



MERCURY SPORT

PILOT'S MANUAL

Thank you for taking the time to read this booklet.



WELCOME PILOT!

Mercury SPORT – Tuned to Perfection





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1. INTRODUCTION

Welcome to the new dimension of high end En-D class. The Mercury Sport is a finely tuned competition 'Top Gun' with typical comfortable and precise characteristics of Axis gliders. It was optimised for maximum efficiency in climb and glide.

It is a high performance (Top End En-D) wing meant for very experienced pilots who hold a full paragliding pilot licence. It is dedicated to highly skilled competition pilots and also suitable as a cutting edge cross country glider. Extensive development, usage of the latest engineering methods and hundreds hours of thorough testing resulted in a user friendly paraglider with a great performance, making sure that you will stay on the very top of the field.

Mercury Sport is a 2 ½ liner concept wing of 7,7 aspect ratio and 84 cells. Although the paraglider has passed EN-D flight certification, it requires very precise and measured piloting inputs. For that reason the Mercury Sport is meant mostly for active competitors.

This is Mercury Sport. This is our flagship, our pride.

This manual provides information about the glider, which will help you to fly safely and keep your wing in good condition. If after reading this manual you have any further questions, please don't hesitate to contact us or any authorised Axis dealer.

Thank you for choosing the new **Mercury Sport** from **Axis**.

*www.axispara.cz
www.pgbase.co.uk*

SAFETY NOTICE

By the purchase of this 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 paragliding equipment greatly increases these risks. Neither Axis nor the seller of Axis equipment shall 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

2. PRE FLIGHT



Pre-delivery Inspection

The Mercury Sport is delivered with a rucksack, inner bag, compression strap and riser's inner bag. Your dealer or instructor should have made a test inflation and test flight before delivery to you.

Brake-line Length

When you receive your new Mercury Sport, the brake-line length is set the same as the certified test glider. This length has been finely tuned by Axis test pilots and it should not be necessary to adjust it.

If you feel it is necessary to adjust the brake-line length to suit physical build, height of harness hang points, or style of flying we recommend you test-fly the glider after every 20mm of adjustment.

There should always be free brake travel when the glider is flown hands-up. This means when you look at your brake lines in flight with your hands up, there should be a slight bow, or arc, to the line – the brake lines should not be tight. This is to prevent the brakes being applied when the speed-system is used.

Brake lines that are too short:

- May lead to fatigue from flying with your hands in an unnatural position
- May impede recovery from certain manoeuvres
- Will certainly reduce your glider's speed range.

Brake lines that are too long will:

- Reduce pilot control during launch
- Reduce control in extreme flying situations
- Make it difficult to execute a good flare when landing.

Each brake line should be tied securely to its control handle with a suitable knot.

Other adjustments or changes to your Mercury Sport **lead to a loss** of guarantee, airworthiness and **validity of EN certification** and may endanger both yourself and others.

If you have any suggestions on improvements let us know and our test pilots will try out your ideas in a controlled situation.

Weight Range



The Mercury Sport must only be flown within the certified configuration as shown in this manual. The weight range quoted is the total in-flight weight which includes pilot, glider, harness, clothing and accessories.

It's absolutely necessary to choose the right size of your Mercury Sport, but how to make the right decision, if you are between the certified weight range sizes?

The Mercury Sport is a racing wing and therefore you should choose to fly in the top part of the weight range to maintain top speed and agile handling with direct feedback from the canopy.

Mercury SPORT	S	M
Zoom	96,5	100
Max Wing Chord	2,17	2,25
Area	23,60	25,4
Span	13,50	14,00
Aspect Ratio	7,7	7,7
Projected Area	19,60	21,30
Projected Span	10,50	11,00
Projected A/R	5,7	5,7
Number of Cells	84	84
Take Off Weight (kg)	88-102	102-118
Min. Speed	25	25
Trim Speed	40	40
Acc. Speed	60	60
Min. Sink Rate	0,85	0,85
Gliding Ration	12	12
Homologation	EN-D	EN-D

Harness Settings



It's necessary to spend some time and adjust your harness to your comfort, so you can enjoy long hours of flying. Make sure your shoulder's strap is not too tight or loose, or you might find difficult to get seated after launching.

Karabiners distance should be set as follows: S and M at 46cm.

Pre-flight Safety

Before flying this glider you should:

- Have the appropriate practical and theoretical training
- Have the required licence and insurance
- Be fit to fly and unaffected by alcohol, drugs or stress
- Wear a suitable helmet
- Use a suitable harness and rescue parachute
- Make a thorough pre-flight check.

3. FLYING THE MERCURY SPORT

We recommend you practice inflating your glider before flying it, and make your first flights in gentle conditions on a familiar flying site.

A. Normal Flight

Pre-flight Inspection

A proper pre-flight check is essential for safe flying.

Before launch lay the glider out into a slight arc with the centre of the wing higher than tips and check that:

- Cell openings are free of obstructions
- Lines are free of tangles or knots
- No twigs, grass or other objects are tangled in the lines
- Risers are correctly connected
- Brake lines run freely through the pulleys
- Knots on brake handles are secure
- Karabiners on risers are closed and tightened

Launch

The key to successful and pleasurable launching is to practice ground-handling on flat ground as often as possible. The Mercury Sport inflates easily and steadily



using forward or reverse launch techniques. To forward (alpine) launch in light or nil wind there is no need to pull the risers hard. Allow the glider to stabilise overhead and run positively forward, checking the canopy is fully inflated and clear of any knots or tangles. Reverse launching is recommended in stronger wind. In this case, canopy may try to overshoot the pilot, so be prepared to slow it down.

Remember! Always visually check that your glider is fully inflated and without any tangles before you take off. This is essential for your safety!

Flight

The best glide speed in calm air is achieved in the hands-up position. The minimum sink rate is produced with both brake lines drawn down equally to about 20% of their range.

Turning

The handling characteristics of the Mercury Sport require no special or non-standard procedures. Brake pressure is progressive. This gives a responsive and sporty feel to the handling. In an emergency (e.g. a broken brake line) the Mercury Sport can be manoeuvred by **very careful** steering with the rear risers or by weight shift.

Remember! Turning at minimum speed (full brakes on) rapidly increases the risk of entering spin, especially if you hit a thermal. Therefore, if you feel the loss of pressure, release a bit the brake handles immediately,

Using the Speed System

The speed system on the Mercury Sport comes supplied with Brummel hooks ready to attach to your own speed-bar of choice. When you have done this, check the speed system runs smoothly by hanging in your harness before flying. In particular, check that the speed system won't be engaged when in normal flight. Unnecessary knots and loops in a speed system are not recommended.

Maximum useable speed is one of the strongest advantages of Mercury Sport. However, in spite of this exceptional stability, any collapse at full speed will be more severe than the same event experienced at trim speed. Always keep both hands on the brake handles when flying fast and be ready to release the speed-bar immediately at the first sign of a collapse. Use the speed system very carefully when flying close to the ground or the terrain.

Remember! Using the full speed-bar make the glider more prone to collapse as it decreases the angle of attack.

Landing



The new Mercury Sport has an excellent gliding ratio. Take account of this when making your landing approach and give yourself the opportunity for S-turns or a longer approach than you might be used to.

For a normal, into-wind landing evenly pull the brakes all the way down when you are about one metre from the ground. Under nil-wind conditions, or if you are forced to make an emergency downwind landing, a wrap on each brake will allow you to make a stronger flare.

Towing

The Mercury Sport has been designed for tow-launching and shows no unusual tow characteristics. It's your responsibility to obtain the right qualification and use suitable harness attachments.

B. Rapid Descent Techniques

Most pilots will, at some time, want to lose height. This may be because of a change in the weather, you want to stay out of cloud, or simply because you want to finish your flight quickly.

Ideally, the best way to lose height is to find an area of sink and stay in it. This way you can fly normally to the ground. However, if there is no sink, or if you are in strong lift and need to go down, a rapid descent method may be needed.

There are two main rapid descent methods:

- Big ears
- Spiral dive

Remember!

Each of these descent methods places extra, different stresses on gliders and should be avoided if you want to extend the life of your glider!

It is important these manoeuvres are initially practiced under qualified supervision and preferably during a safety training course (SIF).

Big Ears



This is the easiest and safest technique for descent while maintaining forward speed. Depending on how much of the wing-tip you deflate, 3m/s to 6m/s sink rate can be achieved.

The Mercury Sport can be steered with big ears by weight-shift alone. Never apply the brakes other than for re-inflation due to the risk of a possible stall.

Initiation: Reach up as high as possible (keep hold of your brake handles) and take hold of the outer A-line on each side of the glider. Pull one in first, maintain direction, and then pull down the second one. Hold them in firmly. Make sure the lines are pulled down equally on each side and your big ears are even.

Recovery: To reopen the big ears, release both risers at the same time. Under normal circumstances the ears will come out on their own, when the lines are released. Opening may be accelerated by slightly pumping the brakes.

Big Ears and Spiral Dive

Entering a spiral dive whilst holding in big ears put extreme strain on the glider, which can lead to equipment failure. AXIS recommends to not to use this manoeuvre.

Remember!

While using the big ears, always use the weight shift for directional control. It is possible to land with big ears however you should release them, before the final approach.

While in big ears, your forward speed and sink can be further increased by using the speed system. Always make the big ears first and then apply the speed bar. To finish the manoeuvre release the speed bar first, and then the ear's tips.

Spiral Dive

The spiral dive is the most effective way of making a fast descent. During the spiral dive the pilot and glider will experience strong centrifugal forces which strain the glider. As such it should be considered an extreme manoeuvre.

Initiation: Weight shift and smoothly pull on one brake so the glider goes from a normal 360-degree turn into a steep turn and from there into a spiral dive. Once established in the spiral the descent rate and bank angle can be controlled with weight shift and the outer brake.

Recovery: The Mercury Sport recovers from a spiral spontaneously as soon as the brakes are released and weight shift returns back to natural stability. It has no tendency to remain locked in a spiral dive. To exit allow the spiral to slow for a turn or two by applying outer brake and weight shift then release smoothly. Always finish a spiral dive at a safe altitude.



Remember!

Spiral dives with sink rate over 10m/s are easily possible, but should be avoided as they put extreme strain on the glider. Always double check your altitude before initiating any rapid descent technique.

Dehydrated and/or not accustomed to spiralling pilot can fall unconscious in steep spiral dive! Due to its long lines the Mercury Sport may generate extremely high G -force in spiral dive. You should use only moderate spirals so as not to put unnecessary load on yourself.

B - Line Stall

As the Mercury Sport is a two liner concept glider therefore it is not possible to execute classic B-stall. The paraglider was not certified for this method of fast descent.

THE BEST TECHNIQUE IS WISE AND SAFE FLYING, SO YOU WILL NEVER HAVE TO DESCEND RAPIDLY!

C. Flying In Turbulent Conditions

Active Flying – B Risers Control

When flying through turbulent air, collapses could be reduced or prevented by applying pressure through the B risers control balls (located at the top of the B risers). Always keep hold of your brake handles without any wraps, when flying with active B riser control method. If you are losing pressure in the wing's nose, quickly apply pressure on control balls to stop collapse from happening.

Whilst flying on speed bar pulling the control balls is exactly same as releasing the speed bar.

If the air gets bit turbulent whilst flying on speed bar apply pressure on B risers balls to feel the wing open and pressured. Once the air becomes smoother again reduce/release the control balls pressure to regain the maximum speed again.

To minimise **likelihood** of unexpected collapses and to maintain highest average speed use actively B risers control balls and speed system methods.

In stronger weather conditions it's necessary to fly with a little brake applied (approx. 20 cm) to prevent deflations and direct feedback from the canopy. You need to maintain a constant pressure through the brakes. The aim is to keep the glider directly above your head in all situations by responding correctly to the glider's movements by using the brakes and weight shift. If you feel loss in pressure (glider pitches in front of you) apply the brakes until normal pressure is resumed then release them to original position. On the other hand, if the glider drops behind you, raise the hands to allow it to regain the speed. All this movements (pumping the brakes) can be symmetric/asymmetric and must be done quickly.



Remember!

Take extra care while flying in rough air. The Mercury Sport is very responsive to piloting inputs. Always watch your airspeed and be careful when applying deep brakes, as you could accidentally stall the wing. Allow yourself lots of practise to get most out of its performance.

Asymmetric Collapse

To re-inflate the Mercury Sport after an asymmetric collapse immediate countersteering is required in order to maintain the flight direction and to prevent a dive. You should always maintain course and direction by weight-shifting away from the collapsed side. This can be reinforced by applying a small amount of brake on the opposite side to the deflation. Under normal circumstances the canopy will reinflate spontaneously.

If the collapse stays in, the collapsed side can be re-inflated by pumping the brake on the collapsed side in a firm and smooth manner. Occasionally pilot's input may be needed to open the wingtip.

If you experience a big collapse while accelerated the canopy will fall behind you due to the difference in inertia between you and the canopy. You must wait until you pendulum back under the canopy before dealing with the deflation. Reacting too early can risk stalling the glider completely. Release the speed-bar immediately, if you have a big collapse during accelerated flight and, while keeping weight shift neutral, apply slight brake to the open side. Let the glider enter a turn if space allows in order avoiding a spin or stall.

In order to execute simulated collapses on the Mercury Sport, additional lines are required, which can be obtained from manufacturer.

CAUTION! EXTREME FLYING MANOEUVRES SHOULD ONLY BE CARRIED OUT DURING A SAFETY TRAINING COURSE UNDER ADEQUATE GUIDANCE!

WHILE PROVOKING OR EXITING REAL SITUATIONS THERE IS A DANGER THAT YOUR ACTIONS WILL PROVE TOO QUICK OR TOO STRONG. THEREFORE YOU SHOULD ALWAYS EMPLOY GOOD JUDGMENT, STAY CALM AND TAKE ONLY MEASURED ACTIONS!

Cravats (Trapped line over the canopy)



In order to minimise drag, the Mercury Sport as well as all latest competition wings have widely spaced suspension lines and stiffened leading edge. Therefore after some serious collapse your wingtip may get tangled. Should this happen, first you need to maintain your direction. Normally a couple of strong brake pulls will clear the tangles out. If not, try big ears or pull down the grey sheathed line leading to the stabiliser. Always be extra careful with any brake inputs as you could accidentally stall the wing. In case of getting to accelerating rotation or if in any doubts, pilot should use the reserve, whilst still has enough altitude.

Symmetric Collapse

A symmetric, or frontal, collapse will normally reopen without any pilot input. The Mercury Sport will regain airspeed with a small surge. Be careful not to brake while the glider is behind you as you could induce a stall.

The Mercury Sport is a latest hi-tech paraglider with significantly stiffened leading edge. In turbulent conditions it is possible that airflow may keep the leading edge collapsed. That's why an instant pilot's reaction is needed – a measured braking at the correct moment will greatly speed up the recovery.

Deep Stall

The Mercury Sport has no tendency to either get into, or stay in, a deep stall. If the glider does enter a deep stall, accelerate the glider out of the deep stall by either pushing on the A-risers or by using the speed bar. Never try to steer out of a deep stall. A wet glider has a higher tendency to deep stall, so if you pass through rain accelerate a little and avoid using big-ears until the glider is dry.

Full Stall

This is an extreme manoeuvre that should rarely, if ever, be required. To induce a full stall take one or two wraps of the brake lines and pull both of them down smoothly. Hold them down, locking your arms under your seat until the canopy falls behind you and deforms into a characteristic crescent shape. In a stable full stall the canopy will oscillate back and forth. Be careful not to release the brakes prematurely or asymmetrically.

The Mercury Sport recovers from a full stall automatically after the brakes are released. During correct recovery, where the brakes are let up a little to allow air to enter the glider prior to being released when the glider is in front of you, the Mercury Sport shows no tendency to surge strongly in front of the pilot.

If the brakes are released prematurely or too quickly there is a possible tendency for the glider to surge. This can be corrected by simultaneous equal braking on both sides. Be careful not to release the brakes asymmetrically as this can cause a large asymmetric collapse followed by a tendency to enter a spin.

Negative Spin



Should a spin occur the Mercury Sport is capable of recovering automatically when the brakes are released. As the glider surges forward slow it down with the brakes to avoid the possibility of a front collapse or an asymmetric collapse which could cause a cravat. Always wait for the glider to be in front of you or above you - never brake while it is behind you as this can risk a stall.

Safety Notice: The Mercury Sport has excellent passive safety as shown by the certification tests. However, be aware that the Mercury Sport can surge forward when a negative spin is released too quickly. Avoid releasing from a spin too quickly or while the glider is behind the pilot.

Acrobatic and SIF Flying

The Mercury Sport is a high performance racing wing and is not designed for aerobatic manoeuvres. However, it's possible to perform SIF (Simulated Incident in Flight) with your new Mercury Sport. AXIS recommends going on the SIF course, every time you upgrade your gear to get familiar with your new equipment. SIF course will boost your confidence and make your flying more enjoyable ☺

Mercury Sport was certified with "collapse lines" which are recommended to be used for any simulation of collapses.

Remember! A wrong manoeuvre at the wrong time may change a straightforward situation into a dangerous problem. Extreme manoeuvres also expose your glider to forces which may damage it. Practice these techniques under adequate supervision preferably during a safety training course.

4. CARE, MAINTENANCE, PACKING and REPAIRS

The materials used to construct your Mercury Sport have been carefully chosen for maximum durability. If you treat your glider carefully and follow these guidelines it will last you a long time. Excessive wear can occur by bad ground-handling, careless packing, unnecessary exposure to UV light, exposure to chemicals, heat and moisture.



Caring Tips

- Choose a suitable area to launch your glider. Lines caught on roots or rocks lead to unnecessary strain on the attachment tabs during inflation. Snagging lines may rip the canopy fabric or damage lines.
- When landing, never let your wing slam down the ground leading edge first! The sudden pressure increase can severely damage the air-resistant coating of the canopy as well as weaken the ribs and seams.
- Whenever you put the glider down, try to slow the wing down by taking a hold of A risers and stepping towards the canopy. This smooth and gentle operation will prolong the life of your wing.
- Always lift up and carry your wing, while moving somewhere else, dragging the glider over grass, soil, sand or rocks, will significantly reduce its lifetime and increase its porosity.
- When preparing for launch or when ground-handling, be sure not to step on any of the lines or the canopy fabric.
- Don't tie any knots in the lines.

UV Damage

Protect your canopy and lines from unnecessary exposure to sunlight.

Storage

- Avoid packing your glider when it is wet. If there's no other way, then dry it as soon as possible away from direct sunlight. Be careful to avoid storing your canopy when damp or wet: this is the most common reason for canopy degradation.
- Don't let your glider come into contact with seawater. If it does, rinse the lines, canopy and risers with fresh water and dry it away from direct sunlight before storing.
- After flight or when storing, always use the inner protection sack.
- When storing or during transport make sure your glider isn't exposed to temperatures higher than 50°C.
- Never let the glider come into contact with chemicals. Clean the glider with clean lukewarm water only. Never clean using abrasives.
- For long-term storage don't pack the glider too tightly. Leave the rucksack zip open when possible to allow any moisture to evaporate.

Repairs

- Small holes in the canopy can be repaired using adhesive tape.
- Larger repairs or cell replacement should only be carried out by the manufacturer's authorised agent.
- Damaged lines should be replaced by your Axis dealer. When a new line has been fitted always check its length against its counterpart on the opposite side of the wing. After replacing a line always inflate the glider on flat ground to check that everything is in order before flying.



- After tree or water landings always examine the glider carefully. If you suspect the glider may be damaged in any way contact your nearest authorised Axis dealer.
- After 100 hours of flying or two years, whichever comes first, your Comet must be checked and tested by the manufacturer's authorised agent.

Packing

To maximize the life of your wing, it's necessary to pack the glider carefully and take extra care of the plastic reinforcements.

AXIS recommends 'classical' rolling up packing from tips to the centre of the glider, folding it at half each time.

Concertina method is not necessary as the canopy is stressed at the same spots every time you pack your glider.

Step By Step Guidance:

- 1) Lay the wing flat on the ground and gather the lines with raisers into the canopy and put the risers into the mini riser's sack.
- 2) Take the tip of the wing and fold it into the centre of the glider. Repeat this until you have each side packed in approximately 30 cm pack. Do the same thing with the other side of the wing.
- 3) Take the whole side of the glider and fold it on the other one to make one big 'sausage'.
- 4) Start folding in from trailing edge. Three folds are enough to pack the glider properly. Do not fold the cells with plastic reinforcement and make sure they remain flat. The cells should always face outside the pack to let the moisture evaporate.
- 5) Strap up the glider. Do not strap it up over the cells.
- 6) Finally place the glider into the inner bag with the cells facing out the bag.

5. TECHNICAL DETAILS

Evolved from highly successful predecessor Mercury glider, new Mercury Sport has a changed profile with improved wingtip stabilisers to reduce drag and give better performance.

The 7.7 aspect ratio, 84 cells, and the two liner concept with reduced total line length give the Mercury Sport top performance.



The inner structure is a direct development from previous Axis series with rib reinforcements. The changes in the internal structure mean higher passive safety. The canopy is reinforced by tapes which connect to attachment points inside the cells – this prevents distortion and helps the canopy keep its form.

A new line system helps to reduce the length of the main lines. The brake attachments have been moved to the trailing edge to create more precise handling and feedback.

All the stitching is on the inside of the canopy for greater protection.

Testing and Certification

The Mercury Sport has passed certification EN-D. The certification of each canopy and its serial number is placed on label inside of central glider cell. Certification is valid for all ABS harnesses. This type of harness allows a certain degree of adjustment to be made to the length of the waist strap. The recommended distance between the karabiners is as follows: **S and M at 46cm.**

In common with all other paragliders, when cross-bracing is looser than the recommended distance, weight-shift control increases and the glider feels more sensitive. However, automatic recovery from a collapse when using slack cross-bracing can be slower and more unpredictable. When cross-bracing is tighter, the pilot feels more stable, but the effectiveness of weight-shift is less effective.

The Mercury Sport is not a paramotor wing. The use of a power unit or paramotor with the Mercury Sport has not been tested by the manufacturer or by the testing authority.

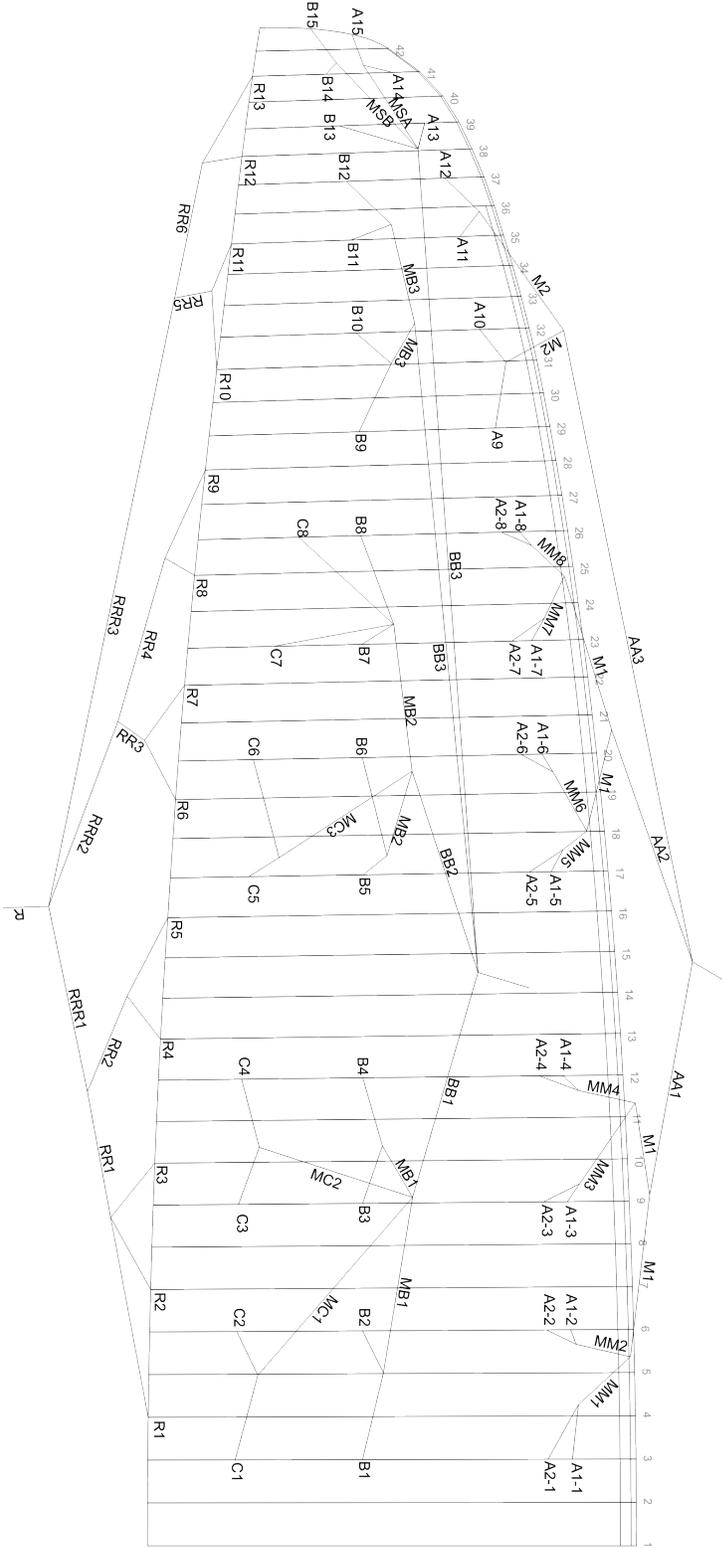


Technical Data

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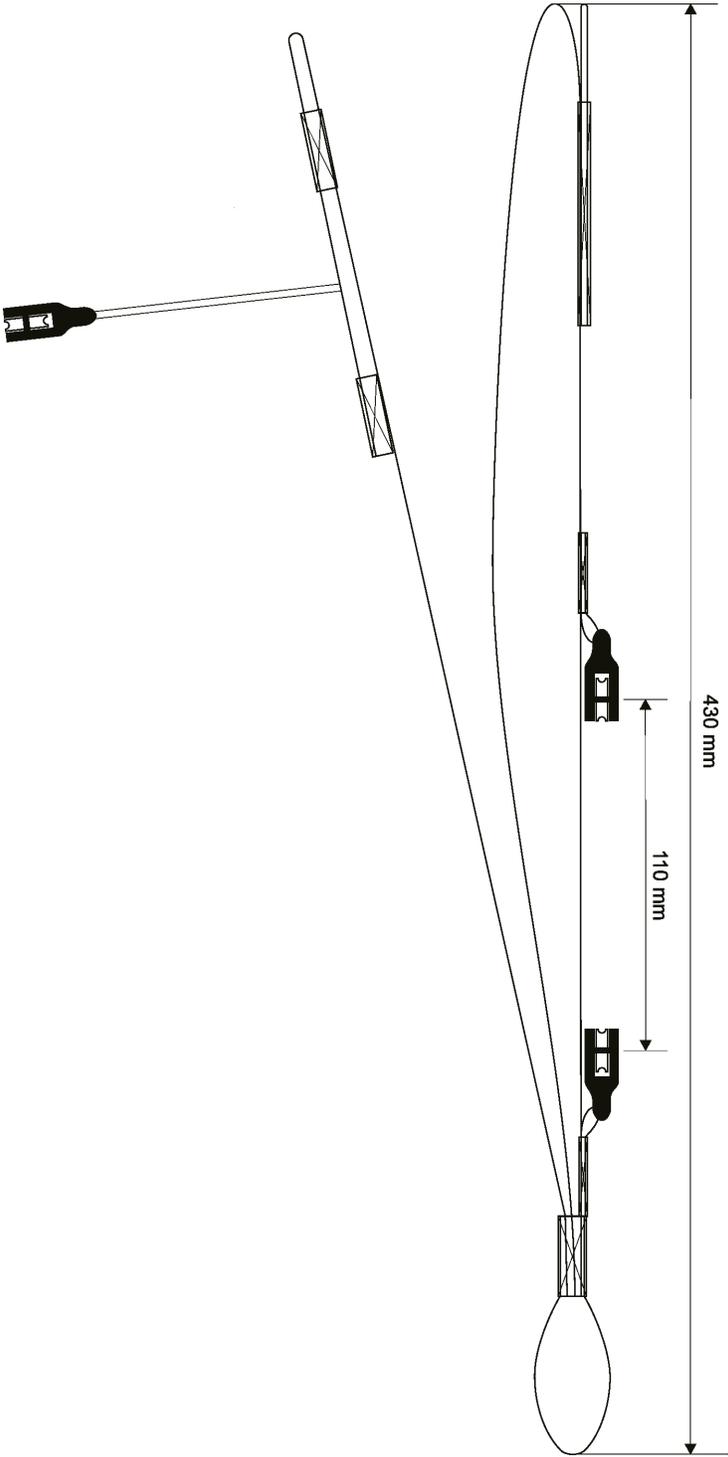
Guarantee:

Your new wing and components are covered by a 2 year guarantee against any manufacture fault. The guarantee does not cover misuse or abnormal use of any AXIS equipment.



Line Plan

Risers





Line measurements

NAME	QUANTITY	MATERIAL	S	M
A1-1	2	Liros DC60	236	235
A1-2	2	Liros DC60	238	240
A1-3	2	Liros DC60	245	250
A1-4	2	Liros DC60	243	250
A1-5	2	Liros DC60	241	250
A1-6	2	Liros DC60	248	255
A1-7	2	Liros DC60	249	255
A1-8	2	Liros DC60	240	245
A2-1	2	Liros DC60	218	220
A2-2	2	Liros DC60	211	215
A2-3	2	Liros DC60	221	225
A2-4	2	Liros DC60	218	225
A2-5	2	Liros DC60	219	225
A2-6	2	Liros DC60	225	230
A2-7	2	Liros DC60	228	230
A2-8	2	Liros DC60	226	225
A9	2	Cousin vectraline 12100	682	714
A10	2	Cousin vectraline 12100	540	568
A11	2	Cousin vectraline 12100	432	456
A12	2	Cousin vectraline 12100	420	442
A13	2	Cousin vectraline 12100	1070	1115
A14	2	Cousin vectraline 12100	414	435
A15	2	Cousin vectraline 12100	452	474
MM1	2	Liros DC120	1019	1084
MM2	2	Liros DC120	923	982
MM3	2	Liros DC120	875	928
MM4	2	Liros DC120	935	987
MM5	2	Liros DC60	832	872
MM6	2	Liros DC60	727	763
MM7	2	Liros DC60	677	713
MM8	2	Liros DC60	679	710



M1	4	Liros DC200	1230	1277
M2	4	Liros DC160	1230	1277
M3	4	Cousin vectraline 12240	1246	1298
MSA	2	Cousin vectraline 12100	564	596
MSB	2	Cousin vectraline 12100	544	577
AA1	2	Liros DC500	5393	5588
AA2	2	Liros DC300	5379	5586
AA3	2	Cousin vectraline 12470	5401	5599
B1	2	I Cousin vectraline 16140	1254	1305
B2	2	Cousin vectraline 16140	1127	1171
B3	2	Cousin vectraline 16140	1082	1128
B4	2	Cousin vectraline 16140	1124	1171
B5	2	Cousin vectraline 12100	1014	1062
B6	2	Cousin vectraline 12100	913	953
B7	2	Cousin vectraline 12100	859	897
B8	2	Cousin vectraline 12100	903	933
B9	2	Cousin vectraline 12100	680	715
B10	2	Cousin vectraline 12100	540	566
B11	2	Cousin vectraline 12100	439	463
B12	2	Cousin vectraline 12100	447	460
B13	2	Cousin vectraline 12100	1072	1080
B14	2	Cousin vectraline 12100	484	502
B15	2	Cousin vectraline 12100	517	540
MB1	4	Cousin vectraline 16330	1241	1295
MB2	4	Cousin vectraline 12240	1243	1295
MB3	4	Cousin vectraline 16140	1245	1295
C1	2	Cousin vectraline 12100	1418	1421
C2	2	Cousin vectraline 12100	1282	1276
C3	2	Cousin vectraline 12100	1234	1233
C4	2	Cousin vectraline 12100	1260	1260
C5	2	Cousin vectraline 12100	1148	1159
C6	2	Cousin vectraline 12100	1045	1049
C7	2	Cousin vectraline 12100	1029	1028
C8	2	Cousin vectraline 12100	985	990
MC1	2	Cousin vectraline 12100	1250	1297
MC2	2	Cousin vectraline 12100	1272	1319
MC3	2	Cousin vectraline 12100	1283	1330



BB1	2	Cousin vectraline 16500	5355	5564
BB2	2	Cousin vectraline 12470	5371	5571
BB3	2	Cousin vectraline 16330	5396	5611
Stab.	2	Cousin vectraline 12240	5844	6073
R1	2	Cousin vectraline 12100	1712	1790
R2	2	Cousin vectraline 12100	1420	1497
R3	2	Cousin vectraline 12100	1250	1320
R4	2	Cousin vectraline 12100	1251	1303
R5	2	Cousin vectraline 12100	1209	1258
R6	2	Cousin vectraline 12100	1176	1218
R7	2	Cousin vectraline 12100	1074	1115
R8	2	Cousin vectraline 12100	1012	1067
R9	2	Cousin vectraline 12100	1011	1076
R10	2	Cousin vectraline 12100	1041	1099
R11	2	Cousin vectraline 12100	974	1036
R12	2	Cousin vectraline 12100	926	985
R13	2	Cousin vectraline 12100	944	1005
RR1	2	Cousin vectraline 16140	1781	1860
RR2	2	Cousin vectraline 16140	1692	1748
RR3	2	Cousin vectraline 16140	1574	1647
RR4	2	Cousin vectraline 16140	1576	1633
RR5	2	Cousin vectraline 16140	1349	1400
RR6	2	Cousin vectraline 16140	1349	1397
RRR1	2	Cousin vectraline 12240	2441	2543
RRR2	2	Cousin vectraline 12240	2354	2476
RRR3	2	Cousin vectraline 12240	2442	2547
R	2	Liros DFLS 200	2855	2957



Specification of Materials:

Canopy

Upper surface: Porcher Sport: Skytex 9017 E77A, water-repellent, 38 g/m²

Upper surface - Leading edge: Porcher Sport: Skytex 9092 E85A, Evolution, 38 g/m²

Lower surface: Porcher Sport: Skytex 9017 E77A, water-repellent, 38 g/m²

Lower surface - Leading edge: Porcher Sport: Skytex 9092 E85A, Evolution, 38 g/m²

Ribs: Porcher Sport: Skytex 9017 E29A, hard finish, 38 g/m²

Reinforcement: Porcher Sport: SR Scrim-2420

Thread: Bonded nylon D60, D40

Suspension system

Lines

LIROS: Dyneema DC 60/ comp line, 0.6mm, minimum strength 60 daN

LIROS: Dyneema DC 120/ comp line, 0.85mm, minimum strength 120 daN

LIROS: Dyneema DC 160/ comp line, 1.1mm, minimum strength 160 daN

LIROS: Dyneema DC 200/ comp line, 1.6mm, minimum strength 200 daN

LIROS: Dyneema DC 300/ comp line, 1.8mm, minimum strength 300 daN

LIROS: Dyneema DFLS 200/ PES cover, 1.42mm, minimum strength 200 daN

Cousin Trestec: Vectraline 12100/ comp line, 0.6mm, minimum strength 50 daN

Cousin Trestec: Vectraline 16140/ comp line, 0.7mm, minimum strength 75 daN

Cousin Trestec: Vectraline 12240/ comp line, 0.9mm, minimum strength 115 daN

Cousin Trestec: Vectraline 16330/ comp line, 1.0mm, minimum strength 145 daN

Cousin Trestec: Vectraline 12470/ comp line, 1.2mm, minimum strength 200 daN

Risers:

Cousin Trestec: PES Pre-stretched polyester reinforced with technora, minimum strength 2000 daN

Maillons:

Elair Servis: Niro triangle 4/200, minimum strength 200 daN

Speedsystem pulleys:

Riley Fittings Australia, RM 302

Harken USA, Ball Bearing Pulley 467



6. ABOUT AXIS

AXIS is a friendly paragliding company established in 1990 in Brno, Czech Republic. Originally started as a PG and HG school, production of paragliding equipment began in 1997. The mission statement of AXIS is production of high performance wings, but with better passive safety than the competitors.

The AXIS specializes in precise handling, which gives the pilot excellent feedback from the canopy and allows 'great time on board'.

The main focus of AXIS is a competition wing Mercury with a proven ability of success on all competition levels and in PWC series. The development ideas are implemented into the rest of the AXIS wing range.

The lessons learned from these thousands of hours of competition success have been used to develop the new Mercury SPORT, a new generation of competition gliders.

We welcome feedback from you about your new Comet. Send it to us at info@axispara.cz or martin@pibase.co.uk (UK pilots).

Please Note

We have made every effort to ensure that the information in this manual is correct, but please remember it is for guidance only. It is not a training manual. It must not be used as a substitute for proper training under the direction of an approved body.

The manual is subject to change without prior notice. Check the websites for updates and the latest information regarding Axis products.

Enjoy your new Mercury SPORT!

www.axispara.cz
www.pibase.co.uk

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