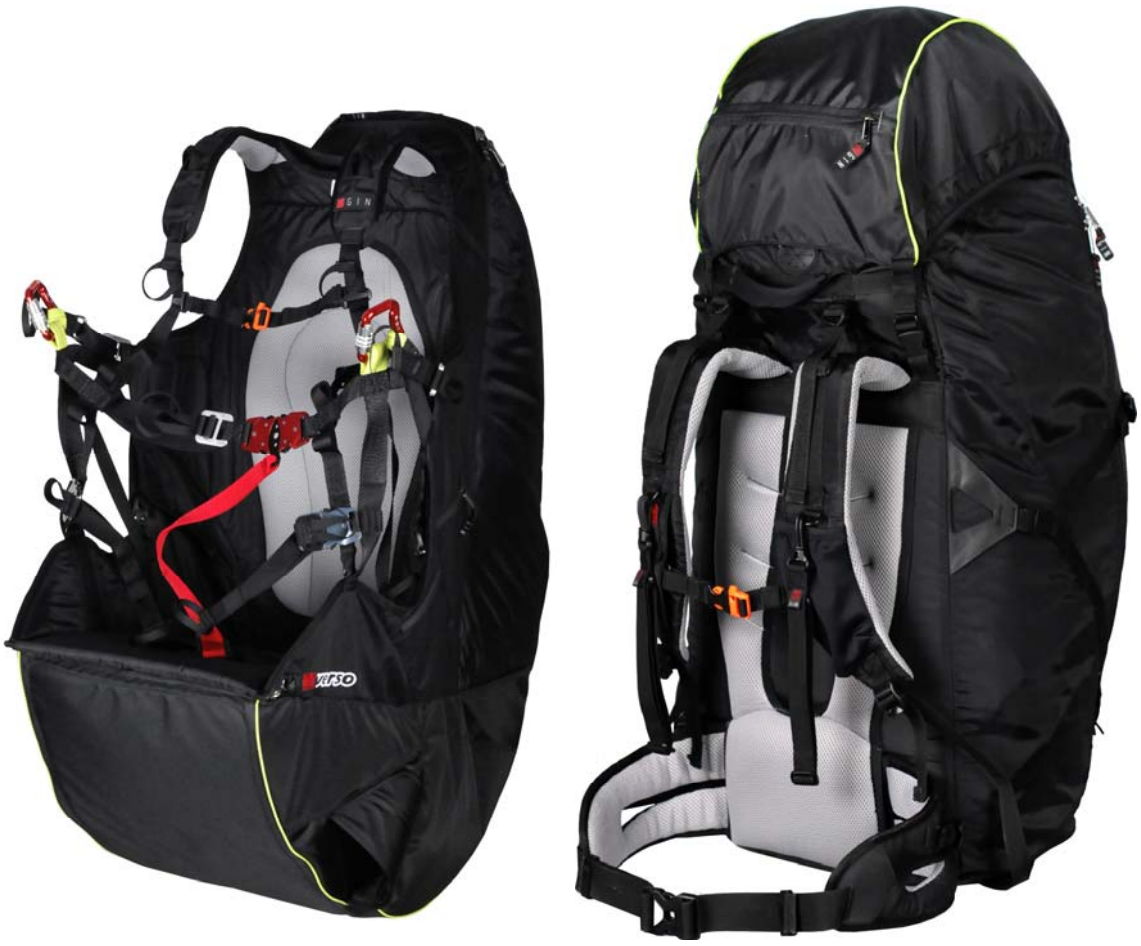
Verso combined harness and rucksack

Owner's Manual



Please read this manual before flying with the Verso for the first time.

GIN GLIDERS INC

Thank You…

Thank you for choosing the Verso harness. We are confident that this harness will provide you with enhanced comfort, control, performance and fun in flight. This manual contains all the information you need to set up, trim, fly and maintain your harness. A thorough knowledge of your equipment will keep you safe and enable you to maximize your full potential.

Please pass on this manual to the new owner if you do resell your harness.

Happy Flights and Safe Landings,

The GIN Team

Safety Notice

By the purchase of our equipment, you are responsible for being a certified paraglider pilot and you accept all risks inherent with paragliding activities including injury and death. Improper use or misuse of GIN equipment greatly increases these risks. Neither Gin Gliders Inc nor the seller of GIN equipment shall be held liable for personal or third party injuries or damages under any circumstances. If any aspect of the use of our equipment remains unclear, please contact your local GIN reseller or importer in your country.

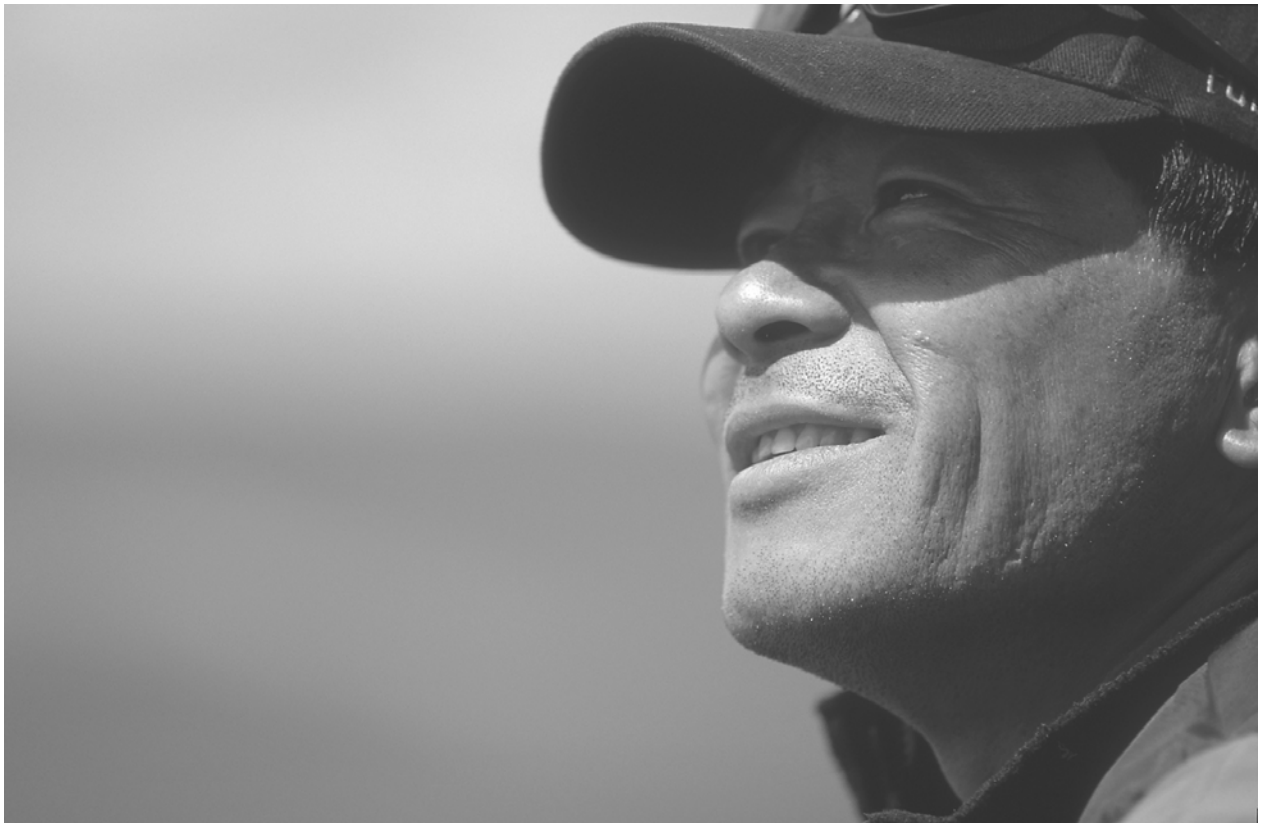
Contents

1. Gin Gliders

Gin Gliders was formed in 1998 by paraglider designer and competition pilot Gin Seok Song and his team of engineers and test pilots.

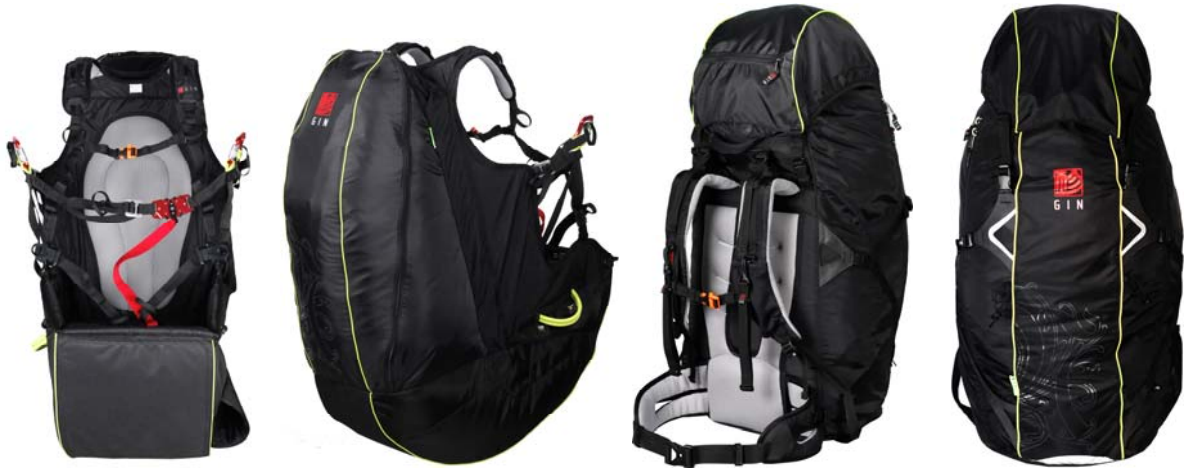
Gin's philosophy is simple: to design paragliding equipment that he and any other pilot love to fly. This philosophy applies equally for a harness such as the Verso, as for the world-beating competition glider, the Boomerang. No product is released to the market without Gin's complete satisfaction. Gin Gliders produce a complete range of accessories and can provide you with many useful items for flying which are all manufactured in Gin Gliders own production facility to guarantee highest quality standards.

Gin has over 20 years' experience of designing and manufacturing paragliders and is backed up by an equally experienced team, both within the company in Korea and throughout a worldwide network of distributors and dealers. The "GIN Team" has won the Paragliding World Cup overall several times and has had countless other competition successes in World Cups, World and National Championships. This high level of expertise provided by dedicated professionals ensures that you get the best possible product support and after sales service.



2. Introducing the Verso

The Verso was developed by GIN GLIDERS to meet the highest standards of the most demanding pilots who want to travel with a lighter and more compact combined harness and rucksack. The special feature of the Verso is that it is convertible into a rucksack. The Verso is suitable for a wide range of pilots, from the occasional club pilot to the experienced cross country pilot.



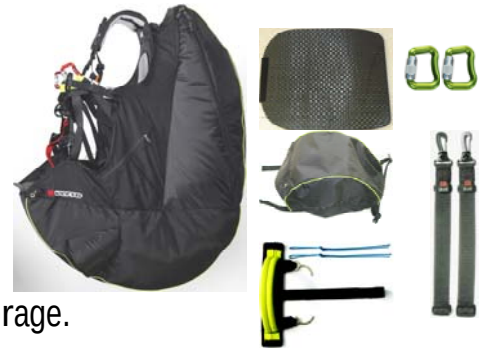
The Verso can be flown with all types of paraglider unless the manufacturer of your particular model requires a specific harness to be used with their glider. Please refer to the manual of your glider to find out if this might be the case. The Verso is a sleek and easy harness, designed for maximum comfort and ease of use. The elegant design focuses on simplicity, eliminating the need for complicated adjustments.

The overall geometry of this harness has been designed to enable the pilot to move comfortably and freely, enabling an easier fast run for take-off and landing.

Leg and chest straps are integrated into the “T-bar system” to prevent the pilot from falling out of the harness if he forgets to fasten the leg straps.

The safety has also been improved by incorporating an airbag into the harness helping to protect the pilot in case he falls on his back. Big air inlets are positioned at the perfect angle on the left side of the harness so that the airbag inflates quickly and efficiently.

Components of the Verso



1 Harness convertible to rucksack
1 Carbon seat plate
2 Carabiners
1 Rescue handle and 2 lengths of line to help close the harness rescue container
1 Rucksack top cover for helmet or extra loose item storage.
2 Handles to hook on shoulder straps.

Features of the Verso

The Verso has been certified by EN and LTF, and is available in XS, S, M and L size.

Size	XS	S	M	L
Pilots height (Cm)	Under 165	160~175	170~185	Over 180
Weight (Kg) (W/O optional Top cover, Shoulder handles and Carabiners)	3.4	3.6	3.8	4.0

Airbag for back protection (substitution for back protector)

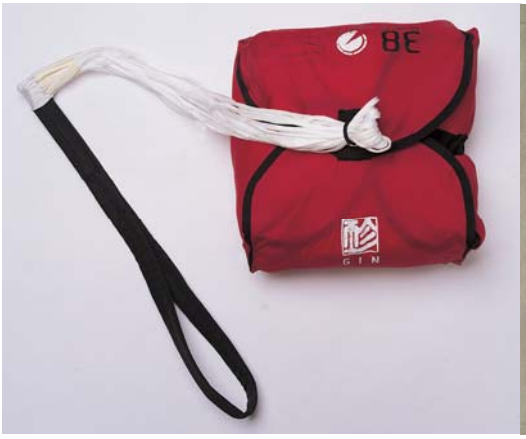
The Verso is a harness with a built-in airbag. Since the air bag is divided into compartments, it can help prevent air being dissipated too rapidly in the event of hard impact. The Verso is designed to reduce the energy of an impact and to help to protect the pilot as much as possible in an accident, but it cannot completely eliminate the risk of injury. The Verso back protection with an airbag has received certification from EN and LTF.

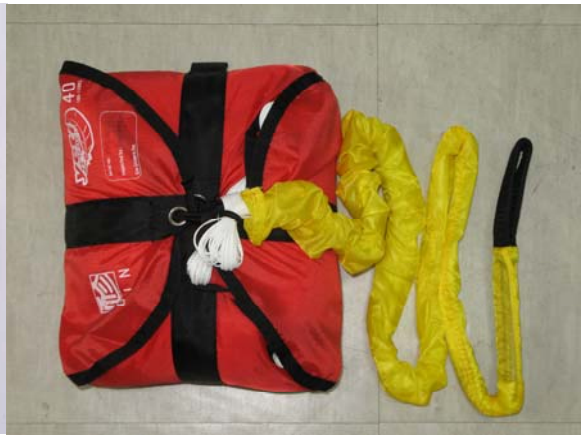
Optional Items

The following items are available as optional extras.

Rescue parachute

The Verso is designed for use with a Gin rescue parachute, such as ONE G and Yeti Rescue. Other manufacturers' rescue systems may also be used. Every first installation of a rescue system into the harness (that means every new combination of harness and rescue system) must be checked by a qualified paragliding professional. This is called a "compatibility check". In this compatibility check the pilot himself, who will be flying with this harness, must always sit in the harness hanging from a simulator and deploy the rescue from the harness container. This check must also be done each time after the rescue has been repacked and re-installed





Speed bar

The Verso is compatible with all common types of speed systems. We recommend the GIN aluminium speed bar.

Flight deck

The Verso may be fitted with a flight deck, allowing easier viewing of instruments and/or carrying of ballast.

Other Accessories

For up-to-date information on additional accessories, visit www.gingliders.com or contact your local GIN dealer or the distributor in your country.

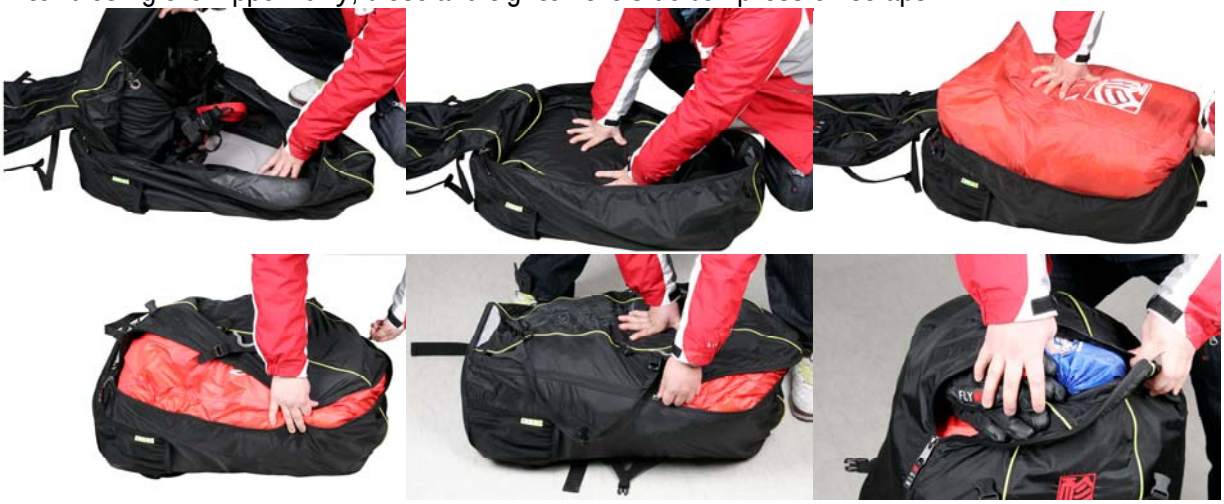
3. Verso Rucksack

Verso rucksack features

You can adjust the size and function of the Verso rucksack to meet your individual requirements.

Packing the paraglider into the bag

Place all the harness webbing straps between the seat and back support when you turn the harness into the rucksack.
Place the paraglider into the rucksack bag, on top of the harness and close one side of the zipper. Then close the other side of the zipper while pushing down on the paraglider.
All extra items like gloves, flying suit etc. can be placed into the top space before closing the zipper fully.
After closing the zipper fully, close and tighten the side compression straps.

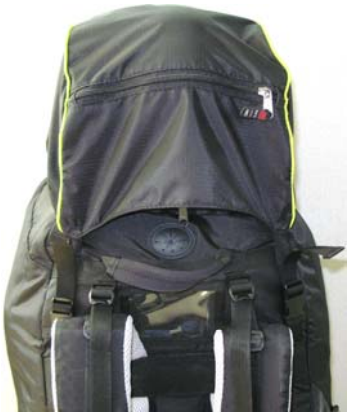


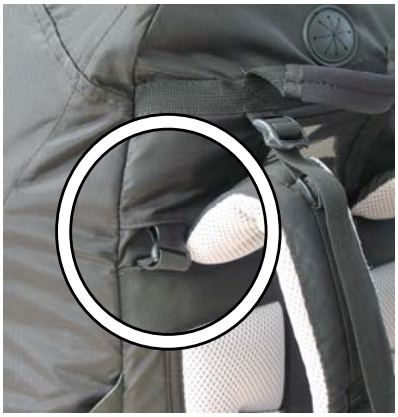
Top cover

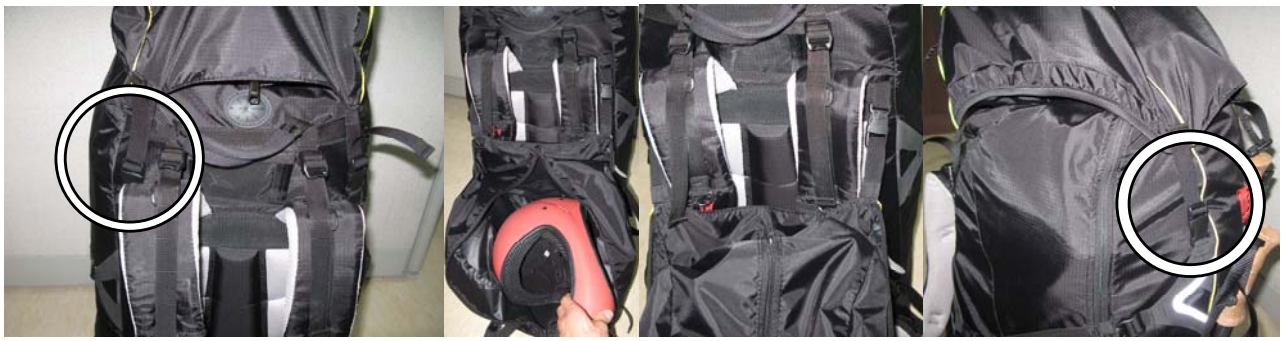
When you need additional volume to carry your smaller items you can fit the removable 15L top cover that was supplied together the verso.

When you connect the top cover, the side with zip closed pocket (wider side) faces the back of your head. Connect it to the buckles either side of the shoulder straps.

The top cover is fitted over the closed bag after storing your wing and everything into the main bag.

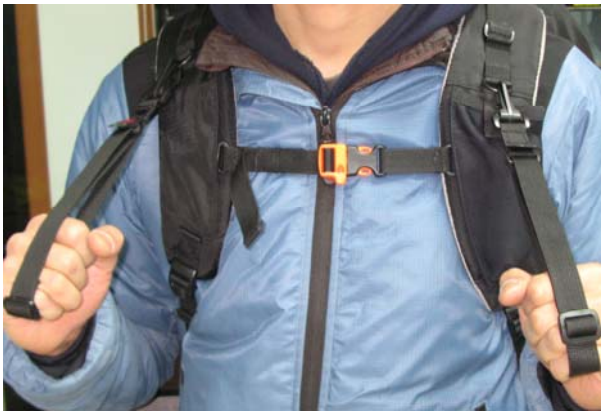






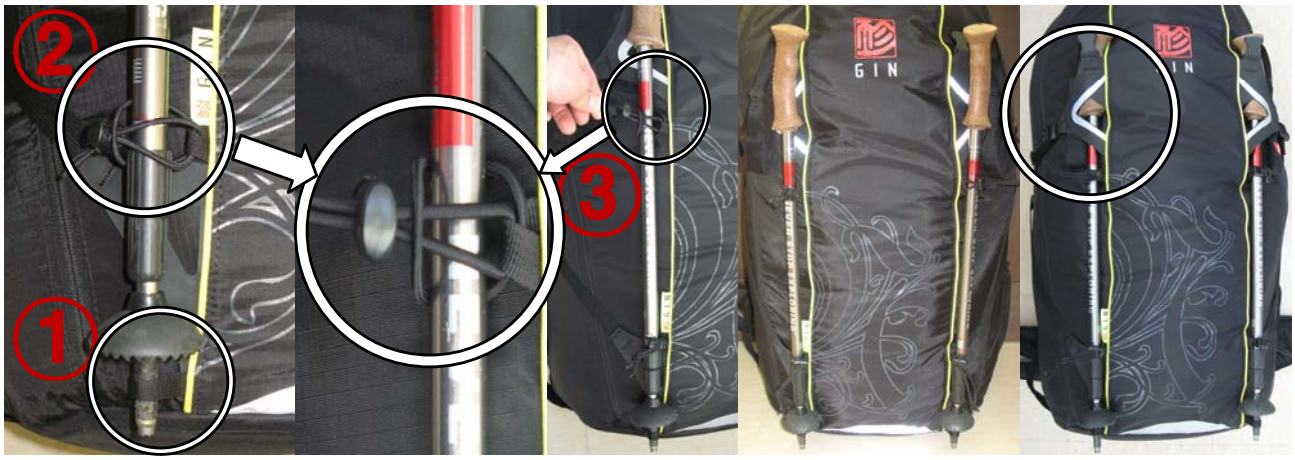
Handle loops on shoulder straps

There is a D ring on each shoulder strap for fitting the adjustable handle loops that may be a useful aid for supporting your hands when walking. They are included in the rucksack, fit them when you need them and adjust to a comfortable length using the buckles



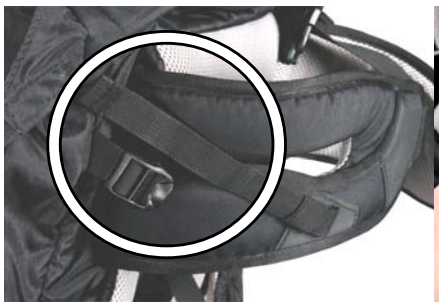
Fixing walking poles

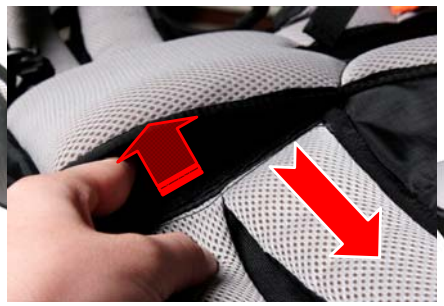
There are 2 elastic cords on each side of back and 2 webbing loops for the poles at the bottom of the bag. First of all, put the end of poles into the bottom loops and then fix and tie with the 2 elastic cords.

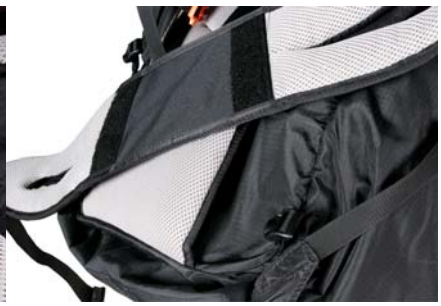


Removable waist belt

If you want to save even more weight you can remove the waist belt. Firstly disconnect the webbing straps between waist strap and bag. Then, separate the waist belt from the Velcro behind (inside) the back pad and take the belt out sideways.

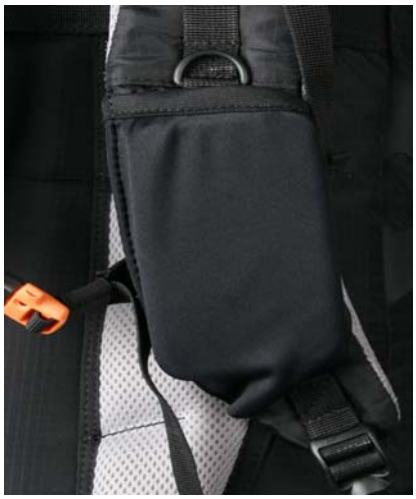






Small front pocket

There is a small pocket for a mobile phone or MP3 player on the left side of the shoulder strap.

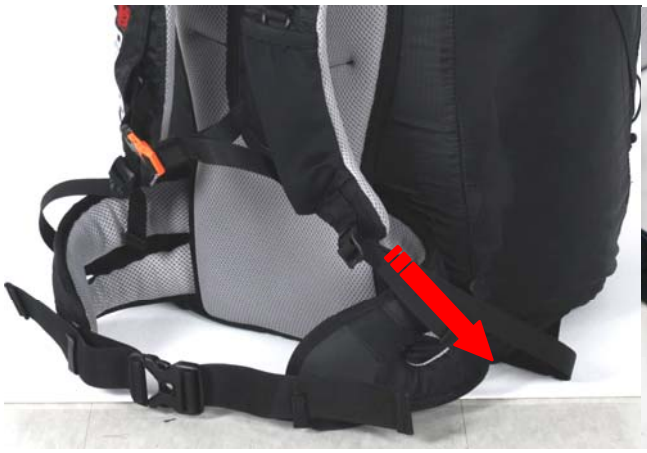


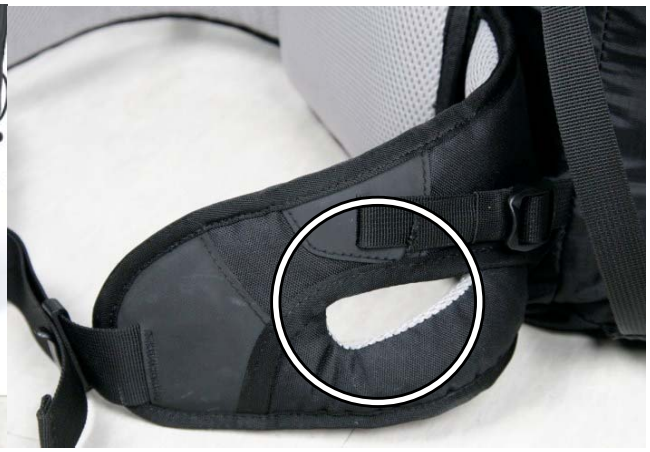
Rucksack adjustment

The rucksack part of the Verso is designed with an Alpine style carrying system. To get the best from your rucksack, it needs to be adjusted correctly to fit your body and your carrying style.

Shoulder straps

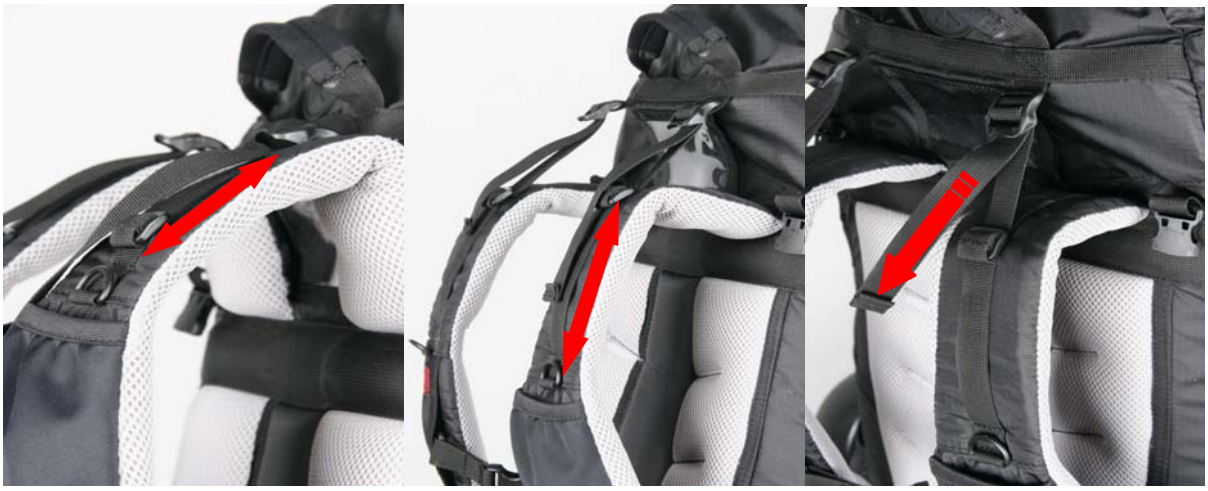
With the rucksack on and the shoulder straps correctly fitted, adjust the length of the shoulder straps so that the middle hole of the waist belt fits comfortably over your hipbone.





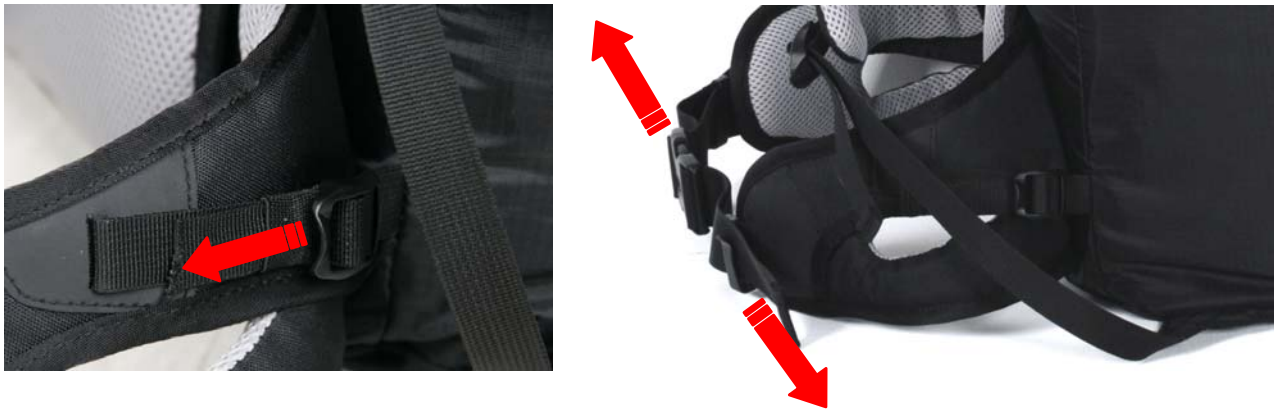
Top stabiliser straps

After adjusting your shoulder straps, adjust the length of the top tension straps, located at the top of the shoulder straps to stabilise the load.



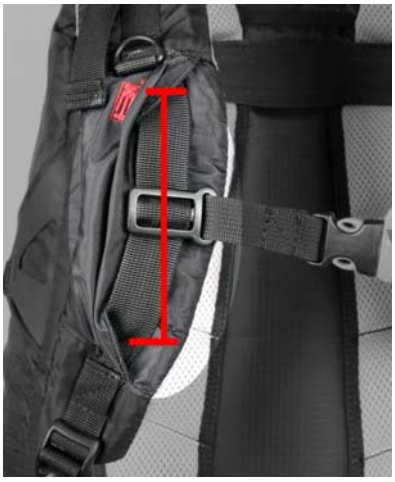
Hip belt

The hip belt is important to the load carrying comfort of the rucksack as this distributes the load of bag from the base of your spine onto your hips; take the time to ensure that the position is correct. Adjust the length of the hip belt so that it is a firm fit and transfers the weight to your hips comfortably. The side stabiliser straps between hip belt and bag should then be adjusted to help stabilise the base of the load.



Chest strap

The chest strap can be moved up and down the sliders on the shoulder straps, located under the pocket. Adjust the position of chest strap to fit across the upper part of your chest. Then connect the buckle and adjust the length to take some lateral tension off the shoulders.



4. Before you fly

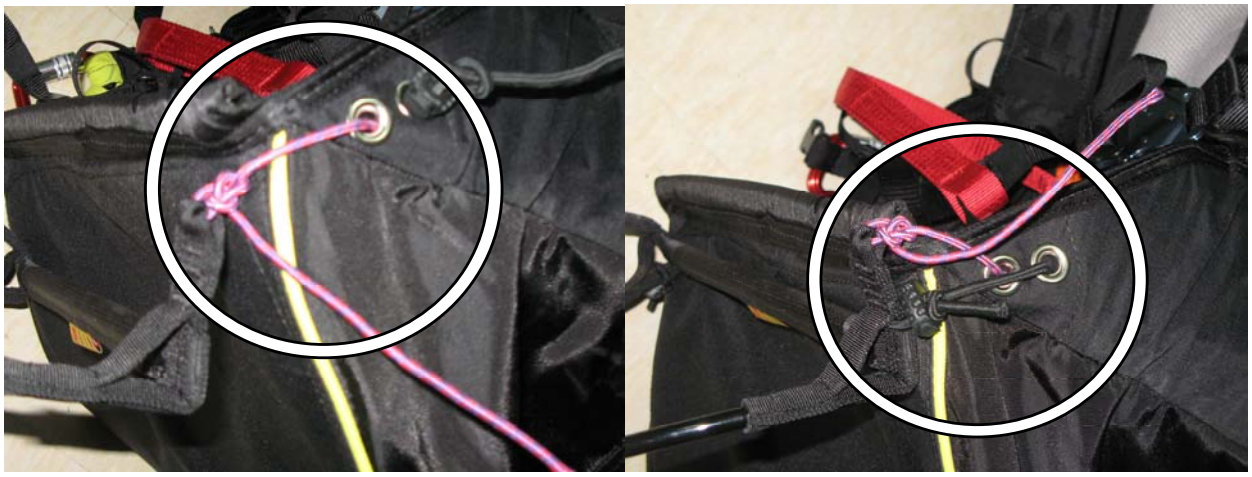
The Verso must be assembled by a suitably qualified paragliding professional, for example your instructor. In particular great care and attention must be paid to the fitting of the rescue parachute into the harness. The pilot should then adjust the harness for comfort.

Assembly

Gin Gliders recommend that assembly be carried out in the order below. If there is any doubt whatsoever about this procedure, please seek professional advice from your instructor, GIN dealer or importer.

Speed System

The speed system is assembled from top to bottom. Pass the cord of the speed bar through the pair of pulleys near the side pocket and route it out through the eyelet near the front corners at each side of the seat. Attach the elastic cord to the speed bar to prevent tangling in case of a parachute deployment.



Rescue Installation

The Verso is compatible with GIN ONE G or Yeti rescue parachutes. Other manufacturer's front mounted rescues may also be used, but as already mentioned earlier in this manual:

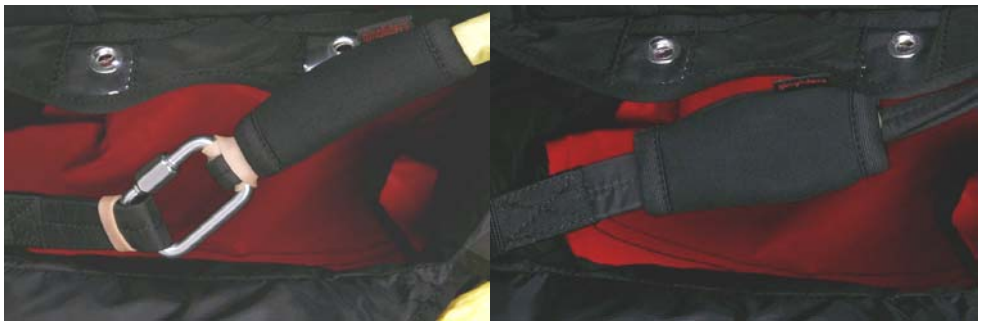
Every first installation of a rescue system into the harness (that means every new combination of harness and rescue system) must be checked by a qualified paragliding professional for compatibility. Prior to the installation, you should also ensure that you have the necessary materials to complete the procedure, for example, suitable maillons and thread.

Rescue parachutes should be repacked at least every 150 days; so installing your rescue in a new harness may also provide a good opportunity for a repack.

Check your rescue manual for further details.

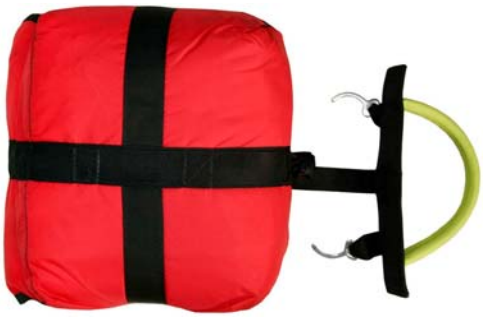
When you attach the rescue bridles to the harness webbing, a Maillon Rapid type 7mm Stainless Steel carre (square) is recommended. But in any case, the connector should be rated at least 9 times the maximum weight. Our recommended 7mm connector for example has a minimum breaking load of 3125kg and an EN certificate of conformity.

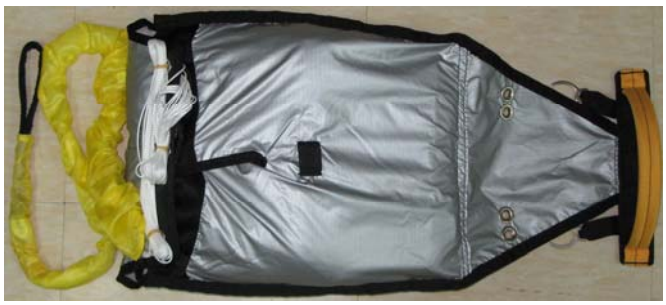
The Maillon should be held in place with rubber bands, tape or plastic heat shrink tube. **Webbing to webbing connections are not recommended, due to the danger of getting the knot the wrong way round, which significantly weakens the connection** and also difficult to disconnect the rescue parachute if you land in trees.



Attaching rescue deployment bag to the harness deployment handle

The rescue container of the Verso comes with its own deployment handle. This handle and its strap must be connected to the deployment bag of the parachute. If your parachute's deployment bag does not have the proper loop, please contact your parachute dealer or a qualified professional to attach the deployment handle by sewing it or adding a new loop in the correct position on the deployment bag.





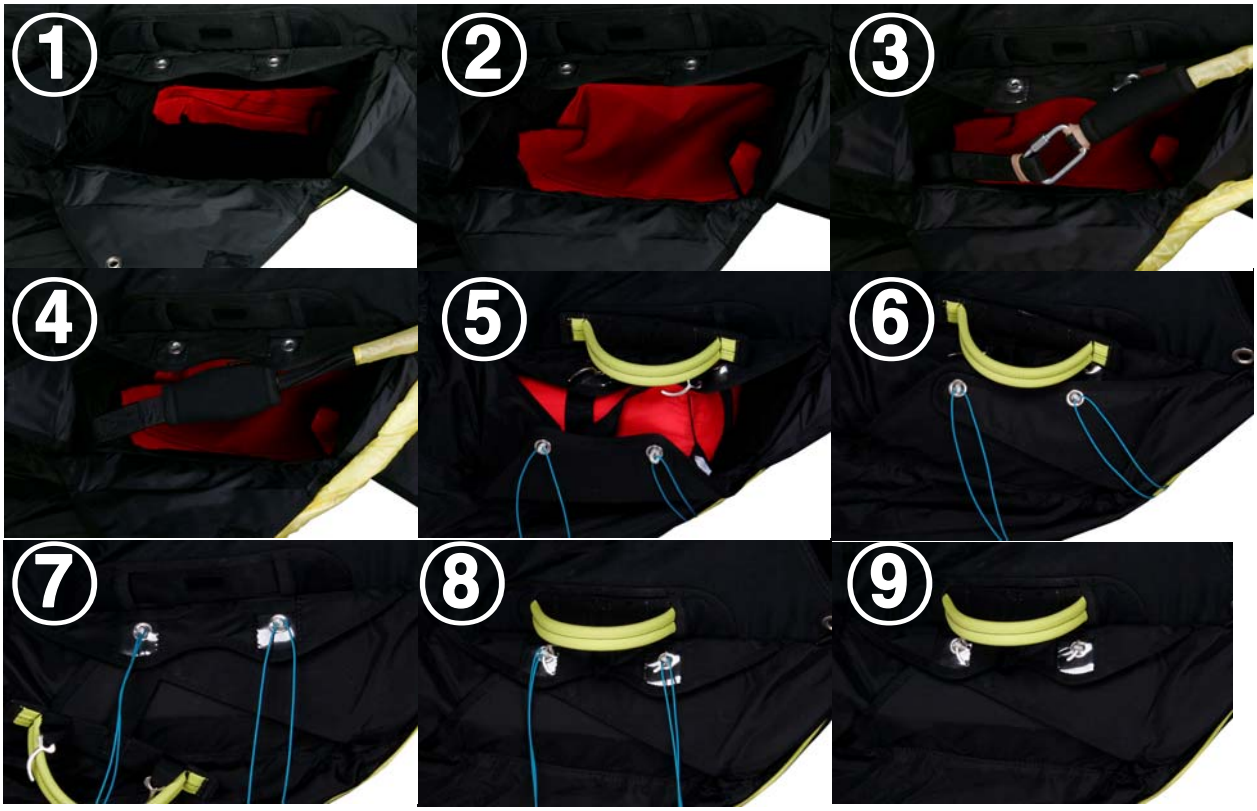
In any case a qualified professional must check the compatibility of the system; harness and rescue parachute, when a rescue parachute is installed for the first time. After every repack of the rescue parachute you can do a compatibility check yourself. Please observe carefully how the professional installs the rescue system, so that you can remember the procedure if you have to do it yourself the next time.

This compatibility check requires that you test to make sure that the rescue parachute can be released from the rescue container in the harness – it must be done by the pilot himself, sitting in the harness hanging from a simulator. It must be done after every repack of the rescue parachute to be sure that the rescue can be released without problems in the case of an emergency.

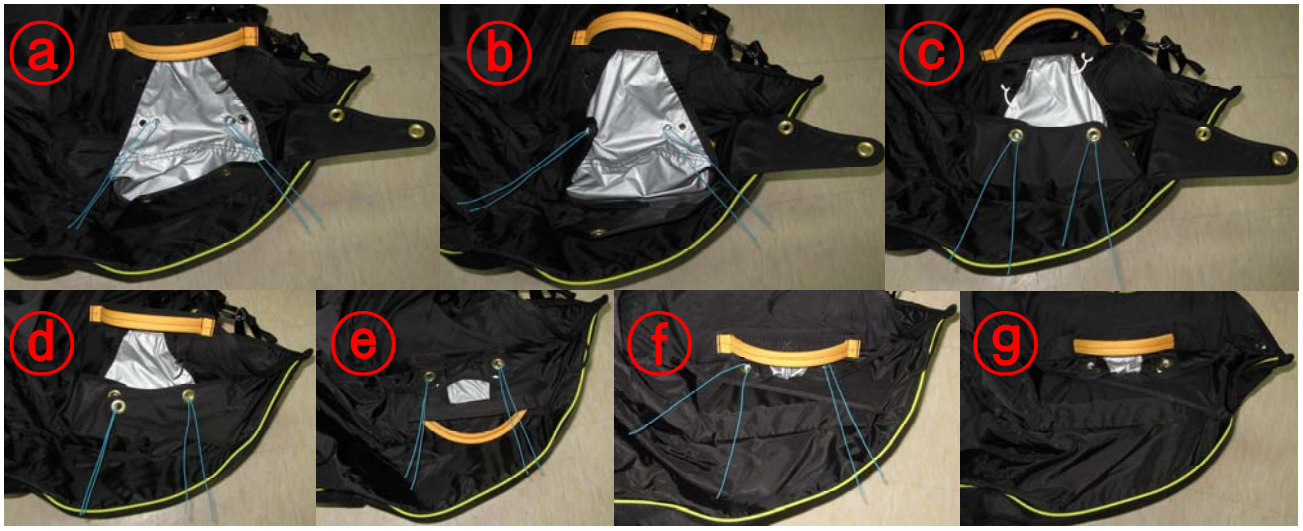
Rescue installation guide

Take special care: The deployment handle must be attached to the side loop on the deployment bag, not to the centre loop. When fitting the rescue to the harness ensure the loop/handle attachment is positioned uppermost, close to the seat plate.

☆ Type: Normal rescue deployment bag 



☆ Type: New rescue deployment bag attached handle 

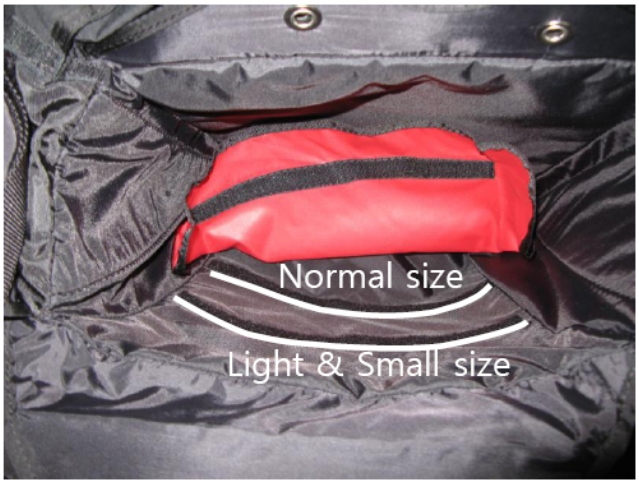


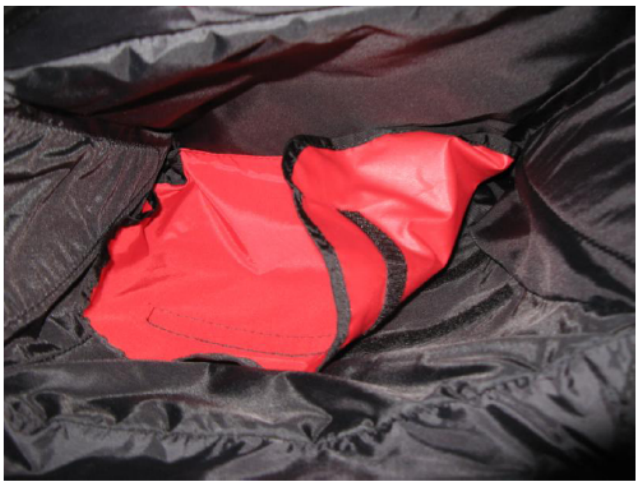
Adjustment of rescue container volume

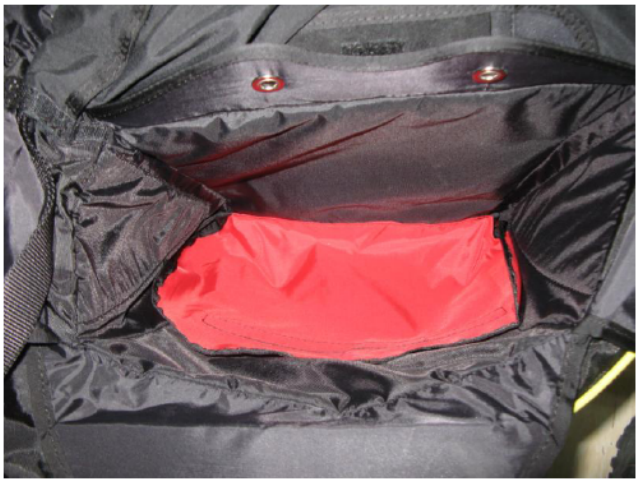
There is a red panel inside the rescue container. This has a Velcro system to adjust the volume of container to fit either a normal sized rescue, e.g. the OneG or a smaller rescue such as the Yeti Rescue.

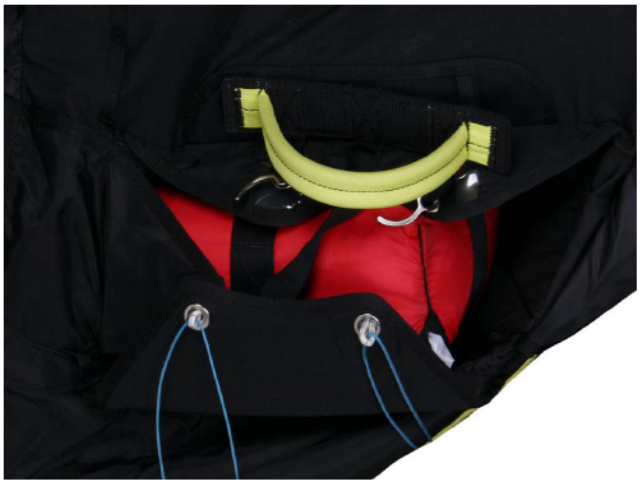
Before you fit the small rescue into the container, firstly detach the bottom edge of the red flap inside the container and fasten it using the Velcro in its outer position, decreasing the internal volume of the container. Then, check that the Rescue fits the remaining space. It should fit comfortably in the container while being held so that it can't move around. (see images below).

Light & Small size rescue install









Adjustments

The Verso should be adjusted to suit your physique and flying style. It is important to adjust it correctly to ensure you can easily slide into the sitting position after take off.

Adjustments should ideally be tested before your first flight by hanging in a simulator. Additional fine-tuning can be done during your first few flights.

Ensure that the rescue system has been installed before making adjustments.

Shoulder Straps

The optimum setting for the shoulder straps depends on the height of the pilot. Stand upright with the chest/leg straps closed and symmetrically adjust the shoulder straps until they are a snug fit, not tight. During flight, these straps won't go slack because of elastic tensioners on the straps. You will find the adjustable buckles either side of the seat.

Lateral Straps

The lateral straps adjust the angle between the thighs and the back. This angle can be set between 100° and 130°. Lengthening the straps increases the angle and vice-versa. The easiest way to adjust them correctly is during a flight in calm air. Remember that flying in the "supine position" that means leaning back, reduces the stability of the harness and increases the risk of twisting after an asymmetric deflation.

Leg Straps

The correct adjustment of the leg straps allows the pilot to easily reach the sitting position after take-off without using his hands. In the standing position, use the buckles under the chest strap to adjust the leg straps so that they fit comfortably without being tight; make sure you do it symmetrically. If it is necessary to lengthen the leg straps, first check that the shoulder straps are not too tight. It is not normally necessary to make large adjustments from the default leg strap setting.

Chest Strap

The adjustment of the chest strap controls the distance between the carabiners and affects the handling and stability of the glider. Widening the distance between the carabiners increases feedback from the wing and allows for easier weight shifting. Closing the strap gives you a more stable feeling in turbulence but increases the risk of stable spiral and also the risk of twisting!

We advise pilots of GIN paragliders to fly with a distance between the carabiners of approximately 40 to 48 cm depending on the size and type of glider you fly.

The chest strap may also be adjusted in flight according to the conditions; for example, it may be tightened in turbulent air and flown at a looser setting in less turbulent or weak conditions (always maintain adjustments within the manufacturer's recommended range).

Seat Straps

The seat straps change the depth of the seat. Adjust to find a comfortable position. In the sitting position, lengthen the straps to their maximum at first and then use the plastic buckles to shorten the straps to find a comfortable position with good back support. Lengthening the straps also helps you to slide easily into the harness at take off, while shortening the straps helps you to be in the standing position for landing.

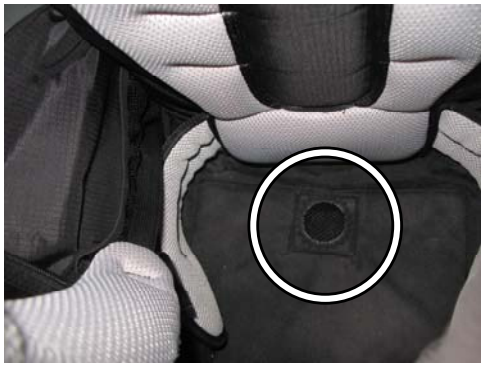
Speed Bar

Hanging in the simulator, adjust the length of the speed bar cord so that the bar hangs at least 15cm below the front of the harness. Making the cord too short could result in the speed system

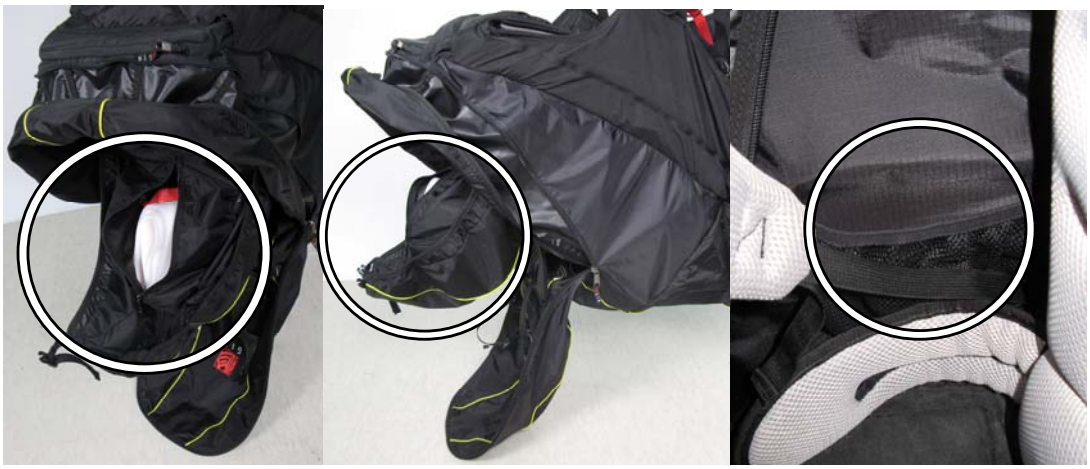
being constantly or unintentionally engaged during flight. It is safer to start with the speed bar a little long and shorten it following your first flights. Test the speed bar in flight only after you are comfortable with your new harness, and always do so in calm conditions with ample clearance above the ground.

Storage

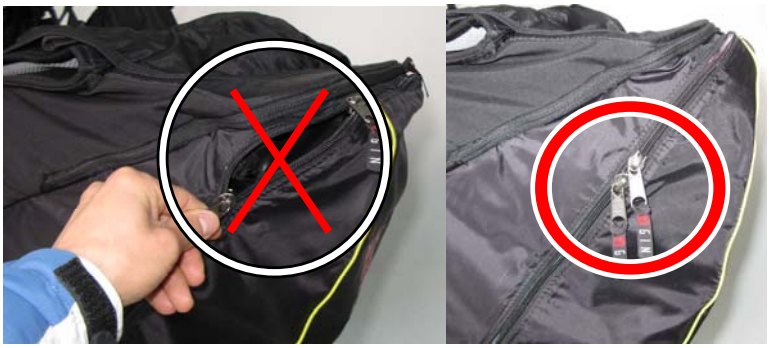
One of the special features of Verso is that it is designed to function as an airbag. Air is scooped into the airbag chambers through a channel on the side of the harness. **Pilots should make sure that this channel and the airways are open in harness mode and that air is free to flow through and into the air chambers in the back of Verso.**



If you want to store items inside the back of the harness, stow them in the bag's top cover or in the side mesh pockets, so that there is no way for them to block the functioning of the airbag.

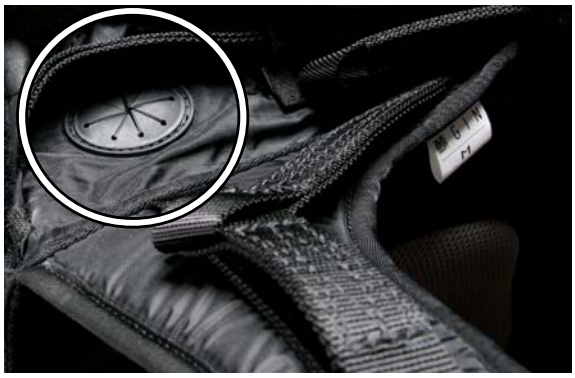


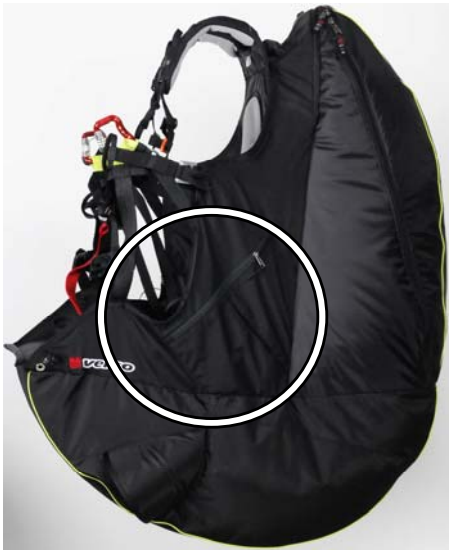
Put bags and other items for stowage inside these pockets and zip them closed. Otherwise, the airbag may not be inflated properly.



Pockets

The Verso includes a mid-size pocket inside the airbag that can be used as a top cover for the bag plus one mesh side pocket. There is also a radio compartment inside the back pocket and a buttonhole to pass the cable for a handheld speaker-microphone or a drink tube from a Camel Back or similar.

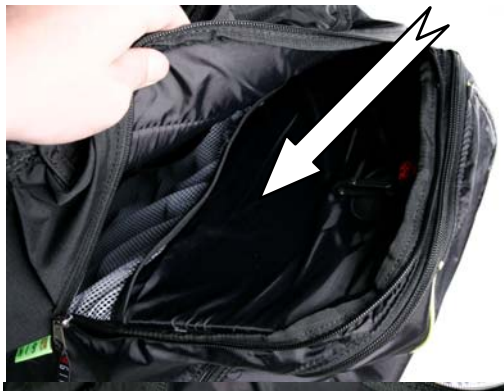


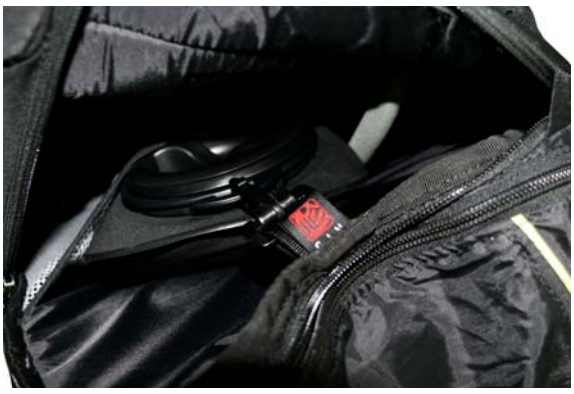


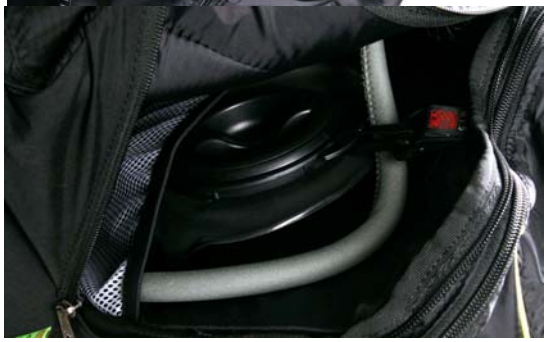
There is small pocket on the left side of harness for carrying small items.

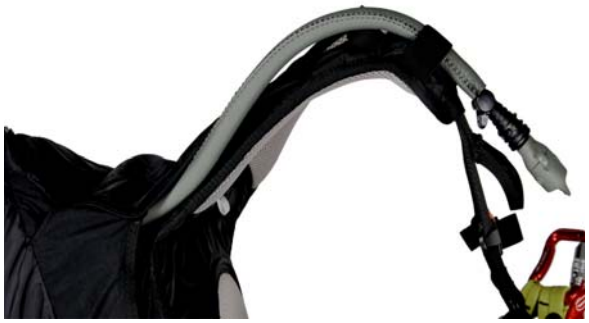
Water bag (Camel Back)

When you open the zipper, situated behind your neck on the Verso harness, you will find a large mesh pocket for a water bag or Camel Back. After installing the water bag in the mesh pocket, you have to hook the bag onto the plastic buckle to suspend its weigh and prevent it moving to the bottom of the bag and causing discomfort. **Don't store anything else in this mesh pocket** as it may influence your position and comfort during flight.









5. Flying with the Verso

Pre-flight checks

For maximum safety, use a complete and consistent system of pre-flight checks and repeat the same mental sequence *every* flight.

Check that:

There is no visible damage to the harness or carabiners that could affect its airworthiness.

The rescue parachute container is closed correctly and the pins are in the right position.

The deployment handle and the pin are correctly inserted or attached.

All buckles, belts, zips are securely fastened. Buckles should click into place as you close them, and a gentle pull on the fastened buckle verifies this. Secure any zips *after* fastening the buckles. Take extra care in snowy or sandy environments.

The paraglider is connected correctly to the harness and both carabiners are secured by their locking mechanisms.

The speed bar is attached correctly to the glider.

All pockets are closed properly and any loose items are tied down safely.

It is important to check that air chamber intake made of mesh is open before each use; otherwise it could lead to malfunction of the airbag.

Check again that you have closed your leg and chest straps before you take off!

Rescue Deployment

It is vital to periodically feel the position of the rescue handle in normal flight, so that the action of reaching for the rescue handle is instinctive in an emergency.

In the event of an emergency, the pilot must quickly evaluate his or her height and the seriousness of the incident. Deploying the rescue when the glider is recoverable may increase the danger of injury. If you have sufficient height and the glider is in a flat spin, it is preferable to first try to stop the spin (e.g. full stall), due to the risk of entanglement. On the other hand, a second's hesitation in deploying the reserve could prove costly if there is insufficient height.

If the rescue is to be deployed, the procedure is as follows:

Look for the rescue handle and grasp it firmly with one hand

Pull sideward and upwards on the handle to release the deployment bag from the harness container

Look for a clear area, and in a continuous motion, throw (and RELEASE!) the rescue away from yourself and the glider, preferably into the air stream and against the direction of spin

After deployment, avoid entanglement and pendulum motions by pulling in the glider as symmetrically as possible with the B, C, D or brake lines

On landing take an upright body position and be sure to do a PLF (Parachute Landing Fall) to minimize the risk of injury

Landing with the Verso

Before landing, slide your legs forward in the harness so that you adopt the standing position. NEVER land in the seated position; it is very dangerous for your back even if you have an airbag. Standing up before landing is an active safety precaution, and is much more effective than the passive system of any back protection.

6. Miscellaneous

Towing

The Verso isn't equipped with extra system for towing. The tow release can be connected to the main carabiners. The best way to attach a tow release is to use a towing adapter, which slides over the lower ends of the risers of the paraglider before attaching the main carabiners. For further details refer to the documentation provided with your tow release or towing adaptor or ask a qualified towing instructor at your tow site.

Tandem Flying

The Verso is not designed for tandem flying.

Flying over water

It is not recommended to use the Verso on any flights over water, especially extreme manoeuvres training, due to the possibility that the airbag could keep the pilot under water in the event of a water landing. So, if you do fly over water, you must take extreme care.

Behaviour in the nature and preservation of flying site

Please observe the local rules at the respective flying site which you use. This is important not to endanger the preservation of flying sites which are necessary to maintain the possibility to execute our beautiful sport.

7. Maintenance and Repair

The materials used in the Verso have been carefully selected for maximum durability. Nevertheless, keeping your harness clean and airworthy will ensure a long period of continuous safe operation.

Maintenance

Avoid dragging your harness over rough or rocky ground.

Unnecessary exposure to UV rays, heat and humidity should be always avoided.

Keep the folded harness in your rucksack when not in use.

Store all your equipment in a cool, dry place, and never put it away while damp or wet.

Keep your harness as clean as possible by regularly cleaning off dirt with a plastic bristled brush and/or a damp cloth. If the harness gets exceptionally dirty, wash it with water and a mild soap. Make sure you first remove the entire sub-components for example, rescue parachute etc. When you clean, don't scrub the fabric inside the Airbag with a brush (especially the back) since the fabric can be damaged by rubbing. Allow the harness to dry naturally in a well ventilated area away from direct sunlight.

If your rescue parachute ever gets wet (e.g. in a water landing) you must separate it from the harness, dry it and repack it before putting it back in it's separate outer container.

After a hard landing you must check your air bag protection for damage. **A tear in the airbag may render it totally ineffective and prevent it from working as protection. You must have the air bag repaired properly before use.**

The zips and buckles may be occasionally lubricated with silicone spray, no more than once a year.

Inspection checklist

In addition to regular pre-flight checks, the Verso should be inspected thoroughly on every rescue repack of 150 days, normally every 2 years of 200 hours. Additional inspections should be performed after any crash, bad landing or take off, or if there are any signs of damage or undue wear. Always seek professional advice whenever in doubt. The following checks should be carried out:

Check all webbing, straps and buckles for wear and damage, especially the areas that are not easily seen, such as the inside of the carabiner hook-in points.

All sewing must be intact and any anomalies attended to immediately to avoid exacerbation of the problem.

Special attention should be paid to the rescue installation, particularly the elastic and Velcro parts.

The seat and back plates must be free from cracks.

The main aluminium carabiners must be replaced at least every 5 years or after 500 hours, whatever comes first. Impacts may create undetectable cracks that could result in structural failure under continuous load.

Repair

The manufacturer or an approved specialist should carry out any repair that involves critical parts of the harness. This will ensure that the correct materials and repair techniques are used.

Environmentally friendly disposal of the harness

When this paragliding harness cannot be used any longer after an extended period of life time, then you must ensure, that it will be disposed in an environmentally friendly way. Please observe the existing regulations and laws in your country.

8. Technical Data

Specification

Description	Paragliding reversible harness rucksack			
EN, LTF certified max. load	120 Kg			
Size	XS	S	M	L
Height of main attachment points above seat plate	40 cm	42 cm	44 cm	46 cm
Carabiner Distance	33-45 cm	33-47 cm	33-51 cm	33-53 cm
Weight (without Parachute, Top cover, Shoulder handles and Carabiners)	3.4 Kg	3.6 Kg	3.8 Kg	4.0 Kg
Parachute Container	Integrated container underneath the seat plate			
Protector	Air bag for back protection			

Certification

Verso harness:

LTF Nr.EAPR-GZ-7254/10

DESCRIPTION

FABRIC OF HARNESS:

OUTSIDE: Nylon 330D kodura, Oxford 210D Ripstop PU, Klingler K4662/WR PU 484

INSIDE: Oxford 210D (HD), 420D HD N/OXFORD PU

WEBBING: DYNEEMA 25mm / 30mm

BUCKLES: T-LOOK SAFETY BUCKLE "LIGHT" BUCKLE AUTOMATIQUE LIGHT 30MM

THREAD: P/F 210 D/9 Bonded, P/F 210 D/4 & 210 D/6 Bonded POLYESTER

Every effort has been made to ensure that the information in this manual is correct, but please remember that it has been produced for guidance only.
This owner's manual is subject to changes without prior notice. Please check with www.gingliders.com for the latest information regarding the Verso and other GIN products.