



NO LIMIT

**BC MANUAL**

Read and understand the owner's guide completely before diving with any Hollis BCD.

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## **PATENT NOTICE**

U.S. Patents have been issued, or applied for, to protect the following design features: Backpack Systems (U.S. Patent No. 5,378,084, Gas Impermeable Laminate (U.S. Patent No. 5,693,412), Harness Buckle (U.S. Patent No. D409,114), Weight Drop System (U.S. Patent No. 5,218,745), Soft Backpack (U.S. Patent No. 4,952,095), and Compensating Waistband (U.S. Patent No. 4,732,305. Other patents pending.

## **HOLLIS AUTHORIZED EUROPEAN MARKET REPRESENTATIVE:**

Huish Outdoors LLC (BARE Sports)  
Factory BLB019C, Bulebel Ind Estate  
Zejtun, ZTN 3000 Malta

**FOR MODELS C60 LX WING, ELITE 2  
HARNESS, HD-200, HTS 2, LTS, S38 LX,  
SMS KATANA, SMS 75, SOLO HARNESS -  
EU TYPE EXAMINATION CONDUCTED**

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KATANA2 - EU TYPE EXAMINATION  
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**CE CERTIFICATION**

All Buoyancy Control Devices sold by Hollis in the EU (European Union) meet the following Personal Protective Equipment requirements, and compliance with the following where applicable:

EN 1809:2014+A1:2016 - Buoyancy  
Compensator

Regulation (EU) 2016/425 of the European  
Parliament and of the Council of 9 March

2016 on personal protective equipment and  
repealing Council Directive 89/686/EEC.

Directive 93/68/EEC (CE Marking)

Where applicable:

EN250:2014 - Respiratory equipment - Open-  
circuit self-contained compressed air diving  
apparatus.

Declaration of Conformity – [www.  
huishoutdoors.com/eu-declarations/](http://www.huishoutdoors.com/eu-declarations/)

**WARRANTY REGISTRATION**

Please take a moment to locate, complete  
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## PRECAUTIONS AND SAFETY INFORMATION

This section contains information that may affect your safety. Please read it completely before attempting to use the product. If you do not understand this information, contact your Hollis Dealer for clarification or more information.

There are warning messages throughout this manual that require your attention to understand and avoid certain conditions that may be hazardous to you. Use of these symbols indicates the following:

### WARNINGS, CAUTIONS AND NOTES



**WARNING:** Indicates situation that may, if not avoided or not corrected, result in serious injury or death.



**CAUTION:** Indicates situation that may, if not avoided or not corrected, result in minor or moderate injury or significant damage to the product.

**NOTE:** Used to direct attention to emphasize an important detail.



#### **WARNING: VENTING GAS IN A HEADS UP POSITION**

Design of wings used on backplates generally include two dump assemblies, with one found on the top of the wing and one at the diver's waist. Diving horizontally allows use of either to vent gas, which we always recommend as a safe diving practice. However if in a heads up position especially when ascending, please take note to vent gas requires use of the manual dump found on the power inflator. As with any BCD there is a risk of excessive gas buildup while ascending. Be sure to follow your dive training to control your buoyancy and ascent rate.



## WARNING

- Hollis BCD's are intended for use by divers who have successfully completed a nationally recognized course in scuba diving.
- As with all underwater life support equipment, improper use or misuse of this product can cause serious injury or death.
- Improper use of the oral inflation/deflation or dump valve assemblies may allow water to enter the BCD resulting in a subsequent reduction in buoyancy. Loss of buoyancy control could result in serious injury or death.
- Hollis BCD's are designed for operating temperatures between 1° and 40° C.
- Hollis BCD's ARE NOT life jackets; They do not guarantee a head up position of the wearer at the surface.
- Prior to each dive, inspect and test your BCD for proper operation. If any part does not function properly, DO NOT USE!
- DO NOT inhale gases from within any Hollis BCD. Doing so can lead to serious injury or death.
- If you do not fully understand how to use your Hollis BCD product, or if you have any questions regarding its functions, you should seek instruction in its use from your authorized Hollis dealer before you utilize this product.
- Have your Hollis equipment inspected and serviced annually or any time you have any concern about your equipment's function or condition by an authorized Hollis dealer.
- Any questions or concerns may be directed towards your local Hollis dealer. Alternately, you may contact one of our technical support representatives. Contact details are on page 2.
- It is the diver's responsibility to assure that fully configured, ready to dive systems are able to achieve positive buoyancy at the beginning and end of any dive. Select a BCD product with adequate lift for the equipment being used.

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# INTRODUCTION

## ASSESSMENT OF RISK

Hollis BCD's are designed and intended for use by divers who have successfully completed a nationally recognized course in scuba diving. Hollis equipment must NOT be used by untrained persons who may not have knowledge of the potential risks and hazards of scuba diving. As with all underwater life support equipment, improper use or misuse of this product can cause serious injury or death.

## SPECIFICATIONS

	Lift	Ditchable Weight	Non-Ditchable Weight	Maximum Tank Size
<b>LTS</b>				
Small	30lb/13.6kg	10lb/9.07	None	Single 12L
Medium	30lb/13.6kg	10lb/9.07	None	Single 12L
Large	30lb/13.6kg	10lb/9.07	None	Single 12L
X-Large	30lb/13.6kg	10lb/9.07	None	Single 12L

*Specifications continued on next page>*

## SPECIFICATIONS CONTINUED

	Lift	Ditchable Weight	Non-Ditchable Weight	Maximum Tank Size
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### ENVIRO-PRO

Small	40lb/18.1kg	24lb/10.9kg	None	Single 15L
Medium	40lb/18.1kg	24lb/10.9kg	None	Single 15L
Large	40lb/18.1kg	24lb/10.9kg	None	Single 15L
X-Large	40lb/18.1kg	24lb/10.9kg	None	Single 15L

### HD-200

Small	34lb/15.4kg	20lb/9kg	10lb/4.5kg	Single 15L
Medium	36lb/16.3kg	20lb/9kg	10lb/4.5kg	Single 15L
Large	38lb/17.2kg	20lb/9kg	10lb/4.5kg	Single 15L
X-Large	38lb/17.2kg	20lb/9kg	10lb/4.5kg	Single 15L

### REDS

	24lb/10.8kg	NA	None	
--	-------------	----	------	--

## CARE AND MAINTENANCE

Your Hollis BCD is a reliable piece of equipment that was designed to withstand the rigors of diving. It will last for many years if cared for properly. Follow the procedures on the next page to ensure a long life for your BCD. You should have the entire BCD inspected and serviced annually by an authorized Hollis dealer to ensure it is operating properly and no components are showing signs of wear.



## PRE DIVE CHECKS

Before each dive check to make sure your equipment is working properly. If any piece of equipment is not working properly, **DO NOT USE!** If damaged, return to your authorized Hollis dealer for repair.

- Under pressure, attach the low pressure inflator hose to the inflator and depress the inflator button to make sure it is working properly.
- Check for leaks at the connection of the inflator.
- Check oral inflation/deflation button is working properly.
- Fill the BCD system with air and check to make sure there are no leaks in the bladder.
- Check all dump valves to ensure air is not leaking in the closed position and that the air can be easily dumped.

## POST DIVE CARE

To keep your BCD in top condition, follow these procedures, in sequence, after each day of diving:

- Fill the BCD one third full of fresh water through the inflator mouthpiece.
- Inflate fully, then rotate and shake, ensuring a complete internal rinse.
- Hold upside down and completely drain the water through the mouthpiece.
- Thoroughly rinse the outside of the BCD with fresh water.
- Store partially inflated out of direct sunlight in a cool dry place.
- Periodically add BCD disinfectant or Steramine™ (available in dive stores) to rinse water to kill any bacterial growth.
- Transport your BCD in a padded carrying case or equipment bag, separated from sharp items (e.g., dive knife, spear gun, etc.) that might puncture the bladder.
- You should also protect the inflation system from damage due to heavy objects (e.g., dive light, weights, first stage, etc.).

# ADJUSTMENTS

Most Hollis BCD's do not require any assembly, but there are adjustments and items that can be removed or added to your Hollis BCD to customize it for best fit.

## CUMMERBUND ASSEMBLY

If your Hollis BCD product comes equipped with an adjustable cummerbund, you can access the cummerbund for adjustment by removing the top of the back pad that is attached to the harness with an elastic loop (**Fig. 1**). This will expose the cummerbund ends. To adjust, pull the cummerbund out of the harness sleeve, and undo the self gripping fastener of the cummerbund (**Fig. 2, 3**). Reposition to the desired length and reattach the self gripping fastener to secure (**Fig. 4**). Weave the cummerbund back through the harness sleeve (**Fig. 5**). Repeat with the opposite side of the cummerbund. Then replace the backpad.



Fig. 1

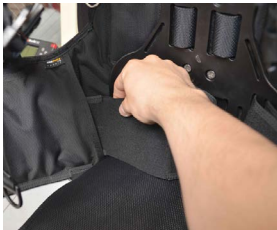


Fig. 2



Fig. 3



**Fig. 4**



**Fig. 5**

## **STERNUM STRAP**

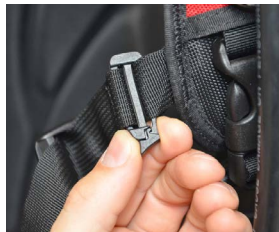
For Hollis BCD's equipped with sternum straps, the position of the strap is adjustable. It can be installed in one of multiple positions or simply removed to suit diver preference (**Fig. 6, 7, 8**).



**Fig. 6**



**Fig. 7**



**Fig. 8**

## WAIST BUCKLE

Insert the waist buckle on the left side of the waist webbing. See pictures for recommended buckle weave (Fig. 9). When at the desired length, pull the remaining webbing through the first slot and tighten (Fig. 10).



Fig. 9

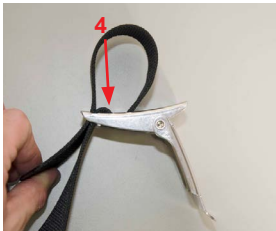


Fig. 10

**NOTE:** Excess waist strap material may be trimmed. To prevent fraying, use a lighter burn the edge of trimmed webbing.



**CAUTION:** Molten Nylon can cause significant burns if it comes in contact with skin. Use precaution whenever using heat to seal nylon webbing.

## CROTCH STRAP

For Hollis BCD's equipped with crotch straps: Take the side of the crotch strap that is not looped in hand. Insert the belt slide, leaving about 8 in (20.3 cm) of webbing between the belt slide and the end of the webbing (**Fig. 11**). Then weave the webbing through the D-ring attached to the bottom center portion of the harness and back through the belt slide (**Fig. 12**). This is where adjustment to the crotch strap will be made. The looped end will thread onto the waist strap (**Fig. 13**). Use the clip for convenience of donning and doffing gear.



Fig. 11



Fig. 12



Fig. 13

# ATTACHING A TANK

Most Jacket-style Hollis BCD's are only designed to handle a single tank and use a single cam band against a contoured hard plastic backplate that holds the tank securely (**Fig. 14**). Hollis products designed for double tanks, or having that option will be marked on the BCD's product tag. Use the attached adjustable guide strap to position the tank on the contoured backplate by placing it around the neck of the tank (**Fig. 15**).



**Fig. 14**



**Fig. 15**



**CAUTION:** Use the following steps to weave the cam band. Nylon may loosen when wet. To ensure a secure hold, soak the straps in water before tightening.

Use the following steps to weave the cam band:

- Pull the band through SS (Stainless Steel) attachment at the base of the buckle (Labeled 1) so the band is now on the outside of the buckle (**Fig. 16**).
- Now weave the band through the middle slot (Labeled 2) from outside to inside (**Fig. 17**).



**Fig. 16**



**Fig. 17**

- Now weave the band through the bottom slot (Labeled 3) of the buckle so the band is against the tank (**Fig. 18, 19**).
- Pull the band tight to make sure there is no slack around the tank or in the buckle weave (**Fig. 20**).



**Fig. 18**



**Fig. 19**



**Fig. 20**

- With the band tight, weave the band through the top slot (Labeled 4) of the buckle from inside to outside (**Fig. 21**). Pull tight and fold the buckle over so it snaps against the tank (**Fig. 22, 23**). Now attach remaining webbing to the webbing against the tank using the self gripping patch (**Fig. 24**).



**Fig. 21**



**Fig. 22**



**Fig. 23**



**Fig. 24**



# INFLATOR AND DUMP VALVE USE



- W** LP Hose Connector
- X** Power Inflator Button
- Y** Mouthpiece
- Z** Deflate / (Manual Inflate) Button

Working Pressures: min = 120 psi (8 Bar), nominal = 140 psi (9 Bar),  
max = 160 psi (11 Bar)

**NOTE** Install the inflator hose to your regulator per your regulator's instructions, or have an authorized technician attach the LP hose to the regulator first stage.

## MANUAL INFLATION

To manually inflate the BCD, depress the manual inflation button and blow into the mouthpiece. Be sure to release the manual inflation button before you remove your mouth from the mouthpiece to ensure you do not lose any air through the mouthpiece. Repeat until desired buoyancy is achieved.

## POWER INFLATION

To power inflate the BCD, depress the power inflator button. This can only be achieved when the low pressure inflator hose is connected and under pressure from the regulator 1st stage. Use short bursts of air to inflate the BCD being careful not to add too much air.



## **WARNING**

**If you depress the Power Inflator fully, the BCD will inflate rapidly. Be careful not to overinflate the BCD causing an unwanted rapid rise towards the surface.**

### **DEFLATING THE BCD WITH POWER INFLATOR OR DUMP VALVE**

To deflate the BCD using the inflator, hold the inflator higher than the top of the BCD and depress the deflate button to release the air. To deflate using the dump valve, lightly pull outwards and upwards. The mouthpiece or dump valve must be at the highest point of the BCD to ensure complete deflation of the BCD. While underwater, be sure to release the deflate button or dump valve before all air is released to prevent water from entering the BCD.

### **ATTACHING THE LP (LOW PRESSURE) INFLATOR HOSE TO INFLATOR**

With the inflator hose attached to the regulator, connect the regulator to a pressurized SCUBA tank. Grasp the QD (Quick Disconnect) end of the LP inflator hose and pull back the coupling release and press it onto the connector on the inflator system and let go of the coupling. Make sure the LP hose is securely attached before pressurizing the regulator system. Pressurize the regulator system by slowly opening the tank valve. Now press the power inflator button until you hear air flowing into the BCD.

### **BUOYANCY CONTROL**

Using the inflation and deflation methods described will help you maintain neutral buoyancy throughout your dive at different depths. A diver who practices buoyancy control can hover in mid water without varying depth. Having good buoyancy control will allow a diver to shed unnecessary ballast and use less energy creating a longer, more relaxed dive.

# INTEGRATED WEIGHT SYSTEM (STYLE 1)

## LOADING WEIGHT POUCHES INTO WEIGHT POCKETS

Squeeze the tabs and pull the handle to remove the weight pouch from the pocket (**Fig. 25**). Open the flap of the weight pouch. Insert the desired weight into the pouch and secure the flap of the weight pouch with the self gripping fastener. Once the weight is secure in the pouch, insert the weight pouch into the pocket (**Fig. 26**). Adjust the pouch so that it fits securely in the pocket. Then fasten the handle to the BCD, making sure it snaps into place.



**Fig. 25**



**Fig. 26**

**WARNING**

Check the maximum weight capacity for each Weight Release Pocket and **DO NOT** attempt to overload the pockets with excess weight. Amounts that you can actually load may be less due to the type and shape of weights being used.

**DROPPING WEIGHT POUCHES FROM THE POCKET**

In an upright position, grasp the handles of both pouches (right and left). Then squeeze the release tabs while pulling the pouches completely out of the pockets. Hold the pouches out so they are clear of all of your gear, and drop them.

**WARNING**

Dropping the weights will present you with immediate positive buoyancy.

**WARNING**

Practice this technique with and without weights while out of the water. **DO NOT** use the drop handles to lift or carry the pouches. Store the weight pouches in a position that will not distort the curved shape (weights down or removed).

**WARNING**

Use of the weight drop system may not afford the diver with face up flotation, especially if the weights are loaded towards the front of the pouches.

# INTEGRATED WEIGHT SYSTEM (STYLE 2)

## LOADING WEIGHT POUCHES INTO WEIGHT POCKETS

Style 2 utilizes removable zippered weight pouches. Each pouch can be filled with hard or soft weight. Once loaded with weight, place the weight pouches inside the pockets located at the waist, as shown (Fig. 27). Then close the zippers, and ensure that the lower velcro closures are fastened closed (Fig. 28).



Fig. 27



Fig. 28

**WARNING**

The maximum weight capacity for each weight release pocket is 5 lbs (2.27 kg). Amounts that you can actually load may be less due to the type and shape of weights being used.

**WARNING**

Prevent the weight from getting hung up in the pockets by **ALWAYS** using the included zippered pouches and **NEVER** overloading the pockets.

**WARNING**

Inspect the velcro closures for wear before diving. Excessively worn velcro closures may lose their holding strength, leading to accidental weight loss during a dive.

## DROPPING WEIGHT POUCHES FROM THE POCKET

In an upright position, grasp the handles of both pockets (right and left). Then pull down on the handles, releasing the velcro tabs (**Fig. 29**). The weight pouch will slide free (**Fig. 30**).



Fig. 29



Fig. 30

# INTEGRATED WEIGHT SYSTEM (STYLE 3)

## LOADING WEIGHT POUCHES INTO LX OR LX2 WEIGHT POCKETS

Style 3 utilizes ditchable weight pouches. Each pouch can be filled with 10-12lbs of either hard or soft weights. Once loaded with weight, place the weight pouches inside the pockets located at the waist, as shown (**Fig. 27**). Then close the pouch, and ensure that the pinch and pull buckle is locked closed.

Fig. 27



**WARNING**

The maximum weight capacity for each weight release pocket is 10-12 lbs (4.55-5.45 kg). Amounts that you can actually load may be less due to the type and shape of weights being used.

**WARNING**

Prevent the weight from getting hung up in the pockets by ALWAYS using the included pouches and NEVER overloading the pockets.

**WARNING**

Inspect the pinch and pull buckles for wear before diving. Excessively worn or cracked closures may lose their holding strength, leading to accidental weight loss during dive.

#### DROPPING WEIGHT POUCHES FROM THE POCKET

To ditch weight from the pocket, pinch the buckles to release the male fitting (Fig. 29), then grasp the handles of both pockets (right and left). Pull forward on the handles, releasing the weight. The weight pouch will slide free (Fig. 30).



Fig. 29



Fig. 30



## DONNING & FITTING

Before any dive make sure that your BCD System fits properly. With your required exposure suit on, don your BCD System. Make sure it fits comfortably, but is not too tight around your shoulders, waist, and crotch (when using a crotch strap). Two fingers laying flat should fit snugly between the shoulders and webbing. Make any adjustments as necessary. Adjust the D-rings and clips to your desired position. A good starting point is a position where you can reach your chest, with your hand held flat horizontally, and holding your arm and hand parallel to the ground. Fine tune the fit as needed.

**NOTE** If you have any questions regarding your Hollis gear, visit your authorized Hollis retailer or contact Hollis Inc. and speak with one of our technical support representatives.

# HOLLIS SIDEMOUNT DIVING SYSTEMS

## SMS 75, SMS 100, SMS KATANA, SMS KATANA 2

	Lift Capacity	Maximum Tank Size
SMS100	52lb / 231 N	Single 20L / Dual 15L
SMS75	40lb / 178 N	Single 15L / Dual 12L
KATANA	35lb / 156N	Single 15L / Dual 12L
KATANA 2	40lb / 178 N	Single 15L / Dual 12L

Hollis sidemount harnesses are ideal for sidemount cave diving, but can be used for any skill level from beginner to advanced given you are at minimum a certified sidemount diver. Before using a Hollis sidemount harness we always recommend taking a recognized training course first.

All Hollis sidemount systems are suitable for side mounting twin or single cylinders. SMS100 and SMS75 can also be used to backmount a CCR, single cylinder or doubles.

## SIDEMOUNT DIVING ADVANTAGES

- Greater safety - Allows full visibility of the breathing system. The diver can perform gas checks/ management, monitor all gauges, valves and hoses without assistance.
- Reduces additional gear - backplate / double bands / hardware / manifold - benefit when travelling
- Aids in transporting gear to and from the beach or boat (two or one tank at a time). This includes exiting the water on a boat dive.

## SMS75 HARNESS SYSTEM



1. Shoulder webbing woven through wing slots - Longer length to support weights
2. Grommets for bungee attachment
3. Embroidered Hollis Logo
4. SMS Wing -40lb/18kg Lift - 360 degree wing
5. Alternate mounting points for rail system
6. Rear mounted dual offset D-ring for attaching accessories
7. Rail system used to attach sidemount cylinders
8. Grommets and bungee for attachment of canister light assembly
9. Tank bungee for holding cylinder close to the diver
10. Cam strap slots for securing a single cylinder if needed.

## SMS100 HARNESS SYSTEM



1. Shoulder Webbing woven through wing slots - Long to support shoulder weights
2. 1" D-rings on for bungee attachment – Top D-rings are preferred placement
3. Embroidered Hollis logo
4. SMS100 Wing - 52 lbs. lift - 360 Degree wing
5. Alternate mounting points for rail system
6. Rear mounted 2" D-ring for attaching accessories
7. Rail system used to attach sidemounted cylinders
8. 1" D-rings for attachment of canister light assembly
9. Tank Bungee for holding cylinder close to the diver – use top d-ring for best trim
10. Cam Strap slots for securing a single cylinder if needed

## SMS KATANA SIDEMOUNT HARNESS



1. One size fits all design.
2. Rear pull dump
3. Reversable Inflator/Dump assembly
4. Primary bungees integrated into the wing to pull tanks up and away from divers torso.
5. 35 lbs / 15.8 kg lift.
6. Padded spine / weight system cover
7. H harness designed for simplicity
8. Two 5 lbs / 2.23 kg non-ditchable weight pockets
9. One 3 lbs / 1.36 kg non-ditchable trim weight
10. Optional butt plate and storage pouch (not shown)

## SMS KATANA 2 SIDEMOUNT HARNESS



1. One size fits all harness design
2. Upper Pull dump
3. Primary adjustable tank bungees (left & right)
4. 40 lbs / 18 kg lift (Available in single or dual bladder)
5. 2" Crotch Strap
6. Interchangeable inflator retainers (left & right)
7. Rear 2" low profile d-rings for attaching accessories (ex. Spools)
8. Rails for attaching lower cylinder clips
9. Adjustable QFS "Quick Fit System" & 20 lbs / 9 Kg weight system (rear of QFS)

### USING THE WEIGHT SYTEM:

1. Lay the harness flat with the internal side facing you, reach behind the QFS backplate and open each (5lbs.) individual weight pocket by pulling on the velcro pocket flap.
2. Insert the desired weight (Not to exceed maximum 5lbs)
3. Maximum system capacity 20lbs. (4 pockets x 5lbs each)
4. Close the weight pocket with the velcro flap.
5. Make sure the pocket flap is securely closed.

**WARNING: Weight pockets are non-ditchable. For divers safety it's important to be properly weighted for each dive.**

## ATTACHING CYLINDERS TO THE SMS SIDEMOUNT HARNESS

Sidemount Cylinder Harness Kit. (Sold separately).

Kit includes the following (**Fig. 31**):

- SS Cam Bands – Qty 2
- SS Tri-Glides – Qty 2
- SS Bolt Snaps 4.5" – Qty 4
- Nylon Line (secures bolt snap to tank)

The image to the right shows how to secure the hardware properly (**Fig. 32**). The top bolt snap is considered a “safety clip” or a redundant point of attachment in addition to the bungee which wraps around the tank valve. This clip connects to the shoulder D-ring on both the left and right side of SMS harness. The lower clip is secured using the cam band and tri-glide. It then connects to the appropriate rail on the butt plate. Cam bands on both tanks should be roughly  $\frac{3}{4}$  the way down the tank as shown in the image.

**NOTE** The lower bolt snap should be configured with the knot facing towards the top of the cylinder as shown. This is to provide additional security, preventing the knot from pulling out of the tri-glide and 2" webbing.

**NOTE** This is only a suggestion on how to configure your Sidemount Harness Regulator Kit. There are other configurations that you may find better suit your diving preference.



**Fig. 31**



**Fig. 32**

## FINAL CONFIGURATION

Your Katana Sidemount Harness comes pre-assembled which makes final configuration much easier.

The last step is the adjustment of the harness is to ensure proper fit when donning the harness. First tighten the waist strap. This will help the following steps pull the harness tight against the body. Next, secure the sternum strap to its appropriate length.

**NOTE Tighten the sternum strap just enough to keep the shoulder straps straight over the shoulder. DO NOT over-tighten which causes the straps to pull towards middle.**

Finally, adjust the shoulder webbing. This should provide a firm and comfortable fit. You may need to give the sternum strap one final tug once complete.

The wing retention system or “bungee” is used to keep the wing streamlined when not fully inflated. It pulls the excess material in while still allowing full inflation. The bungee can be trimmed to the desired length. However use caution as you may need this additional bungee length at a later date. Once trimmed it can not be replaced without replacing the whole strap.

**NOTE Over-tightening will reduce the amount of lift in the wing.**

Although preparation will take a small time investment, once you have completed the configuration steps (rigging the tanks, attaching the cylinders, and adjusting the harness properly) your in water profile should look something like below. Trim is horizontal and streamlined.

**NOTE Cam band more towards the rear or bottom of tank = Feet down / Cam band more towards the front or top of tank = head down**



# HOLLIS BCD WINGS (PRE-2021)

C60LX, C45LX, S38LX, S25LX

	Lift Capacity	Maximum Tank Size
C60LX	60lb / 27.2kg	Single 20L / Dual 15L
C45LX	45lb / 20.4kg	Single 15L / Dual 12L
S38LX	38lb / 17.2kg	Single 15L
S25LX	25lb / 11.3kg	Single 12L



# HOLLIS BCD WINGS (2021 MODELS)

ST22, ST35, DT45 DUAL, DT50

	Lift Capacity	Maximum Tank Size
ST 22	22lb / 10kg	Single 12L
ST 35	35lb / 15.9kg	Single 15L
DT 45 DUAL	43lb / 19.5kg	Single 15L / Dual 12L
DT 50	20lb / 22.7kg	Single 20L / Dual 15L

ST 22



ST 35



DT 45 Dual



DT 50



# INFLATOR AND DUMP VALVE USE



- W** LP Hose Connector
- X** Power Inflator Button
- Y** Mouthpiece
- Z** Deflate / (Manual Inflate) Button

Working Pressures: min = 120 psi (8 Bar), nominal = 140 psi (9 Bar),  
max = 160 psi (11 Bar)

**NOTE** Install the inflator hose to your regulator per your regulator's instructions, or have an authorized technician attach the LP hose to the regulator first stage.

## MANUAL INFLATION

To manually inflate the bladder, depress the manual inflation button and blow into the mouthpiece. Be sure to release the manual inflation button before you remove your mouth from the mouthpiece to ensure you do not lose any air through the mouthpiece. Repeat until desired buoyancy is achieved.

## POWER INFLATION

To power inflate the bladder, depress the power inflator button. This can only be achieved when the low pressure inflator hose is connected and under pressure from the regulator 1st stage. Use short bursts of air to inflate the bladder being careful not to add too much air.



## **WARNING**

**If you depress the Power Inflator fully, the bladder will inflate rapidly. Be careful not to overinflate the BCD causing an unwanted rapid rise towards the surface.**

## **DEFLATING THE BLADDER WITH POWER INFLATOR OR DUMP VALVE**

To deflate the bladder using the inflator, hold the inflator higher than the top of the bladder and depress the deflate button to release the air. To deflate using the dump valve, lightly pull the knob outwards and upwards. For the corrugated hose dump, simply pull on the inflator end of the hose. In all methods the vent must be at the highest point of the bladder to ensure complete deflation of the bladder. While underwater, be sure to release the deflate button or dump valve before all air is released, to prevent water from entering the bladder.

## **ATTACHING THE LP (LOW PRESSURE) INFLATOR HOSE TO BLADDER**

With the inflator hose attached to the regulator, connect the regulator to a pressurized SCUBA tank. Grasp the QD (Quick Disconnect) end of the LP inflator hose and pull back the coupling release and press it onto the connector on the inflator system. Make sure the LP hose is securely attached before pressurizing the regulator system. Pressurize the regulator system by slowly opening the tank valve. Now press the power inflator button until you hear air flowing into the bladder.

## **BUOYANCY CONTROL**

Using the inflation and deflation methods described will help you maintain neutral buoyancy throughout your dive at different depths. A diver who practices buoyancy control can hover in mid water without varying depth. Having good buoyancy control will allow a diver to shed unnecessary lead weight and use less energy creating a longer, more relaxed dive.



## **WARNING**

**If you are using a dual bladder wing, be sure to note primary bladder and OPV (Diver's side) versus the dual or "backup" bladder and OPV. You never want to operate both at the same time as this can result in trapped gas, uncontrolled ascent and/or loss of buoyancy underwater.**

## HOLLIS BACKPLATES ASSEMBLY

## SOLO HARNESS ASSEMBLY



## SOLO HARNESS PARTS



Note: Backplate not included

## SHOULDER STRAPS ASSEMBLY

Insert main harness webbing through top slot of plate that would be on your right shoulder. Make sure the grommet is in front of the plate with about 6 inches (15.2 cm) of webbing between the grommet and the front of the plate (**Fig. 33**). Now insert the grommet side of the webbing back through the angled slot, next to the top slot, and pull the webbing through. The grommet will now be on the back side of the plate (**Fig. 34**). Pull the webbing across the back of the plate, and insert the webbing through the angled slot on the opposite side of the plate. Adjust the webbing so the grommet is centered with the bolt hole in the plate (**Fig. 35**). Now, from the front, pull the webbing back through the top slot so the webbing mirrors itself on both shoulders (**Fig. 36**). Place the plate so that the front is facing forward and bring the webbing to the front (**Fig. 37**).



**Fig. 33**



**Fig. 34**



**Fig. 35**



**Fig. 36**



**Fig. 37**

## SHOULDER PADS

Make sure when installing the shoulder pads that they curve away from the center of the backplate; they will then wrap naturally around your body. Each pad has 3 elastic slots that the webbing must weave through (**Fig. 38**). Between the elastic slots are 2 spaces for included D-rings. Slide the pad on to the harness webbing to where you feel it will sit best on your shoulder and insert D-rings with belt slides between each elastic slot to hold the shoulder pad in place (**Fig. 39**). Choose one of the left shoulder D-rings and sliders to attach the black bungee loop. The loop will be used to retain the corrugated BCD hose when diving. Pads can be adjusted later when the harness is complete. Repeat the same process on the opposite shoulder (**Fig. 40**).



**Fig. 38**



**Fig. 39**



**Fig. 40**



## WAIST STRAPS

Making sure the shoulder straps contour in and around the body, pull the webbing through the lower inside slots on both sides. Insert webbing through a metal keeper on the backside of the backplate and then back through the lower outside slot. The webbing should now be on the front side of the plate, as shown (**Fig. 41**). Adjust the webbing so there is enough slack in the shoulder area to don and doff the harness. Additional adjustments can be made when the harness is complete. If desired, included D-rings can be inserted on either side of the harness waist strap (**Fig. 42 & 43**). D-rings can be adjusted to any position on the waist webbing as desired.



**Fig. 41**



**Fig. 42**



**Fig. 43**

**NOTE** Locking the harness adjustment in place will require adding a 2" tri-glide behind the backplate, where the harness weaves through the waist slots. This will also make quick adjustments not possible while wearing the backplate/harness.

## CROTCH STRAP

Take the side of the crotch strap that is not looped; secure a D-Ring with a belt slide. Leave about 8 inches (20.3 cm) of webbing between the slide and the end of the webbing. Then weave webbing through the backplate from the back side (**Fig. 44**). Use the larger slot at the center of the backplate's bottom and weave the webbing back through the belt slide

(**Fig. 45**). This is where adjustment to the crotch strap will be made. The looped end will thread onto the waist strap. When adjusted properly the D-ring should be spaced approximately one hand width from the backplate, facing the backside, and secured with a belt slide (**Fig. 46**).

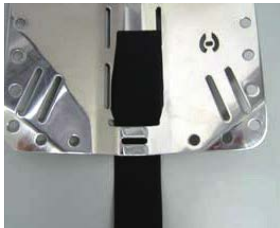


Fig. 44



Fig. 45



Fig. 46

## WAIST BUCKLE

Insert the waist buckle on the left side of the waist webbing. See pictures for recommended buckle weave. Weave (**Fig. 47**).

When at the desired length pull the remaining webbing through the first slot and tighten (**Fig. 48**).



Fig. 47

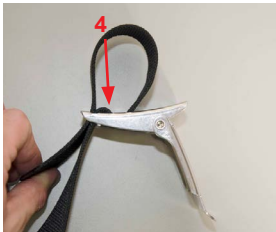


Fig. 48

**NOTE** Excess waist strap material may be trimmed. To prevent fraying, use a lighter to burn the edge of trimmed webbing.

# ELITE 2 HARNESS ASSEMBLY

## ELITE 2 HARNESS PARTS



WAIST/LOWER SHOULDER  
ASSEMBLY



UPPER SHOULDER  
ASSEMBLY



CROTCH STRAP ASSEMBLY

## WAIST STRAP

The Elite 2 comes with two lengths of 2 inch (5.1 cm) nylon webbing straps. Use the shorter of the two to construct the waist strap assembly. Working from the backside of the backplate, run the 2 inch (5.1 cm) nylon webbing through the waist slots on the backplate as shown (Fig. 49, 50).

**NOTE** Threading the waist strap in front of the backplate is necessary to accommodate cam bands for single tanks. Next run the shoulder strap plate through the waist strap as shown (Fig. 51). Repeat on the other side. Install the belt slide and D-ring, one on each side, as shown (Fig. 52, 53).



Fig. 49

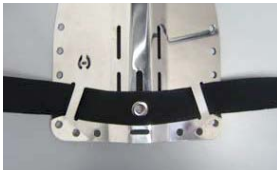


Fig. 50



Fig. 51



Fig. 52



Fig. 53

## UPPER SHOULDER STRAP

With the longer of the two lengths of webbing provided with the Elite 2, weave the strap as follows. From the back side of your backplate insert the webbing as shown (**Fig. 54, 55, 56**).



**Fig. 54**



**Fig. 55**



**Fig. 56**

On the left side weave the shoulder pad with the 2 inch (5.1 cm) webbing panel at the top as shown in (**Fig. 57, 58**). Next weave through a belt slide and then through the panel on the epaulette (**Fig. 59**).

Weave a belt slide and bent D-Ring as shown (**Fig. 60**). Then weave under the 1 inch (2.5 cm) panel (**Fig. 61**). Next weave another belt slide and bent D-Ring onto the webbing (**Fig. 62, 63**).



**Fig. 57**



**Fig. 58**



**Fig. 59**



Fig. 60



Fig. 61



Fig. 62



Fig. 63

Take one of the two D-Rings with the webbing leads and clips attached and weave the webbing as shown (**Fig. 64**). Make sure the larger female clip faces down. The sternum strap (lead with the smaller clip) should face inward toward the center chest (**Fig. 64, 66**). Weave the webbing back through the 3 belt slides (**Fig. 65**). The left side shoulder strap should now look like the photo (**Fig. 66**). Repeat the steps to install the shoulder strap on the right hand side.



Fig. 64



Fig. 65



Fig. 66

## CROTCH STRAP

Take the side of the crotch strap that is not looped; secure a D-Ring with a belt slide leaving about 8 inches (20.3 cm) of webbing between the slide and the end of the webbing. Then weave webbing through the backplate from the back side (**Fig. 67**). Use the larger slot at the center of the backplate's bottom and weave the webbing back through the belt slide

(**Fig. 68**). This is where adjustments to the crotch strap will be made. The looped end will thread onto the waist strap. When adjusted properly the D-ring should be spaced approximately one hand width from the backplate, facing the backside, and secured with a belt slide (**Fig. 69**).



Fig. 67



Fig. 68



Fig. 69



## WAIST BUCKLE

Insert the waist buckle on the left side of the waist webbing. See pictures for recommended buckle weave. Weave (**Fig. 70**).

When at the desired length pull the remaining webbing through the first slot and tighten (**Fig. 71**).



Fig. 70

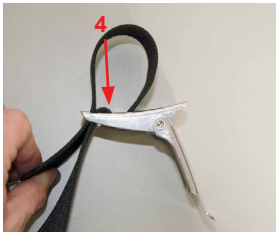


Fig. 71

### NOTE

Excess waist strap material may be trimmed. To prevent fraying, use a lighter to burn the edge of trimmed webbing.

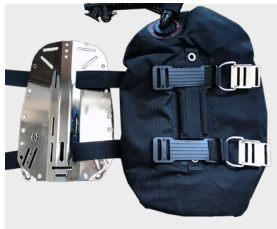
## ASSEMBLY OF BACKPLATE ONTO WING



**Fig. 72**



**Fig. 73**



**Fig. 74**



**Fig. 74**

## POST DIVE CARE

Rinse with fresh water and allow to air dry.

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