



# EVASION BUMP

User's manual

**English version** 

SUPAIR-VLD PARC ALTAÏS 34 RUE ADRASTÉE 74650 ANNECY CHAVANOD FRANCE

45°54.024'N / 06°04.725' E

RCS 387956790

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Thank you for your choice of a EVASION BUMP. We are proud to join you on your journey in our common passion : paragliding.

SUP'AIR has been designing, producing and selling accessories for free flying activities since 1984. By choosing a SUP'AIR product you benefit from almost thirty years of expertise, innovation and listening. This is also our philosophy : working endlessl

We trust that you will find this user's manual comprehensive, explicit and hopefully pleasant to read. We advise you to read it carefully !

On our website www.supair.com, you will find the last up to date information about this product. If you have any further questions, feel free to ask one of our retailers. And of course, the entire SUP'AIR team are at your disposal through info@supair.com

We wish you many safe flying and enjoyable hours, and happy landings

The SUP'AIR team

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#### Introduction

Welcome to the tandem world.

With the EVASION BUMP, you are equipped with a tandem harness designed with an integrated reserve parachute pocket and an BUMPAIR protection. This harness is targeting intensive professional use.

The ergonomy is classic with a wooden seatplate whose V-shape enables a very ergonomic position with the passenger.

After reading this manual, we suggest you check your harness by hanging in it before flying.

N.B : Three important icons will help you when reading this manual





Danger !!

#### **Technical specifications**



В

E

Back height (cm)

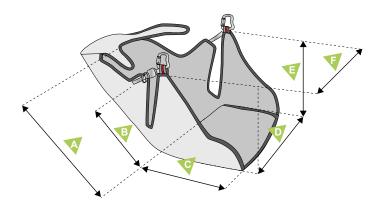
Leaning setting height (cm)

Seat length (cm)



Carabiners height (cm)

Carabiners distance (cm)



Pilot size	Model
	170-195 cm
Pilot maximum weight	≤ 120 kg
Harness weight (+ carabiners+speedbar)	3990 g
Designed for	Paragliding only
Back height (cm)	68
Leaning setting height (cm)	34
Seat length (cm)	47
Carabiners height (cm)	42
Impact damping system : Airbag (Volume)	No
Impact damping system : Bumpair (Thick- ness)	YES
Homologation	EN 1651 - LTF
Flight : tandem (Pilot- Passenger)	Pilot
Flight : acrobatic flying	No
Take-off : Winching	No
Quick-out carabiners compatibility	No

This harness is delivered with two 45 mm Biners ( 138 g. for the set ).

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#### Components



#### This illustration will help you during your reading.





#### Harness overview

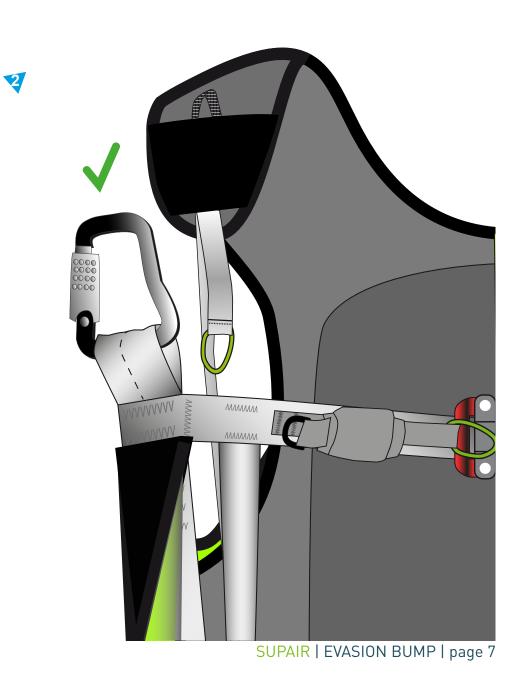
- Automatic ventral buckle
- Rectangular push-through leg straps buckles.
- 37 Ventral width adjustment
- Leaning setting
- 5 Shoulders straps adjustment
- Reserve parachute handle (W2)

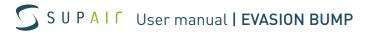
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#### Compatible carabiners :

# Zic**ial 30 mm carabine** Réf VALCENCE CONTRACT

### Carabiners assembly







#### Rescue parachute setup assembly.

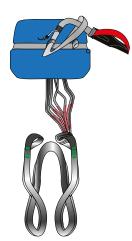


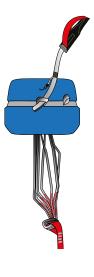
Thank you for comprehensively reading the following ! We will recommend you to have your reserve parachute initially installed by someone competent and familiar with the procedure.

Connecting the handle to the rescue parachute's deployment bag

Place the handle inside the middle webbing loop and make a lark's head knot with the handle.

Fasten tightly the lark's head knot and verify the solidity of the link.





The handle must be connected to the central loop.

Thank you for comprehensively reading the following ! We will recommend you to have your reserve parachute initially installed by someone competent and familiar with the procedure.

then through the external grommet.

Installing the reserve parachute in its pocket.

Push the piece of line/cord, underneath the connection strap,

Adjustable reserve parachute pocket.

The reserve parachute pocket volume is variable in size.You first must adjust its volume according to that of your reserve parachute.

The pocket volume can slightly be increased by using the lateral flaps external grommets.

The harnesses are delivered by default, with the "small" volume setting corresponding to the X-TRALITE BI-SUP'AIR reserve parachute size. Small volume default setting.





Pull on the rear flap, remove

the cord from it grommet.





Reserve parachute installation in the pocket.



Insert the reserve parachute inside the harness parachute pocket by opening all the flaps. The POD must be positioned with the handle at the top with risers and lines at the bottom. Push the risers through the guiding sleeves ( the risers must be located behind the parachute ).



Push the cord through the right loop ( if the handle is located to the right ).



Push the loop through the lower flap grommet. The yellow cable will also be pushed through the lower flap guide located near the grommet.



Push the cord through the upper flap grommet.



Push the yellow cable through the loop and gently pull the cord out.



Push the cord through the left loop.



Push the loop through the lower flap grommet.



Push the Loop through the upper grommet flap grommet and push the yellow cable through it ( loop ).



The yellow cable locks the reserve parachute pocket flaps in place. Tuck the upper flap inside its lower stretchable pocket. Check before every fligth for the yellow cable to be properly inserted through the two loops keeping the reserve parachute pocket securely

Position the handle in its folding sleeve. It may not protrude from the harness.



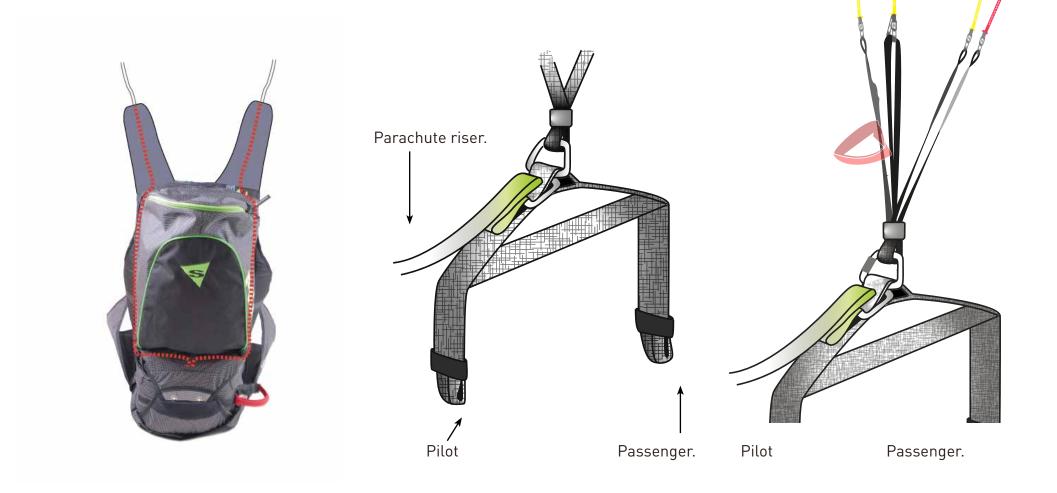
Handle positioning in it holding sleeve.

Upon setup completion, conduct an extraction sequence during a hang-test to verify that all works properly before duplicating the installation procedure again...

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Install the risers inside the lateral guiding sleeve. The risers come out of each strap guide. Connect the risers atop each spreader-bar ( main hooking location), with the maillon rapide trapeze stainless steel 6 mm + the flexible elastic rings.





All harness adjustments must be made prior the first flight during a hang-test session. It is of utmost importance to adopt a proper flying posture, check all basic adjustments and have easy access to in-flight adjustments.



- Chest strap finger-loop tension tightening adjustment.
- Chest strap finger-loop tension release adjustment.
- Tigh
  - Tightening snapper (leaning setting)
- Loosening strap (leaning setting)

Tightening snapper (shoulder strap)



Loosening strap ( shoulder strap)





**Position setting** 

#### A Leaning angle setting

Set the angle of leaning by tightening the snapper (towards a more vertical position) or the black webbing (towards a more horizontal position). You can extend the lumbar support by tightening the #5 buckle.

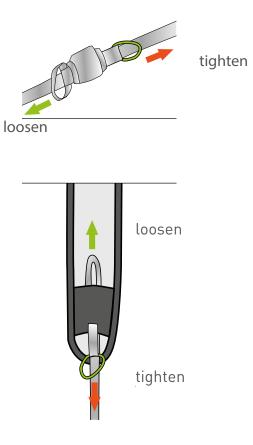
#### B Shoulders' straps adjustments.

Tighten the shoulder straps by pulling the finger loop down.

Pull up to release.

Ŷ

The shoulder straps support, greatly helps the comfort level. It should be set precisely. You must find the correct tension between the side and shoulder straps adjustments.



#### C Chest strap adjustment.

To adjust correctly during a hang-test. The chest-strap tensioning/loosening as little effect on the wing's incidence while weight-shifting.

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#### Pre-Flight control.

- Inspect the harness and the carabiners for possible wear and tear.
- Be certain for the handle cables to be securely fastened in place inside their respective reserve parachute pocket housings.
- Check that your personal settings have not changed.
- Check that all zippers and buckles are closed.
- Check that the speedbar/accelerator is correctly connected and adusted.
- Check that no rigging line or other object comes in contact and interferes with the rescue parachute handle.
- Make sure that the self-locking carabiners are locked and connected to the paraglider.
- Be certain for the accelerator/speed-bar line not to ride through the reserve parachute handle.

#### Takeoff



After a thorough weather conditions analysis was conducted and the decision to fly was made, put your harness on and follow the next steps :

• Fully close the leg straps, Safe-T-bar and chest strap buckles..



• Takeoff maintaining a vertical posture and push yourself inside the harness but only once away from the ridge.



Do not let go the brakes when close to the terrain.

**Flight phases** 

#### In flight.



Set the distance between the two carabiners according to the aerology of the moment, and the wing manufacturer's recommendations.

#### Speedbar use.

We recommend using the speed-bar cautiously due to the increased risk of a partial or full frontal collapses.



Use the speed-bar/accelerator (transitions) only when far away from the ridge and in calm weather conditions as the wing becomes more sensitive to turbulence when accelerated. If you feel a loss of tension in the speed-bar/accelerator, stop pushing it and apply a light brake pressure on the toggles to prevent the glider from experiencing a potential frontal collapse.



Beware not to push on the speed-bar/accelerator to enter the harness after takeoff (it is not a foot-rest) or there could be the risk of a frontal collapse taking place as a result.



To use the speed-bar/accelerator, backpedal and grab the bar with the back of your shoe, push and use the second foot to stabilize it or to grab the second bar.

Apply pressure symmetrically to the first stage (first bar), when reaching the maximum enabled distance, then push on the second stage (upper bar). To decelerate, reverse the procedure.

#### Landing

Always be certain to have enough altitude to make a landing approach corresponding to the weather conditions of the moment and terrain. During the landing approach, never make hasty maneuvers. Always land upwind in a standing posture and be ready to run upon touchdown if necessary.



During your final approach, use as much airspeed as possible based on the weather conditions of the moment, then gradually reduce the glider air speed by pushing the toggles all the way down until contact with the ground is made. Beware not to brake too soon and too rapidly and too deep which could lead to a stall and a dangerous landing.

During high wind speed landings, turnaround and face the wing as soon as ground contact is made and move toward the wing while braking symmetrically to deflate it.

Do not land in a seated position as it is dangerous.

Flight phases

## Using the reserve parachute

#### Throwing the reserve parachute.



It is strongly recommended to frequently check your reserve parachute handle location while in flight. This exercise should be executed instinctively and will increase your chances of a successful parachute extraction in case of an emergency.

Estimate your AGL (Altitude Above Ground Level) which if high enough may make it worth trying to bring your wing back to a normal flying configuration. If in doubt quickly deploy your emergency parachute.

#### Deploying a rescue parachute should only be done in an emergency.



With a strong lateral and then vertical tug, pull the handle towards you and then throw the parachute away from you ( including the container and its handle ) toward a clear unobstructed area of the sky. As soon as the parachute deploys, bring as much of the glider as possible toward you by pulling symmetrically on the "C" or "D" risers or on the toggles/brakes. Be prepared to land by adopting an upright position with knees together and legs slightly bent. Prepare to roll down, hands on your chest, ankles together with pivoting hips and shoulders in a Paragliding Landing Fall (PLF) configuration.

# Towing

To takeoff under tow you must be equipped with a quick release specially designed for the task. Connect the towing release system to the main carabiner attachment points in accordance to manufacturer recommendations. Before towing you should consult with a competent towing outfit about safety recommendations.

# Mandatory controls

#### Mandatory biannual inspection.



Ascertain parachute deployment functionality by pulling the handle to activate a clean POD extraction sequence.
Inspect the harness for wear and tear.

#### Annual check



- An annual deployment and repacking of the reserve parachute must be conducted by competent and certified personnel.

#### Harness cleaning and maintenance.

It is a good idea to clean your harness from time to time. We recommend using a brush and soft solvents only ( soap or mild cleaning agents ).

Rinse thoroughly. Never use aggressive chemicals such as strong solvents which could be harmful to the fabric, webbings, stitching and weaken the overall integrity of the harness.

The zippers should be lubricated from time to time using a silicon spray.

If you regularly use your harness in a dusty environment (dirt, sand, etc...) we advise you to regularly check and maintain your carabiners and buckles : clean them with a mild detergent, then, blow-dry them fully but DO NOT LUBRICATE !

Prior to using them conduct a thorough carabiners and buckles checkup to insure their full functionality.

If you use your harness in a marine/sandy/salty environment, pay particular attention to your gear and follow a regular rigorous maintenance routine.

If your air bag is damaged, have it professionally checked and repaired if necessary.

#### Storage and transport.

When not in use your harness should be stored inside your paragliding backpack in a dry cool and clean place protected from UV exposure. If your harness is wet please dry it thoroughly before stowing it away.

During transport protect the harness against mechanical or UV deterioration (use a bag). Avoid long transports in wet conditions.

#### Life-span



Once every two (2) years a thorough harness inspection must be conducted :

- Webbing wear and tear (no excessive wear nor rip beginning or unwanted folds).
- Buckles and carabiners (functionality wear and tear).
- The AIRBAG's integrity (especially after a strong impact), in other words, no holes, tears or rips.



The threads and fabric used to manufacture the EVASION BUMP were specifically selected for their quality and resilient capacities. However in particular instances such as long term UV exposure abrasion, contact with damaging chemicals, general wear and tear, the harness will need to be inspected at a professional certified repair facility. Safety comes first!



The self-locking carabiners are NEVER to be used for any activities other than paragliding.

#### Repairs

In spite of using the highest quality products used for manufacturing, it is possible for your harness to deteriorate through general use. If showing any sign of wear and tear it should be sent for inspection and/or repairs at a professional certified facility.



SUP'AIR offers an extended warranty period reaching beyond the product standard protection plan against manufacturing defects. Contact us either by telephone or by E-mail sav@supair.com to receive a quotation.

#### Hardware & Parts

- Zicral 30 mm carabiners. (réf. : MAILCOMOUS30)
- Carbon seat plate
- « ALT3 » Reserve parachute handle (POIALT3)

#### **Materials**

Fabrics

Polyamide 210D RIPSTOP

Straps

Polyester 25mm and 28mm (1250 daN) Polyamide 15 mm, 20 mm, 25mm et 40mm

SUP'AIR manufactures its harnesses in Europe. Most of the components used are Made in Europe.

#### Recycling

We have minimized our manufacturing footprint by carefully selecting environmentally friendly materials; most of our components are recyclable.

If you estimate that your EVASION BUMP has reached the end of it life-span, you can separate plastics from metals and dispose of them according to your community recycling rules. As for the fabric itself contact your local authorities to find out how to proceed to discard it.



SUP'AIR takes the greatest care in its products design and manufacturing and hence offers a five (5) year limited warranty from the date of purchase against manufacturing defects or flaws occurring during normal use. Any damage or degradation resulting from incorrect or abusive use, abnormal exposure to aggressive factors, including, but not limited to; high temperature, intense sun exposure, high humidity, excessive abrasion, etc, will invalidate this warranty.

The safeguards incorporated in the SUP'AIR harnesses are guaranteed for use in temperatures averaging (-10 ° C to 35 ° C). The lifespan of foam protectors is 5 years or limited to three substantial impacts. If an air-bag protection is used instead, check for damage.

# Disclaimer



Paragliding is an activity requiring specific skills and sound judgement. Learn how to fly within the environment of a certified paragliding school. Carry an insurance policy with you in addition to you pilot certification. Always mind and gauge your personal skills against the weather conditions of the day. Better be safe than sorry ! SUP'AIR can not be held responsible for your paragliding decisions or activities.



This SUP'AIR product has been designed exclusively for paragliding. Any other activity such as skydiving or BASE jumping is absolutely forbidden.



**Pilot's gear** It is essential for you to wear a suitable head protection (certified paragliding helmet), adequate footwear and the right clothing for the activity. Moreover carrying a reserve parachute connected to your harness in flight is highly recommend.

# CE certification : About the paragliding harnesses protection

We want to inform you and let you know that no harness protection can guarantee a complete protection against injury. In particular, the back protector which does not prevent potential injuries to the spine or pelvis.

Moreover, only parts of the body covered by the air bag may benefit from protection against potential impacts.



Warning, any modification or misuse of the protection can dangerously alter its performance and compromise the integrity of the safety device.

Protection is ensured only when the protective elements are present and properly installed. Thus, when the protection is removable, check that it is correctly positioned.

Your harness protection CE conformity labeling is certified by the following laboratory : CRITT Sport Loisirs **nr. 0501**, Z.A. du Sanital, 21 Rue Albert Einstein, 86100 Chatellerault – FRANCE This page will help you to record all the life stages of your EVASION BUMP harness.

Serial number :

Purchase date Owner's name	□Care □Resale	□Care □Resale
	date	date
Name and stamp of the shop	Workshop's name/ Buyer's name	Nom de l'atelier/de l'acheteur
	Care	Care
	Resale	Resale
	date	date
	Workshop's name/ Buyer's name	Workshop's name/ Buyer's name

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