

User's manual

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

45°54.024'N / 06°04.725' E

Revision Indice: 20120314 EN



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

SUPAIR has been designing, producing and selling accessories for free flying activities since 1984. By choosing a SUPAIR product you benefit from almost thirty years of expertise, innovation and listening. This is also our philosophy : working endlessly to develop better products and to maintain a high quality production in Europe.

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](http://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 SUPAIR team are at your disposal through [info@supair.com](mailto:info@supair.com)

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

The SUPAIR team

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All the pictures of this user's manual were shot by Thomas De Dorlodot and Horacio LLo-rens during their 2011 expedition in Pakistan where they set many new records such as Himalayan distance record (225 km).

More information on :

[www.xp.supair.com](http://www.xp.supair.com)



Welcome to the world of lightweight performance! You have in your hands the key that opens the door to exceptional flights. The DELIGHT is our most persuasive invitation to adventure and with it you will be able to go higher, further and fly longer. Now, you just have to find a playground big enough !

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



Advice



Caution !

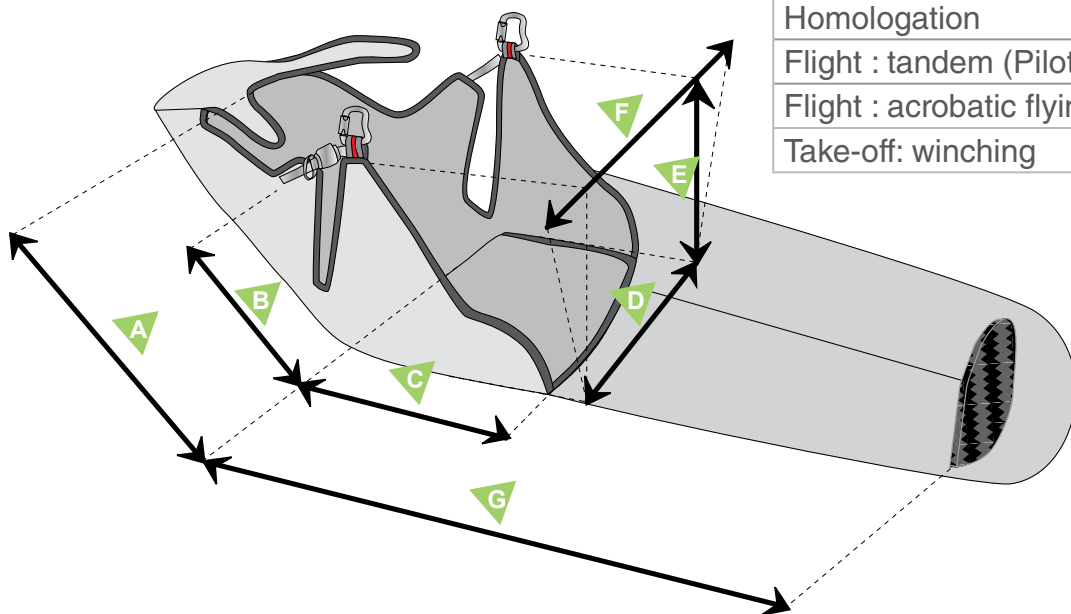


Danger !



## Technical sheet

- A** Back height
- B** Leaning setting height
- C** Seat length
- D** Seat width
- E** Carabiners height
- F** Carabiners distance
- G** Speedbag length



## Technical specifications

Model	DELIGHT M	DELIGHT L
Pilot size	1 m 55 - 1 m 90	1 m 70 - 2 m 05
Weight	60 - 80 kg	75 - 100 kg
Harness weight (+ carabiners+speedbar)	2,45 kg (+ 140g+ 43g)	2,7kg (+140 g + 43 g)
Designed for (cm)	Paragliding only	
Back height (cm)	57	61
Leaning setting height (cm)	29	32
Seat length (cm)	50	50
Seat width (cm)	33-37	33-37
Carabiners height (cm)	44	44
Carabiners distance (cm)	28-45	28-45
Speedbag length (cm)	100-120	105-125
Impact damping system : Airbag (Volume)	No	
Impact damping system : Bump'air (Thickness)	Yes - 15 cm	
Homologation	EN 1651 - LTF	
Flight : tandem (Pilot- Passenger)	No-No	
Flight : acrobatic flying	No	
Take-off: winching	No	

Choosing your harness' size is important. You will find here below a height/weight table that will help you in your size choice. With its hammock architecture and its "lying flat" flying position, we advise you to try out the harness under a hanging device at one of our retailers in order to choose the correct size.

For a complete list of our retailers, please click here : [www.supair.com](http://www.supair.com)

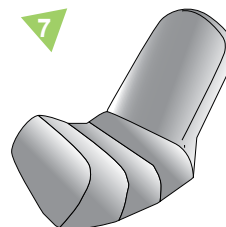
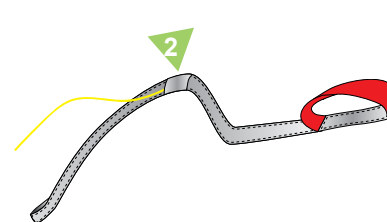
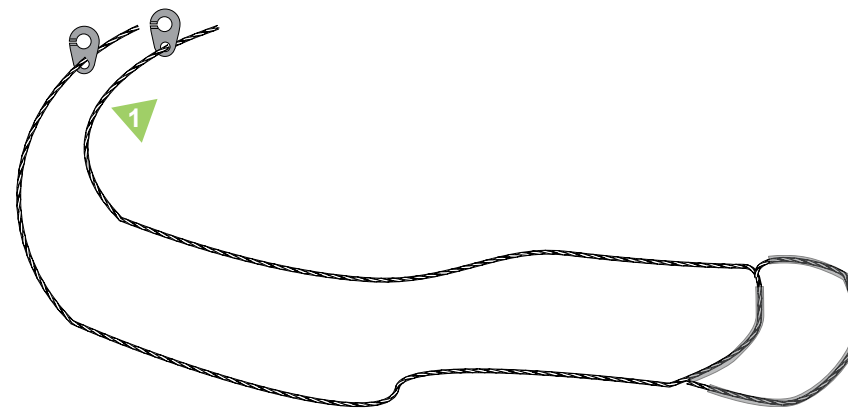
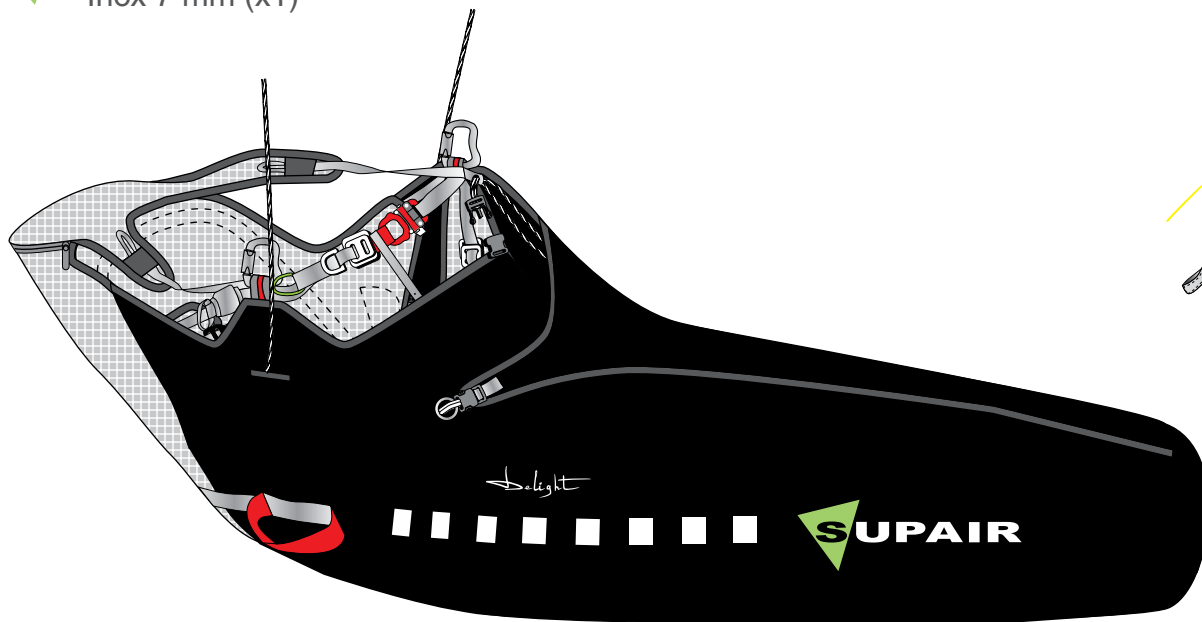
Size Weight	1m55	1m60	1m65	1m70	1m75	1m80	1m85	1m90	1m95	2m	2m05
60											
65											
70											
75											
80											
85											
90											
95											
100											
105											

- M
- M/L
- L
- Preliminary test under hanging device

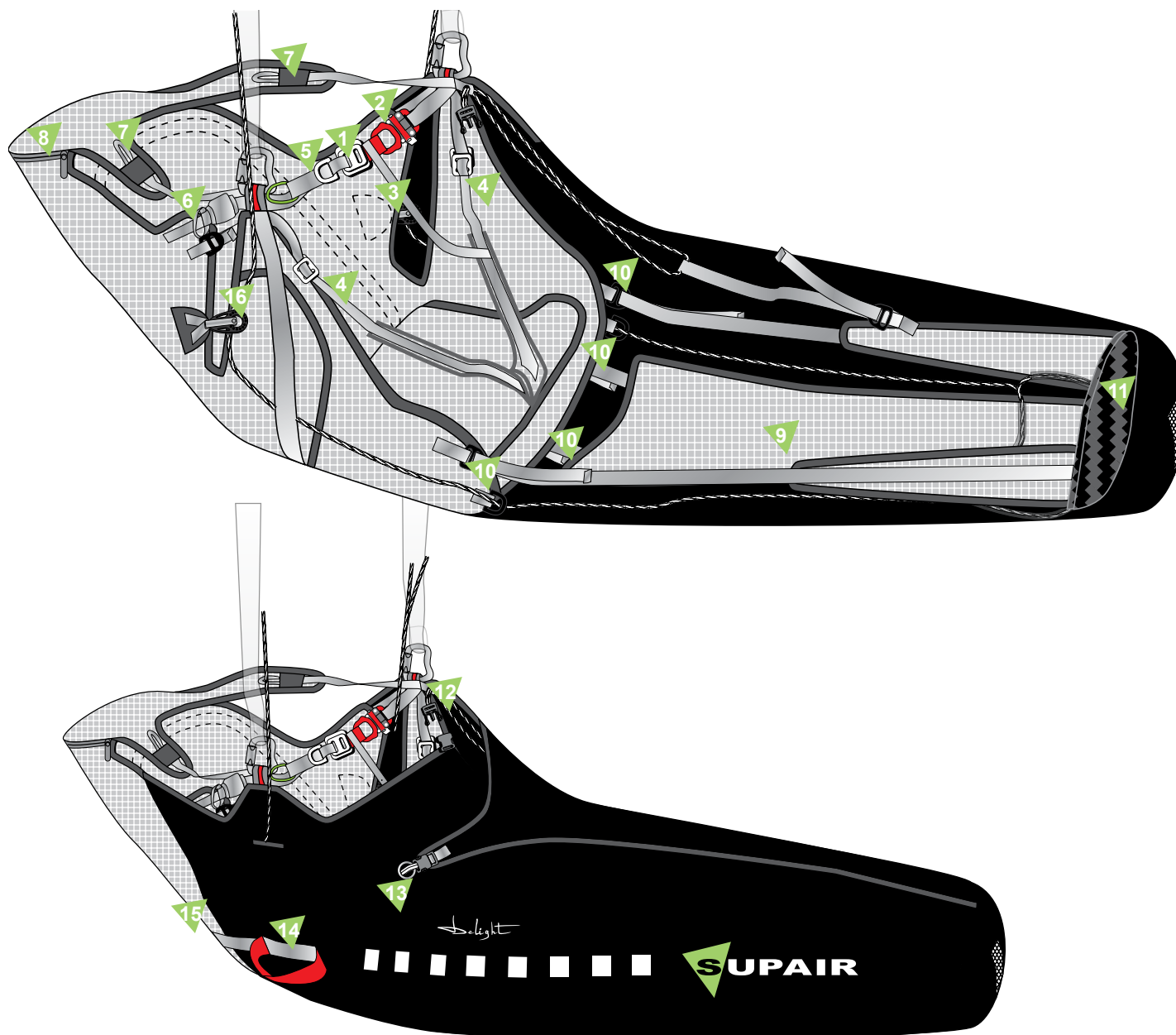




- |                                              |                                |
|----------------------------------------------|--------------------------------|
| 1 Speedbar                                   | 6 Zicral 30 mm carabiners (x2) |
| 2 Rescue parachute handle                    | 7 Bumpair 14 cm                |
| 3 Rescue parachute risers                    | 8 Footrest Unique size         |
| 4 O rings (x2)                               | 9 Cockpit                      |
| 5 Maillon Rapide <sup>®</sup> Inox 7 mm (x1) |                                |

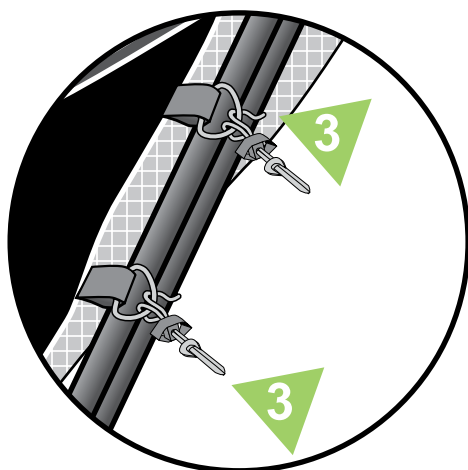
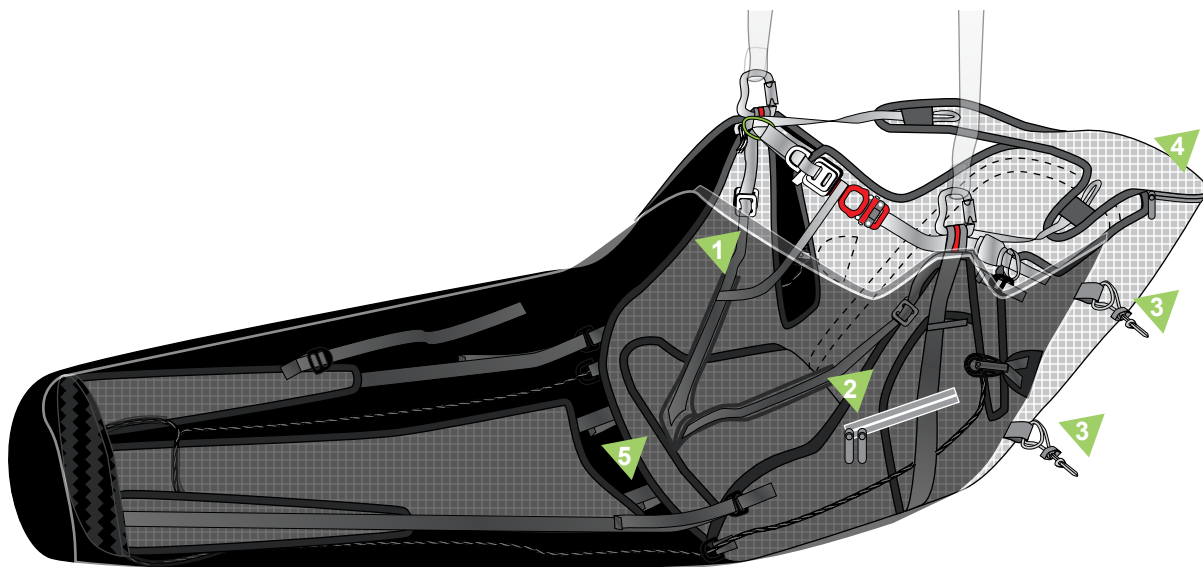


This illustration will help you during your reading.



- 1 Right ventral buckle
- 2 Left automatic ventral buckle
- 3 Safe-T-bar  
(Sup'Air patent A1-1832/981)
- 4 Thigh strap buckle
- 5 Ventral width adjustment
- 6 Leaning setting
- 7 Shoulders' straps adjustment
- 8 Back pocket
- 9 Feet glide part
- 10 Speedbag leaning adjustment
- 11 Footrest
- 12, 13 Speedbag closing buckles
- 14 Rescue parachute handle
- 15 Rescue parachute pocket
- 16 Harken® Pulley





- 1 Cockpit
- 2 Lateral storage pocket
- 3 Walking poles holder (handgrip top)
- 4 Back pocket
- 5 Under seating pocket for ballast (3 litres)



## Rescue parachute pocket characteristics

- 4 flaps back pocket.
- Cable locking.
- Handle on the right-hand side.
- Volume : 3 to 6,5 litres.
- Compatible with the SUPAIR light and X-tralite rescue parachutes and other solo rescue parachutes.

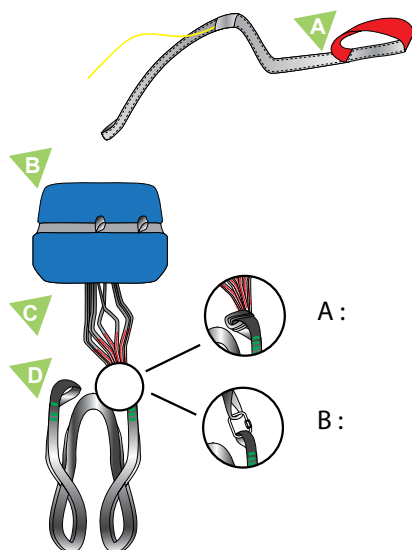
## Connecting the handle to the rescue parachute's deployment bag



*Thanks for reading carefully ! We recommend the initial rescue parachute assembly and installation is made by a qualified person.*

**A : Y-Risers** : make a lark's head and connect the risers to the harness using Maillon Rapide® Inox 6 or 7 mm (x2) see page 12

**B : Standard Risers** : use one Maillon Rapide® Inox 7 mm. See page 13



**A** DELIGHT rescue parachute handle

**B** Parachute folded according to manufacturers specification and in deployment bag.

**C** Parachute rigging lines

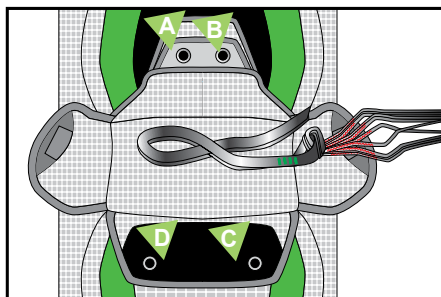
**D** Parachute risers (Y-risers or standard risers)

1. Place the handle inside the middle webbing loop and make a lark's head knot with the handle.
2. Fasten tightly the lark's head knot and verify the solidity of the link.

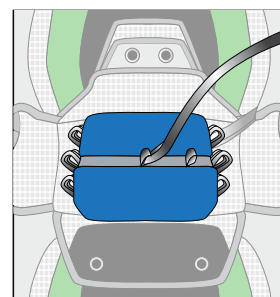


*Thanks for reading carefully ! We recommend the initial rescue parachute assembly and installation is made by a qualified person.*

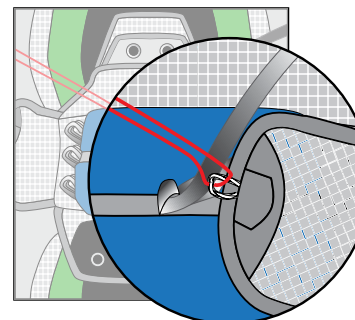
- A B** Upper flap grommets  
**C D** Under flap grommets



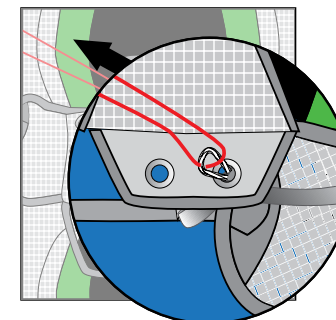
1. Place the risers' straps and the rigging lines of the parachute clearly coiled



2. Place the parachute in its pod on top of the risers and lines.



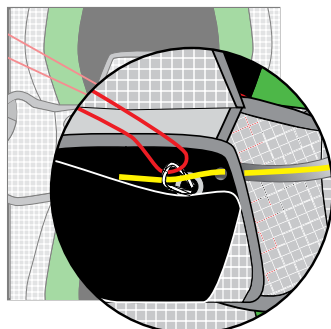
3. Take a suitable line and pass it inside the snapper on handle's side.



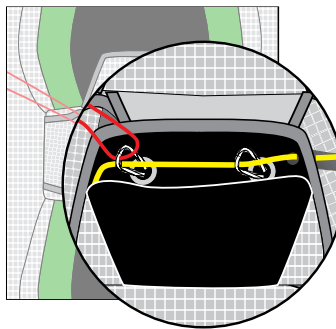
4. Pull the snapper and pass it through the B grommet.



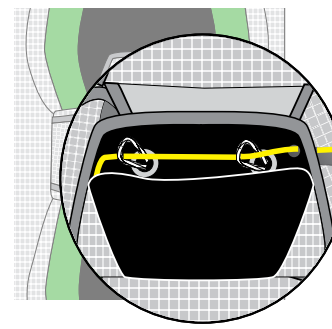
When the assembly is complete, perform a test pull of the handle to ensure the compatibility and the correct deployment of the rescue (pod + handle). Then reassemble as previously done.



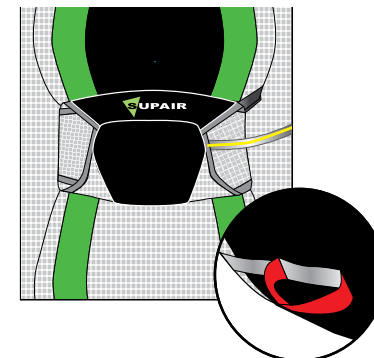
5. Pass the snapper through the C grommet and pass the handle's cable inside the hole of the down flap and finally inside the snapper. Pull away gently the line



6. Place the line through the other snapper in the A and D grommets (up and down flaps). Repeat step #5.

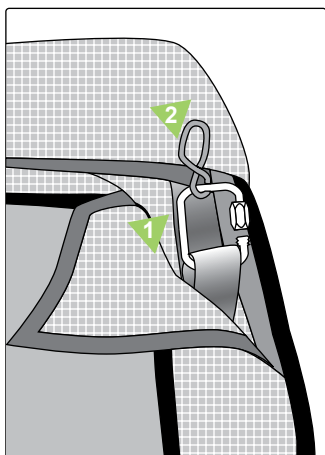


7. Put the cable trim inside the flap pocket

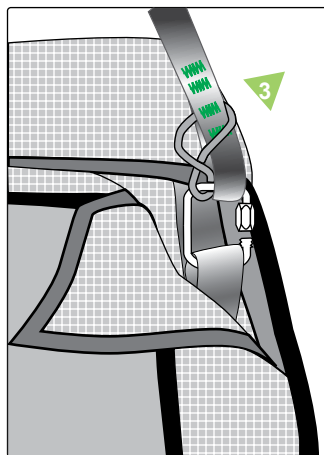


8. Turn down the last flap and place the handle on its velcro.

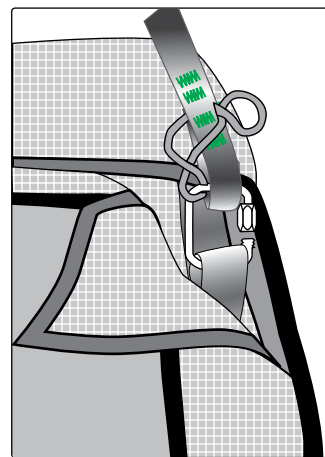
1. Place the Maillon Rapide® (locking nut upwards and on exterior side) inside the webbing loop. Place the O-ring inside the Maillon and twist it.



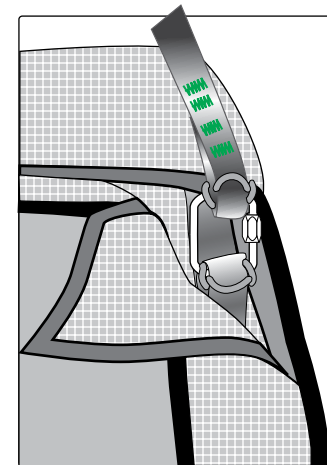
2. Pass the riser inside the free loop and inside the Maillon Rapide®.



3. Make a new twisted loop with the ring and pass it inside the Maillon Rapide®.



4. Repeat steps #1, #2 and #3 with another O-ring for the connexion to harness. Tighten the Maillon Rapide® locking nut correctly, with a spanner if needed.

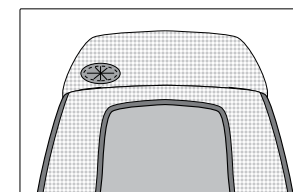
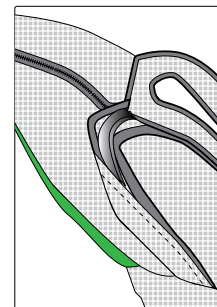
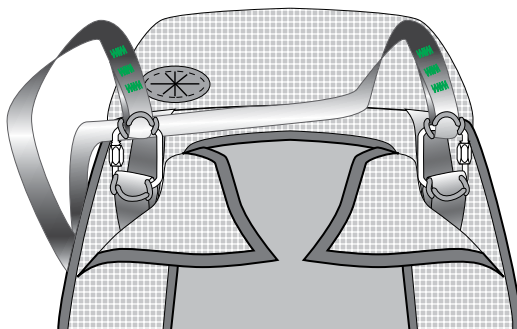


1 Maillon Rapide® Inox  
6 mmn (x2)

2 O-Rings (x2)

3 Parachute risers

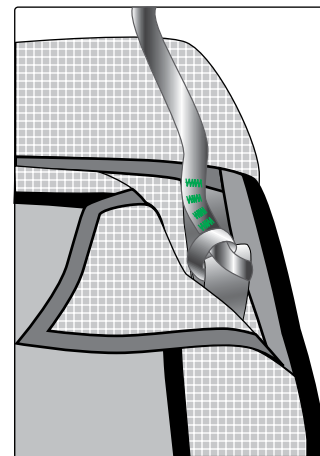
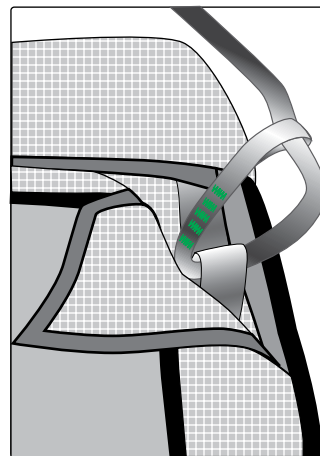
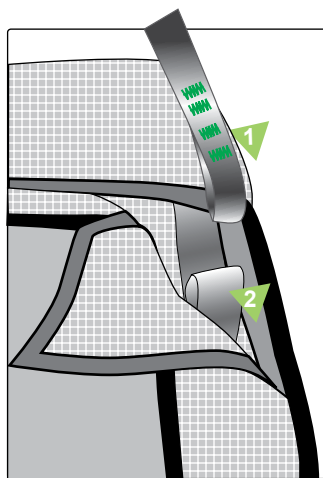
5. Neatly stow any surplus risers under the flaps.



Your DELIGHT is fitted with light standard parachute risers

1. Make a lark's head between the risers and the webbing loop for rescue attachment.

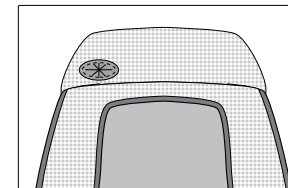
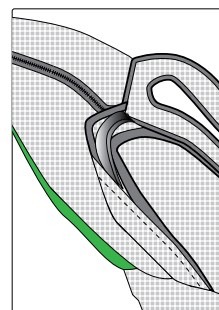
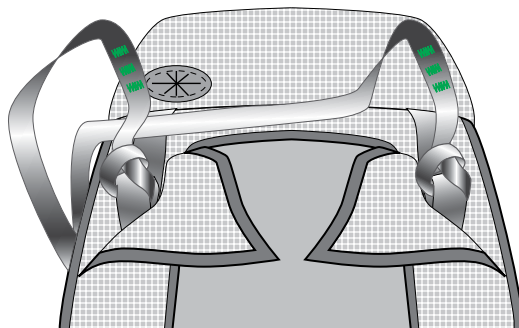
2. Fasten the lark's head neatly



1 Rescue parachute standard risers

3. Neatly stow any surplus risers under the flaps.

2 Webbing loop for rescue risers attachment

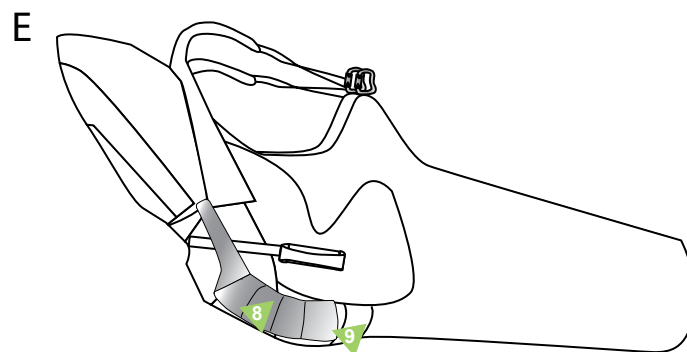
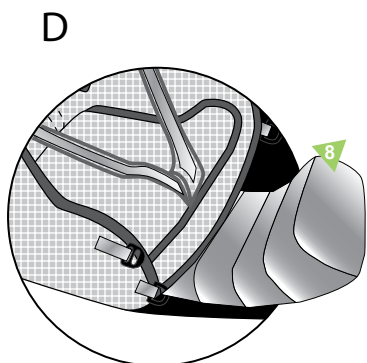
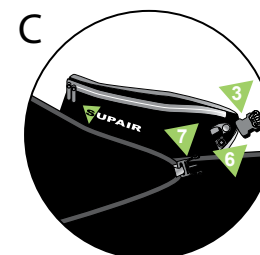
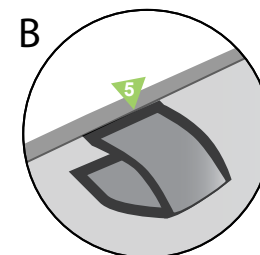
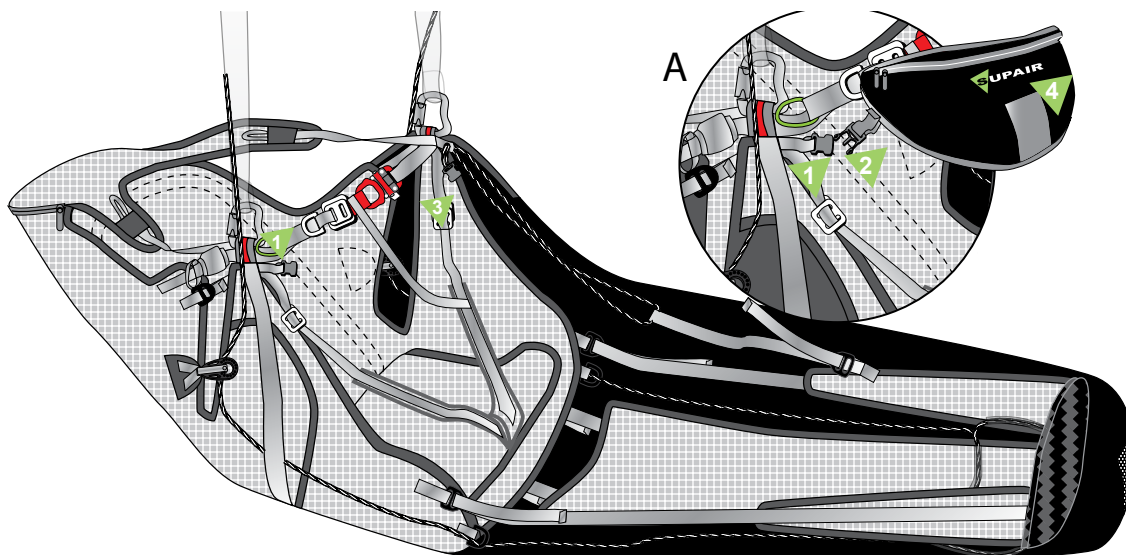


A- Connect the female buckle (1) to the male buckle (2).

B- Connect the cockpit's velcro patches (4) to the speedbag's velcro patches (5).

C - Pass the male buckle on speedbag (7) through the the strap loop with snap fasteners (6) and connect it to the female buckle (3) of the harness.

- 1 Female buckle Harness
- 2 Male buckle Cockpit
- 3 Female buckle on braided rope Harness
- 4 Velcro fastening-Cockpit
- 5 Velcro fastening on speedbag Harness
- 6 Strap with snap fasteners Cockpit
- 7 Male buckle on speedbag- Harness
- 8 Bumpair 14 cm
- 9 Internal cell with velcro for bumpair



D- Unzip the pocket and unfasten the internal cell with velcro (9). Push the BUMPAIR (8) inside the pocket under the seat.

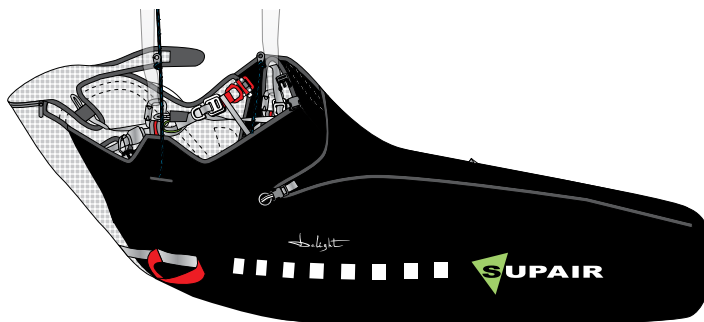
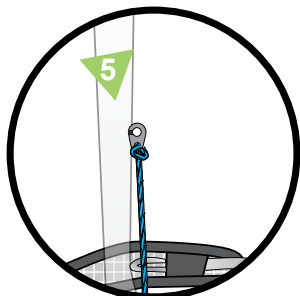
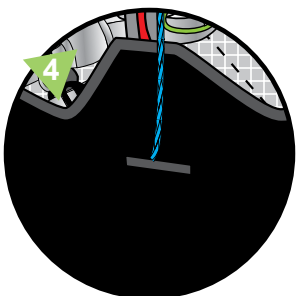
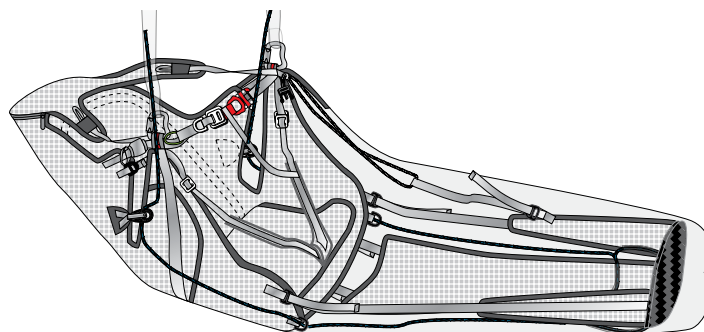
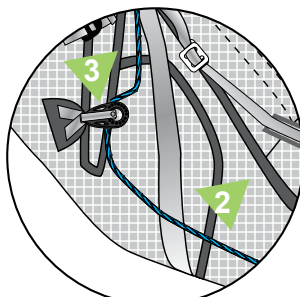
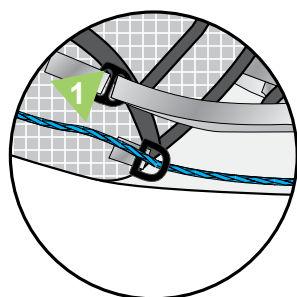
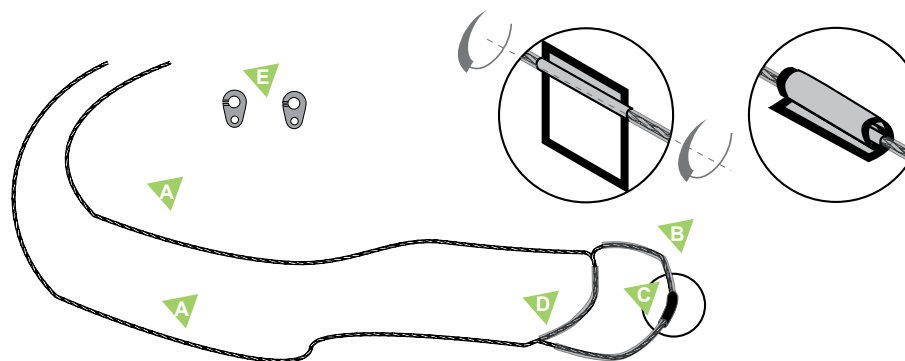
E- Fasten the internal cell with velcro (9) and zip the pocket.



A light speedbar is provided with harness. The following illustration shows how to install it.

## Composition

- A** Braided ropes
- B** First bar
- C** Centering spacer
- D** Second bar
- E** Speedbar hook



**1** Pass the speedbar braided rope inside the plastic keeper.

**2** Pass the speedbar braided rope outside the strap.

**3** Pass the speedbar braided rope inside the pulley.

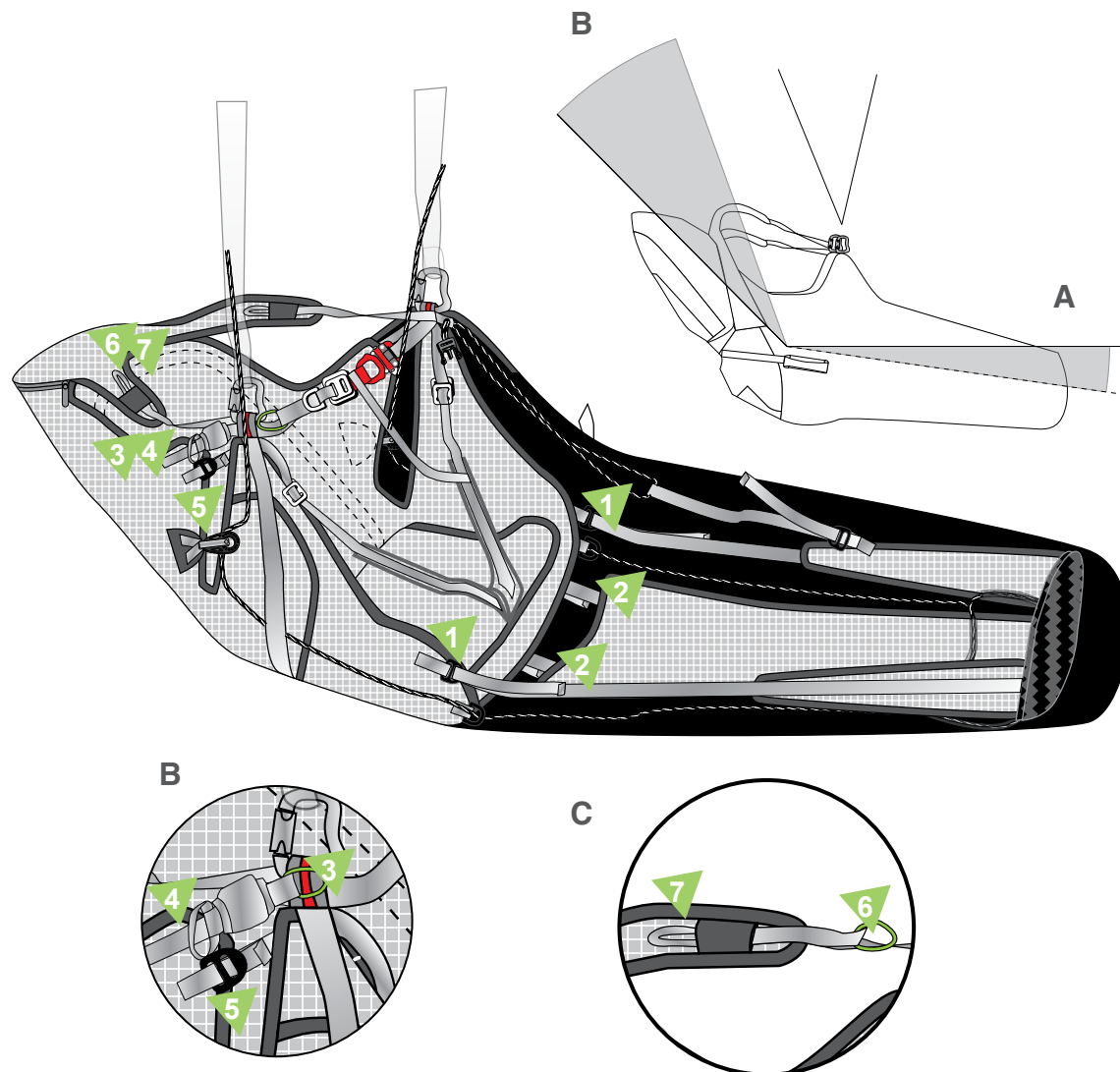
**4** Pull out the braided rope outside the speedbag.

**5** Pass the braided rope inside the speed bar hook then tighten the hooks to the risers' accelerator loops. Adjust the length before making a bowline knot.



*Setting your position inside the harness before taking-off is extremely important.*

- 1 Lateral buckles
- 2 Under seating buckle
- 3 Tightening snapper (leaning setting)
- 4 Loosening strap (leaning setting)
- 5 Lumbar adjustment buckle
- 6 Tightening snapper (shoulder strap)
- 7 Loosening strap (shoulder strap)



## A Speedbag angle setting

With the help of the two lateral and under seating buckles, set the angle of the speedbag around horizontal position.

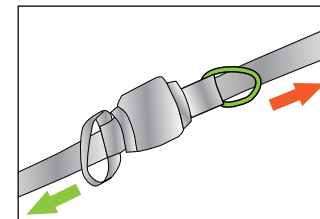
## B Leaning angle setting

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.

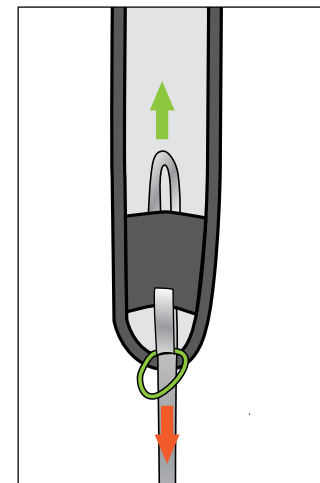
**B**



loosen

tighten

**C**



loosen

tighten

## C Shoulders' straps adjustment

Tighten the shoulders' straps by using the snapper and pulling it forward.

Loosen it with help of the tubular webbing by pulling it backward.



The support of the shoulders' straps greatly helps comfort. It should be set precisely.

The DELIGHT has equipped several X-ALPS 2011 pilots. It is consequently a high performance harness designed for XC flights, for competitions as well for bivy-flying adventures. But it is also aimed at “hike and fly” or high-mountain flying.



## Pre-Flight control

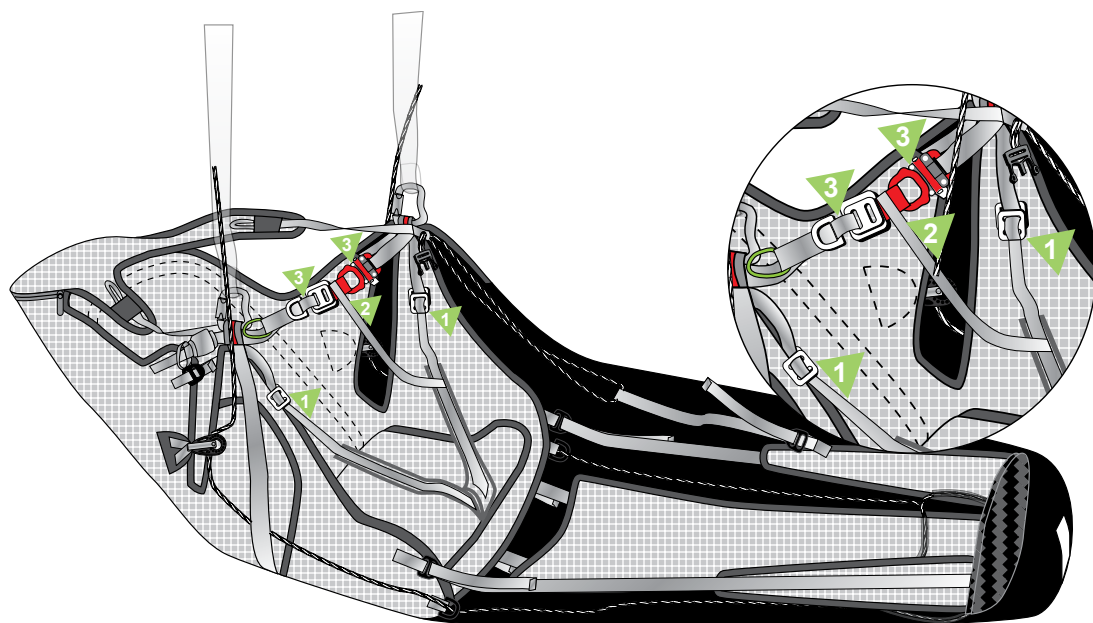





- Check that the harness and the carabiners did not deteriorate.
- Check thoroughly that the rescue handle's cable end has not got outside the snappers' flaps.
- Check that your personal settings haven't changed.
- Check that all zippers and buckles are closed.
- Check that the speedbar is correctly connected and set.
- Check that no rigging line or other object comes in contact with rescue parachute handle.

After a thorough weather conditions analysis, when the decision to fly has been taken, fit into the harness :



- Fasten the buckles (thigh straps, safe-T-bar and ventral buckles) with application.
- Check that the carabiners are correctly locked.



-  Thigh strap buckles
-  Safe-T-Bar® Sup'air patent A-1832/981
-  Ventral buckles



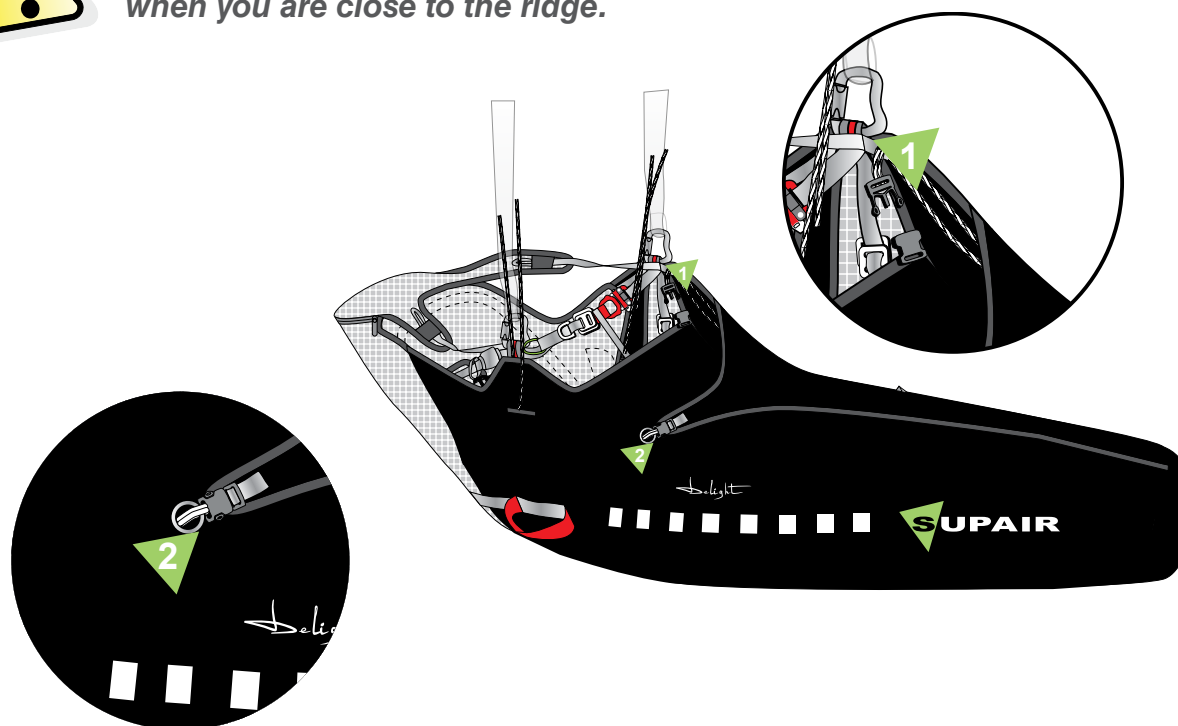
## Take-off

After being correctly fitted into your harness, fasten the left buckle (1, on braided rope) of the speedbag then fasten the second speedbag buckle (2).

During take-off, maintain a standing position and as soon as you are far enough from the ground, fetch the speedbag with one of your heels. With help of the foot-rest, push back into your harness.



***Do not release your hands from the brakes when you are close to the ridge.***





## In flight

As soon as you are airborne, the behaviour is very instinctive and precise.



***Please set the distance between the two carabiners according to aerology and to wing's manufacturer recommendations.***



Tightening provides more stability but less harness piloting efficiency. Be careful as it increases the risk of risers twisting. On the contrary, loosening the strap provides more efficiency but can be dangerous by turbulent aerology (increased risk of falling towards the collapsed side of your glider).

## Speedbar use

We recommend a careful use of the speedbar because of an increased risk of massive collapse. Please read carefully the manual of your glider.

To use the speedbar, maintain one foot on the footrest then with the other, place your foot onto the centering space and push the first bar.



This spacer helps you to obtain a symmetrical acceleration.

Once your foot touches the footrest, use the other foot to push the second bar.

## Landing

In order to land, during the approach, take your legs out of the speedbag in plenty of time. Stand up inside the harness and adopt an upright position in order to run to dissipate horizontal speed.



***Do not land whilst in the seated position, this is dangerous.***

## Throwing the reserve parachute



We strongly advise you to check frequently the location of the reserve parachute's handle. To do this, we recommend that you lower your right hand following the risers. This movement should be done without looking. By doing this, you increase your chances in case something goes wrong and you need to throw the reserve parachute.

Evaluate your height from the ground. If you have a lot of altitude, it may be better to attempt to recover your wing to normal flight, But if you are in any doubt, deploy your rescue parachute.



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

With a strong, lateral and then vertical tug, pull the handle towards you and then throw the whole parachute (including the bag and handle) as hard as you can towards a clear area of sky. As soon as the parachute deploys, haul down the glider by pulling as symmetrically as you can the risers (C or d D) or on the brakes.

Be prepared to land by adopting an upright position, with knees together and legs slightly bent. Prepare to roll down with pivoting shoulders.

We propose you optional accessories that combine perfectly to your DELIGHT harness.

Function	Code	Description	Weight
Portage	SACDELIGHT	<a href="#">DELIGHT rucksack.</a> Dyneema® fabric, 90 lts capacity, lateral storage pockets.	750 g
Connection to the glider	MAILCONNECT	<a href="#">Connect</a> Soft Dyneema® sleeved carabiners	12 g (part)
Rescue parachute	PARXTRALITE S PARXTRALITE M PARXTRALITE L	<a href="#">Parachute SUPAIR X-tralite S (PTV Max 80 kg)</a> <a href="#">Parachute SUPAIR X-tralite M (PTV Max 95 kg)</a> <a href="#">Parachute SUPAIR X-tralite L (PTV Max 115 kg)</a>	< 1 kg < 1,2 kg < 1,4 kg
Ballast	BALLAST	Water pocket with tap. Max volume: 15 lts	185 g

All the information for the accessories are provided with the product or are easy to access on our website [www.supair.com](http://www.supair.com)



## Wash and care of your harness

It is a good idea to wash your harness from time to time. To do this, we recommend to use a soft solvent (such as soap), use a brush and rinse thoroughly. In any case, do not use chemicals such as detergents or strong solvent because it may deteriorate the webbing, stitching and fabrics of your harness.

The zip fasteners should be lubricated from time to time, using a silicon spray.

If your harness gets wet, it is advisable to treat your automatic buckles and carabiners with silicone grease from time to time.

## Storage and transport

When you don't use your harness, store it inside your paragliding rucksack, in a dry, cool and clean place, protected from UVs exposure. If your harness is wet, please dry it thoroughly before storing.

For transport, protect the harness from any mechanical or UV deterioration (use a bag). Please avoid long transports in wet conditions.

## Lifetime

Independently of the pre-flight check-out, you have to open and unfold your rescue parachute once every 6 months.

Once every 2 years, you need to perform a complete check of your harness :  
fabrics

- webbings (no excessive wear, no rip beginning, no unwanted folds)
- buckles and carabiners



The threads that compose the webbing and fabrics used in the DELIGHT have been selected in order to ensure the best possible lightness/lifetime compromise. Nonetheless, in some conditions, after a long term exposure to UV and/or significant abrasion or exposure to chemicals, **it is compulsory to check your harness in a certified repair centre. It is about your safety.**



These carabiners must never be used for anything else else than paragliding (not for climbing, no towing, etc ...)

**The carabiners must be replaced by new ones every 5 years.**

## Repair

Though we use the highest quality materials, it is possible that your harness may eventually deteriorate through general use. If it is showing any signs of significant wear and tear, you should check it and repair it in a certified repair centre.



SUPAIR offer a repair facility for their products beyond the end of the warranty period. Please contact us either by telephone or by E-mail [sav@supair.com](mailto:sav@supair.com) in order to receive a quotation.

## Materials

### Fabrics

DYNEEMA® RIPSTOP  
CORDURA®  
CORDURA® RIPSTOP

Connection straps (Rescue risers to Maillon Rapide®)

Dyneema® (1350 daN)

### Speedbag

LYCRA MEMBRANE

### Webbings

Polyamide 20 mm (500 daN)  
Polyester 25 mm (1250 daN)

## Recycling

All our materials are selected for their technical and environmental characteristics. No components of our harnesses may harm nature. Most of our components are recyclable.

If you judge your DELIGHT has finished its life, you can separate all the plastic and metallic parts and apply up-to-date sorting rules in effect in your community. For recycling of the fabric parts, we advise you to contact your local authority that deals with fabric recycling.

## Warranty

SUPAIR takes the greatest care in the design and production of its products. SUPAIR guarantees its products 5 years (from purchase date) against any defect or design fault 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 etc will invalidate this warranty.

## Disclaimer



Paragliding is an activity that requires, skill, specific knowledge and sound judgement. Be careful, learn in certified schools, subscribe an adequate insurance policy as well as a flying license and make sure your skill match the conditions. SUPAIR cannot be held responsible for your paragliding decisions or activities.



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

## Pilot's gear



This is essential that you carry a helmet, suitable boots and clothing. Taking a reserve parachute suitable for your weight and correctly connected to your harness is also very important.



This page will help you to record all the life stages of your harness.

Serial number :

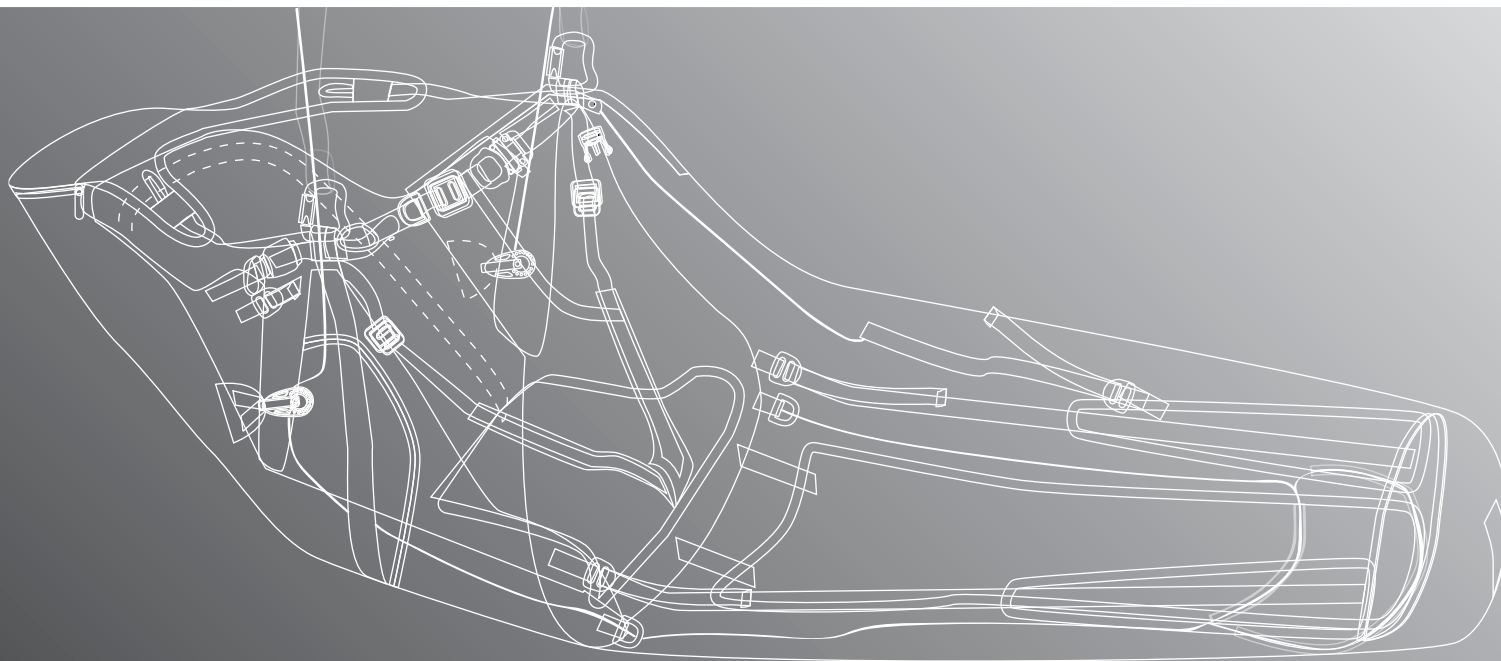
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Name and stamp of the shop :	

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

45°54.024'N / 06°04.725' E