



## TECHNICAL DIVING EQUIPMENT

DELUXE HARNESS (Item no.: HB-2)

THANK YOU for choosing Dolphin Tech technical diving BCD component. Only materials best suited to diving conditions were used to make this vital piece of equipment and it was designed and made according to the highest standard in diving equipment manufacturing so you can have reliable service from it for years to come.

### GENERAL WARNINGS AND CAUTIONS

Please read and thoroughly understand the content of this owner's manual in its entirety. If there is anything not clear on how this product functions, for your safety sake, do not use it and please contact an authorised IST dealer for assistance.

Do not modify any component on this product as it will render the warranty void and it may not function properly and safely.

Improper use or intentional misuse of this product may cause serious injury or death.

Prior to each dive using this dive equipment, please make sure your tank(s) is attached properly and securely to your harness. Inspect for any irregularity or wear and tear at the same time and if in doubt, please contact your nearest IST authorised dealer for assistance.

**Repair**, maintenance task and any disassembly must only be performed by an IST authorised dealer. Unauthorised service will render the warranty void and may cause this product to malfunction.

### PRODUCT DESCRIPTION AND USER INSTRUCTION

Your Deluxe harness kit should contain the following parts:

- ◆ 80cm / 31.5" long, 2" wide nylon connecting webbing with centring grommet.
- ◆ 1 pair of anatomically shaped and padded shoulder straps with 4 bent D-rings and 8 webbing keepers (already affixed) and female quick release buckles.
- ◆ 2 waist straps with male quick release buckles
- ◆ 4 x WK-4 stainless steel webbing keepers
- ◆ 2 x DR-2 flat s/s D-rings
- ◆ 2 x HBW-1 waist padding
- ◆ BB-3 s/s cam buckle.



The deluxe harness is used in conjunction with a technical diving back plate such as IST BP-3 stainless steel or BP-4 aluminium plate. The following instructions show you how to put the harness together.



- 1) Insert one end of the nylon connecting webbing from the back through the angled slot near the top of the plate (see Pic. 1) then through the adjacent top slot from the front (see Pic. 2).



**Pic. 1.**



**Pic. 2.**

- 2) Repeat the same procedure with the other side and remember to centre the grommet against the plate's ridge.



**Pic. 3. (back)**



**Pic. 4. (front)**

- 3) Thread each end of the strap through both WK-4 webbing keepers slots (so 4 in all) sewn on a shoulder padding (as shown in Pic. 5) on the appropriate side, i.e. the right pad has an anatomical bend to the right when putting on the BCD and vice versa for the left.

Difficulties in threading can be experienced as the clearance is tight but this is intentionally designed to ensure the pad and the connecting webbing can not come undone.



**Pic. 5.**

A helpful way to accomplish this task is by pushing a corner of the connecting strap when going through each opening of a webbing keeper and then use a pair of pliers to pull it through (Pic. 6).



**Pic. 6.**

When adjusting the connecting strap to personal fitting (please refer the next section), a flat screw driver can be inserted between the strap and the webbing already sewn on the padding (Pic. 7) to create a gap so it will be easier to move the strap in either direction with pliers.



**Pic. 7.**

- 4) There are 2 pairs of slots in the lower corners of the plate (Pic. 8). Take one end of the webbing and thread it through the inside slot (on the same side of the plate) from the front (Pic. 9).



**Pic. 8.**



**Pic. 9.**

- 5) Thread the webbing through a WK-4 webbing keeper (Pic. 10) in the back of the plate. Pull most of the webbing through then thread through the keepers' other opening in the opposite direction. Finally, exit it through the other slot (Pic. 11). Repeat the procedure with the other side (Pic 12).



**Pic. 10.**



**Pic. 11.**

- 6) Repeat the procedure with the other side (Pic 12).

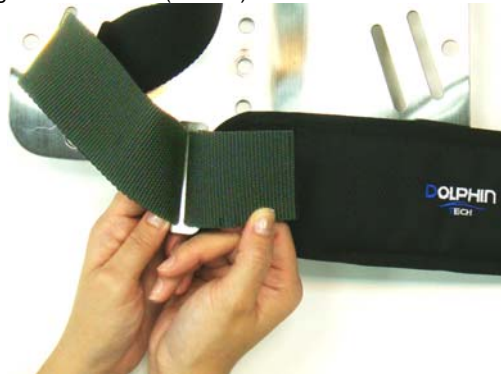


**Pic. 12.**

- 7) To assemble the waist padding, thread one webbing end down through its webbing keeper in the direction shown (Pic. 13)... then back up through the other slot (Pic. 14).



**Pic. 13.**



**Pic. 14.**



- 8) Thread the webbing through the webbing loop (as pointed by the red arrow) then assemble the waist flat D-ring as shown.



**Pic. 15.**

- 9) Pic. 16 shows the complete threaded waist webbing. Repeat procedure 7) through 9) for the other side.



**Pic. 16.**

- 10) To assemble the belt buckle, thread the left webbing (when wearing the BCD) through the buckle's slots as the picture shown below (Pic. 15 & 16).



**Pic. 17.**



**Pic. 18.**





### Harness adjustments

After putting the back plate and harness together, adjustments will have to be made to suit your unique body shape and diving requirements. Here are some helpful guidelines for you to follow:

- It is a good idea to put on the exposure suit intended to be used with the BCD so the best adjustment can be achieved.
- Adjusting the height of the back plate: After putting the harness on, you should be able to touch the top of the back plate with your finger tips.
- The shoulder straps should fit as snugly as possible but not overly tight so that donning or doffing becomes difficult. Adjust strap length so there is just enough room for 2 fingers to pass through between the chest and the strap.
- The waist straps secure the lower portion of the harness to your torso. It should be tight but not uncomfortable. Excess webbing should be trimmed off and the loose threads burnt off with a lighter. You can leave the webbing slightly longer than needed as adjustments may be necessary due to a change in the thickness of the exposure suit used / body shape.
- Chest D-rings: For the basic harness, the bent D-rings should be located approximately mid way between the collar bone and the most pronounced part of the chest. For the deluxe harness, adjust the height of the top pair so they are approximately mid way between the collar bone and the most pronounced part of the chest.
- Waist D-rings: They should be placed at the widest points of the waist.
- Crotch strap length: It should be long enough to stop the back plate from moving upward but not too short that it becomes uncomfortable. Trim off the excess and burn off any loose fibre with a lighter to prevent fraying.



Please pay extra precaution when using fire.

- Crotch strap back D-ring: It should be on or just above the tailbone.

### MAINTENANCE AND STORAGE

- Do not drag this component across sharp or coarse surface.
- Do not place any sharp and / or heavy object on any part of this component.
- Do not expose it to the sun while not diving.
- Immediately after a dive, rinse this component with fresh water as soon as possible. Air dry (in the shade) **completely** before putting it away.
- Store in a cool, shaded place.

### WARRANTY



The use of non-factory parts or any modification may irreparably damage this BCD component and its parts which will render the warranty void and can lead to unsafe diving.

The warranty of this technical BCD component is valid to the original owner only (with proof of purchase) AND it covers any defects in materials and / or workmanship for the period of 2 **years** from the date of purchase. Proper maintenance as prescribed in this manual is required to uphold the warranty during the valid coverage. Any wear and tear under normal usage, as well as any commercial / rental usage, are not covered by this warranty. The following action will also void the warranty: any incorrect use or misuse – intentional or unintentional or any modification of this BCD component.

If a problem has developed with this product, please contact your nearest IST authorised dealer or IST distributor for return authorisation. Please properly package this product and send with your proof of purchase and postage prepaid. We reserve the right to service any non-authorised returns.

### PURCHASE RECORD

Date of purchase	(dd) / (mm) / (yy)
Dealership & contact information	(Dealer's stamp)
Purchaser & contact info:	