



# JX3010(NELEUS)

## B.C OPERATING MANUAL

### Introduction

Thank you for purchase of our product.

This operating manual is the guidebook to provide instructions on how to use your buoyancy compensator (B.C.), NELEUS, for recreational diving.

We believe this manual is useful in mastering technology of a B.C. for people who have learned the right usage of a B.C. and obtained a C-card through proper training at a diving instruction organization as well as people who use it at C-card training. Please carefully read and digest the contents of this manual before use. We also suggest that you take this manual with you to refer to before diving.

Keep this manual in a safe place. If you lose it, contact your original dealer or authorized distributor of our company. A replacement manual will be reissued later.

The main contents consist of assembly of B.C., setting to a tank, the check before use, usage, care after use, storage, and a periodic inspection.

B.C. NELEUS is diving gear to use in combination with a regulator for recreational diving. Therefore, the knowledge of the right handling of regulator is also necessary. Please use the operating manual of the regulator which you use as well as this manual of NELEUS.

In addition, depending on the model of regulator, it is considered not being suitable for the use by the combination with this product. We recommend you use by the combination with the regulator made by Bism.

We are constantly researching and improving our B.C., and so the product you purchased may differ in certain details from the one described in this manual. If you have any queries regarding your B.C. or the information contained in this manual, please feel free to contact our company at the address below.

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### Key to Symbols Used in this Manual

- Danger**  
Danger indicate a great risk of death or serious injury from improper use.
- Warning**  
Warning indicate a risk of death or serious injury from improper use..
- Caution**  
Caution indicate a risk of minor injury or damage to property from improper use.

【Note】 Useful Information to know.

# IMPORTANT INFORMATION

## Purpose of Use

This product is diving gear for recreational diving use.

The connection with a regulator allows the use and is buoyancy compensator “adjusting neutral buoyancy” at the time of recreational diving.

## Before Use

Carefully read the advice on safety given in this manual and also in the manual of a regulator before diving.

■ Do not use this product as a lifesaver or a float.

### ⚠ Warning

● Do not use this product for any purpose other than recreational diving. In particular, please do not use it as a lifesaver or a float. Air may fall out and it may cause to be drowned.

■ Obtain C-card before use.

### ⚠ Warning

● Use this product after having obtained a C-card and completing a proper training program at a recognized diving school, and be familiar with a B. C., or under the instruction of the diving school. Otherwise it may cause an accident resulting in injury or death.

## Special Features

■ Adjustment Mechanism of Cummerbelt Length (Page 6)  
● Cummerbelt length at the waist portion is adjustable.  
● Also, we sell as an option the extension belt which can extend a waist belt by 20 cm. Please contact your original dealer or authorized distributor of our company. (Extra charge)

■ Long Tank Buckle (Page 8)  
The long tank buckle which you can fix to a tank without particular strong power is adopted.

■ Easy Exhaust Operation (Page 12)  
● The exhaust, power deflation, by the “OUT” button can be performed.  
● The exhaust by the “ORAL” button is possible.  
● When exhaust knob of a shoulder belt portion is pulled, the exhaust, quick deflation, from relief valve of a right shoulder can be performed.  
● When exhaust knob of a right waist portion is pulled, the exhaust, quick deflation, from relief valve of a right waist is possible.

■ Adoption of Quick Release Shoulder Buckle. (Page 11)  
The quick release buckle which can easily loosen a shoulder belt with only a thumb is adopted.

■ H. f. s. Float Structure is Adopted.  
When air is supplied to a B. C., the float structure which inflates so that the body may be wrapped in by the effect of a special shape rib is adopted.

■ Adoption of Thin Harness.  
The newly-designed thin harness which distributes weight appropriately by bringing a tank close to your body is adopted.

■ 2 Way Inflator is Adopted. (Page 13)  
The 2 way inflator system which can also turn a corrugated hose from the back side to use is adopted.

■ Adoption of Waist Curve Line.  
The waist curve line which fits the body easily by making a curve around the waist is adopted.

■ F.T.A.(Front Tightening Adjuster)is Adopted.(Page 13)  
By changing the length of a stretch code, you can adjust movement of the front portion (pocket portion) of B. C. toward the upper and lower sides to be tight or loose.

■ Adjustment Mechanism of Shoulder Belt Length (Page 7)  
The maximum length of shoulder belt is adjustable.

■ Please follow instructions about safety.

### ⚠ Warning

● When you use this product, please follow all the instructions about the safety directed in this operating manual.

■ Do not use if functioning abnormally.

### ⚠ Warning

● Do not use this product if it is not functioning normally.  
● If your B. C. starts to function abnormally, contact your original dealer or authorized distributor of our company. Using a faulty B.C. may cause an accident resulting in injury or death.

## Specifications

### Body

The maximum buoyancy: XS: 117N (12kgf), S: 137N (14kgf), M: 157N (16kgf), L: 196N (20kgf) XL: 245N (25kgf) 245N(25kgf)

Weight: (JX3010Q has M, L and XL size only)  
[JX3010D] ;XS:3.3kg, S:3.4kg, M:3.5kg, L:3.7kg, XL:4.0kg  
[JX3010Q] ; M:3.9kg, L:4.1kg, XL:4.4kg

Length of beltline ; 55 cm ~ 110 cm

Loading weight of a pocket ; 5kg or less (One pocket)

Temperature range ; - 5 ~ + 50°C

Material: Thermo-plastic coating cloth

Basic cloth: Nylon

Back side: Polyurethane

### Hose Portion

Material: Inner tube ; Vinyl chloride

Outer cover ; Vinyl chloride

Coupling ; Copper alloy

Outer diameter ; 13 mm

Hose length ; 700 mm

Nominal size of coupling threads ; 3/8-24UNF

Maximum operating pressure ; 15 bar

Minimum bending radius (Inside of hose) ; 115 mm

Hose guard ; Regular equipment

### Relief Valve

Position: One in right shoulder, one in right waist portion  
Exhaust operation pressure at the time of over pressure: 0.2 bars or less.

Tensile force necessary for quick deflation: 9.8 ~ 14.7 N (1 ~ 1.5kgf)

### Combination Valve II

Corrugated hose length: 550 mm (L and XL size of JX is 670 mm)

(Length from the center of a housing to the end of an oral button)

Weight: 405 g Air supply flow: 80 liter/minute

## Float Explosion Prevention Equipment

■ Relief Valve

When air has been supplied to float of B. C. excessively by mistake, in order to prevent the burst, if internal pressure of float exceeds certain pressure, it is in structure to open the relief valve automatically and release air from a housing.

# NAMES OF PARTS

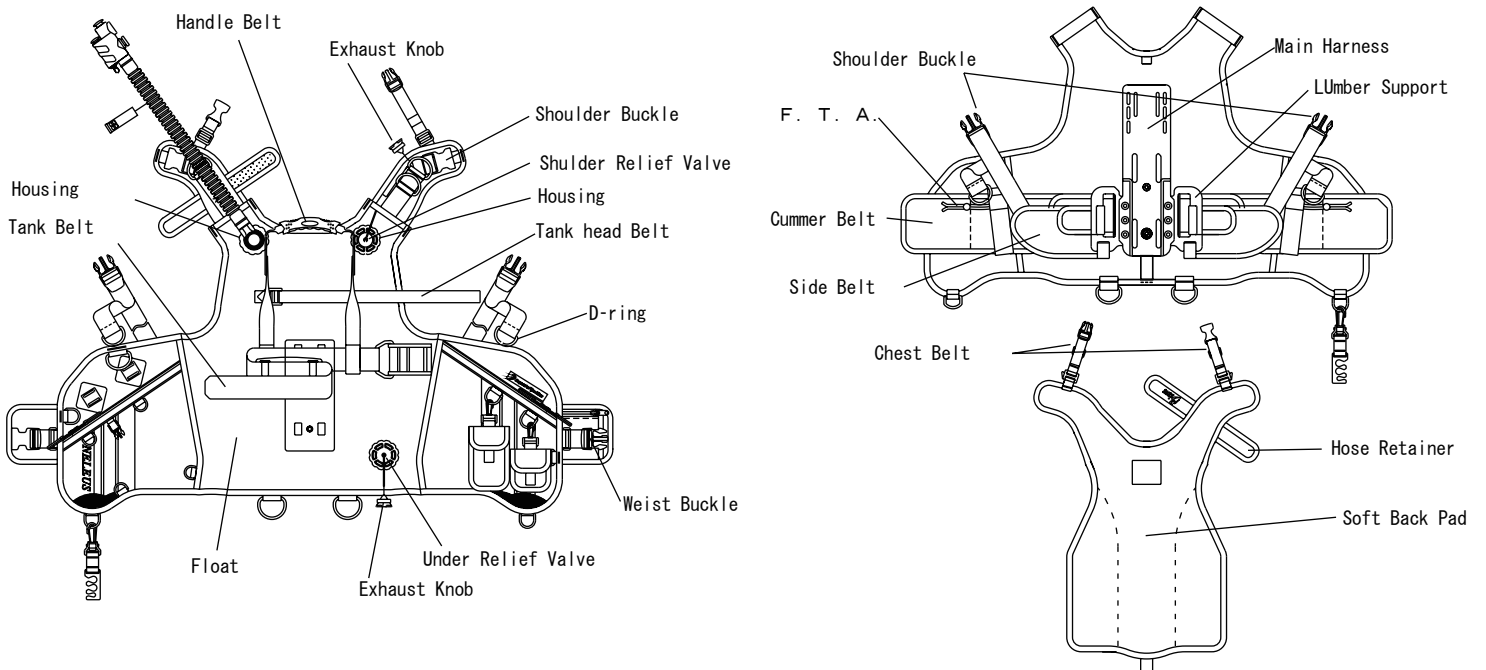
## At the Time of Assembly

■JX3010D



## At the Time of Buckle Release

■JX3010D



# NAMES OF PARTS (Continued) Refer to the page in ( ) for the explanation of how to use.

## Inflator

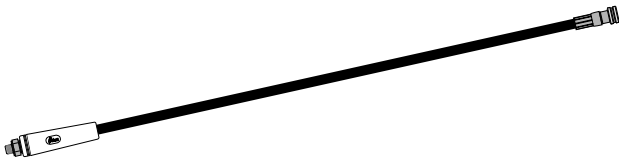
### ■Combination Valve II



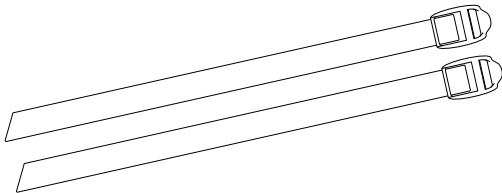
## Attachments

Please confirm before using this product. Refer to the page in ( ) for the detailed explanation.

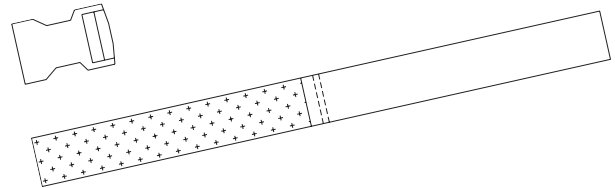
■B. C. Hose (1 piece), Hose Guard (1 piece).  
Connect to a regulator first stage. (Page 6)



■Patch Belt (JX series only : 2 pieces).  
Install to a B. C., use it to fix a knife, etc.



■Female Buckle (1 piece), Corrugated Hose Belt (1 piece).  
(JX series only)  
Install them when you use a combination valve in new back position. (Page 13)



■Operating Manual (This copy)

# ⚠ PRECAUTIONS

## □ Follow the safety rules.

Only use under the direction of a recognized diving school or after obtaining a C-card having completing a proper training program at a recognized diving school and thoroughly familiarizing yourself with the correct use of a B. C.. Have your buddy double check everything. Avoid diving deeper than 30m/98ft. (This is the maximum safe depth for normal recreational diving.)

## □ Please select the size which fits your body type.

Please use B. C. of the size which fits your body type. Otherwise, you may lose balance in the water and it causes a decrease in performance.

## □ Avoid shocks.

Though the product can withstand the shock in the usual use, drops and hard knocks may damage it.

## □ Please be careful of allergy.

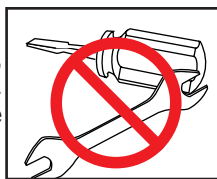
In the case of wearing to the bare skin, weak skin and the allergic tendency may get a rash. When you get a rash, stop wearing of the B. C., and consult with a medical specialist of dermatology.

## □ Please use the Bism made hose guard.

Please do not attach hose guards and hose protectors other than our products to a B. C. hose. It may cause hose breakage.

## □ Do not modify the product.

Since it may become a safety problem, please do not modify the product. Responsibility cannot be taken about the trouble after modification.



## □ Avoid contact with chemicals.

If mercury and chemicals (thinner, gasoline and various solvents or those cleaner, adhesives, paint, medicine and cosmetics which are containing them) adhere, discoloration and breakage may be occurred on the main body and hoses.



Gasoline

## □ Do not put weight into a side pocket.

### ⚠ Warning

● Please do not put weight into a side pocket. Not only it causes the trouble of the pocket, but also it becomes difficult to remove weight in emergency and may cause an accident resulting in injury or death.



## □ Avoid overweight

### ⚠ Warning

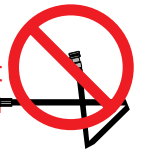
● Please adjust the weight so that you can keep the neutral buoyancy on the surface while being in the state that air is exhausted completely from a float before diving. It may cause an accident resulting in injury or death by uncontrolled descent.



## □ Do not fold or pull a hose.

### ⚠ Warning

● Please do not fold or pull a hose. It not only breaks, but it may cause an accident resulting in injury or death.



## □ Do not use it as a lifting bag.

### ⚠ Warning

● Please do not carry out usage that you ascend by using the buoyancy of the air supplied. (As a lifting bag) You may get decompression sickness by rapid ascent.

## □ Do not jump from the high place.

### ⚠ Warning

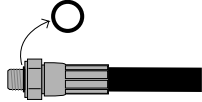
● Please do not jump from the high place more than 2m in the state that air is in the air cell. As big buoyancy is applied rapidly, not only B. C. breaks, but it may carry out an injury.

# ASSEMBLY

## Install B.C. Hose to a Regulator

### ⚠ Warning

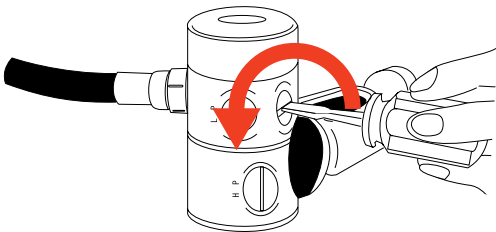
- Please install the hose in the state that the first stage of a regulator is not connected to a tank. If the first stage is pressurized during work, a plug in the port flies and it is dangerous.
- Please use the regulator with the first stage having L. P. port thread of 3/8-24UNF as nominal size. Otherwise, not only it causes the damage of equipment, but also a hose comes off and it may cause an accident resulting in injury or death.
- Please confirm that O-rings are set at the threads portion of each B. C. hose. When there are no O-rings, it causes the air leakage.
- Do not install the B. C. hose to an H. P. (High Pressure) port.



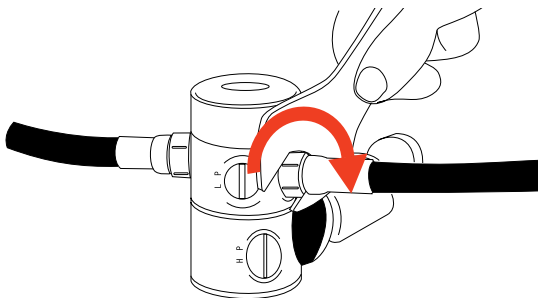
### ⚠ Caution

- When you tighten hose couplings with a spanner, please keep the tightening torque of 9.8N · m (100kgf · cm). Otherwise it may cause to damage the threads portion.
- Please do not attach hose guards other than our products to a B.C. hose.

- 1 Please remove the plug from the L. P. (Low Pressure) port of the first stage of a regulator.



- 2 Please screw in the coupling of a B. C. hose to L. P. port and turn it clockwise with a spanner to tighten it. Tightening torque is 9.8 N · m (100 kgf · m).



### 【Note】

- If you are not familiar with the installation work, please ask your original dealer or the authorized distributor of our company for installation of hoses.

# BEFORE SETTING TO A TANK

## Check of B.C. Hose

Please check whether the hose is damaged or has broken.

### ⚠ Warning

- If there is an abnormality in your B. C. hose, you must not use it.
- When there is an abnormality, stop to use it and contact your original dealer or authorized distributor of our company.

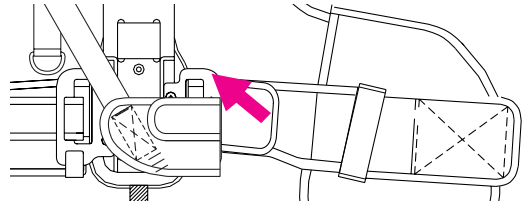
## Adjust Cummerbelt Length

### ⚠ Warning

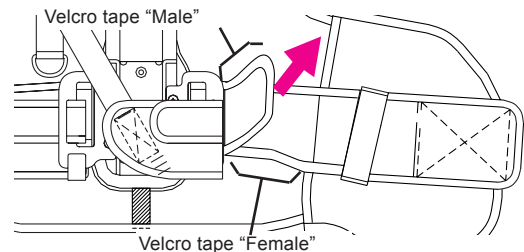
- Please do not remove Velcro tape which connects harness and a side belt, and do not change width of the Velcro tape portion.
- Please wear your own diving suit and perform the length adjusting.

□ Shorten the length.

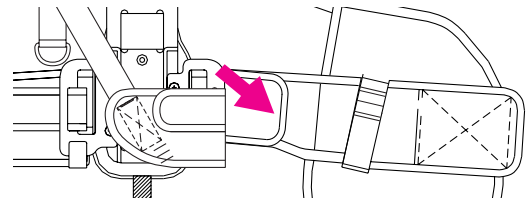
- 1 Take off soft back pad.
- 2 Remove the Velcro tape of a cummerbelt.



- 3 Pull out the belt as much as you want to shorten it. At this time, please be careful for the Velcro tape "Male" not to protrude from the Velcro tape "Female" by pulling out too much.



- 4 Press down the Velcro tape from the front and back side and stick together.



- 5 Install the soft back pad.

□ Lengthen the length.

- 1 Please perform like "1" and "2" of "Shorten the length", and send a belt to the direction to lengthen in "3". At this time, be careful for the Velcro tape "male" not to enter into the slit of harness by sending it too much.
- 2 Stick the Velcro tape together like in "4", and install the back pad like in "5".

### 【Note】

- A waist size changes a lot with the kinds of suit to wear. When the diving suit to wear is changed, please be sure to readjust the length.
- A cummerbelt is in each side of right and left. Please perform length adjustment for both cummerbelt.

# BEFORE SETTING TO A TANK (Continued)

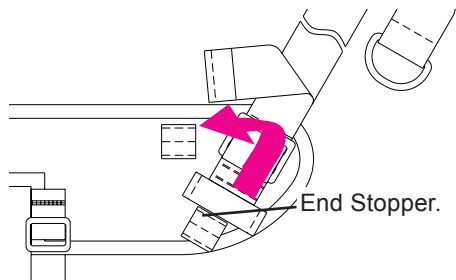
## Adjusting the Maximum Length of Shoulder Belt

**【Note】**

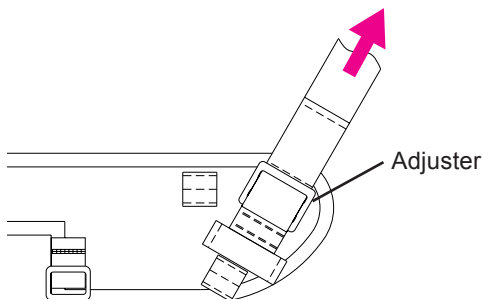
- The maximum length when a shoulder belt is loosened most can be adjusted.
- When the maximum length of the shoulder belt is lengthened, you can wear a B. C. easily over a dry suit.
- If the maximum length of the shoulder belt is shortened, you can control surplus of the belt easily when you wear BC.

### □ Lengthen the shoulder belt.

- 1 Remove lower end of the shoulder belt from an end stopper.

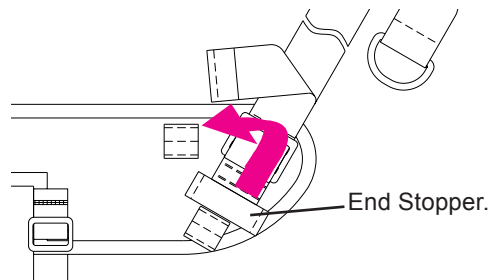


- 2 Shift the shoulder belt in the portion of an adjuster, and pull a lower end out to the buckle side.

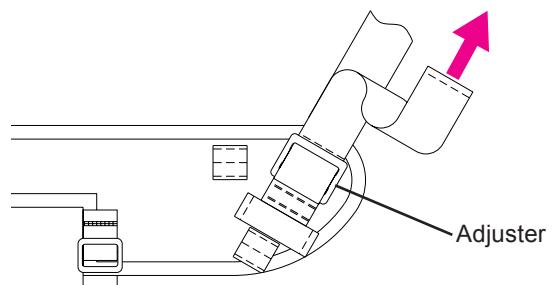


### □ Shorten the shoulder belt.

- 1 Remove lower end of the shoulder belt from an end stopper.

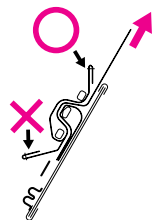


- 2 Shift the shoulder belt in the portion of an adjuster, and pull a lower end out to the opposite side of the buckle.



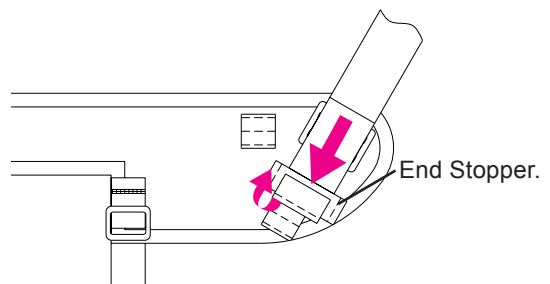
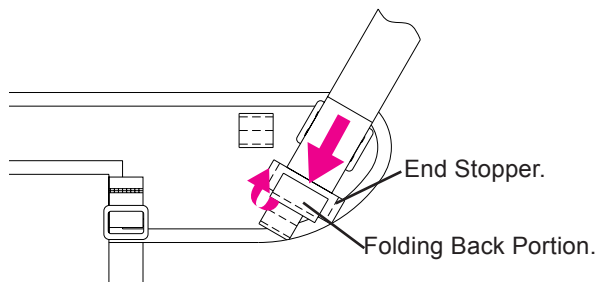
**▲ Caution**

- Please do not remove the lower end of a shoulder belt from an adjuster. A shoulder belt separates, and it may cause an accident resulting in injury or death.



- 3 After adjustment, put the surplus of shoulder belt through the end stopper.

- 3 After adjustment, put the surplus of shoulder belt through the end stopper.



**【Note】**

- If the folding back portion of the shoulder belt lower end is hooked on the end stopper, the surplus portion will become difficult to separate from the end stopper.



# SETTING TO A TANK

## Install B.C. to a Tank

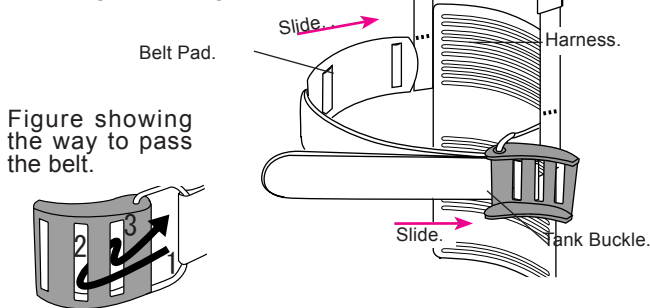
### ⚠ Warning

- Please put the tank on the stable place, such as the flat ground, at the time of setting. It is dangerous if it falls.
- Please be careful not to catch a handle belt between a tank and B. C. at the time of setting. Not only you cannot use a handle belt, but also a tank is not fixed firmly.

### 【Note】

- A handle belt is a handle for carrying the whole tank, after setting B. C. to a tank.

- 1 Slide a tank buckle and a belt pad in right and left over the belt so that their position may become close to the harness side. Pass a tank belt through the 2 slits of a tank buckle as shown in a figure, and make a tank belt ring large enough for a tank goes through.

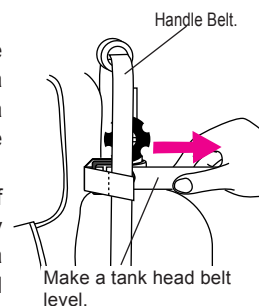


- 2 Put the ring of a tank belt over the top of the tank. Set a direction of a tank so that the air exit side of a tank valve may turn to the back side at the time of wear.

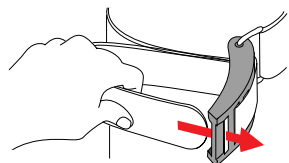
Also, adjust the setting height of B.C. so that a tank head belt may be fixed at the lower portion of a tank valve in the level state, and then tighten it.

Be careful not to tighten a tank head belt too much at this time.

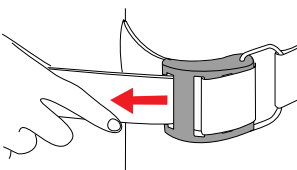
- 3 In the state that a tank buckle is set in direction of a figure, pull the end portion of a belt, and tighten a tank.



- 4 While pulling the end of the belt, turn the tank buckle. Stick the end of the belt to the Velcro portion of the belt.



- 5 Having a tank belt, move it up and down and check whether the tank belt moves. If it moves, please start it again from the beginning. (Refer to page 17 for the way to remove.)



### 【Note】

- Install a B. C. to a tank before setting a regulator first stage.

# INSTALLATION OF B.C. HOSE

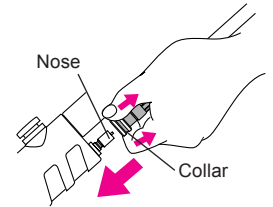
## Install a B.C. Hose

### ⚠ Warning

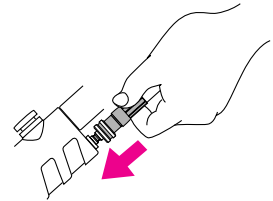
- When you perform the connecting work of a B. C. hose, close the tank valve, push the purge button of a regulator to release the pressurized air in a hose.

- 1 Install a regulator first stage to tank valve according to an operating manual of the regulator.

- 2 Connect a quick-coupler at the end of a B. C. hose to a nose while sliding a collar of the quick-coupler.



- 3 Grip the end of the quick-coupler and push it until it sounds "click".



- 4 While pulling the quick-coupler by gripping the end of it, check whether it comes off. When it comes off, please start it again from the beginning.

## Check the Connecting Portion of B.C. Hose

### ⚠ Warning

- If there is an air leakage from a connecting portion, do not use it.
- When the air leakage from a connecting portion does not stop, please consult with your original dealer or authorized distributor of our company.

Open a tank valve according to an operating manual of a regulator or a gauge. Touch the connecting portion with your fingers to check if air leaks or not. Also, check if you can hear the sound of air leakage,

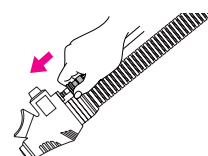
If air leaks, once disconnect the quick-coupler and connect it again from the beginning after pushing a purge button of a regulator second stage to release air pressure in a hose, and then check air leakage again.

- Disconnect B.C. hose.

### ⚠ Warning

- Before disconnecting a quick-coupler of B.C. hose from inflator, be sure to close the tank valve, push the purge button of a regulator to release the pressurized air in a hose.

- 1 Close the tank valve, push the purge button of regulator second stage to release residual air in a hose.
- 2 Pull the collar of a quick-coupler at the end of a B. C. hose and disconnect from the nose while pulling the collar.





# BASIC OPERATION OF AIR SUPPLY EXHAUST & ACTUATION CHECK

## Inflator Operation of Air Supply · Exhaust & Actuation Check

### ⚠ Warning

- Air supply by the “IN” button of an inflator (Power Inflation) is performed only when an inflator is set up correctly and air is in a tank. Air is not supplied when there is not enough air.
- Please do not give a strong shock against an inflator. It causes of breakage and also operation failure.
- When abnormalities are found in the following check, please stop use and consult with your original dealer or authorized distributor of our company.

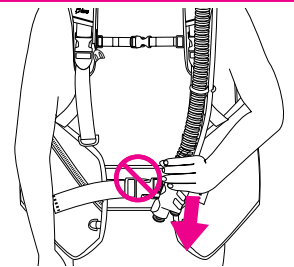
### ⚠ Caution

- Please do not continue exhaust operation in the state that there is no air in float of B. C. during diving. A lot of water may come in the float of B. C.

### □ Actuation check

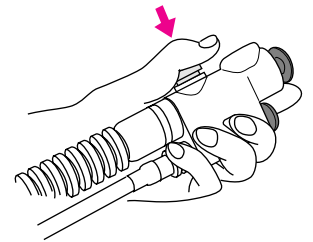
### ⚠ Warning

- Exhaust by the “OUT” button is performed only when an inflator is set up correctly and air is in a tank. Air is not supplied when there is not enough air.
- Please do not pull combination valve. It causes of breakage and also operation failure.

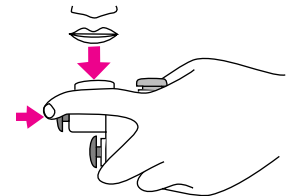


### ■ Air supply operation

- 1 “Power Inflation”  
When you push “IN” button, air is supplied in the float. Check whether air is supplied in float only while pushing the button.

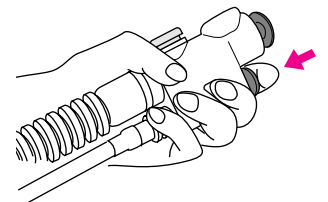


- 2 “Oral Inflation”  
Hold a mouth piece of an inflator in your mouth firmly, if you push oral button only while blowing a breath, air is supplied into a float. Check whether air is supplied certainly.

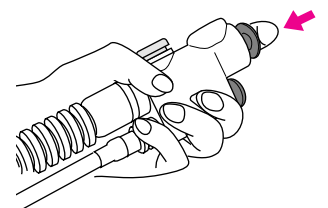


### ■ Exhaust operation

- 1 “Power Deflation”  
When “OUT” button is pushed, the valve in the housing on a left shoulder will be released and the air in float will fall out. Put air in a float about 80% and check whether air is exhausted only while you push the button.



- 2 “Deflation by ORAL Button”  
When “ORAL” button is pushed, the valve in the inflator will be released and the air in float will fall out through the mouth piece. Put air in a float about 80% and check whether air is exhausted only while you push the “ORAL” button.



### 【Note】

- If you perform the exhaust with the “OUT” button (Power Deflation), a little air will be exhausted from the root of the “OUT” button, but it is not failure.
- Please refer to Page 12 for underwater exhaust operation.

# BASIC OPERATION OF AIR SUPPLY EXHAUST & ACTUATION CHECK(Continued)

## Exhaust Operation of Relief Valve & Actuation Check

### Warning

- Do not use this product if it is not functioning normally.
- If you find any abnormality by the following check, please stop use and consult with your original dealer or authorized distributor of our company.

### Caution

- In the case of the exhaust by a relief valve, if exhaust knob is pulled too strong, it will become a cause of breakage. The power which can open a valve is enough. Please check the proper level of power before use.

#### Visual check

Check whether the string of each shoulder and under exhaust knob is not being broken.

#### Actuation check

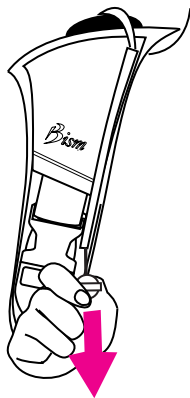
#### Exhaust actuation at the time of over pressure

- 1 Push the "IN" button and inflate a float.
- 2 Also, continue to push the "IN" button and confirm that air is automatically exhausted from a relief valve.

#### Exhaust operation by shoulder relief valve. "Quick Deflation"

When you pull an exhaust knob downward, a valve on a shoulder will be opened only while it is pulled, and the air in a float will be released through the relief valve on the right shoulder.

Put air in a float about 80% and check whether air is exhausted only while you pull the exhaust knob.



#### Exhaust operation by under relief valve. "Quick Deflation"

When you pull an exhaust knob downward, a valve on a waist will be opened only while it is pulled, and the air in a float will be released through the relief valve on the right waist.

Put air in a float about 80% and check whether air is exhausted only while you pull the exhaust knob.

#### [Note]

- In order to prevent the burst of a float when putting air too much in it, the role of a relief valve is to exhaust air automatically when the pressure inside float exceeds a fixed level.
- Please refer to Page 12 for underwater exhaust operation.

# PUT ON · TAKE OFF (How to Use Shoulder · Waist Buckles)

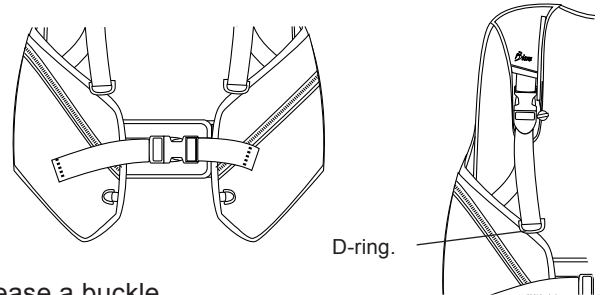
Please learn how to use various buckles before actually wear the B.C.

### Warning

- Please do not release various buckles of shoulder · waist underwater. It may cause an accident resulting in injury or death.

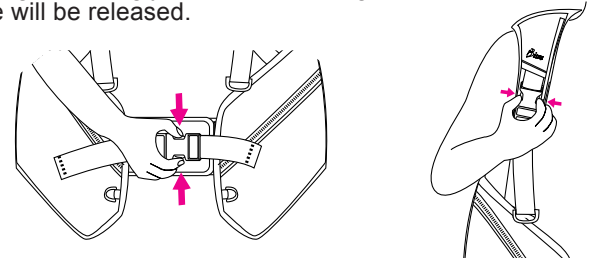
## How to Use Shoulder Waist Buckles

#### Accurate wearing state



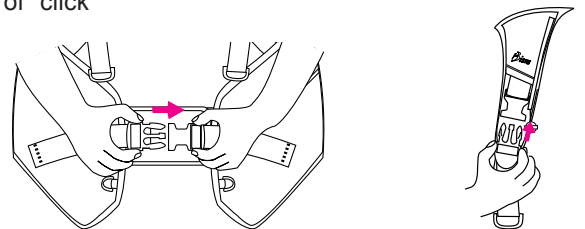
#### Release a buckle

When you press the center of a buckle with your fingers strongly as shown in a figure, the buckle will be released.



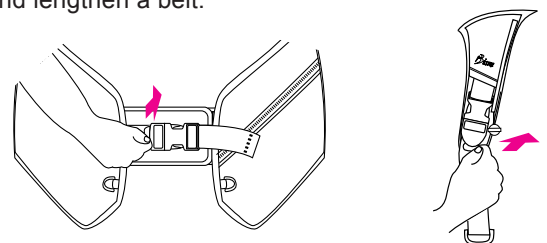
#### Fasten a buckle

When you insert male side of a buckle into the female side as shown in a figure, it will fit in with a sound of "click"



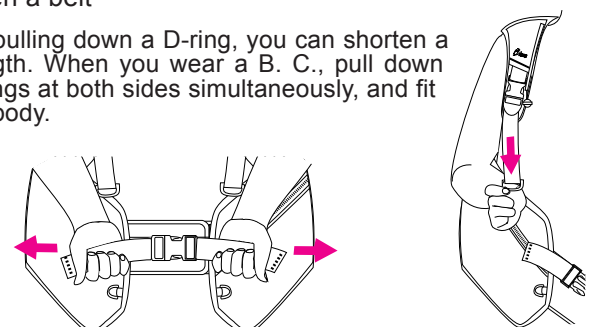
#### Lengthen a belt

Lift a buckle to the front, as shown in a figure, and lengthen a belt.



#### Shorten a belt

Just pulling down a D-ring, you can shorten a belt length. When you wear a B. C., pull down the D-rings at both sides simultaneously, and fit to your body.



# PUT ON · TAKE OFF (Continued)

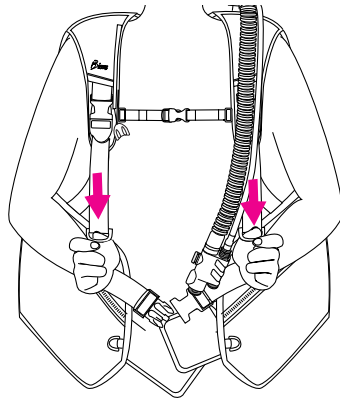
## ⚠ Warning

- Please wear B. C. in the place where is no body except your buddy who helps you to wear it. Tanks hit each other and it becomes the accident.
- Wear B. C. in the state that the shoulder buckles on both shoulder are fastened. Wearing it while the buckles are released, the whole tank and B. C. may be dropped and dangerous.

## Carry a B. C. on the Back

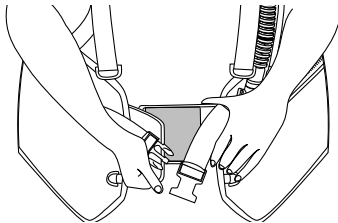
- 1 Slightly lengthen a belt in the state that the shoulder buckles on both right and left shoulders are fastened. Release a buckle of a waist belt, tear off the Velcro tape of a cummerbelt, and also loosen the belt. Moreover, move the hoses to the tank side so that they may not twist together.

- 2 Slip into the B. C. jacket and carry it on the back.



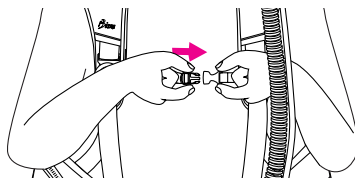
- 3 Pull down the D-rings of shoulder belts at both sides simultaneously, and fit to your body.

- 4 Stick the Velcro tapes of a cummerbelt together and fasten the waist buckle.

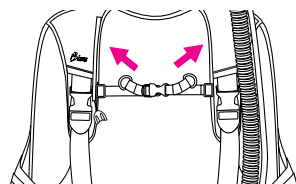


- 5 Pull down the end of waist belts at both sides simultaneously, and fit to your body.

- 6 When you insert male side of a buckle into the female side, it will fit in with a sound of "click".

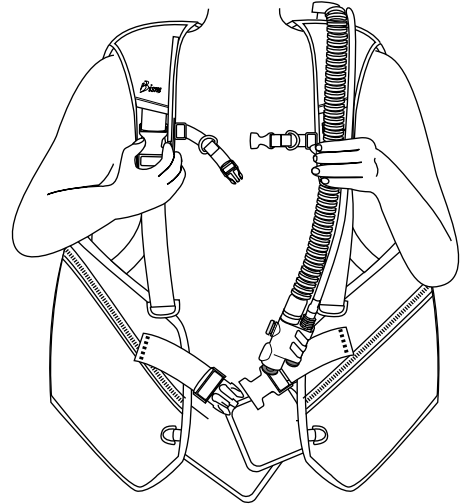


- 7 Eliminate the slack of the belt.



## Take Off a B. C.

- 1 Release a buckle of chest belt and waist buckle, and also tear off the Velcro tape of a cummerbelt.
- 2 Hold one of the shoulder belts firmly by the hand of the same side. Release the buckle of the other side of shoulder belt by the other hand.



- 3 Swing a tank around to the front of you while holding the shoulder belt by one hand, and place the tank on the ground by keeping it with the other hand.

# BASIC USAGE

## Supply Air to a B.C.

### ⚠ Warning

- Do not perform air supply by pushing "ORAL" button underwater. You drink water by mistake, and it may cause an accident resulting in injury or death.
- Air supply by the "IN" button of an inflator is performed only when air is in a tank. Air is not supplied when there is not enough air.

### 【Note】

- If you continue to supply air to a B. C. which is already full of air, in order to prevent the burst of float, it has structure which releases air from a relief valve.

□ Supply air by "IN" button. (Underwater and surface)

When you push "IN" button, air is supplied to a B.C.

□ Supply air by "ORAL" button. (Surface only)

In the state of keeping enough buoyancy by a fin kick, hold a mouth piece of an inflator in your mouth firmly, push oral button only while blowing a breath, and supply air into a float

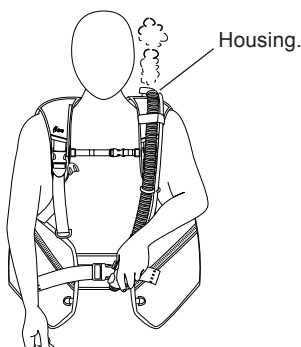
## Exhaust Air of a B.C.

### ⚠ Warning

- When an inflator is not set up correctly such as, B. C. hose is not installed correctly, tank valve is closed, air pressure in a tank is not enough, exhaust by the "OUT" button cannot be performed.

□ Exhaust air by "OUT" button.

Take a posture so that the position of the housing of the left shoulder becomes the most top of a float (vertical posture), and then push the "OUT" button at hand, air will be exhausted from the housing.

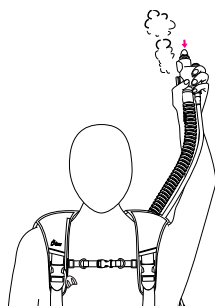


### 【Note】

- Exhaust by the "OUT" button is performed only when a low pressure hose of B. C. is set up correctly and tank valve is opened.

□ Exhaust air by "ORAL" button.

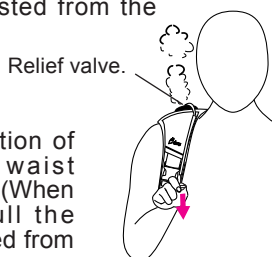
Take a posture so that the position of the housing of the left shoulder becomes the most top of a float (vertical posture), and then push the "ORAL" button while facing a inflator toward surface, air will be exhausted from a mouth piece portion of inflator.



□ Exhaust by exhaust knob.

■ In the case of a shoulder relief valve.

Take a posture so that the position of the relief valve of the right shoulder becomes the most top of a float (vertical posture), and then pull the exhaust knob, air will be exhausted from the relief valve of the right shoulder.



■ In the case of an under relief valve.

Take a posture so that the position of the relief valve of the right waist becomes the most top of a float (When head first etc.), and then pull the exhaust knob, air will be exhausted from the relief valve of the right waist.

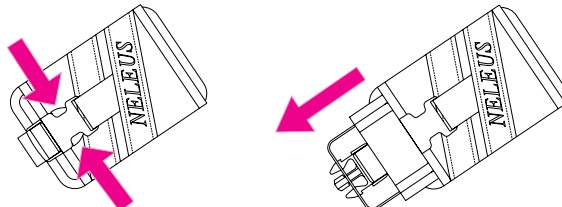
# HOW TO USE A WEIGHT POCKET

## Wear Weight (JX3010Q only)

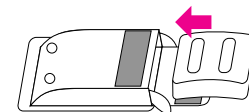
### ⚠ Warning

- Please do not use the weight release buckle other than emergency. Otherwise it may cause an accident resulting in injury or death.
- When you wear weight, please check that the weight release buckle is set correctly. When the buckle setting is imperfect, it may cause injury by dropping weight.

- 1 Press the center of a buckle with your fingers strongly to release the buckle, pull out an inner pocket.



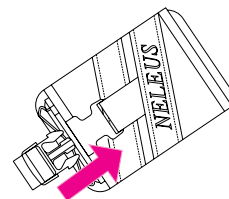
- 2 Open a flap of the inner pocket, and put in a weight.



### 【Note】

- Please wear the weight of 2 kg or less in one side. A pocket may be damaged.

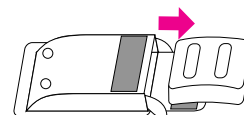
- 3 Put the inner pocket in the weight pocket, fasten the buckle by pushing male side into female side until it sounds "click".



## Remove Weight (JX3010Q only)

- 1 Press the center of a buckle with your fingers strongly to release the buckle, pull out an inner pocket.

- 2 Open a flap of the inner pocket, and remove a weight.



- 3 Put the inner pocket in the weight pocket, fasten the buckle by pushing male side into female side until it sounds "click".

## When Securing of Buoyancy is Immediately Required. (JX3010Q only)

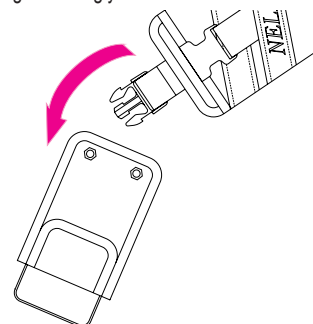
### ⚠ Warning

- Please do not perform the quick release by the following methods other than emergency. The weight that dropped hit another diver, and it may cause an accident resulting in injury or death.
- Please also teach a buddy the method of the weight release. Otherwise when an accident happens the buddy may not be able to rescue you.

- 1 Press the center of a buckle with your fingers strongly to release the buckle.

- 2 When the opening of a weight pocket faces downward (the direction of the sea bottom), weight falls.

When the weight does not fall automatically, please pull the handle of the inner pocket, and take it out.



# 2 WAY INFLATOR

## Turn an Inflator from the Back Side.

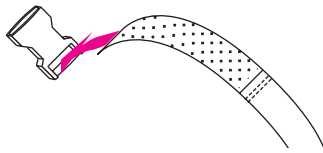
### ⚠ Warning

- When you turn an inflator from a back side and use it, please do not fix a corrugated hose to the back side of the float. Air supply by the "ORAL" button becomes difficult, and it may cause an accident resulting in injury or death.

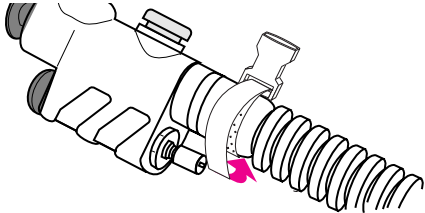
### 【Note】

- By turning and wearing an inflator from the back side, simple appearance without a corrugated hose in the left breast can be arranged.

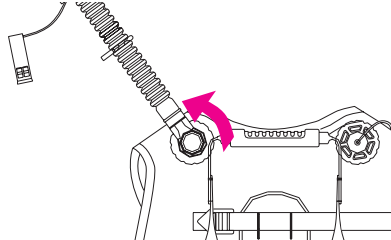
- 1 Put corrugated hose belt through the female buckle of the attachment part.



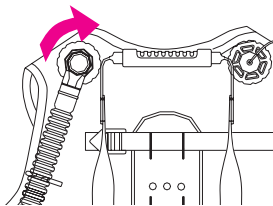
- 2 Attach the corrugated hose belt to a corrugated hose of a combination valve, and stick the Velcro tape together.



- 3 Loosen the thread portion of a housing and remove the combination valve.



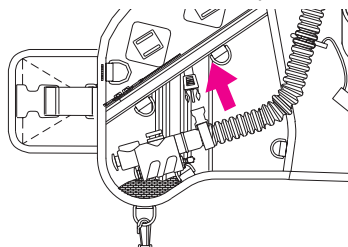
- 4 Place the combination valve upside down, adjust the angle of a convex and a concave portion which is 12 square shapes of a housing, and screw in.



### ⚠ Warning

- Please adjust correctly the convex and concave portion of 12 angles of a housing, and screw in all the way. If 12 angles have shifted, it causes an air leakage. If screwing is insufficient, a housing comes off, and it may cause an accident resulting in injury or death.

- 5 Push in the female buckle attached to the combination valve to the male buckle until it sounds "click", and connect them certainly.



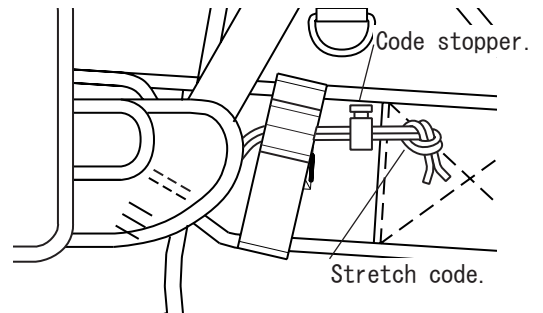
# ADJUSTMENT OF F.T.A.(Front Tightening Adjuster)

## Adjust F.T.A. (Front Tightening Adjuster)

### 【Note】

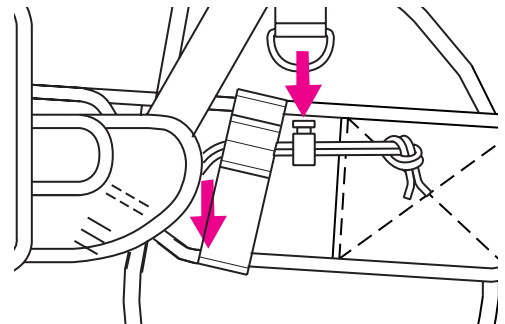
- By adjusting F.T.A. (Front Tightening Adjuster), up and down movement of a cummerbelt and a pocket also can be adjusted.
- If FTA is loosened when carrying BC on the back, the cummerbelt and a pocket become easy to move up and down, and the cummerbelt will become difficult to be raised even if you put in air to the limit in BC.
- When installing a tank to a B. C. and carrying the B. C., if F. T. A. is fastened in advance, the cummerbelt and pocket will become difficult to hang down.

### ■Names of parts.



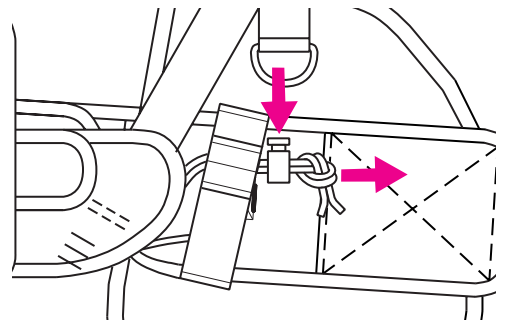
### □Loosen F. T. A.

While pushing a button of a code stopper, pull a stretch code at the portion where close to the side belt as shown in the figure to loosen F. T. A.



### □Tighten F. T. A.

While pushing a button of a code stopper, pull a stretch code at the knot portion as shown in the figure to tighten F. T. A.



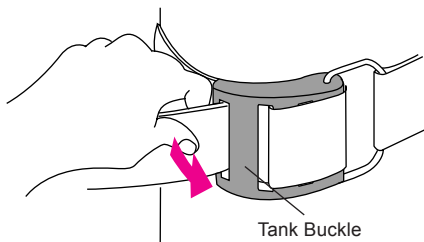
# REMOVE B.C. FROM TANK

## How to Remove a B. C. from a Tank

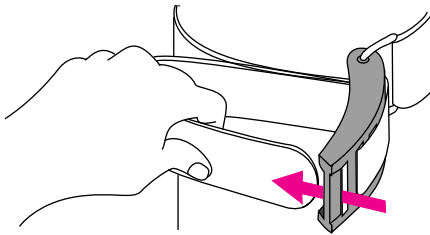
### ⚠ Warning

- When you remove a B. C. from a tank, please put the tank on the stable place, such as the flat ground. It is dangerous if it falls.

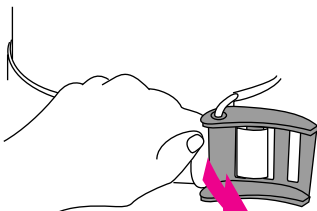
- 1 Close a tank valve, release the residual pressure inside of a hose by pushing the purge button of regulator second stage, and then disconnect the B. C. hose from a nose. (Refer to page 7)
- 2 Remove the regulator first stage from the tank.
- 3 Tear off the end of tank belt from a Velcro tape, and turn the buckle.



- 4 Draw a belt through the slot of the tank buckle.



- 5 When you move the base of the tank buckle toward the direction of arrow, belt will be loosened.



- 6 Tear off the Velcro tape of the tank head belt.

- 7 Loosen the tank belt, and remove the B. C. from upside of the tank.

### 【Note】

- Keep it in the state that a belt is not drawn from a tank buckle even after removing from B. C., it will make you easy for next setting.

# WASH & DRY

## Wash Outside

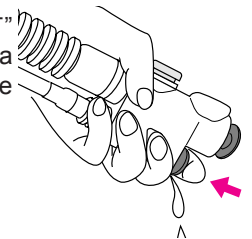
### ⚠ Caution

- Equipment may be damaged if soaked in hot water of 50°C or more.
- Please wash B. C. with fresh water immediately after use. If the salt attached dries and crystallizes, it causes an operation failure of a valve.

- 1 After soaking the whole equipment to fresh water for about 15 minutes, rinse the whole in water to wash the salt away.
- 2 Wash away each valve and inflator portion with fresh water well.

## Wash Inside of a Valve.

- 1 Wash inside of a float.
- 2 Install regulator first stage to a tank, and connect the B. C. hose to an inflator.
- 3 Open a tank valve, push "OUT" button 4 ~ 5 times. Water inside a valve will be drained from the base of the "OUT" button.

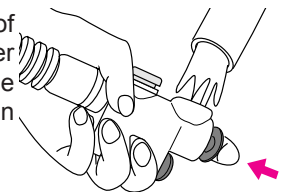


## Wash Inside a Float

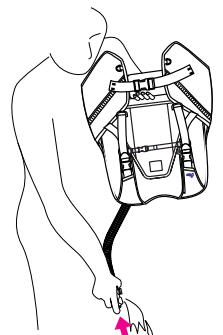
### ⚠ Caution

- Please do not push water out of the relief valve by using the pressure while putting air into B. C. It causes the damage.

- 1 While pushing "ORAL" button of inflator, press a faucet of water service against a mouthpiece portion, and put fresh water in float about 1/4.
- 2 After blowing air from the mouthpiece of an inflator to inflate B. C., shake the B. C. fully, and rinse the inside of float.



- 3 Hold B. C. so that the housing position of the base of an inflator hose may become the bottom, and also make an inflator position to the bottom, and drain the water inside of the float with air by pushing the "ORAL" button.
- 4 Repeat the above 1 ~ 3 process for 2 to 3 times.



# WASH & DRY

## Dry

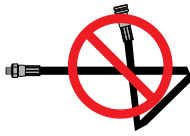
- 1 Inflate a B. C. by putting air in it about 80% through inflator mouthpiece.
- 2 Avoid direct rays, and dry the B. C. completely in the shade of dry and in good ventilation.

# STORAGE & PERIODIC INSPECTION

## Way of Storage

### ⚠ Caution

- Please keep the B. C. hose in a natural form. Over bending may cause a kinking and remarkably short service life.
- Please keep BC without folding. It shortens the service life of the float remarkably and causes the air leakage.



- Wash and dry the B. C. completely.
- Hang it on the hanger and keep it in the place with the dry, cool and sufficient ventilation where does not get sunshine.

## Periodic Inspection

### ⚠ Warning

- Regardless of frequency and the number of times in use, please ask your original dealer or authorized distributor of our company for a periodic inspection per once in a year.
- Regardless whether or not you use it, a B. C. may not function normally when you ignore a periodic inspection.

### 【Note】

- Some parts carry out natural deterioration. Exchange of such parts is also performed by periodic check.
- Please ask your original dealer or authorized distributor of our company for a periodic inspection per once in a year. (Pay Service)

# STORAGE & PERIODIC INSPECTION

## Service after the Sales

- When your B. C. is out of condition, check it first. Please refer to the clause of "Troubleshooting" and check whether it is failure.
- When it is still out of order; Please contact your original dealer or authorized distributor of our company.
- Reserving period of parts. Our company reserves the performance parts (the parts required to maintain the function of the product) to repair B. C. for at least 8 years after the production is discontinued. Since repair may be possible depending on a problem even after this reserving period passes, please consult with your original dealer or authorized distributor of our company.

# TROUBLE SHOOTING

Trouble	Major Cause	Measure	Page
It does not fit when wear it.	<ul style="list-style-type: none"> <li>○Length of cummerbelt at waist portion is not adequate.</li> <li>○Length of shoulder belt is not sufficient.</li> </ul>	○Adjust the cummerbelt.	6
		○Adjust the shoulder belt.	7,10
B. C. cannot be fixed to a tank firmly	○The way of pass a belt through a buckle is wrong.	○Pass the belt through tank buckle correctly, and fix it.	8
BC does not inflate even if I push the "IN" button. (Air is not supplied)	<ul style="list-style-type: none"> <li>○B.C.hose is not connected correctly.</li> <li>○Tank valve is not open.</li> <li>○Air in a tank is not enough.</li> <li>○You might push exhaust button at the same time.</li> <li>○Relief valve is open.</li> </ul>	○Connect the B. C. hose correctly.	8
		○Open the tank valve.	-
		○Change to the tank with full of air.	-
		○Do not push exhaust button.	-
		○Do not pull exhaust knob.	-
BC does not inflate even if I perform the "Oral Inflation". (Air is not supplied)	<ul style="list-style-type: none"> <li>○You might push "OUT" button at the same time.</li> <li>○Relief valve is open.</li> <li>○The "ORAL" button is pushed at the time except blowing air.</li> </ul>	○Operate "ORAL" button only.	9
		○Do not pull exhaust knob.	-
		○Push "ORAL" button only at the time blowing air. (Refer to the course of a diving school)	9
Exhaust cannot be performed by "ORAL" button	○Posture is not appropriate.	○Perform button operation while taking a posture so that the position of the housing becomes higher than the float portion. (Refer to the course of a diving school)	12
BC does not exhaust even if I pull the exhaust knob.	○Posture is not appropriate.	○Perform the operation while taking a posture so that the position of the housing of the relief valve becomes the most top of a float.	12
Air leaks from a relief valve.	<ul style="list-style-type: none"> <li>○The pressure inside float exceeds a fixed level.</li> <li>○A foreign object is stuck in the relief valve.</li> </ul>	○In order to prevent the burst of B. C. jacket, when inner pressure goes too high, it has structure which releases air.	-
		○Wash the valve with water well.	-
Air leaks from a mouth piece portion of an inflator.	○A foreign object is stuck in an oral valve.	○Wash the inside of inflator with water well.	14
Air leaks from a housing at the shoulder portion of inflator.	○A foreign object is stuck in an exhaust valve.	○Wash the housing portion with water well.	-
B.C. hose cannot be connected to an inflator.	<ul style="list-style-type: none"> <li>○Inside of the B.C. hose is pressurized.</li> <li>○Thread size of hose coupling is not adequate as the B.C. hose is not Bism product.</li> </ul>	○Close the tank valve, release the air pressure in the hose by pushing the purge button of a regulator	8
		○Use the B. C. hose of attachment.	-
B.C. is abnormally heavy.	○Water is in side of a float.	○Drain the water in the float.	14
Buoyancy is insufficient.	○Weight is too heavy.	○Adjust to a reasonable weight.	-
BC does not exhaust even if I push "out" button.	<ul style="list-style-type: none"> <li>○B. C. hose is not connected correctly.</li> <li>○Tank valve is not open.</li> <li>○Air in a tank is not enough</li> <li>○Posture is not appropriate.</li> </ul>	○Connect the B. C. hose correctly.	8
		○Open the tank valve.	-
		○Change to the tank with full of air.	-
		○Take a posture so that the position of the housing of the left shoulder becomes the most top of a float.	12







# Memo

