



OWNER'S
MANUAL
CONNECT RACE LITE



Dear Connect Race Lite- owner

THANK YOU FOR PURCHASING A SWING PRODUCT!

This Instruction Manual is an important part of your paragliding equipment. It contains instructions, important advice on safety and paraglider care and maintenance, along with tips on flying technique and general information about the sport of paragliding.

It is essential that you read this Manual thoroughly before your first flight.

Consistent development work and the innovative combination of the materials used have resulted in a product that meets our and your high demands and sets standards.

If you have any questions which are not answered in this Manual, please do not hesitate to contact SWING directly or your SWING dealer. Our contact details are in the Appendix.

We hope that you have a great time flying the Connect Race Lite - and “happy landings”!

SWING Team



INFORMATION



SWING Flugsportgeräte GmbH reserves the right to alter or add to the contents of this Manual at any time. You should therefore regularly visit our website:

www.SWING.de

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The fact that this Manual has been made available does not confer any claim to the product descriptions, common or trade names or other intellectual property.



WARNING

Read this Manual before using your harness!



DANGER

This harness must not be used for sky-diving.

Contents

01	INTRODUCTION.....	4
	MANUAL.....	4
	SWING AND THE ENVIRONMENT	5
02	SAFETY	6
	SAFETY ADVICE	6
	SAFETY NOTICES.....	6
	DISCLAIMER AND EXCLUSION OF LIABILITY, OPERATING LIMITS	7
03	HARNESSES FEATURES	8
	TECHNICAL DATA.....	8
	DIAGRAM.....	9
	CONCEPT	9
	EQUIPMENT.....	9
	FITTING THE RESERVE SYSTEM.....	16
	ADJUSTMENT OPTIONS	23
	SPEED SYSTEM.....	25
04	FLYING WITH THE CONNECT RACE LITE.....	26
	PRE-FLIGHT CHECK.....	26
	TOWING	26
	TANDEM FLIGHTS	26
	EMERGENCIES AND SPECIAL FLYING CONDITIONS	26
	SUSPENSION TRAUMA	26
05	MAINTENANCE	27
	CARE AND MAINTENANCE.....	27
	REPAIRS AND INSPECTION.....	28
	INSPECTION	28
	WARRANTY	29
	DISPOSAL	29
06	SWING ON THE WORLD WIDE WEB	30
	SWING WEBSITE.....	30
	SWING ACCESSORIES	30
	FACEBOOK, TWITTER & YOUTUBE	30
07	APPENDIX	31
	ADDRESSES.....	31
	HARNESSES DATA.....	32
	PILOT DETAILS / PROOF OF OWNERSHIP.....	32
	INSPECTION AND REPAIRS CARRIED OUT:	32
	NOTES.....	33

01 Introduction

Manual

You must read this Manual carefully before using the harness for the first time.

This will allow you to familiarise yourself with the adjustment options and the care and maintenance of your new paraglider harness.

Information in this Manual on design of the paraglider harness, technical data and illustrations are subject to change. We reserve the right to make changes without prior notification.

Special text giving safety information is identified in this Manual in accordance with the ANSI Z535.6 standard.

The Manual complies with the airworthiness requirements in LTF NFL II 91/09 and forms part of the certification.

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Special text



DANGER

Sections of text headed “Danger” indicate a situation where there is **imminent** danger, which in all probability **will lead to death or serious injury**, if the instructions given are not followed.



WARNING

Sections of text headed “Warning” indicate a potentially dangerous situation, which **may lead to death or serious injury**, if the instructions are not followed.



CAUTION

Sections of text headed “Caution” indicate a potentially dangerous situation, which may lead to **minor or slight injury**, if the instructions are not followed.



PLEASE NOTE

Sections of text headed “Please note” indicate possible **damage to property**, which may occur if the instructions are not followed.



TIP

Sections of text headed “Tip” give advice or tips which will make it easier to use your paraglider.

Series of instructions

In this Manual, instructions which must be followed in a certain order are numbered consecutively.

- < Where there is a series of pictures with step-by-step instructions, each step has the same number as the corresponding picture.
- d Letters are used where there is a series of pictures but the order is not relevant.

Lists of parts

- ① Numbers circled in red refer to various parts of the item pictured. A list of the numbers and the name of the part labelled follows the picture.

Bullet points

Bullet points are used in this Manual for lists.

Example:

- risers
- lines

QR Codes



If this Manual refers to a website, a QR code is also given. The website will open if the code is scanned using a smartphone with the appropriate app.

Manual on the internet

Additional information about your harness and any updates to the Manual can be found on our website at www.SWING.de.

This Manual was current at the time of going to print. It can be downloaded from SWING's website prior to print.

SWING and the environment

Protection of the environment, safety and quality are the three core values of SWING Flugsportgeräte GmbH and they have implications for everything we do. We also believe that our customers share our environmental awareness.

Respect for nature and the environment

You can easily play a part in protecting the environment by practising the sport of paragliding in such a way that there is no damage to nature and the areas in which we fly.

Keep to marked trails, take your rubbish away with you, refrain from making unnecessary noise and respect the sensitive biological equilibrium of nature. Consideration for nature is required even at the launch site!

If you are a smoker, please do not leave cigarette butts behind.

Paragliding is, of course, an outdoor sport – protect and preserve our planet's resources.

Environmentally-friendly recycling

SWING gives consideration to the entire life cycle of its products, the final stage of which is recycling in an environmentally-friendly manner. The synthetic materials used in our products must be disposed of properly. If you are not able to arrange appropriate disposal, SWING will be happy to recycle the product for you. Send the glider with a short note to this effect to the address given in the Appendix.

02 Safety



WARNING

The safety advice given below must be followed in all circumstances. Failure to do so renders invalid the certification and/or results in loss of insurance cover, and could lead to serious injuries or even death.

Safety advice

All forms of aerial sport involve certain risks. When compared with other types of aerial sport, paragliding has the lowest number of fatal accidents measured according to the number of licensed pilots.

However, few other sports demand such a high level of individual responsibility as paragliding. Prudence and risk-awareness are basic requirements for the safe practice of the sport, for the very reason that it is so easy to learn and practically anyone can do so. Carelessness and overestimating one's own abilities can quickly lead to critical situations. A reliable assessment of conditions for flying is particularly important. Paragliders are not designed to be flown in turbulent weather. Most serious paraglider accidents are caused by pilots misjudging the weather conditions for flying.

Please bear in mind that any aerial sport is potentially dangerous and that ultimately you are responsible for your own safety.

We therefore strongly encourage you to fly in a conservative manner. This applies both to the choice of conditions in which you fly and also to the safety margin which you allow

when carrying out the various flying manoeuvres.

We recommend that you only fly using paragliding equipment, harness, reserve parachute and helmet that have been tested and certified.

The CONNECT RACE LITE complies with the airworthiness requirements for hang gliders and paragliders at the time of delivery.

The CONNECT RACE LITE leads the way in development standards for paraglider harnesses. It will remain airworthy for many years if you look after it properly.

This Manual must be passed on to any new owner of the harness. It forms part of the certification and belongs with the harness.

Observe the other specific safety advice in the various sections of this Manual.

Safety notices

Safety notices are issued when defects arise during use of equipment which could possibly also affect other examples of the same model.

The notices contain instructions on how to inspect the equipment

concerned for possible faults and the steps required to rectify any faults.



SWING publishes on its website any technical safety notices and airworthiness instructions which are issued in respect of SWING products.

Services such as RSS are also available which allow internet users to follow various websites and any changes made to them without having to access them individually. This allows much more information to be followed

than was previously the case. You should therefore visit the safety pages of the certification agencies on a regular basis and keep up-to-date with new safety notices which cover any products connected with paragliding (refer to Appendix for addresses).



WARNING

The harness owner is responsible for carrying out the action required by the safety notice.

Disclaimer and exclusion of liability, Operating limits

Use of the product is at the pilot's own risk!

The manufacturer cannot be held liable for any personal injury or material damage which arises in connection with SWING products. The certification and warranty shall be rendered invalid if there are changes of any kind or incorrect repairs to this harness, or if any inspections are missed.

Pilots are responsible for their own safety and must ensure that the airworthiness of the equipment is checked prior to every flight. The pilot should launch only if the paragliding equipment is airworthy. In addition, when flying outside of Germany, pilots must observe the relevant regulations in each country.

The paragliding equipment may only be used if the pilot has a valid licence for the area or is flying under the supervision of an approved flying instructor. There is no liability on the part of third parties, in particular the manufacturer and the dealer.

Disclaimer and exclusion of liability

In terms of the warranty and guarantee conditions, the paraglider harness may not be used with certified paragliding equipment if any of the following situations exists:

- the inspection period has expired, or the inspection has been carried out by unauthorised agencies or people
- the pilot has insufficient experience or training
- repairs have been carried out by the pilot or unauthorised repairs have been carried out, or there have been repairs using parts which are not original parts
- the pilot has incorrect or inadequate equipment (paraglider, protection, reserve parachute and helmet)

Operating limits

The harness may only be used within the operating limits. These have been exceeded if any of the following situations exists:

- it is used outside of the permissible weight range
- it is used when there is obvious damage to it
- it is used in rain or drizzle, in cloud, fog and/or snow
- the air temperature is below -30°C or above 50°C
- alterations have been made to the harness which are not approved
- the pilot uses the harness for a purpose which is not connected with paragliding. This harness is, e.g., not a parachute harness and not intended for use as such!

03 Harness features

Technical data

Intended Use	Paraglider harness			
Certification	LTF 91/09, EN 1651			
Certification number	EAPR-GZ-0831/18			
Maximum hook in load	120 daN			
Sizes	S	M	L	XL
Distance carabiner – seat plate [cm]	46	48	50,5	52
Distance between carabiners [cm] (min. – max.)	37-48	37-48	38-52	38-52
Seat plate (l x w) [cm]	30 x 25	31,5 x 26	33 x 27	34,5 x 28
Weight approx. [kg]* (inflatable protector / foam protector)	3,1 / 3,2 (3,5 / 3,6)	3,2 / 3,3 (3,8 / 3,9)	3,5 / 3,6 (4,0 / 4,2)	3,6 / 3,7 (4,2 / 4,3)
Protection	Alternatively 16cm foam protector or inflatable protector, each LTF NfL II 91/09 approved Lightshield back protection (TÜV Cat. 2)			
Installation of reserve	Integrated container (volume 3,0 - 6,5 litre) under the seat, side deployment handle			
Included in delivery	<ul style="list-style-type: none"> • CONNECT RACE LITE harness • Two aluminium carabiners • Deployment handle and inner container for reserve • Lightshield back protection • Seat plate • Speed bar • Instruction Manual 			
Optional accessories	<ul style="list-style-type: none"> • Wind shield • Alternative protector 			

Weight including carabiners, reserve handle and (Lightshield back protection, seat plate)

Diagram

What does the CONNECT RACE LITE look like?



Fig.1 CONNECT RACE LITE

Concept

The CONNECT RACE LITE is the result of many years of collaboration between Woody Valley and Swing to develop cross-country harnesses. It is intended for all pilots who have high demands when it comes to harness weight, but who do not want to sacrifice comfort, control and aerodynamics.

The CONNECT RACE LITE is fitted with a pocket for the optional Anti-G drogue parachute.

Target group

The harness was designed for pilots who also enjoy hiking, and it can be used for hike & fly tours as well as extended cross-country flights. It is extremely comfortable, and this makes it suitable for anyone looking for a high-quality and lightweight pod harness with practical features and compact dimensions.

Intended use

The CONNECT RACE LITE was developed as a lightweight pod harness for everyday use, with the maximum level of comfort.

It may only be used as a paraglider harness in combination with “lightweight aerial sports equipment” with an unladen weight of less than 120kg.

Equipment

Safety features

Safety Lock system

The CONNECT RACE LITE uses the proven Safety Lock system, to minimise the risk of closing the cockpit without doing up the chest strap.

Nevertheless, even this system cannot protect against failure to fasten the leg straps.



Fig. 2 Safety Lock system

Protector

The CONNECT RACE LITE comes with your choice of a 16cm foam protector or an inflatable protector. Both types of protector are LTF certified in combination with the harness.

Using the inflatable protector reduces the dimensions and weight of the harness.



WARNING

The CONNECT RACE LITE has LTF certification only in combination with one of the two protector options.

Installing the foam protector

To install the protector, open the zip for the protector compartment located beneath the seat plate. Place the protector into the pocket and close the zip.



Fig. 3 Installing the foam protector

The inflation tube is fed outwards to the right through the red loop, and inwards behind the red carabiner. Do up the zip for the protector compartment to close it again.



Fig. 4 Feeding through the tube

Lightshield

The CONNECT RACE LITE has back protection that is TÜV/GS certified in accordance with EU standard 89/686/EEC Category 2.

The Lightshield does not have any bearing on the results of the certification test, so it can be removed by undoing a zip behind the back support, which is between the base and the large pocket, which reduces harness weight further.



Fig. 5 Lightshield

Reserve compartment

The CONNECT RACE LITE has a rescue chute compartment underneath the seat, immediately behind the back protection. The rescue chute must be attached to the harness before it is stowed in the integrated container.

The CONNECT RACE LITE is delivered complete with a handle built into the inner container.

No other inner container or handles should be used.

Information on installing the rescue system is in the section “Fitting the Reserve System”.

Comfort features

Removable seat plate

The Connect Race Lite has a removable seat plate. This provides much higher lateral stability for the harness.

With use, the seat plate develops creases and moulds to suit the pilot’s body shape, without losing any of its lateral stability.

To remove the seat plate, take out the protector and then pull the seat plate out of the pocket.



Fig. 6 Removing the seat plate

Follow this procedure in reverse to insert the seat plate. Make sure when you are doing this that the leg straps are correctly aligned and are positioned again behind the seat plate pocket in the back region.

ABS stability setting

The attached ABS strap allows you to adjust the CONNECT RACE LITE to make it more stable. The more tightly the strap is pulled, the more stable and therefore less agile the harness is. The factory setting (indicated in red) makes the harness slightly more stable.

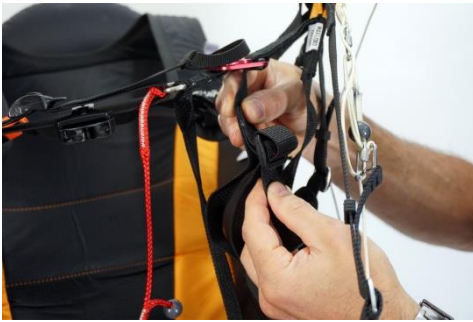


Fig. 7 ABS stability setting



Fig. 9 Windshield and bag

Urine tube

There is an opening on the left-hand side of the harness in the orange section through which a urine tube can be fed.



Fig. 8 Opening for urine tube

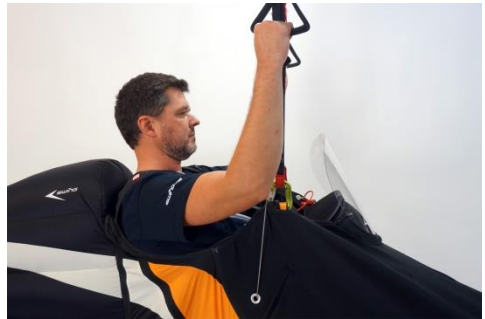


Fig. 10 Windshield when installed

Mesh back

The back section has mesh spacer fabric to maximise seating comfort. This ensures optimum pressure distribution for your back and good air circulation.

Windshield

The optional windshield protects the pilot against the wind and cold. It is secured to the cockpit using the three snap fasteners under the Lycra cover. It should always be removed and stored in its bag when you are not flying to prevent any damage.

40 mm block pulleys

The CONNECT RACE LITE can be used with the optional 40mm block pulleys (AV006). To install this pulley, release the bottom loop, pass it through the lower loop on the strap and then connect it again. Make sure that the pulley is going in the correct direction, as indicated by the arrow.



Fig.11 40mm block pulley



Fig.12 Attaching the pulley

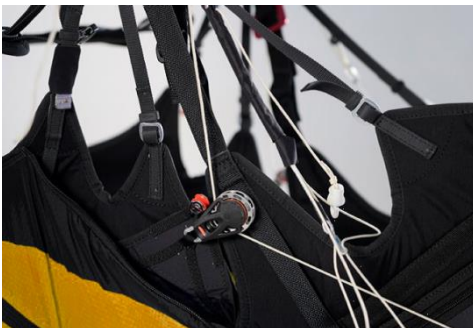


Fig.13 40mm block pulley when fitted

Pockets

Rear storage compartment

To reach the rear storage pocket, unzip fully the aerodynamic rear section of the harness. It can be folded down to allow better access.

This pocket was specifically designed and sized to hold an inner bag and items of clothing or a sleeping bag if necessary. Inside there are two pockets, one to hold the Streamer hydration system bladder and one to hold trekking poles.



Fig.14 Rear storage compartment

Hydration system pocket

The CONNECT RACE LITE is compatible with the Streamer hydration system. Place the Streamer in the pocket shown in the picture, which is located in the rear storage compartment. The drinking tube is fed through the opening marked "H2O", then to the small red strap on the left-hand side of the carabiner hang-point, also marked "H2O".



Fig. 15 Pocket for Streamer



Fig. 17 Pocket for trekking poles

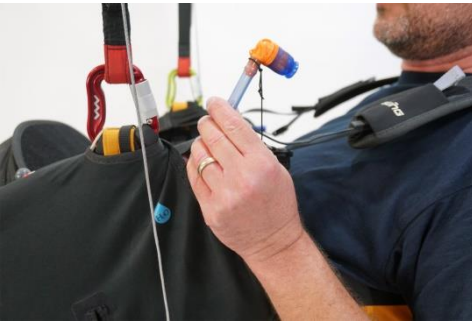


Fig. 16 Streamer when installed

Cockpit and side pockets

The CONNECT RACE LITE has several pockets that are easy to reach while you are flying. First, the CONNECT RACE LITE has a generous pocket in the cockpit.



Fig. 18 Cockpit pocket

i PLEASE NOTE

Packing too much in the rear pocket could interfere with correct inflation of the aerodynamic section of the harness.

Arrange all items evenly in the rear pocket to prevent the container from becoming misshapen.

Do up fully all zips in the aerodynamic rear section.

Trekking poles

There is a pocket for trekking poles in the rear storage compartment, next to the pocket for the hydration system.

Next to the cockpit there is a small pocket on the speed bag with a safety loop e.g. for a camera or radio.



Fig. 19 Camera pocket on the speed bag

The harness also has two very large zippered side pockets with safety loops.

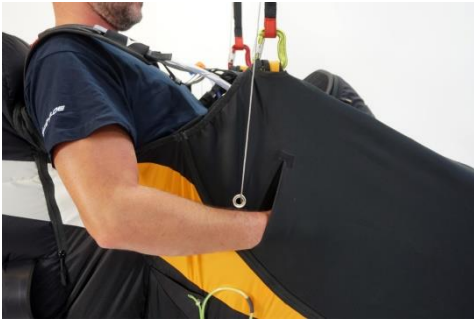


Fig. 20 Side pockets

Bottom pocket for tent or ballast

The CONNECT RACE LITE has a pocket underneath the seat, which is ideal for a small tent and an ultralight sleeping mat. Alternatively this pocket can be used to hold ballast.



Fig. 21 Pocket underneath the seat plate

Anti-G drogue parachute

The Anti-G drogue parachute is a safety device that offers increased safety during spiral dives by reducing G-force in a spiral by up to 40%. The system is easy to use and works with any type of paraglider. The drogue chute is stored in the cockpit pocket just below the flight instruments.

The bridle for the drogue chute is attached to the right carabiner of the

harness. To operate the drogue chute correctly, simply open the zip, take out the drogue chute and throw it in the direction of the spiral.

It is possible to deactivate the drogue chute after a spiral dive using the handle and to land as normal with it deployed but disabled. Alternatively, it can be deactivated after exiting the spiral dive and pulled in, storing it in the cockpit once again.



Fig. 22 Storing the drogue chute



Fig. 23 Activating the drogue chute



PLEASE NOTE

To ensure correct use of the Anti-G drogue chute, it is important that you read and understand the instruction manual before using it during flight. The Anti-G drogue chute is optional equipment that can be purchased separately.

Cockpit

The cockpit is incorporated into the speed bag and has a flight deck for removable instruments.



Fig. 24 Flight deck for instruments

Adjusting the cockpit angle

Connect the cockpit strap to the chest strap and shorten it as needed in order to adjust the cockpit according to the weight of the instruments used and the desired angle.



Fig. 25 Cockpit angle adjustment

Fitting the reserve system

Only an appropriately qualified person should fit the reserve.

The steps to be followed are given below.



WARNING

In addition, any sections of the reserve parachute instruction manual that are relevant to fitting the reserve must be followed.



DANGER

If your harness should ever get wet (e.g. because of a landing in water) the reserve system must be dried out and repacked before your next flight.

Harness specific inner container

The CONNECT RACE LITE is delivered complete with the handle built into the inner container. Do not use any other inner container or handle even if they seem to be appropriate.



WARNING

Use only the original deployment handle!

No reserve is mounted in the delivery condition!

First of all, you pack the correctly packed rescue, without the inner container, into the inner container of the CONNECT RACE LITE. Please also refer to the packing and installation instructions of the reserve and check the approval of the reserve manufacturer.



Fig. 26 CONNECT RACE LITE inner container

All SWING ESCAPE and ORANGE CROSS rescue systems have been tested by us for compatibility and can be used with the CONNECT RACE LITE inner container.

Inserting the reserve into the inner container

The repacking of a reserve from the associated inner container into the CONNECT RACE LITE inner container is shown below using the SWING ORANGE CROSS as an example.



WARNING

In addition, it is essential that you follow the relevant points in the operating instructions for the reserve.

Changing the inner container can have a negative effect on the opening behaviour of your reserve.



Fig. 27 open inner container

Open the container and position the line bundles.



Fig. 28 Relocated rescue with line bundles

Lift the reserve into the new container. Do not turn it and pay attention to the course of the lines.



Fig. 2 Container with outer line bundles

Place the containers next to each other, paying attention to the direction of the closure loop.

If, as with the ORANGE CROSS, there are bundles of lines on the outside of the container, remove them and combine them with rubber bands, but do not change the length.



Fig. 29 *Partially closed container with inner and outer line bundles*

Fold the container shut and position the outer lines outside.



Fig. 30 *closed container*

Close the container with a line bundle. The eye of the line bundle should be approx. 4cm large, so that nothing can loop through and block the release (eye too long), and so that the container is securely closed and does not open unintentionally (eye too short).



Fig. 31 *External linen bundles*

If available, position the outer line bundles and check that the bundles are not twisted.



Fig. 32 *Closed container with inserted line bundles*

Push the line bundles under the container flaps.



PLEASE NOTE

Line bundles attached to the outside of the rescue container are used to first stretch part of the lines and provide some distance to the pilot before the container opens. This order should be maintained when repacking the rescue.

Fitting the bridle

There are three ways in which the reserve chute can be connected with the harness.

Loops

In the first method, the harness's connecting bridle is put through the loop of the reserve's bridle. The reserve itself is passed through the large loop in the reserve's bridle, and this connects the two. The connection loop must be pulled as tight as possible so as to avoid friction between the two bridles during the shock caused when the reserve opens. To ensure that the connection loop between the two remains tight, it should be held in place by using a Neoprene sleeve.

Screw-lock links

The two lines are inserted into the screw-lock links, which are tightened by hand.

A neoprene sleeve is then placed over the connection to hold it in place. This prevents twisting and possible cross-loading.

This method can absorb a higher shock load than the previous one and is therefore the method recommended by SWING. The screw-lock links and neoprene sleeve are available from SWING.

Reserve with dual bridle

If a steerable reserve chute with dual bridle or any other reserve with dual bridle is used, the reserve is connected using the loops of the harness bridle which are located near the padded shoulder straps. In this case, the harness bridle is not needed and should be folded up, fastened using two rubber bands and then stored away under the cover behind the pilot's neck.

For this attachment method, you need two screw carabiners with a breaking strength of at least 2400 daN. Make

sure that the bridle is long enough for the reserve to be positioned in the harness's reserve container.

There must be enough line length to ensure that, on activating the reserve chute, the reserve stays in the reserve container until it is thrown.



PLEASE NOTE

Check that the steering handles for the steerable reserve parachute can be reached during use.

Inserting the reserve

Place the packed container next to the harness in the later installation position.

The connection triangle between the handle and the inner container (to the parachute bag) must be positioned upwards and outwards.

Then place the packed container beside the harness in the position it will ultimately be installed.

Undo the zip for the V-line channel so that the V-line is not caught up. Then connect the reserve to the V-line using one of the methods described above. Store the V-lines neatly in loops in the outer container of the harness and then place the reserve itself into the container. Place the reserve into the container for the harness in such a way that the delta quick link between the handle and the inner container is positioned upwards and outwards and the suspension line loops are behind the reserve.



Fig. 33 Inserting the reserve



DANGER

It is essential to check that none of the lines are knotted or twisted up in the reserve.

Closing the container

Feed a flexible plastic tube (included with SWING reserves) or a thin cord (paraglider line) into the elastic loops that later close the container. Close the container by pulling the loops through the eyelets using the cord.



Fig. 34 Thread the cord into the upper loop

First secure the upper loop using the short splint pin from the deployment handle. Insert the end of the pin into the opening behind the loops. Remove the cord carefully without damaging the loop.



Fig. 35 Threading the short pin



Fig. 36 Closing the upper loop

The long pin is then passed through the hole next to the closure flap into the rescue compartment.



Fig. 37 feeding the long pin into the rescue compartment

Now close the second loop using the long pin from the deployment handle.

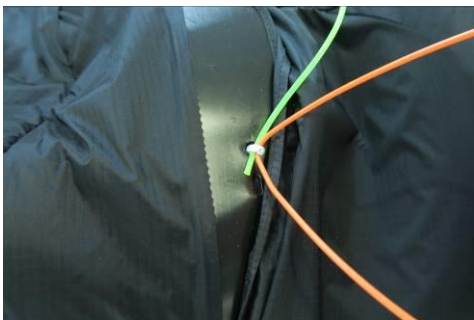


Fig. 38 Threading the long pin

Once again, insert the end of the pin into the opening behind the loop and carefully remove the cord.



Fig. 39 Rescue handle with inserted split pins



Fig. 40 Harness with closed rescue container



Danger

The deployment handle may be blocked and the reserve may be difficult to operate or may not deploy at all if the above instructions have not been followed.

Make sure that it has been attached correctly by carrying out a trial deployment.

Closing the V-line channel system

The CONNECT RACE LITE has a Velcro-free V-line channel system. To close it, first undo the zip fully (before closing the container). The zip is located behind the shoulder strap on the side of the harness opposite the reserve handle. Then pull it all the way down to the reserve container.



Fig. 41 Zip underneath the top flap

When you are sure that the V-line is lying correctly in the channel, pull the zip in the opposite direction back to its original position.



Fig. 42 Closing the V-line channel

The zip is now closed and the V-line channel's warning colour is no longer visible.



Fig. 43 V-line channel when closed



PLEASE NOTE

Ensure that the end of the zip is closed by the reserve pocket before locking the pin. If it is not, the V-line channel could open during flight and the V-lines could fall out.

Compatibility test

Every new combination of reserve and harness/outer container must be inspected after the first packing to ensure that it operates safely. It must be possible for the pilot to deploy the reserve from the flying position without any problem and according to the guidelines in the manufacturer's instructions. The inspection must be recorded in the reserve's packing certificate (compatibility test).

We recommend that the compatibility test is carried out by the dealer.



DANGER

A deployment check must be carried out if a newly packed chute is integrated in a harness outer container, checking whether the deployment force is between 6 and 10kg.

Adjustment options

The CONNECT RACE LITE has various adjustment options so that pilots can adjust the harness according to their particular wishes and preferences. Pilots should take their time in doing this because it will provide a high level of comfort!

We recommend that you hang the harness in a simulator (or frame etc.) when making the adjustments.



PLEASE NOTE

Use your usual loading (reserve parachute, drinking water etc.) when adjusting the CONNECT RACE LITE to ensure that it is adjusted appropriately for you.

Adjusting the seating position

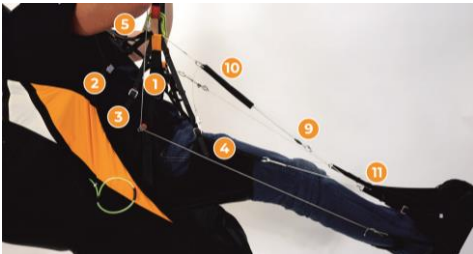


Fig. 44 Overview of adjustment options

- 1 Riser
- 2 Back position adjustment strap
- 3 Seating depth adjustment strap
- 4 Leg angle adjustment strap
- 5 Shoulder adjustment strap
- 6 Chest adjustment strap
- 7 Leg strap
- 8 ABS strap
- 9 Line for speed bag
- 10 Safety System
- 11 Footrest adjustment strap
- 12 ABS stability setting



Fig. 45 Chest strap

When delivered, the CONNECT RACE LITE is adjusted to a standard ergonomic setting, apart from adjustments for pilot height. We recommend for your first flight that you alter only settings related to height, and leave the other settings unchanged, as this set-up has proved to be suitable for most pilots.



Fig. 46 Ergonomic standard adjustment

If you wish to alter the other settings, you can easily return to the factory settings by adjusting the straps so that the red stitching is in line with the buckle as shown in the picture above.

Please select the size of your CONNECT RACE LITE according to your height rather than its seat width. Unlike a “seated” harness, the height of the back support determines a good level of comfort and correct flight position. It is therefore important to choose the correct size, paying more attention to the height of the back than the width of the seat.

We recommend hanging the harness in a simulator to find the optimum setting. Put all of the items that you would normally have during flight into the rear pocket, so as to create the most realistic simulation of flight position and conditions.

Adjust back angle and seat depth



Fig. 47 Buckles for back angle and seat depth

Buckle no. 1 is for adjustment of the angle of the lower back, allowing a choice of how “deep” to sit in the harness (Fig. 14). A comfortable seating position should be chosen which is suitable for the pilot’s build, so that no further adjustments need to be made during flight. The range of angle adjustment is about 10°, with the pilot sitting “deeper” the more the adjustor is opened.

Buckle no. 2 is for the angle of inclination of the upper body vis-à-vis vertical flight axis.

Buckle no. 3 alters the angle of the thigh. This gradient should be adjusted in such a way that you can easily get into your seating position and back out again.

Length of shoulder straps

Adjusting the shoulder straps allows the harness to be altered according to the height of the pilot. This is done

using the adjustment buckles integrated in the shoulder padding. The strap is loosened upwards above the loop and tightened downwards through the strap.

The shoulder strap is correctly adjusted if it lies on the shoulder but the crimped elastic band at the lower end is not stretched taut.



Fig. 48 Loosening the shoulder strap



Fig. 49 Shortening the shoulder strap

Chest strap

The chest strap controls the distance between the two carabiners, and can be opened up to 50cm. For your first flight with the CONNECT RACE LITE, we recommend setting the chest strap half-way so that the correct distance can gradually be determined during flight. A tighter chest strap gives you greater stability. Opening it up too much does not improve performance, but makes the harness less stable.

Making it too short increases the risk of twists.



Fig. 50 Shortening the chest strap

Adjusting the speed bag

The speed bag is made from a very light windproof and water-repellent soft shell fabric. The automatic closing system for the speed bag demonstrates an innovative geometry, which makes it easier for the pilot to get his/her legs into the speed bag after take-off. The speed bag length can be adjusted using two small buckles that are located on either side of the speed bag above the heels. We recommend that they are set evenly.



Fig. 51 Adjusting speed bag length

use a simulator and hook into the risers, or sit on the ground in the harness and get someone to help by supporting the risers. You will then be able to adjust the length of the speed system.

If the speed bar adjustment is too short, it may cause the glider to be permanently pre-accelerated. It is safer to start off with the speed bar a little too long and then progressively shorten it during subsequent flights. Bear in mind that any adjustment needs to be made symmetrically on both sides. Avoid using rigid speed bars, as they could damage the speed bag. The speed bar is attached using two elastic cords and simple knots to the footrest, which keeps the speed bar stretched out and ready for use.



Fig. 52 Speed bar

Speed system

The CONNECT RACE LITE is delivered with a two-phase speed bar. The length of the speed bar should be adjusted only when the optimum seating position has been determined. To adjust the system correctly, either

04 Flying with the CONNECT RACE LITE

Pre-flight check

It is essential that you thoroughly check all equipment before launch!

Always check the following as part of the pre-flight check:

- Is the harness in proper condition?
- Is the reserve system in order or does it need to be inspected/repacked?
- Are the harness and the speed system correctly adjusted?
- Are the pockets all done up?
- Are the reserve deployment handle and pins in the correct position?
- Are both carabiners properly closed / secured?
- Are the speed system lines attached to the glider and is the speed system correctly attached to the harness?



Fig. 53 *Harness correctly done up*

Towing

The CONNECT RACE LITE is also suitable for towing. The appropriate towing devices are available from specialist stores. They are attached to the main carabiners.

SWING also recommends using a towing aid, which is attached between the towing device and the harness. The SWING range includes the “Pro-Tow” tow aid that can be used for this purpose.

Tandem flights

The CONNECT RACE LITE is not intended for use as a pilot harness in tandem flights.

If it is used as a passenger harness, the deployment handle of the rescue must be removed and the rescue compartment must be closed securely.

The pilot must observe the relevant regulations in each country.

Emergencies and special flying conditions

Suspension trauma

You may experience suspension trauma if the full weight of your body is hanging in the leg straps.

The leg straps cut into the thighs, which can prevent the blood flow out of the legs. Large amounts of blood can accumulate or pool in the legs as a result of this.

You must land as quickly as possible if you do not manage to sit down in the harness after you launch! Avoid tight circles and high loads during the descent!

If you are hanging in the harness after a rescue deployment or tree landing, try to stand in your leg cover to reduce the pressure on your thighs.

You should move your legs to relieve the strain and allow occasional circulation and to get the muscles pumping (e.g. by doing ankle rotations and knee lifts).

05 Maintenance

Care and maintenance

Care

The harness is made from top quality materials, but you must nevertheless be careful never to drag it across the ground or to leave it exposed unnecessarily to UV rays, petrol or chemical vapours/liquids, heat or moisture.

If the harness gets dirty, it can be sponged with slightly soapy, lukewarm water.

Storage

SWING recommends that all of your paragliding equipment be stored away from UV light in a dry room that is well-aired and has a constant temperature. Open the backpack and/or inner bag and the belt a little so that air can get in.

Maintenance

Keep the harness locking apparatus clean and oil with a few drops of sewing machine or bicycle oil when necessary. This should be done at least once a year.

Inspect the condition of your harness regularly, or at least once a year. Check in particular whether the seams or straps have any areas of wear or tears.

Replacing air inlet reinforcements

The air inlet reinforcements should be inspected regularly to ensure that the aerodynamic rear section is able to inflate smoothly. The Mylar can be replaced in a couple of easy steps if it is damaged: simply remove the damaged Mylar, which is found in a

small nylon pocket, and replace it with a new piece.



Fig. 54 Mylar reinforcement

Air inflow will then be smooth.



Fig. 55 Airflow

Replacing the leg cover

The leg cover for the CONNECT RACE LITE has a zip, so that it can be replaced if necessary.

Leg straps

Check that the leg straps go the right way around the seat (over the abrasion protection).

Seat

A damaged seat could break and should be replaced.

Condition of components

The age, condition and operation of carabiners and buckles should be checked regularly. Locking

mechanisms must work smoothly and should close, lock and open reliably. The twist-lock aluminium carabiners from Woody Valley included in delivery must be replaced at least every five years.

Contact with salt water

If salt water gets on the harness, it should be rinsed immediately in fresh water (before it dries) and then allowed to dry in a well-ventilated place in the shade.

There can be permanent damage to the fabric of the harness if it is not rinsed thoroughly.

Repairs and inspection

Repairs



TIP

SWING harnesses have an accurate identification in the rear storage compartment.

It is helpful to provide the type designation of the harness if you are contacting your SWING dealer with any queries or ordering replacement parts or accessories, to ensure accurate identification.

SWING workshops

All repairs and servicing should be carried out by a SWING-authorized workshop or directly by SWING. SWING workshops have trained staff, original SWING parts and the necessary know-how, all of which will ensure top quality work.

Repairs to the airbag should only be carried out by the manufacturer.

Small repairs to the harness

You can repair small tears in the harness yourself using self-adhesive sail material, provided that the tears are in places which do not bear heavy loads, are not at the seams and are no bigger than 3cm.

The material is available from SWING.

Inspection

General

SWING's service programme as set out in the Maintenance and Service book should be followed so that the same high level of flight safety, operational safety and reliability is ensured for your harness in the future as well. This can be downloaded from the SWING website under Product Information.

The inspection documentation should be completed and signed immediately. Failure to observe the inspection periods renders invalid the certification and warranty. A properly completed logbook with details and all flying and training will help you to comply with these periods.

SWING recommends that you send the harness for inspection at the same time as the wing.

Inspection periods

The following inspection periods apply in Germany to the CONNECT RACE LITE (check the situation in your country):

- Harnesses used by schools or commercially must be inspected every 2 years from the date of purchase.
- Harnesses for personal use must be inspected every 2 years from the date of purchase.

- The harness must be inspected after 150 hours of use (including ground handling) if this occurs before the 2 year period referred to above.

Ground handling time must be at least doubled when calculating the total hours of use because of the increased wear and tear on the harness.

Validity of inspection

In order to benefit from SWING's warranty, every inspection must be carried out by SWING or by an inspection agent authorised by SWING. The documentation and the result of the inspection must be clearly identifiable (date and place/name of the inspector) and must be entered near the harness information/certification sticker.

Personal requirements for inspection by pilot

Personal requirements for inspection by a pilot of solo gliders:

- Valid restricted pilot's licence for paragliders/hang gliders or equivalent licence.

Personal requirements for inspection on behalf of another party

- Professional training required for inspection work.
- Two years professional experience in manufacturing or servicing paragliders and hang gliders or a technically similar activity, of which 6 months within the last 24 months is with a manufacturer of aviation equipment, or by confirmation from the manufacturer.
- Adequate relevant training with the manufacturer or importer.

- Specific instruction for each equipment type that is renewed annually.

Inspection by the pilot

SWING recommends that inspection be carried out by the manufacturer/importer or by an authorised inspection agent.

What to do if damage is discovered, Repairs

If damage is discovered when the harness is being inspected which affects its airworthiness, then the harness must be returned to the manufacturer or an authorised service centre for repairs. This also applies to any damage if its effect on the system's airworthiness cannot be clearly determined.



PLEASE NOTE

Repairs should only be carried out by the manufacturer or an authorised service centre.

Warranty

The terms of the warranty offered by SWING are given in the warranty provisions on our website:

www.SWING.de/guarantee.html

Disposal

Even the best products and materials have only a limited useful life.

The materials used in a paraglider harness must be disposed of properly. Please ensure that you dispose of your SWING harness properly if it has reached the stage where its useful life is over.

If you wish, you can return it to us and we will then dispose of it for you.

06 SWING on the World Wide Web

SWING website

SWING has a comprehensive website, which provides additional information about many topics related to paragliding. SWING's website is the first port of call for SWING's worldwide following:

www.SWING.de

On SWING's website, you will find an extensive range of accessories for paragliders, useful products for pilots, as well as additional information and accessories.

You will also find links there to other services and websites:

- Product registration
- SWING accessories
- Facebook, Twitter & youtube

These websites and their content are provided for your use. The content of SWING's websites has been made available for your use on an "as is" and "as available" basis. SWING reserves the right to alter the websites at any time or to block access to them.

SWING accessories

SWING paragliding accessories, clothing and accessories can be ordered from your SWING dealer/distributor or directly from SWING.

Facebook, Twitter &



youtube

SWING is very active with the new media of Facebook, Twitter and youtube and has various websites which are updated daily on various

topics related to aviation and SWING products.

Paragliders

www.facebook.com/pages/SWING.Paragliders
<http://twitter.com/SWINGparaglider>

Speedgliders

www.facebook.com/SWINGSpeedflyingTeam
<http://twitter.com/SSTSpitfire>

SWING TV



On SWING TV, SWING puts official video footage and footage by pilots, under these

categories:

- Paragliding
- Speedflying
- Accessories
- Video footage by pilots



www.SWING-tv.de

At this point we would like to say

We hope you enjoy yourself and have many great flights with the CONNECT RACE LITE

SWING Team

07 Appendix

Addresses

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82290 Landsberied
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Fax: +49 (0) 8141 3277 - 870

Email: info@SWING.de

www.SWING.de

Paraglider recycling

SWING Flugsportgeräte GmbH

- Recycling Service -

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DHV

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Versions

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