



STYVWMLK

TONKA

MANUAL/SERVICE

Seriennr:



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## 1 EINLEITUNG

Congratulations on the purchase of your new skywalk TONKA! Thank you for your trust in skywalk paragliders. We are certain that you will enjoy every minute with your skywalk TONKA. We recommend that you read this handbook attentively so that you can feel comfortable with your new paraglider. The handbook will comprehensively inform you on the skywalk TONKA. This handbook also gives you tips for flying safely and with confidence, so that you can enjoy many hours in the sky with your TONKA. For helpful suggestions, questions or critic, please call or send us an e-mail. The skywalk Team is gladly at your disposal.

### **THE SKYWALK TEAM**

## 2 DESCRIPTION

The TONKA is a small, light glider with very appealing glide performance, high agility and fun factor. The design and construction of the TEQUILA3, outstanding in good-natured and straightforward handling, served as the basis for the construction of the TONKA.

Thus, the TONKA is a fun and light but still robust wing, suitable for a wide range of use. For soaring in strong winds, your next hike & fly tour or in the thermals, the TONKA will be your trusty companion.

In order to realize the compromise between low weight and durability, the top sail of the TONKA is composed of a new material of UTT in combination with a light cloth from DOMINICO.

Of course the TONKA is also equipped with the groundbreaking JET FLAP technology. JET FLAPs have consistently prevailed in the past few years and make it possible to land at low speeds with high safety potential, along with providing top climb performance.

### PILOT SPECIFICATIONS

Due to the high wing load, the TONKA 15 demands a pilot with regular flying experience, solid active flying experience with other paragliders and experience dealing with canopy collapse. The TONKA is very predictable in its reactions, but to some extent requires a dosed and quicker braking reaction than a normally-sized glider. If the TONKA is flown with low wing load, with a maximal total launch weight of 75kg, it is also recommended for experienced hobby pilots.

## 3 TECHNICAL DATA

<b>Type</b>	<b>15</b>
<b>Cells</b>	<b>44</b>
<b>Area (m2)</b>	<b>17,5</b>
<b>Wingspan (m)</b>	<b>9,6</b>
<b>Aspect ratio</b>	<b>5,3</b>
<b>Area projected</b>	<b>14,6</b>
<b>Aspect ratio projected</b>	<b>3,75</b>
<b>Canopy weight</b>	<b>3,3kg</b>
<b>Weight range</b>	<b>56-105kg</b>
<b>Certification</b>	<b>LTF09/EN: D</b>

### CAUTION:

THE IDENTIFICATION PLATE IS PRINTED ON THE INSIDE OF THE STABILO. HERE THE DATE OF FIRST FLIGHT AND THE NAME OF THE PILOT MUST BE ENTERED. THE TYPE INSPECTION TAG IS PRESSED INTO THE MIDDLE CELL ABOVE THE CHECKAIR STAMP. THE DATE OF THE INSPECTION MUST ALSO BE ENTERED. IF THIS LABEL IS MISSING, IT SHOULD BE ASSUMED THAT THE GLIDER IS AN UNINSPECTED PROTOTYPE .

## 4 LINE SYSTEM

Thanks to extensive testing, the lines of the TONKA have a very high level of strength with a very small diameter. Line testing, as well as the effectivity of the speed system, are important matters for us. Safety always remains a priority throughout all of our design concept and calculation processes. For this reason, we have implemented an elaborate combination of Liros Dyneema and Tecnora lines in the TONKA.

The skywalk TONKA is equipped with 3 A-, 3 B- as well as 3 C and 1 stabilo line.

The top lines of the last cells attach to the stabilo – main line, together with the stabilo toplines, which lead directly to the B-riser.

The brake lines are not load bearing and lead from the trailing edge of the wing over the main brake line through the brake pulley on the C-riser to the brake handle. There is a mark on the main brake line where the brake handle is knotted. This adjustment should not be altered, on one hand to assure adequate brake travel when landing and on the other hand to avoid constant braking.

For better recognition, the A-lines and the A-riser are red and the stabilo line is pink.

The B-lines are yellow, the main brake line and the brake spider are orange and all other lines are blue.

The line locks are triangular, a plastic insert prevents the lines from slipping as well as accidental opening of the line locks.

The skywalk TONKA has 4 risers on each side.

- > The A-lines lead directly to the A-risers.
- > The B-lines and the tip line lead to the B-riser.
- > The outermost C-main line leads to the front C-riser.
- > Both inner C-main lines lead to the rear C-riser.

An illustration of the risers can be found at the back of the handbook.

## **IMPORTANT SAFETY WARNING:**

**FLYING A PARAGLIDER REQUIRES MAXIMUM CAUTION AT ALL TIMES. BE AWARE THAT AS A PARAGLIDING PILOT, YOU FLY AT YOUR OWN RISK. AS A PILOT YOU MUST GUARANTEE THE AIRWORTHINESS OF YOUR PARAGLIDER BEFORE EVERY SINGLE FLIGHT.**

### **The skywalk TONKA may not be flown:**

- > outside of the minimum and maximum certified launch weight.
- > with a motor, except if there is DULV- or motorglider association authorization
- > in rainy, snowy and extremely turbulent weather conditions or high winds
- > in fog or clouds (visual flight)
- > with insufficient experience or training

Each pilot is responsible for their own safety and must ensure that their aircraft (paraglider) has been checked and serviced for its airworthiness before launching. You can only fly your skywalk TONKA with a valid flying license and in accordance with local rules and regulations.

The skywalk TONKA passed multiple quality control checks during production. More spot checks were performed before delivery to the dealer.

## 5 SPEED SYSTEM

The skywalk TONKA can be equipped with a foot-operated speed system. The Speed System works on the A-, B-, C3-Risers. Exact specifications can be found on the riser illustration.



### INSTALLING THE ACCELERATOR

**EQUIPMENT:** Most standard harnesses have pulleys attached for the speed system. The Speed system lines run from the front through the pulleys on the harness upwards and knotted at the correct length to the brummel hooks. With the correct adjustment of the acceleration lines, the foot bar can be reached easily with angled legs during flight. By straightening the legs, the entire speed range can be used. Prior to flying, the brummel hooks of the foot-operated accelerator and the speed system have to be connected to the risers. Check that the

speed system line runs freely. Function: The pilot pushes on the speed system pulley block, thereby decreasing the force by half and shortening the A-, B- and C- risers.

Illustration of risers in acceleration - page 64-66.

## 6 GURTZEUG

All EN- or LTF-certified harnesses from the harness group GH ((harnesses without solid cross-bracing) are authorized for use with the skywalk TONKA.

### CAUTION:

**FULLY CROSS-BRACED HARNESSES INFLUENCE HANDLING DRASTICALLY AND DO NOT LEAD TO INCREASED SAFETY PERFORMANCE!**



## 7 FLIGHT TECHNIQUES AND PERFORMANCE

### **PREFLIGHT CHECK AND MAINTENANCE:**

It is important to check all paragliding equipment thoroughly before every flight to inspect for defects. Also check the paraglider after long flights and after long periods of storage.

Check thoroughly:

- > All seams of the harness, the seams of the rescue and risers
- > All connecting parts, maillons and carabiners
- > The brake-line knots on both sides and follow the brake-line to the top
- > All the other lines from riser to canopy
- > All the line attachment points at the canopy
- > If the top or bottom sail has partial damage or wear and tear
- > The ribs and crossports from inside

### **CAUTION:**

**DO NOT LAUNCH IF YOU DETECT ANY DEFECTS, EVEN MINOR DEFECTS!**

## **LAYING OUT THE GLIDER:**

If you use your paraglider for the first time we recommend that you practice some inflations and try some simple flights at a training site. This way you are able to get used to your skywalk TONKA. Lay out the canopy so that the leading edge is slightly arched. This way the A-lines are tensioned first in the middle during inflation.

The paraglider inflates evenly which ensures a stable and straight take off. Carefully separate the line levels and risers. If the risers are not twisted, the brake lines will run freely through the eye to the trailing edge of the glider. All lines should run freely without knotting or twisting from the risers to the canopy. Only seldom will knotted lines release during flight! The brake lines lay directly on the ground, so pay special attention that they do not get caught during launch. No lines should lie underneath the canopy. Tangled lines can have disastrous consequences!

## **THE LAUNCH**

The skywalk TONKA is very easy to launch. It has no tendency to get stuck and does not demand any special knowledge outside of the standard paragliding techniques. If you fly in the upper weight range, the launch speed will be noticeably higher than that of a normal-sized glider.

The TONKA is also equipped with the innovative JET FLAP System. Air is conducted from the bottom sail (pressure area) and is blown out at the top sail (suction area). The connection is established by jet-shaped channels, which are located in the rear section of the wing. When increasing the angle-of-attack the danger of airflow interruption and subsequent stall is minimized. Results: the constant airflow even at great angles-of-attack delays the stall, the flyable minimum speed is lowered and the pilot has an increased angle of attack range. This is important, especially during launch and landing. Of course, having JET FLAPS is not an excuse for unrestrained use of the brakes, but the slow flight characteristics of the TONKA profit immensely. Otherwise, no special control of the JET FLAP System is required and flying with a wing equipped with JET FLAPs is exactly as usual.

## **TURNING:**

The skywalk TONKA is very agile and reacts without delay to steering impulse. Generally, less steering impulse is required for the TONKA than for its big brother, the TEQUILA3. Because of the high wing load of the canopy at the upper end of the weight range, the TONKA reacts to even moderate brake input with significant curves and substantial altitude loss. It is a lot of fun to improve your flying abilities with the TONKA.

## **CAUTION:**

### **PULLING THE BRAKE LINES TOO FAR AND TOO FAST CAN CAUSE FULL STALL!**

You will recognise a one-sided stall by the high steering pressure and the slight backwards bend of the outer wing. If this phase, you must immediately back off the brake inside the curve.

## **EMERGENCY STEERING:**

If one brake line tears or releases from the brake handles, you will still have limited steering and landing capability of the skywalk TONKA with the help of the C-riser.

## **ACTIVE FLYING:**

Active flying means flying in harmony with your paraglider. Anticipate the behaviour of your skywalk TONKA in flight, especially in turbulent and thermal conditions and react accordingly. In calm air necessary corrections will be minimal, but turbulence demands permanent attention and the use of brakes and weight shifting in the harness. Good pilots have instinctive reactions. It is important that you always have direct contact to the canopy by slight pressure on the brakes in order to feel the stored energy of the glider. This way you will recognize a loss of pressure in your canopy and subsequent collapse early and will be able to react in time. The TONKA is equipped with a turbulence-damping profile, which in combination with the high wing load provides a high resistance against collapses. Nevertheless, collapses are still possible if the pilot does not fly actively. Even without pilot reaction the skywalk TONKA will seldom collapse, but you can markedly increase safety by flying actively.

## **ACCELERATED FLYING:**

A small effort is needed to operate the speed system. This can affect the sitting position in the harness. We therefore recommend an upright position in the harness. Adjust the harness accordingly, especially during your first few attempts at accelerated flying. We remind you to only fly in wind conditions that are flyable with the wing in a normal adjustment. To reach the maximum speed press the speed bar firmly until both pulleys on the A-risers touch each other. As soon as you operate the speed system, the angle of attack will be reduced, the speed increases, but the paraglider becomes less stable and can collapse more easily. Therefore, always use the speed system with adequate altitude from the ground, obstacles and other aircraft. Avoid a brake line adjustment that is too short. Collapses when accelerated are normally more impulsive and demand a faster reaction.

**NEVER ACCELERATE IN TURBULENT CONDITIONS!**  
**NEVER ACCELERATE NEAR THE GROUND!**  
**NEVER LET GO OF THE BRAKE HANDLES!**

In case the glider collapses you must immediately back off of the acceleration-system in order to stabilize and reopen your paraglider.

## **LANDING:**

The skywalk TONKA can be landed easily but the pilot must adjust accordingly for the higher flight and landing speed. Make your final approach against the wind and let the glider slow down. Further reduce the speed by applying the brakes lightly and evenly. At about 1m above the ground you increase the angle of attack by slowing down more and eventually completely flare out the glider. When you have reached the minimal speed apply full brake. Use very carefully dosed braking in head winds. Once you are safely on the ground, bring the sail carefully into stall. Avoid a landing approach with steep alternate turns (danger of oscillation!).

## **WINCHTOWING:**

The skywalk TONKA is very suitable for towing. Make sure you climb from the ground at a flat angle.

- > Pilot must be instructed in towing.
- > Pilot must use a certified winch.
- > Winch driver must have a towing instruction including sail planes.

Always steer carefully when towing, do not over-brake, the glider already flies at an increase in the angle of attack.

## **MOTORIZED FLIGHT:**

Get informed about the current status of certification of motorized flight at your dealer, national distributor or directly through us. No certification existed at the time this handbook was published. (July 2012)

## **8 LANDING**

This handbook is not a textbook for learning how to paraglide.

According to the local rules and regulations, instruction and training must be carried out at a licensed flight instruction center. The following information will enable you to get the most out of your new skywalk TONKA.

## **SPIRAL DIVE:**

You can initiate the spiral dive by carefully increasing the pull on one of the brakes and simultaneously shifting your weight to the inside of the curve.

Due to the higher wing load, entering a spiral dive with the TONKA is simple.

Bank and sink speed can be controlled by dosed pulling or release of the brake line on the inside of the curve. Gentle braking of the wing at the outer curve will prevent not only the collapse of the outer wing, but also control the sink speed. A spiral dive is the fastest way to lose altitude. This is an advantage and a disadvantage at the same time, since you must learn to control the sink rate. You must always maintain enough altitude because of the extreme altitude loss. In order to avoid oscillation when exiting the spiral dive, you must slowly release the brake on the inside of the curve while maintaining pressure on the curve outer side brake.

## **B-LINE STALL:**

The B-lines are pulled down symmetrically (20cm). Keep the brake handles in the hands. The airflow on top of the profile largely detaches and the paraglider will enter deep stall without flying forward. With increased pressure on the B-risers, surface area decreases and sink speed increases. You can exit this state of flight by rapidly and symmetrically releasing both B-risers.

The paraglider will pitch forward and begin to fly forward again. Do not use the brakes in this case! If the canopy starts to form a rosette forwards, you must immediately exit the B-stall. If the wing does not reopen you may speed up the opening process by dosed, symmetrical brake pressure. Because the TONKA is equipped with a 3-line system, the pressure on the B-riser is somewhat higher than the pressure on a conventional 4 line-level wing. However, this somewhat higher pressure is rewarded with higher sink rate in the stall.

## **BIG EARS:**

In contrast to the spiral dive and B-stall, big ears result in an increase of forward speed in relation to the gliders sink rate. Big ears are used to avoid or exit dangerous areas horizontally.

## CAUTION:

**FLYING WITH BIG EARS CAN CAUSE STALL. THEREFORE, BE CAUTIOUS WITH THE STEERING LINES AND DO NOT USE BIG EARS IN A FAST DESCENT IF THE GLIDER IS WET.**

## 9 EXTREM-FLUGMANÖVER

### ASYMMETRIC TUCK:

In strong turbulence, a collapse cannot be excluded. As a rule, the skywalk TONKA opens automatically. The rotation towards the collapsed wing section can be minimized by braking on the open side of the canopy. In case of a big collapse you will have to brake with caution in order to avoid a stall. If the wing still does not open despite counter-steering, you can speed up the opening process by pumping the brake on the tucked side.

### CRAVAT / LINE OVER:

This type of instability never occurred during any of our test flights with the skywalk TONKA. Still, in extremely turbulent air or as a result of exceptional pilot error it is possible that the folded wing section might get tangled in the lines. The pilot may then stabilize the paraglider with carefully dosed counter-braking. Without immediate pilot intervention, a cravat will turn into a strong spiral dive.

### There are several possibilities to untangle the paraglider:

- >Pumping on the folded side.
- >Pulling the stabilizer-lines (tip-lines).

In case none of these manoeuvres are successful, you can try to unfold the paraglider by performing a full stall. Only experienced pilots with sufficient experience should attempt this manoeuver. Make sure you have enough altitude to recover from the stall.

## **CAUTION:**

**IF NONE OF THESE MANOEUVERS ARE SUCCESSFUL OR THE PILOT FEELS OVERWHELMED BY THE SITUATION, THROW THE RESERVE IMMEDIATELY!**

### **FRONT TUCK:**

The paraglider will enter a tuck by a strong pull on the A-risers or from a very sudden strong downwind. The leading edge will fold along the whole length of the wing. Carefully dosed braking will reduce oscillation and simultaneously speed up the opening of the canopy. As a general rule, the skywalk TONKA will recover from the front tuck automatically.

## **CAUTION: DO NOT OVERBRAKE!**

### **THE PARACHUTAL STALL:**

The paraglider has no forward speed and simultaneously strongly increased sink rate. The parachutal stall may follow a too passively exited B-stall. Porous canopy fabric (excessive UV-degradation) or frequent towing (stretched A-lines) can result in an increased risk of parachutal stall.

The pilot can recover from a stable stall by slightly pushing the A-risers forward at the maillons or by using the speed system. The skywalk TONKA normally exits the parachutal stall automatically.

## **CAUTION:**

**IF A PILOT HAS EXCESSIVELY SHORTENED THE MAIN BRAKE LINES, THERE IS AN INCREASED RISK OF FULL STALL AFTER THE B-STALL. THUS, NEVER SHORTEN THE BRAKE LINES.**

## **CAUTION:**

**AS SOON AS THE BRAKES ARE USED DURING STALL, A PARAGLIDER WILL ENTER FULL STALL. NEAR THE GROUND, A STABLE STALL SHOULD NOT BE EXITED BECAUSE OF OSCILLATION. INSTEAD, THE PILOT SHOULD STRAIGHTEN UP IN THE HARNESS AND PREPARE FOR A PARACHUTE LANDING FALL.**

## **FULL STALL:**

In order to full stall your paraglider, wrap both brake handles once and pull strongly and with equal pressure. The wing will steadily slow down, until the air flow separates completely. The canopy will suddenly tip back. Despite this violent reaction, keep holding the brakes down until the wing stabilizes.

The skywalk TONKA flies backwards in full stall and usually forms a forward rosette. This rosette will form if the full stall is entered slowly. If the brakes are pulled down too quickly, forward rosette will not form. To exit the full stall, the pilot must release the brake lines slowly and symmetrically upwards. (response time  $\geq 1$  sec). The glider opens and surges forward to pick up speed. Braking symmetrically will prevent the skywalk TONKA from surging too far forward. If the pilot does not brake, the TONKA will surge forward dramatically and a front tuck may result.

## **CAUTION:**

**IF A FULL STALL IS EXITED TOO EARLY, TOO QUICKLY OR INCORRECTLY, THE CANOPY MAY SHOOT FORWARD DRASTICALLY.**

## **NEGATIVE SPINS:**

A paraglider spins backwards if the airflow disconnects over one half of the wing. In the process, the canopy spins on a vertical axis and the rotation center is within the wing span. The inside wing flies backwards.

## **There are two reasons for the negative spin:**

- > One brake is pulled too far and too quickly (e.g. when entering a spiral dive)
- > One brake is pulled too strongly while flying slowly (e.g. flying in thermals).
- > The skywalk TONKA usually re-enters normal flight immediately after the brake is

released without any great altitude loss.

> If the pilot inadvertently enters negative spin and exits it immediately, the skywalk TONKA will return to normal flight without any major sink. The brake which was pulled too far comes back until the airflow has contact again with the inner wing. Prolonged negative spin causes the canopy to shoot too far to one side. This can result in an impulsive collapse.

## **WINGOVER:**

Flying alternating left/right turns results in increased banking of the wing. During wingovers with a strong bank, the curve-outer wing will begin to unload. Increased banking should be avoided, since an eventual collapse can be very impulsive.

## **CAUTION:**

**FULL STALL, NEGATIVE SPIN AND WINGOVERS (ABOVE 90°) ARE ILLEGAL ACROBATIC FLIGHT MANOEUVERS AND ARE NOT PERMITTED IN NORMAL AIR TRAFFIC. EXITING INCORRECTLY OR OVERREACTING MAY HAVE DANGEROUS CONSEQUENCES INDEPENDENT OF THE TYPE OF PARAGLIDER!**

## **10 MATERIALS**

The skywalk TONKA is manufactured out of highest-grade materials. skywalk has chosen the best possible combination of materials in respect to durability, performance and longevity. We know that durability is a deciding factor in customer satisfaction.

## **Wing and Ribs:**

Top Sail: UTT, DOMINICO 10DMF  
Bottom Sail: DOMINICO 10DMF, 20DMF  
Ribs and Compression Bands: DOMINICO 30DMF, 70032 1580 E4D

## **Lines:**

LIROS has been the world's leading producer of paragliding lines for quite some time. We selected a mix of uncovered LTC lines and covered PPSL lines.

Top lines: DSL 70  
Middle lines: LTC 120  
Main lines and Tip lines: PPSL 200, PPSL 120, NTSL 160  
Main brake lines: DFLP 200/32

## **Risers:**

The risers are manufactured by Cousin Freres from 12,5 mm polyester webbing with Kevlar inserts. Stretch values, strength and stability of this webbing are among the highest of all products currently on the market.

## **11 MAINTENANCE**

With proper maintenance, your skywalk TONKA will stay in airworthy condition for several years. A well maintained paraglider lasts a lot longer than one which is packed carelessly after use. In the air, your life depends on the condition of your glider.

Proper packing of your glider guarantees that your wing will remain at a consistently high quality level. Your skywalk TONKA has reinforcements constructed from flexible nylon rods in the leading edge.

The Superflex material is very bend-resistant and does not require any special handling.

- > Shake the canopy out gently to remove leaves, grass, sand, etc
- > Sort the lines evenly and arrange them on the canopy.
- > Make sure that your glider is in dry condition before packing.
- > Lay the glider cell upon cell – from the middle of the glider outwards - from the second cell, so that the leading edge reinforcements lay neatly on top of one another.
- >> This gathering method naturally goes faster with two people, one at the leading

edge and one at the leech, but with some practice you will be able to perform this task easily by yourself.

- > Fold over the gathered cloth from the bottom up, pressing the air out as you go fold the complete cell over once towards the middle>repeat the same packing method on the other glider half.
- > Now lay both sides on top of one another and make sure that the leading edge reinforcements lay neatly on top of one another.
- > Fold the cells from the bottom in the direction of the leading edge, the first fold should have approximately the length from hand to elbow.
- > The leading edge can be folded inward once from the upper end, but this is not totally necessary. However, any air remaining inside the glider should be pressed out through the leading edge, and not through the material.
- > Now place the compression band around the glider across the leading edge
- > Place the entire glider into the inner pack sack. This protects the glider from being damaged by the zipper or other objects.
- > Open the pack sack and lay the glider inside. The soft material here provides for good carrying comfort for your lower back.
- > Now lay the harness with the seat board upwards onto the glider in the pack sack and (in most cases), close with the zipper. The top of the packsack offers enough space for helmet, overall, instruments, etc.

## **STORAGE:**

Store your paraglider in a dry location, protected from light and away from chemicals! Dampness is the natural enemy of all paragliders. Therefore, always make sure your paragliding equipment is dry before packing it away. A heated room is best for this purpose.

## **CLEANING:**

Rubbing and cleaning leads to faster deterioration of your paraglider. The PU-coated sail cloth of the skywalk TONKA is maximally soil-resistant. If you still think that your paraglider needs to be cleaned, then use a soft and wet towel or sponge. Don't use any soap or detergents. Never use flammable products.

## **REPAIR:**

All repairs must be carried out by the manufacturer or by an authorised skywalk

Service Center. Amateur repairs can cause more harm than good.

## **MATERIAL WEAR AND TEAR:**

The skywalk TONKA is primarily constructed out of nylon cloth, which loses strength with UV-exposure and becomes permeable to air. Therefore, lay your glider out right before starting and pack it away as soon as possible after landing, to avoid unnecessary UV-exposure.

## **LINE REPAIR:**

The lines of the skywalk TONKA are made from Dyneema or Tecnora cores with a polyester cover. Avoid overloading single lines, since overstretching is irreversible. Continuous bending of the lines at the same spot decreases the strength, even if only slightly. All visible line damage, even if it is only damage to the line cover, requires replacement of the line. New lines should be ordered from the manufacturer or an authorized skywalk maintenance facility. Your flight school or dealer can help you with the line replacement. Before you replace the line, check the correct length by comparing with the same line from the other side of the glider. After replacing the line, a line check must be performed, preferably by laying the glider out on the ground.

## **GENERAL TIPS:**

When laying out your paraglider, make sure that neither the canopy nor the lines become Dirty, as dirt particles in the fibres can damage the material and lines.

- > If the lines get tangled on the ground during launch, they may overstretch or break
- > Do not step on the lines and/or canopy.
- > Make sure that no sand, stones or snow get inside the canopy as the extra weight collected in the trailing edge may slow down or even stall the glider.
- > Sharp edges damage the canopy.
- > Uncontrolled inflation attempts in strong winds may result in the glider impacting into the ground at high speed. This can cause rips, damage on lines and/or fabric.
- > Make sure not to land your canopy leading edge first as this may cause permanent damage to this area of your paraglider.
- > After landings in trees or on water you should check the length of the lines.
- > After contact with salt water, thoroughly rinse the glider with fresh water!

## 12 DISPOSAL

skywalk places high value on the environmental compatibility and quality control of our materials. If your glider should reach the point where it is no longer airworthy, please remove the metal parts. All other parts such as lines, cloth and risers can be brought to a waste disposal center. The metal parts can be brought to metal recycling. If you wish, you can send your glider on to us, and we will dispose of it in a responsible manner.

## 13 NATURE AND ECOLOGICAL COMPATIBILITY

We have taken the first step towards ecological awareness with our motorless sport. Those who prefer to climb to the launch site make our sport even more ecologically compatible. We intend on continuing on an ecologically responsible course. When you are out enjoying our sport, this means specifically: clean up your trash, stay on marked trails and don't cause unnecessary noise. Please help to maintain the balance of nature and act with respect to plants and animals in their territory

## 14 2-YEAR-CHECK

According to DHV regulations, your glider will have to undergo a maintenance check after 24 months. According to these regulations the 2-Year-Check has to be carried out by the manufacturer, its representative or by the owner himself. The check will have to be confirmed by a DHV-stamp. Missing this deadline or if the check is carried out by a non-authorized company will result in the immediate loss of your skywalk TONKA model certification and all warranty and liability claims. We highly recommend that a skywalk-authorized center perform the 2-Year-Check. Without the proper instruments and specific knowledge the check will be insufficient and the airworthiness of your glider cannot be guaranteed.

### **CHANGES TO THE PARAGLIDER:**

Your skywalk TONKA is determined to be within the regulated parameters of tolerance upon leaving production. These parameters are very narrow and must not be altered under any circumstances. Only this way can the optimum balance between performance, handling and safety be guaranteed!

### **CAUTION:**

**UNAUTHORISED CHANGES RESULT IN IMMEDIATE TERMINATION OF THE OPERATING LICENSE! ANY LIABILITY CLAIM TOWARDS THE MANUFACTURER AND ITS DEALERS WILL BE EXCLUDED!**

## 15 CERTIFICATION

The achievement of official certification is the final polish. The different certifications are the last hurdle in the development of a skywalk paraglider. The test flights are absolved only when the test team is completely happy with the glider. We point out that the certification results provide little information when it comes to flying the glider in thermally active and turbulent air. The glider classifications serve to inform solely with regard to the performance of a paraglider during extreme flight manoeuvres in stable air conditions. The extreme flight maneuvers provoked during the

certification process should therefore be considered as individual factors in a complex interrelation and therefore should not be overrated.

## 16 CLOSING WORDS

Paragliding is a fascinating sport. With the skywalk TONKA, you have a glider in your hands which represents the very peak of glider technology today. This glider will bring you years of enjoyment when you treat it with care. Respect for the challenges and dangers of flying is a prerequisite for satisfying, enriching flights. Even the safest paraglider can be dangerous if you misjudge the weather information or your level of experience. Please be reminded that all airports are potentially risky and that your safety largely depends upon your own level of awareness.

We recommend that you respect the legal standards and always fly with care.

**ALL PILOTS FLY AT THEIR OWN RISK!**

**YOUR SKYWALK TEAM**

## SKYWALK

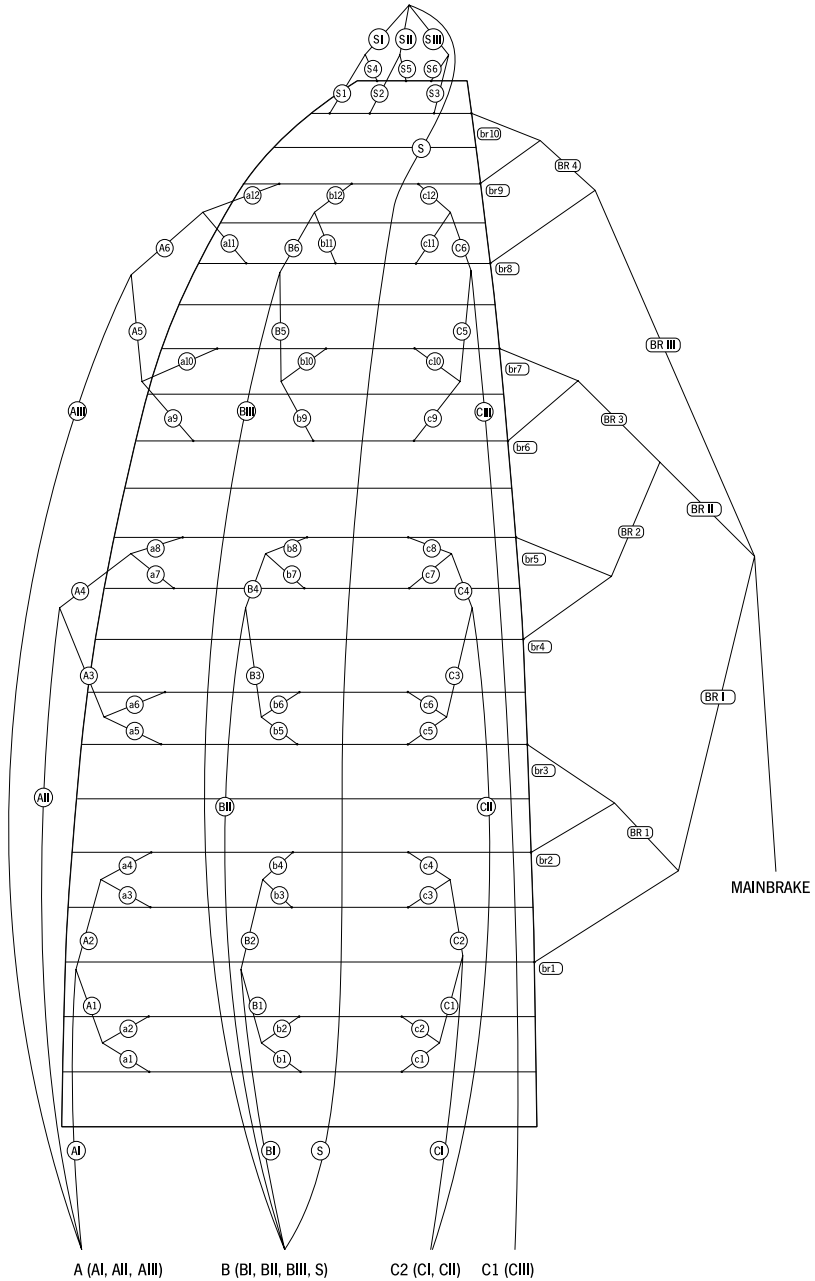
GmbH & Co. KG

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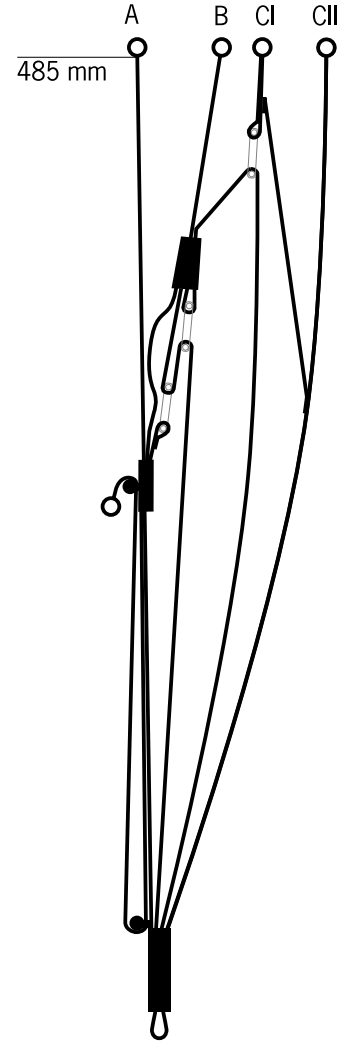
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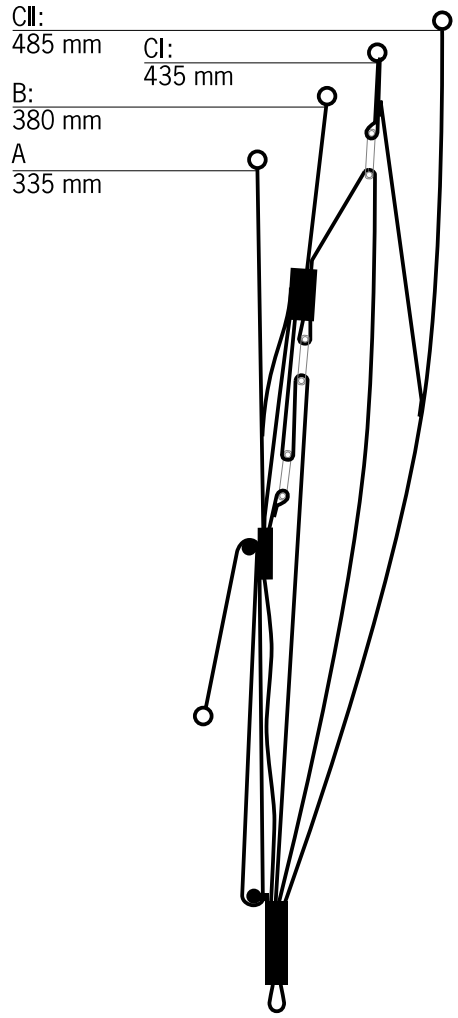
## 17 LEINENPLAN



## 18 TRAGEGURTE



Normalflug



Beschleunigt

