SCUBAPRO

S-TEK

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SCUBAPRO BCS MANUAL

Congratulations on purchasing a SCUBAPRO Buoyancy compensator (BC) and welcome to SCUBAPRO. We are confident that you will enjoy extraordinary performance from our BC, designed and manufactured using the most advanced technology.

We thank you for choosing SCUBAPRO and wish you a future of safe dives and underwater enjoyment!

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1. IMPORTANT WARNINGS

1.1 General Warnings

WARNING

This manual must be read and understood entirely before using the product. It is advised that you keep this manual in your possession during the entire life of your BC. FAILURE TO READ, UNDERSTAND, AND FOLLOW THE PRECAUTIONS LISTED IN THIS MANUAL COULD RESULT IN SERIOUS INJURY OR DEATH.

WARNING

When diving you must follow the rules and apply the skills taught by a recognized scuba diving certification agency. Before taking part in any diving activity, it is mandatory to have successfully completed a scuba diving course covering both theoretical and technical aspects of diving.

WARNING

This instruction manual does not replace a diving instruction course!

WARNING

In accordance with European standards, our BCs can only be considered certified where all components are present, as per the original SCUBAPRO configuration, including the low pressure hose supplied.
Any variation of the original configuration invalidates conformity to European certification standards.

1.2 Pre-Dive Warnings

WARNING

DO NOT DIVE with a BC that does not pass any of the Pre-Dive, Dive or Post-Dive inspection points and tests. Diving with a BC that fails any of the listed check points could result in the loss of buoyancy control while diving, resulting in serious injury or death.

WARNING

Ensure you have fully understood the jacket's function and features and adjust the straps appropriately before diving. If in doubt, ask your official SCUBAPRO dealer for help.

WARNING

Do not attach an L.P. hose to a Scuba regulator high pressure (HP) port or to a gas supply with pressure in excess of 200 psi (13.8 bar). This may result in damage or explosive failure of the Inflation Valve or Low Pressure Hose, which could result in injury or death.

WARNING

DO NOT DIVE with a BC that is damaged, leaks air or does not function properly. Terminate any dive as safely and quickly as possible if the BC becomes damaged, leaks gas or does not function properly.

WARNING

Special instruction in cold water diving practices and the specific use of this product in cold water is required prior to cold water diving (temperatures below 10°C/50°F). This instruction is beyond the scope of this manual.

WARNING

This product is designed to use air or helium/nitrogen/oxygen mixtures containing up to 40% oxygen. Use of gas mixtures with increased oxygen, or the addition of other substances, may cause corrosion, deterioration, premature aging or component failure of metal and rubber parts. These actions may result in loss of buoyancy control or air holding integrity of the BC, resulting in injury or death. Non standard gas mixtures may also present a risk of fire or explosion.

WARNING

The assembly of the system should only be done by a trained person such as an Authorized SCUBAPRO Dealer to avoid incorrect assembly. After the assembly, a final inspection must be performed by an Authorized Dealer. Incorrect installation can cause serious injury or death.

1.3 Dive Warnings

WARNING

THIS BC IS NOT A LIFE JACKET OR A RESCUE DEVICE.
Emergency face up floatation may not be provided for all wearers and in all conditions.

WARNING

Avoid prolonged or repeated exposure to chlorinated water, such as swimming pools. Wash your BC immediately after any use in chlorinated water. Chlorinated water can oxidize fabrics and materials on your BC, thereby shortening the life of the BC as well as cause colors to fade. Damage and fading from prolonged exposure to chlorinated water is specifically not covered under warranty.

WARNING

Do not use your BC as an assist or ‘‘lift bag” for bringing objects to the surface. These objects may be lost during the ascent, creating a sudden increase in buoyancy and loss of buoyancy control.

WARNING

Keep sand and other contamination out of the mouthpiece of the TEK BPI. Under certain conditions, contamination can cause the valve not to close completely. If this occurs while diving, shake the TEK BPI while depressing the deflate button several times. If the valve leaks or remains inoperable, terminate the dive. Diving with a leaking Buoyancy Compensator or with valves that do not operate properly may result in a loss of buoyancy control that could result in injury or death.

WARNING

Never breathe from your BC. Your BC may contain gas residue, liquid or contamination that may result in injury or death if inhaled.
Keep water out of the bladder of the BC. Repeated use of the Oral Valve or Over Pressure Valve may allow water inside the BC, reducing the amount of buoyancy provided by the BC. This could result in injury or death. Drain all water out of the BC prior to every use.

WARNING

Wing-style BCs are built for a stable position underwater. The S-Tek is not a life jacket. Fully inflated, the S-Tek does not guarantee an unconscious diver will be in a safe, heads-up position at the surface.

WARNING

When using a weightbelt with the crotch strap, you must place the weightbelt on top of the crotch strap ensuring it can fall freely from your body. Failure to follow this practice will prevent the weightbelt from being released and may result in serious injury or death.

WARNING

The deflation device with the maximum outflow of gas is the lower deflation valve (fig. 17)

2. EUROPEAN CERTIFICATION

All SCUBAPRO BCs described in this manual have obtained the European certification according to European rules regulating the conditions for the release on the market and the fundamental safety requirements for second category Personal Protective Equipment (PPE). Certification tests have been conducted according to the EN1809 harmonized standard, to ensure the compliance of the products to the fundamental requirements for health and safety set by European regulation 2016/425/EU.

The CE and EN1809 marks on the product denote the conformity to said requirements. The Manufacturer of SCUBAPRO BCs is:
SCUBAPRO EUROPE Via Tangoni 16 16030 Casarza Ligure (GE) Italy, or SCUBAPRO GERMANY & E. Europe Johnson Outdoors Vertriebsgesellschaft mbH Bremer Straße 4 90451 Nuremberg GERMANY

3. PRECAUTIONS

For your protection while using SCUBAPRO life support equipment, we call your attention to the following:

- Use the equipment according to the instructions contained in this manual and only after having completely read and understood all instructions and warnings.
- Use of the equipment is limited to the uses described in this manual or for applications approved in writing by SCUBAPRO.
- Cylinders must only be filled with atmospheric compressed gas, according to the EN 12021 norm. Should moisture be present in the cylinder, beside causing corrosion of the cylinder, it may cause freezing and subsequent malfunction of the regulator during dives carried out in low temperature conditions (lower than 10°C (50°F). Cylinders must be transported according to local rules provided for the transport of dangerous goods. Cylinder use is subjected to the laws regulating the use of gases and compressed air.
- Equipment must be serviced by qualified personnel at the prescribed intervals. Repairs and maintenance must be carried out by an Authorized SCUBAPRO Dealer service facility and with the exclusive use of original SCUBAPRO spare parts.
- Should the equipment be serviced or repaired without complying with procedures approved by SCUBAPRO or by untrained personnel or not certified by SCUBAPRO, or should it be used in ways and for purposes other than specifically designated, liability for the correct and safe function of the equipment transfers to the owner/user.
- The content of this manual is based upon the latest information available at the time of going to print. SCUBAPRO reserves the right to make changes at any time.
- All dives must be planned and carried out so that at the end of the dive the diver will still have a reasonable reserve of air for emergency use. The suggested amount is usually 50 bars (725 psi).

SCUBAPRO refuses all responsibility for damages caused by non-compliance with the instructions contained in this manual. These instructions do not extend the warranty or the responsibilities stated by SCUBAPRO terms of sales and delivery.

4. S-TEK - COMPONENTS AND SPECIFICATIONS

4.1 Primary purpose of the Buoyancy Compensator

The primary purpose of a Buoyancy Compensator is to make you more comfortable by enabling you to maintain neutral buoyancy at depth.

You are neutrally buoyant when you maintain a specific depth without expending significant physical effort to prevent an ascent or descent from that depth.

4.2 S-TEK PURE Harness with Stainless Steel Back Plate

The S-TEK PURE Harness incorporates the D.I.R. (Doing It Right) style of continuous webbing and includes the following:

- 2 x Pre-bent Shoulder Stainless Steel D-rings.
- 1 x Waist Stainless Steel D-ring on the left side.
- Crotch Strap with 2 x Stainless Steel D-rings.
- Silicone Epaulet and Guide Bands.
- Stainless Steel Tri/Quad-Glides.
- 2 x Revolutionary new S-TEK Ergo Nuts to house standard Stainless Steel Wingnuts, making them easier to tighten and loosen. Ergo Nuts are also flush mounted to prevent suit abrasion and are ergonomically designed for use in the cold, with wet or gloved hands.
- Marine Grade Electropolished 316 Stainless Steel Back Plate with softened organic shape, featuring a Built-in Carry Handle.
- 2 x S-TEK WEB-LOCs to prevent overtightening.

4.3 S-TEK PURE Harness with Aluminium Back Plate

The S-TEK PURE Harness incorporates the D.I.R. (Doing It Right) style of continuous webbing and includes the following:

- 2 x Pre-bent Shoulder Stainless Steel D-rings.
- 1 x Waist Stainless Steel D-ring on the left side.
- Crotch Strap with 2 x Stainless Steel D-rings.
- Silicone Epaulet and Guide Bands.
- Stainless Steel Tri/Quad-Glides.
- 2 x Revolutionary new S-TEK Ergo Nuts to house standard Stainless Steel Wingnuts, making them easier to tighten and loosen. Ergo Nuts are also flush mounted to prevent suit abrasion and are ergonomically designed for use in the cold, with wet or gloved hands.
- Marine Grade 5182 Anodized Aluminium Back Plate with softened organic shape, featuring a Built-in Carry Handle.
- 2 x S-TEK WEB-LOCs to prevent overtightening.

4.4 S-TEK PRO Harness with Stainless Steel Back Plate

The S-TEK PRO Harness is supplied with adjustable Tek-Loc Shoulder buckles making doffing and donning a breeze and includes the following:

- 2 x Pre-bent Shoulder Stainless Steel D-rings.
- 2 x Waist Stainless Steel D-rings.
- Crotch Strap with 2 x Stainless Steel D-rings.
- Silicone Epaulet and Guide Bands.
- Stainless Steel Tri/Quad-Glides.
- 2 x Revolutionary new S-TEK Ergo Nuts to house standard Stainless Steel Wingnuts, making them easier to tighten and loosen. Ergo Nuts are also flush mounted to prevent suit abrasion and are ergonomically designed for use in the cold, with wet or gloved hands.
- Marine Grade Electropolished Stainless Steel 316 Steel Back Plate with softened organic shape, featuring a Built-in Carry Handle.
- Molded Monprene® Pads for Back, Shoulder and Waist.

4 .5 S-TEK PRO Harness with Aluminium Back Plate

The S-TEK PRO Harness is supplied with adjustable Tek-Loc Shoulder buckles making doffing and donning a breeze and includes the following:

- 2 x Pre-bent Shoulder Stainless Steel D-rings.
- 2 x Waist Stainless Steel D-rings.
- Crotch Strap with 2 x Stainless Steel D-rings.
- Silicone Epaulet and Guide Bands.
- Stainless Steel Tri/Quad-Glides.
- 2 x Revolutionary new S-TEK Ergo Nuts to house standard Stainless Steel Wingnuts, making them easier to tighten and loosen. Ergo Nuts are also flush mounted to prevent suit abrasion and are ergonomically designed for use in the cold, with wet or gloved hands.
- Marine Grade 5182 Anodized Aluminium Back Plate with softened organic shape, featuring a Built-in Carry Handle.
- Molded Monprene® Pads for Back, Shoulder and Waist.

4.6 TEK BPI – K-Style Balanced Power Inflator/Deflator Unit and Elliptical Corrugated Hose

All S-TEK Donut Wings are supplied with the TEK BPI – a K-Style Balanced Power Inflator/Deflator unit which is CE compliant. This style is preferred by Tech Divers worldwide.

The primary benefit of a Balanced Power Inflator is exceptional, consistent, flow rate, irrespective of depth and tank pressure, which makes this addition an important Tech benefit.

The new Elliptical EPDM Corrugated Hose features increased durability with crush resistance while remaining very flexible. Included is an exclusive Saddle to retain your LP hose with the new Silicone Guide band.

Also included is a 56cm Superflow Kevlar reinforced LP Hose with Quick Disconnect Coupling.

4.7 S-TEK Donut 30 Wing

The S-TEK Donut 30 Wing is ideal for single tank use and incorporates the following features:

- 1000 Denier Air Textured Outer Bag with industry leading abrasion resistance and Eco-friendly Dope-Dyed fabric.
- 500 Denier Air Textured Inner Bag.
- YKK Zippers and embroidered logos.

LIFT CAPACITY: 13KG/30 POUNDS 130 LIFT (N) for Maximum cylinder size 15L.

4.8 S-TEK Donut 40 Wing

The S-TEK Donut 40 Wing is an ideal option for use with both Single Tanks and Twin Tanks and offers the following features:

- 1000 Denier Air Textured Outer Bag with industry leading abrasion resistance and Eco-friendly Dope-Dyed fabric.
- 500 Denier Air Textured Inner Bag.
- YKK Zippers and embroidered logos.

LIFT CAPACITY: 18KG/40 POUNDS 190 LIFT (N) for Maximum cylinder size 18L or 2 x 15L.

4.9 S-TEK Donut 60 Wing

The S-TEK Donut 60 Wing is designed exclusively for Twin Tank use and offers the following features:

- 1000 Denier Air Textured Outer Bag with industry leading abrasion resistance and Eco-friendly Dope-Dyed fabric.
- 500 Denier Air Textured Inner Bag.
- YKK Zippers and embroidered logos.

LIFT CAPACITY: 27KG/60 POUNDS 260 LIFT (N) for Maximum cylinder size 20L or 2 x 18L.

4.10 S-TEK Single Tank Adapter (S.T.A)

The S-TEK Single Tank Adapter makes attaching a single cylinder a cinch! The S.T.A. offers the following features:

- Marine Grade 5182 Anodized Aluminium plate.
- Single cinch band for easier attachment and better vertical adjustability.
- Rubber Grip pad.
- Fixed bolts for easy attachment and removal.
- Tank Height Adjustment Strap with quick release.

4.11 S-TEK Twin Tank Kit

The S-TEK Twin Tank Kit is a premium attachment option for Twin Cylinders and offers the following features:

- Stainless Steel 50mm wide bands.
- Double reinforcement at fixing point offering exceptional stability.
- Laser etched logo.
- Available for 2 x 140mm, 2 x 171mm or 2 x 204mm diameters.

NOTE: Use 2 x Ergo Nuts included with your S-TEK PURE or PRO Harness – see chapter ATTACHING CYLINDER SYSTEMS in this manual.

5. S-TEK - SETUP AND ADJUSTMENTS

5.1 S-TEK PURE Harness (Stainless or Aluminium) Setup

The S-TEK PURE Harness offers two separate modes of use:

- **Extender Mode** on Shoulder Straps to provide easier doffing and donning (All S-TEK PURE Harnesses are shipped in this mode).
- **Fixed Mode** on Shoulder Straps provides the most simple, secure attachment for extreme diving.

5.1.1 Choosing the correct mode

Extender Mode

The S-TEK PURE Harness is shipped in Extender Mode and uses the exclusive S-TEK WEB-LOC to prevent overtightening of the shoulder straps, allowing you to 'save' the setting of the Shoulder Strap each time you don your harness. This system can be personally tailored to you.

In this mode, the Shoulder Straps can be loosened slightly once the waist buckle is undone. Tri-glides traditionally placed at the back of the back plate have been removed, allowing the webbing to slide through the back plate. The WEB-LOCs (fig.1) are added to the Shoulder Strap webbing to set a minimum length, preventing overtightening of the Shoulder Straps when you tighten the Waist Strap.
Overtightening your harness can restrict movement and respiration.

Set the WEB-LOC to the correct position by unclipping the lock (fig.1-1, fig.1-2) and sliding it down the Shoulder Strap to the position that, once your harness is donned, sets desired shoulder length while allowing good freedom of movement without restricting your harness and breathing. Clip it closed (fig.1-3).


fig. 1

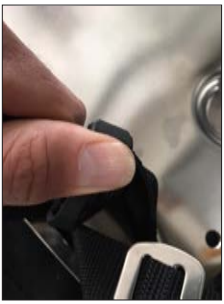
fig. 1-1


fig. 1-2


fig. 1-3

Fixed Mode

Although the S-TEK PURE Harness is shipped in Extender Mode, a spare Tri-Glide is included, should you want to convert your harness to the Fixed Mode.

In this mode, the Tri-Glide already supplied in Extender Mode on the right Waist Strap needs to be moved to the traditional position at the back of the back plate.

The spare Tri-Glide included with the harness needs to be positioned identically on the left side. You will need to remove the Waist Buckle, left-side Tri-Glide (fig.2 and fig.2-1) with D-ring and place the spare Tri-Glide (fig.2-2) in the same position at the back of the back plate. Rethread the left-side Tri-Glide (fig.2-3) with D-ring and Waist Buckle once you are happy with the Fixed Mode shoulder strap length.

You can then remove the S-TEK WEB-LOCs as described in the Extender Mode section above as they serve no purpose in the Fixed mode.

Should you wish to revert to the Extender Mode, reverse the process and keep the spare Tri-Glide safe should you ever require the Fixed Mode option later.

fig. 2

fig. 2-1

fig. 2-2

fig. 2-3

5.1.2 Shoulder Strap and D-Ring Location

While standing, don your harness. Lift your elbows ensuring your arms are parallel to the ground and point your thumb toward the shoulder strap (fig. 3) to get an indication of the correct D-ring placement.

This placement is important for having easy access to items clipped onto the D-rings, including Stage Cylinders.

Feed the webbing through the Tri-Glide until you have created a loop (fig.3-1). Move the Tri-Glide and D-ring unit in the desired direction along the shoulder strap (fig.3-2) to locate it in the ideal position as described above.

Note: Before this step, decide which mode suits your requirement best; Extender or Fixed mode. WEB-LOCs and Tri-Glides should be removed or added and placed in the correct positions as described in the Mode Section above.

fig. 3

fig. 3-1

fig. 3-2

5.1.3 Waist D-Ring (left-side) and Tri-Glide (right-side) Position

As a general rule, the Waist D-ring on the left side of the S-TEK PURE Harness should be located in line with an outer leg trouser seam (fig.4).

This D-ring is normally used for clipping off your SPG and Stage Cylinders.

In Extender Mode, the distance between the WEB-LOC and the Waist D-ring on your left hip (or the Tri-Glide on your right hip), allows you to easily loosen Shoulder Straps to remove your harness or accurately tighten when donning your harness.

In Fixed Mode, the Shoulder Strap length is fixed.

To change the position, feed the webbing through the Tri-Glide and Tri-Glide/D-ring unit until you have created a loop (much the same as the process described above in the Shoulder Strap and D-ring section). Move in the desired direction along the Waist Strap until placement is aligned with an outer leg trouser seam.

fig. 4

5.2 S-TEK PRO Harness (Stainless or Aluminium) Setup

5.2.1 Shoulder Strap and D-Ring Location

While standing, don your harness. Lift your elbows ensuring your arms are parallel to the ground and point your thumb toward the shoulder strap (fig.5) to get an indication of the correct D-ring placement.

fig. 5

Adjustment of the Shoulder Strap length, as well as the chest D-ring location, is set using the excess webbing at the top section of your S-TEK PRO Harness on the back of the back plate (fig.5-1). We recommend using this method for D-ring shifting (rather than feeding the webbing through the Monprene® Shoulder pads and Tri-Glide/D-ring unit) in order to ensure the TEK-LOC adjustment buckles on the Shoulder Straps are in the correct position.

fig. 5-1

You should allow approximately 20cm of excess webbing to ensure you can re-adjust your harness depending on thickness of exposure protection or configuration changes.

Adjust the Shoulder Strap length or chest D-ring placement by feeding the webbing through the Tri-Glide (fig.5-2) so that, once your harness is donned and the TEK-LOC buckles are tightened, your D-rings are in the correct location. Shoulder Straps should be adjusted to allow good freedom of movement without overly restricting your harness and breathing.

fig. 5-2

Ensure you do not have more than 15-20cm of excess webbing from the TEK-LOC adjustable buckles (fig.5-3). Too much webbing could increase drag and irritation!

fig. 5-3

5.2.2 Waist D-Ring's Position

The S-TEK PRO Harness is supplied with 2 x Waist D-rings, one on each hip. As a general rule, both D-rings should be located in line with an outer leg trouser seam (fig. 6). These D-rings are normally used for clipping off your SPG, Stage Cylinders and any other accessories.

To change the position of the D-rings, feed the webbing through the Tri-Glide/D-ring units until you have created a loop (fig.6-1). Move in the desired direction along the Waist Strap until placement is aligned with an outer leg trouser seam. You will also need to feed the webbing through the Monprene® Waist Pad to move the location of both D-rings.

fig. 6

fig. 6-1

5.3 Front Buckle Location and Trimming Excess Webbing (PURE and PRO Harnesses)

The placement of the Stainless Steel Waist buckle does depend on diver configuration but generally should be off-set slightly to the right (fig. 7), so it is unhindered by the crotch strap which is centrally aligned with your navel but still allows easy reach to release the buckle. The waist buckle should not be too far right if you are using a light canister on your right side.

To move the Waist Buckle, untuck the existing webbing from the 2 x Elastic Webbing Retainers (fig. 7-1) and feed all excess webbing through the buckle to allow you to move the Waist Buckle in the desired direction (fig. 7-2).

You should allow approximately 20cm of excess webbing (fig. 7-3) (to be tucked back into the Elastic Webbing Retainers) to ensure you can re-adjust your harness depending on thickness of exposure protection or configuration changes. Remember that each time you add an item like a light canister onto your system, you will require some of the excess webbing.

Trim the excess webbing while still allowing for approximately 20cm of excess. Use a lighter to singe the free end to prevent fraying.

fig. 7

fig. 7-1

fig. 7-2

fig. 7-3

5.4 Rear Crotch D-ring Position (PURE and PRO Harnesses)

The Rear Crotch D-ring is used for clipping off gear such as Reels, Delayed Surface Marker Buoys (DSMB) or Lift Bags – items that are not used often. As a general rule the D-ring should be about a hand width below the botton end of the back plate (fig. 8) to ensure it's low enough to access without being blocked by your cylinders.

The Front Crotch D-ring is included for D.P.V. (Diver Propulsion Vehicle) clip off. It is advised not to clip any other gear onto this D-ring which could increase drag and the risk of entanglement.

To adjust the position of the Rear Crotch D-ring, free the excess webbing from the Elastic Retainer on the crotch strap (fig. 8-1). Feed excess webbing through the Tri-Glide (fig. 8-2) and move the unit to the desired position ensuring a hand width distance from the back plate (fig. 8-3).

fig. 8


fig. 8-1

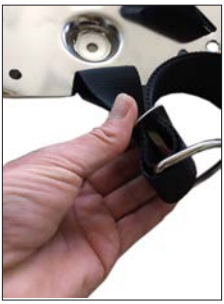
fig. 8-2


fig. 8-3

5.5 Final Back Plate Position Check (PURE and PRO Harnesses)

As a final check to ensure you've set up your harness correctly, the back plate should be positioned and tightened so that once the back plate is in the correct location on your back, you can easily reach the top handle of your back plate with both hands (fig. 9).

This check also ensures that you are able to comfortably reach your isolation manifold and valves.


fig. 9

6. S-TEK - ATTACHING CYLINDER SYSTEMS

6.1 S-TEK Ergo Nuts (fig. 10)

All S-TEK PRO and PURE Harnesses are supplied with 2 x Ergo Nuts. The Ergo Nuts provide the following benefits:

- Suit friendly - prevent abrasion.
- Flush-mounted and ergonomically designed to allow easier tightening and loosening of cylinder systems, especially with cold, wet hands or when wearing gloves.
- Imperial or Metric.
- Fit diver's existing Wingnuts 8mm and 10mm.
- 5/16''-18 and 3/8''-16.
- Grip O-ring to prevent unintentional loosening.

fig. 10

6.2 S-TEK Single Tank Adapter (S.T.A.) for both PURE and PRO Harnesses

For this procedure you will require the following three S-TEK components (fig. 11):

- S-TEK PURE or PRO Harness (Stainless Steel or Aluminium) with included Ergo Nuts (x2)
- S-TEK Wing (normally an S-TEK 30 Wing or 40 Wing for use with an S.T.A.)
- S-TEK Single Tank Adapter (S.T.A.) with included Mounting Bolts and Wing Nuts.

NOTE: Remove the above items from their packaging and remove the Low Pressure Inflator Hose packaged with your S-TEK 30 Wing, 40 Wing or 60 Wing. Keep it to one side, in order to assemble this onto your First Stage regulator, outlined later in this manual.

fig. 11

Step 1

Remove the 2 x Ergo Nuts from the back plate (fig. 11-1) and discard the triangular cardboard tabs (fig. 11-2).

Step 2

Using a small flat screwdriver, lever the retaining tabs (fig. 11-3) on both of the Ergo Nuts to remove the covers (fig. 11-4).

Step 3

Remove the wingnuts from the mounting bolts of the Single Tank Adapter (fig. 11-5).

Step 4

Place the wingnuts from the Single Tank Adapter into the disassembled Ergo Nuts (fig. 11-6), replace the snap-on covers onto the Ergo Nuts and engage the tabs to ensure they are secure.


fig. 11-1

fig. 11-2


fig. 11-3


fig. 11-4

Step 5

Place your PURE or PRO harness face-down while aligning the top webbing mounting eyelet (PURE Harness) with the mounting hole of the back plate (fig. 11-7). The PRO Harness has no top webbing mounting eyelet.

fig. 11-5

fig. 11-6

Step 6

Place your S-TEK wing face-down on a flat surface while aligning the two mounting holes on your bladder with the back plate mounting holes (fig. 11-8). If you have a PURE Harness, be sure to align the top webbing mounting eyelet too.

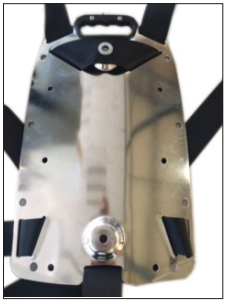

fig. 11-7

fig. 11-8

Step 7

Align the mounting bolts of the Single Tank Adapter through both the wing and the back plate (fig. 11-9).

Step 8

Turn your S-TEK system over (fig. 11-10), face-up, while being careful to keep the mounting bolts in place. The two mounting bolts should be visible and protruding through the mounting holes of the back plate.

fig. 11-9

fig. 11-10

Step 9

Tighten the Ergo Nuts firmly onto the protruding mounting bolts (fig. 11-11).

Your Single Tank Adapter is now installed! (fig. 11-12)

fig. 11-11

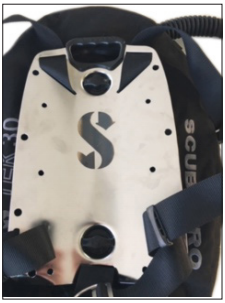

fig. 11-12

6.3 S-TEK Twin Tank Kit for both PURE and PRO Harnesses

For this procedure you will require the following three S-TEK components (fig.12):

- S-TEK PURE or PRO Harness (Stainless Steel or Aluminium) with included Ergo Nuts (x2)
- S-TEK Wing (normally an S-TEK 40 Wing or 60 Wing for use with a Twin Tank Kit)
- Your Twin Cylinders with twin bands installed.

fig. 12

NOTE: Remove the above items from their packaging and remove the Low Pressure Inflator Hose packaged with your S-TEK 40 Wing or 60 Wing. Keep it to one side, in order to assemble this onto your First Stage regulator, outlined later in this manual.

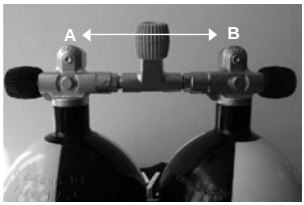

fig. 12-1

IMPORTANT! Make sure that your Twin Cylinders are set correctly prior to installing your PURE or PRO Harnesses.

Ensure that the space between the center of the valves and the center of the bands is identical. An incorrect measurement could result in damage to both the Valve Manifold and the Valves (fig.12-1, fig.12-2).

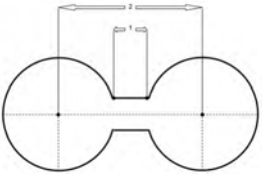

fig. 12-2

The upper twin tank band is generally placed just below the shoulder of the cylinders (fig.12-3). Ensure that the lower band is placed so that the spacing between the two bolts is exactly 11”/279.4mm for perfect backplate hole alignment (fig.12-4).

fig. 12-3

fig. 12-4

Step 1

Remove the 2 x Ergo Nuts from the back plate (fig.12-5) and discard the triangular cardboard tabs (fig.12-6)

fig. 12-5

fig. 12-6

Step 2

Using a small flat screwdriver, lever the retaining tabs (fig.12-7) on both Ergo Nuts to remove the covers (fig. 12-8).

fig. 12-7

fig. 12-8

Step 3

Locate your S-Tek 40 Wing or 60 Wing and Back Plate onto the mounting bolt of the Twin Tank Kit (fig.12-9, fig.12-10).

NOTE: Be aware of the length of the Mounting Bolt, ensuring it is the correct length to accept the Ergo Nuts. If the Mounting Bolts are too long, they may cause the Ego Nut lid to unclip from the Ergo Nut housing (fig.12-11).

fig. 12-9

fig. 12-10

Step 4

Place the wingnuts from the Twin Tank Kit into the disassembled Ergo Nuts (fig.12-12), replace the snap-on covers onto the Ergo Nuts and engage the tabs to ensure they are secure. Tighten firmly onto the protruding mounting bolts (fig.12-13).

Your Twin Tank Kit is now installed! (fig.12-14)

fig. 12-11

fig. 12-12

fig. 12-13

fig. 12-14

7. BC EXAMINATION AND PROCEDURES

Pre-dive, dive and post dive BC examination helps to identify equipment problems before unsafe conditions exist, helping to prevent diving accidents. All equipment must be regularly inspected by an authorized SCUBAPRO equipment repair facility to maintain its safe operation.

7.1 Pre-Dive Visual Inspection and Valve Test:

1. Examine the entire BC for cuts, punctures, frayed seams, excessive abrasion, loose/missing hardware and other damage of any kind.
2. Inspect the TEK BPI (inflate button, deflate button, and inlet) and Manual Dump Valve for cracks, damage or contamination.
3. Inflate the TEK BPI using the inflate button (with LP hose attached and charged with gas pressure from a cylinder). Check that the Over Pressure Valve activates on full inflation and reseals after releasing excess gas. Ensure the manual Dump Valve operates correctly on activation and reseals completely.
4. Inflate the BC orally until it is full and firm via the TEK BPI unit's mouth opening, while depressing the deflate button on exhalation. Listen and check for leaks. Let the BC stand inflated for 30 minutes or more and then check the BC for loss of gas.
5. If applicable and when using the Single Tank Adapter, soak the cylinder bands in water and fit the BC to a SCUBA cylinder. Pull up on the BC while it is attached on the SCUBA cylinder, checking that the BC is secure and will not slip while diving.
6. While wearing the BC, adjust all straps on the BC for a comfortable fit that does not restrict breathing. Make these adjustments with the BC inflated and while wearing the exposure suit you intend to dive with.
7. Check quick release weight pockets or systems that retain weight (if your BC is equipped with them). Make sure that their retention systems are fully and securely engaged. Confirm that they can be quickly released and the weight freely removed from the system.
8. Do a buddy check with your dive partner confirming that all valves operate correctly prior to entering the water.

8. OPERATION

SCUBAPRO S-Tek BC's are supplied with the TEK BPI (K-Styled Inflator/Deflator Unit). The TEK BPI, when connected to the tank and regulator by a Low Pressure hose, makes it possible to control buoyancy in the water (inflation and deflation of the BC) by using the inflate and deflate buttons.

Low Pressure (LP) Inflator hose (fig.13):

Locate the low pressure (LP) hose of the TEK BPI Inflator/Deflator unit supplied with your S-Tek 30,40 or 60 Wing. Connect the LP hose to an unused LP port of the first stage (fig 14). Note - LP port uses a 3/8 UNF thread. Choose the LP port that makes the most sense for your personal configuration. This should be torqued to 4 Newton Meters.

fig. 13

8.1 Connecting the TEK BPI (Inflator/Deflator Unit)

The TEK BPI allows you to inflate your BC using gas from your SCUBA cylinder. It's LP hose, threaded on an LP port of the firt stage regulator, is connected to the TEK BPI by the Quick Disconnect Coupling.

fig. 14

To attach the Quick Disconnect Coupling:

1. Make sure that both fittings are free of contamination prior to connecting them together (fig. 14-1).
2. Pull the collar of the Quick Disconnect Coupling while pushing the hose firmly onto the fitting inlet on the S-TEK inflator/deflator unit (fig. 14-2).

fig. 14-1

fig. 14-2

3. Release the collar when the coupling is fully sealed on the inlet fitting of the TEK BPI. Pull gently but firmly on the hose to check for a secure connection (fig. 14-3).

4. To disconnect, pull the Quick Disconnect Coupling collar back and disengage the LP Hose from the inlet fitting. fig. 14-4).

fig. 14-3

fig. 14-4

8.2 Power Inflating the BC with the Inflate Button

To inflate the BC, press the Inflator button (fig. 15). Gas should enter the BC. For better control during inflation, use short bursts of gas by repeatedly pressing and releasing the inflate button.

fig. 15

8.3 Orally Inflating the BC with the Deflate Button

The Oral opening is found at the open end or mouthpiece of the TEK BPI (fig. 16). It allows you to inflate your BC with your exhaled breath while depressing the DEFLATE button. Use of this method for inflation is recommended on the surface or on land prior to diving. It may be used when you cannot or do not wish to add gas to the BC with the inflate button using gas from the cylinder.

fig. 16

1. First exhale a small amount of gas into the mouthpiece to purge any water that may be trapped in the cavity.
2. With the same breath, continue to exhale while depressing the Deflate button (fig. 16-1).
3. Release the Deflate button once you have added a breath of gas.
4. Repeat steps 2 and 3 until the desired amount of buoyancy is reached.

fig. 16-1

8.4 Deflating the BC with the Deflate Button

Assume a head-up position in the water. Raise the TEK BPI unit above and in front of your face (this ensures the unit will be postioned above the aircell of the BC). Depress the Deflate button and visually confirm that gas is escaping from the unit. For best control, let gas out in a series of short, measured amounts, while observing the effects on your buoyancy.

8.5 Deflating the BC with the Dump Valve

On S-TEK 30, 40 and 60 Wings, a manual Dump/Over Pressure Valve is located on the inside lower left position of the bladder (fig. 17).

fig. 17

The Over Pressure Valve prevents over-inflation of the BC. If the internal pressure exceeds the spring pressure in the Over Pressure Valve, the valve automatically opens and releases gas to prevent damage to the BC. The valve will automatically close when the internal pressure is lower than the spring pressure in the Over Pressure Valve.

Over Pressure Valves located at the lower rear of the bladder are equipped with lanyard and pull knob. This lower dump valve can be manually activated when the diver is in a horizontal or head-down orientation in the water, positioning the valve at the highest point of the air bubble for easy deflation.

9. POST DIVE

9.1 Cleaning, Inspection, Transport and Storage

Correct servicing and maintenance guarantees you many years of reliable function of your SCUBAPRO® S-TEK BC.

Keep the following instructions for care:

- Fill the wing with fresh water (preferably luke warm) and shake so the water rinses the entire internal aircell.
- Keep the wing upside down while depressing the deflate button on the TEK BPI to drain all internal water.
- Disinfect the inner wing regularly (at least after each dive trip) with an approved disinfectant specifically for diving to prevent baterial growth.
- Rinse the outer shell and harness thoroughly with fresh water.
- Clean all valves so that possible debris and dirt are removed.
- Place a small amount of Christolube® or suitable silicone grease on the quick release collar of the TEK BPI attachment.
- Dry your BC completely before storage but do not dry it in direct sunlight as ultraviolet rays shorten the life of the fabric and cause colors to fade.
- Slightly inflate the wing for storage.
- Store your BC in a cool, dry location. Do not store in direct sunlight.

For your safety your BC should be inspected and maintained at an Authorized SCUBAPRO Dealer once every two years or every 100 dives. Any damage caused due to failure to properly maintain the BC is not covered by the warranty.

Handle the S-TEK systems in such a way to ensure that no sharp or heavy objects (e.g. knives, tanks, lamps, lead etc.) damage the harness, wing or inflator/deflator units.

9.2 Disinfection

SCUBAPRO recommends McNett Revivex. Use according to the procedure and dilution described on its packaging.

10. GENERAL SPECIFICATIONS AND WARRANTY

Shelf life is seven years for a new, unused BC when deflated and stored in a sealed container or bag at typical room temperature, with no exposure to UV.

Operating temperature range

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

Low pressure Hose / Pneumatic Inflation Valve

LP hose and Pneumatic Inflation Valve operating pressure	95 – 200 psi (6.5 – 13.8 bar)
Low Pressure Hose Fitting threads	3/8 – 24 UNF
O-Rings - Seals	EPDM – Buna/Nitrile - Silicone

Your S-TEK has a two year warranty covering defects in workmanship and function. The warranty only covers products purchased from an Authorized SCUBAPRO Dealer.

Repairs or replacements during the warranty period do not extend the warranty period itself.

Excluded are faults or defects due to:

- Excessive wear and tear
- External influences e.g. transport damage, damage due to bumping and abrasion, influences of weather or other natural phenomena.
- Servicing, repairs or work on the product not authorized by the manufacturer.
- Diving accidents
- Improper assembly
- Improper use, improper maintenance, neglect or modifications

All warranty claims must be returned with the dated proof-of-purchase to a SCUBAPRO Authorized dealer. Visit www.scubapro.com for the Dealer nearest you.

Note

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Product packaging is made of recycled materials & is recyclable.

BUILT TO LAST.
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O Manual e as Declarações de Conformidade estão disponíveis em:
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