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Printed in Taiwan

# TUSA

BUOYANCY COMPENSATOR JACKET TARIER-JACKET GILET STABILISATEUR TRIMJACK CHALECO COMPENSADOR DE FLOTABILIDAD CORPETTO EQUILIBRATORE ЖИЛЕТ КОМПЕНСАТОР ПЛАВУЧЕСТИ

# OWNER'S MANUAL GEBRAUCHSANLEITUNG MANUEL D'UTILISATION HANDLEIDING MANUAL DE USUARIO MANUALE D'USO РУКОВОДСТВО ПОЛЬЗОВАТЕЛЯ

BEFORE USING ANY TUSA B.C.J. READ THIS MANUAL COMPLETELY.

VOR DEM GEBRAUCH EINES TARIER-JACKETS VON TUSA BITTE DIE GEBRAUCHSANLEITUNG GANZ DURCHLESEN.

AVANT D'UTILISER UN GILET STABILISATEUR TUSA QUELCONQUE VEUILLEZ LIRE ATTENTIVEMENT CE MANUEL D'UTILISATION.

LEES DEZE HANDLEIDING AANDACHTIG DOOR ALVORENS U HET TUSA TRIMJACK IN GEBRUIK NEEMT.

ANTES DE UTILIZAR CUALQUIER CHALECO COMPENSADOR DE FLOTABILIDAD TUSA, LEA COMPLETAMENTE ESTE MANUAL

PRIMA DI USARE QUALSIASI CORPETTO B.C.J.TUSA LEGGERE ATTENTAMENTE QUESTO MANUALE.

ПЕРЕД ИСПОЛЬЗОВАНИЕМ ЛЮБОГО ЖИЛЕТА КОМПЕНСАТОРА ТUSA ПОЛНОСТЬЮ ПРОЧТИТЕ ДАННОЕ РУКОВОДСТВО

CE0426 EN 250 EN 1809

9 th.

**CONGRATULATIONS!** You are now the owner of one of the many fine TUSA products. Your new Buoyancy Compensation Jacket is built to exacting standards, using only the highest quality materials.

Before you use your new B.C.J., please read this manual carefully. The following warning, cautions, and notes were written to make it possible for you to enjoy your diving experience with maximum safety.

We at TUSA want you to have many years of dependable service from your new equipment and have many memorable and safe dives. Thank you for purchasing one of our high quality products.

#### WARNING : THIS PRODUCT IS A SCUBA DIVING BUOYANCY DEVICE. THIS IS NOT A LIFEJACKET: IT DOES NOT GUARANTEE A HEAD UP POSITION OF THE WEARER AT THE SURFACE.

**IMPORTANT NOTICE :** TUSA BCJ is intended to be used **down** to a 50 meter (164 feet) maximum water depth and **can** be used in cold water with temperature below 10°C.

#### "MARKING"

When fully inflated in fresh water at sea-level, approximate buoyancy capacity of each size is as follows:

| Size | Lift Capacity   |                 |                 |                 |                 |  |
|------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
|      | BCJ-5960        | BCJ-5560        | BCJ-2100/3200   | BCJ-1800        | BCJ-7000        |  |
| XS   | -               | -               | 80N (=8.2kgf)   | 75N (=7.7kgf)   | -               |  |
| XS-S | 190N (=19.4kgf) | 130N (=13.3kgf) | -               | -               | 165N (=16.8kgf) |  |
| S    | -               | -               | 100N (=10.2kgf) | 93N (=9.5kgf)   | -               |  |
| М    | 190N (=19.4kgf) | 160N (=16.3kgf) | 140N (=14.3kgf) | 110N (=11.2kgf) | 165N (=16.8kgf) |  |
| L    | -               | -               | 170N (=17.3kgf) | 147N (=15.0kgf) | 220N (=22.4kgf) |  |
| L-XL | 190N (=19.4kgf) | 230N (=23.5kgf) | -               | -               | -               |  |
| XL   | -               | -               | 205N (=20.9kgf) | -               | 220N (=22.4kgf) |  |

| Size | Lift Capacity   |                 |                 |                 |                 |  |
|------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
|      | BCJ-9300        | BCJ-3860        | BCJ-1650        | BCJ-6900        | BCJ-6910        |  |
| XS   | 85N (=8.7kgf)   | 105N (=10.7kgf) | 80N (=8.2kgf)   | 140N (=14.3kgf) | 140N (=14.3kgf) |  |
| XS-S | -               | -               | -               | -               | -               |  |
| S    | 105N (=10.7kgf) | 125N (=12.8kgf) | 95N (=9.7kgf)   | 140N (=14.3kgf) | 140N (=14.3kgf) |  |
| М    | 125N (=12.8kgf) | 155N (=15.8kgf) | 135N (=13.8kgf) | 140N (=14.3kgf) | 140N (=14.3kgf) |  |
| L    | 140N (=14.3kgf) | -               | -               | 140N (=14.3kgf) | 140N (=14.3kgf) |  |
| L-XL | -               | 195N (=19.9kgf) | 170N (=17.3kgf) | _               | -               |  |
| XL   | _               | _               | _               | 180N (=18.4kgf) | -               |  |



MAX. CAPACITY : 15 Litres Tank Diameter MAX. :  $\phi$ 204mm (8.0 inch) **NOTICE:** The PPE (Personal Protective Equipment) mentioned in this User's Manual was submitted to tests for validation of the design and certified according to Art. 10 of Directive 89/686/EEC by ITALCERT - Viale Sarca 336, 20126 Milano ITALY, Notified body  $n_o$  0426. This device is in compliance with EN 1809:1997 (PPE belonging to category II) and EN 250:2000 (PPE belonging to category III).

The CE marking means the compliance of the device to the Basic Health and Safety Requirements of Annex II of Directive 89/686/EEC. The number 0426 near the CE identifies the Notified Body ITALCERT, entitled for the EC quality control system for the final product according to Art. 11.A of Directive 89/686/EEC."

#### The definition of SCUBA according to EN 250:

- demand regulator, air cylinder with cylinder valves
- carrying harness / support for air cylinder (your B.C.J.!)
- safety device/s (e.g. your Pressure gauge) , facepiece / mouthpiece

This device is a component of your SCUBA. Remember that a SCUBA must be composed only of CE marked components. Please read carefully the User's Manuals attached to all the components you intend to use to assemble your SCUBA." Tabata cannot be considered responsible for any damage / injury to persons or things for eventual uncompatibilities / misuse due to use of non CE marked components.

# WARNING STATEMENTS

- This information has been put together for your safety. Please read and understand this manual completely before using your new B.C.J.
- Prior to using this product, it is required that you receive training in buoyancy compensation from an internationally recognized educational organization.
- You should also carefully read the owner's manual and all instructions that accompany this product before its use.
- Misuse of this product may result in uncontrolled ascents, descents, loss of buoyancy and control which could lead to serious injury or death.
- Please Note: This B.C.J. is not a Coast Guard approved surface flotation device for all users and conditions.
- Always inflate your B.C.J. slowly to avoid uncontrolled ascents. Rapid inflation can lead to loss of control upon ascent which could result in air embolism, serious injury or death.
- A significant amount of practice is required in order to maintain a safe rate of ascent. The Overpressure Valve cannot and should not be used to control or prevent uncontrolled ascents.
- Do not add weight to the B.C.J. by placing them in the pockets, or other form of attachment. Doing so may prevent you from easily releasing them in case of emergency. Additionally, excess weight may reduce the buoyancy of the B.C.J. and impair or prevent its proper operation.
- Your cummerbund and attachment straps should be adjusted for a comfortable and proper fit. Your B.C.J. should **not** restrict your breathing when fully inflated. Check all bands, straps, quick-disconnect buckle and the cummerbund for wear prior to

each use. Replace worn or damaged items before use, using only an **authorized** scuba equipment repair facility.

- Modifying your B.C.J. or using after-market accessories may prevent it from functioning properly and could result in damage to the B.C.J. which may lead to serious personal harm or death.
- Always examine your B.C.J. on a pre-dive, dive and post-dive basis. This will help you identify equipment problems before they occur. Virtually all B.C.J. equipment-related diving accidents can be prevented by following these simple warnings and precautions. It is also strongly recommended to have your B.C.J. checked regularly by your authorized TUSA dealer/service center to ensure that the inflator and/or other mechanical devices are operating properly.
- It is important to have the APA system serviced every 12 month or after 100 dives (whichever comes first). Please see authorized dealer for overhaul.
- This equipment is designed to use standard air mixtures containing 21% oxygen and 79% nitrogen. (the breathable air must be in compliance with EN 12021.)
  Fill in your air cylinders only from certified compressors. If you have any doubt concerning the quality of the air (e.g. smell) DON'T DIVE!

The addition of helium or other substances, or using different

mixtures may cause deterioration or corrosion of metal and rubber parts. Such deterioration may lead to premature aging or failure. Non-standard air mixtures may also increase the risk of fire or explosion.

- When storing, transporting in your car, or shipping the BCJ, do not have the inflator hose folded. Also, do not pull on the inflator section when taking the BCJ out from a mesh bag or the like or when carrying it around. Applying excess force to the inflator hose, for example by folding it, twisting it, or pulling on it too hard, can cause cracks in the hose.
- Never leave the BCJ in the passenger compartment or trunk of your car on a clear day, exposed on a boat to direct sunlight, or in any location that might reach extremely high temperatures over 60°C. The heat and UV rays can cause deformation and discoloration and reduce the service life of the material the BCJ is made from.
- Keep the BCJ away from knives, cutters, and other sharply pointed objects.
- When handling the BCJ, never place any heavy object on it, drag it around, or handle it in any way roughly.

#### PLEASE NOTE:

This Owner's Manual contains important safety and maintenance information. The entire manual should be read and understood fully before using your Buoyancy Compensator Jacket (B.C.J.). If you have any questions concerning the use or care of your B.C.J. contact your TUSA Dealer, your diving instructor, or the nearest TUSA Distributor.

# **BEFORE DIVING INSTRUCTIONS**

Take the time to familiarize yourself with the function of your B.C.J. prior to use in

#### The checks that must be performed before dive:

- Connect the QD hose to the inflator and to the pressure reducer (follow instructions on "AIRWAY SYSTEM" para).

- Open the tank valve slowly after all the SCUBA is assembled.

- Check all the devices for inflation and deflation for correct functioning: Inflate and deflate activating all the devices. If you feel that any of the devices do not function properly, DON'T DIVE.

- Inflate B.C.J. until it feels firm. Let stand for 30 minutes. If the bag is not as firm as when inflated, DON'T DIVE.

NOTE: These information are partially included in "PRE-DIVE INSPECTION" in page 9.

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# BUOYANCY COMPENSATOR JACKET DESIGN AND FUNCTION

Your TUSA Buoyancy Compensator Jacket is a single bag construction. With proper care, it should give you many years of trouble-free service.

Your TUSA Buoyancy Compensator Jacket functions three ways:

- 1. Provides surface flotation-Your B.C.J. supplies added surface buoyancy, allowing you to direct your energy to swimming rather than flotation.
- Effortless ascent and descent-Increasing or decreasing air to your B.C.J. provides positive or negative buoyancy, with rate of air increase or decrease controlling rates of ascent/descent.

#### PLEASE NOTE:

Adjusting air for ascent requires practice in order to maintain a safe rate of ascent. Air inside your B.C.J. expands as you approach the surface, causing acceleration. Consult your certified diving instructor or diving manual for instruction regarding safe rates of ascent and descent.

 Allows for neutral buoyancy at various depth-When you have reached the desired depth, adding or releasing the correct amount of air will allow you to reach neutral buoyancy. You will neither ascend nor descend.

#### PLEASE NOTE:

Should repairs ever become necessary, work is to be performed only by an authorized TUSA Dealer.

#### **AIRWAY SYSTEM**

Airway Systems are standard on all TUSA B.C.J. 's Low Pressure Quick Disconnect(QD) Hose Installation

#### To Your Regulator

HAND-SCREW in threaded end of the QD Hose into Low Pressure Port of Regulator. Tighten gently but firmly with a 15mm hexagonal key. The threaded connection of the QD hose to the pressure reducer is a standardized connection 3/8" UNF. Please refer to the User's Manual of your regulator for identification of LP outlets.

Check your system before dive: a low pressure gauge connected to LP Ports must not read over 1.2MPa (12bar), and under 0.8MPa (8bar) if tank is full.

It is recommended that your TUSA dealer installs your QD Hose on your regulator.

WARNING: Do not connect QD Hose to Regulator High Pressure(H.P.) Port. Injury to diver and equipment may result.

#### To Your B.C.J. (Fig. 1)

Connect QD Hose Inflator by pulling Quick-Disconnect Collar back with thumb and forefinger, while pushing Hose Coupling onto Inflator Plug. Release Collar when Coupling is engaged fully. Pull gently but firmly on Hose to check if Coupling is securely joined to Plug. To disconnect Inflation Hose from Inflator, pull Quick-Disconnect Collar back and disengage Coupling from Plug





#### Attach the "Low Pressure Quick Disconnect Hose' to the inflator plug

#### Setting the low pressure hose (APA type)

Connect the plug for the coupler for the regulator BCJ low pressure hose, then fit in the low pressure hose in the groove on the side of the inflator hose as in Photographs 3 and 4. This arranges the hose neatly and makes it easier to handle and makes it easier to mount and remove the BCJ



(Fig. 4)

#### Inflator setting position (APA type)

The recommended APA inflator setting position is the same as for a regular inflator. (Fig. 5)

Of course, normal exhaust operations and use of the Rapid Exhaust Deflation by pulling the APA inflator main unit are both possible. When primarily using the rapid exhaust function with the APA exhaust button, there is also an APA inflator setting position that uses the BCJ hose holder to fasten with the APA exhaust button right at hand. (Fig. 6)



(Fig. 5)

(Fig. 6)

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# **B.C.J. DEFLATION**

#### Rapid Exhaust Deflation (Fig. 7)

Rapid Exhaust feature is a standard item on the TUSA B.C.J.'s allowing the diver to vent air rapidly from the B.C.J.

Procedure for activating valve is as follows:

1. Pull gently on forward Inflator Assembly to activate Exhaust Valve. Maintain forward pressure until enough air has been exhausted to reach desired buoyancy. Release pressure to close valve.



(Fig. 7)

#### PLEASE NOTE:

Rapid Exhaust Valve has a pull travel limited to approximately 1/4". Pulling harder WILL NOT increase air flow. Do not yank or jerk hard on Inflator Assembly to activate valve, or this could lead to the damage of parts and malfunction of the system.

#### NOTE:

Should Rapid Exhaust Valve not operate properly, manual(oral) deflation can be accomplished using the Manual Deflation Button.

#### CAUTION:

Do not press Manual(oral) Inflation/Deflation Button while exhausting air through Rapid Exhaust Valve, as this will cause water to enter B.C.J.

#### Manual Deflation

Procedure for Manual Deflation.

- 1. Raise Inflation/Deflation Assembly to a position nearest the surface of the water.
- 2. Press Manual Inflation/Deflation Button until enough air has been exhausted to reach desired buoyancy. (Fig. 8)
- 3. Release pressure from button and re-position hose.

**NOTE:** Do not continue pressing button after all air has been exhausted from B.C.J. Doing so may cause water to enter into inner bladder.



#### APA inflator unit (APA type)

To take in air from the tank and obtain buoyancy, press the Auto inflation button. Holding down this button can take in more air than necessary, so adjust the amount of air by repeatedly pressing the button for a short while then releasing it. On the other hand, air can be deflated from the BCJ to lower buoyancy by raising the APA inflator main unit high in the direction of the water surface and pressing the regular Deflation button. It is also possible to deflate rapidly by pressing the APA deflation button. Of course, it is equipped with the Rapid Exhaust Deflation, which is a feature of TUSA BCJs. This function "enables you to exhaust rapidly by grasping the APA inflator main unit with one hand and just pulling in forward direction". It is very important to practice oral inflation method , manual deflation method and disconnecting LP hose to prepare for any type of malfunction or emergency situation.

# **B.C.J. INFLATION**

#### Oral Inflation

Procedure for Oral Inflation:

- 1. Before activating valve, purge any water that may be trapped in mouthpiece by exhaling a small amount of air into oral inflator opening.
- With mouth still pressed against oral inflator opening, press Manual Inflation/Deflation Button as you exhale. (Fig. 9)



(Fig. 9)

- 3. Release button as you inhale air.
- 4. Continue inflation using Steps 1-3 until desired buoyancy is achieved.

#### Auto Inflation

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To inflate B.C.J. slowly press Auto Inflation Button. (Fig. 8)

#### WARNING:

While inflating the B.C.J. it is recommended to have contact on the deflation button to prevent an out of control ascent.

#### **Over-Pressure Exhaust Valve**

All TUSA B.C.J.'s are equipped with an Over Pressure Exhaust Valve. (O.P.E.V.)

This allows the B.C.J. to be automatically vented should air pressure in the inner bladder become too great. O.P.E.V. valve will close once desired air pressure is achieved, thus preventing damage to B.C.J. due to overexpansion.

#### CAUTIONS FOR APA INFLATOR USAGE (APA TYPE)

In case of malfunction of APA power exhaust upon emergency such as damage of internal wire, use oral exhaust method.

If the APA inflator main unit is dragged along a surface, for example when you reach the bottom, then sand and pebbles may jam the APA deflation button and make exhaust operation impossible. If exhaust operations do become impossible, either use a normal exhaust operation or use the Rapid Exhaust Deflation to exhaust. After exiting, carefully wash out the sand clogging the button with running water.

#### PRE-DIVE INSPECTION

Following procedures to be performed before every dive:

- 1. Check the Rapid Exhaust Valve threaded fitting, and make sure they are tightened down properly.
- 2. Inflate B.C.J. until it feels firm. Let stand for 30 minutes. If the bag is not as firm as when inflated, do not use. Return B.C.J. to the nearest TUSA Dealer for inspection and/or repair.
- 3. It is important to have the APA system serviced every 12 month or after 100 dives (whichever comes first). Please see authorized dealer for overhaul.

#### **Cummerbund Adjustment**

(1) Peel off the Hook & Loop fastener of the rear end of cummerbund which has been folded back through the appropriate slot of the waist support panel. Adjust the length and then close the Hook & Loop fastener. (Fig. 10)



(Fig. 10)

(2) If you must make a major adjustment in length, use a different slot in the waist support panel. (Fig. 11, 12)



#### Adjusting the tightness around the arm hole. (BCJ-9300, 5560, 3860)

- (1) There are two adjustment slots on the waist support panel. If you feel the shoulder strap too tight or too loose against your shoulder / arm, you can adjust by attaching the shoulder strap into another slot.
- (2) Move the metal slider to desired slot. Outer slot for wider fitting, inner slot for tighter fitting. Simply pull on, turn parallel, and slant the metal slider. Pull the

metal slider out through the slot. Reinsert the metal slider into the new slot with the same procedure.

(3) (Fig. 13) shows the anchor belt after adjustment. If the metal slider comes out, the BCJ may be pulled back by the weight of the tank and slide down. Be sure to check that the metal slider is securely fastened.



(Fig. 13)

#### THREADING AND ADJUSTING TANK BELT

1. Thread the cam buckle as shown in Figure (14 to 16).



- 2. Slide the backpack onto tank to desired position.
- Cam belt should now be positioned as shown in Figure 17. Pull firmly on end of the belt until all slack has been removed.



- 4. Once again check that the backpack is at desired position on tank.
- 5. To prevent slack of the belt while buckle is lifted, mate the Hook and Loop fastener on the belt once in this timing. (Fig. 18)



(Fig. 18)

- 11 -

6. Pull the buckle to be upright positioned as shown in Figure 19 so the belt cannot slip. And release the Hook and Loop fastener then thread the end of belt through end slot of buckle. (Fig. 20)



(Fig. 19)

7. Grasp belt end firmly and pull buckle to closed position. (Fig. 21) Attach belt end to Hock & Loop fastener. (Fig. 22)



#### (Fig. 21)

(Fig. 22)

- 8. Check that the tank belt is securely fastened to tank. Hold tank in place in an upright position. Grasp backpack by upper carrying handle, and try to move backpack up and down on tank. There should be no movement, if belt moves, has not been adequately tightened.
- 9. To readjust to proper tightness:
  - (a) Remove belt end from Hock & Loop fastener, and cam buckle.
  - (b) Unthread belt from end slot only of cam buckle.
  - (c) Repeat step 5-8 above.
- 10. To remove backpack from tank after a dive:
  - (a) Remove belt end Hock & Loop fastener, and open cam buckle.
  - (b) Unthread belt from end slot only of cam buckle.
  - (c) Slide backpack off tank.

WARNING: Proper installation and adjustment are extremely important to assure correct performance of backpack. Improper installation on tank may allow the tank to slip out of backpack. Loss of the tank could result in loss of buoyancy control, and/or air supply and personal injury could result. If you have any questions about proper use for this product, ask your diving instructor, your TUSA dealer, or your TUSA distributor.

# LOADING THE WEIGHTS (ex. BCJ-2100, 1800, 1650)

Except for the BCJ-2100 and 1650 are equipped with a weight loading system. The weight loading system loads weights to optimize the balance of the BCJ in the water. Use the following procedure to load weights.

The photographs were specially made to use for the explanation. When actually loading the weights, please do so after setting the BCJ on the tank. Loading the weights before putting the BCJ on the tank could make it difficult to set the BCJ on the tank because of the weight.

- 1. Firmly grasp the weight release knobs located under the unit's right and left pockets. (Fig. 23)
- 2. Pulling the knob will release the safety lock. For safety you will feel the weight cartridge catch a little bit, however just continue to pull it out of the holder. (Fig. 24 and 25)



- 3. Place the required amount of weight in the weight cartridge. [Up to 4 kg can be loaded in a single side.] (Fig. 26)
- 4. After inserting the weight, securely close the surface fastener. (Fig. 27)
- 5. After putting on the BCJ, insert the weight cartridge holders as shown in Fig. 28. Be sure to insert the cartridge. Having a diving buddy help will make it easier to insert the weights.







(Fig. 26)

(Fig. 27)

(Fig. 28)

- 6. After inserting the weight cartridges all the way into the holder, close the weight holder's cover buckle as shown in Fig. 29 and Fig. 30 until it locks closed.
- 7. Finally, lock the safety lock lever to complete insertion of the weights. (Fig. 31).





(Fig. 29)





unlocked

locked (indication "locked" appears)

# ON DEMAND WEIGHT RELEASE PROCEDURE (ex. BCJ-2100, 1800, 1650)

Use the following procedure to remove the weight cartridge during use.

- 1. Firmly grasp the weight release knob as shown in Fig. 32.
- 2. Pull the knob strongly to unlock the safety lock lever. Continue to pull it to release the mein buckle. (Fig. 33)
- 3. Pull the knob further and remove the weight cartridge. (Fig. 34)





\* It is difficult to check the weight release knob while diving, so make an effort to remember the position and shape of the knob by feel.



(Fig. 34)

# LOADING THE WEIGHTS (BCJ-1800, 1650)

#### The BCJ-1650 has a weight loading system. Use the following procedure to mount weights.

\* The strength of the Hook & Loop fastener is set on the condition that it be used underwater. Therefore, you will encounter strong resistance when carrying out setting it out of the water. Be careful not to let the fastener's hook come in contact with any other material since it may damage it.

- 1. Peel off the Hook & Loop fastener of the cartridge closure cover, which are on the top of left and right pockets. (Fig. 35)
- 2. Pull out the weight cartridge from the mounting holder. (Fig. 36)
- 3. Peel off the closure cover of the weight cartridge. (Fig. 37)
- 4. Insert as much weight as needed into the weight cartridge. (Up to 4kg / 8lbs. can be inserted into each cartridge.) (Fig. 38)
- 5. After inserting the weights. firmly close the cover.
- 6. Hold open the cartridge mounting holder with one hand and insert the weight cartridge. (Fig. 39)



(Fig. 35)

(Fig. 39)



- 7. Push the weight cartridge all the way in, then fasten the Hook and Loop fastener of the cartridge closure cover. (Fig. 40)
- 8. Finally, close the cartridge closure cover completely. (Fig. 41)



(Fig. 41)



(Fig. 38)

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(Fig. 36)



(Fig. 40)

# **ON DEMAND WEIGHT RELEASE PROCEDURE (BCJ-1800, 1650)**

- 1. Securely grab hold of the weight release knob as in the photograph. (Fig. 42)
- 2. When you pull on the knob forcefully, the Hook and Loop fastener of the cartridge closure cover peel apart. (Fig. 43)
- 3. Pull on the knob further to pull out of the weight cartridge. (Fig. 44)







(Fig. 42)

# **\***"NON RELEASABLE" EXTRA POCKETS

Two non-releasable not zippered pockets are located in the rear of the B.C.J. (Fig. 45)

These pockets may be used for additional weights. However, please note that these pockets CANNOT be reached by the diver him/herself to release the weights. Please refer to the warning listed below for further details



WARNING : With the B.C.J. deflated completely, and no additional weights attached, the amount of weight in the non-releasable weight pockets **MUST** not cause you to sink from the surface of the water.

ALWAYS consult with your dive instructor on the use of the non-releasable pockets for additional weights.

ALWAYS notify your divemaster and dive buddy on the use of your non-releasable pockets.

# \*ADJUSTING THE ANCHOR BELT LENGTH (BCJ-9300, 5560, 1650, 3860)

If you fill the cartridge up completely with weights, the pocket of the bladder tends to hang down under the weight. To compensate for this, tighten the strap on the anchor belt so that you feel a little weight. (Fig. 46)



#### GUSSET ADJUSTER STRAP (BCJ-7000, 6910, 6900, 5960)

Side gusset of bladder can be adjusted to the proper buoyancy by tightening (increase) or loosing (decrease) the gusset adjuster strap. (Fig. 47)



(Fig. 47)

#### WARNING :

To control your ascent when drawing your weight cartridges, release one side at a time. Often, it may not be necessary to draw both weights to ascend safetly. The release handles are difficult to view while diving, so it is important that you practice and become familiar with the location and shape of the weight release handle prior to each dive.

#### **CAUTION:**

Always notify your diving instructor or diving buddy that you are using a B.C.J. with a Weight Loading System.

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#### **BCJ ATTACHMENT**

(1) Put the BCJ on your back and tighten the shoulder belts by pulling the D-shaped rings (Fig. 48) on the front edge of the shoulder belts, tightening them enough to fit comfortably to your body. Stoop forward a little, as if you were carrying a child on your back, so as to lessen the burden of the tank on your back.



(Fia. 48)

- (2) Tighten the cummerbund securely and fasten with the Hook and Loop fastener (Fig. 49). Make sure that the hook is overlapping exactly on top of the Loop on the cummerbund.
  - \* If there is not exact overlap, you must adjust the length of the waist belt (see page13).



(Fig. 49)



(Fig. 50)

(4) Finally, do up the chest buckle (Fig. 52), pulling the end of the chest strap to one side to tighten it.





# **DUMP VALVE**

To operate the dump valve on the rear of your right shoulder or lower back, hold the knob and pull it sideways and downwards, as shown in (Fig. 53, 54).

to tighten it (Fig. 51).



(Fig. 53)

#### SHOULDER ANGLE ADJUSTER (BCJ-9300, 6910)

The upper back section of the BCJ-9300 and 6910 is equipped with a shoulder angle adjuster, for adjusting the opening of the shoulder belt (Fig. 55). When loading the BCJ on to the tank, adjust the length of the adjuster belt to the desired position (Fig. 56).

\* Does not need to be adjusted for every dive.



(Fig. 55)



(Fig. 56)

# **CHEST BELT POSITION ADJUSTER (BCJ-6910)**

The position of the BCJ-6910 chest belt can be adjusted both up and down. The product is set in the upper position when it is shipped, as shown (Fig. 57). If the lower position fits better, remove the end of the belt from the buckle, thread through the lower hole of the belt holder, and set. If the belt still wraps around the shoulder part in the same way as it did when in the upper position, it will deform the end of the shoulder part. To avoid this, be sure to set by directly folding back with the belt holder as shown (Fig. 58).



(Fig. 57)

(Fig. 58)

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### CHEST BELT POSITION ADJUSTER (BCJ-9300, 7000)

The position of the BCJ-9300 and 7000 chest belt can be adjusted up and down. The product is set in the upper position when it is shipped. (Fig. 59) In the lower position fits better, slip the Slick Clip® of the chest belt from the loop of the shoulder belt as shown (Fig. 60), thread through the lower loop and lock the Slick Clip<sup>®</sup>.





(Fig. 59)

(Fig. 60)

# **ROLLUP BUCKLE (BCJ-1800)**

The BCJ-1800 weighs less than 2kg/4.4lbs and is designed for destination diving. A buckle located behind the right side pocket can be used to roll and pack the BCJ-1800 for travel.

#### Usage Method

 Slide the female buckle on the right side of the waist belt (left side from your perspective) to the end of the webbing. (Fig. 61)



- (Fig. 61)
- 2. Tightly roll up the pocket section on the left side as shown in Picture 2. (Fig. 62)



3. Fold the right side pocket section over the rolled up left side section. (Fig. 63)



- (Fig. 63)
- 4. Connect the female waist belt buckle (from Step 1) to the male side (rollup buckle) located behind the right side pocket. (Fig. 64)



5. The BCJ-1800 Voyager is now rolled and packed for travel. (Fig. 65)



#### CAUTION:

If the BCJ is left rolled up for longer extended periods of time, the soft pad sections and other sections could change shape. Be sure to store the equipment in the normal fashion except when transporting.

# CARE AND MAINTENANCE OF YOUR B.C.J.

# With proper care and maintenance, your TUSA B.C.J. should provide years of trouble-free service.

- 1. Rinse the B.C.J. thoroughly inside and out with fresh water after every use as follows.
- (a) Fill B.C.J. 's Bladder to approximately 1/4 full with clean, fresh water through Inflator's mouthpiece. (Manual Infration /Deflation button should be pressed.)
- (b) Inflate B.C.J. by mouth and shake to distribute clean water around.
- (c) Remove the Airway system by unscrewing bracket counter clockwise. (Fig. 66)

(d) Pull the valve assembly away from the nut bracket.

air to drain out of the nut bracket opening.



(e) Hold the B.C.J. upside down and allow all water and

(Fig. 66)

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- (f) The Airway system should be cleaned separately from the B.C.J. With the inflation button depressed, flush with fresh water through the opening of the shoulder dump (water should run out through the mouth piece.)
- \* During this procedure some residual water will remain in the inflation/deflation head. To drain the water hold the Airway system upside down (Inflator side up/Exhaust side down) and press the Auto inflation button. Water will then drain from the inflation plug.
- (g) Reinstall the Airway system. (Follow steps (d) & (c) in reverse.)
- (h) Rinse the entire B.C.J. by dipping B.C.J. in tub of fresh water or flushing with hose.
- (i) Dry the B.C.J. in a shaded area out of direct sunlight. (B.C.J. should be completely dry before storage.)
- 2. Do not store damp or while folded. Store slightly inflated in cool, dark, dry location.
- 3. Avoid prolonged exposure to direct sunlight. The sun's ultraviolet rays will shorten the life of the fabric and especially the Inner Bladder.
- 4. Never rest sharp or heavy objects on the B.C.J.

#### After every use:

Rinse inside and out with fresh water and drain. Inflate for storage.

TUSA strongly recommends inspection, overhaul and scheduled parts replacement at least once a year in order to ensure the optimum functioning of the BCJ.

#### CAUTIONS FOR APA INFLATOR USAGE (APA TYPE)

In case of malfunction of APA power exhaust upon emergency such as damage of internal wire, use oral exhaust method.

If the APA inflator main unit is dragged along a surface, for example when you reach the bottom, then sand and pebbles may jam the APA deflation button and make exhaust operation impossible. If exhaust operations do become impossible, either use a normal exhaust operation or use the Rapid Exhaust Deflation to exhaust. After exiting, carefully wash out the sand clogging the button with running water.

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