

# MANUAL

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**VERSION 1/2016** ©

## Verification of Checks and repairs

BATIS	
Serial number:	
First check by ICARO / date:	Name/ Stamp

Check (C) Repair (R)	Which repair/ Check? Check valid until?	Performed by/ date

Check (C) Repair (R)	Which repair/ Check? Check valid until?	Performed by/ date

Check (C) Repair (R)	Which repair/ Check? Check valid until?	Performed by/ date

Check (C) Repair (R)	Which repair/ Check? Check valid until?	Performed by/ date

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## Congratulations on buying your BATIS harness and welcome the family

## of ICARO - pilots!

# Before you get to know your system please read the manual, there is important information inside.

This manual gives you information on the entire specific and general characteristics of the harness.

All technical data and instructions in this manual were drawn up with great care. ICARO Paragliders cannot be made responsible for any possible errors in this manual.

Should you decide to sell this harness at a later date, please pass on this manual to the new owner.

No guarantee of any kind can be made against accidents, injury, equipment failure, and/or death. It is assumed that the pilot is in possession of the necessary qualifications and provisions of any relevant laws are observed.

The use of this harness is entirely at your own risk.

Every pilot bears the responsibility of his/her own safety. The manufacturer or distributor assumes no responsibility for accidents occurring while using it.

Do not fly unless you are personally willing to assume all risks inherent in the sport of paragliding and all responsibility for any property damage, injury, or death, which may result from use of this sport.

Your harness is made with great care and state of the art, tested according European Standards EN 1651:1999<sup>1</sup>, and Notification of the Federal Aviation Administration of Germany <sup>2</sup> Is pattern tested as harness with foamed rubber protector is suitable for training and tandem flying.

#### It is strictly prohibited to fly the harness

- with damaged carbines, belts, buckles or protector
- outside the specified weight range
- in aerobatics
- This product has been designed exclusively for paragliding. Any other activity such as skydiving or base jumping is absolutely forbidden.

<sup>&</sup>lt;sup>1</sup> Harnesses – Requirements and test methods

<sup>&</sup>lt;sup>2</sup> "Directives about airworthiness for hang- and paragliders (LTF NfL II 91/09)".

All technical data and instructions in this manual were drawn up with great care. ICARO Paragliders cannot be made responsible for any possible errors in this manual.

Important information in this manual is written in *fat cursive writing*.

Any important changes to this manual will be published in our home page (<u>www.icaro-paragliders.de</u>).

Should you decide to sell this harness at a later date, please pass on this manual to the new owner.

Each alteration is dangerous and reactions are not predictable. Your harness will lose its pattern test result and guarantee.

The manufacturer or distributor assumes no responsibility for accidents occurring while using it.

Every pilot must ensure that the harness is properly checked at regular intervals.

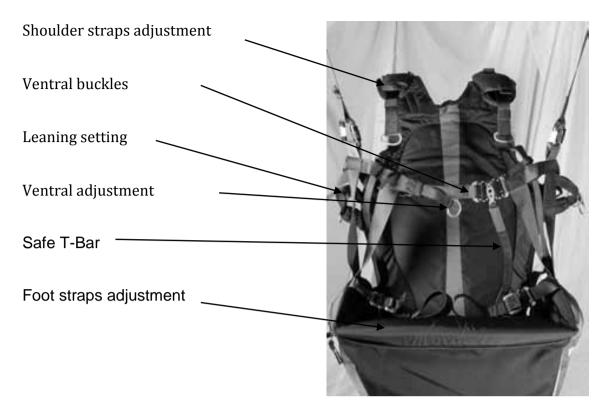
## **Environmental aspects:**

The materials of which a harness is made require a special waste disposal. So please send disused ICARO - harnesses back to us. We will care about a professional waste disposal without costing for you.

Please do our nature-near sport in a way which does not stress nature and environment!

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

## Especially at the launch site consideration is needed!



## I. To get to know your BATIS

Allowed for training	yes
Allowed /certified for aerobatics	yes / yes
Allowed /certified for aerobatics	no/ no
Allowed /certified for towing	no/ no
Allowed /certified for flying with motor drive	no/ no

Technical data	
Pilot size (cm)	160 - 190
Pilot weight (kg)	50 - 100
Size	one size
Karabiner highs (cm)	44
Seat length (cm)	47
Harness weight (kg)	3,19
Protektor	Airbag
Adjustment of the rescue system	back
Check Intervall	2 years

With the BATIS you are equipped with a tandem harness passenger designed with an Airbag protection and an Anti Balance System which enables a good dampening and flight stability.

#### Position setting

The harness can be adjusted in many ways to the individual needs and likings of each pilot. We advise each pilot to take time to get acquainted to the harness.

This will reward the pilot with an excellent sitting comfort. To carry out the adjustments we advise to hang the harness in a simulator.

#### Leaning angle setting

Pull up to release. Set the angle of leaning by tightening the snapper (towards a more vertical position) or the black webbing (towards a more horizontal position),

#### Shoulder straps adjustment

Tighten the shoulder straps by pulling the finger loop down.

When adopting a reclined flying posture, the shoulder straps must enhance in-flight comfort levels by supporting the upper back. The shoulder straps support, greatly helps the comfort level.

It should be set precisely. You must find the correct tension between the side and shoulder straps adjustments.

#### Adjustment of leg straps

Pull the leg belts tight before starting, but make sure they do not cut in or squeeze. Due to a special design the leg belts will not hinder your running at the start.

Because they are tied tight, the front of the seat is lifted up and helps you getting into the harness. By slipping back in the gear, the leg belts loosen a bit after start.

## Adjustment of chest straps

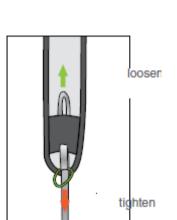
The adjustment of the harness chest strap controls the distance between karabiners and affects the handling and stability of the glider.

Excessive tightening the chest strap increases stability but also the risk of twists following glider collapse, and it also increases the frequency of getting collapses due to poor feedback from the glider.

The risk of twisting is also strongly affected by the seating position of pilot. Flying in a laid back (reclined) position makes it much more difficult to react in time to prevent riser twisting.

With the chest strap in a more closed position the glider also has more tendency to maintain a stable spiral, lengthening of the chest strap gives more feedback from the glider but decreases stability.

ICARO paragliders recommends 38 – 46 cm.



tighten

loosen

## II. Flying with the BATIS

# It is important to perform a preflight check before taking off. Please give the following points your special attention.

- Check the harness and carabiners completeness.
- Check that the (optional) front parachute pocket is correctly closed.
- Check that your harness adjustments have not changed.
- Check the connection risers / harness as well as the self-locking karabiners (locked and secured).
- Make certain to close all buckles, pockets and especially the Air-Bag zipper with its locking mechanism.
- Double check that all buckles are fully locked and secured by pulling firmly on them. Check that no line, tab or cloth is stuck / jammed in the buckles.

Please set the distance between the two karabiners according to the aerology and to the wing manufacturer's recommendations. The average distance / spacing for most gliders from the center of the right side to the center of the left side where the risers connect, is between 36 cm and 45 cm.

Tightening the chest strap provides more stability but less harness piloting efficiency. It increases the risk of riser twisting. On the contrary, loosening the strap provides more efficiency but can be dangerous in turbulent aerology while increasing the risk of falling towards the collapsed side of your glider and without being able to efficiently counteract the situation.

Stand up inside the harness and adopt an upright position in order to run to dissipate horizontal speed. Do not land whilst in the seated position, this could be dangerous.

## III. Care and repair Instructions

## **Care Instructions**

To maintain your harness in good condition, please ensure that the harness does not get dragged along the ground, the karabiner does not get hit against rocks and avoid over exposure to sunlight, heat or humidity.

If you wish to clean your harness it is best to use warm water and a soft sponge.

Store your harness in a dry and dark place, ideally between 5° and 30° Celsius. Do not store it near chemicals or petrol.

If you will not fly for longer period, take it out of its pack.

Avoid storing your harness for days at a time in a hot car.

If the harness has become wet, lay it out so that air can get to all areas of the fabric, also your second chance.

It may take several days for your harness and your rescue system to dry out completely especially the lines of the rescue system, which take longer than the fabric. Do not fold and store your rescue system prematurely if it not completely dry. Mildew may damage your harness and your rescue system.

#### Repairs

The seal of approval can only be preserved if original parts are used. If you discover any damaged parts to the harness which might impede deployment, pleases end it back to the manufacturer to be repaired.

Repairs can only be carried out by the manufacturer or from the manufacturer authorized persons.

The aluminum karabiners should be changed every two years at the latest as the aluminum might get micro cracks from impacts during use.

#### Inspection

After 24 months, it is important to have your harness inspected by a trained ICARO technician.

## Without regular certified inspections, your harness will lose its certification and guarantee.

Only an authorized technician who has been trained by ICARO paragliders is authorized to sign and date the harness certification label and sign the manual.

## IV. Terms of guarantee

ICARO paragliders guarantees 24 month for the proper processing, an operation within the allowable limits of proper operation and the fulfillment of the eligibility criteria of harness equipment at the time of first delivery by ICARO paragliders.

# Guarantee is only valid for ICARO products with LTF/ EN certification.

## What is covered by the guarantee?

Provided that ICARO paragliders accept the fault the guarantee contains all necessary spare parts related to the replacement or repair of defective parts and working time.

ICARO paragliders accept no freight costs (outbound and return transportation).

## What are the conditions of the guarantee?

Provided that ICARO paragliders accept the fault the guarantee contains all necessary spare parts related to the replacement or repair of defective parts and working time.

- ICARO paragliders needs to be informed immediately after the discovery of a defect and the defective product must be sent to us for testing.
- The harness was used in normal circumstances and maintained according to the instructions. This includes in particular the careful drying, cleaning and storage.

- The harness was used only within the applicable guidelines and all rules have been complied with all times.
- All flights must be accounted for within the flight book.
- There were only original spare parts used and checks, exchange and / or repairs were conducted by an authorized dealer or by ICARO Paragliders company / person and properly documented.
- A fully and correctly completed guarantee card must be sent at least 6 weeks after buying the glider to ICARO paragliders commercial. Alternatively can this be sent via the appropriate online form on <u>www.icaro-paragliders.com</u>.

#### What is excluded from guarantee?

- Harnesses
  - that are used for training purposes, Acro or other official competitions,
  - which were involved in an accident,
  - which have been changed by yourself,
  - that were not purchased from an authorized dealer / flight school,
  - where the required inspection intervals were not met and the verification of the harness was not conducted by a ICARO paragliders authorized operation / person
- Damage
  - which has occurred due to improper treatment (i.e. storage in humidity, heat or direct sunlight)
  - caused by solvents, salt water, insects, sun, sand, humidity or "debagjumps".
  - caused by force majeure.
  - caused by the paramotor (Oil, fuel, damage in cause of the prop)
- Parts that need to be replaced due to normal wear and tear,
- Discoloration of the cloth material used,

In case of a concluded claim the period of guarantee carries on. The period of guarantee and the connected claim are not prolongated and are only valid until the original date of expiry. The freight costs (transport to and from) are not paid by ICARO paragliders.

## V. Annex

Please fill in the guarantee card which you find on our homepage <u>www.icaro-paragliders,com</u> and send it to us.

Check shee	t for harnesses			
Client (Name, A	ddress):			
Type / size / yea	ar of construction :	Serial numb	ber:	
Certification nur	nber:	Date of last	Date of last inspection:	
		Memos	yes	no
Seat strap	Visible damages?			
system	Areas of abrasion?			
Seetboard	Visible damages?			
Seat board	Positioning of the straps ok?			
	Visible damages?			
Straps	Course of the straps?			
•	Seams ok?			
	Visible damages?			
Buckles and carbines	Condition (closing properties,			
	operation) ok?			
	main carbines (condition, age)			
	Operativeness ok?			
Ducto stans	Visible damages?			
Protectors	Seams ok?			

FIDIECIDIS	Seams ok?		
Airbog /	Valve ok?		
Airbag -/ Foamed material	Tightness airbag/ foam protector sheeting?		
material	Conditions of any reinforcements ok?		
	Visible damages?		
Speed her	Fixing rubber ok??		
Speed bar	Return pulleys ok?		
	Lines ok?		
	Visible damages?		
	Identification plate ok?		
Rescue system	V-lines		
	Handle fitted and connected?		
	Container properly closed?		
Dealmaak	Visible damages?		
Backpack	Zip ok?		
(reversible harnesses)	Buckles ok?		
namesses)	Seams ok?		

Compatibility check effected?	Additional repairs carried out? Which?
Type label affixed?	
Inspection stamp affixed?	

Overall result	
	Next inspection:
As new	· · · · · · · · · · · · · · · · · · ·
Very good	Next inspection when using
Used	the harness commercial:
Much used	
certification only for one year	
not airworthy	Date, name and signature of the checker

**Dispatch protocol / Delivery content** 

Handle	
Seat Board	
Carbineers	
Manual	

.....

Date

Signature

.....