



Deimos Harness Guide



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ECO Arrow and Prone Harnesses



How to pick the correct size

The “superman” style of harness comes in two sizes: Arrow (for kids to small adults), and the Prone (for small to large adults). For the best support and enjoyment, the rider should have their knees near the bottom of the harness.

How to adjust fitting

There are three steps to adjusting these harnesses:

1. Step into the harness and **tighten the legs straps first** until snug,
2. Tighten the waist straps until snug,
3. Adjust the shoulder straps until snug or until comfortable.

How to hook in



How to hook in

All of the lanyards must connect to the zip line trolley using a steel carabiner. They may be placed altogether or in two or more carabiners (left and right side) for added safety with redundancy.

Safety Warning

Aluminum carabiners are prone to micro fractures and should never be used.

ECO Light, D-Light and Cosmic Harness



How to pick the correct size

The ECO light harness (adult size), because it has no waist padding, has a huge range of adjustment (24" to 58"); however the full padded ECO D-Light is slightly more limited in size (37" to 57"). If the waist strap has been adjusted to the smallest setting, and the harness still feels loose in the waist, the rider must select a different harness (like ECO Light). The shoulders and legs straps on ECO Light are fully adjustable and should fit everyone. The ECO Kids harness should fit most kids between the ages of five to ten (it has a huge adjustment range of 18" to 36"), but keep in mind that ECO kids has 1-1/8" (3cm) wide webbing and is not suitable for kids that weigh more than 75 lbs; in this case the ECO light harness is the best choice.

How to adjust fitting

There are four steps to adjusting the ECO Light and D-Light harnesses:

4. Step into the harness and **tighten the legs straps first** until snug,
5. Tighten the waist straps until snug,
6. Adjust the shoulder straps until snug or until comfortable.
7. Adjust the butt straps for about an inch of play or until comfortable.

How to hook in



How to hook into the front loop

The lanyard or tether to the zip line pulley must be connected to a "full strength" hard point on the harness. This point must be rated for at least 15kN. Please contact us for a detailed drawing outlining the strength of each hard point.

If possible, we suggest that a second redundant lanyard be connect to the harness (on a different hard point).



How to hook in to rear loops

The rear hard points are for positioning only.

For certification, the **rear** hard points were tested to a maximum of 10kN, and are therefore not suitable for fall arrest. The maximum length of fall allowed is 0.5 meters.

ECO Light, D-Light and Cosmic Harness



How to pick the correct size

The ECO light harness (adult size), because it has no waist padding, has a huge range of adjustment (24" to 58"); however the full padded ECO D-Light is slightly more limited in size (37" to 57"). If the waist strap has been adjusted to the smallest setting, and the harness still feels loose in the waist, the rider must select a different harness (like ECO Light). The shoulders and legs straps on ECO Light are fully adjustable and should fit everyone. The ECO Kids harness should fit most kids between the ages of five to ten (it has a huge adjustment range of 18" to 36"), but keep in mind that ECO kids has 1-1/8" (3cm) wide webbing and is not suitable for kids that weigh more than 75 lbs; in this case the ECO light harness is the best choice.

How to adjust fitting

There are four steps to adjusting the ECO Light and D-Light harnesses:

8. Step into the harness and **tighten the legs straps first** until snug,
9. Tighten the waist straps until snug,
10. Adjust the shoulder straps until snug or until comfortable.
11. Adjust the butt straps for about an inch of play or until comfortable.

How to check for wear



The hook in points will eventually wear out and the harness will need to be replaced, once the protective orange cover is worn through, and you can see the black webbing – the harness **MUST** be retired. The complete harness should be inspected daily for any problems (rips, cuts or abrasion).

Check the leg straps



Leg Strap Check

Check that the harness leg straps are in the correct position (buckle on the outside). If the leg strap is in the wrong position, the rider could be injured.

Check the Sternum Strap buckle



Sternum Strap Check

Check that webbing on the buckle is doubled back thru the same buckle (as shown). If the buckle is in the wrong position, the strap may become completely undone (while under load).

Certification

Please contact us for certification details.

Zip and Zip Light Harness



How to pick the correct size

The Zip and Zip Light harness is available in four sizes kids, small, large and extra large. The size is determined mainly from the size of the rider's waist and height. If the rider can get into the harness and the shoulders can be adjusted to a snug fit, the harness is then sized correctly.

How to adjust fitting

Once the rider steps into the Zip harness and all buckles are connected correctly, there are just three adjustments required:

1. Adjust the waist strap with about a fist size of space between the riders belly button and waist strap,
2. Adjust the shoulder straps until snug or comfortable,
3. Adjust the vest strap until snug or comfortable.

How to use the rear loop



The main purpose of this connection is as a temporary tether to the tower or as a redundant connection to the zipline cable. This loop must **NEVER** be used as the main zipline hook in point. The harness will continue to work, if this loop is used as the primary point, however the stitching will start to tear and the harness will need to be repaired or replaced.

How to check for wear

The hook in points will eventually wear out and the harness will need to be replaced: once the protective cover is worn through, and you can see the black webbing – the harness must be retired. The complete harness should be inspected daily for any problems (rips, cuts or abrasion).

Certification

Please contact us for update to date certification details.

General Information - Carabiners



Only steel carabiners should be used for ALL zipline systems. With aluminium carabiners, especially the ones with a metallic coating, the constant shock experienced at the end of each ride, can eventually cause micro cracks, resulting in total carabiner failure. Steel carabiners are more likely to stretch than crack, and therefore are the best choice.



On the Zip and Zip Light harnesses specifically, the securing pin stops the webbing from rubbing against the gate of the carabiner, greatly extending the life of the harness. For these harnesses, we recommend the Tacoma steel carabiner with triple lock gate – ANSI Z 359.1-1992 rated to 50 KN (usually in stock at Deimos).



General Information - Sternum Strap



Most of our harnesses have a sternum strap option. We offer two types of buckles on the sternum strap: plastic (left picture) or metal (right picture). This strap, when used correctly, keeps the shoulder straps in place. If your course allows riders to flip up-side-down, then the steel buckle on the sternum strap must be on the harness and adjusted to the snug position.



General Information – Cleaning & Storage

The safety of your customers depends on the condition of the harness. The harness material (nylon) degrades with exposure to sunlight, moisture, perspiration etc. The best way to clean nylon webbing is, by hand, with a little soap and water - hang to dry in a dark, and in a well-ventilated place. If it has just a little dirt on it, we suggest using a brush (no water).

Nylon webbing is susceptible to mould and mildew (if not stored correctly). Always make sure the harness is completely dry and stored in a dark well-ventilated place at room temperature and in a regular humidity environment. Avoid storing the harnesses near the sun or in any hot location (like an outdoor shed) - excessive heat can quickly dry out the webbing which may cause the harness to eventually fail.

Harness Life Time

For textile products, the maximum lifetime is **ten** years from the date of manufacture.

The lifespan of metal products is not limited.

Warning: An unusual event may require you to retire a product after only one use. This may involve the type and intensity of use, or the environment in which it is used: aggressive environments, sharp aretes, extreme temperatures, chemicals...

A harness must be retired when:

- It is over 10 years old
- It has been subjected to a major fall or load
- It fails to pass inspection
- Its reliability is in question
- Its entire history is not known (e.g. found or second-hand product)
- When it becomes obsolete due to changes in legislation, standards, technique or incompatibility with other equipment.

Limited Warranty

We warrant for **one year** from purchase date and only to the original retail buyer that our products are free from defects in material and workmanship. If the Buyer discovers a covered defect, Buyer should return the Product to the place of purchase. In the event that this is not possible, return the Product to us at the address provided. The Product will be repaired or replaced at our discretion. That is the extent of our liability under this Warranty and, upon expiration of the applicable warranty period, all such liability shall terminate.

Warranty Exclusions

We do not warranty Products against normal wear and tear, unauthorized modifications or alterations, improper use, improper maintenance, accident, misuse, negligence, damage, or if the Product is used for a purpose for which it was not designed. This Warranty gives you specific rights, and you may also have other rights which vary from state to state (or Province to Province). Except for expressly stated in this Warranty, we shall not be liable for direct, indirect, incidental, or other types of damages arising out of, or resulting from the use of Product. This Warranty is in lieu of all other warranties, express or implied, including, but not limited to, implied warranties of merchantability or fitness for a particular purpose (some states do not allow the exclusion or limitation of incidental or consequential damages or allow limitations on the duration of an implied warranty, so the above exclusions may not apply to you).

Any other questions?

Please contact your dealer or our web site at www.zip-harness.com:

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