



Commando Escape

Buoyancy Compensator User Instruction Manual

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Important Information

Please read all the information in this manual, it is extremely important that you familiarise yourself with all the Buoyancy Control Device (BCD) features, adjustments and operations before entering open water.

Diving equipment can be dangerous to the untrained user. Only use this BCD if you have received buoyancy control training from a qualified instructor belonging to a recognised training organisation.

Always carry out a personal pre-dive kit inspection before every dive following the instructions in this manual and always carry out BUDDY checks before entering open water.

DO NOT over inflate your BCD underwater. A rapid, uncontrolled ascent may lead to serious injury or death. In the event of a rapid ascent it is important to vent gas from the BCD as quickly as possible.

DO NOT use the BCD to lift heavy objects to the surface, it is not a lift bag.

The BCD should be serviced annually by AP Diving or an authorised agent.

DO NOT tamper with the BCD. Alterations to the design of the BCD should only be carried out by AP Diving.

DO NOT Place crotch straps over your weight belt. Always put your weight belt over your crotch straps so it can be ditched in an emergency.

Never inflate the BCD with Carbon Dioxide.

Always use the direct feed hose supplied with the Inflator. **Never** use any other brand or type of hose as these may not connect properly or provide the required gas flow rate.

WARNING

The Escape does not have the AP Diving BUDDY breathing system; automatic breathing from the BCD air cell is not available.

The APV100 Auto Air demand valve can be used on the Escape as an "Octopus" 2nd stage using air from the divers' main SCUBA cylinder. It can also be used for routine inflating/deflating of the BCD and oral inflation like the standard inflate/deflate valve. The Travel Wing does not have the emergency cylinder option available, therefore the Auto Air cannot take advantage of this facility. Please read the Auto Air instruction manual for usage information.

Intended Use

This BCD is intended for diving purposes only. It provides a diver with the means to safely descend, ascend, maintain neutral buoyancy and float on the surface.

This BCD is designed to work in conjunction with other essential items of diving equipment i.e. an 'aqualung' (high pressure gas cylinder, cylinder valve, pressure reducer, hoses and breathing regulator) and should not be used in the water without this items.

This BCD is not a lifejacket; it does not guarantee a head up position of the wearer at the surface.

DO NOT use the BCD to lift heavy objects to the surface. Adding weight will alter your balance and buoyancy and could damage the BCD.

Introduction

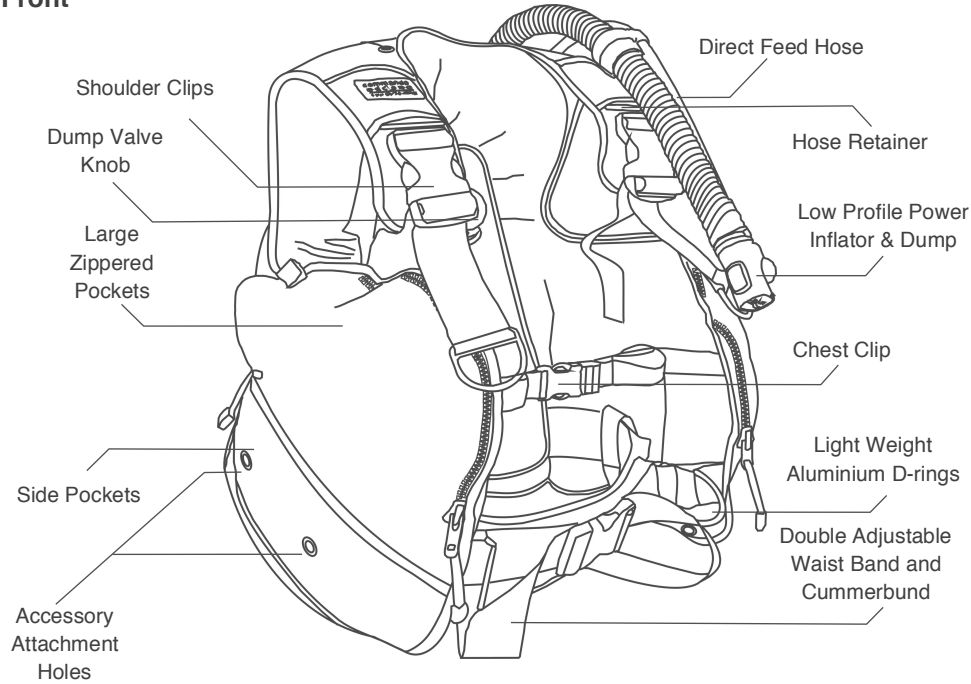
Introducing the latest Commando BCD from AP Diving, the Commando Escape, a lightweight travel jacket that utilises bespoke new materials to deliver heavy-duty quality, comfort and performance – all under three kilos.

This Instruction Manual provides you with the information you need to get the most from your new Escape. It is important that you read and understand the contents of this manual before you go diving.

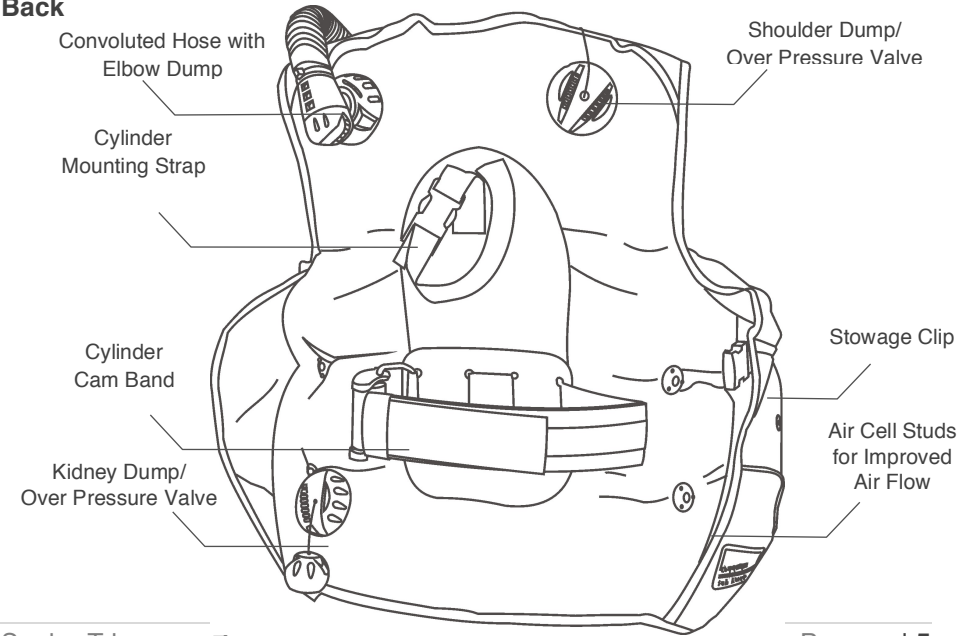
BCD Features:

- Lightweight design
- 4 x huge zippered side pockets
- Low profile power inflator
- Cummerbund with double adjustable waistband clip
- Backpack cover for extra comfort
- Lightweight aluminium D-rings
- Hi-viz reflective piping
- Integrated 3rd shoulder dump
- Hose routing clip
- Available in 5 Sizes

Front



Back

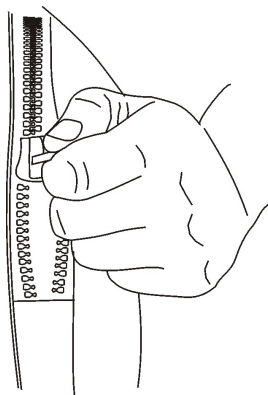


Equipment Stowage

Zip Pockets

There are two zip pockets located on each side of the BCD, a large main pocket plus a secondary pocket. The zips open from the front for easy access. Inside the main pockets are small D-rings for accessory attachment.

The secondary pockets have conveniently located eyelets for the attachment of external accessories such as a diver's knife.



Surface Trim & Weighting

Important – the positioning of the BCD on the cylinder is extremely important to achieve correct surface support and balance. Altering the position can result in the balance going from one extreme, pulling the diver backwards to the other extreme of holding the diver face down. When set correctly the BCD will hold the diver bolt upright.

If the BCD is pulling the diver backwards, move the BCD higher up the cylinder. If the BCD is pushing the divers face downwards, move the BCD lower down the cylinder.

Be aware that a diver's weight belt plays a crucial role in the surface support position. If the weights are removed such as in an emergency or prior to exiting the water, the diver's surface position may be altered.

Buoyancy Check – Don all your diving kit as you would for a normal dive, fully inflate the BCD in shallow water. Vent all the gas from the BCD and dry suit, expelling as much gas as possible. Add/remove lead to the weight belt until the water is level with your eyes with your lungs half full, so when you empty your lungs you descend.

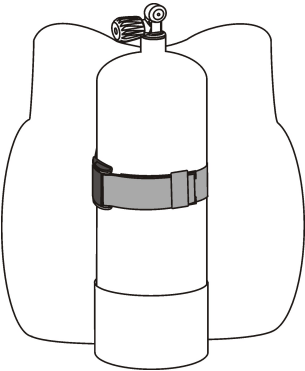
Important: It is essential to do a buoyancy check before venturing into open water.

Cylinder Mounting Options

Single Cylinder

BK3 – Single cam band fitted as standard.

Suitable for all common cylinder sizes.

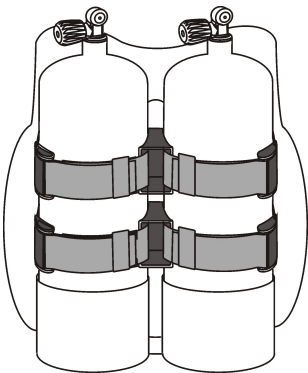


Twin Cylinders

Twinning bands available in 3 standard sizes:

Product Code	Main Cylinder Diameter
BK15	5.5"
BK16	7"
BK17	8"

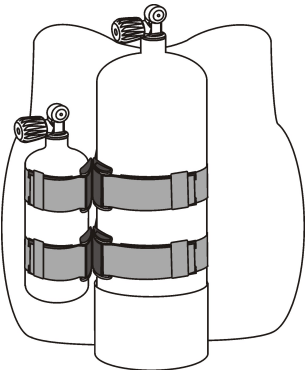
Note: Spacer blocks are not used if the valves are manifolded.



Pony Cylinders

Pony bands available in 4 standard sizes:

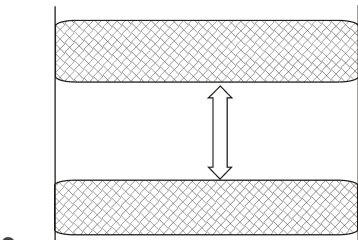
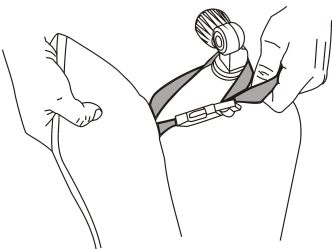
Product Code	Main Cylinder Diameter	Pony Cylinder Diameter
BK18	7"	4"
BK19	7"	4"
BK20	8"	4.5"
BK21	8"	4.5"



Note: The top cam bands fit through the BC Backplate and around the cylinders. The lower bands only go around the bands for stability.

Mounting Cylinders

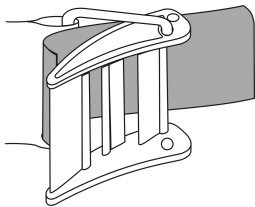
1. Place the loop on the rear of the BCD over the neck of the cylinder. Adjust the webbing so the jacket is sitting at the desired height on the cylinder.



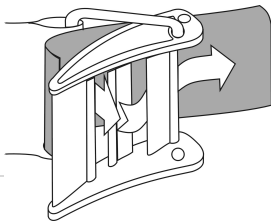
2

2. If mesh is used on the cylinder, part it to allow the cam band to grip directly on to the surface of the cylinder.

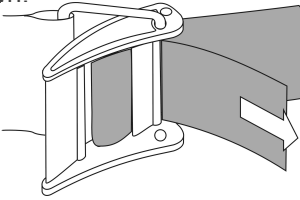
3. Ensure the rubber sleeve aligns with the velcro on the cam band.



4. Before threading the buckle turn it back against the metal loop.

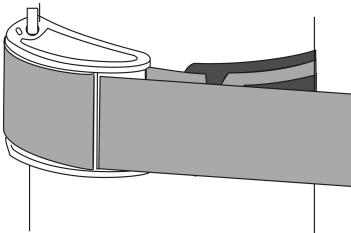
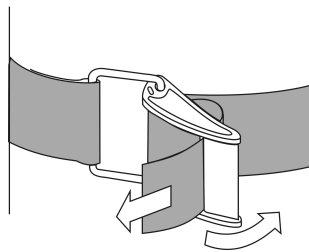


5. Thread the webbing through the metal loop and through the buckle as shown.



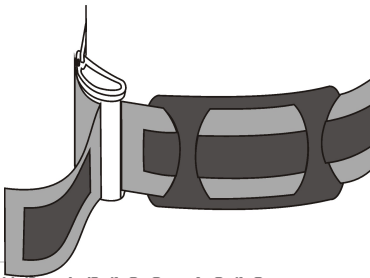
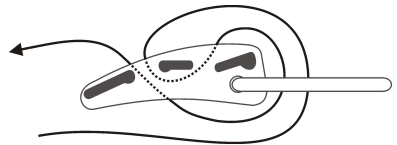
6. Pull the end of the webbing to tighten the webbing to the cylinder.

7. Secure the webbing by pulling the buckle forward 90°. Now thread the remaining webbing through the buckle, as shown.

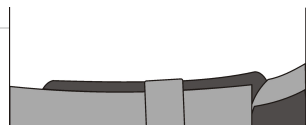


8. Clamp the cam buckle in position by pulling the end of the webbing.

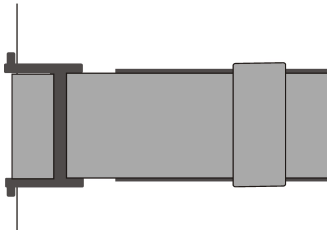
9. This is a cross section showing how the webbing should be threaded through the cam buckle.



10. Ensure that the rubber sleeve does not interfere with the buckle.



11. Once secure, the loose end of the webbing is then velcroed down and tucked under the webbing loop, leave 50mm (2") spare.



12. Check that the cam band is straight on the cylinder and secure.

Pre Dive Inspection

Visually inspect the BCD material and fittings for signs of damage or excessive wear.

Operate the quick release snap connector on the direct feed hose. Ensure that the connector operates smoothly.

Attach the direct feed hose to a low pressure port on the 1st stage pressure reducer. Connect the hose snap connector to the power inflator. Inflate the BCD until the over pressure valves start to vent. Check that the rate of inflation is satisfactory. Check for leaks, especially around the valves (once they have finished venting the excess pressure).

Operate all the dump valves, including the inflator dump and elbow dump on the convoluted hose. Ensure the valves operate and re-seal.

Important: If you find any problems please **DO NOT** use the BCD, contact the factory for advice. Unauthorised repairs or modifications may be dangerous and could affect the warranty.

Donning the BCD

Fully extend all the adjustment straps and clip the shoulder straps together.

With the help of your Dive Buddy slide your arms through the shoulder straps. While your Dive Buddy takes the weight of the BCD tighten the shoulder straps until the cummerbund is level with the hips.

Wrap the cummerbund around your hips and clip the waist and chest straps together, pull all the straps to tighten. The waistband should sit comfortably around the hips.

Add some gas to the BCD and adjust the chest straps accordingly.

Check that you can move your arms freely, and make any final adjustments.

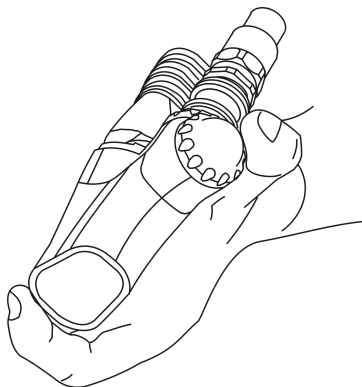
Buoyancy Control

Inflating the BCD

Power Inflator

For routine BCD inflation, press the blue dome button on the power inflator. This draws gas directly from your main gas supply. Gas should be added in short bursts to avoid a buoyant ascent.

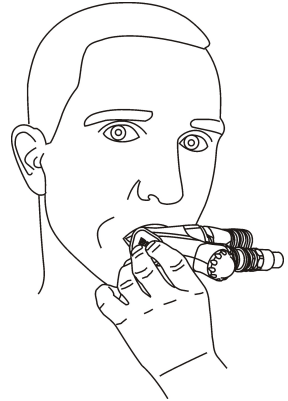
Important: In the event of a free flow into the BCD from the power inflator, disconnect the direct feed hose thus cutting off the feed of gas to the BCD. The direct feed hose valve will automatically shut off when it is disconnected.



Important: Add and vent gas from the BCD in short bursts to maintain a controlled decent, ascent and neutral buoyancy. Adjusting the BCD's buoyancy in large amounts will cause a see-saw effect dive profile and may cause an uncontrolled buoyant ascent.

Oral Inflation

The BCD can be orally inflated by pressing the exhaust button at the end of the valve and blowing into the oral inflation mouthpiece.

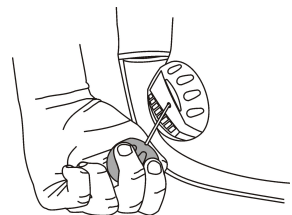
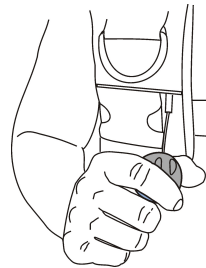


Deflating the BCD

Dump Valves

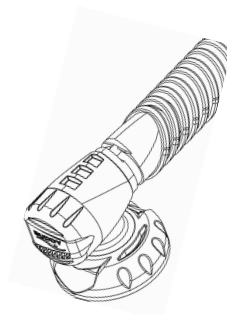
There are two standard dump valves on the BCD for routine deflation, one on the right hand shoulder and one on the lower left. The shoulder dump works best while the divers head is towards the surface; the rear dump valve works best when the diver is facing downwards.

To operate the dump valves, pull on knobs attached to the valves. To aide location the shoulder knob is negatively buoyant and the lower knob is positively buoyant.



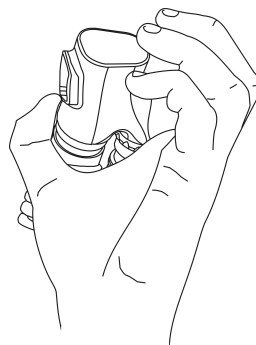
Elbow Dump

The Elbow dump sits on the left hand shoulder. To operate the valve, pull the inflator unit attached to the convoluted hose. The inflator pulls on a cable running through the hose to operate the valve.



Power Inflator Dump

The exhaust button on the power inflator can be used to deflate the BCD. To operate the exhaust valve raise the valve above your head and press the grey exhaust button at the end of the valve.



Note: Water may enter the BCD when using the power inflator dump.

Post-Dive Maintenance

Always rinse the BCD with cold potable water after every diving session.

To rinse the inside of the BCD, unscrew the elbow joint connecting the convoluted hose. Pour in cold potable water to rinse to air cell, then drain and leave to dry naturally. Rinse and dry the convoluted hose using the same method. **IMPORTANT–** Ensure that the elbow O-ring is correctly located before replacing the elbow and conduct a leak test by inflating the BCD.

If necessary disinfect the BCD after rinsing using diluted the AP Diving cleaning solution. Thoroughly rinse the disinfectant from the BCD using cold potable water. **IMPORTANT–** Never use household detergent, bleach or other strong chemicals to clean the BCD.

Allow the BCD to dry naturally, ideally inside an enclosed clean and dry room with circulating air. **IMPORTANT – DO NOT** dry the BCD in direct ultraviolet sunlight or a radiant heat source which could damage or discolour the BCD fabric.

Storage

After cleaning and drying the BCD it should be stored in a clean and dry environment. There should be adequate air circulation to minimise the potential for condensation.

Remove any heavy objects and avoid any stress to the air cell or harness during storage.

BCD's that are not used for an extended period will not benefit from regular cleaning (rinsing and drying). This will increase the potential for growth of any contaminating micro-organisms that might be present.

Technical Information

Sizing & Buoyancy

Size	Chest Size (Measured in T-shirt)*	Max. Buoyancy (kg)	Buoyancy (N)
Small	< 99cm/39"	11.2	110
Medium	99cm/39" – 110cm/43.5"	17.3	170
Large	110cm/43.5" – 120cm/47.5"	19.3	190
XL	120cm/47.5" – 131cm/51.5"	21.4	210
XXL	131cm/51.5" >	27.5	270

***Your suit type should be considered as follows:**

5mm wetsuit: add 2.5cm/1" to the measurements above

10mm wetsuit: add 5cm/2"

Membrane drysuit + undersuit: add 5cm/2"

BCD Operating Temperature Range

Air: -10 to +50 °C

Water: -2 to +40 °C

Direct Feed Inflator Hose Supply Pressure

Max: 28 BAR

Min: 6.5 BAR

Recommended: 9.5 BAR

BCD Shelf Life

The shelf life of an unused BCD is 7 years, derived from the O-rings and seals.

Warranty

All AP Diving products are sold on the understanding that only British Law applies in cases of warranty claims on the product liability, regardless of where the product is purchased or used.

This BCD is warranted against faulty materials and workmanship for a period of 3 years from date of purchase. A valid warranty card or purchase receipt must be made available before a claim can be made.

If a fault occurs AP Diving will replace or repair the product at their discretion, therefore all claims must be referred directly to AP Diving.

AP Diving reserves the right to verify all claims. If a fault occurs, firstly contact the factory for advice and if necessary, the product should be returned directly to the factory, postage and insurance pre-paid.

Due to the harsh nature of the diving environment, misuse or neglect renders all warranties null and void.

Any unauthorised repairs or modifications render all warranties null and void.

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