# GTD light 2



**Woody**Valley

Manual Edition 1.0 - 05.2020





# **Woody**Valley

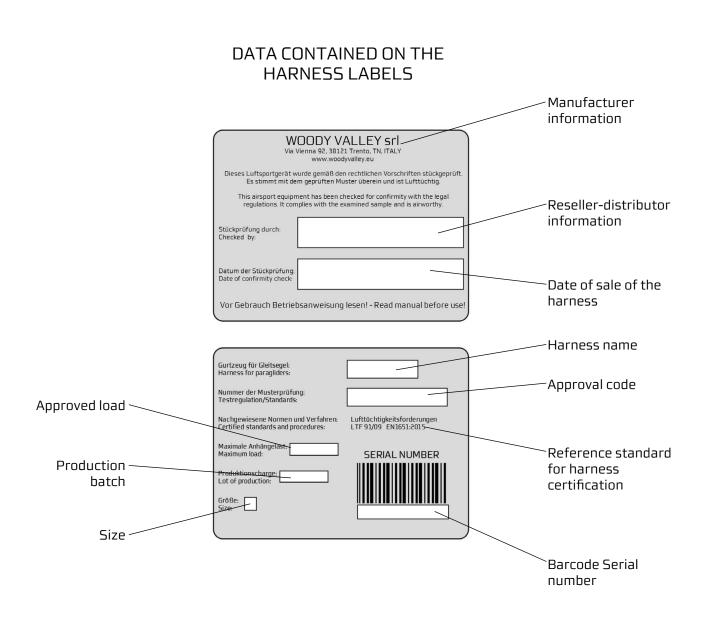
Congratulations on your purchase of a WOODY VALLEY product. We remind you that all our products are the result of meticulous research in constant collaboration with pilots from all over the world. That's why your opinion is so important. Your experience and collaboration help us constantly improve our harnesses, to always get the best out of every Woody Valley creation.



GTO light 2 - user manual

#### MANUFACTURER INFORMATION:

WOODY VALLEY s.r.l. via Vienna, 92 - Loc. Spini, Sett. "D" 38121 Trento - ITALY Tel +39 0461 950811 - Fax +39 0461 950819 Web: <u>www.woodyvalley.eu</u> E-mail: <u>info@woodyvalley.com</u>



**Woody**Valley

#### THANK YOU

We would like to thank you for choosing a Woody Valley product. We invite you to carefully read this important document, the harness user manual and to take special account of the two most important paragraphs concerning:

#### INSERTING THE RESERVE PARACHUTE.

The reserve parachute is a life-saving piece of equipment. It must be inserted so that it works correctly when required whether this happens in two days' time, or two years from now.

ADJUSTING THE HARNESS.

The harness is the connecting point between the pilot and the paraglider, and it is a necessary component for optimising flight performance and pleasure. A bad harness that is well adjusted may enable you to fly well, but a good harness that is badly adjusted may put you off flying altogether.

We are confident that this harness will give you great comfort, control, performance and enjoyment in flight. We are conscious of the fact that reading an instruction manual is not an exciting experience. However, please remember that this product is not a citrus juicer or a mobile phone, and that correct use of the harness helps reduce the risk of flying accidents. This manual contains all the information necessary to assemble, adjust, fly and store your harness. Thorough knowledge of your equipment will improve your personal safety and your level of flying.

Team Woody Valley

# SAFETY NOTE

By the purchase of Woody Valley equipment, you are responsible for being a certified paraglider pilot and you accept all risks inherent with paragliding activities including injury and death. Improper use or misuse of equipment greatly increases these risks. In no case shall Woody Valley or Woody Valley equipment resellers be held liable for personal or third party injuries or damages under any circumstances. If any aspect of the use of our equipment remains unclear, please contact your local reseller or Woody Valley directly.

#### CONTENTS

- **1- GENERAL INFORMATION** 
  - 1.1 Concept
  - 1.2 GTO Light 2 Protections
  - 1.3 Safety lock system
  - 1.4 S.O.S label
- 2 BEFORE USING
  - 2.1 Wearing your GTO light 2 correctly
  - 2.2 Reserve parachute
  - 2.2.1 Handle with deployment bag
  - 2.2.2 Connecting the reserve parachute to the harness
  - 2.2.3 Inserting the reserve parachute
  - 2.2.4 Extracting the reserve parachute
  - 2.2.5 Back pocket
  - 2.3 Harness adjustments
  - 2.3.1 Seating position and back adjustment
  - 2.3.2 Shoulder-pad adjustment
  - 2.3.3 Chest-strap adjustment
  - 2.3.4 Leg-cover
  - 2.3.5 Speed-bar adjustment
  - 2.3.6 Pee Tube
  - 2.3.7 Cockpit angle adjustment
  - 2.3.8 ABS stabilizer adjustment
- 3 FLYING WITH GTO Light 2
  - 3.1 Preflight checks
  - 3.2 Pockets
  - 3.3 Camelbak
  - 3.4 Using the cockpit
  - 3.5 Lower tent or ballast holder pocket
  - 3.6 Anti-G drag parachute
  - 3.7 Dorsal protection
  - 3.8 Flying over water
  - 3.9 Assisted take-off hook
  - 3.10 Landing with GTO LIGHT 2
  - 3.11 Disposing of the harness
  - 3.12 Regulations for behaviour in natural environments
  - 3.13 Tandem flying

#### 4 - PACKING THE HARNESS

- 5 CHARACTERISTICS AND INSTALLATION OF OPTIONAL EQUIPMENT
  - 5.1 Ballast bag
  - 5.2 Concertina light
  - 5.3 Rucksack
  - 5.4 Inflatable protection
  - 5.5 Windscreen

**Woody**Valley



- 5.6 40mm block
- 5.7 Foot sliding protection
- **6 MAINTENANCE AND REPAIR** 
  - 6.1 Replacing air inlet reinforcements
  - 6.2 Periodic dorsal protection checks
  - 6.3 Replacing the leg cover
- 7 WARRANTY
- 8 CERTIFICATES OF APPROVAL
- 9 TECHNICAL DATA

#### **1- GENERAL INFORMATION**

This manual is an integral part of the GTO light 2 harness and should be stored in a safe place for future reference. For further information, please contact your reseller or Woody Valley directly.

Before using the harness, the pilot is advised to read this manual carefully.

Declaration of conformity

The manufacturer WOODY VALLEY s.r.l. hereby declares that its products comply with standard UNI EN 1651 - LTF 91-09

This equipment must contain:

- Harness
- Footrest board in carbon
- Snap-hook
- Handle with built-in deployment bag for reserve parachute deploy-

ment

- 2 reserve elastic loops for closing the reserve parachute
- Three-step light speed-bar
- Lightshield protection
- Dorsal protection
- Leg cover with zip closure
- 2 mylars for air inlets

I principali optional disponibili sono:

- Rucksack
- Concertina light
- Bag for front ballast equipped with transport handles, tube and val-

ve

- Anti-G drag parachute
- Inflatable protection
- Windscreen
- Foot sliding leg cover protection
- 40mm block

# 1.1- Concept

GTO Light 2 is designed to be used as a harness for sport paragliding flying with a maximum weight of 120 kg.

The GTO Light 2 is the most extreme example of Woody Valley's many years of experience in cross-country harnesses. It has been designed to meet the needs of all pilots who have high demands for lightness without sacrificing comfort, piloting and aerodynamics.

GTO Light 2 is equipped with a pocket for an optional "Anti-G" drag parachute and a safety system to help prevent you from forgetting to fasten the leg straps.

1.2- GTO Light 2 Protections

GTO Light 2 is equipped with two protections:

• One protection in LTF regulation foam under the seat, with a thickness of 16 cm

• One category 2 TÜV/GS certified lightshield in accordance with EU standard 89/686/ECC for protecting the top part of the pilot's back. This does not affect the results of the certification tests, so it is therefore removable by accessing the zipper behind the back which is between the base and the pocket.

The optional inflatable protection can be used instead of the standard foam protection in order to reduce the harness volume and weight.



**Woody**Valley



# Certificate of approval

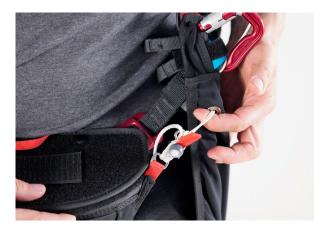
| more Impact Dad D  | nort   |  | point.   | iding by ai                                   | , iniquenza                            | Inspection certificate number:   | MISC_136.20 | 019        | Name impact pad: | Inflatable Airba       | g        |
|--|--|--|--|---|--|--|-------------|------------|------------------|------------------------|----------|
| rness Impact Pad R   | •                            |  |  |   |  | Test results of Impact pad t   | est         |            |                  |                        |          |
| ection certificate number: MISC_136.2  | 19   | Updated  |  |   |  |  | without en  | P2         | include emer     | gency parachute<br>PR2 | 1        |
| nufacturer data:   |  | Sample data:                                   |  |   |  | Maximum Peak of impact [g]   | 37.87       | 38.20      | 0.00             | 0.00                   |          |
| nufacturer name: Woody Valle<br>presentative: Simone Cale  |  | Name impact pad<br>Impact pad intgrated        |  | irbag   |  | Impact duration at +38 [g] in [ms]<br>Impact duration at +20 [g] in [ms] |             | 0.00 22.50 | 0.00             | 0.00                   |          |
| et: Via Vienna S   |  | Impact pad intgrated<br>Impact pad type:       |  |   |  | Uncertainty k=2[g]   | 2.18        | 2.20       | 0.00             | 0.00                   | 1        |
| t code place: 30121 Trent  |  | Serial number:                                 | N210   |   |  | Difference of test 1 and 2 [%]   | 100.00      | 100.87     | 100.00           | n/a                    | J        |
| intry: Italy   | v  | Weight of sample [kg]<br>Date of test:         | : 0.057<br>17.09.2019                          |   |  |  |             |            |                  |                        |          |
| ness model: GTO Light  |  | Date of test.                                  | 17.03.2015                                     |   |  |  |             | P12        | 380              |                        |          |
|  |  |  |  |   |  |  |             |            | 308              |                        |          |
| nosphere AGL:  |  |  |  |   |  | 50.00  |             |            |                  |                        |          |
| [C*] 23.5  |  |  |  |   |  | 30.00  | 1           |            |                  |                        |          |
| 1 [%] 56<br>hPa] 974.4   |  |  |  |   |  | 10.00  |             |            |                  |                        |          |
|  |  |  |  |   |  | 1000   |             |            |                  | m                      |          |
| nmary of Impact pad test <sup>(1)</sup>  |  |  |  |   |  | -10.003.50 4.50  | 5.          |            | 7.50             | 8.50                   | 9.50     |
| innary of impact pad test  |  |  | -  |   |  |  |             |            | ine [3]          |                        |          |
| id Test configuration (2)  | Impact [g] (3)   | f Duration at 38 [g]<br>in [ms] <sup>(4)</sup> | [g] in [ms] (5)                                | and 2 [%] (6)                                 | Result                                 |  |             | P22        | 0g 38g           |                        |          |
| V Test sample attached to dumn<br>position, without emergency p  | in flying  | 0.00   | 22.50  | 0.87  | POSITIVE                               |  |             | P22        | Jag 38g          |                        |          |
| R Test sample attached to dumr   | ( in flying  |  |  | 006880  |  | 50.00  |             |            |                  |                        |          |
| position, Include emergency p  |  | 0.00   | 0.00   | 0.00  | n/a                                    | TE 30.00   |             |            |                  |                        |          |
|  |  |  |  |   |  |  | - 1         |            |                  |                        |          |
|  |  |  |  |   |  | 10.00  |             |            | 1                |                        |          |
| ue data  |  |  |  |   |  | -10.002.90 3.90  | 4.90        | 5.90       | 6.90             | 7.90 8                 | .90 9.90 |
| ce of declaration Villeneuve   |  |  |  |   |  |  |             |            | ime (s)          |                        |          |
| e of issue: 24.09.2019   | Revision 01:   | : 11.10.2019                                   |  |   |  |  |             |            |                  |                        |          |
| haging director Alain Zoller   |  |  |  |   |  |  |             |            |                  |                        |          |
| nature:  |  |  |  |   |  | 50.00  |             |            |                  |                        |          |
| 715  |  |  |  |   |  | 30.00  |             |            |                  |                        |          |
|  |  |  |  |   |  |  |             |            |                  |                        |          |
|  |  |  |  |   |  | 10.00  |             |            |                  |                        |          |
| Manufacture Instrument   | Type no  | S/N  | Validity Calibra                               |   |  | -10.002.70   | 3.20        | 3.70       | 4.3              | 20                     | 4.70     |
| Burster/MTS Accelerometer 10<br>JDC elec Geos n°11 Skywa   |  | 1263567<br>22                                  | 23.01.202                                      |   |  |  |             |            | ime [s]          |                        |          |
|  |  |  |  |   |  |  |             |            |                  |                        |          |
|  | iable. Air Turpuoise SA having                                     | a thoroughly assessed the s                    | ample mentioned alv                            | tua dariara it was fr                         | und conform with all                   |  |             | PR22       | 0g <u>38g</u>    |                        |          |
| s signature approve the validity of the test reports if a  | requirements defined by  | y the following norms:                         |  |   |  | 50.00  |             |            |                  |                        |          |
|  | is the uncertainty (on safe side) / 1                              | The uncertainty stated is the                  | expanded uncertain                             | nty obtained by multip                        | plying the standard                    | a 30.00  |             |            |                  |                        |          |
| European Standard EN1651 :2018,<br>Calculated value in tests reports include the value mi  |  | nes wrenn und assigned ran                     | ge or values with a p<br>lure distance from bo | ottom of impact pad to                        | o ground.                              |  |             |            |                  |                        |          |
| European Standard EN1651 :2018.  | = 2. The value of the measurand<br>d impact pad is mounted on. Whe | vere the impact occurs, mea.                   |  |   |  | 10.00  |             |            |                  |                        |          |
| Calculated value in tests reports include the value mi<br>uncertainty by the coverage factor<br><sup>(2)</sup> The dummy is lifted minimum up to 1.65 m, | nd impact pad is mounted on. Whe                                   |  |  | If any, the maximum                           | duration in at 20 fol                  |  |             |            |                  |                        |          |
| European Standard EN1651 :2018,<br>Calculated value in tests reports include the value mi<br>uncertainty by the coverage facto                           | nd impact pad is mounted on. Whe                                   | n in at 38 (g) should be less                  | or equal to 7 [ms], <sup>(6)</sup>             | If any, the maximum<br>% from the first test, | duration in at 20 [g]<br>maximum peak. | -10.003.00 3.20  | 3.40 3.6    |            | 4.00 4.20        | 4.40 4.60              | 4.80 5   |

WoodyValley \_\_\_\_\_



#### 1.3 - Safety Lock System

To address the issue of forgetting to fasten the chest and leg straps on the harness, the Woody Valley team has developed a leg-cover closure system, through which the pilot is required to grasp the leg strap and is thus reminded to close it. This system cannot replace a failure to hook the leg straps.



1.4 - S.O.S. label

This red with white lettering label is clearly visible in a pocket on the right shoulder padding and is easily removable.

On the back of this label, you can write information that you think should be given to rescue workers in case of accident.





#### 2- BEFORE USING

GTO Light 2 is supplied with dorsal protection and also with a lightshield that has already been pre-assembled by the manufacturer. Reserve parachute installation must be carried out with the utmost care and attention by a qualified professional operator, for example your instructor. Only then should the pilot adjust the harness for comfort.

# 2.1- Wearing your GTO light 2 correctly

Put the shoulder straps on, hold the leg straps and then pass the red buckles through the left and the right chest buckles.

Connect the right white hook to the black loop of the left Lycra.

Take the little red strap at the end of the grey line near the left leg strap red buckle and pass it through the little ring attached to the right Lycra next to the cockpit. Secure the system by passing first the little red strap through the metal square near the left carabiner and then the little ball through the grey line loop.

Finally connect the cockpit buckle to the leg strap buckle.



#### 2.2- Reserve parachute

GTO Light 2 has a parachute container located under the seat at the back just after the dorsal protection.

The reserve parachute must be attached to the harness before being inserted in the built-in container. The connection takes the form of a dual bridle and is fixed in two points at shoulder height to provide better load distribution and to ensure a correct landing position in case the parachute is deployed. This helps to minimise the risk of injury. The built-in harness bridle has a central loop to which the parachute connects.

2.2.1- Handle with deployment bag

GTO Light 2 is supplied complete with a handle built into the deployment bag. Do not use other deployment bags or handles adapted for this purpose. The connection triangle between the handle and the deployment bag (with respect to the parachute pocket) must be positioned upward and outward.





**Woody**Valley

#### 2.2.2- Connecting the reserve parachute to the harness

There are three different methods of attaching the reserve parachute bridle to the harness bridle.

First system (for non-pilot-controlled parachutes):

Use a screw-lock karabiner with a breaking strength of at least 2,400 kg. In this case, the bridles should be held in position within the karabiner using elastic bands, to prevent the karabiner from rotating and taking the strain laterally instead of vertically. The karabiner's screw-lock should be tightly screwed shut to avoid any possibility of it opening accidentally. This type of connection can absorb a higher opening shock than the second system, and for this reason this is without doubt the recommended system.



Second system (for non-pilot-controlled parachutes):

The emergency bridle should pass through the harness bridle loop. Next, the emergency parachute should be passed through the large loop of the emergency parachute bridle. The result is a connection that should be tightened as much as possible so as to prevent dangerous friction between the two cables during emergency opening shock.



**Woody**Valley



Third system (for pilot-controlled or non-pilot-controlled parachutes with double bridle):

If you are using a reserve parachute with a dual bridle, it can be connected to the harness using the two loops positioned at the base of the harness bridle, near the padded shoulder straps.

In this case, the harness's reserve parachute bridle will not be used, and so it should be folded, fastened using two elastic bands, and positioned under the cover behind the pilot's neck.



The two connections should be made using screw-lock karabiners with a breaking strength of at least 1,400 kg. It is important to verify that the length of the bridle is sufficient to position the reserve parachute inside the harness pocket, and that there is sufficient play to enable the parachute to be taken out of the pocket without causing the reserve parachute deployment bag itself to open during extraction.

#### CAUTION:

To prevent abnormal side loads, the cable is hooked to both loops on their respective shoulder-straps. Not only to one of the two.



✓ Woody Valley



#### 2.2.3- Inserting the reserve parachute

Bring the bridle passage zipper slider to its Lycra pocket, which is located at the top of the harness behind the neck.

Open the zipper starting from the closing flap so as to achieve free passage of the bridle between the loop and the parachute. After having connected the reserve to the harness with one of the previously described systems.

Introduce a thin rope (paragliding line type) into each elastic loop which you will use to help close the container.



Insert the elastic loops in the corresponding pockets and through the small eyelets. Insert the parachute in the harness container with rescue handle facing upwards and rescue parachute lines facing the harness tail.



Close the large black plastic flap using the cord and block the elastic loop using the longest pin, having it pass first through the hole just under the handle insertion, then in the elastic loop and finally in the hole located after the elastic strap. Then remove the thin cord.

#### GTO light 2 - user manual



Move the zipper slider (on the part covering the bridle) to the limit near the handle. Then close the zipper about 10 cm and, using the second thin cord inserted in the other white elastic strap, close the smaller flap, inserting the shorter pin. Then insert the remaining part of the short pin in the nearby hole. Then remove the thin cord.



The cord must be removed at the end of this phase and must be extracted slowly in order to avoid damaging the elastic loops due to excessive friction between the parts.

₩ Woody Valley \_



# CAUTION:

Each new combination of reserve parachute and harness or external container that is assembled for the first time must be inspected by an official reseller of the harness or the reserve chute or a flight instructor to verify that it can be effectively deployed. Deployment of the emergency chute must be perfectly possible from the normal flying position.

The paraglider harness and the emergency parachute opening system are not suitable for use in free falls and in strong shocks.

Its bearing structure has been designed, tested and certified to withstand emergency parachute opening shock in accordance with the standard requirements for paragliding.

This does not mean that the other parts of the harness will not become damaged due to emergency parachute opening shock. This is true whether it occurs due to actual need in the event of an accident or if it occurs voluntarily, for example during a safety course.



#### 2.2.4- Extracting the reserve parachute

It is very important to periodically feel for the position of the reserve parachute deployment handle during normal flight, so that the action for reaching for the reserve parachute handle becomes instinctive in an emergency. The deployment procedure is as follows in emergency situations:

• Look for the reserve parachute handle and grasp it firmly with one hand.

• Pull the handle outwards in order to extract the reserve parachute from the harness container.

•Look for a clear area and, in a continuous motion, throw the reserve parachute away from yourself and the glider.

•After opening, keep the paraglider from interfering with the reserve parachute as follows:

- If the connecting edge is turned upward, grip straps "D" or the brakes and break down your paraglider.

- If instead the connecting edge of the glider is turned downward, pull back strap "D" or a brake and have the glider rotate with the connecting edge upward and then pull both brakes or straps to help break down your paraglider.

• On landing, adopt an upright body position and ensure that you perform a "parachute landing fall" to minimise the risk of injury.

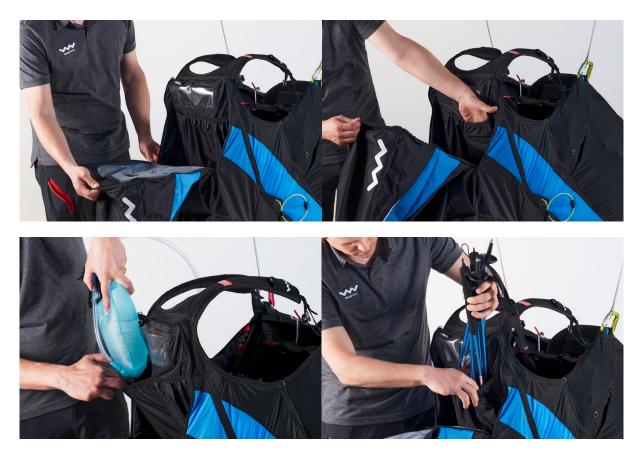




#### 2.2.5- Back pocket

To access the back pocket, you must first fully open the zipper on the rear aerodynamic side of the harness and turn it for easier access to the pocket.

This compartment has been carefully designed and sized to hold the transport and clothing rucksack or a sleeping bag. Inside are two pockets, one to hold a camel-bak and one to hold trekking poles. To close the pocket and the rear aerodynamic part, simply close the zippers.



# CAUTION:

- Overfilling the back pocket could compromise correct inflation of the aerodynamic part of the harness.

- Evenly distribute all the objects inside the volume of the back pocket so as not to deform the shape of the container.

- Be sure to completely close the zipper of the aerodynamic back part for correct inflation.

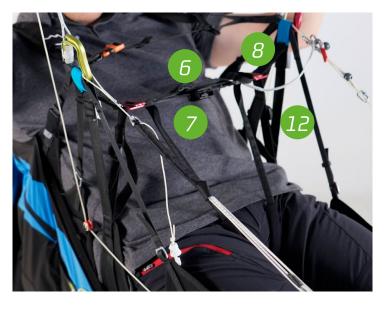
# 2.3- Harness adjustments



#### KEY:

- 1. Load-bearing strap
- 2. Back adjustment strap
- 3. Seating depth adjustment strap
- 4. Leg angle adjustment strap
- 5. Shoulder adjustment strap
- 6. Chest adjustment strap
- 7. Leg strap
- 8. Abs strap
- 9. Front cover cords
- 10. Safety System
- 11. Footrest adjustment strap
- 12. ABS stabilizer adjustment

- paragraph 2.3.1
- paragraph 2.3.1
- paragraph 2.3.1
- paragraph 2.3.1
- paragraph 2.3.2
- paragraph 2.3.3
- paragraph 2.3.4
- paragraph 2.1
- paragraph 2.3.4
- paragraph 2.3.8



# ✓ Woody Valley



GTO Light 2 is supplied already adjusted to a standard ergonomic setting, apart from adjustments required for pilot height. Therefore, for the first flight we recommend adjusting the harness for height alone, leaving the other settings unchanged, because they have proved to be satisfactory for the vast majority of pilots.



If you wish to change the other settings, remember that you can always return to the factory settings by making reference to the red marks on all adjustment straps.

Please remember that the size of your GTO Light 2 must be chosen according to your height and not according to the width of the seat.

Unlike a "sitting" harness, where the height of the back support is not essential for comfort, the height of the back support is decisive in a harness that requires "lying" piloting for obtaining comfort and a correct flight position. It is therefore important to choose the right size, paying more attention to the height of the back without worrying about the width of the seat.

To find the optimum position we recommend hanging with the harness, simulating flight position and conditions. Therefore, it is best to place all the material which you normally take into flight with you in the back pocket.

CAUTION:

- Before carrying out any adjustment the reserve parachute must be inserted.

- Each adjustment must be carried out symmetrically on both sides.
- Each adjustment strap must be tensioned.



# 2.3.1- Seating position and back adjustment

In this photo, you can see how the "lateral" adjustments are arranged and how many points actually go to support the pilot, from the upper part of the back to the lumbar part. All these adjustments offer the great advantage of supporting the pilot and, moreover, allow for adaptation to every type of back.



In detail, adjustment No. 1 varies the angle between the legs and the back (seating depth), distributing the loads between the seat and the lumbar area, thereby providing the pilot with greater comfort. The main adjustment that allows you to select the inclination of the torso with respect to the vertical flight axis is n°2 for back adjustment. Adjustment 3 varies the angle of the legs. If you want to change the adjustments, you must loosen the first strap and then subsequently adjust it to the most comfortable point. Once these adjustments have been made, re-tighten the overlying strap to secure the new set point.





#### 2.3.2- Shoulder-pad adjustment

Adjustment of the shoulder pads compensates for the variation in pilot height and the adjustment buckle is located at the apex of the same. The shoulder pads also bear part of the weight of the torso for improved comfort. We recommend adjusting the shoulder pads so that they fit against your shoulders without being too slack or too tight.



# 2.3.3- Chest-strap adjustment

The chest strap which controls the distance between the two karabiners has a maximum opening of 50 centimetres. For the first flight with GTO Light 2, we suggest setting the chest strap to the halfway point and then locating the preferred length in flight by means of gradual adjustment. When the chest strap is shorter and tighter, stability is greater. An excessive distance between karabiners does not improve glider performance and tightening the chest strap excessively may exacerbate the "twist" effect that may follow an asymmetric collapse of the wing.







#### 2.3.4- Leg-cover

The leg cover is made of special, very lightweight wind-proof and water-proof Lycra material. The geometry of the innovate cords of the leg-cover's automatic closing system makes it easier for the pilot to insert their legs after take-off. This cover can be adjusted length-wise using the two buckles on the sides just over the ankles, highlighted in the picture below. We recommend lengthening or shortening as needed while respecting the symmetry.





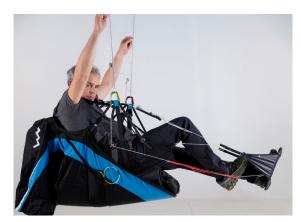
# 2.3.5- Speed-bar adjustment

GTO Light 2 is already equipped with a 3-step speed-bar: After having adjusted the sitting position to the optimum configuration, the length must be adjusted. To adjust the system correctly, the pilot has to adopt a flying position in the harness, suspended from a flight simulator, and hook into the risers of the paraglider or have another person then help by supporting the risers, so the pilot can adjust the length of the speed-system cords.

If the speed-bar cord is too short, it could cause a constant force on the speed-system during flight, so that it is unintentionally engaged at all times in flight. It is safest to take off with the speed-bar a little too long, progressively shortening it during the next flights. Remember that all adjustments have to be performed symmetrically, on both sides. If you want to change the bar, we advise against the use of rigid speed-bars that can damage the external Lycra cover.

The bar's cords should be passed through the pulleys located near the back corners of the seat and then moved directly up to the paraglider riser connections, passing through the eyelet hole on the Lycra, placed in the leg cover. The two elastic bands must also be installed, fixed by means of simple knots to the two loops on the lower side of the footrest. This allows the speed bar to always be well stretched out and ready for use.







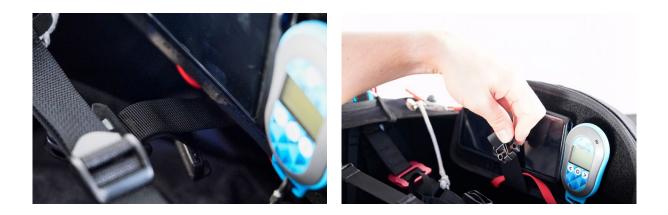
#### 2.3.6- Pee Tube

In the blue part on the left side of the harness is a hole for passage of the pee tube



# 2.3.7 -Cockpit angle adjustment

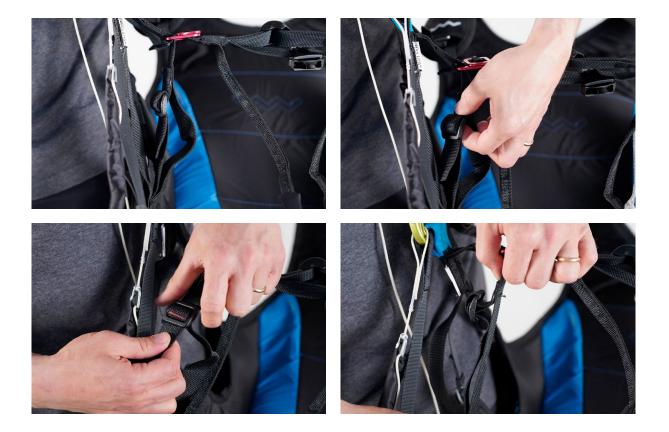
To manage the weight of your flight instruments and find the ideal cockpit angle by adjusting the plastic buckle of the strap that connects the bottom of the cockpit to the chest strap.



#### 2.3.8 - ABS stabilizer adjustment

The new ABS adjustment strap allows you to control the GTO light 2 stabilization: the further from the red mark, the less stable and the more responsive your GTO light 2.

Please note that our factory settings already makes the GTO Light 2 more stable than its predecessor.



#### 3 - FLYING WITH GTO Light 2

#### 3.1 - Preflight checks

For maximum safety use a valid and complete preflight inspection method and repeat the same sequences mentally for each flight. Check that

• The two buckles on the chest strap and the "Safety-Lock" system are closed

• The reserve parachute handle is fastened in its correct position, and the pins are firmly inserted

• The pockets and zips are closed

• The paraglider is connected correctly to the harness, and that both karabiners are locked closed by means of their locking system

• The speed bar is attached correctly to the glider





#### 3.2 - Pockets

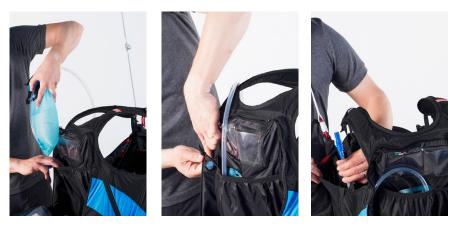
In addition to the back pocket seen in section 2.2.5, GTO Light 2 features a spacious back pocket and various side pockets. One of these is located comfortably near the right main karabiner and is equipped with a safety slot for radio or mobile phone housing. The harness is also equipped with other two very spacious side pockets. The instrument panel is designed so that it can be easily removed from the cockpit so that tools are always available for various briefings and to keep them safe from any possible crushing due to harness packing.





#### 3.3 - Camelbak

GTO Light 2 is set up for a camel-bak. Position the camel-bak in its special compartment inside the back pocket. Pass the hose through the special hole set indicated with a "H2O" logo, through which you can reach the red strap fixed inside the Lycra on the left side near the karabiner (as shown in the photos), where a second "H2O" logo is fixed.





**Woody**Valley



# 3.4- Using the cockpit

The cockpit is built into the leg-cover and has a support base for detachable instruments.



3.5- Lower tent or ballast holder pocket

GTO Light 2 houses a pocket under the seat, designed to hold a single-seater tent and an ultralight inflatable mattress, or alternatively for inserting a ballast bag.



3.6 - Anti-G drag parachute

The "Anti-G" drag parachute is a safety device that allows safer spiral descents by reducing the G force in a spiral dive. This system is very simple to use and works with any type of glider.

Stowage is provided in the front pocket just below the flight instruments for anti-G installation on the GTO Light 2. Attach the anti-G bridle to the right karabiner of the harness.



To correctly use the braking parachute, simply open the zip, pull it out, release it, and start the spiral to the right. The advantages of using it are a higher sink rate and up to a 40% reduction in G-Force. You can descend in spiral and then disable the drag chute using the handle and land as normal with the Anti-G parachute deployed (but disabled). Otherwise, once exiting the spiral, you need to disable it and then put it back in its pocket and close the pocket zipper. At this point it is ready to be used again.

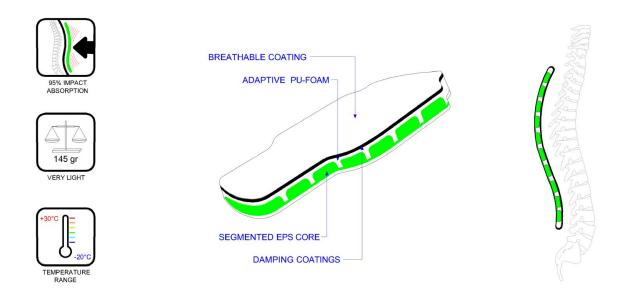
# CAUTION:

To ensure correct use of the "Anti-G" parachute it is important that you carefully read and understand the instructions included in the parachute manual. The "Anti-G" drag parachute is optional equipment and can be purchased separately.



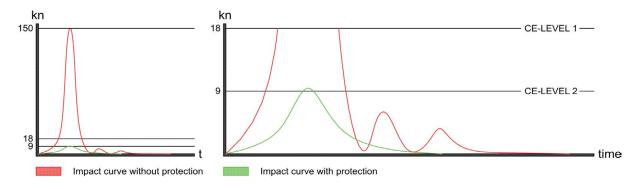
# 3.7- Dorsal protection

The GTO Light 2 is equipped with a TüV and CE (level 2) approved dorsal protection which is found inside the back of the harness. This protection increases back comfort but can be removed by accessing the zipper on the back of the backrest.



The absorption effect of the back protector reaches approximately the required value with a residual force of only 975 kN.

This means that approximately 94% of the impact energy is absorbed. The materials and their protective function are TÜV SÜD approved in accordance with European standard EU-Norm 89 /686 / EWG and have been tested/certified as personal protection equipment category 2 (PSA). They also meet standard TÜV/GS on product safety.



#### 3.8- Flying over water

GTO Light 2 poses no specific problems connected to flying above water but, in any case, landing in water is always dangerous. Woody Valley recommends using a suitable life jacket when flying above water.

#### 3.9- Assisted take-off hook

GTO Light 2 harnesses can be used for towed launches. The tow bridle release should be hooked directly to the main karabiners, ensuring that the karabiners are positioned with the opening bar facing the rear. For further details see your tow hook instructions or ask a qualified towing instructor at your air field.

#### 3.10- Landing with GTO LIGHT 2

Before landing, slide your legs out and off the seat surface, so that you take up a standing position. Never land in the seated position; it is very dangerous for your back even if you have foam dorsal protection, which provides exclusively passive protection. Standing up before landing is an active safety precaution, and it is much more effective than passive forms of protection.

# 3.11- Disposing of the harness

The materials used in a paragliding harness require correct disposal. Please give your harness back to us instead of throwing it away, we'll take care of its correct disposal.

# 3.12- Regulations for behaviour in natural environments

Please respect the nature and landscapes that surround us when practising sport. Please do not leave marked trails, do not dispose of waste, do not make loud noises and please respect the delicate balance that exists in the mountains.

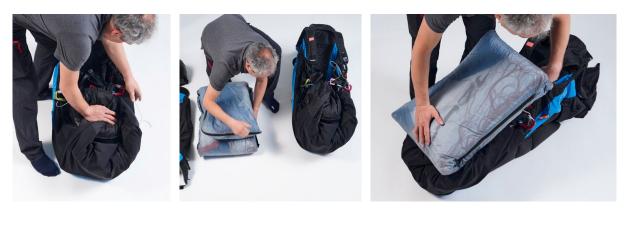
# 3.13- Tandem flying

GTO Light 2 cannot be used as a tandem harness for pilots or for passengers.

#### 4- PACKING THE HARNESS

The GTO Light 2 harness can be packed into the rucksack whether or not the paraglider is hooked onto the karabiners. The sequence of operations shown below will help you pack up the harness properly.

Fold the leg cover, then place the footrest on top, then position the glider over the harness and slip on the rucksack from the bottom.







Once the harness is inserted, turn over the entire package and close the zipper. Fold the tail inside. The materials used allow any extent of folding without affecting how it functions in flight. Enough space will be available in the top part for the instruments and helmet.



# 5- CHARACTERISTICS AND INSTALLATION OF OPTIONAL EQUIPMENT

# 5.1- Ballast bag

Our ballast bag is equipped with transport handles, a tube and drainage tap. It can hold from 3.8 litres up to 5.7 litres of water (depending on the size of the harness) and can be inserted into the ballast holder under the seat.



5.2- Concertina light

A convenient "concertina light" for folding your paraglider is available as an optional extra. It weighs approximately 275 grams and is equipped with two side zippers to reduce the volume of the paraglider and facilitate its insertion into the rucksack.



5.3- Rucksack

As an optional, we also offer a rucksack, sized to hold the harness, the paraglider and the rest of your equipment. Equipped with various pockets, pole holder, camel bak holder and a convenient external elastic cord jacket holder. An emergency whistle is located on the chest strap closure. Very comfortable and enveloping, it will accompany you on your walks to reach take-off. Available in four sizes, starting from S with a volume of 95 litres, M 105 litres, L 115 litres and XL 120 litres.



#### 5.4 - Inflatable protection

Our innovative inflatable protection reduces the GTO light 2 volume and weight once packed.

To insert the inflatable protection into your harness, open the zip under the seat making sure that the inflating tube stays on the back and comes out behind the seat on the right side of your GTO light 2. Finally, secure it with the little red strap near the right carabiner.



5.5 - Windscreen

The optional windscreen protects the pilot from the cold and the wind. Secure the windscreen with the three buttons under the cockpit Lycra. To preserve your windscreen, always remove and keep it in its bag when you're not flying.



#### 5.6 - 40mm block

The GTO light 2 can be used with the optional AV006 40mm pulley instead of the default one.

To add your AV006 40mm pulley, do as follows: release its bottom loop, pass the Dynema loop through it and lock it back.

Keeping the arrow in the correct direction is key to successfully complete this operation (see related picture).



5.7 - Foot-sliding protection

The foot-sliding protection preserves the inner fabric of the leg cover from the wear and tear caused by the speed bar usage.

Check out the assembly instructions in our video manual or ask your Woody Valley dealer.



#### **6- MAINTENANCE AND REPAIR**

Check the harness after every impact, bad landing or launch, or in the case that there are signs of damage or excessive wear.

We recommend having your harness checked by your retailer every two years, and replacing the main karabiners every two years.

To prevent unnecessary wear and deterioration of the harness, it is important to avoid scraping it against the ground, rocks or abrasive surfaces. Do not expose the harness unnecessarily to UV radiation (sunlight) outside normal flying activities. Wherever possible, protect the harness from humidity and heat.

Store all your paragliding equipment in a cool, dry place, and never put it away while damp or wet.

Keep your harness as clean as possible by regularly cleaning off dirt with a plastic bristle brush and/or a damp cloth. If the harness gets exceptionally dirty, wash it with water and a mild soap.

Allow the harness to dry naturally in a well-ventilated area away from direct sunlight.

If your reserve parachute ever gets wet (e.g. in a water landing) you must remove it from the harness, dry it and repack it before putting it back in the container.

Repairs and replacement of harness components cannot be performed by the user, but exclusively by the manufacturer or staff authorised by the manufacturer. The manufacturer and authorized service staff alone can use materials and techniques ensuring correct product functionality and its complete conformity to product certification.

Zip fasteners should be kept clean and lubricated with silicone spray. In the case of making any request to an official retailer or Woody Valley for maintenance operations, please quote the complete identification number shown on the silver label in the rear pocket.

In order to create a high-performance, lightweight harness, the materials used are of excellent quality, but have a lower weight per square meter with respect to standard harnesses. Therefore, pilots should take the utmost care when using and packing the GTO Light 2 harness. Correct use will extend harness life.

In the event of damage to the harness, repairs can only be performed by the manufacturer or by workshops certified by the manufacturer. The only exceptions are small cuts or holes in the covering material (with a length of less than 20 cm), which can be covered and glued with appropriate materials



# 6.1- Replacing air inlet reinforcements

Remove the damaged Mylar and replace it with the spare that you will find in the nylon bag by rewinding it in the two pockets that are just inside the



#### 6.2- Periodic dorsal protection checks

It is advisable after a crash to check the condition of the seams of the parts that make up the dorsal protection. Open the zipper under the seat on the left side of the harness. Remove the protection and open its zipper. Remove the three polyethylene panels and the second container. Open the zipper on the second container and remove the four parallelepipeds, check the seams of the latter and the two containers. Once the condition of all the seams have been inspected, reassemble everything.

6.3- Replacing the leg cover

The leg cover is made with a very elastic, very lightweight Lycra. We invite you to follow some recommendations for greater durability:

- In case of take-offs with crushed stone or in the presence of thistles, lay the harness on the ground delicately. Do not move the harness by dragging it on the ground.

- Do not use metal speed bars or those that have protruding parts that can damage the Lycra.

- To avoid stressing the elasticity and the surface of the Lycra too much, get used to pushing the speed-bar in a horizontal line, avoiding pushing downward, dragging shoes along the Lycra.

The GTO Light 2 leg cover is equipped with a zipper for replacement when needed.



#### 7- WARRANTY

The warranty period, which is 2 years as provided for by law, commits us to correct any construction defects on our products that are attributable to manufacturing defects.

We advise you to validate the warranty period by filling out the form available on our website in the "Support" section within 10 days from the date of purchase. Enter the ID code of the harness shown on the silver label positioned in the rear pocket.

To initiate a warranty claim, promptly inform WOODY VALLEY of the discovery of the alleged manufacturing defect by sending the harness ID code and a detailed description of the detected problem.

To restore the defective product, you will need to send it to WOODY VALLEY or parties authorised by them.

WOODY VALLEY reserves the right to decide the best method for restoring the harness (repair, replacement of parts or of the product).

The warranty does not cover damage caused by careless or incorrect use of the product (for example inadequate maintenance, unsuitable storage, overloading, exposure to extreme temperatures, etc.). The same holds true for damage attributable to accidents, emergency parachute opening shock or normal wear.

#### 8- CERTIFICATES OF APPROVAL

 $\sim$ 

|   |  | Messen   Prüfen   Bewerter  | Anlass   |   |   |  |  |
|---|--|---|--|---|---|--|--|
|   |  | Form: IB-EBL-GZ Rev. 1.4 - 01.02.2014   | Aniass   |   |   |  |  |
| Inspektionsberic  | ht   | Vorausgehender Bericht<br>- keiner -  |  | onsstelle nach den gültigen Luft                          |   | tGerPV ein Luftsportgerätes durch<br>prüfen zu lassen, wird die Inspektion |  |
| Dokumentationsnummer<br>Unterauftrag  | EAPR-GZ-0831/18  | Ausgabe 0<br>deutsche Ausgabe   | Inspiziert wurde das Muste   |   | ·   |  |  |
| Auftraggeber  | WOODY VALLEY SRL   |   | 1 Gurtzeug Gruppe<br>2 maximales Abflug                              |   |   | GH<br>120  |  |
|   | via Vienna 92  |   | 2 maximales Abrilig<br>3 Integriertes Rettu                          |   | Kg  | Side semi Tube   |  |
|   | 38100 Trento   |   | 4 Art des Dämpfun  |   |   | Moussebag  |  |
|   | Italy  |   | 6 Betriebshandbuc  | h, Fassung  |   | Vers. 1 - 06/2018  |  |
| Auftrag vom   | 04.04.2018   |   | 7 Datenblatt, Fassu  | ung   |   | 30.07.2018   |  |
| Auftragseingang   | 04.04.2018   |   | Vom ursprüngli   | chen Inspektionsumfang wur                                | de nichts weggelasser   | 1  |  |
| Inhalt des Auftrages  | Feststellung der Festigkeit und Fun  | ktion eines Gleitschirm-Gurtzeuges  | Es wurden keine Teile der Inspektionsarbeit an Dritte vergeben.      |   |   |  |  |
| Art des Auftrages   | umfassend Bezug:   | keiner  | Zusammenfassung  |   |   |  |  |
| Inspektionsort  | 87730 Bad Grönenbach, Sitz der In  | spektionsstelle   |  | entspricht den Lufttüchtigke<br>e- genannten Normen/Verfa |   |  |  |
| Inspektionsgegenstand   | GTO light  |   |  |   |   |  |  |
| Seriennummer  | Proto  | Zustand neu   |  |   |   |  |  |
| Inspektionsgrundlage  | LTF 91/09, Pkt. 4., Pkt. 5., Pkt. 1<br>EN 1651 - IA 011, IA 012, IA 017,   | 0.  |  |   |   |  |  |
| Prüfzeitraum  | 04.04.2018 bis   | 30.07.2018  |  |   |   |  |  |
| Inspektionsdatum  | 30.07.2018   |   | i.A. Kotja Tajan<br>Katja Tessher                                    | ~   |   |  |  |
| Dieser Inspektionsbericht besteh<br>(Anlage 1: EBL, Anlage 2: Protei  | nt aus 2 Seiten und enthält 2 Anlagen<br>ktortest)   | Katja Tessner<br>Musterprüfer und Leiter de   | er Inspektionsstelle   | Bad Grör  | nenbach, den 30.07.2018   |  |  |
| Dieser Inspektionsbericht darf nur vollstän<br>der EAPR GmbH. Dokumente ohne Unten<br>dem Stempel der EAPR GmbH versehen. | dig und unverändert weiterverbreitet werden. Auszüge oc<br>schrift und Stempel haben keine Gültigkeit. Das Deckbla | der Kürzungen bedürten der schriftlichen Genehmigung<br>It und die Unterschriftsseite dieses Dokuments sind mit |  |   |   |  |  |
|   | I  | I   | I  | I   | I   | 1  |  |
| EAPR GmbH   | Postbank AG<br>796200806 BL<br>Fon +49 (0) 8334-534470 IBAN:   | Z 70010080  | EAPR GmbH<br>Ispektionsstelle für<br>Luftsportgeräte<br>Marktstr. 11 | Fon +49 (0) 8334-534470                                   | Postbank AG<br>796200806 BLZ 700100<br>IBAN:<br>DE66 7001 0080 0796 2 |  |  |

# GTO light 2 - user manual

| EAPR GmbH<br>Anlage 1 Inspektionsbericht Nr. EAPR-G2   | 2-0831/18                          | E L Prüfen   Bewerter             | Anmerkungen  | keine                                     |  |  |  |
|--|------------------------------------|-----------------------------------|--|---|--|--|--|
| Erklärung über Bauausführung und   | d Leistung (EBL)                   | EBL-GS-DB - Stand 19.12.2012 - V5 | Betriebsanweisung in der Fassung vom Vers. 1 - 06/2018 |   |  |  |  |
| 30.07.2018   |                                    |                                   | Nachprüffristen  |   |  |  |  |
| Gleitsegel-Gurtzeug  |                                    |                                   |  | 24 Monate                                 |  |  |  |
| Musterprüfung EAPR-GZ-0831/18  |                                    |                                   |  |   |  |  |  |
| Gerätemuster GTO light   |                                    |                                   |  |   |  |  |  |
| Musterprüfinhaber  | WOODY<br>via Vienna<br>38100 Trent |                                   | Bad Grönenbach, 30.07.20                               | 18  |  |  |  |
| 33100 Trento<br>Italy  |                                    |                                   | Diese Erklärung wurde elektronisch                     | erstellt und ist ohne Unterschrift gültig |  |  |  |
| Datum der Musterprüfbestätigung  |                                    | 30.07.2018                        |  |   |  |  |  |
| Datum der Musterprüfbestätigung<br>Art der Prüfung   |                                    | umfassend                         |  |   |  |  |  |
| Bezug  |                                    | keiner                            |  |   |  |  |  |
| achgewiesene Normen und Verfahren LTF 91/09, Pkt. 4., Pk<br>EN 1651 - IA 011, IA 0               |                                    |                                   |  |   |  |  |  |
| Gurtzeuggruppe   |                                    | GH                                |  |   |  |  |  |
| Gurtzeuggruppe<br>Zulässiges max. Startgewicht kg<br>Integrierter RG-Container                   |                                    | 120 kg                            |  |   |  |  |  |
| Integrierter RG-Container  |                                    | Side semi Tube                    |  |   |  |  |  |
| Innenconteiner Teil des Gurtzeuges   |                                    | Ja                                |  |   |  |  |  |
| RG Container Volumen - ccm   |                                    | 3000 - 5000 ccm                   |  |   |  |  |  |
| Volummenreduzierung des Retterfaches   | no<br>50                           |                                   |  |   |  |  |  |
| Einhängehöhe cm  |                                    |                                   |  |   |  |  |  |
| Einhängehöhe ändert sich mit Gurtzeuggröße<br>Art des Dämfungssystems                            | 3                                  | ja<br>Moussebag                   |  |   |  |  |  |
| Protektortestwert a  |                                    | 33.4                              |  |   |  |  |  |
| Art des Dämfungssystems<br>Protektortestwert g<br>Schnallensystem<br>Schnallenöffnung unter Last |                                    | Get-up                            |  |   |  |  |  |
| Schnallenöffnung unter Last  |                                    | nein                              |  |   |  |  |  |
| Beinstrecker   |                                    | ja                                |  |   |  |  |  |
|  |                                    |                                   |  |   |  |  |  |

A1 - S1/2

Erklärung über Bauausführung und Leistung (EBL) EAPR-GZ-0831/18 30.07.2018

A1 - S2/2

endegurtzeug

Erklärung über Bauausführung und Leistung (EBL) EAPR-GZ-0831/18 30.07.2018

# 9- TECHNICAL DATA

|                                  | 1                                    |                |  |  |
|----------------------------------|--------------------------------------|----------------|--|--|
| Distance between karabiner and   | S = cm 46 M = cm 48                  |                |  |  |
| seat                             | L cm 50.5                            | XL cm 52       |  |  |
| Distance between karabiners (min | S = cm 37-50                         | M = cm 37-50   |  |  |
| - max)                           | L cm 37-55                           | XL cm 37-55    |  |  |
| Total weight of GTO Light 2      | S = 3,182 Kg                         | M = 3,345 Kg   |  |  |
|                                  | L = 3,591 Kg                         | XL = 3,657 Kg  |  |  |
| Type of dorsal protection        | Protection in 16 cm foam             |                |  |  |
| Type of back protection          | Lightshield protection (TÜV cat. 2 ) |                |  |  |
| Type of straps                   | Get-Up without rigid seat            |                |  |  |
| Reserve parachute housing volume | 3000 – 5000 cm <sup>3</sup>          |                |  |  |
| Limit of use                     | 120 daN                              |                |  |  |
| LTF certification number         | EAPR-GZ-0831/18                      |                |  |  |
| Front pocket capacity            | 1 litre                              |                |  |  |
| Bottom pocket capacity           | S = 3,8 litres                       | M= 4,5 litres  |  |  |
|                                  | L= 5,3 litres                        | XL= 5,7 litres |  |  |
| Rucksack volume (optional)       | S = 95 litres                        | M= 105 litres  |  |  |
|                                  | L= 115 litres                        | XL= 120 litres |  |  |
| Rucksack weight (optional)       | S = 610 gr                           | M= 648 gr      |  |  |
|                                  | L= 660 gr                            | XL= 667 gr     |  |  |
| Easy Bag weight (optional)       | 275 gr                               |                |  |  |

This owner's manual is subject to change without prior notice.

Please check at www.woodyvalley.com for the latest information regarding the GTO light 2 harness.

Latest update: MAY 2020.

Every effort has been made to ensure that the information contained in this manual is correct, but please remember that it has been produced for guidance only.