



# PARAMOTEUR EVO

## User's manual

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RCS 387956790

08/10/2015

Thank you for purchasing the PARAMOTOR EVO harness model. We will be pleased to share, assist and help you fulfill our common passion of Powered Paragliding.

SUPAIR had been designing, manufacturing and selling accessories for the free flying community since 1984. Choosing a SUPAIR product is a guaranty of excellence with 30 years of expertise, innovation and constant customer care. It also is our philosophy

You will find next, a thorough easy to understand explanative detailed brochure to comprehensively read all the way through !

On our website [www.supair.com](http://www.supair.com) can be found the latest information relevant to this particular product. If you however have more questions to be answered, do not hesitate in contacting any of our dealers/retailers, and of course, the entire SUPAIR staff a

Wishing you many safe, enjoyable flying hours and happy landings.

The SUPAIR team

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Welcome to the world of Powered Paragliding ( abbreviated as PPG ) ! With the PARAMOTEUR EVO you are equipped with a complete, comfortable product to broaden your horizons and bring you many beautiful long flights from cruising basics to technical piloting

After familiarizing yourself with this manual, we will recommend you to conduct a harness hang-test before your initial flight.

N.B : Three important icons will help you better understand this brochure.



Advice



Caution !

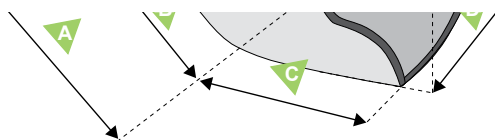


Danger !!



## Technical sheet

- A** Back height (cm)
- B** Backrest angle and height adjustment (cm).
- C** Seat length (cm)
- D** Seat width (cm)
- E** Carabiners height (cm)
- F** Spacing between carabiner connections (cm).



	S	M	L	
Pilot size	155-170 cm	165-180 cm	175-195 cm	
Pilot weight	50-70 kg	60-85 kg	70-95 kg	
Harness weight (+ carabiners + speedbar)	3245 g	3395 g	3505 g	
Designed for	Paramotor only			
Back height (cm)	60	64	66	
Backrest angle and height adjustment (cm).	32	35	35	
Seat length (cm)	37	41	43	
Seat width (cm)	38	42	44	
Carabiners height (cm)	36	38	38	
Spacing between carabiner connections (cm).	38-53	40-53	42-53	
Impact damping system : Airbag (Volume)	No			
Impact damping system : Bumpair (Thickness)	No			
Certification (light aerial sports equipment)	EN 1651. LTF. (Pilot < 120kg)			
Flight : tandem (Pilot- Passenger)	No			
procedures for emergencies and special flight conditions	use rescue in emergencies situation			
Rescue container	No			

This harness is delivered with two 30 mm carabiners ( Weight : 138 mg for the set ). An overall weight decrease is possible to achieve by swapping the carabiners with a «»Connect»» set ( 24 gr. Total ).

A SUPAIR retailer/dealer list can be found at [www.supair.com](http://www.supair.com)

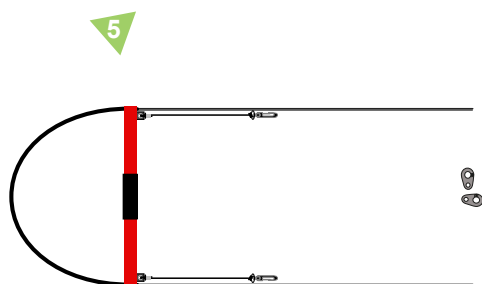
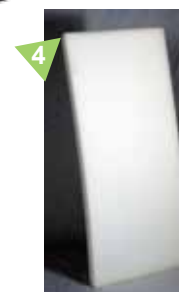
Size Weight	1m45	1m50	1m55	1m60	1m65	1m70	1m75	1m80	1m85	1m90	1m95	2m	2m05
50				S	S	S							
55			S	S	S	S							
60			S	S	S			M					
65			S	S			M	M					
70			S		M	M	M	M	L				
75					M	M	M	M	L	L			
80					M	M	M		L	L	L		
85						M		L	L	L	L		
90								L	L	L	L		
95							L	L	L	L			
100									L				
105													
110													

S
  S/M
  M
  M/L
  L

- 1 Rescue parachute handle.
- 2 Wooden seat plate.
- 3 30 mm Aluminum self-locking biner.
- 4 Additional foam

## Option

- 5 Double stage speed-bar.
- 6 Self retractable foot-rest.
- 7 PARAMOTO EVO pocket.



This illustration will help you understand the brochure layout.



- 1 Self-locking chest strap buckle.
- 2 Safe-T-bar ( Safety strap ).
- 3 Self-locking leg strap buckle.
- 4 Chest strap adjustment.
- 5 Backrest angle adjustment.
- 6 Shoulder straps adjustment.
- 7 Seat extension adjustment.
- 8 Removable side storage pocket.
- 9 Foot-rest buckles.
- 10 Accelerator pulleys.
- 11 Swan-Neck and low swivel bars attachment point.
- 12 Low riser attachment point.
- 13 High riser attachment point.
- 14 Diagonal PPG attachment point.
- 15 Additional foam pocket.



## Connecting the wing to the harness.

Without twisting the risers, connect them to the harness attachment loops using the self-locking carabiners.

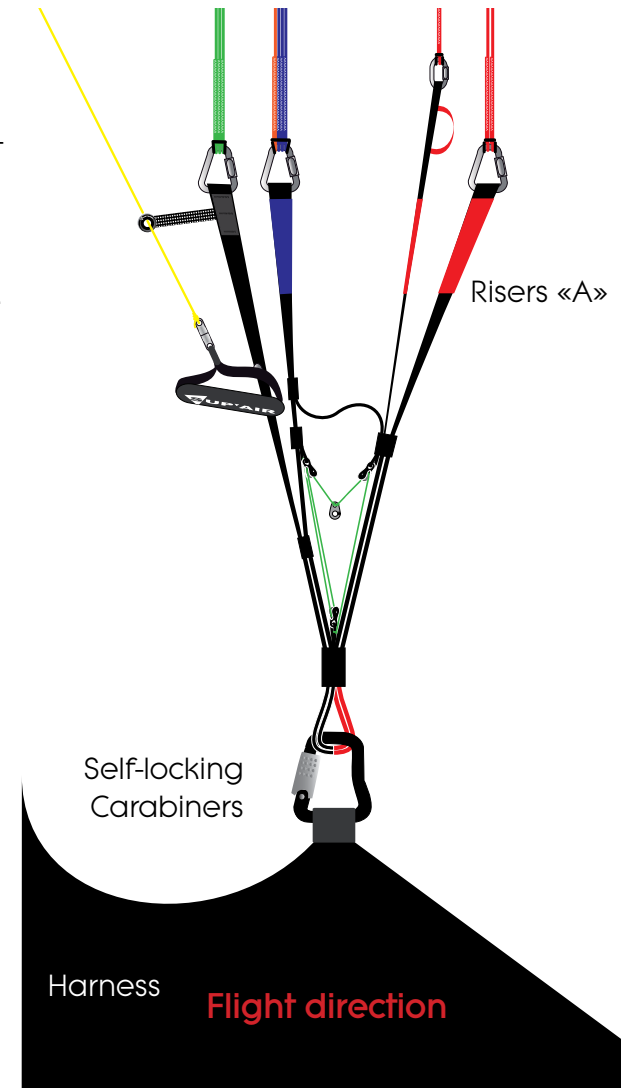
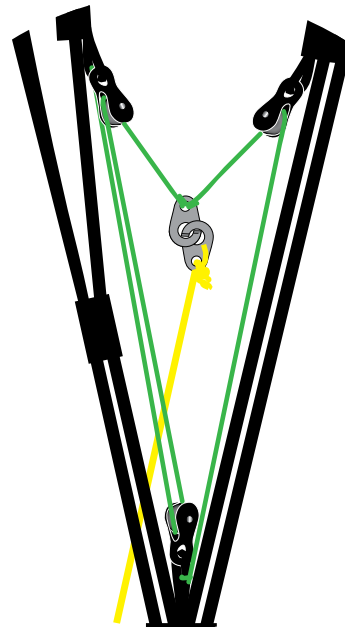
Check for the risers to be properly positioned and untwisted. The «A» risers must be located at the front and facing the flight direction (see diagram).

Lastly, check for the main self-locking carabiners to be fully closed and locked in place.

## Installing the accelerator

Install the accelerator by following the instructions found on page 13.

Connect it to the wing using the split hooks. Once the accelerator/speedbar is connected, adjust its length according to your measurements. For correct use, there must not be any tension at the split-hook level when the accelerator/speedbar line is fully relaxed.



The PARAMOTOR EVO harness is compatible with most PPG frames found on the market today.  
The harness is equipped with two high and two low connection points in addition to two diagonal straps.

Upper straps connections.



Frame overview with harness placement.



Wrap the strap around the frame and push it through the first buckle opening, and then through the second.



The use of a screwdriver to pivot the buckle, and a pair of pliers to pull the strap can be helpful to simplify the task.



Overview of the frame with the harness connecting locations.



To prevent having dangling straps, push them through the shoulder Velcro® guides.

Low straps connection.



Position the buckles at the beginning of the tensioning strap.  
Wrap the strap around the frame.



Push the strap through the buckle.



Be certain for the frame to be securely fastened in place.

Attaching the diagonal straps to the frame.

The diagonal straps enable a tight connection of the harness to the frame.



The end of the strap is connected via a POP rivet to the frame.

## Harness connection to the Swan-neck bars.



Fasten the bars ends to the harness loop straps using a shackle.

Make a loop to loop configuration with the connecting ring.



Fasten securely using the Velcros®, then push the glider's self-locking carabiner through to connect the wing's risers.



Harness overview with the Swan-Neck bars setup.



## Low bars installation.

Low bars ( J-canes ) installation.



Assembly on low sweveling canes.



The PARAMOTOR EVO is pre-equipped to accept a foot-rest.  
The foot-rest relaxes leg tension, and brings additional support, thus enhancing piloting experience.

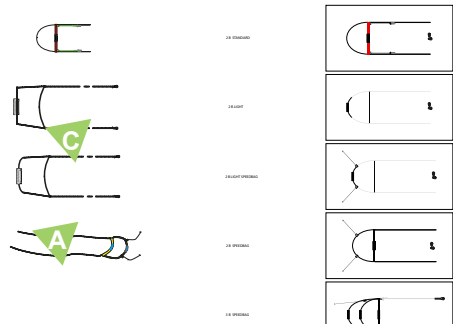
Fasten and adjust the foot-rest with the metal buckles found on either side of the seating area.

- A** Short foot-rest.
- B** Foot-rest buckle ( pre-equipped harness ).



The PARAMOTOR EVO is pre-equipped to accept an accelerator ( Speed-Bar ).

Most accelerators found on the market today are compatible with this harness. Within the SUP'AIR accessory line, the standard Speed-bar is the most adapted for being lighter and designed with a recoil system.



- A** Line.
- B** Locking split hook.
- C** Elastically retractable speed-system.



Push the accelerator cord and the elastically line through ring "D".



Push the cord through the Speed-bar pulley "E", then through pulley "F".



Insert the end of the cord through the paraglider riser split hook. Adjust the cord's length before tying a knot. Repeat procedure on the other side of the harness.

Connection to the paraglider :

Insert the end of the cord through the paraglider riser split hook. Adjust the cord's length before tying a knot. Repeat procedure on the other side of the harness.



# Installing the reserve parachute inside the container.

The PARAMOTOR EVO is pre-equipped to accept a side reserve parachute container.



Remove the harness right side pocket by unfastening the zipper.



Installing the reserve parachute inside the container.



Fasten the extraction handle with a loop to loop configuration to the center of the POD.



Position the risers inside the guiding exit sleeve.

Position the risers inside the bottom section of the pocket with a bit of slack to adjust them at the end of the installation.

Connect the risers to the parachute with a loop to loop junction configuration or using a 6 mm square steel carabiner with the correct load resistance.



Place the POD to the center of the open container.



Push a line through one of the small looped cords, then through the flap's grommet on the same side.



Push through the upper flap's grommet.



Push the handle safety pin through the small looped cord.





Repeat the procedure by closing the other and opposite side of the reserve parachute container.



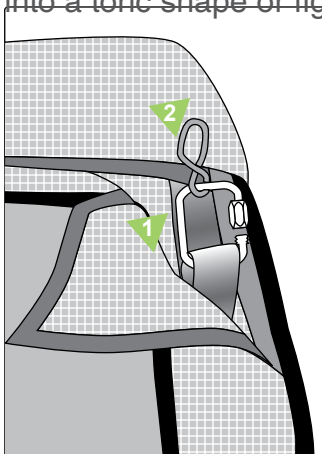
Fasten the reserve parachute container by zipping it to the harness.



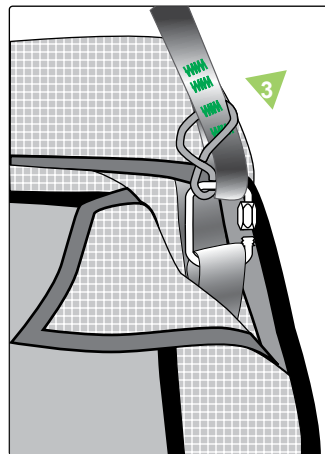
**Danger !!**

Always place the risers on the outside of the canes.

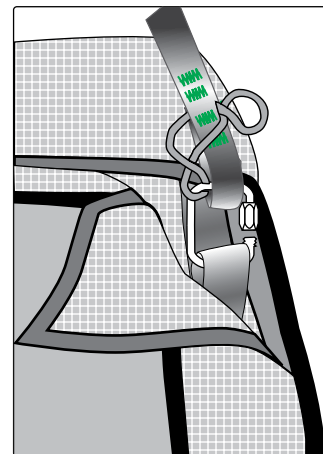
1 - Place the Maillon Rapide® with the gate up and facing outward inside the strap's loop underneath the flap. Place the soft ring inside the Maillon Rapide® and twist it into a toric shape or figure 8.



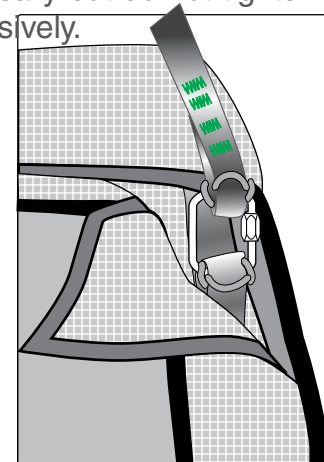
2 - Push the the riser through the upper section of the toric 8 shape, and then through the Maillon Rapide®.



3 - Twist the toric 8 shape once more, and connect it to the Maillon Rapide®.

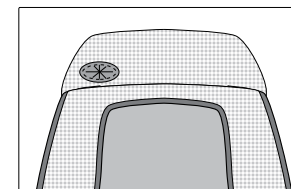
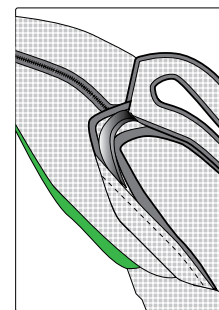
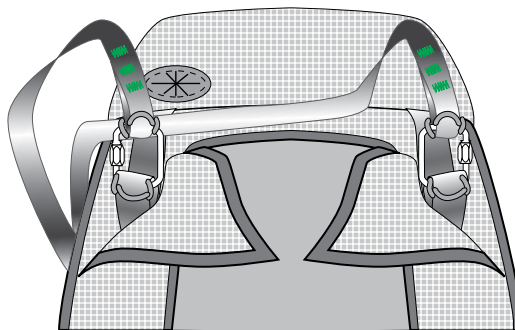


4 - Repeat the procedures 1, 2 and 3 with the other toric 8 shaped ring on the harness side. Tighten securely the Maillon Rapide® treaded gate - use a pair of pliers if necessary but do not tighten excessively.



- 1 - Maillon Rapide® Inox 6 mm (x2).
- 2 - Toric joint ( x2 ).
- 3 - Reserve parachute risers.

5 - Stow away the risers excess under the flaps.





Risers overview layout.



When the installation is completed : close the risers flap covers to tidy up the harness.

At the end of the installation procedure, conduct a reserve parachute extraction under a hang-test apparatus, then repeat the packing procedure once more.



*The complete installation + test procedure must be conducted before the first flight, under a hang-test apparatus. These steps are important to ensure a correct seating posture, unobstructed viewing to on-board instrumentation, and easy strap adjustments*

- 1 Chest strap tightening adjustment.
- 2 Chest strap finger-loop tension release adjustment.
- 3 Backrest adjustment buckle.
- 4 Loosening strap (backrest adjustment).
- 5 Shoulder strap tightening adjustment.



Conduct a thorough pre-flight check before each takeoff ( see Preflight checklist ).



- Check that neither harness nor carabiners are damaged in any way.
- Check for the (optionnal) front parachute pocket to be properly closed and secured in place.
- Check that your harness adjustments have remained unchanged.
- Check for the harness connections to the paraglider to be correct, and for the carabiners to be securely locked in place.
- Check for the speed-system connections to be correct ( if you fly with an accelerator ).
- Check for the connections to the PPG ( Powered Paraglider ) to be correct.

After evaluating the weather conditions, and deciding to take a flight, strap the harness onto yourself :



- Carefully and fully close all the legs, chest and Safety-T straps.
- Be certain for all self-locking buckles to be properly fastened by manually pulling them from either sides after locking them in place. Be certain not have any strap, bridle, cord or fabric "" stuck"" in the buckles.
- Be absolutely certain not to have any paraglider line or other object in contact with the reserve parachute handle.



- 1 Leg strap self-locking buckle.
- 2 Safe-T-Bar® SUPAIR Patent A-1832/981
- 3 Chest strap self-locking buckle.





Takeoff is intuitively executed. Once air borne, the transition to seating is easily made. If the sequence is a tad difficult : raise your knees, and push with your shoulders on the risers while twisting the hips back and forth ! Another tip, is to tight



***Never grab your harness with brakes in hands to push yourself inside the seat. There would be the risk for the glider to slow down excessively and experience a possible stall.***

***Never let go the brakes/toggles from your hands while flying close to a ridge.***



## In flight



Once air borne, the harness behaviour is very instinctive and precise.

***When used in PG ( Paragliding ) mode, adjust the chest strap based on the weather conditions you will be flying in, and according to the wing manufacturer's recommendations ( generally, the distance from the middle of the right carabiner to the middle of the left carabiner has to be 38 to 45 cm)***



In PPG ( Powered Paragliding ) mode, the stability is enabled via the spacing/width of the PPG frame itself. Adjusting the chest strap does not affect the wing's behavior.

## Using the optional accelerator/Speed-Bar.



We will recommend you to be cautious while using the accelerator due the increased potential of a collapse for lowering the angle of attack after pushing on the bar. Consult the wing owner's manual for more information.

## Landing



Adopt a torso vertical posture in your harness with your legs extended downward, ready to run and dissipate the horizontal speed.

***Never attempt landing while still seating in your harness. It is dangerous!***

We also have at your disposal, optional accessories perfectly adapted to your PARAMOTOR EVO harness.

Function	Code	Description	Code
Speed-bar/Accelerator	ACCELSOUPLE	Standard Speed-bar/Accelerator.	100 g
Short foot-rest.	CALEPIED	Short foot-rest.	150 g
PARAMOTOR EVO reserve parachute pocket.	POCHEPARAPARAMOT	PARAMOTOR EVO reserve parachute pocket.	270 g

All accessories information is included with the merchandise or can be found on our website at [www.supair.com](http://www.supair.com)



## Cleaning and caring for your harness.

It is advisable to clean your harness regularly using mild detergent such as hand soap only, a brush with abundant water rinsing. Never use solvents of any kind which could damage your harness fabric and webbings.

The zippers must be lubricated from time to time using silicone spray.

If you frequently use your harness in humid environments, think about lubricating your quick-release buckles and carabiners with silicon grease.

**Storage and transport** When not using your harness, stow it away inside your paragliding backpack in a dry, cool, clean location away from UV. rays. If your harness happened to be wet or humid : dry it thoroughly before packing it away.

During transport, fully protect your harness from mechanical and UV. aggressions ( place it in a bag ). Avoid long hauls in humid environment/conditions.

## Lifespan

Regardless of all pre-flight checks, you must open and repack your reserve parachute every six ( 6 ) months.

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

- All webbings for excessive wear and tear, fabric damage and unusual folds.
- All buckles and carabiners ( no cracks, or mechanical flaws ).



The straps and fabric fibers used for the PARAMOTOR EVO manufacturing were carefully selected to achieve the best compromise between weight and product lifespan. However, in some specific conditions such as over UV. exposure and/or consequent abrasion, o



The carabiners can not be used for any activity other than PG ( Paragliding ) and PPG ( Powered Paragliding ).

**SUP'AIR RECOMMENDS CHANGING YOUR CARABINERS EVERY FIVE ( 5 ) YEARS.**

## Repairs

In spite of using the best quality materials, it is possible for your harness to eventually deteriorate through general use. If showing any signs of significant wear and tear, an inspection should be conducted and repairs made if necessary at a certified



SUPAIR offers an extended products warranty coverage beyond the end of the standard warranty period in case of massive structural product failure. For more information, please contact us either by telephone or by E-mail [sav@supair.com](mailto:sav@supair.com)

## Materials

Fabrics  
Nylon  
CORDURA®

Webbings  
Polyamide 20 mm (500DaN)  
Polyester 25 mm (1250 DaN)

## Recycling

Our materials are selected for their excellent mechanical abilities, and environmental friendly characteristics. Most of our components are recyclable.

If you deem your harness to have exhausted its lifespan, separate all the plastic and metallic parts from the harness. To recycle them including the fabric, please contact your local recycling center on how to proceed.

## Environmentally friendly practices.

We highly recommend you to respect the environment while conducting the paragliding activity by not wandering outside marked trails, not making excessive noise, but be nature and wildlife conscious instead, that be on the ground or in the air.

### Warranty

SUP'AIR pays special attention to R&D and manufacturing. The product warranty is five ( 5 ) year from the date of purchase against any manufacturing defect occurring under normal use. Any abusive product handling or extreme treatment subjecting your harne

### Disclaimer



Paragliding is an activity requiring the highest of awareness, specific knowledge, and good analytical reasoning. Be prudent by learning how to fly within the structure of a certified school, acquire an insurance, a pilot license, and only fly in weather



**This SUP'AIR product was designed to be solely used for PG ( Paragliding ) and PPG ( Powered Paragliding ). The PARAMOTOR EVO is absolutely NOT compatible with Skydiving, BASE jumping or similar sports, and should NEVER be used in such activities.**

### Pilot's gear



It is essential to wear a helmet, footwear and clothing adapted to the activities. Carrying a reserve parachute corresponding to your weight, properly packed and carefully installed inside your harness is an essential piece of equipment to have onboard i

This page will help you log and keep track of your PARAMOTEUR EVO harness maintenance, care and lifespan.

Serial number :

Purchase date :	
Owner's name :	
Retail store/shop's name :	

<input type="checkbox"/> Maintenance :	
<input type="checkbox"/> Resale :	
Date :	
Workshop's name/ Buyer's name	

<input type="checkbox"/> Maintenance :	
<input type="checkbox"/> Resale :	
Date :	
Workshop's name/ Buyer's name	

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