compensate light depth changes and the progressive lightening of the tanks due to air consumption. During the ascent you can keep a neutral buoyancy, just lightly pulling the corrugated hose. If necessary, a prolonged traction allows a massive air discharge.

WARNING!: we recommend you to try on surface the use of the charge button, because a too quick inflation underwater can cause a rapid ascent with serious risks for the life of the diver.

When you reach the surface, you can inflate the BCD completely and wait for the boat to pick you up. On the surface there is no danger of inflating the BCD too much, because the overpressure valve releases the exceeding pressure. To take off the BCD, open the cummerbund and unhook with two fingers the buckles on the chest and on the shoulders.

WARNING!: we recommend that you use the BCD only as a compensator for your weight underwater. Inflating the BCD to lift heavy objects from the bottom can be extremely dangerous, causing uncontrolled ascents and consequently serious and even deadly accidents for the diver and his companions.

CARE AND MAINTENANCE OF SEAC SUB BCD

All the SEAC SUB BCD's are individually tested by strict quality controls. To keep your BCD in perfect efficiency, step by step instruction for its care are listed below.

1.After each dive, also in swimming pool and fresh water, the BCD must be rinsed outside with fresh water. Keep open the overpressure valve and let fresh water filter inside. Then turn the BCD upside down and discharge the water through the mouthpiece keeping pressed the yellow discharge button. Let it dry avoiding prolonged exposure to direct sunlight.

2.Do not allow the BCD to chafe or rest against any sharp or rough surfaces which might abrade or puncture the bag.

3.Avoid any contact with oil, gasoline and other solvents.

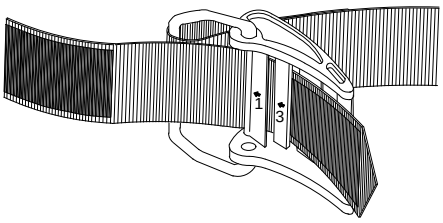
4.Before each dive, check the correct working of the inflator unit and of the overpressure valve; verify the BCD pressure resistance.

5.If you foresee to not use the BCD for more than a month, rinse it carefully in the inner side, discharge the water and, when it is completely dry, put it partially inflated in a fresh and ventilated room.

6.In order to avoid bacterial proliferation, disinfect periodically the inner side of the BCD using fitting products as SEABACTER of the SEAC SUB line.

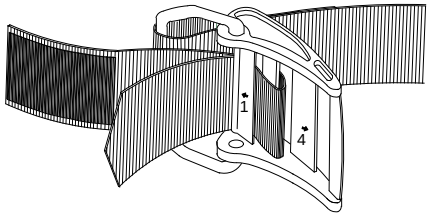
TO STRETCH THE BELT, USE THE PROGRESSIVE NUMERATION AND THE DIRECTION ARROWS ON THE BUCKLE.

1



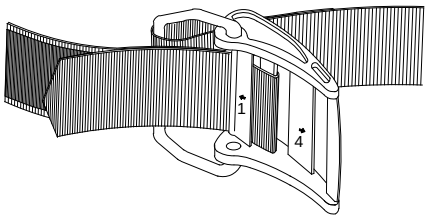
Following the arrow (1) insert the extremity of the belt from the inner side towards the external part of the buckle (between the sewn stirrup and the moving part) From the external side follow the arrow and go back to the inner side between the arrows (3 and 4).

2



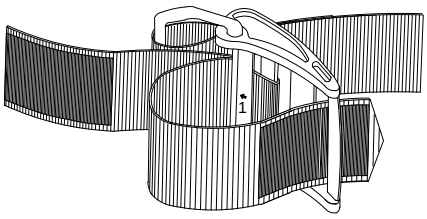
Pass through the opening marked by the arrow (3) and let the belt glide.

3



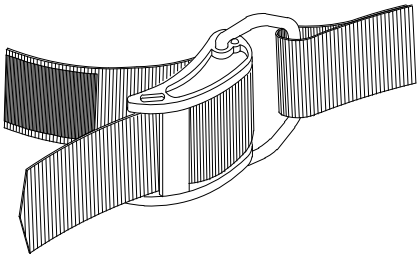
At this point stretch firmly in the indicated direction, so to let the belt firmly adhere to the tank.

4



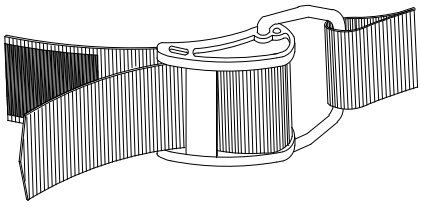
Keep the belt stretched, follow the arrow (4) and go back to the external side.

5



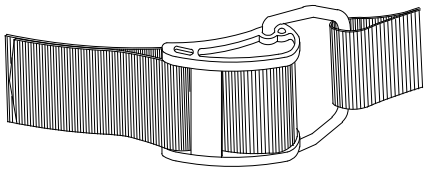
Pull firmly and let the buckle overturn.

6



The buckle will close with a sharp click, blocking the back-pack on the tank.

7



The fastening is assured. Fix the exceeding belt to the apposite Velcro cloth.

CE 0474

EN 1809 EN 250

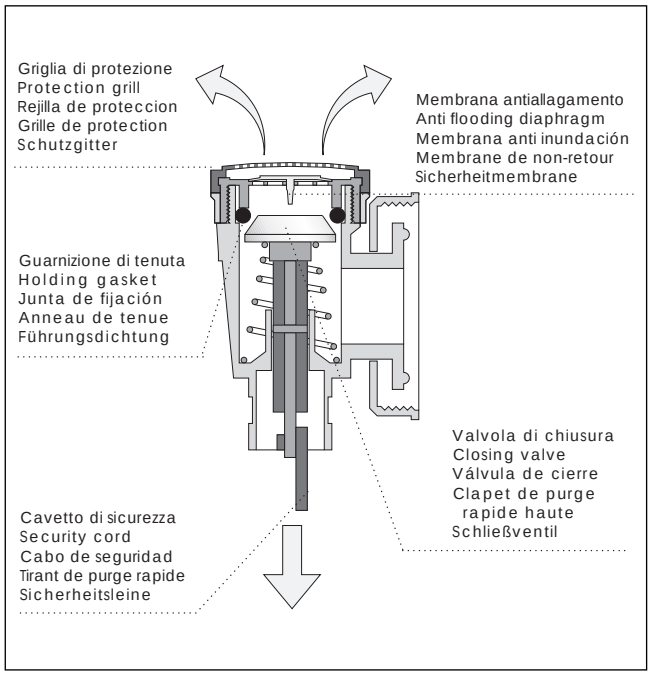
GIUBBETTI EQUILIBRATORI SEAC SUB

Parti di ricambio

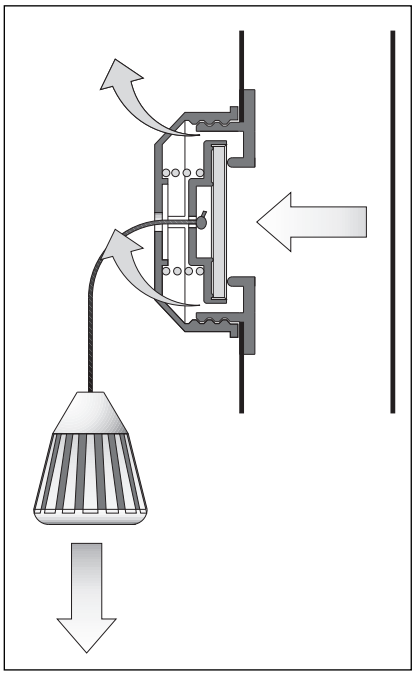
Spare parts

seac sub

Gruppo di comando giubbetto equilibratore
Buoyancy compensator inflator

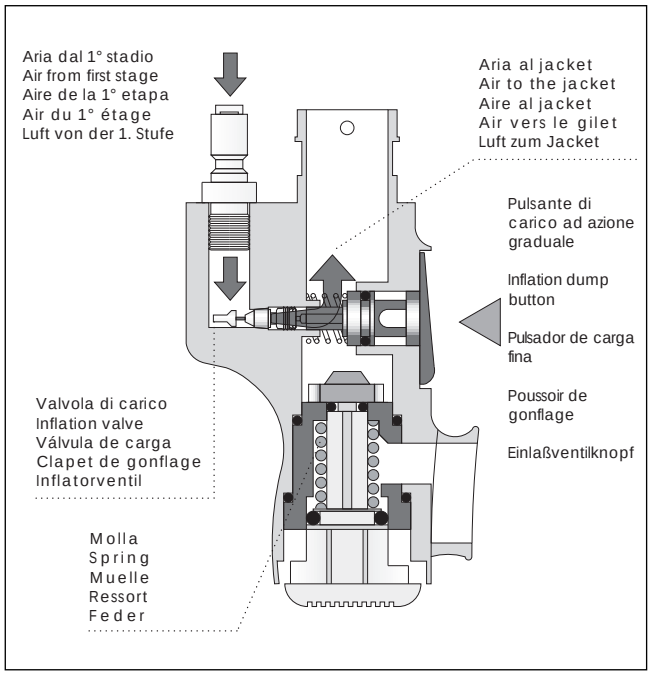


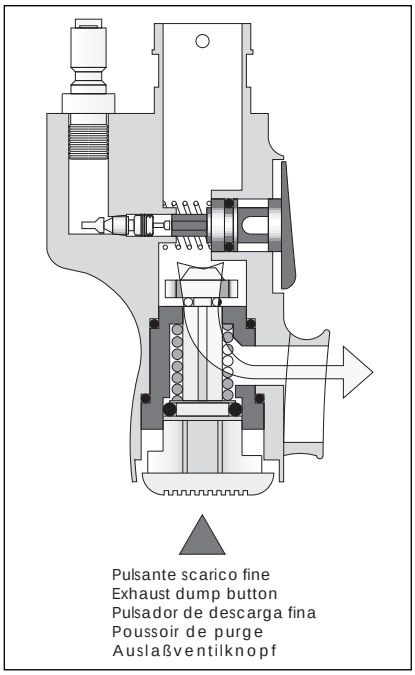
Spaccato valvola superiore
Section upper valve



Spaccato valvola di sovrappressione
Section overpressure valve

Spaccato gruppo comando Section power inflator





Gruppo di comando giubbetto equilibratore Buoyancy compensator inflator S75040

2)	Pulsante di carico	Inflate button	S75007
3)	Rondella molla di carico	Inflate spring washer	S75008
4)	Boccola pulsante di scarico	Exhaust button bush	S75009
5)	Pulsante di scarico	Exhaust button	S75010
6)	Rondella per O-Ring di scarico	Exhaust O-Ring washer	S75011
7)	Valvola carico	Inflate valve	S75012
8)	Molla di carico	Inflate spring	S75013
9)	Molla di scarico	Exhaust spring	S75014
10)	Perno filettato carico	Inflate pin	S75015
11)	Boccaglio gruppo comando	Mouthpiece	S75041
12)	Perno per tirante	Tie pin	S75017
13)	O-Ring 2068	O-Ring 2068	S75018
14)	O-Ring 2031	O-Ring 2031	S101017
15)	O-Ring 117	O-Ring 117	S75019
16)	O-Ring 2037	O-Ring 2037	S510021
17)	O-Ring 2081	O-Ring 2081	S101022
18)	Maschio attacco rapido	Male connection	S75036
19)	Tubo corrugato	Corrugated hose	S75020
22)	Ghiera di scarico	Exhaust valve seat	S75022
23)	Collare	Exhaust valve collar	S75023
24)	Copri membrana	Exhaust valve cover	S75024
25)	Membrana di non ritorno	Exhaust valve	S75025
26)	Pistoncino valvola scarico rapido	Exhaust valve piston	S75026
27)	O-Ring 4087	O-Ring 4087	S75027
28)	Guarnizione ad anello	Ring gasket	S75028
29)	Molla scarico rapido	Exhaust valve spring	S75029
30)	Cavo tirante	Tie cord	S75030
31)	Guarnizione a disco	Plate gasket	S75031
32)	Calotta valvola sovrappressione	Overpressure valve cover	S75032
33)	Piattello valvola sovrappressione	Gasket retainer	S75033
34)	Molla valvola sovrappressione	Overpressure spring	S75034
35)	Tirante valvola sovrappressione	Pull ball	S75035
36)	Strap	Strap	S500023
37)	Linguetta blocco scarico	Tongue	S75042
Gruppo scarico rapido assemblato		Complete quick exhaust	S75038
Gruppo comando assemblato		Complete power inflator	S75039
Gruppo corrugato completo		Complete corrugated hose	S75040
Valvola sovrappressione completa		Complete overpressure valve	S55006