



independence



paragliding



Owner's manual

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Matador XC

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With the harness system Matador XC you bought one of the lightest and most functional harness, which is available on the market at present. Thank you for your confidence. Please read this instruction carefully and consider, that Fly market GmbH & Co. KG is not liable for accidents and damage, which result from disregarding of this operating instructions.

Technical description:

The Matador XC is a paragliding harness for the use in a not motorized paraglider. Certification No.: EAPR GZ-0040/14.

It can be used with or without leg cover. For an optimized size adjustment different leg covers are available which can be combined with all harness sizes.

technical datas	Small	Medium	Large
max. load	120 daN	120 daN	120 daN
harness weight	4,6 kg	4,8 kg	5,1 kg
hangpoint height incl. carabiner	50 cm	50 cm	50 cm
protector system	Mousse Bag	Mousse Bag	Mousse Bag

Overview:

- a) Rescue system container
- b) Rescue system release handle
- c) Combined chest belt / leg belt buckle
- d) Lateral chest belt / adjustment buckle
- e) Main suspension
- f) Length and inclination adjustment leg cover
- g) Leg cover buckle
- h) Shoulder belt with adjustment buckle
- i) Suspension for rescue parachute connection bridle (covered)
- j) Protector
- k) Leg belts
- l) Speedbar
- m) Speedbar rope
- n) Attachment for rubber rope speedbar
- o) Pulley for speed bar line
- p) Storage bag
- q) Cockpit with instrument deck
- r) Stirrup (only Matador XC with leg cover)



Mounting the leg cover:

The leg cover is to be connected in the first step with the two zippers on the right and rear side of the harness.

On the left side of the leg cover is a rope which is to be connected to the loop located on the left harness side.

Then the inner leg cover is to be attached with the two plastic clips on the front edge of the seatboard.

As a next step, the two recesses left and right on the leg cover are pulled over the main suspension. To do this the carabiners must be removed first and reinserted after.

The length adjustment of the inner leg cover will be attached to the D-ring, close to the right and left main suspension. Then the closing system of the leg cover is to be installed. For this, the buckles must be looped out of the closure rope and looped in again after installation.

The left side of the closure rope is threaded from the outside to the inside of the D-ring close the left main suspension.

On the right side the shorter closure rope is passed through the small O-ring close to the right main suspension and treated through the grommet of the leg cover.

The longer closure rope of the right hand side is passed through the O-ring close to the speed bar pulley and is also passed through the remaining grommet of the leg cover close to the pulley.

Closing the Matador XC leg cover:



1. Close chest / leg belt buckle



2. close right side of leg cover



3. close left side of leg cover

Adjustment possibilities:

Adjustment possibilities are existing at the shoulder belts, the chest belt, the lateral chest belts, leg straps, leg cover inclination and length.

By the versatile adjusting possibilities of the Matador XC we recommend in any case that all adjustments and settings are done in a simulator **before** the first flight to guarantee an optimal comfort.

The combined chest belt / leg straps buckles are secured against unintentional opening. To open the buckles push both buttons of the buckle at the same time.

Closing the leg cover (only Matador XC with leg cover):

The leg cover is closed with the plastic buckles (g) crosswise. On the right side are two buckles, on the left side one buckle.

It must be ensured in any case, that before closing the leg cover the leg straps and chest belt are closed first!!!

Adjust the chest belt:

If the chest belt is closed, also the leg belts are closed. The Click-Lock buckles must be closed audibly! The length of the chest belt can be adjusted and should not be tightened too much.

Adjusting the shoulder belts:

Please note that with correct adjusting the shoulder belts are felt with light pressure on the shoulders. With the shoulder belts you adjust the harness on the pilot's height, but also you adjust the seating position between upright and lying.

Adjusting the lateral chest belts:

Adjusting the lateral chest belts take place as the third step and offers on one side again the variation of the seating position. On the other hand you adjust with the lateral chest belts the most comfortable seating position. During the adjustment pay attention to the fact that the body load is distributed equal on shoulder belt and lateral chest belt.

Underneath the adjustment of the lateral chest belt there is another adjustment possibility which routes to the front of the seatboard. With this adjustment possibility the angle of the seatboard can be adjusted for a higher comfort.

Adjusting of the leg belts:

Usually the length of the leg belts is to be adjusted only once. Please pay attention that the length is not too long or too short. If the length is too long then it is quite difficult to get in the right flying position after take off. If the length is too short it is difficult to straighten up in landing position. The access to the length adjustment is via the zipper under the cover of the rescue system bridle.

Adjusting the length and inclination of the leg cover:

With the 4 plastic buckles (f) the length and inclination of the leg cover can be adjusted. Depending on the length of the legs different leg cover sizes can be used.

Attaching the speed bar:

The rope course of the speed bar is shown in the picture „inside life of leg cover“. It runs down from the risers to the pulley above the seatboard (o) and is fixed with with the elastic rope in the loops (n)

The length of the speedbar line must be adjusted in a simulator before flight!!!

2. Mounting the rescue parachute

The Matador XC has got a deployment bag with integrated release handle. Out of this reason you have to find out the right size of the deployment bag before mounting the rescue parachute.

Therefore you need to know the volume of the rescue parachute. If it is not shown in the parachute manual, you can alternatively determine the volume of the rescue parachute by checking it's weight.

As a rule of thumb multiply the weight by 3. For example: 1500 gr x 3 = 4500 ccm Volumen

You have the choice of two deployment bag sizes for the Matador XC. Only an original deployment bag is allowed to be used:

Container size Medium	from 3000 ccm to 6300 ccm
Container size Large	from 5000 ccm to 8500 ccm

2.1. Placing the rescue parachute into the innercontainer:

After you have chosen the right innercontainer size the rescue parachute is to be placed into the deployment bag. The steps of packing until you have reached the shown status below, has to be done according the rescue parachute manual!

The following guide shows the assembling of an Annular Evo. Other systems have to be build in the same way analogously. Please check if there are special remarks in your parachute manual!

Steerable systems (exsample Rogallo systems) can be installed in the Matador XC only with explicit approval of the



1. Fold the parachute like a "S" on the width of the container, pull out the Ram-Air-pockets a little bit to the side (if the parachute is equipped with Ram-Air-pockets).

2. Remove the packing cord!



Placing in deployment bag option a)

3a. Fold the canopy in small S-folds and place it in the deployment bag. Bundle the lines in 3x3 "8-folds". Do not bundle the last 60 cm of lines.

Placing in deployment bag option b)

3b. Fold the canopy in big, horizontal S-folds (stack pack). Bundle the lines in 3x3 "8-folds". Do not bundle the last 60 cm of lines.



Both options are technically equivalent and can alternatively be used.

Attention: new rubber bands must be used for line bundles and container with every re-pack!



4. Close the deployment bag with the lines. First the right flap with the upper and lower flap. Depending of the rescue system size the inner or outer grommets can be used to adjust the deployment bag volume.

5. Close the left flap. Also here you can adjust the deployment bag volume by using the inner or outer grommets. First close the middle, then the outside!

2.2. Mouting the deployment bag into the harness:



1. Connect the rescue bridle with the harness bridle by looping the bridles or with a quick link (strength > 2400 daN) and fix the connection to prevent slipping (for example by a neopren sleeve).

2. Stow the bridle in the harness container and place the deployment bag (lines facing to the bottom side) in the harness container. Loop in the packing cords.



3. Close the first container flap by using the loops with the help of the packing cords. Place the handle-deployment bag connection in between the 2 grommets.



4. Close second container flap with packing cords.



5. Close third container flap with packing cords. Put the pins through the loops.



6. Remove all packing cords! Close pin covers and place the handle in the neoprene pockets (red arrow), secure handle with a 2 daN seal threat (green arrow).

Attention:

After every installation of a rescue-system in a harness there must be a test if the opening force is between 2 and 7 daN. If harness and rescue parachute are combined the first time a compatibility check have to be performed by an authorized person!

The compatibility must be confirmed in the parachute repack log book.

Operating notes:

Operation of the protector:

The Matador XC has a type certified back protector made out of a special foam, which is sewn in a nylon fabric cover. Before every take off you have to check that the protector is completely filled up with air. Especially on low temperatures and after long disuse of the protector (if compressed during storage) it may take a little longer to be inflated completely.

During a hard landing the air inside of the protector will be compressed and the air will be deflated through the seams of the nylon fabric cover. The resulting deceleration distributes the impact energy over a longer period and protects the spine from extreme peak loads. However, even the best back protection does not guarantee the prevention of back injuries!!!

For this reason, the protector should not be used for unnecessary seat board landings. With every use the protector will be less efficient and the effect of protection less - even if no damage is visible.

If a damage is visible the protector is not to be used anymore as well as after a hard landing!! In this case the protector must be exchanged or inspected by the manufacturer.

Before use of the harness the following points should be checked:

- Outer shell of the protector and the entire belt system intact?
- Protector fully inflated?
- Rescue container and release handle properly closed and mounted?
- Acceleration system (if mounted) properly mounted and adjusted?
- All harness buckles properly closed and adjusted?
- Leg cover properly closed?

Maintenance / service life of the protector:

The protector is almost maintenance free. Before each take off the protector should be checked if in right position and fully inflated. The protector is, because of to the mounting position between rescue container and seat board, protected from mechanical damage. Visible damage (holes, cracks) must be repaired, otherwise the outer shell can break during an impact with a loss of damping.

After a hard landing with the use of the protector and if a damage is visible the protector must be repaired or exchanged by the manufacturer or an authorised dealer/workshop.

Tandem flights:

The Matador XC is only suitable as a passenger harness. As a pilots harness the Matador XC it is not suitable because the rescue system container will not fit for a tandem rescue system.

Towing:

The Matador XC is suitable for towing if the main carabiners are used as attachment points for the towing release. There are no separate attachment points to mount a towing release!

Please check the towing release manual for a correct adaption on the harness.

Behavior in particular cases

During water and strong wind landings the pilot should disconnect himself as soon as possible from the paraglider / harness after landing. For that please loosen if possible the leg belts and then open the leg and chest buckles. We generally recommend to carry a webbing cutter!

For tree landings, etc. the pilot should first secure himself against a possible crash and should wait for professional help. Contrary to above recommendations, it is possible that a different behavior as described is required. The variety of possible situations not allows an universal or general advise for the right behavior. The right behavior is a case-to-case decision in full responsibility of the pilot.

Lifetime and replacement of parts, repair advice

The Matador XC is designed for high loads and stress. High demands were set in the choice of materials. The lifetime of the harness depends on a high degree of awareness and treatment of the pilot. We recommend to inspect the harness periodically for signs of wear. If necessary damaged components must be replaced.

Damaged components may only be repaired by the manufacturer or an authorized workshop. Only original parts are to be used!

If the harness is dirty, clean it only with water. Avoid mechanical stress as brush and rub. Chemical cleaners will damage fabric and webbing.

Maintenance, inspection, periodic check:

The Matador XC is almost maintenance free but it requires a regular check for damage. Regular inspection gives you the guarantee of a full function of the harness.

Take particular care that no dirt gets into the mechanic of the buckles and that all moving parts of the buckle are running free and are not damaged. If needed you can oil the buckles a little bit.

The maintenance of the protector is described separate.

The harness must undergo at least after 24 months a complete check. The carabiner must be replaced according the carabiner manufacturer instructions, lately after 1000 hours or 5 years. Only original carabiners are to be used! The periodic check must be documented.

Storage and transport:

In order to prevent unnecessary weakening of the harness we recommend for storage and transport:

- avoid high temperatures (for example: closed car in summer)
- avoid dealing with fire, sharp objects and chemicals close the harness
- avoid unnecessary long exposure to sunlight as ultraviolet radiation destroys the molecular structure of the material
- avoid contact with salt water or acid liquids
- if the harness is not in use for a long time, especially the back protector should not be stored compressed. Store the harness in a cool, dry place.

Disposal:

The materials used in a paragliding harness require proper disposal. Please return the worn-out equipment to us. The equipment will be disposed properly by us.

Nature- and environment friendly behaviour:

Actually it's self evident, but nevertheless mentioned particularly: Please do our nature near sport in a way which do not stress nature and environment!

Please do not walk beside the marked ways, don't leave your litter, don't make unnecessary loud noises and respect the sensitive balance in the mountains.

Especially at the take-off we have to take care for the nature!