

DOLPHIN

TECH



TECHNICAL DIVING COMPONENT

- 30lb AIR CELL (Item no.: JT-30)
- 50lb AIR CELL (Item no.: JT-50)
- 65lb EXP. AIR CELL (Item no.: JT-65)

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 IST authorised dealer for assistance.

Do not use this air cell as part of your scuba diving equipment if you have not received relevant and proper dive training and certification from a recognised scuba training agency.

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

Do not inhale gas from within this air cell

Maximum recommended cylinder capacity (with max. 8" / 203mm diameter) is a single 15-litre tank for JT-30, twin 15-litre tanks for JT-50, and twin 15-litre tanks for JT-65 air cell.

Do not use this air cell as a lift bag. It is not designed for this purpose and may result in uncontrollable ascent, which could lead to serious injury or even death.

Prior to each dive, fully inflate the air cell and inspect for leakage, damage and proper operation.

Before using this air cell as part of your diving equipment in open water, it is highly recommended to familiarise with its features in confined water first.

Repair or maintenance task of any part or any disassembly of the air cell and power inflator / corrugated hose assembly must only be performed by an authorised IST dealer. Unauthorised service will render the warranty void and may cause this product to malfunction.

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

PRODUCT DESCRIPTIONS

Dolphin Tech technical diving equipment is modular and so you can purchase different components to suit the need of a particular dive mission. There are 4 styles of air cells available: JT-30 (30lbf air cell), JT-50 (50lbf air cell) and JT-65 (65lbf EXP. air cell). Their outer shells are all made from tough 1680D ballistic nylon and inner bladders from TPU coated nylon.

IST
JT-30▲



IST
JT-50▲



For JT-30 single tank and JT-50 twin tank (right) air cells, each has a single inner bladder and comes with a single 16" inflator with standard technical elbow connection and an over-pressure exhaust valve to the front lower left side (when wearing). They have 1 pair of grommets at industry standard 11" apart.

IST EXP.
JT-65▲



JT-65 is like JT-30 and JT-50 but packed with redundancy features * and more. It has a back up 19" inflator hose, which is attached to a secondary (back up) bladder. Each bladder also has 2 over-pressure exhaust valves for convenience in buoyancy control. The position of the valves and inflators can also be interchanged for a personalised set-up. There are 3 sets of grommets and each set has 2 holes, 11" apart. You can fine-tune your bladder position in relation to the harness and tanks. Lastly, due to its increased size, a parameter bungee cord wraps around the air cell to restore hydro-dynamics when less / no air is inside the inner bladder while diving.

* Note: The primary bladder should be used at all time during a dive unless, in the unlike event of it becoming faulty, ONLY then the redundant (back up) bladder and its valves and inflator can be used. As to how primary / redundant bladder and their attached parts are arranged, please consult your technical dive training manual and / or instructor.



Each air cell discussed previously is equipped at least 1 rapid exhaust valve which automatically releases excess gas when the pressure inside the bladder is 0.17kg/cm² (2.4psi) greater than the ambience to protect the bladder from bursting.



All air cells come with a 16" long assembly comprises of a power inflator, corrugated hose and standard technical elbow connection. For JT-65, an additional back-up 19" long assembly

is attached to the right shoulder. Dolphin Tech can also provide 13" long power inflator (as extra) for those who prefer a shorter set-up.

Inflator with recreational style shoulder dump valve is available separately and comes in either 14" or 16" long assembly – please contact your local IST dealer for more information.

All power inflator's recommended working pressure is 7.6BAR (110psi) ~ 11BAR (160psi) and the ideal pressure is between 9.5BAR (138psi) ~ 10BAR (145psi).

USING THE AIR CELL

The temperature range for using Dolphin Tech air cell:

Air	-20°C ~ 50°C / -4°F ~ 122°F
Water	-2°C ~ 40°C / 28°F ~ 104°F

Power inflator

Depending on the model purchased, your air cell may come with 1 or 2 inflators. They all operate in the same manner:

Inflator button: Use thumb to press the inflation button to inflate the BCD.



Deflation / oral inflation button: Use index finger to press the button to:

- 1) * Deflate the BCD, or
- 2) Orally inflate the BCD through the mouthpiece (only press the button down when ready to blow air into the BCD).



* Due to technical wing's inherent design, sometimes gas may get trapped inside your the wing. Therefore when venting gas from the air cell while diving with the power inflator, make sure the inflator elbow is at the highest point (i.e. above the rest of the wing) and hold the power inflator as high as you possible can before depressing the button.

- △ Oral inflation of your air cell while diving is a skill to be learned under the supervision of a certified scuba instructor.
- △ Depressing the oral inflator button while the air cell is empty may allow water to enter the bladder!
- △ The air / gas from within the air cell is not suitable for breathing. Do not breathe it through the oral inflator!

Attaching low pressure inflator hose



Attach only the low-pressure hose to a regulator's low-pressure port. Attaching it to the high-pressure port can cause the hose to burst, which may result in serious injury or death.

1)



Make sure this o-ring is present in the male end of the low pressure BC hose

2) Screw the hose into a low pressure port in your regulator's first stage.



3) Pull back the quick disconnect sleeve in the female end of the low pressure BC hose and connect it to the power inflator's quick disconnect nipple.



4) Open the tank valve SLOWLY. Check for any air leakage and proper power inflator function before using the air cell.

Over-pressure exhaust valve



You can conveniently pull open the over-pressure exhaust valve to vent gas in the bladder to change your buoyancy while diving. As with the power inflator's deflation button, it needs to be at the highest point of the air cell in order to be effective.

MAINTENANCE AND STORAGE

- Do not put or drag the air cell across rough and / or sharp surfaces.
- Do not place any sharp and / or heavy object on any part of this air cell.
- Do not expose the air cell to the sun while not actually diving.
- Immediately after a dive, rinse your air cell and BCD with fresh water as soon as possible. The air cell will require extra cleaning on the inside and it can be easier done if taken off the BCD assembly. Press the power inflator's deflation button to let fresh water in through the mouthpiece. At about a quarter full, gently shake then turn the air cell upside down so it can be rinsed thoroughly. Drain some water through the inflator mouthpiece then the rest through the over-pressure valve(s). Repeat 2 to 3 times.
- Inflate and hang the air cell up so it can dry inside and out – **DO NOT** use a hook on the fabric part of the air cell when hanging or damage can result!!!



Do not put your air cell away until it is completely dry!

- Store the air cell slightly inflated in a cool, shaded place.
- Have an IST authorised dealer to inspect your air cell at least once a year to ensure proper and safe functioning of all parts.

BUOYANCY DATA and MAXIMUM TANK SIZE

Model	Buoyancy	Max. tank size
JT-30	120N / 27lbf	Single 15L
JT-50	200N / 45lbf	Twin 15L
JT-65	290N / 65lbf	Twin 15L

WARRANTY



Use of non-original factory parts or any modification may irreparably damage this air cell, which will render the warranty void and can lead to a loss of buoyancy control or air holding capability while diving. This could result in injury or death. **ONLY** replace worn or damaged items with genuine, factory supplied parts from an IST authorised dealer.



Your BCD should be inspected by an authorized IST dealer at least once a year, and more often if you dive frequently. This is a required action to keep your warranty in effect

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 valid coverage period. 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

Serial #	
Date of purchase	(dd) / (mm) / (yy)
Dealer's name & address	
	(Dealer's stamp)
Purchaser's name:	
Contact info:	