

J-1700 Mercury

Buoyancy Compensator Devices Owner's Guide

### **NOTICE**

The PPE (Personal Protective Equipment) mentioned in this User's Manual was assessed by ITALCERT – Viale Sarca 336, 20126 Milano ITALY, Notified body n° 0426.

This device is in compliance with EN 1809:2014+A1:2016 (PPE belonging to category II)

The CE marking means the compliance of the device to the Basic Health and Safety Requirements of Annex II of Regulation (EU) 2016/425.



# Thank you for choosing IST BCD

## **Definitions of Warning, Cautions and Notes**



A warning

indicates a situation that, if not void, will result in serious injury or death.



A cautions indicates a situation that, if not void, may result in serious injury or death.



indicates a situation that, if not avoid, may result in minor or moderate injury or damage to the BCD.



# **CONTENTS**

General Warning and Cautions	3
Airway	6
Attaching Low Pressure inflator hose	8
Threading the tank band and buckle	9
Attaching the tank to BCD	10
Donning the BCD	12
Over Pressure Relief Valves	14
Cummerbund Adjustment	15
Dumpable Weight pouch	16
Non-Dumpable Weight pouch	18
Maintenance	19
Limited Warranty and Disclaimer	21
Service Record	22





# **General Warning and Cautions**



Read owner's guide and any labels affixed to the BCD thoroughly before using this product. If you do not completely understand these instructions, do not use this BCD.

Do not use this BCD if you have not received proper training and certification in SCUBA diving.

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

Emergency face up flotation may not be provided for all wearers and in all conditions.

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

Do not inhale gases from within this BCD.



Prior to each dive, full inflate the BCD and inspect for leakage, damage and proper operation.

Before diving this BCD in open water, it is important to familiarize yourself with it first in confined shallow water, do not enter open water until you have weighted yourself properly and become familiar with using all of its features and adjustments.

Before entering water, check to ensure that you can ditch the dumpable weight pouch quickly and easily without any obstruction. You may need to do it when under water in the events of out of air emergency or uncontrolled descent.

Obtain prescribed service for this BCD from an IST OEM customer at least once a year. The service consists of a complete overhaul of the power inflator and a general air leak inspection of valve connections and bladder.

Repair and disassembly must only be performed by IST OEM customer. Unauthorized service will void the warranty and may cause this product to malfunction.



The Maximum depth covered by certification is 50 meters.

Limitation to use of compressed air in compliance with EN12021

Maximum recommended cylinder capacity is 15 liters(See Fig. 1)



#### Temperature Range for Use:

Air  $-20^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ 

Water -2  $^{\circ}$ C to +40  $^{\circ}$ C

#### Marking

When fully inflated in fresh water at sea-level, approximate buoyancy capacity of each size is as follows which is printed on a label sewn on BCD:

### J-1700 BC'S LIFT (unit: N)

Size	XS	SM	MD	LG	XL
Part No.	J1700-XS	J1700-S	J1700-M	J1700-L	J1700-XL
Buoyancy	120	140	170	220	270



# **Airway**

#### Power inflator

Inflator's Working Pressures are 110 psi (7.58bars) Minimum, 160 psi(11.03bars) Maximum, and 140 psi(9.65bars) nominal. Inflator button, Press it to inflator BCD. (See Fig. 1-1) Manual button and Mouthpiece, press it to

deflate BC or oral inflate BCD(See Fig. 2)



Fig.1-1



Note

Oral inflation of your BCD under water is a skill that must be achieved under the supervision of a certified diving instructor.

 $\triangle$ 

Depressing the oral inflator button while the BCD is empty

may allow the water to enter the bladder.



#### Rapid Exhaust Valve

It automatically release air when the air pressure inside the bladder is nearly 2.4 pounds per square inch(0.165bar) over ambient. You can pull to dump air thru REV too.(see Fig. 3)



Fig.3



## **Attaching Low Pressure inflator hose**



Only attach the LP hose to the lower pressure (LP) port of **Warning:** regulator. Attach to the High Pressure (HP) port may cause the hose to burst and result in serious injury.









Fig. 4

Fig. 5

Fig. 6

Fig. 7

Ensure the presence of an o-ring. (See Fig. 4)

Screw the male end into the LP port of regulator, make sure it secured. (See Fig. 5)

Attach female end onto inflator nipple.(See Fig. 6)

Open the tank valve slowly and press the inflator button to hear the air flowing into BC. (See Fig. 7)



# Threading the tank band and buckle



**NOTE:** BCD is shipped with the tank band pre-threaded through the buckle. (See Fig. 8 Fig. 9 Fig. 10 Fig. 11 Fig. 12 & Fig. 13)



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12



Fig. 13



# Attaching the BCD to the tank

**NOTE:** Wet the tank band first, the nylon webbing stretches a little while wet.

**NOTE:** Make sure the metal loop of the tank band is as close to the rear of BCD as possible, this will provide a great range of adjustment.

Loop the tank locator strap over the tank valve; adjust it to hold the BCD at the desired height position. (See Fig. 14)



Fig. 14

Open the buckle and pull the free end of the tank band until the backpack fit the tank very tight. (See Fig. 15)
Close the buckle half and thread the free end of the band through the end slot of the buckle.(See Fig. 16)



Close buckle and secure the Velcro closure of the tank band. (See Fig. 17)







Fig. 15

Fig. 16

Fig. 17



# **Donning the BCD**

Loosen each straps to its maximum length by lifting up on the bottom tabs of the buckle. (See Fig.18)

Open the sternum strap buckle (See Fig.19) and waist strap buckle if equipped. Open the waistband (See Fig.20).



Have your dive buddy hold the BC/cylinder assembly behind you, while your arms through the shoulder straps(See Fig.21).

Pull the BC onto your back, adjust it comfortably fit your height, fasten close the waist band until it is close fit for your waist. (See Fig.22)





After your dive buddy released the BC/cylinder assembly, and the weight of the BCD was located on your hips and shoulders, bend forward at the waist and tighten the shoulder straps by pulling down on the D-rings located on the ends of the straps(See Fig.23).

Readjust the waistband, if necessary, so that it is comfortably fit your waist but not restricting, with 4 inches of overlapping closure.

Close the sternum and waist straps, if equipped, and pull the free ends until they are comfortably snug but not restricting(See Fig.24 & 25)



### **Over Pressure Relief Valves**

#### Some BCD models have this feature.







Fig. 26

Fig. 27

Fig. 28

It automatically release air when the air pressure inside the bladder is nearly 2.4 psi (0.165bar) over ambient.(See Fig. 26)

You can pull the ball to rapidly dump the air too. (See Fig. 27 & Fig. 28)



Whenever you remove and replace the cap of the valve, make sure that the stainless spring is in correct place; pull it to feel the spring function well and inflate the BCD to see if it is secured and no leak.



# **Cummerbund Adjustment**

#### Some BCD models have this feature.

Adjust the ends and secure the Velcro. (See Fig. 29 & 30)

The adjustment should leave an overlap of 4 inches when wearing the BCD.(See Fig. 31)







Fig. 29

Fig. 30

Fig. 31



# **Dumpable weight pouch**

Some BCD models have this feature.



Warning: You must practice the ditching of these Dumpable Weight Pouches prior to each dive.

Put weight into pouches(See Fig. 32 & Fig. 33)

Insert weight pouches into BCD and secure with Velcro and/or

buckles. (See Fig. 34 Fig. 35)

Grasp the handles and pull them out firmly and completely out of BCD.

(See Fig. 36)



A cautions To avoid injuring other divers, always look below you before dropping weight.









Fig. 33



Fig. 34

Fig. 35

Fig. 36



# Non-Dumpable Weight Pouch



**Warning:** It cannot be released to provide emergency ascending Maximum weight for Non-dumpable weight pouch is 5 pounds (2.2kg)





Fig. 37

Fig. 38

Put weight into weight pouches and secure with Velcro. (See Fig. 37 & 38)



## **Maintenance**



NOTE:

Improper maintenance will void the warranty and cause this product to malfunction.

During use, do not pull the BCD on the sand and stone.

Do not sit on BCD or set heavy/sharp objects on the BCD.

Do not put the BCD under sunshine unattended.

Do not dip the BCD in chlorine water.

#### After use:

Rinse the outside of BCD thoroughly with fresh water.

Fill the BCD one third full with fresh water through the inflator mouthpiece.

Fully inflate the BCD, rotate and shake the BCD to rinse the interior thoroughly.

Drain the water out through mouthpiece.

Fully inflate the BCD and allow it to dry inside and outside.

Slightly inflate the BCD for storage in cool place.





Warning:

Do not hang the BCD on hooks like this, it will puncture the bladder: (See Fig.39)



Fig. 39



# **Limited Warranty**

IST warrants the original purchaser for two years from the date of purchase. The product will be free from defects in material and workmanship, provided it receives normal use and proper care.

The warranty must be made through the same IST OEM customer and a sale receipt must accompany the product to be returned.

These warranty are limited to repair or replacement at the discretion of IST.

## **Disclaimer**

IST disclaims and excludes any liability for incidental or consequential damages.

# **Normative References**

EN1809:2014+A1:2016 Diving equipment - Buoyancy compensators - Functional and safety requirements, test methods.



# **Service Record**

Purchase date:		
	Serial no.:	
OEM customer:		
1. Service person signatur <u>e</u>	Date:	
Notes:		
2. Service person signature	Date	
3. Service person signature	Date	



4. Service person signature	Date:	
Notes:		
5. Service person signature	Date	
Notes:		
6. Service person signature		
Notes:		
7. Service person signature Notes:		



3. Service person signature	Date
Notes:	
9. Service person signature	Date
Notes:	









IST SPORTS CORP www.istsports.com

CE marked BC have been approved to EN 1809:2014+A1:2016 EC Type examination conducted by: ITALCERT S.r.I V.Ie Sarca, 336 - I 20126 Milano , Italy

