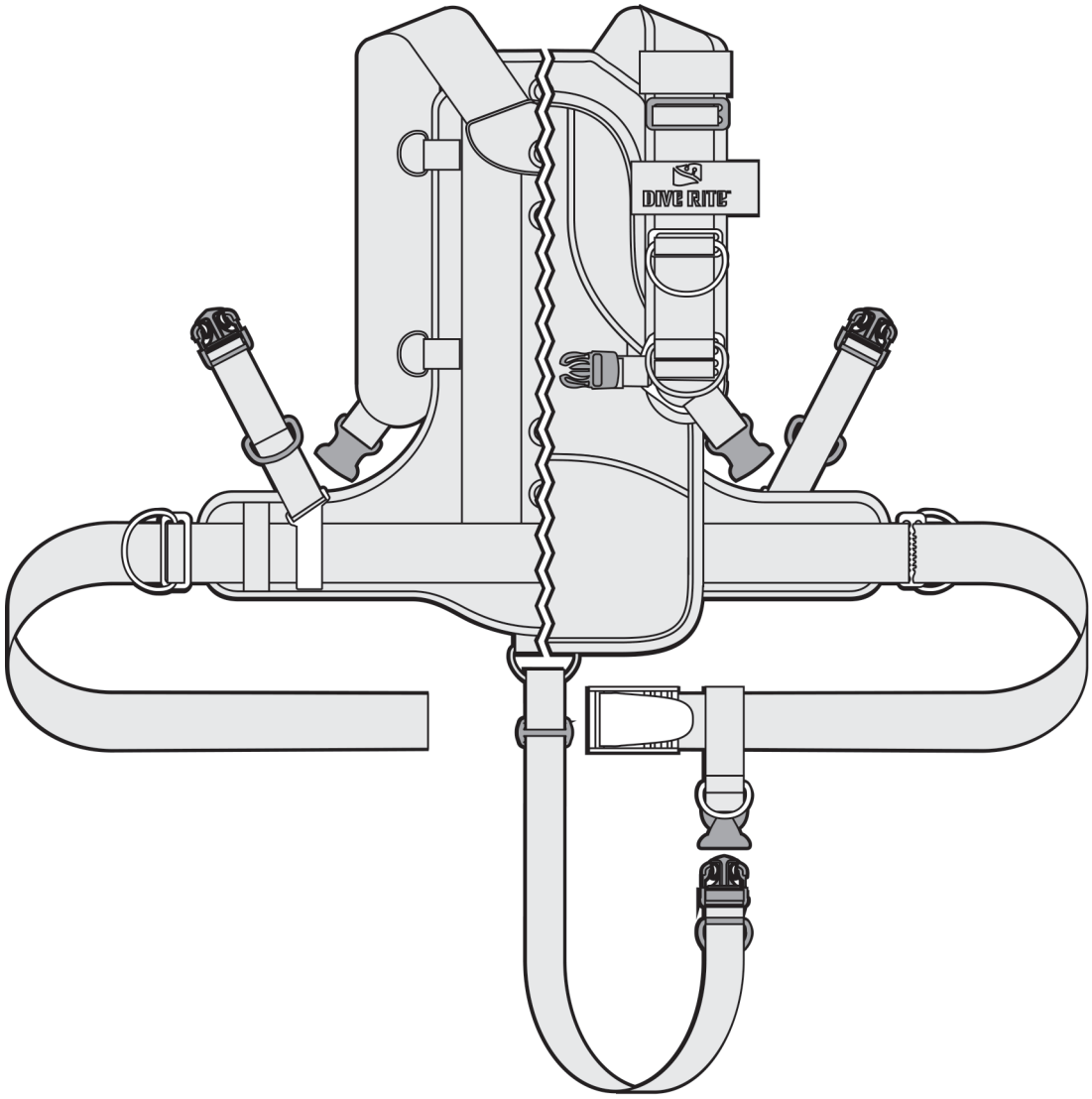
Transpac® XT Owners Manual



DIVE RITE®

Congratulations…

…on your TransPac® XT BCD harness purchase. The TransPac® XT has been designed, manufactured, and tested for the highest possible performance and reliability. With proper use and maintenance outlined in this manual it will provide you with many years of outstanding service.

Web Resources

As you read through the manual watch for pointers and helpful tips from the Dive Rite pros. To access our complete library and helpful videos at Dive Rite TV, go to *www.DiveRite.com*.

Product Updates

For product updates and new product release notifications, SIGN UP for the Dive Rite newsletter and follow us on Facebook at *www.Facebook.com/DiveRiteTechGear.*

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Contents

Important: Your TransPac® harness and air cell will each have a sewn-in label that lists both the serial number and date of manufacture. Record this information in the space provided in the back of this manual. *Do not* detach these labels, as they are essential for warranty service.

1.0 Important Warnings

⚠ WARNING

Read this manual carefully before diving with the TransPac® XT so that you thoroughly understand this user manual and all other warnings that accompany the product. Retain this manual for as long as you own your TransPac® XT. If you do not understand any part of this manual, contact Dive Rite at (386) 752-1087 or *Support@DiveRite.com*.

⚠ WARNING

Make sure you fully understand this BC's features and function, and adjust the straps correctly before diving. If in doubt, ask your authorized Dive Rite dealer for help.

⚠ WARNING

Before diving, you should have the proper training from a qualified instructor and obtain certification from a recognized training agency. Your training should include a minimum of entry-level open water scuba diver training, mastering the basic skills of buoyancy control, the use of buoyancy control devices (BCs), oral inflation of BCs, low-pressure inflation of BCs, and deflation of BCs using a variety of methods.

⚠ WARNING

This manual *is not* a substitute for diver training from a recognized diver training organization. Failure to obtain training and certification in safe diving practices can lead to serious personal injury or death.

⚠ WARNING

If you wear a weight belt with the TransPac® XT, you must fasten the crotch strap first and then put the weight belt on over it. Failure to do so may hinder your ability to release the weight belt in an emergency. This, in turn, can cause serious injury or death.

⚠ WARNING

Changes to the TransPac® XT, or use of after-market accessories, can prevent its proper function or result in damage to the TransPac® XT. This can cause serious personal injury or death.

⚠ WARNING

The TransPac® XT is NOT a United States Coast Guard approved personal flotation device (PFD). The TransPac® XT will NOT provide face-up flotation for all users and conditions.

⚠ WARNING

The TransPac® XT should not be used as the sole form of flotation; divers should have additional forms of flotation, such as wet suits or dry suits, to provide buoyancy in case they need to abandon the TransPac® XT or it malfunctions.

⚠ WARNING

The TransPac® XT is not a lift bag. Attempting to use it as such places a diver at extreme risk for dangerous, uncontrolled ascent.

⚠ WARNING

This BC is not a breathing device. *Never breathe from the BC.* Your BC may contain gas residue, liquid, or contamination that may result in serious personal injury or death if inhaled.

⚠ WARNING

In accordance with European standards, Dive Rite BCs can only be considered certified where all components are present, as per the original Dive Rite configuration. Any variation of the original configuration invalidates conformity to European certification standards.

2.0 CE Certification

The PPE (Personal Protection Equipment) mentioned in this manual was tested and certified according to 89/686/EEC Directive, for a maximum depth of 50 meters (150 feet) by ITALCERT, Viale Sarca 336, 20126 Milano-Italy, Notified Body No. 0426. The device is in compliance with the EN 250 (PPE of category III in accordance with 89/686/EEC Directive) and EN 1809 (PPE of category II in accordance with 89/686/EEC Directive) and it is not a lifejacket; it does not guarantee a head-up position of the wearer on the surface. CE0426 is the conformity marking according to 89/686/CDD Directive. The number 0426 identifies the Notified Body ITALCERT for the controls on the product according to Article 11A of the 89/686/CDD Directive (only for PPEs of III category).

2.1 EN 250: 2000 norm regulations and what they mean

The requirements and tests defined by the EN 250: 2000 standard aim to ensure a minimum safety level for the operation of underwater breathing equipment. In Europe, the EN 250: 2000 norm defines the minimum technical standards of acceptance for recreational diving regulators. All Dive Rite regulators have successfully passed the certification test required by this regulation.

2.2 Definition of SCUBA according to EN 250: 2000

This regulation defines a SCUBA unit as a self-contained open-circuit underwater breathing apparatus. A SCUBA unit can be composed of component groups. During use, the minimum required component groups are elements a) to e) of the following list:

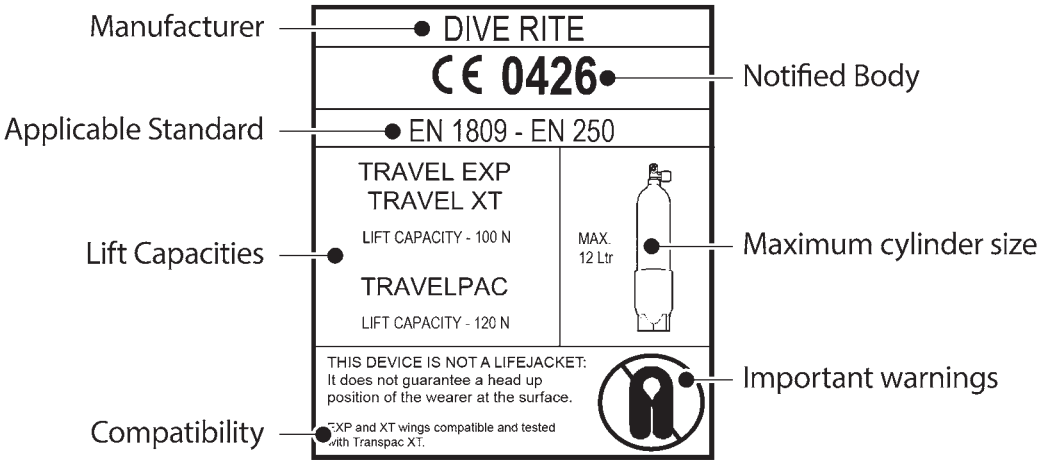
a. cylinder(s) with valve(s);
b. demand regulator(s);
c. safety device(s);
d. face mask: complete mouthpiece or half-mask for diving or complete mask;
e. carrying system.

2.3 Limitations Provided by EN 250: 2000

The SCUBA unit can be comprised of separate components such as: cylinder(s), regulator(s), pressure gauge. The Dive Rite BCs described in this manual can be used with SCUBA components units certified according to directive 89/686/EEC and EN 250: 2000 norm. The air contained in the cylinder must comply with the requirements for breathable air defined by EN 12021 norm. The maximum operating depth is 50 meters (164 ft.) however divers must conform to the limits set by local regulations in force at the diving location.

3.0 Important Precautions Relating to CE Certification

- Use this equipment according to the instructions contained in this manual and only after having completely read and understood all instructions and warnings.
- Use of this equipment is limited to the uses described in this manual or for applications approved in writing by Dive Rite.
- Cylinders must only be filled with atmospheric compressed air, according to the EN 12021 norm. Should moisture be present in the cylinder, beside causing corrosion of the cylinder, it may cause freezing and subsequent malfunction of the equipment during dives carried
- In temperatures lower than 10° C/50° F, cylinders must be transported according to local rules provided for the transport of dangerous goods. Cylinder use is subjected to the laws regulating the use of gases and compressed air.



Every Dive Rite BC harness, air cell or BC/air cell combination comes with a CE label like this

- This equipment must be serviced by qualified personnel at the prescribed intervals. Repairs and maintenance must be carried out by an Authorized Dive Rite Dealer service facility and with the exclusive use of original Dive Rite parts.
- Dive Rite equipment must be serviced at recommended intervals by a qualified technician. Failure to service Dive Rite equipment at recommended intervals or by untrained individuals will void the warranty and can lead to serious injury or death.
- Any components replaced on a Dive Rite product must be replaced with genuine Dive Rite parts.
- Use of Dive Rite equipment for purposes other than their intended use can lead to serious injury or death.
- The content of this manual is based upon the latest information available at the time of going to print. Dive Rite reserves the right to make changes at any time.
- All dives must be planned and carried out so that at the end of the dive the diver will still have a reasonable reserve of air for emergency use. The suggested amount is generally no less than 50 bar/725 psi.

Dive Rite refuses all responsibility for damages caused by non-compliance with the instructions contained in this manual. These instructions do not extend the warranty or the responsibilities stated by Dive Rite terms of sales and delivery.

⚠ WARNING

Always perform a pre-dive and post-dive inspection of the BC.

4.0 General Information

A BC harness and air cell can serve many functions. Chief among them:

- The harness serves as the primary attachment point for single or double cylinders, as well as the optional integrated weight system and other accessories.
- The air cell and low-pressure inflator can be used to help offset buoyancy loss due to wet suit or dry suit compression. Given an air cell of sufficient size, it can also be used to offset the weight of double cylinders, if the weight of the cylinders alone is sufficient to make the diver negatively buoyant without any additional lead weight. The air cell *is not*, however, intended to compensate for intentional overweighting.
- The air cell can also be used to facilitate resting or swimming at the surface. It *is not* intended to substitute, however, for overweighting or failure to have reserve buoyancy in the form of a wet suit or dry suit.

5.0 Harness/Air Cell Features

Among Dive Rite's signature products, the TransPac® XT leads the way in comfort and durability. Developed by Dive Rite CEO, Lamar Hires, the TransPac® XT design was born from expeditions in the remote karst region of Japan. The TransPac® XT uses a true mountaineer backpack design with integrated hip pads, molded foam lumbar support pad, and ergonomic shoulder pads. The TransPac® XT is available in sizes XS-XXL, and is also available in sizes specifically for women.

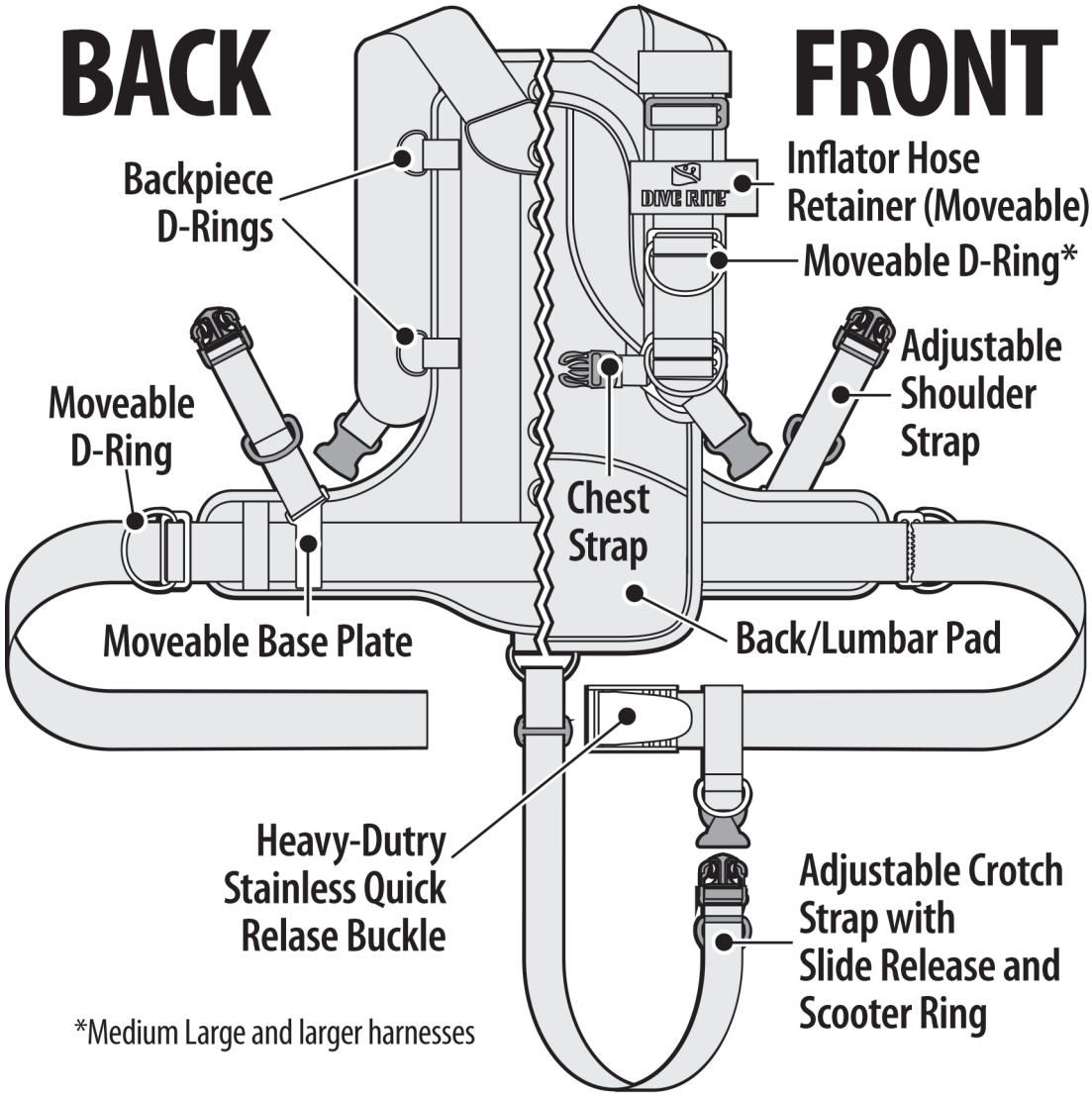


Figure 5a: TransPac® XT harness features

- Available in sizes XS-XXL with easy customization options at the shoulder and waist plate, the TransPac® XT is designed to fit any size diver, including children.
- The TransPac® XT evenly balances weight across the hips and back distributing the weight of single or double tanks. The dual density foam hip pads hug the lower back giving critical support and cushioning. Narrow, double-foam shoulder pads fit perfectly beneath the 50 mm/2.0 in shoulder webbing to give chafe-free comfort.
- The high-tech, molded foam lumbar pad is contoured in all the right places with mesh airflow channels for instant draining topside. Chest support strap provides ultimate load distribution and when used with the removable, 38 mm/1.5 in crotch strap provides outstanding stability and comfort in the water.
- Transition plates at the shoulders allow for quick addition/deletion of hardware and finite adjustments.
- Neutrally buoyant, the TransPac® XT weighs less than 2.29 kg/5 lbs and packs flat for travel. Optional weight pockets slide easily onto the waist belt. Designed for use with any XT or EXP wing in the Dive Rite line. Made in the U.S.A.

5.1 Technical Specifications

- Soft backplate constructed of 1000 denier ballistic nylon for maximum tear and abrasion resistance
- Marine grade stainless sideplates provide custom fit and performance depending on placement at waist

- Shoulder straps feature pivot rings at chest level for load distribution and acetyl resin quick release buckles for easy doff and don
- Acetyl resin engineered plastic quick release buckles on the 50 mm/2.0 in nylon webbing rated at 3,175 kg/7,000 lbs breaking strength forms the shoulder and waist straps.
- Dual, 91 cm/36 in cam straps with lightweight marine grade stainless steel buckles
- Marine-grade, stainless steel hardware (sizes XS-M have only one set of shoulder D-rings due to space limitations)
- Crotch strap D-ring can support 25 mm/1.0 in, 38 mm/1.5 in or 50 mm/2.0 in straps. A 38 mm/1.5 in crotch strap with stainless scooter ring and slide-release buckle is standard.
- Grommet mounting holes slide over bolt kit when diving doubles. Stability plates must be used to protect harness and provide maximum security and stability.
- Made in the U.S.A.

Harness Weight

TransPac® XT harness weights are as follow:

- XS: 1.9 2kg/4.25 lbs
- SM:1 .95kg/4.25 lbs
- MD: 2.0 54 kg/4.50 lbs
- LG: 2.15 kg/4.75 lbs
- XL: 2.20 kg/4.88 lbs
- XXL: 2.23 kg/4.93 lb

Shelf life

Shelf life is seven years for a new, unused BC when deflated and stored in a sealed container or bag at typical room temperature, with no exposure to UV.

Operating Temperature Range

- Air: -20° C to +50° C/-4° F to 122° F
- Water: -2° C to +40° C/28 °F to 104° F

⚠ WARNING

Special instruction in cold water diving methods, and the specific use of this product in cold water, is required prior to cold water diving (temperatures below 10° C/50° F. This instruction is beyond the scope of this manual.

Low-Pressure Inflator Mechanism

- LP hose and Pneumatic Inflation Valve operating pressure: 6.5-13.8 bar/95-200 psi
- Low-Pressure inflator hose threads: 3/8-24 UNF
- O-Rings/Seals: EPDM, Buna/Nitrile, Silicone

5.2 Air Cells

TransPac® XT air cells are available in five different series, providing a range of lift capacities for a variety of diving applications.

- Some series, such as the Travel and Voyager, are re dedicated single cylinder air cells.

- The Classic series is intended solely for use with double cylinders.
- The CCR series is intended solely for use with rebreathers.
- The Rec series can be used with either large singles or lightweight doubles.

See comparison table for more information.

Air Cell Capacities and Recommendations

Wing Series	Rated Lift	Use With Cylinders Up To	Recommendations
Travel	100 Newtons	Single 12 Liter	Compact, lightweight; ideal for travel
Voyager	170 Newtons	Single 15 Liter	Versatile, all-around recreational air cell
Rec	100 Newtons	Single 16 Liter or Dual 12 Liter	Works with large singles or small doubles
Classic	270 Newtons	Dual 17 Liter	Ideal for large doubles, plus stages
CCR	180 Newtons	Dual 12 Liter	Optimized for CCR use

In each series, you may have a choice of fabrics and other features.

- The outer shell of EXP models are made from 1,680-denier ballistic nylon.

- The outer shell of XT models are made from Superfabric®, and are even more resistant to punctures and tears.

⚠ WARNING

This product is designed for use with gas mixtures containing no more than 40% oxygen. Use of mixtures with increased oxygen or the addition of helium or other substances may cause corrosion, deterioration, premature aging or component failure. This can result in loss of buoyancy or compromise the integrity of the BC, resulting in injury or death. Non-standard gas mixtures may also present a risk of fire or explosion. Use only mixtures containing no more than 40% oxygen.

6.0 Optional Accessories

Dive Rite XT or EXP wings are available separately or in packages with the TransPac® XT harness. Other optional accessories include:

- Dive Rite Gravity Weight Pockets or 7.25 kg/16 lb or 14.5 kg/32 lb QB Weight Pockets
- Dive Rite Bellows or Clipper Pocket
- Dive Rite Z-Knife or Trauma Shears
- Dive Rite Lift Bag or Surface Marker Tube

7.0 Sizing

For maximum comfort and best performance, your TransPac® XT must fit you properly. Your TransPac® XT should be properly sized to your stature and individual comfort. For all divers, it is easiest to start with your T-Shirt size and then adapt for your height and weight.

Men's Transpac® XT Sizing

Transpac® XT Size	T-Shirt Size	Height
M	SM/M	160-167 cm/5'3" to 5'6"*
L	L	167-180 cm/5'6" to 5'11"
XL	XL	175-188cm/5'9" to 6'2"
XXL	XXL	175 cm+/5'9"+

**Medium T-shirt but tall? Use height for Transpac® XT size.*

Women's Transpac® XT Standard Sizing

Transpac® XT Size	T-Shirt Size	Height
M	M	157-170 cm/5'2" to 5'7"
ML	L/XL	157-170 cm/5'2" to 5'7"
ML/MXL	XL/XXL	157-170 cm/5'2" to 5'7"

Women outside these ranges may need the standard backplate.

Women's Transpac® XT Standard Sizing

Transpac® XT Size	T-Shirt Size	Height
XS	XS	152-157 cm/5'0" to 5'2"
SM	SM	157-160 cm/5'2" to 5'3"

There are three primary components to the TransPac® XT:

- Backplate.
- Shoulder pads.
- Sideplates with adjustment straps.

Let's take a look at each.

7.1 Backplate

The most critical piece for proper sizing is the backplate, which is available in three sizes.

- The standard backplate is 143 cm/17 in long from the bottom of the waist belt to the top of the plate. The waist area is 24 in60 cm/ long from end-to-end of the hip pads and the length of the actual waist webbing is 182 cm/72 in total. The standard plate is used on all men's sizes from large to XXL. The plate can be easily identified with two sets of three grommets for mounting doubles or air cells.
- The medium backplate is 38 cm/15 in long from the bottom of the waist belt to the top of the plate. The waist area is 60 cm/24 in long from end-to-end of the hip pads and the length of actual waist webbing is 182 cm/72 in total. This backplate is used on standard women's sizes from medium to XL. The medium backplate has two sets of two grommets for mounting doubles or air cells.
- The petite backplate has two sets of two grommets for mounting doubles or air cells. It Is is 38 cm/15 in long from the bottom of the waist belt to the top of the plate. The waist area is 50 cm/2.0 in long from end-to-end of the hip pads and the length of actual waist webbing is 152 cm/60 in total. This plate is used for women's petite sizes XS and Small.

7.2 Shoulder Pads

Shoulder pad length determines the size of the harness. The shoulder pad terminates on the chest at the pivot point for the chest strap and sideplate straps. T-shirt size is normally a good indicator of what size shoulder pad is needed

for an optimal fit. A size change on the shoulder pads is 50 mm/2.0 in from size to size.

- For men, shoulder pads should terminate on the chest around the nipple line. If you are in between sizes, it's easy to adjust the shoulder pads by moving them forward one 25 cm/1.0 in. If you need to adjust it 50 cm/2.0 in or more you should move up a size. Remember, moving up a size is only changing the shoulder pad length.
- For women the shoulder pad should terminate just above the bust line for a proper fit.

7.3 Sideplates with Adjustment Strap

- The sideplate is on the waist belt and its positioning is very important for fit and comfort. Too far forward and you lose the hip support of the backplate, too far back and you may not have enough adjustment strap and the harness may feel too small.
- The average fit for the sideplates is to have them covered by your arms when they are by your side. This is approximately 50 cm/2.0 in behind the belt loop on the hip pads. Larger waist lines may need to shift this forward but never move it forward of where your arms are when by your side.
- All harnesses leave the factory adjusted for average fit. You may need to do some adjustments to get the most comfort and stability. For sizing questions or concerns, contact Dive Rite at 800-495-1046 or *Support@DiveRite.com*.

  Video: To understand how a TransPac® XT should fit and see the critical fitting points, go to *www.DiveRite.com/DiveRiteTV* and see our how-to videos.

8.0 Attaching Single Cylinders

You can easily attach the TransPac® XT harness to a single tank using standard stainless steel cam straps provided. The cam straps attach to the backside of the TransPac® XT and can be easily removed for cleaning or transport.

⚠ WARNING

Before each use, check the TransPac® XT's bands, straps, quick-disconnect clips and the hip pad/waist strap for wear. Have an authorized Dive Rite dealer replace worn or damaged items before use. Failure to replace worn or damaged tank buckles and bands could lead to loss of tanks or of the TransPac® XT assembly itself. This could lead to serious injury or death.

Any wing that can accommodate a single tank on a BC harness can be used with the TransPac. The wing is sandwiched between the TransPac® XT and the tank and is held in place by the cam bands. Optional plastic or stainless steel assembly screws can also be used for added security.

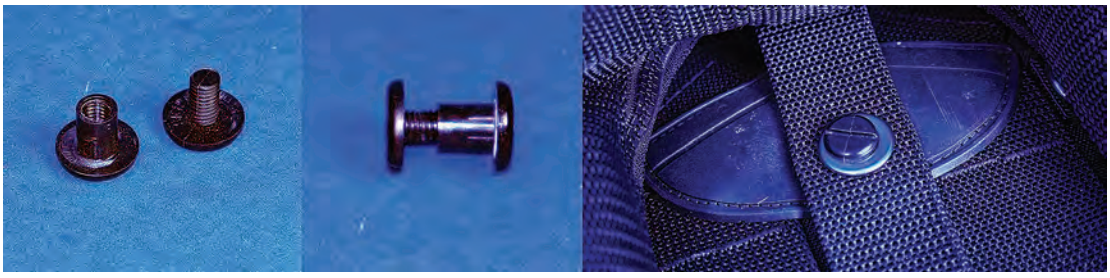


Figure 8a: TransPac® XT assembly screws

Please Note: The TransPac® XT does not require a single tank adapter and should not be sued with one.

Please Note: The Rec series wing is the largest air cell designed for use with single cylinders. In general, most users will be better off using either the Travel or Voyager series wings, as these minimize the air-cell's tendency to wrap along the sides of the cylinder, trapping air.

8.1 Attaching the Wing

⚠ WARNING

Soak the cam band in water before each use. Failure to soak the webbing may allow the cylinder strap to loosen, resulting in tank loss, injury or death.

- Unbuckle the cam straps and allow them to stretch out fully on either side of the TransPac® XT harness.
- Unweave the cam strap from the farthest cam strap webbing slot on the TransPac® XT backplate, leaving the cam straps woven under one slot only at this time.

The cam bands come with slotted traction pads,shown here.

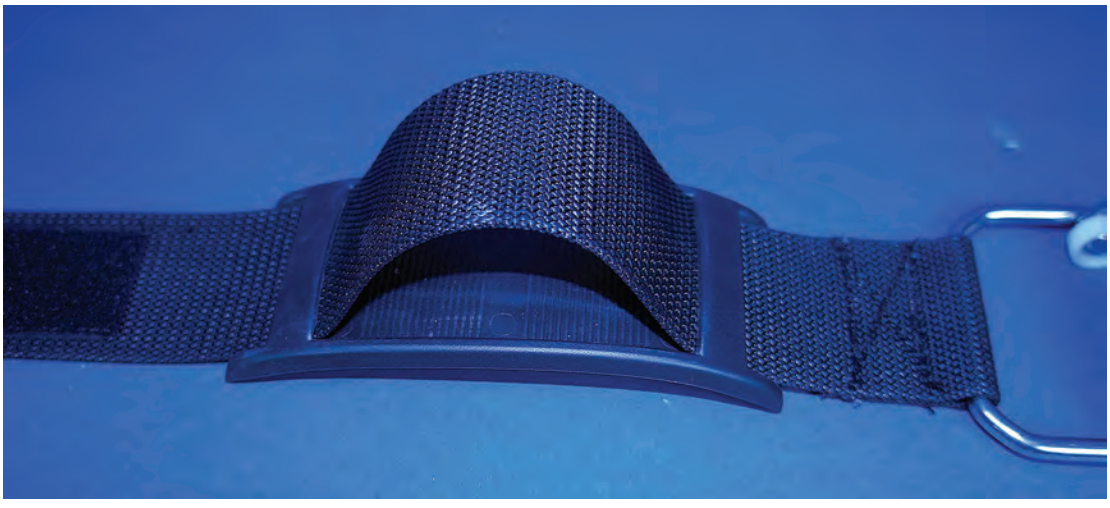


Figure 8b: Slotted traction pad

- Orient the traction pad so that the flat side will face the tank.
- Slide the non-buckle end of the cam band through *one* of the two slots, but not the other. Slide the traction pad as far as you can up the cam band so that it is almost touching the buckle assembly.

This illustration will show you how the cam bands are designed to weave through the backplate webbing while helping to keep the wing in place.

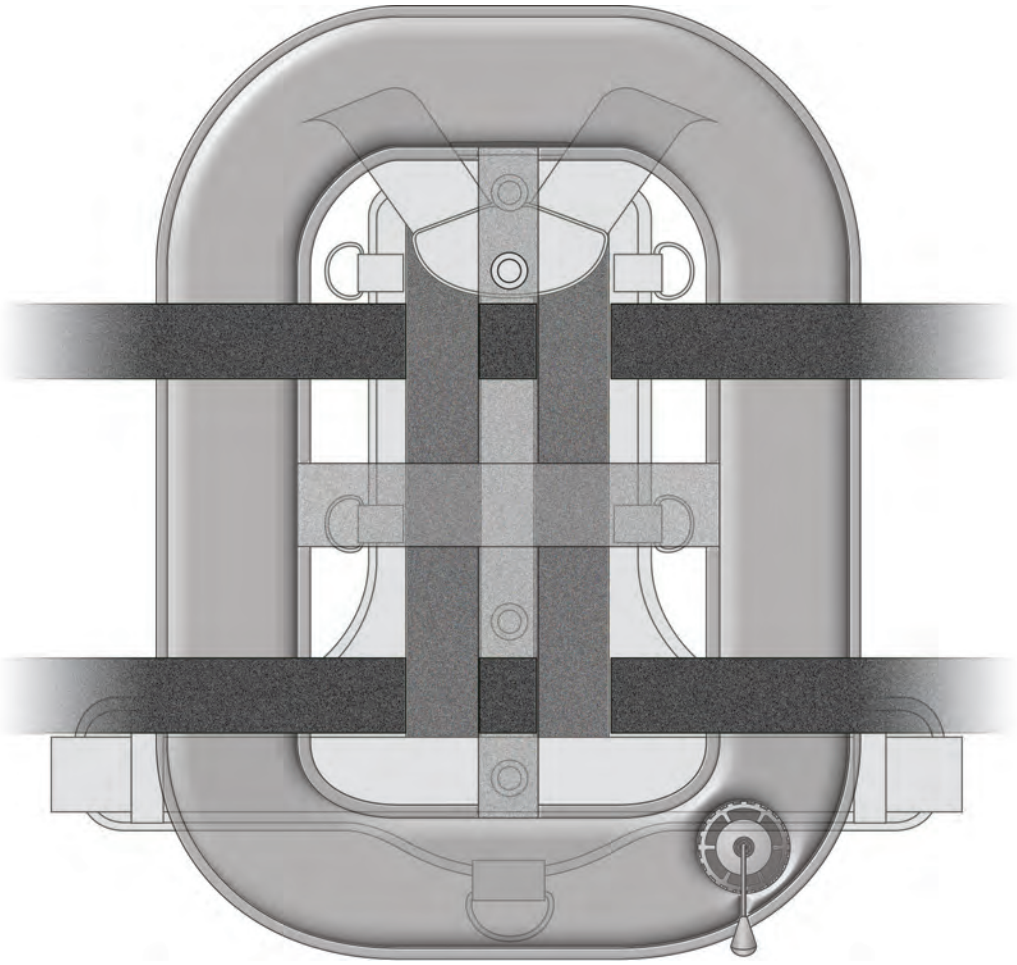


Figure 8c: Cam band routing

- Place the front of the wing on top of the TransPac® XT, facing the harness.

The back of the wing should now be facing you.

- Thread the non-buckle end of the cam band through the wing opening underneath *one* of the backplate webbing straps and the center strap of the wing, as shown below.

Figure 8d: Weaving cam band through the backplate webbing and traction pad

- Now thread the free end of the cam band through the remaining slot of the traction pad and through the remaining backplate webbing strap.
- Pull the cam band tight. It should lock the traction pad in place and look like the illustration below.

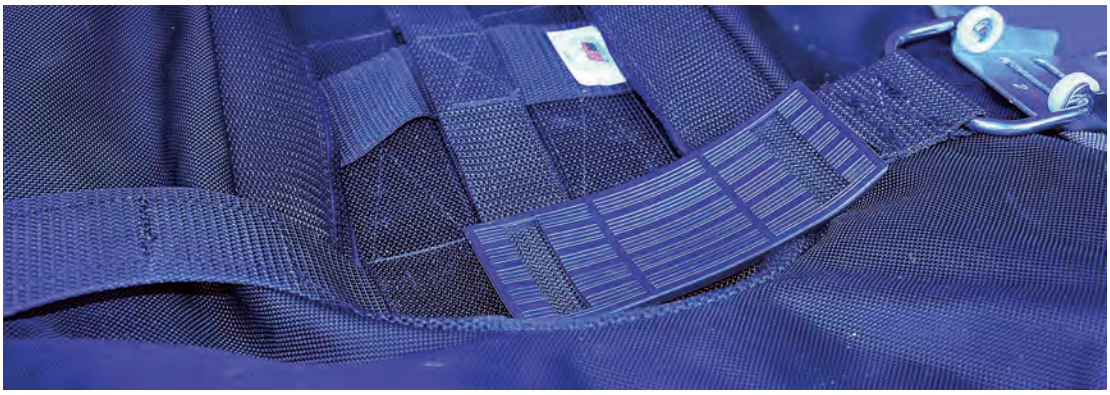


Figure 8e: Traction pad in place

- Repeat the process with the second cam band.

- Pull the non-buckle end of the cam strap up through the wing opening, over the wing center webbing and insert the end through the webbing slot on the TransPac® XT backplate not yet in use. You should now have captured the wing webbing cross hairs by weaving the cam straps over and under the wing webbing.
- Once the TransPac® XT is attached to a single tank, pick up the rig by the harness shoulder straps and move it up and down. Make sure that the tank is fastened securely and that the bands are tight enough to prevent them from coming undone accidentally. If the cam straps are not tight enough, tighten them and perform the shake test again.

For more information, see our helpful video series at *www.DiveRite.com/DiveRiteTV.*

8.2 Threading Cam Buckle

The buckle assembly on TransPac® XT cam bands works largely the same as most other cylinder cam bands. You may, however, notice some differences.

- The buckle itself is made from a solid piece of stainless steel. As such, it cannot break or fail the way plastic buckles sometimes do.
- Nylon rollers at the base of the buckle help ensure smoother operation and made it easier to securely fasten the cam band.

The cam buckle itself thread largely the same way as most others. Nevertheless, this confuses many divers.

To help matters, the slots on the under side of the buckle are numbered *1, 2* and *3*, representing the order in which the cam strap weaves through the buckle.

You can thread the cam buckle correctly by following these steps:

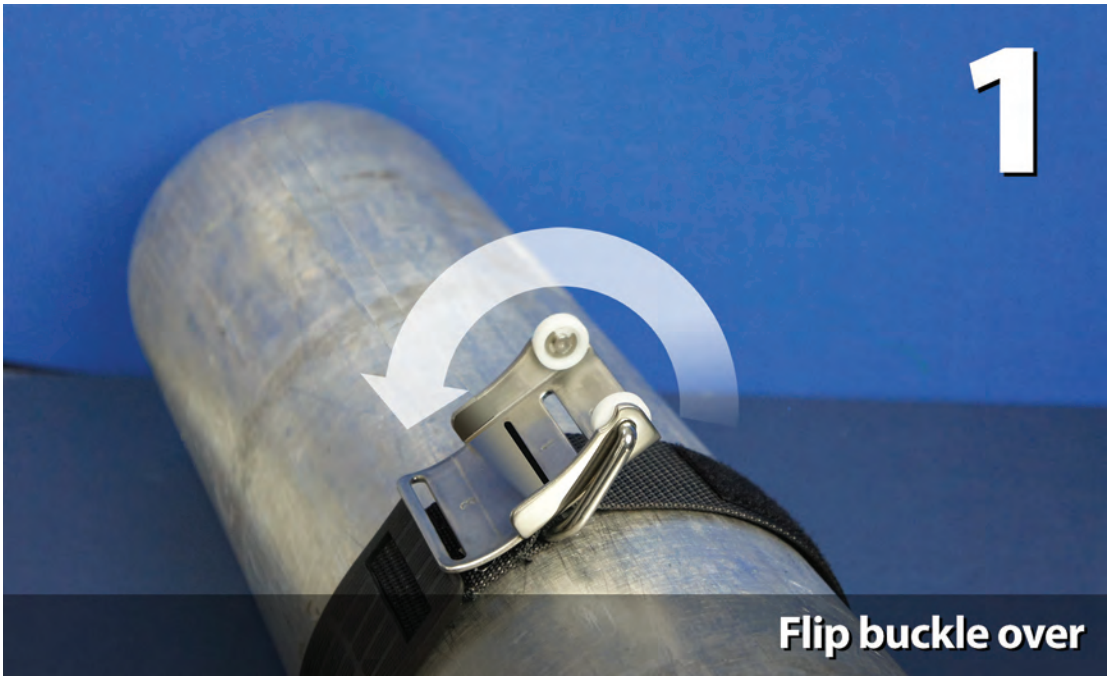


Figure 8f: Step one

Please Note: The single biggest mistake divers make when threading cam buckles is that they fail to flip the buckle over and thread the webbing from underneath.

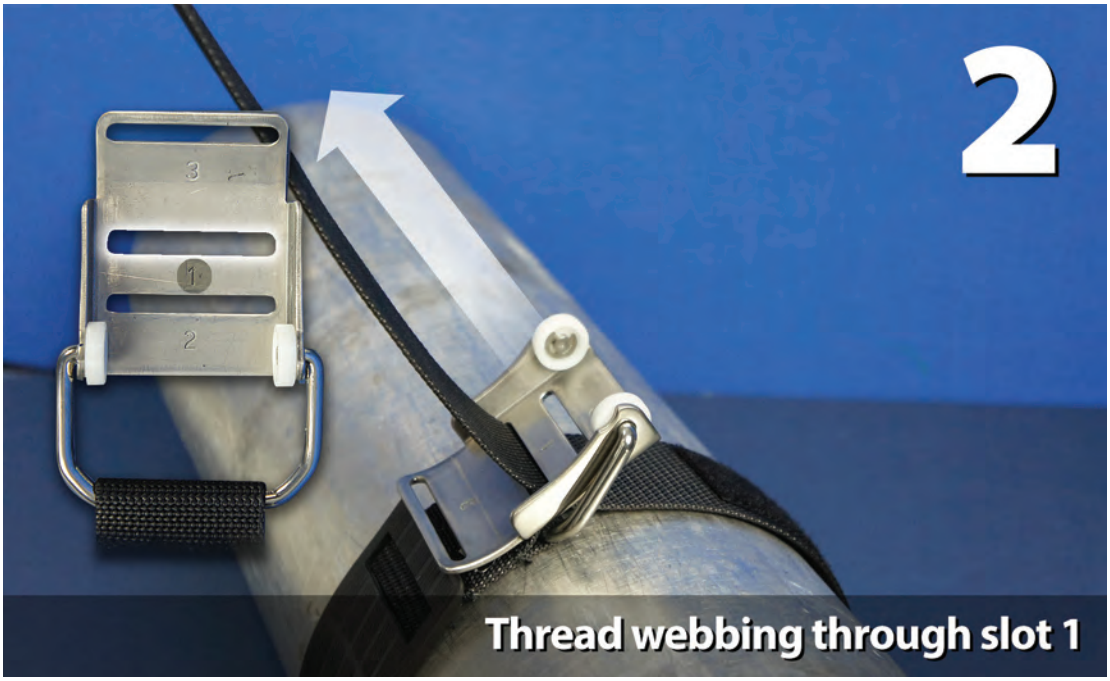


Figure 8g: Step two

Figure 8j: Step three

At this point, you want to pull the cam strap as tight as possible, and continue to hold it while progressing to step four.

Figure 8i: Step four

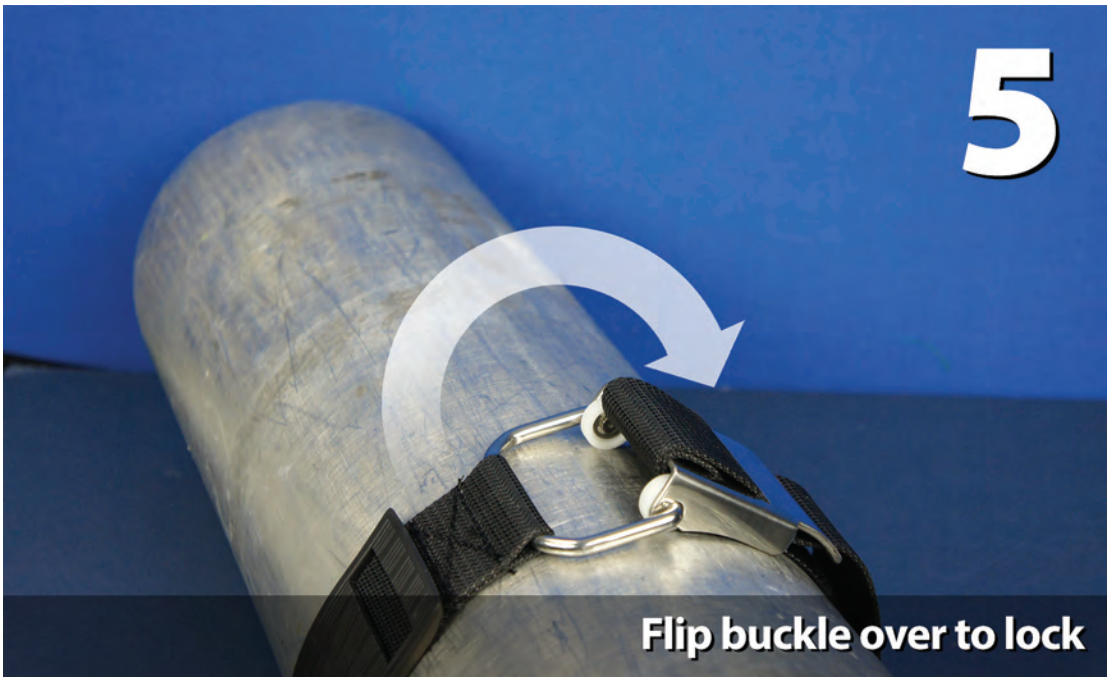


Figure 8j: Step five

⚠ WARNING

To prevent accidental tank loss, make sure the straps are tight enough so that the cylinder cannot move or slide on the BC. Failure to do so could result in serious personal injury or death.

The best way to make sure the cam bands are sufficiently snug is to reach down see whether you can move them up or down the cylinder while fastened. If they have been fastened correctly, they should not move at all. If they do move, re-tighten them.

9.0 Attaching Double Cylinders

The TransPac® XT is easily attached to a set of double tanks using a pair of TransPac Stability Plates and the standard bands and bolt system used on double tanks. Any wing that can accommodate a set of double tanks on a BC harness can be worn with the TransPac® XT. The wing is sandwiched between the TransPac® XT and the tanks, and is held in place using the tank bolt kit and stability plates.

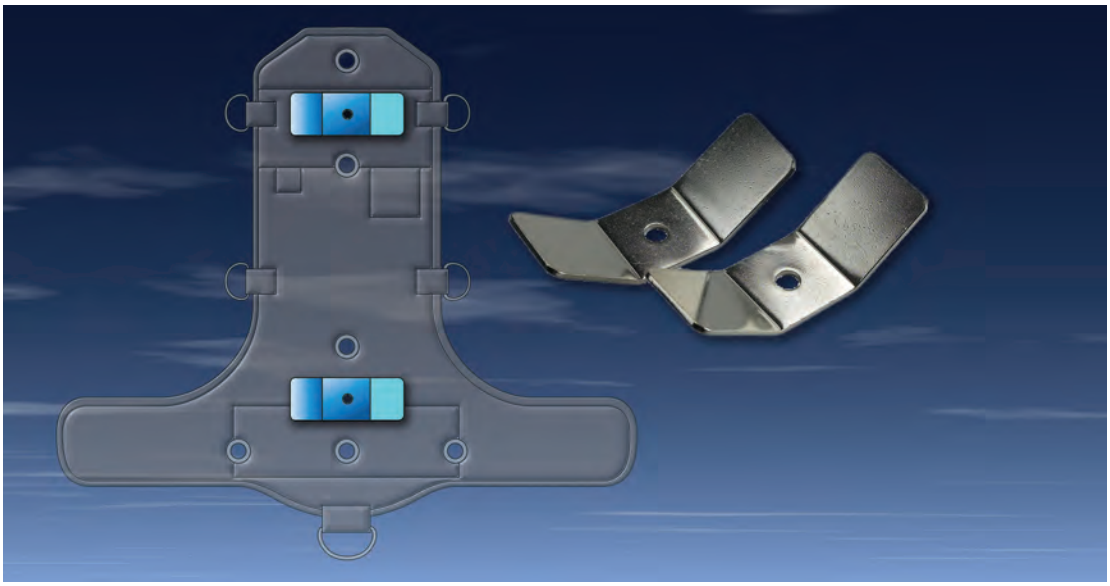


Figure 9a: Stability plates

The design of TransPac® XT harnesses and wings assume your tank bolts are spaced 28 cm/11 in apart (this is the standard spacing for dual-cylinder bolts). Multiple grommets on both the TransPac® XT harness and the Rec and Classic series wings allow you to move both the wing and harness up or down, relative to the tanks. Most users will find the center grommet on both works best.

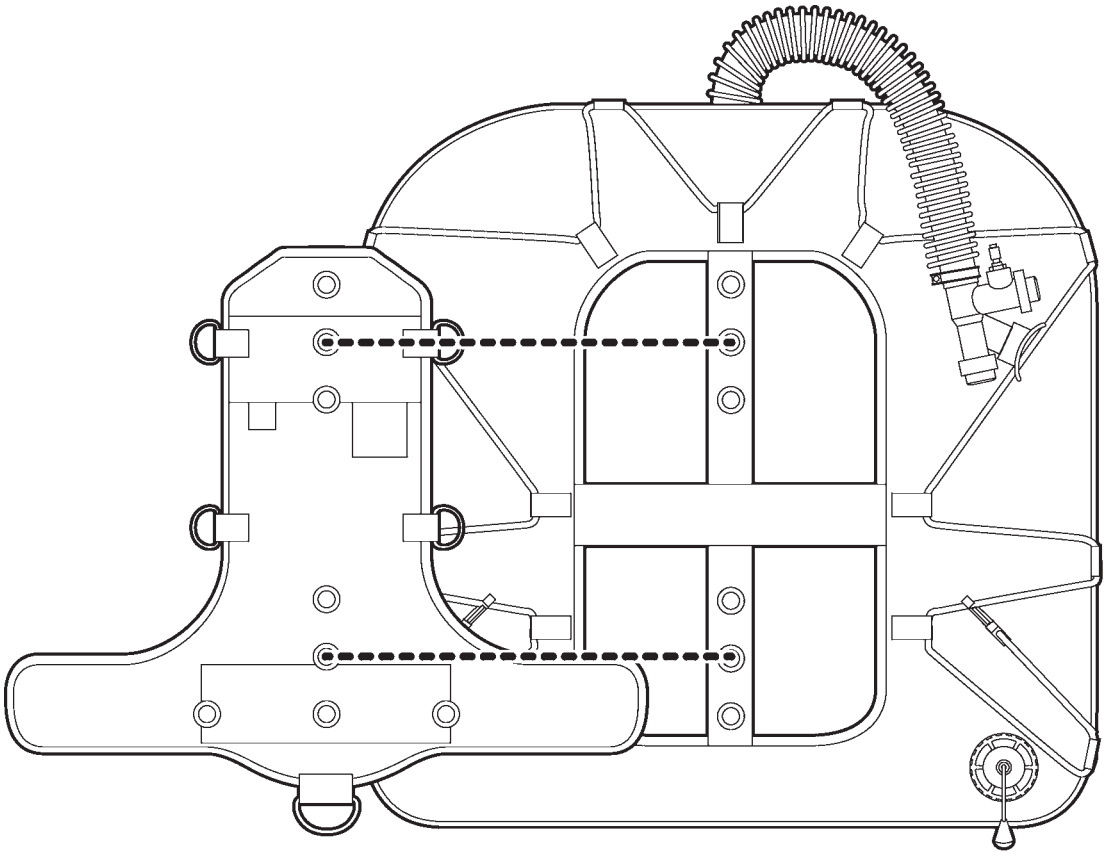


Figure 9b: Backplate and wing grommets

To attach the wing:

- Remove the wing nut and washer from the bolt kit on the double tanks.
- Place the wing on top of the tanks with the front of the wing facing upwards. Make sure to select the grommet placement that best suits your buoyancy needs.
- Remove the lumbar pad from the TransPac® XT, exposing the grommets.

The lumbar pad is held in place by hook-and-lock fabric and peels away easily. The bottom of the lumbar pad is held in place by a 25 cm/1.0 in hook-and-lock strap which can be unfastened and re-fastened if need be.

- Place the TransPac® XT on top of the bolts and wing, choosing the grommet placement that best suits your buoyancy needs.
- Place a stability plate on top of the bolt kit, concave side following the contour of the cylinders, pushing down on top of the TransPac® XT backplate and the wing. Secure the stability plate with the washer and wing nut, cinching the wing nut as far as it will go while pressing the TransPac® XT backplate and wing into the channel between the tanks.
- Repeat with the second stability plate.
- Replace the TransPac® XT lumbar pad.
- Don the rig and fasten the TransPac® XT and move around from side to side, making sure the harness/wing/tank combination moves with you and is not sliding around. If there is any play, repeat steps above and make sure the stability plates are tightening the rig down between the channel of the tanks.

  Video: For more information, see our helpful video series at *www.DiveRite.com/DiveRiteTV.*

10.0 Donning and Adjusting Your TransPac® XT

10.1 Donning Your TransPac® XT

⚠ WARNING

Adjust the BC so that it does not restrict your breathing when fully inflated. Restriction of normal breathing while wearing your BC could result in serious personal injury or death.

To ensure proper fit while diving, the TransPac® XT should be donned according to the following sequence:

- Assuming you already have the air cell and tank attached, loosen the chest strap and waist belt of the TransPac® XT.
- Slide your arms into the shoulder straps and fasten the chest strap. Make sure the shoulders of the TransPac® XT lie parallel to one another. Do not over-tighten the chest strap.
- Fasten the waist belt, making sure it is snug around the waist, slightly below the navel.
- If you tank is resting on a bench or table, now lift the tank onto your back leaning forward slightly to carry the weight. The tank should now be free of any platform and simply resting on your back.
- Fasten the crotch strap, ensuring it is snug enough to slightly pull the waist strap down in a *V* pattern.

- Now tighten the shoulder straps, pulling on the tabs of each strap backward and downward toward your lumbar.
- Rock gently from side to side and make sure your entire rig is moving with you and not slipping anywhere.
- Fully inflate the wing and make sure it does not restrict your breathing or movement.

Video: For more information, see our helpful video series at *www.DiveRite.com/DiveRiteTV.*

10.2 Adjusting Your TransPac® XT

Once you fit the TransPac® XT to your stature, it is important to understand how to customize the fit for your personal enjoyment and best product performance.

Sizing the Crotch Strap

The crotch strap is an essential part of a high-performing and well-fitted harness system. It keeps the harness in place during water entry and keeps the BC from shifting upwards on the body, reducing the likelihood of the tank touching the back of the head during a dive.

Please Note: The Transpac XT comes standard with a 38 mm/1.5 in crotch strap with slide-release buckle. Additional crotch strap options of 25 mm/1.0 in with quick release buckle or 50 mm/2.0 in continuous webbing are available through any authorized Dive Rite dealer.

- A crotch strap should fit snuggly, but not be uncomfortable. Size the crotch strap to your stature, making sure you leave enough excess webbing for fine tuning.

- Once you determine the correct length, adjust the crotch strap accordingly. To do so, unweave the loose end of the webbing through the stainless steel belt slide on the crotch strap. Adjust the webbing to the desired length by loosening or tightening the webbing at the attachment point (the stainless steel D-ring) on the TransPac® XT. When it is set for the desired length, weave the loose end of the webbing through the stainless steel belt slide on the crotch strap.
- If need be, you can trim any excess webbing that results. To prevent fraying, use a webbing line cutter.
- Crotch strap placement on the waist strap is determined by preference. Most users will likely want the stainless buckle to be slightly to the right, so that they crotch strap can be centered. Whatever placement you choose, make sure it does not interfere with movement.

  Video: For more information, see our helpful video series at *www.DiveRite.com/DiveRiteTV.*

Adjusting the Side Plates

Your TransPac® XT comes set up to dive single tanks. The waist side plate is approximately 10 cm/4.0 in from the edge of the soft backplate. Divers who wear double tanks, sidemount tanks or heavy steel tanks, will want to move the sideplate farther back on the waist belt in order to maximize lumbar support.

Please Note: The waist side plate should not be moved forward under the arm pit. Although this position makes it easier to snug up the shoulders, it reduces lumbar support and overall performance of the rig, potentially causing back strain.

Video: For more information, see our helpful video series at *www.DiveRite.com/DiveRiteTV.*

Adjusting Shoulders, Adding/Removing Hardware

It is easy to adjust TransPac® XT shoulder length.

- You can make adjustments of less than 38 cm/1.5 in using the excess webbing tucked under the shoulder strap assembly.
- Unweave the webbing from the bottom two slots of the shoulder transition plate and slide the transition plate to the desired location.
- Re-weave the webbing through the bottom slots of the plate and tuck it back behind the shoulder pad.
- Slide the D-ring hardware down the same amount of spacing, if desired and move the plastic belt slide downward in order to shift the shoulder padding.
- Adding or removing hardware from the shoulder assembly requires complete removal of the transition plate. Use the steps listed above to complete this process.

Follow these same steps to add or remove hardware, yet you will need to fully unweave the shoulder transition plate in order to slide new hardware on/off the webbing.

Please Note: If making adjustments, adjust one shoulder at a time, using the other as a visual reference.

Video: For more information, see our helpful video series at *www.DiveRite.com/DiveRiteTV.*

11.0 BC Inflation and Deflation

11.1 Connecting the Low-Pressure Inflator

⚠ WARNING

Do not attach a low-pressure (LP) hose to a regulator high-pressure (HP) port or to an air supply with pressure in excess of 14 bar/200 psi. This may result in damage or explosive failure of the low-pressure hose and/or power inflator assembly, and result in serious personal injury or death.

To attach the low-pressure hose to the BC inflator assembly:

- Make sure both fittings are free of contamination.
- Pull back the collar of the quick-disconnect coupling, while pushing the hose firmly onto the nipple found on the power inflator.
- Release the collar when the coupling is fully seated on the nipple. Pull gently but firmly on the low-pressure inflator hose to check for a secure connection.
- To disconnect, pull the collar back and disengage the LP hose from the nipple.

⚠ WARNING

Repeated use of the oral inflator or overpressure valve may allow water inside the BC, reducing the amount of buoyancy provided by the BC. This could result in serious personal injury or death. Drain all water out of the BC prior to and after every use.

11.2 Low-Pressure Inflator Operation

- To inflate the BC, press the power inflator button. Air should enter the BC.

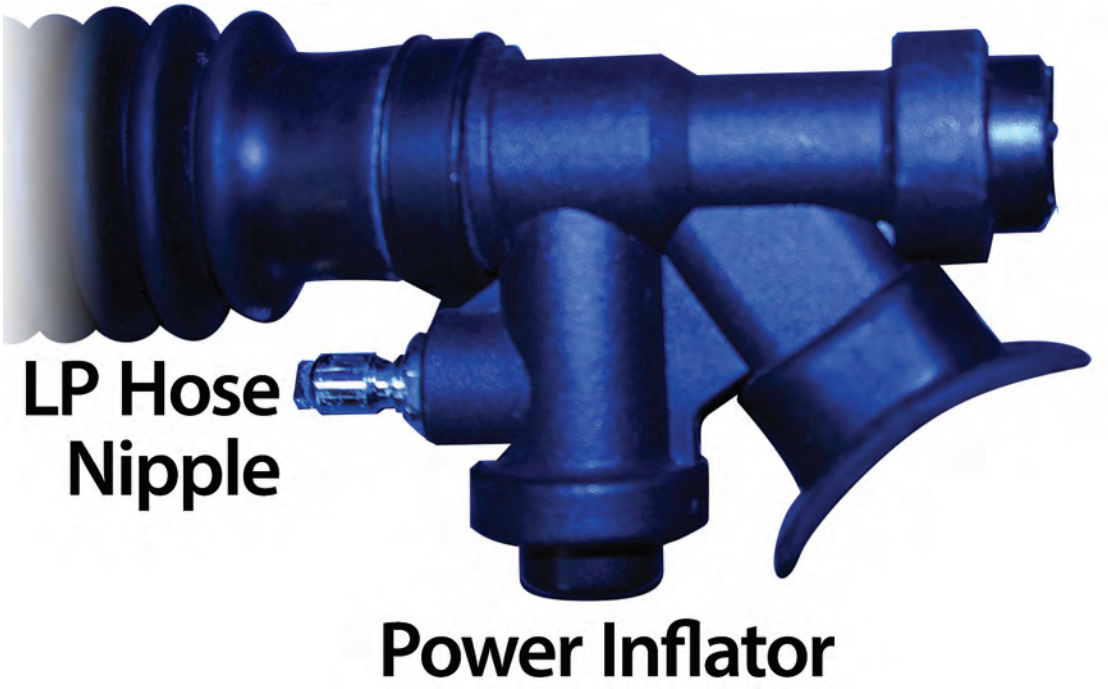


Figure 11a: Power inflator button

- For better control during inflation use short bursts of air by repeatedly pressing and releasing the power inflator button.

11.3 Oral Inflation

The oral inflator is located on the end of the low-pressure inflator assembly. Oral inflation should only be used in the event of power inflator failure.

To use the oral inflator:

- Exhale a small amount of air into the mouthpiece to purge any water that may be trapped there.
- With the same breath, continue to exhale while fully depressing the oral inflation/manual deflation button.

Figure 11b: Oral inflator

- Release the button before taking your mouth off the mouthpiece. Failure to do so can result in loss of inflation and buoyancy.
- Repeat these steps until the desired amount of buoyancy is reached.

11.4 BC Deflation

Using the Oral Inflator/Manual Deflator Button

- Turn your body so that the point at which the large-diameter BC inflator hose is the highest point on the air cell.
- Hold the inflator hose so that the mouthpiece is higher than the inflator hose connection point on the BC.
- Depress the oral inflation/manual deflation button in short bursts until you release the desired amount of air.

⚠ WARNING

Keep sand, debris, and other contaminants out of the oral inflator/manual deflator mechanism. Under certain conditions, contamination can cause the valve to not close completely. If this occurs while diving, shake the valve while depressing it several times. If the valve leaks or remains inoperable, terminate the dive. Diving with a leaking BC or with valves that do not operate properly may result in a loss of buoyancy control that could result in serious personal injury or death.

Using Remote Exhaust Valve

Many TransPac® XT air cells are equipped with a remote exhaust valve at the point where the large-diameter BC inflator hose joins the air cell. This valve is activated by pulling down on the inflator assembly. To vent air using the remote exhaust valve:

- Turn your body so that the point at which the large-diameter BC inflator hose is the highest point on the air cell.
- Pull down on the low-pressure inflator assembly until you hear air escaping. Stop pulling down on the valve to stop air flow.
- Continue to release air in short bursts until you achieve the desired state of buoyancy.

  Please Note: Remote exhaust valve travel is limited; you will not release air any faster by pulling harder.

Using Overpressure Relief Valve

The air cell's overpressure relief valve helps prevent accidental overinflation of the BC. It is designed to open automatically when pressure inside the air cell reaching approximately 0.14 bar/2.0 psi over ambient pressure.

The overpressure relief valve is equipped with a pull dump and can also be used for manual air cell deflation. This may be helpful when in a head-down/feet-up position, when neither the oral inflator or remote exhaust valve are the highest points on the air cell.

To do so:

- Turn your body so that the overpressure relief valve is the highest point on the air cell.
- Pull out on the pull-dump cord until you hear air escaping. Stop pulling down on the valve to stop air flow.
- Continue to release air in short bursts until you achieve the desired state of buoyancy.

  Please Note: Overpressure-relief valve travel is limited; you will not release air any faster by pulling harder.

General Recommendations

- With all deflation methods, hold the valve open no longer than needed. This helps prevent excess water from entering the BC.
- Do not depress the oral inflator button when activating the remote exhaust or overpressure relief valve, as water may enter the BC through the oral inflator mouthpiece.

12.0 Pre-, Post-Dive Procedures

Pre-dive and post-dive BC examination helps to identify equipment problems before unsafe conditions exist, preventing accidents. All equipment must be regularly inspected by an authorized Dive Rite equipment repair facility.

⚠ WARNING

Do not dive with a BC that does not pass any of the pre-dive or post-dive inspections and tests. Loss of buoyancy control or air holding integrity could occur, resulting in serious personal injury or death.

12.1 Pre-Dive Visual Inspection and Valve Test

- Examine the entire BC for cuts, punctures, frayed seams, excessive abrasion, loose/ missing hardware and other damage of any kind.
- Inspect the oral inflator, power inflator, remote exhaust and overpressure relief valves for cracks, damage, or contamination.
- Check to make sure the oral inflator,remote exhaust and overpressure relief valves open when activated and seal properly when released.
- Connect the low-pressure inflator hose to the BC, turn the air all the way on, then check to make sure the inflator adds air when you press the button, and stops adding air when you release it. If the BC inflates on its own, *do*

not use it; have it inspected and repaired by an authorized Dive Rite dealer.

- Inflate the BC air cell until it is firm. Listen and check for leaks. Let the BC stand inflated for 30 minutes or more, then check to make sure there has been no significant air loss.
- If diving a single cylinder, soak the cam bands in water and attach the BC to your tank. Perform the test outlined earlier to make sure the bands do not move or slip.
- While wearing the BC, adjust the straps and other attachments on the BC for a comfortable fit that does not restrict breathing. Make these adjustments with the BC inflated and while wearing the exposure suit you intend to dive with.
- If using the optional integrated weight system, make sure that the locking systems are fully engaged, yet allow for weight to be dropped quickly.

⚠ WARNING

Do not dive with a BC that is damaged, leaks air or does not function properly. Terminate any dive as safely and quickly as possible if the BC becomes damaged, leaks air or does not function properly.

12.2 Post-Dive Cleaning

With proper care and service, your TransPac® XT will provide you years of safe, enjoyable use. Without proper care, your TransPac® XT can become damaged and be either unserviceable or dangerous to use.

Please Note: Marine grade stainless steel can develop rust over time even when properly cared for.

- Clean the TransPac® XT only with fresh water and mild detergent. Chemicals, strong detergents, and cleaning solutions can damage the TransPac® XT and shorten its life.
- Rinse the TransPac® XT thoroughly with cool, fresh water after every use. To do this depress the oral inflator button and hold the mouthpiece up to a running water source (hose, faucet, etc).
- Fill the BC air cell approximately one quarter full with clean fresh water through the oral inflator.
- Orally inflate the BC and shake to distribute water inside of the BC.
- Hold the BC upside down, depress the oral inflator button and allow all water and air to drain from the mouthpiece.
- Repeat one or two more times.
- Rinse the entire BC with fresh water by dipping in a tub or spraying with a hose.
- Rinse all valves to make sure all sand and other debris is removed.
- Dry the BC: if hanging, make sure it is not in direct sunlight. Dry completely if storing, slightly inflated.

⚠ WARNING

Avoid prolonged or repeated exposure to chlorinated water, such as in swimming pools. Wash your BC immediately after any use in chlorinated water. Chlorinated water can oxidize fabrics and materials on your BC, thereby shortening their life, and cause colors (especially neon) to fade. Damage and fading from prolonged exposure to chlorinated water is specifically not covered under warranty.

12.3 Transportation, Storage and General Protection

- The sun's ultraviolet rays can fade and damage the TransPac® XT, shortening its life. Store the TransPac® XT away from sunlight and excessive heat.
- Keep sharp objects from coming into contact with the TransPac® XT. Do not rest heavy objects on the TransPac® XT or drag it over rough surfaces.
- Avoid excessive pool use. Chlorinated water can lead to premature discoloration and shorten the products life.

12.4 Inspection and Service Interval

Your BC should be inspected and maintained at an authorized Dive Rite service center at least once a year, more often if you dive frequently. Any damage caused due to failure to properly maintain the BC is not covered by the warranty.

⚠ WARNING

Due to heavy usage, BCs used for rental/diving centers, professional purposes or other intensive use must be checked at least every six months. Overall condition and main safety parts such as the air cell, valves, elbow, corrugated hose and inflator mechanism must be inspected. If any of the above parts show wear or diminished performance it should be replaced immediately or removed from usage, if replacement is not possible.

13.0 Warranty

- Dive Rite will — at its sole discretion — repair or replace TransPac® XT components proved to be damaged by faulty manufacture or material, at no cost, for the lifetime of the TransPac® XT.
- This warranty applies only to the original purchaser. It does not cover commercial or rental use, nor does it extend to units purchased from entities other than an authorized Dive Rite dealer.
- This warranty specifically excludes color changes, light fastness, or fading. Dive Rite does not accept responsibility for stains or transference or bleeding of color to other items.
- To make a claim under the warranty, the owner must have registered their TransPac® XT on our website at *www.DiveRite.com*. All warranty repairs should be accompanied by a copy of the purchase receipt. A Return Authorization (RA) can be obtained by calling Dive Rite at 800-495-1046 or e-mail at *Service@DiveRite.com*. Before shipping, ensure that the TransPac® XT is adequately packaged and protected.
- Dive Rite is not responsible for any shipping costs incurred, regardless of warranty status.
- Dive Rite is not responsible for any damage that may occur during shipping.
- Repairs made under the warranty will not extend the warranty period.
- All further claims, especially for damage after diving accidents, are excluded from coverage under this warranty.

- Dive Rite has no obligation to honor any extension of this warranty.
- This warranty is in lieu of all other warranties, express or implied. No other person or representative is authorized to assume for Dive Rite any other liability in connection with the sale of this product.

For additional information about our distributors and dealers, see our web site at: *www.DiveRite.com*.

Support: All Dive Rite products receive our commitment to excellence in customer service from your fellow divers. Contact us with any questions at *Support@DiveRite.com* or phone at (386) 752-1087, Monday through Friday, 9:00 AM-4:00 PM, Eastern Time.

Record Serial Numbers Here

Item	Serial Number
TransPac® XT Harness	
Travel Wing	
Voyager Wing	
Rec Wing	
Classic Wing	
CCR Wing	

Service Record

Date	Authorized Dive Rite Service Center

DIVE RITE®