

XCL



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PARAGLIDING HARNESS

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Introduction

We congratulate you on your purchase of a new XCL harness. You have chosen a state of the art product which is one of most comfortable paragliding harnesses available on the market today.

We thank you for placing your trust in us, and hope that comfortably seated you will get maximum enjoyment during many nice flights.

Please carefully read this user manual and use it as a guide to adjusting the harness properly for your size and shape; and to obtaining the most comfortable flight position. In addition to instructions you will find a few important suggestions and tips on how to care for, clean and use your new harness.

The XCL harness is built to comply with the high standards and demands for paragliding harnesses.

The manufacturer can not be held responsible for any accidents or injuries caused by improper usage or failure to comply with this user manual.

We wish you maximum enjoyment from your discovery of this fantastic aerial sport and of course happy landings.

Technical description

The XCL harness was developed to satisfy the demand for a modern paragliding harness, and incorporates feed-back from pilots. MAC's long experience with design and development of harnesses combined with use of the best selected materials warranty a combination of longevity, comfort during use and perfect flying characteristics.

The XCL harness is suitable for all pilots, from beginners to the more experienced pilot who prefers a slightly inclined sitting position. The seat material provides pleasant leg support and comfort. The harness is equipped with an 12. cm. foam back-protector with a plastic reinforcing plate to protect against any penetrating impact. The harness is produced from CORDURA, a first-rate abrasion resistant material. The XCL harness is supplied inclusive of speed bar system and brummel-hooks, as usually delivered on MAC paragliders

Adjusting your XCL

The XCL harness offers you several adjustment choices, making it possible for the pilot to find his ideal position according to his size and shape. The harness is adjustable using shoulder, lateral, chest and legs straps. The harness is correctly adjusted when you feel comfortable without any pressure on shoulders or back

Particular settings

The basic setting of the angle between your back and the vertical axis.

Please devote sufficient time to setting the harness correctly. Preferably hang it on a simulator or similar, and check it, spending long enough to simulate long periods of flight. This gives you the opportunity, to easily try a number of different settings at one time before undertaking your first flight.

Adjusting of lateral straps

Adjustments can be made to the lateral straps leading through the flat buckles to your back. When correctly adjusted you feel only light pressure on both back and shoulder. If the lateral straps are too loose you will feel pressure on your shoulders from the shoulder straps. By pulling on them you change the position. If you feel pressure on your back, release the lateral straps by pulling the loop on the flat buckles.

Adjusting of shoulder straps

Adjustments can be made to the shoulder straps leading through the flat buckles to your shoulders.

When correctly adjusted you feel only light pressure on both back and shoulder. If shoulder straps are too loose you will feel pressure on your back from the lateral straps. By pulling on them you change the position. If you feel pressure on your shoulders release the shoulder straps by pulling the loop on the flat buckles.



Adjusting of shoulder straps



Adjusting of front lateral straps

Adjusting of chest strap

The chest strap is secured with an automatic T buckle. This prevents any chance of the pilot falling out of the harness if he forgets to fasten the legs straps. The click must be audible. By adjustment of the chest strap the pilot determines the sensitivity of the harness. Adjustment of the distance between the main carabineers is made by pulling loops on chest strap. The harness is most sensitive to weight-shift when the chest strap is released. The shorter the distance between the main carabineers the less sensitive the harness becomes to weight shift and the effect increased. By pulling the loop on chest buckle the chest strap can be released.

Adjusting of leg straps

The leg straps are secured with automatic Cobra buckles. The click must be audible! Correctly adjusted, the leg straps control the freedom of movement of the legs, before and during take off. If the leg straps are too tight your upright position in the harness is limited and not comfortable. If they are too slack you can have trouble sitting in the harness after take off.

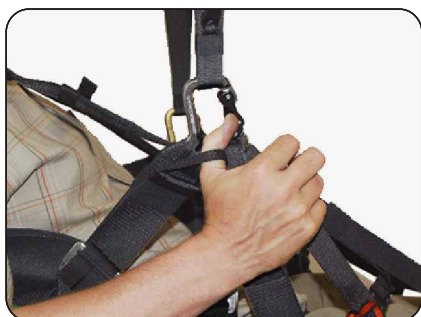
Never forget to close buckles on leg straps !

Adjusting of bottom and front lateral straps - angle of seat

The XCL harness is equipped with lateral 25mm straps leading from the main carabineers to the bottom rear and front of the seat plate. Using these straps you can change angle of the seat plate to find your preferred position. Adjustments are made with the narrower straps leading through the flat buckles. When bottom lateral straps are tightened you will feel better support to the hips. You can release them by pulling on the buckle loop. When front lateral straps are tightened you will feel better stabilization and support to the knees. You can release them by pulling on the buckle loop.

Attention! These straps are used solely to change the angle of the seat plate. They can not replace the function of the main straps. For this reason bottom lateral straps must be released when front lateral straps are tightened and opposit.

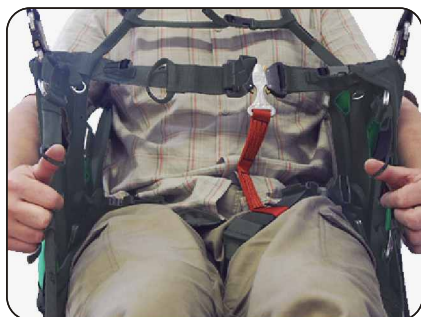
Attention! The main straps must allways be tightened.



Adjusting of lateral straps



Adjusting of bottom lateral straps



Adjusting of spreaderbar straps



Adjusting of chest strap

Adjusting of spreaderbar straps

The XCL harness is equipped with spreaderbar. Adjustments are made with the narrower strap leading through the flat buckles attached on the main carabineers. Using these straps you can change its length to preferred position. You can release them by pulling on the buckle loop. Spreaderbar is attached through rubber lines on spreaderbar and offer easy and immediate use of spreaderbar.

Ventral strap and slim chest straps

The XCL harnesses is equipped with ventral strap preventing sliding in the harness. If the ventral strap is too tight your upright position in the harness is limited and not comfortable. The XCL harnesses is equipped with slim chest strap preventing sliding out of shoulder straps.

Emergency parachute assembly

The XCL harness is compatible with most available emergency parachutes. The envelope system outer container is integrated into the harness shape. The inner container is big enough to hold a rescue canopy up to 43 m² in size. The reserve bridle is integrated into the harness, being attached to the shoulder straps and covered by a tunnel on the right side of the harness. The rescue canopy must be inserted in the original XCL inner container with attached handle and pins. You must not use an inner container from other manufacturers.

Attention: Rescue canopies from other manufacturers must be refolded following original instructions into the supplied XCL inner container without their originally provided container.

Possibilities of emergency parachute connections

1. The lines of the rescue canopy are directly connected (slipped onto) the integrated connection bridle.
2. A rescue canopy with a short bridle can be attached directly to the integrated connection bridle. Alternatively connection can be made with a carabineer with a minimum strength of 2000 kg.



Connection 2



Connection 1,2

3. Rescue canopies with an attached long "Y" bridle can be attached to the harness shoulder straps with two trapezoid karabiners. Ensure you place them only on the correct loops on the shoulder straps. See picture "Connection 3".

Assembly in outer container

1. Place the XCL inner container with rescue canopy onto the outer container as shown in the picture below. The rescue canopy bridle leads to the tunnel on the right-hand side. The line loop of the rescue canopy is placed between the seat plate and reserve and the handle leads to its correct place on the harness.

Attention! Other placements leads to malfunction of the system!

2. You need 50 cm of spare line to place through the loop nearer to the handle. Ensure the correct positioning of the handle bridle between the two lateral flaps on the right side. Step by step lace the spare line through the holes on the lateral flaps, followed by the rear and front flap. See picture below! Finally secure the loop using the pin nearest to the handle. Then lace the spare line step by step through the left lateral flap, followed by the rear and front flap. Secure this second loop with the pin furthest from the handle. The rescue system is now installed in the harness and it remains only to tuck the end of the front flap into the pocket on the rear flap.



Connection 3



Assembly in outer container



3. Correct assembly must be checked by a test release of the rescue system. If the system is working then reassemble in the same way as described.

Attention! Before each take-off check the locking pins securing the outer container.

Attention! If you are unsure of the correct assembly of your rescue system ask your dealer, or contact the MAC PARA importer in your country direct.

Speed system

The XCL harness is equipped with a speed system and includes Brummel hooks as supplied on MAC paragliders. The speed bar lines feature stoppers preventing free movement of the speed bar unless required. The first step of the speed bar should maintain its position to the front after first use and be operated by foot without hand help.

Towing

The XCL harness is excellent for towing. The release system must be connected to the same carabineers attaching the paraglider risers. To attach the release system properly, insert the release bridle in such a way that the release itself is in front of the risers, in the direction of flight.

Tandem flying

The XCL harness is not suitable for tandem flying as passenger harness.

Harness check before take off

Checking the XCL harness before take-off is crucial. Always check the following points:

- Is the rescue system handle attached properly?
- Are rescue system securing pins inserted correctly?
- Are all pockets closed properly?
- Make sure that each buckle is fastened properly. Check for correct fastening by pulling on both straps leading to the buckle.
- Make sure that the main carabineers are fastened properly

Attention! Pay special attention during winter in ice or snow. Always clear any ice or snow before fastening the buckles.

Maintenance and repairs

We suggest you have your harness checked by an authorised person once every two years. If you have your reserve repacked, ask for a harness check. The main aluminium carabineers can be used only under instructions and regulations of the carabine producer. Impacts may create undetectable cracks that, because of continual cyclic loads, could result in structural damage. Avoid dragging your harness on the ground and rocks etc. Protect from unnecessary exposure to UV rays, avoid storing when damp and avoid exposure to extreme temperatures.

Clean the harness only with lukewarm water with a light soapy solution. Use of chemical cleaners or thinners is expressly prohibited. Keep automatic buckles clean. They may be lubricated once in a year with a silicon spray.

The customer may not do any harness repairs or replacements of spare parts him/herself. This can lead to limitation of functionality, or can even endanger your life. For this reason any repair or corrections must be made directly by the manufacturer.

Technical description

Description:	paragliding harness
Max. load:	100 kg
Karabiner distance:	38-60 cm
Weight inclusive back protection (without rescue chute):	5,4 kg

Back protection: Styrofoam protection; 12 cm with plastic plate penetration protection

Rescue system: Integrated container (envelope system) under the seat plate with a lateral handle.