

## FITTING YOUR HALCYON BUOYANCY COMPENSATOR

The Halcyon Buoyancy Compensator system provides superior buoyancy control and trim adjustment for divers in any underwater environment. Each component of the BC system—the proper buoyancy wing, alternative lift device, weighting system, and Secure Harness—works together to provide you with safe, efficient control of your gear while under water and on the surface. The BC harness system is adjustable to fit all body types, providing for a much more precise fit than jacket-style BCs.

The Halcyon Buoyancy Compensator has two primary forms of adjustment. The classic adjustment system involves a semi-permanent fitting in which the diver tunes the harness to the appropriate size based upon their size and thermal protection. Meanwhile, the patent-pending Halcyon Cinch allows the diver to adjust the harness quickly, fine tuning it for each dive regardless of the thermal protection worn. The classic system can be upgraded by purchasing a Cinch Upgrade from your Halcyon dealer. Both systems are discussed in detail with the quick-adjust Cinch outlined on page 11.

To properly fit your Secure Harness before first use, begin by suiting up with the same thermal protection that you will use with your BC. If you plan to dive with a drysuit, make sure to include all undergarments. In addition to the thickness of the drysuit, a full set of thermal undergarments can add considerable bulk and have a dramatic impact on the sizing of the harness.

### Fitting Your Buoyancy Compensator – Classic Semi-permanent Fitting

You can adjust the Halcyon BC Secure Harness without the use of special tools by adjusting the triglidge fasteners along the back of the backplate and on the crotch strap (figure 1). To adjust the shoulder straps, loosen the triglidge fasteners on the back of the backplate where the webbing feeds through the slots (figure 2). Using equal amounts of webbing from both sides of the waist belt, adjust the straps so that several fingers can fit under the webbing along your shoulders (figure 3). The shoulder straps need to be loose enough to be comfortable with your thickest amount of thermal protection. The fit of the harness should facilitate easy doff/don, both in water and out of water, yet still remain snug enough so that your tanks are secure while stage bottles clipped off to the top D-ring stay close to the chest.

To finalize the fit of the harness shoulder straps, loosen the straps enough to allow easy movement of the backplate. Position the backplate for proper tank position, with the top of the backplate high enough to touch by reaching behind your head with either hand; if you can touch the backplate, you should be able to reach your valves when your rig is fully assembled (figure 4). With the backplate in position, tighten up the arm straps until you are able to fit two or three fingers underneath the strap. You should be able to easily slide the straps off of either shoulder. Be careful not to leave excessive slack in the harness straps. An exceedingly loose-fitting harness will allow the backplate to ride low on your back, making it nearly impossible to reach your valves.

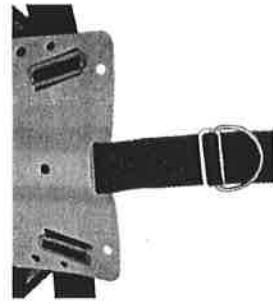


Fig. 1: Rear view of crotch strap triglidges

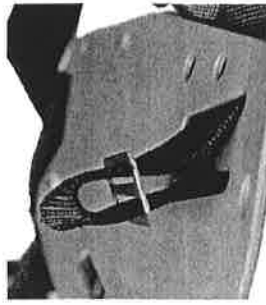


Fig. 2: Adjusting rear triglidge fastener

Fig. 3: Allow for at least two fingers of spacing between the harness strap and your exposure suit.



Fig. 4: Proper placement of backplate



The crotch strap should be comfortable and allow you to reach your tanks. The waist belt should fit as snug as is comfortable. Do not overtighten the waist belt so much as to restrict breathing. When adjusting the waist belt, make sure to set the buckle so that it is off to your right side. With the buckle in this position, the crotch strap is unable to accidentally open the buckle.

To adjust the crotch strap, buckle the waist strap without running it through the crotch strap. Now pull the crotch strap up to the waist belt. Set the length so that the top of the crotch strap loop extends a half-inch (12mm) over the top of the waist belt.

While standing on land, your BC should be snug but not uncomfortably tight. In the water your harness should be snug enough to prevent notable motion of the cylinder as you change orientation, but not too tight so as to bind or restrict your complete range of shoulder and arm movement.

### Fitting Your Buoyancy Compensator – Cinch Quick-adjust Design

Adjustment of the Secure Harness while wearing the Cinch is quick and easy. Following similar guidelines, begin your first fitting in the exposure suit you will be diving in. Once finished, check placement of the D-rings as noted in the previous section, and be sure to trim the extra webbing after you've determined the best size range for your Cinch harness and quick-adjust crotch strap.

- **To Tighten the Harness:** While using both hands, grasp the ends of the waist band webbing and pull up and outward (at roughly 45 degrees) from the body (fig. 13, p. 11).
- **To Loosen the Harness:** Grasp the webbing at the shoulder straps just above the waist. Push the harness out and up slightly from your waist (fig. 14, p. 11).

For more information on sizing and adjustment of the Cinch design can be found starting on page 11 of this manual.

## FINE-TUNING YOUR BC SYSTEM

The BC harness is the model of simplicity. The Secure Harness utilizes one D-ring on each side of the chest, avoiding the unnecessary clutter of multiple attachments. One D-ring is located on your left hip and single D-rings are placed on the front and back of the BC crotch strap. The hip D-ring is used to attach a pressure gauge, stage bottles, or small tools during a dive.

The knife is placed in a sheath on the waist belt left of the crotch strap, where it can be quickly deployed with either hand. The knife is small and designed as a tool for cutting line. Two backup lights are attached, one to each of the two chest D-rings. These lights are held to the strap by an elastic ring. This location puts the lights in a streamlined position against your chest while remaining completely accessible.

Once you have properly sized your Secure Harness, you will want to fine-tune the position of the five D-rings. The shoulder D-rings should be positioned relatively high on the shoulder straps, especially if you plan to utilize stage



bottles in your diving. If the D-rings are too low, the stage bottles will hang too far away from your body, causing significant drag and possibly damaging marine environments. The shoulder D-rings should also be high enough to allow for proper storage of your Scout back-up lights and to allow for ease of use of your wing's inflator hose to adjust trim and buoyancy, yet not so high that you can't clip an item off with the same-side hand as the clip.

To position the shoulder D-rings, extend your arms straight out to the side, parallel to the ground. Bend at the elbow and bring your thumb straight to the shoulder strap. The center of your thumb should intersect the center of the D-ring (figure 5). Next, reach across your body to (or almost to) your left shoulder with your right arm (figure 6). Make sure the right-side D-ring doesn't pinch between your arm and chest. Do the same with your left. If either D-ring pinches, adjust it upwards.

The waist D-ring is used for clipping off the SPG and for stage bottles. To position the waist D-ring, run your left thumb straight down your left side until it hits the waist strap. Your thumb should intersect the D-ring, very close to your hip bone. The position might need to be adjusted after your first dive with your BC system. In water, practice clipping/unclipping the SPG and, if you wear stage bottles, have your buddy check the position of the tanks. You do not want the waist D-ring positioned so far back that you can't comfortably clip or unclip your SPG, nor so far forward that a buoyant stage would become a hindrance or cause excessive drag.

~~The rear crotch D-ring is generally used for storing gear not used very often, such as reels or lift bags. This D-ring needs to be low enough that you can clip/unclip gear there (and not be blocked by the bottom of the tanks), yet high enough that the gear does not hang down too far. Typically, position the gear D-ring one hand-width down from the bottom of the backplate (figure 7).~~

The front crotch D-ring is only used with a tow-behind scooter. Gear should never be clipped to this D-ring, as it will hang in the slipstream and pose significant entanglement hazards.



Fig. 5: Locating the proper location for the chest D-rings



Fig. 6: Checking final placement of the chest D-ring



Fig. 7: Rear D-ring placement



Fig. 8: Assembled Eclipse BC System with accessories.



Fig. 9: Placement of the 6-lb. Convertible Weight inside the STA Channel

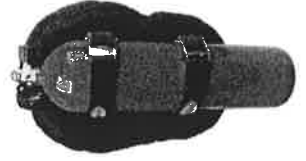


Fig. 10: Correct strap position on single cylinder