



ARROW

User manual

WELCOME

We welcome you to our team and thank you for the trust you have placed in our ARROW harness.

We would like to share with you the excitement and passion that went into the process of creating this harness. A high-performance harness designed for pilots who want to make the most of their XC adventures and start competing.

“Give importance to the small details to make big things happen”

This is the user manual and we recommend you read it carefully.

The NIVIUK Team

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ARROW

AIM HIGH, AIM FAR

This manual provides the necessary information on the main characteristics of your new harness.

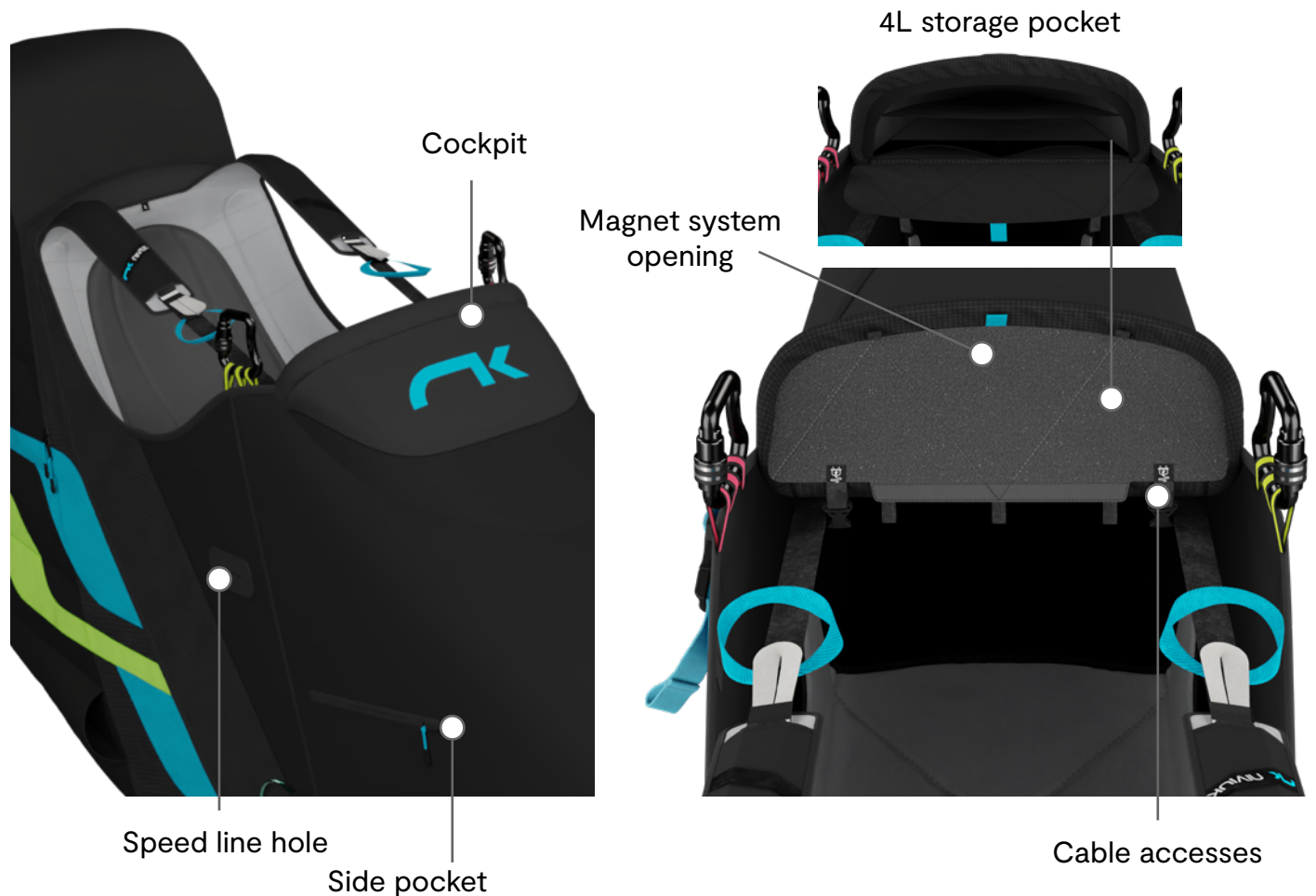
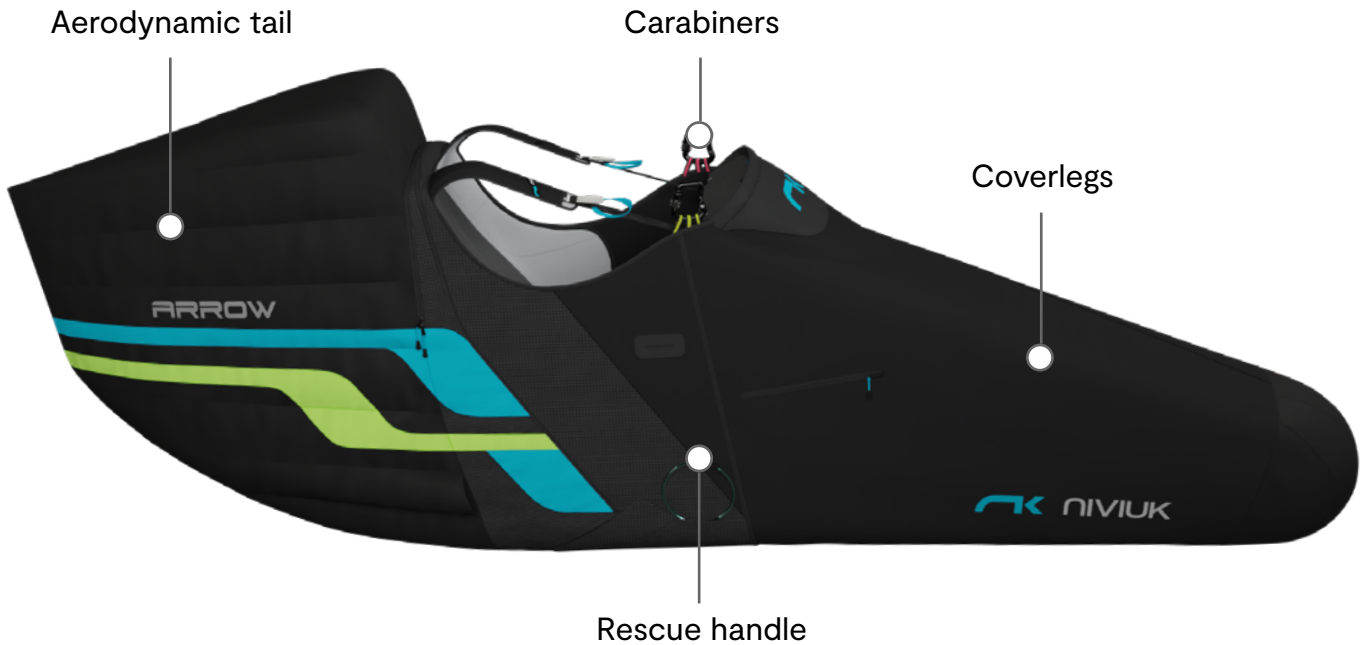
Whilst it provides information, it cannot be viewed as an instructional handbook and does not offer the training required to fly this type of harness. Training can only be undertaken at a certified paragliding school and each country has its own system of licensing. Only the aeronautical authorities of respective countries can determine pilot competence. You can get more information from our website at <https://www.niviuk.com>

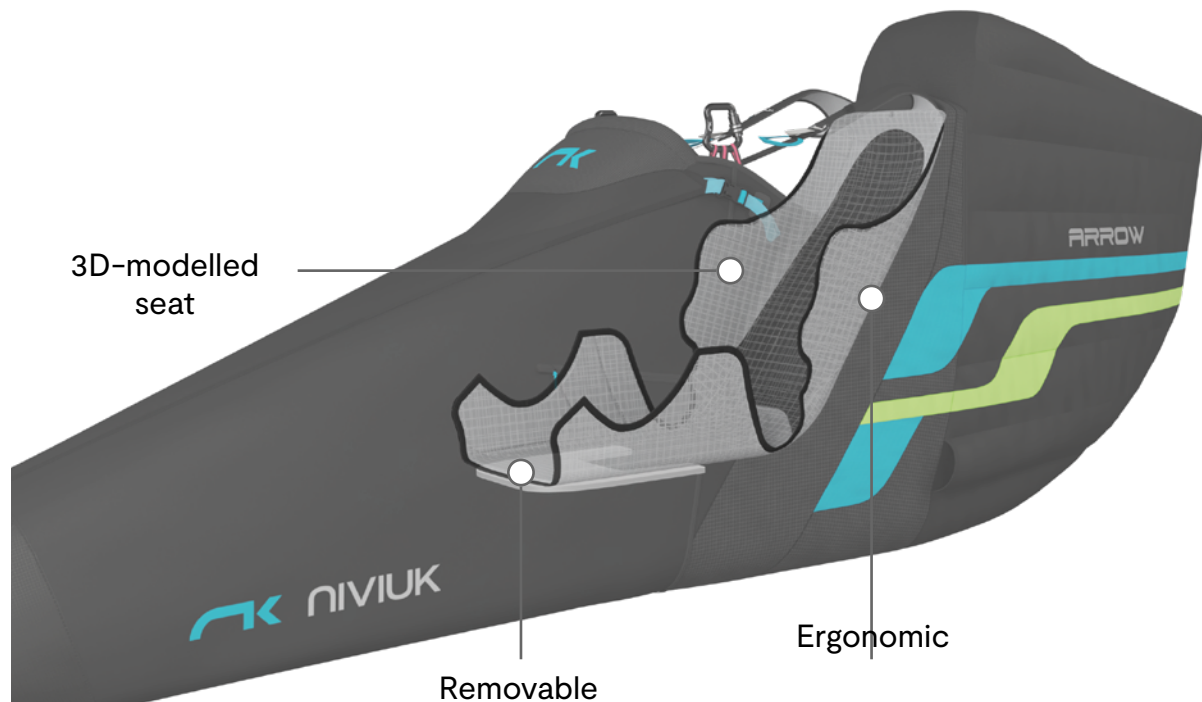
The information in this manual is provided in order to warn you against adverse flying situations and potential dangers. Equally, we would like to remind you that it is important to carefully read all the contents of your new ARROW manual.

Misuse of this equipment could lead to severe or irreversible injuries to the pilot, even death. The manufacturers and dealers cannot be held responsible for misuse of the equipment. It is the responsibility of the pilot to ensure the equipment is used correctly.

GENERAL CHARACTERISTICS

Overview of the harness

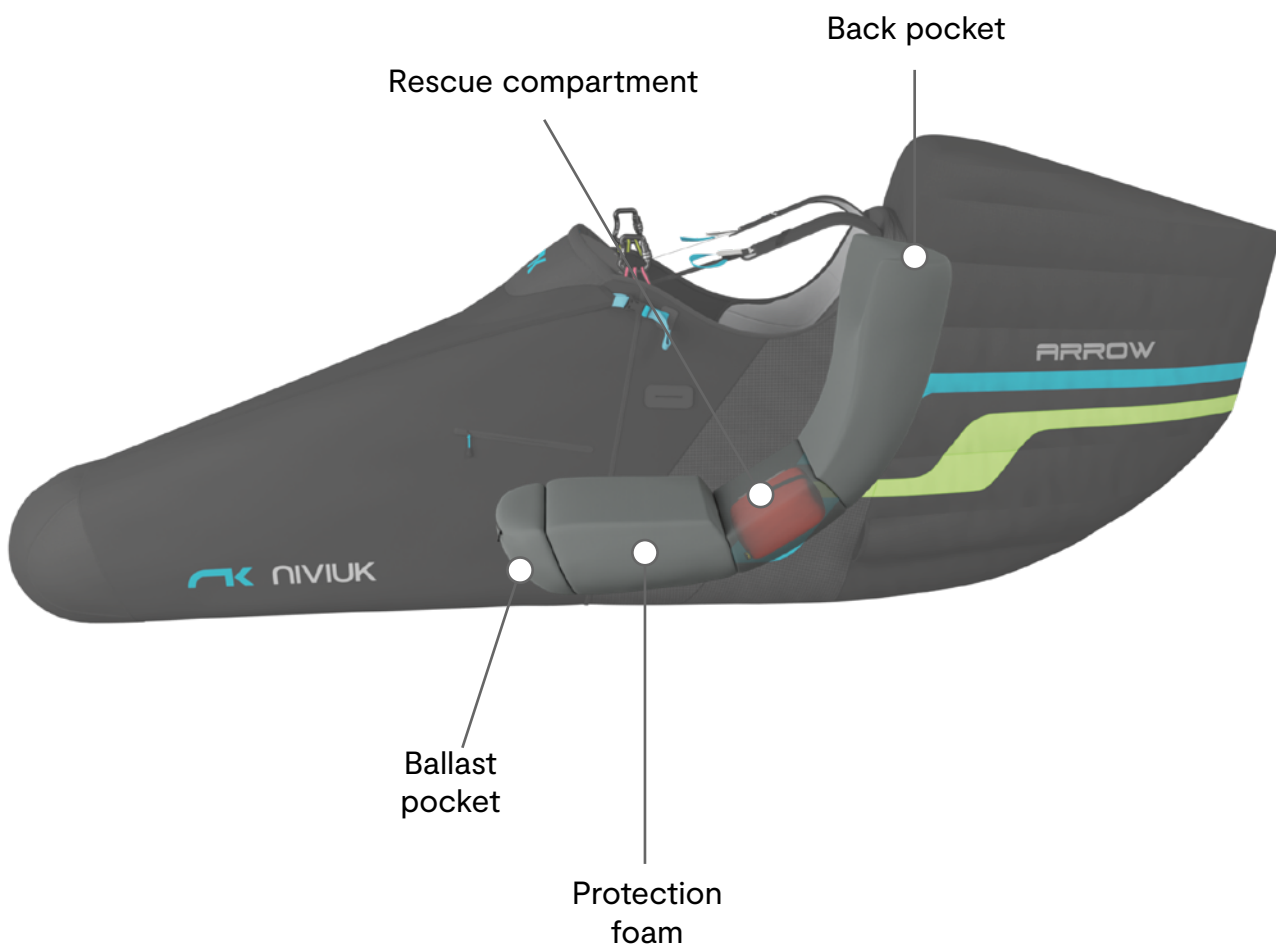




3D-modelled seat

Ergonomic

Removable seat board (250 g)



Rescue compartment

Back pocket

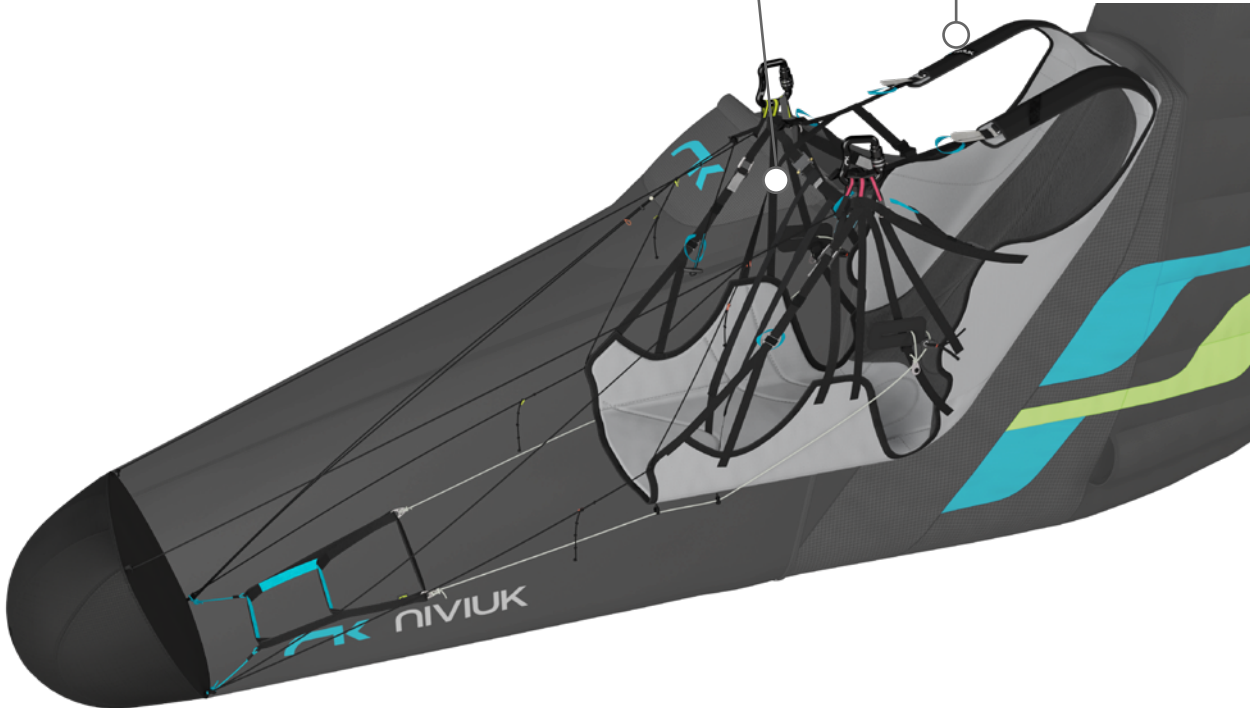
Ballast pocket

Protection foam

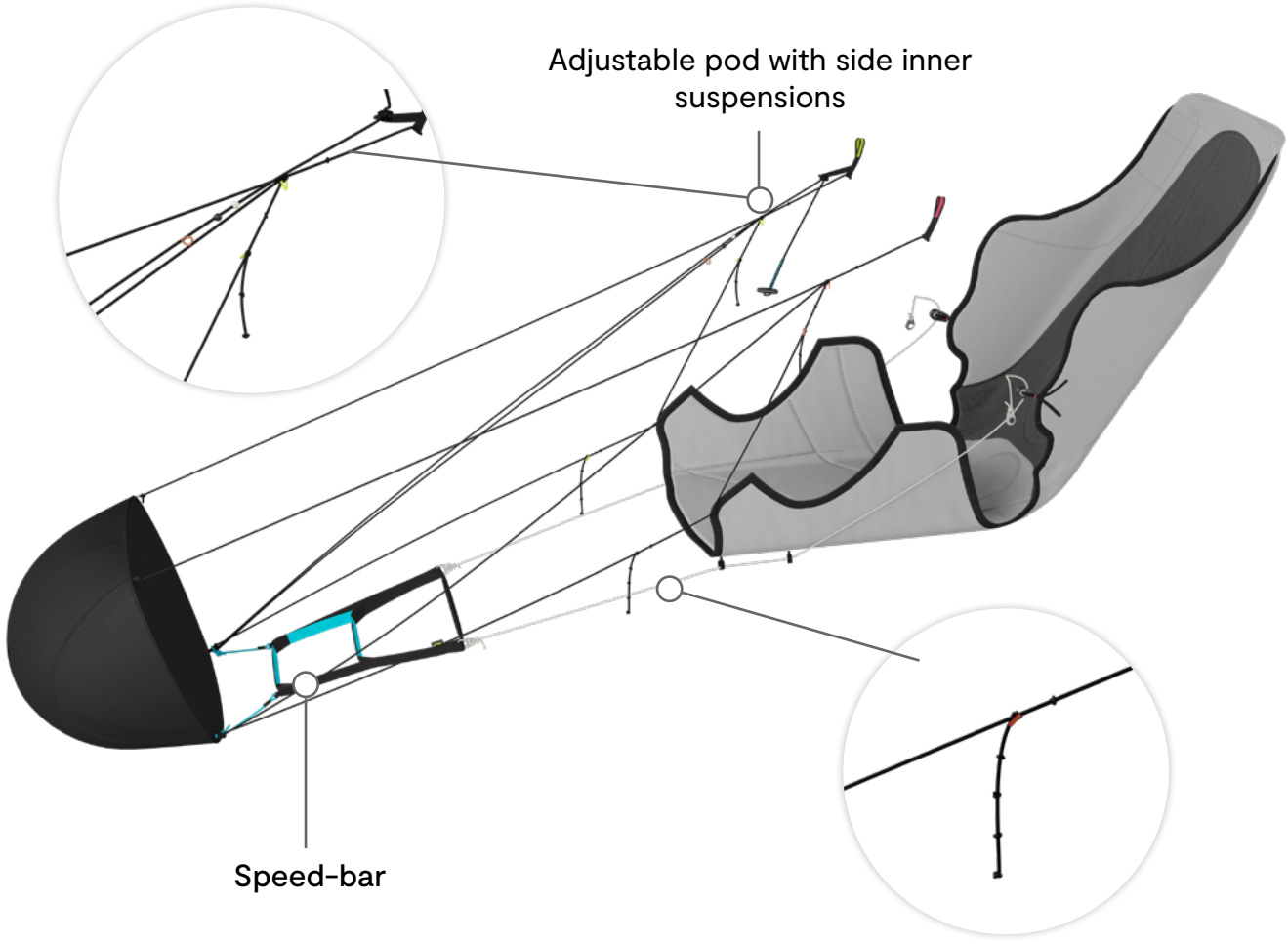
Check all the features and settings of the harness in the following link:
<https://www.youtube.com/watch?v=fi1BagcPapg>

Shoulder straps

Chest straps



Adjustable pod with side inner suspensions



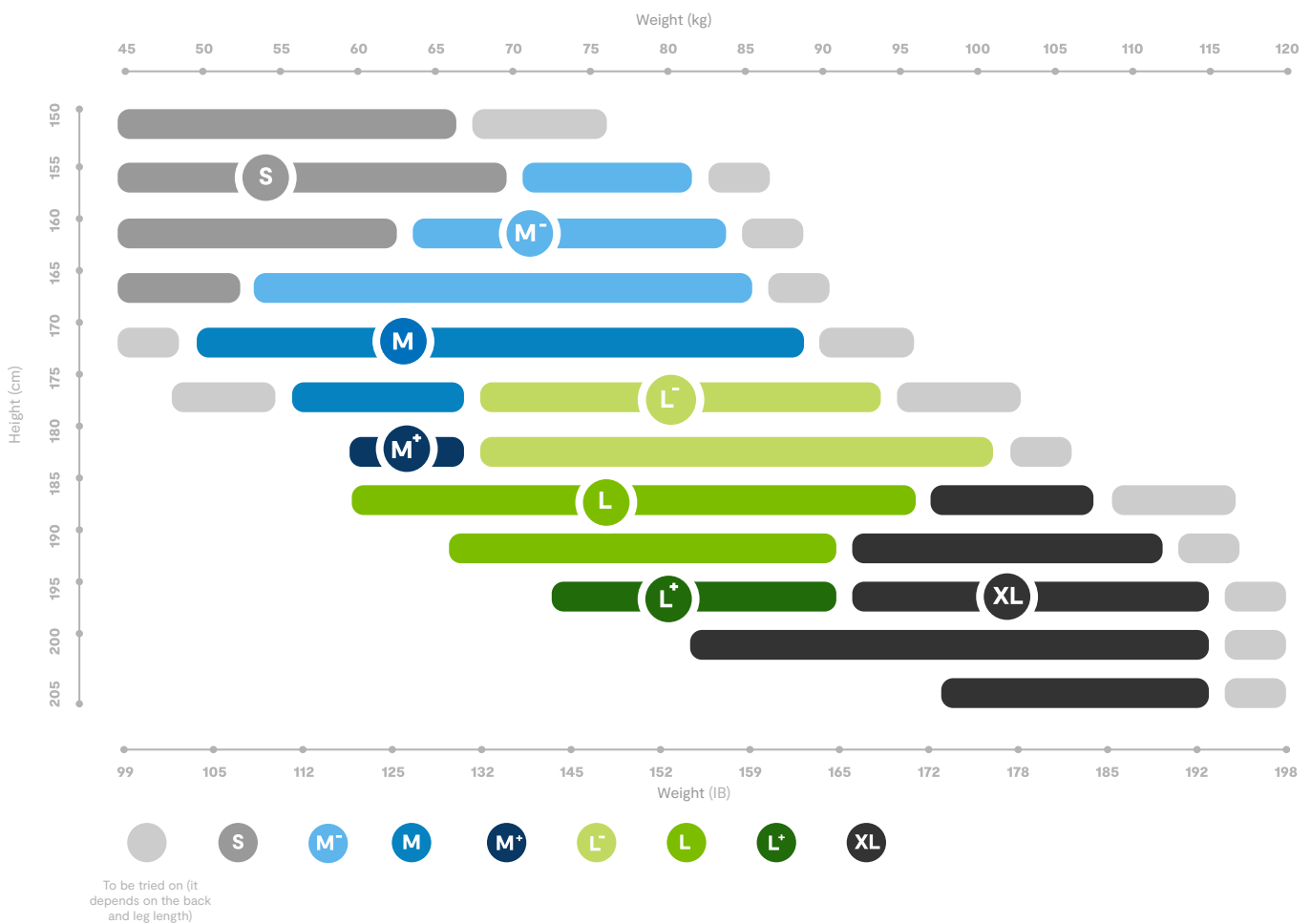
Speed-bar

Technical data

Specification table

	S	M	L	XL
WEIGHT	3,85 kg	3,95 kg	4,3 kg	4,65 kg
PILOT HEIGHT	150-170 cm	165-178 cm	175-187 cm	182-200 cm
BACK LENGTH	60 cm	60 cm	64,5 cm	69 cm
SEAT BASE (WIDTH)	31 cm	31 cm	33 cm	36 cm
SEAT BASE (LENGTH)	47 cm	47 cm	50 cm	54 cm
BALLAST VOLUME	6 L	6 L	7 L	8 L
COCKPIT VOLUME	3 L	3 L	4 L	5 L
CARABINER DISTANCE	34-43 cm	34-43 cm	36-46 cm	36-46 cm
MAX. LOAD	120 kg	120 kg	120 kg	120 kg
CERTIFICATION	EN/LTF	EN/LTF	EN/LTF	EN/LTF

Weight and height table



Target group

A high-performance harness designed for pilots who want to make the most of their everyday XC adventures and those beginning to compete. A comfortable, manoeuvrable and very stable harness, lightweight, durable and easy to use.

Maximum comfort

Excellent ergonomic design - totally comfortable. 3D modeling of the seat and back support has made it possible to design a very stable and comfortable structure so that the harness adjusts perfectly to the pilot's body. A manageable, solid and accessible harness for a wide range of pilots. The back support features ergonomic foam for improved comfort. Additionally, the seat board is removable - therefore it is possible to fly with 250 grams less to save weight in flight, while slightly narrowing the shape of the seat.



Optimised aerodynamics

The rear fairing, which optimises its aerodynamic shape, reduces the adverse pressure gradient and drag. It is a high-performance harness, where the pilot, glider and harness are in complete harmony. During flight, its inflation system with two strategically placed air inlets maintains the shape of the fairing with high internal pressure.



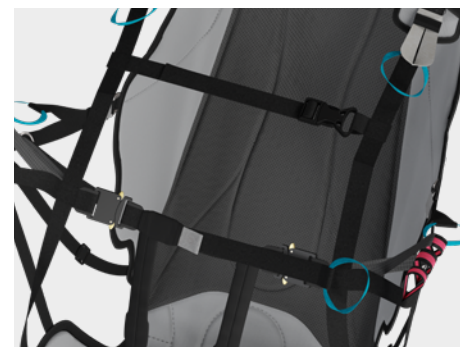
Equally light and robust

Constructed with semi-light materials for both a long service life and reduced weight. The result is a pod harness weighing only 3.95 kg (size M) but made with robust materials. With a removable and replaceable pod, its durability is exponentially increased.



Commitment to safety

To increase its safety, the Arrow features a 15 cm foam back protector, with efficient impact absorption in case of a hard landing. Thanks to the applied triangulation, the ARROW is very stable in glide and has extra speed. It includes a T-lock system to connect the chest strap to the leg loops, using two attachment points. It is easy to use and extremely safe.





Design process

The NIVIUK team has done extensive and meticulous work. Distinctive adjustments were made as a result of flight testing of the various prototypes. These were tested in all flight conditions. This intensive development of an innovative and modern harness has been made possible by the extensive experience of our team. All NIVIUK products undergo a thorough final inspection.

UNPACKING AND ASSEMBLY

Assembling the harness

Before your first flight we recommend making the initial adjustments of the harness using a hang frame.

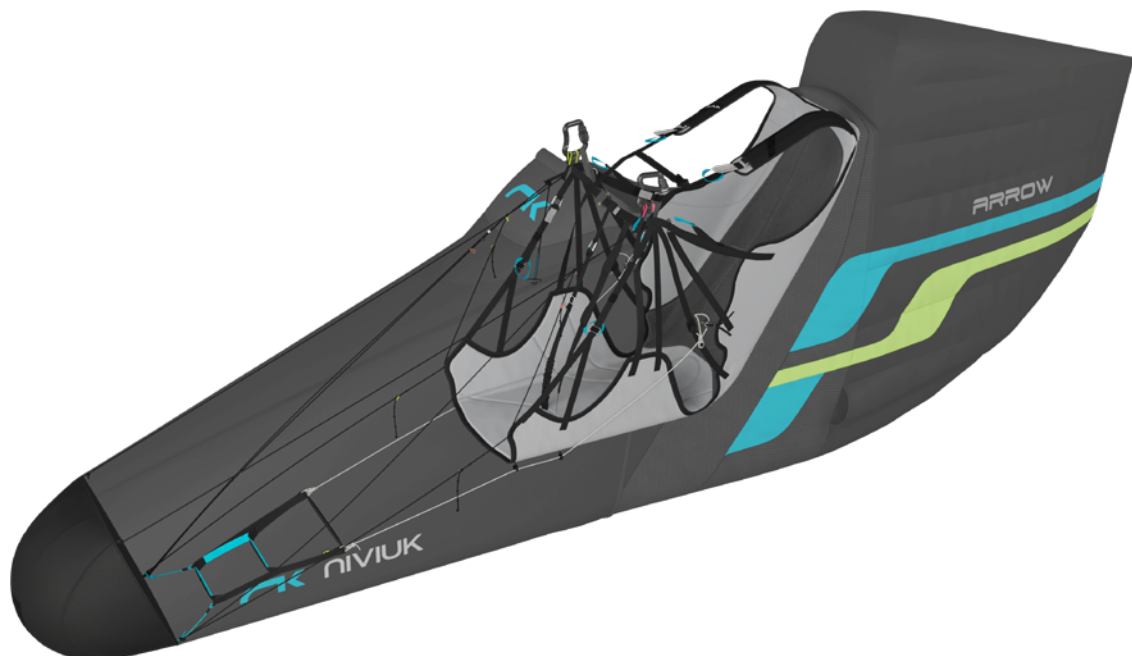
Position the harness and hang it from the carabiners. Sit in the harness and close it. Using the straps, adjust it to your individual preference.

To adjust the harness to your body shape, a number of easy-to-use adjustable straps have been incorporated into the ARROW.

Connecting the harness to the wing

The ARROW has two carabiners to connect the harness to the paraglider. The right carabiner is connected to the right riser of the wing, both of which are green. The left carabiner is therefore connected to the left riser, both of which are red.

Adjusting the harness



Pilot position

The ARROW can be adjusted to regulate the angle of the pilot. This angle can be varied by adjusting the appropriate straps.

You can also vary the angle of the back and the shoulder straps can also be adjusted.



Chest strap

The chest strap, which controls the distance between the two carabiners, can be adjusted in flight from 34 to 43 cm in size M.

For the first flight with the ARROW, we suggest that the strap is set to the middle position, and then gradually ensure that the option that best suits your needs is selected in flight. The optimal adjustment will depend on the type of wing you are flying with the ARROW. When the chest strap is tighter, the wing feels more stable. However, over-tightening the strap may enhance the “twist” effect. A wide distance between carabiners increases the turning capacity.



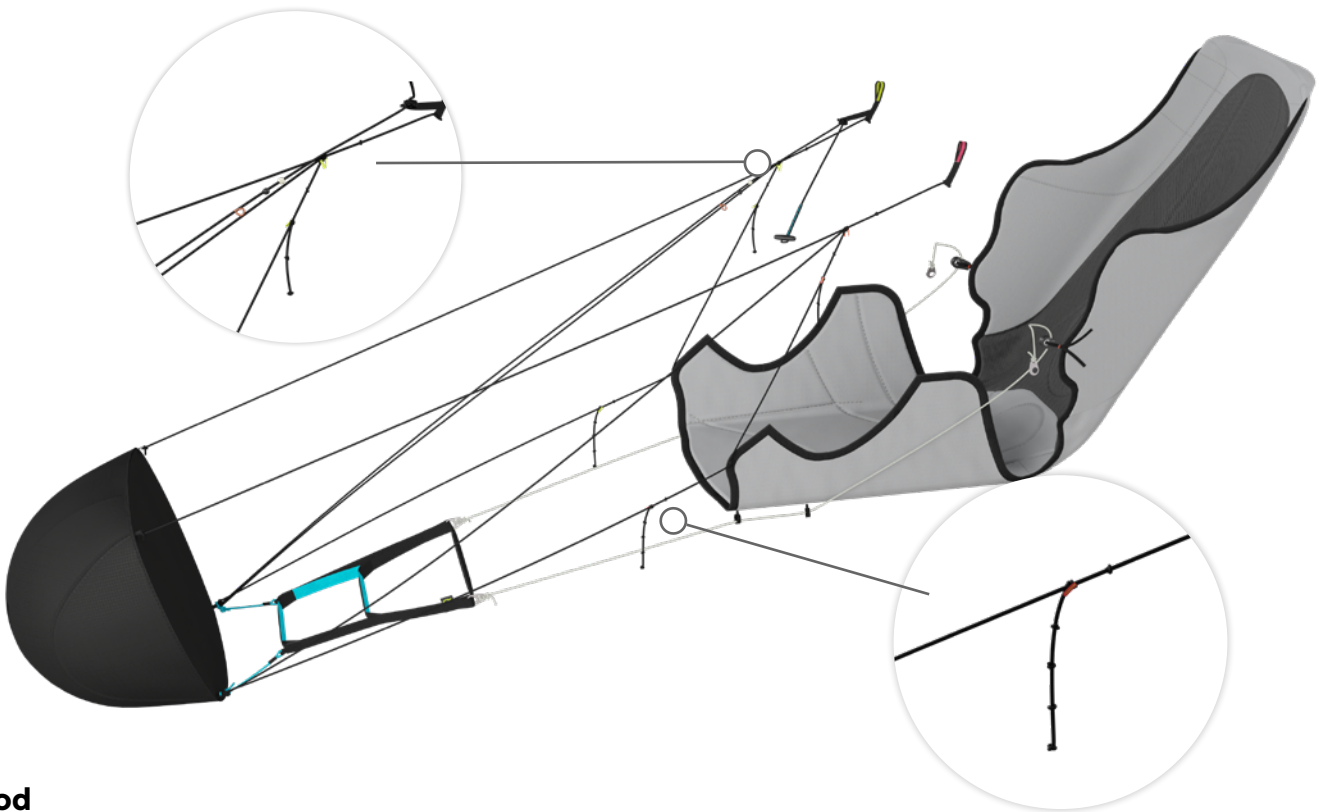
Shoulder straps

The adjustment of the shoulder straps depends on the height of the pilot. To get the optimal adjustment, sit up straight with chest strap and legs loops closed and adjust the shoulder straps symmetrically.



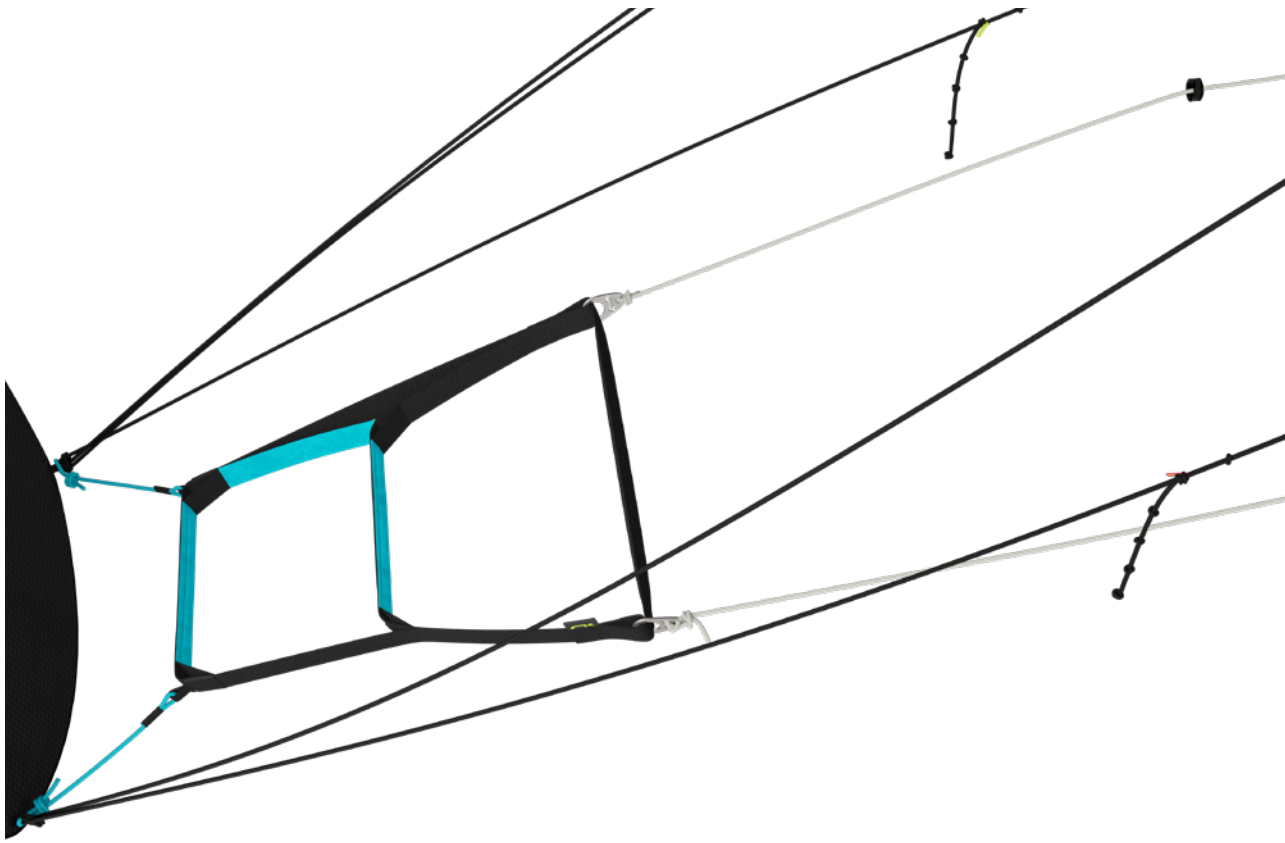
Leg loops

The leg loops must be correctly adjusted so that the pilot can get into and sit down without using their hands after take off. If the length is not correct, it is possible that problems or difficulties may occur in flight when placing the legs in the harness. If the leg loops are still too long when standing, use the adjustment straps under the chest strap so that they fit without being too tight. Make sure they are symmetrical. If it is necessary to lengthen the leg loops, first make sure that the shoulder straps are not too tight. Normally, not much adjustment is needed to the default position of the leg loops.



Pod

The pod can be adjusted to fit the size of the pilot's legs thanks to the cords situated at the side of the inside of the pod. It is essential that the pod is correctly adjusted so that the pilot is comfortable during flight. Adjust it in a hang frame before your first flight. Niviuk R+D pilots provide the following tip for getting into the pod without getting stuck: put your left leg in first, and then put your right leg in. Using the straps, adjust it to your individual preference.



Speed-bar

The ARROW comes fitted with a speed-bar. It is important to adjust the harness before adjusting the speed-bar, as the length of the speed-bar depends on the positioning of the legs.

Use a hang frame to adjust the speed-bar before your initial flight.

Sit the harness and adopt your flying position to adjust the cords symmetrically on both sides. If the cords are set too short, they can cause constant tension on the speed system, which could be dangerous. Please remember that it is always preferable for the speed-bar to be set longer than shorter.

Installing the parachute

You can find a tutorial on correctly installing parachutes in our harnesses on our Youtube channel:

<https://www.youtube.com/watch?v=pSzJCEJwcyM>

**Please note: the parachute must be fitted inside the container. If it fits too loosely in the inner container there is a possibility that it may twist or that the lines or webbing may not be positioned correctly, which may make it difficult or impossible to deploy the parachute.*

TAKE CARE: Your safety depends on the correct installation of the parachute. This process must be carried out with care and we therefore recommend that it is performed by qualified personnel.



Replacing the pod

To ensure the durability of the harness, the ARROW is fitted with a removeable pod. When you need to replace it, use the zip located on the sides, below the carabiners.

You will have to set up and adjust the pod again before your first flight with it. To do this, see the section on “Adjusting the harness”.

You will also find a tutorial on how to install your pod correctly on our Youtube channel at:

<https://youtu.be/UhyJxCN-am0>

Optional accessories

Ballast
Camelbak
Drink tube
Pee tube

IN FLIGHT

Pre-flight checks

For maximum safety, check your equipment thoroughly, using the same sequence, before every flight.

Check the following:

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

All buckles, straps and zips are connected/closed. The buckles should snap into place when you close them (a gentle tug on them verifies this). Be especially careful in snowy or sandy areas.

The glider is correctly connected to the harness and both carabiners are secured with their locking mechanisms closed.

All pockets are properly closed and items hanging from the harness are secured/attached.

Check again that you have secured the chest strap and leg loops before launch.

The parachute container is properly closed.

The deployment handle is fully inserted into the pockets.



Launch

Make sure the weather conditions are suitable for your skill and experience level. If you make the decision to fly, put on the harness and make sure all buckles are closed correctly and your legs are through the leg loops. Your life depends on it.

For your safety, before launching always repeat the same sequence of your pre-flight check.

CAUTION: stay away from mountain relief if you have to use your hands to get into the harness. You should always have your hands on the brakes when near terrain.

If you need to use your hands to get into the harness, try adjusting the harness using a hang frame.

Landing

Before landing, slide your legs forward in the harness to assume a standing position. Never land whilst still in the seated position as this may cause a back injury. Standing up before landing is an active safety decision and is much more effective than relying on the passive system of the back protector. It is not necessary to adjust the harness before landing. Simply straighten your legs and get into a standing position and prepare to land.

Flying above water or landing in water

TAKE CARE: flying above water during a cross-country flight or SIV course exposes the pilot to the risk of a water landing. This situation is very dangerous and flying with a life jacket is essential during an SIV course. We recommend avoiding this situation whenever possible.

After a water landing, the foam back protector floats and there is a risk of the pilot being pushed underwater. The pilot should wear a life jacket to avoid this occurrence. Before hitting the water, it is recommended to undo the buckles (without compromising safety) and to have enough time to get out of the harness quickly to avoid drowning. This way you will be able to reach the safety boat more easily.

If the harness gets wet due to falling into the water, the protectors and the harness must be removed from the water to dry completely.

The parachute must also be removed to dry completely. Once dry, it has to be packed correctly and installed in the harness again. See the section on "Installing the parachute".

Do not store your equipment if it is still wet or damp – wait for it to dry completely.

Rucksack and packing

In the following link you can discover all the details of the harness and see the best way to pack it in your backpack to transport it with your glider and flying equipment:

<https://www.youtube.com/watch?v=ZehlaAGhCQ8>

TYPES OF FLYING

Winch flying

The ARROW is suitable for winch launching.

The winch release is attached by means of the main carabiners on the risers, where the wing is attached.

Tandem

The ARROW is not recommended for tandem operation.

Other

The ARROW is not designed or recommended for aerobatic or acro flying.

We consider extreme or acrobatic flights to be any form of piloting different than standard flights. Learning aerobatic/acrobatic manoeuvres should be conducted under the supervision of qualified instructors within a school environment and over water with all safety/rescue elements in place.



CARE AND MAINTENANCE

Maintenance

The materials used in the ARROW have been carefully selected to ensure maximum durability. We recommend checking the harness after every impact, bad launch or landing, and if it shows signs of damage or heavy wear.

We recommend the harness is fully inspected in an authorised workshop every two years and the carabiners are also changed every two years.

To prevent wear or damage to the harness, it is important to avoid dragging the harness on the ground, over stones or abrasive surfaces. Do not expose it unnecessarily to UV radiation (sun light). Whenever possible, keep the harness away from moisture and heat. Store all your paragliding equipment in a cool, dry place, and never store it when it is wet or damp.

Keep your harness as clean as possible by regularly wiping off dirt with a plastic brush and/or a damp cloth. If the harness is very dirty, clean it with water and mild soap. Allow it to dry naturally in a well-ventilated area without direct sun light.

Storage

Keep your equipment in the in a cool, dry place away from solvents, fuels or oils.

Do not leave the gear inside a car boot, as cars left in the sun can become very hot. A rucksack can reach temperatures up to 60°C.

Weight should not be laid on top of the equipment.

When storing the harness in a backpack, care must be taken that it does not become deformed. Never store it when still damp. Never use detergents to clean it. Dry the harness in a well-ventilated area. If your parachute gets wet (e.g. if you fall into water) it must be removed from the harness, dried and repacked before being put back into the container.

It is recommended that any repair and/or replacement of the harness components should only be carried out by the manufacturer or authorised personnel. Only the manufacturer and authorised professionals use the materials and techniques that will ensure the correct functionality of the harness, according to its certification.

Checks and inspections

In addition to daily and pre-flight checks, the ARROW must be thoroughly inspected at every parachute repack, which is normally once a year. Additional checks should be carried out after every impact, bad launch or landing, or in case of signs of damage or wear.

Every two years or 100 flying hours (whichever comes first), the harness must be inspected in an authorised workshop.

If in doubt, contact a professional. These are the required inspections:

Check webbing and buckles for damage, especially in areas that are not easily visible, such as the inside of attachment point webbing, where the carabiner rests. All seams must be intact and any damage must be repaired immediately.

The main aluminium carabiners must be replaced every two years or 500 flying hours or if they have any signs of damage. Impacts can create undetectable damage that can result in structural failure under continuous loading.



Repairs

Repairs to your ARROW may only be carried out by the manufacturer or qualified and authorised personnel. This ensures that the most appropriate materials and correct repair techniques are applied.

If you are not qualified to do so, do not attempt to repair the harness yourself.

Niviuk Service

Niviuk Service is our official workshop offering a quality service, based on the care and maintenance of flight equipment. Thanks to the knowledge, technologies and procedures we have acquired over the years, we can repair any flying equipment.

We want to guarantee the safety and durability of your new product, so our official workshop is the perfect place to have it serviced and/or repaired.

Every two years, your equipment should be checked by a professional.

For more information, please consult the Niviuk Service section of our web site at www.niviuk.com

Product registration

You can register your new product on the Niviuk website in the MyNiviuk section and enjoy its benefits.

SAFETY AND RESPONSIBILITY

It is well known that free-flying with a paraglider is considered a high-risk sport, where safety depends on the person who is practicing it.

Incorrect use of this equipment may cause severe, life-changing injuries to the pilot, or even death. Manufacturers and dealers cannot be held responsible for your decisions, actions or accidents that may result from participating in this sport.

You must not use this equipment if you have not been properly trained to use it. Do not take advice or accept any informal training from anyone who is not properly qualified as a flight instructor.

GUARANTEE

The equipment and components are covered by a 2-year warranty against any manufacturing defect.

The warranty does not cover misuse of the equipment.

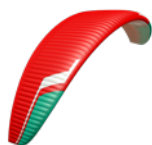
Any modification of the harness or its components invalidates the guarantee and its certification.

If you notice any defects in your harness, please contact Niviuk immediately for a more thorough inspection.

SPECIFICATIONS

Compatibility

RECOMMENDED



ARTIK 6



ICEPEAK
X-ONE

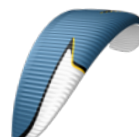


PEAK 5

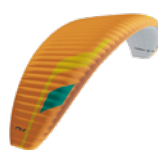
COMPATIBLE



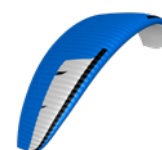
HOOK 6



IKUMA 2



HOOK 6 P



IKUMA 2 P

Certification

You will find the certification certificates on the product page at www.niviuk.com/en/arrow

AIR TURQUOISE SA | PARA-TEST.COM

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Test laboratory for paragliders, paraglider harnesses
and paraglider reserve parachutes



Paragliding Harness - EN

Inspection number :	PH_317.2020
Manufacturer :	Niviuk Gliders
Model and size :	Arrow L
Maximum pilot weight [kg] :	120
Integrated container for rescue system:	No
If Yes. Volume of the container [cm ³] :	2'000 min 10'000 max
Serial number:	-----
Production date (year / month) :	-----

Harness protector (impact pad)

Impact pad type:	Foam
Impact pad integrated:	Yes
Impact pad number:	MISC_192.2021
If not integrated : Manufacturer	Serial number:
Production date (year / month) :	-----

Warning : Read the operating manual before using this equipment!

A sample has been tested and certifies its conformity with the following standard: **EN1651:2018, EN12491:2015**. This model corresponds with the tested sample and its airworthiness.