



# DOLPHIN TECH



## TECHNICAL DIVING COMPONENT

- Ø7.25" (184mm) TWIN TANK BAND SET (Item no.: BP3-H)
- Ø8" (203mm) TWIN TANK BAND SET (Item no.: BP3-H-8)

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, make sure your twin tank bands are properly and securely attached to your harness and tanks. 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** and maintenance task 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



Each Dolphin Tech twin-tank band set comes 2 connecting bolts, 2 aircraft nuts (nut with nylon insert), 6 flat washers and 2 split washers.

Our band is available in 2 sizes: for cylinder with 7.25" / 184mm or 8" / 203mm nominal diameter.

\*\*\* Back plate is available separately \*\*\*



## Twin tank attachment

In order to set up a twin tank set, you will need a set of manifold or alternatively, 2 valves with outboard valves (available from your IST dealer separately) installed to your tanks first. If you wish, this is a perfect opportunity to have the manifold and valves oxygen cleaned and serviced so you can use them with Nitrox / oxygen later.

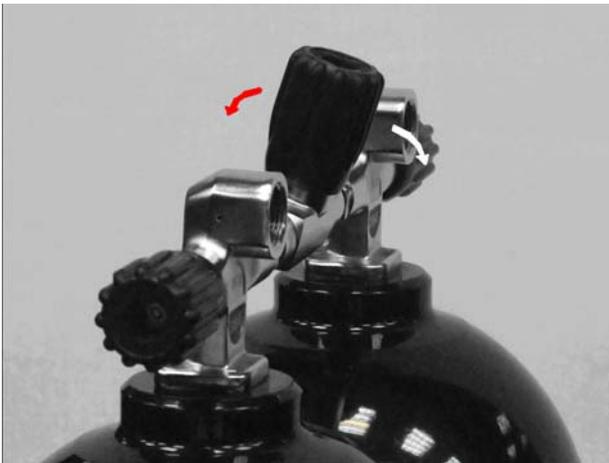
The following procedure takes you through the setting up of a twin set with manifold but if you are putting together an independent double, ignore all references made to the manifold.

**⚠ IMPORTANT: The handling of pressurised vessels, such as scuba cylinders, can be extremely dangerous. It is not in this user's manual's scope to cover valve installation. IST strongly recommend leaving the valves / manifold and twin tank band installation to your trained local dive professionals.**

**⚠ If you intend to carry out the installation of the twin tank bands, you must have your trained local dive professional check the assembly to ensure safe operation before using it.**

**⚠ Make sure the pressurised gas stored inside the cylinders is released completely before work can commence. The failure to do so can have dire consequences and serious injury or even death can result.**

**⚠ When encountering an assembling problem, stop immediately and contact your local dive professionals for assistance. Without doing so, the risk of damaging your dive equipment and / or causing serious injury / death when testing / using / transporting / storing the twin-set is greatly increased.**



1) With the manifold already installed, let the cylinders standing on a **clean** and **level** working surface. Make sure the centre isolator's valve angle is in a preferred position.

**⚠ If using a manifold, please keep the cylinders parallel to each other and do not move them excessively or pick them up until installation of the bands is complete. The cylinders are only held together by the centre isolator, which is made from brass and its fine threads is vulnerable to damage in this half-assembled state.**



2) Make sure these lock nuts are shifted all the way towards the centre isolator valve to allow room for adjustment later. You will need a (adjustable) spanner with 22mm jaw opening. Please note the right valve's thread (pictured left) is left-handed, turn clockwise to loosen.

3) Slide one band over the cylinders and leave it at the bottom. It may be necessary required to rotate the centre isolator to bring the cylinders inward or out to get the right clearance.

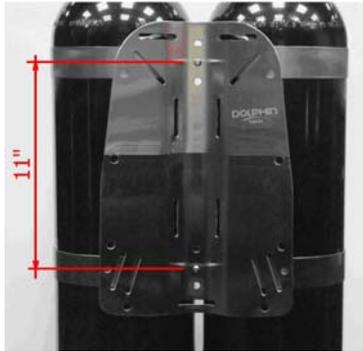


4) Place the other band at or just below where the cylinder dome curve ends.

5) Put a bolt through a flat washer then both holes of the top band from the back of the cylinders (i.e. the side with yoke dimples – as in **Pic. 3.**).



6) Place another flat washer onto the bolt from the front of the cylinder and then using a spanner to hold the bolt's end nut and another to turn the aircraft nut onto the bolt. DO NOT FULLY TIGHTEN AT THIS STAGE.



7) Repeat step 5 & 6 with the bottom tank band. Please note the distance from the top band should be 11" (centre to centre). It is easier using a back plate to measure.

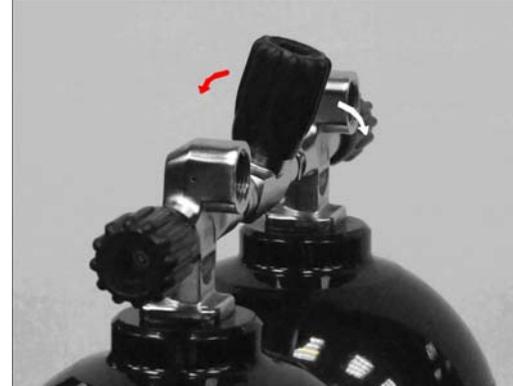
8) Gently lay the twin cylinders down on their sides to make sure they are on the same plain. To check this, see if you can rock the twin cylinders by pressing the end of the cylinders or the valves down against the working surface. You may need to loosen the aircraft nut a little to level them.



9) Check if the cylinders remain parallel to each other. Take a measurement directly below the top band and the other near the bottom. This is a critical step because the tank valves and isolator are made from brass, which can be easily damaged due to stress caused by unevenness. If there is no difference or if the difference is minimal (< 2mm), tighten the aircraft nuts until they are fully engaged with the band (**Pic. 6.**). (However, DO NOT over-tighten or the bands will distort). Stop often to recheck if the cylinders continue to stay parallel. It is also a good idea to

periodically stop and check if the bolts are staying at 11" apart as sometimes the bands can move during the tightening process.

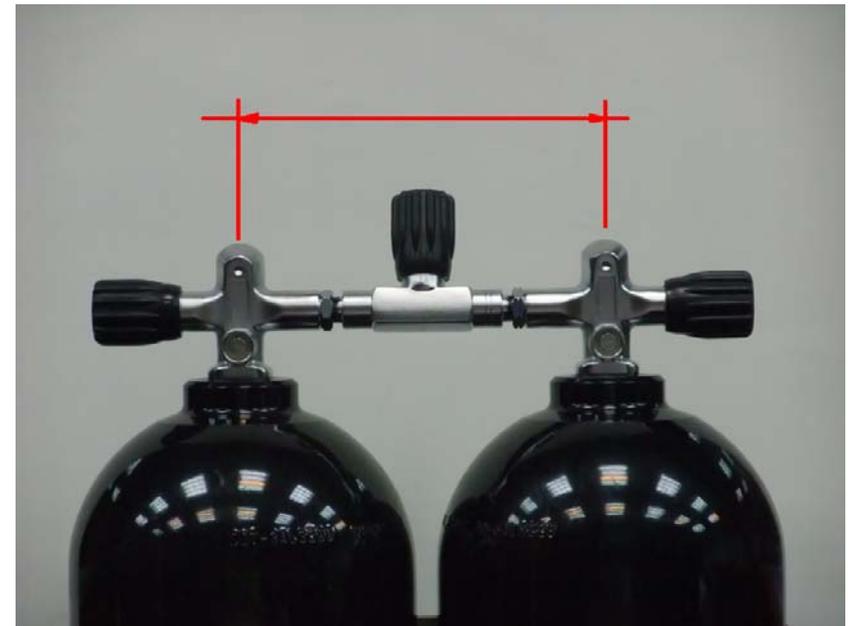
When adjustment is needed:



If the top gap is closer than the bottom, rotate the centre isolator bar backward (left arrow) to push the cylinder valves away from each other 1 full rotation at a time (so it can return to the preferred position) and check. Continue until the cylinders are parallel. If the bottom gap is closer, then turn the centre isolator 1 full rotation at a time (right arrow) to bring the cylinders closer together and check again. Continue until the cylinders are parallel.

If the centre isolator becomes difficult to turn, stop immediately or damage may occur. Check if an over-adjustment has been made. If the cylinders are still not parallel but no over-adjustment has been made, you may need to loosen / tighten the aircraft nuts to allow room the isolator to rotate.

\* The valves' centre to centre distance (as measured by the yoke dimple at the back of the valves) is **21.3 ~ 21.7cm.**





- 10) Tighten the centre isolator lock nuts against the valves.

The band assembly is now complete

- 11) Put a twin tank air cell onto the bands' bolts, followed by an assembled backpack (harness and back plate).
- 12) Put a flat washer and a split washer onto each bolt then secure everything the wing nut (hand-tighten only)

Tank height: Please keep in mind at the completion of the installation, the tank valves should be high enough for you to reach (after putting on the BCD) and turn both tank valves and the centre isolator on and off (if necessary during a dive) but not too high so you risk of getting the tank valves and / or centre isolator in the back of your head when entering the water or when bending your head backwards.

MAINTENANCE AND STORAGE

- Do not put or drag this BCD component across rough and / or sharp surfaces.
- Do not place any sharp and / or heavy object on any part of this component.
- Immediately after a dive, rinse this component with fresh water as soon as possible. Air dry (in the shade) **completely** before putting your BCD and back plate pouch away.
- Store in a cool, shaded place.

WARRANTY



Use of non-factory parts or any modification may irreparably damage this BCD component and will not only render the warranty void but can potentially make your dives unsafe. ONLY replace worn or damaged items with genuine Dolphin Tech parts.

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 part.

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:	

