ADAM

BRUCE GOLDSMITH DESIGN

MANUAL

EN-A	34
rated	cells
technology	weight
CCB	4.9kg

Version 2.2, November 2016

Contents

ADAM Owner's Manual
PARAGLIDER EN / LTF A

Welcome to Bruce Goldsmith Design

BGD is a world leader in the design and production of paragliders. For many years Bruce Goldsmith and his team have been developing products with world-beating performance for pilots who want the best. We apply our competitive knowledge to design top quality products that combine the highest performance with the safe handling our customers value and respect. BGD pilots appreciate our quality and reliability. BGD´s world-class status is based on the skills and expertise we have developed in combining aerodynamic design with cloth and materials technology. All BGD products are developed and made with the same skill and attention to good design that are synonymous with the ultimate performance and precision required by paragliders.

Congratulations on your purchase of the BGD ADAM

The ADAM is a paraglider, designed to a high standard of safety and stability, but it will only retain these characteristics if it is properly looked after. Please read this manual carefully from the first to the last chapter to ensure you get the best out of your ADAM.

This manual has been prepared to give you information and advice about your paraglider. If you ever need any replacement parts or further information, please do not hesitate to contact your nearest BGD dealer or contact BGD directly.

Introduction

The ADAM is an entry-level paraglider suitable for beginner pilots Exceptional stability and passive safety combined with speed and good performance make this a wing which is real pleasure to fly.

The use of this glider is limited to non aerobatic manoeuvres.

This paraglider must not:

- be flown with more than the maximum certified total load
- have its trim speed adjusted by changing the length of risers or lines
- exceed 60 degrees of bank angle
- be flown in rain or snow
- be towed with a tow line tension in excess of 100 kg.
- It is your dealer´s responsibility to test fly the paraglider before you receive it. The test flight record of this is on the last page of this manual. Please be sure that this has been completed by your dealer, to prove that he has done this. Failure to test fly a new paraglider may invalidate any warranty.

Any modification, e.g. change of line lengths or changes to the speed system causes a loss of airworthiness and certification. We recommend that you contact your dealer or BGD directly before performing any kind of change.

Specifications

	S	M	ML	L	
Linear scaling factor	0.94	1	1.05	1.10	
Projected area	18.56	21.00	23.15	25.41	m2
Flat area	22.09	25.00	27.56	30.25	m2
Glider weight	4.3	4.9	5.4	5.9	kg
Total line length	243	275	303	333	m
Height	6.30	6.67	7.00	7.80	m
Number of main lines	3/4/3	3/4/3	3/4/3	3/4/3	A/B/C
Cells	34	34	34	34	
Flat aspect ratio	4.465	4.465	4.465	4.465	
Projected aspect ratio	3.22	3.22	3.22	3.22	
Root chord	2.82	3.00	3.14	3.29	m
Flat span	9.96	10.59	11.12	11.65	m
Projected span	7.73	8.22	8.64	9.05	m
In-flight weight range	50-75	70-95	90-110	105-130	kg
Trim speed	38	38	38	38	km/h
Top speed	50	50	50	50	km/h
Min sink	1.0	1.0	1.0	1.0	m/s
Best glide	8.0	8.0	8.0	8.0	
Certification	EN-A	EN-A	EN-A	EN-A	

2 Preparation

1. Select a suitable takeoff area determined by wind and terrain, clear of any obstacles that may catch in the lines or damage the canopy.

2. If your paraglider has been correctly packed, you should take it to the top of the takeoff area, and allow the rolled canopy to unroll itself down the hill (if on a slope). This should leave the paraglider with the bottom surface facing upwards, the openings at the downwind end of the takeoff area, and the harness at the trailing edge at the upwind side.

3. Unroll the canopy to each side so that the leading edge openings form a semicircular shape, with the trailing edge drawn together as the centre of the arch. The harness should be drawn away from the canopy until the suspension lines are just tight.

3 Pre-flight Inspection

The ADAM is designed to be as simple as possible to inspect and maintain but a thorough pre-flight procedure is mandatory on all aircraft. The following pre-flight inspection procedure should be carried out before each flight.

1. Whilst opening out the paraglider check the outside of the canopy for any tears where your paraglider may have been caught on a sharp object or even have been damaged whilst in its bag.

2. Check that the lines are not twisted or knotted. Divide the suspension lines into six groups, each group coming from one riser. By starting from the harness and running towards the canopy remove any tangles or twists in the lines. Partially inflating the canopy in the wind will help to sort out the lines.

3. It is particularly important that the brakes are clear and free to move. Check the knot which attaches the brake handles to the brake lines. Several knots should be used here or they may get entangled in the brake pulleys. Both brakes should be the same length and this can be checked by an assistant holding the upper end of the brake lines together whilst the pilot holds the brake handles. The brake lines should be just slack with the wing inflated when the brakes are not applied. After checking the brake lines lay them on the ground.

4. Always check the buckles and attachments on the harness. Ensure the two main attachment maillons/ karabiners from the harness to the main risers, and the six shackles which attach the risers to the lines, are tightly done up

5. Before the pilot attaches himself to the harness he should be wearing a good crash helmet, and boots which provide ankle support. Put on the harness ensuring all the buckles are secure and properly adjusted for comfort.

Your paraglider is now ready for flight.

4 Flight Characteristics

This manual is not intended as an instruction book on how to fly the ADAM. You should be a qualified pilot or under suitable supervision, but the following comments describe how to get the best from your ADAM.

Weight range

Each size of the ADAM is certified for a certain weight range. The weight refers to the 'overall takeoff weight'. This means the weight of the pilot, the glider, the harness and all other equipment carried with you in flight.

We recommend to fly the ADAM in the middle of the weight range.

If you fly the ADAM on the lower half of the weight range, the turning agility decreases and the glider will be more damped. In strong turbulence the wing tends to deform and to collapse slightly more than with a higher wing loading. If you mainly fly in weak conditions you should consider flying the ADAM on the lower side of the weight range.

If you fly the ADAM in the upper half of the weight range, the agility and the stability in turbulence will increase. Also the speed will increase slightly. The self damping will decrease in turns, as well as after collapses, so if you fly in bumpy conditions and you want a dynamic flight characteristic you should go for the top of the weight range.

Active Piloting

Even though the ADAM is designed as an easy glider, 'active piloting' is a tool that will help you fly with greater safety and enjoyment. Active piloting is flying in empathy with your paraglider. This means not only guiding the glider through the air but also being aware of feedback from the wing, especially in thermals and turbulence. If the air is smooth the feedback can be minimal but in turbulence feedback is continuous and needs to be constantly assessed by the pilot through the brakes and the harness. Such reactions are instinctive in good pilots. Maintaining contact

with the glider through pressure on the brakes is essential and allows the pilot to feel the loss of internal pressure, which often precedes a collapse. The ADAM is highly resistant to collapse without any pilot action at all, but learning how to fly actively will increase this safety margin even further.

Harness

The ADAM is tested with a 'GH' (without diagonal bracing) type harness. The GH category includes weight shift harnesses as well as ABS style (semi stable) harnesses.

Takeoff

The ADAM is easy to inflate in light or stronger winds and will quickly rise overhead to the flying position. The best inflation technique is to hold one A riser in each hand. The 'big ear' risers could be also held for the best inflation..

Nil Wind

Inflation is best done by taking both of the A risers in each hand. The A risers are marked with red cloth to make them easier to find. In nil or very light wind, stand with all the A lines taut behind you, then take one or two steps back (do not walk all the way back to the canopy) and begin your launch run pulling gently and smoothly on the A risers. As soon as the canopy starts to rise off the ground stop pulling so hard on the A risers but pull all the risers evenly through the harness. Maintaining gentle pressure on the A risers always helps in very calm conditions. Have your hands ready to slow up the canopy with the brakes if it starts to accelerate past you.

Reverse Launch

In winds over 10 km/h it is probably better to do a reverse launch and inflate the canopy whilst facing it using the A risers, without the 'Baby A risers' to prevent the glider from inflating the wingtips first.

The ADAM has little tendency to overshoot but releasing pressure on the A risers when the canopy is at about 45° will help to avoid overshooting. The stronger the wind and the greater the pressure on the A risers, the more quickly the canopy will rise.

Turning

The ADAM does not require a strong-handed approach to manoeuvering. For a fast turn smoothly apply the brake on the side to which the turn is intended. The speed with which the brake is applied is very important. If a brake is applied fairly quickly the canopy will do a faster banking turn, but care must be taken not to bank too severely. To attain a more efficient turn at minimum sink, apply some brake to the outside wing to slow the turn and prevent excessive banking. The ADAM flies very well like this, but care must be taken not to over-apply the brakes as a spin could result, even the ADAM has a very low spin tendency. The ADAM will turn far more efficiently if the pilot weight-shifts into the turn in the harness. Remember that violent brake application is dangerous and should always be avoided.

Straight Flight

The ADAM will fly smoothly in a straight line without any input from the pilot. With a pilot weight of 70 kg on the medium size without the accelerator the flying speed will be approximately 38 km/h. .

Thermalling

To attain the best climb rate the ADAM should be thermalled using a mild turn, as described above, keeping the wing´s banking to a minimum. In strong thermals a tighter banking turn can be used to stay closer to the thermal´s core. Remember that weight-shifting in the harness will make the turn more efficient and reduce the amount of brake required.

Care must be taken not to apply so much brake as to stall. This is however very easy to avoid as the brake pressure increases greatly as you approach the stall point. Only fly near the stall point if you have enough height to recover (100m).

Wing Tip Area Reduction (Big Ears)

The ‘baby A riser’ allows the ADAM to be ‘big eared’ simply and easily. The big ear facility does not allow you to fly in stronger winds, but is a facility which allows the pilot to descend quickly without substantially reducing the forward

speed of the canopy (as is the case with B lining). To engage big ears the pilot will need to lean forward in the harness and grasp the big ears risers (one in each hand) at the maillon, keeping hold of both brake handles if possible. Pull the risers out and down at least 30 cm so as to collapse the tips of the glider. It is very important that the other A lines are not affected when you do this as it could cause the leading edge to collapse. Steering is possible by weight-shifting with big ears in. If the big ears do not come out quickly on their own, a pump on the brakes will speed things up.

Before using the big ears facility in earnest it is essential to practice beforehand with plenty of ground clearance in case a leading edge collapse occurs. Always keep hold of both brakes in order to retain control. Putting your hands through the brake handles so they remain on your wrists is a good method of doing this.

B-Line Stall

This is a fast descent method and is a useful emergency procedure. With both hands through the brake handles, the pilot takes hold of the top of the B risers, one in each hand, and pulls them down by around 50 cm. This will stall the canopy and forward speed will drop to zero. Make sure you have plenty of ground clearance because the descent rate can be over 10 m/sec. To increase the descent rate pull harder on the B riser. When you release the B riser the canopy will automatically start flying again, normally within two seconds. Sometimes the canopy will turn gently when it exits from the B line stall. It is normally better to release the B riser fairly quickly rather than slowly as this may result in the canopy entering deep stall.

Always release the riser symmetrically as an asymmetric release from a B line stall may result in the glider entering a spin. This manoeuvre is useful when losing a lot of height quickly is necessary, perhaps when escaping from a thunderstorm. It should not be performed with less than 100 m of ground clearance (see also Chapter 5).

Spiral Dive

A normal turn can be converted into a strong spiral dive by continuing to apply one brake. The bank angle and speed of the turn will increase as the downward spiral is continued. Be careful to enter the spiral gradually as too quick a

brake application can cause a spin or enter an over-the-nose spiral.
BGD gliders are designed and tested to recover from normal spirals with a descent rate inferior to 16 m/s, automatically without pilot input. If the pilot increases the descent rate of the spiral to over 16 m/s or initiates what is known as an over-the-nose spiral, the glider may require pilot input to recover. In this case all the pilot needs to do is to apply some outside brake and steer the glider out of the turn.
The over-the-nose spiral is a special type of spiral dive where the glider points almost directly at the ground. Making a sudden brake application during the spiral entry so that the glider yaws around enters this, and the nose of the glider ends up pointing at the ground, after this the glider picks up speed very quickly. This technique is very similar to SAT entry technique, and like the SAT it is an aerobatic manoeuvre, which is outside the normal safe flight envelope. Please do not practice these manoeuvres as they can be dangerous. Care should be taken when exiting from any spiral dive. To pull out of a steep spiral dive release the applied brake gradually, or apply opposite brake gradually. A sharp release of the brake can cause the glider to surge and dive as the wing converts speed to lift. Always be ready to damp out any potential dive with the brakes. Also be ready to encounter turbulence when you exit from a spiral because you may fly though your own wake turbulence, which can cause a collapse..

CAUTION:

SPIRAL DIVES CAN CAUSE LOSS OF ORIENTATION (black out) AND SOME TIME IS NEEDED TO EXIT THIS MANOEUVRE. THIS MANOEUVRE MUST BE EXITED IN TIME AND WITH SUFFICIENT HEIGHT!

Speed System

The ADAM is sold with accelerator risers and a speed stirrup as standard but can be flown without the speed stirrup attached. Launching and general flying is normally done without using the accelerator. The accelerator bar should be used when higher speed is important. A 70 kg pilot on the ADAM – medium size should be able to reach a speed of 50 km/h using the accelerator system. Glide angle is not as good in this format, so it is not necessarily the best way to race in thermic conditions and the canopy is slightly more susceptible to deflations. Using the stirrup can require some effort and the pilot´s balance in the harness can be affected. It may be necessary to make some adjustments to

the harness. We recommend that only fly in conditions where you can penetrate with the risers level so that you have the extra airspeed should you need it.
To fly at maximum speed the stirrup should be applied gradually until the upper pulley on the A riser butts against the pulley at the riser base.

The accelerator system is designed to give maximum speed when the pullies of the accelerator touch each other. Please do not go beyond this point by using excessive force to attempt to make the glider go faster as this may result in the glider collapsing..

IMPORTANT:

- Do practice using the speed system in normal flying.
- Be careful flying fast in rough or turbulent conditions as deflations are more likely to occur at speed. The speed increase is achieved by reducing the angle of attack, so the canopy has slightly more collapse tendency.
- Remember that your glide deteriorates at higher speeds. Best glides are achieved when the risers are level and the brakes are off.

Check the component parts regularly for wear and tear, and ensure that the system always works smoothly.

Landing

Landing the ADAM is very straightforward. Flare in the normal way from an altitude of around 2 m when landing in light winds. It may sometimes help to take wraps on the brakes to make the flare more effective.

Strong wind landings require a different technique. If you use the brakes to flare in a strong wind the ADAM tends to

convert this to height. This can be real problem.The best method is to take hold of the C risers at the maillons just before landing, and collapse the canopy using these when you have landed. The glider will collapse very quickly using this method. The glider can also be steered using the rear risers but be careful not to cause a premature stall.
After landing the B risers can also be used to collapse the canopy, although it is more difficult to control the collapsed canopy on the ground using this method.

5 Recovery Techniques

Stalls

Stalls are dangerous and should not be practiced in the course of normal flying. Stalls are caused through flying too slowly. Airspeed is lost as brake pressure increases and as the canopy approaches the stall point it will start to descend vertically and finally begin to collapse. Should this occur it is important that the pilot releases the brakes at the correct moment. The brakes should never be released when the wing has fallen behind the pilot; the brakes should be released fairly slowly, to prevent the forward dive of the canopy from being too strong. If you do release the brakes quickly you should brake the canopy strongly during the surge forward, to stop the dive. All pilots who fly the ADAM are advised never to attempt this manoeuvre unless under SIV instruction. This manual is not intended to give instruction in this or any other area.

Deep Stall (or Parachutal Stall)

The ADAM has been designed so that it will not easily remain in a deep stall. However, if it is incorrectly rigged or its flying characteristics have been adversely affected by some other cause, it is possible that it could enter this situation. In the interests of safety all pilots should be aware of this problem, and know how to recover from it. The most common way to enter deep stall is from a flying too slowly, from a B-line stall or even from big ears.

When in deep stall the pilot will notice the following:

- Very low airspeed
- Almost-vertical descent (like a round canopy), typically around 5m/s.
- The paraglider appears quite well inflated but does not have full internal pressure. It looks and feels a bit limp.

Recovery from deep stall is quite simple:

The normal method is to simply initiate a mild turn. As the canopy starts to turn it will automatically change to normal flight, but it is very important not to turn too fast as this could induce a spin.

The second method is to pull gently on the A risers. This helps the airflow to re-attach to the leading edge, but be careful not to pull down too hard as this will induce a front collapse.

If the deep stall is particularly stubborn and the previous methods do not work then a full stall will solve the problem. To do this apply both brakes again fairly quickly, as if to do a strong stall, then immediately release both brakes and damp out the surge forward in the normal way. The canopy will swing behind you then automatically reinflate and surge forward in front of you before returning to normal flight. It is the surge forward that exits the canopy from deep stall.

Spins

Spins are dangerous and should not be practiced in the course of normal flying. Spins occur when the pilot tries to turn too fast. In a spin the pilot, lines and canopy basically stay vertical and rotate around a vertical axis.
The ADAM will resist spinning, but if a spin is inadvertently induced the pilot should release the brake pressure but always be ready to damp out any dive as the glider exits the spin. If the pilot does not damp the dive on exiting the spin the glider may have an asymmetric deflation.

Symmetric Front Collapse

It is possible that turbulence can cause the front of the wing to symmetrically collapse, though active piloting can largely prevent this from occurring accidentally. A pilot can reproduce the effect by taking hold of both the A risers and pulling down sharply on them. The ADAM will automatically recover on its own from this situation in around 3 seconds. During this recovery period it is advisable not to apply the brakes as this could stall the wing.

Asymmetric Front Collapse

The ADAM is very resistant to deflations; however if the canopy collapses on one side due to turbulence, the pilot should first of all control the direction of flight by countering on the opposite brake. Most normal collapses will immediately reinflate on their own and you will hardly have time to react before the wing reinflates automatically. The act of controlling the direction will tend to reinflate the wing. However, with more persistent collapses it may be necessary to pump the brake on the collapsed wing using a long, strong, smooth and firm action. Normally one or two pumps of around 80 cm will be sufficient. Each pump should be applied in about one second and smoothly released. In severe cases it can be more effective to pump both brakes together to get the canopy to reinflate. Be careful not to stall the wing completely if this technique is used.

Releasing a trapped tip (cravat)

On the ADAM it should be very difficult to trap the tip so that it will not come out quickly. However, following a very severe deflation any canopy could become tied up in its own lines. If this occurs then first of all use the standard method of recovery from a tip deflation as described in Asymmetric Front Collapse above. If the canopy will still not recover then pull the rear risers to help the canopy to reinflate. Pulling the stabilo line is also a good way to remove cravats, but remember to control your flight direction as your number-one priority.If you are very low then it is much more important to steer the canopy into a safe landing place or even throw your reserve.

NOTE: Test pilots have tested the ADAM well beyond the normal flight envelope, but such tests are carried out in a very precise manner by trained test pilots with a back-up parachute, and over water. Stalls and spins on any paragliders are dangerous manoeuvres and are not recommended.

FOR MORE INFORMATION AND FURTHER READING ABOUT RECOVERY TECHNIQUES WE HIGHLY RECOMMEND THE ‘SIV BIBLE’ WRITTEN BY BRUCE GOLDSMITH, AVAILABLE AS AN I-BOOK IN DIFFERENT LANGUAGES.

6 Storage and Servicing

Packing

The ADAM can be packed in a traditional roll-up method, or concertina folded. Concertina folding will help extend the life of the glider.

1. Select a suitable flat area that is out of the wind if possible.

2. Arrange the canopy with the underside facing upwards and the harness at the trailing edge. Lay all the lines on the canopy. At this stage you may wish to remove your harness.

Now different techniques can be used depending on the kind of inner bag you use:

Stuffsack

3. Roll up the canopy in sections from each tip inwards.

4. Then starting from the harness at the trailing edge, roll up the canopy squeezing out all the air at the same time.

The rolled canopy will now fit neatly into its bag.

Concertina bag.

3. Lay the glider bunched by the lines on top of the concertina bag with the leading edge in position.

4. Concertina the leading edge together with all the plastics lying side by side. Avoid dragging the leading edge over the ground during this procedure.

5. Lay the glider on its side and put the straps around the leading edge.

6. Now squeeze the rest of the air out of the canopy and close the zip.

7. Finally fold the bag in three making sure the leading edge remains unfolded.

Storage & Care

If you have to pack away your canopy wet, do not leave it for more than a few hours in that condition. As soon as possible dry it out, but do not use direct heat sources as it is inflammable!

Always store the canopy in a dry, warm place. Ideally this should be in the temperature range of 5 to 13 degrees centigrade.

Never let your canopy freeze, particularly if it is damp.

The ADAM is made from high quality nylon, which is treated against weakening from ultraviolet radiation. However, UV exposure will still weaken the fabric, and prolonged exposure to harsh sunlight can severely compromise the safety of your canopy. Therefore once you have finished flying, put your wing away. Do not leave it laying in strong sunshine unnecessarily. If you are concerned about any aspect of the integrity of your paraglider please contact your nearest BGD dealer or talk to BGD directly.

Do not treat your canopy with chemical cleaners or solvents. If you must wash the fabric, use warm water and a little soap. If your canopy gets wet in sea water, wash it with warm water and carefully dry it.

Small tears in the top or bottom surface (not normally the ribs) of a canopy can be repaired with a patch of self-adhesive ripstop nylon. Tears no longer than 100 mm can be repaired in this way providing they are not in a high-stress area. If you have any doubt about the airworthiness of your canopy please contact your dealer or BGD directly.

Servicing / Inspection

It is important to have your glider regularly serviced.

Your BGD ADAM should have a thorough check / inspection every 24 months or every 150 flight hours, whichever occurs first. This check must be made by the manufacturer, importer, distributor or other authorised persons. The checking must be proven by a stamp on the certification sticker on the glider as well in the service book.

Please print out the service pages from this manual, fill in the number of flights and hours flown in the Certificate of Service.and send together with your glider when it goes for inspection or servicing.

The manufacturer will only accept responsibility for paraglider lines and repairs which we have produced and fitted or repaired ourselves.

7 Closing Words

Your ADAM is an advanced, stable glider that promises you many hours of safe and enjoyable flying, provided you treat it with care and always keep a respect for the potential dangers of aviation.

Please always remember that flying can be dangerous and your safety depends on your own. With careful treatment you should have with the ADAM for many years a high flying capability. The ADAM has been tested internationally under current airworthiness standards, and these represent the current knowledge concerning the safety of a glider. However, since there are still many unknown issues, for example the effective lifespan of the current generation of gliders and how strong the material aging can be accepted without affecting the airworthiness. We are sure that there are natural forces that can threaten your safety seriously, regardless of the quality of construction or the condition of your glider. Your security is ultimately your responsibility. We strongly recommend that you fly carefully, adjust to the weather conditions and are constantly dealing with the safe side.

Flying in a club, or a school with experienced pilots is highly recommended

We recommend that you fly with a standard harness with a back protection and a reserve parachute. Always use good equipment and an approved helmet..

See you in the sky!

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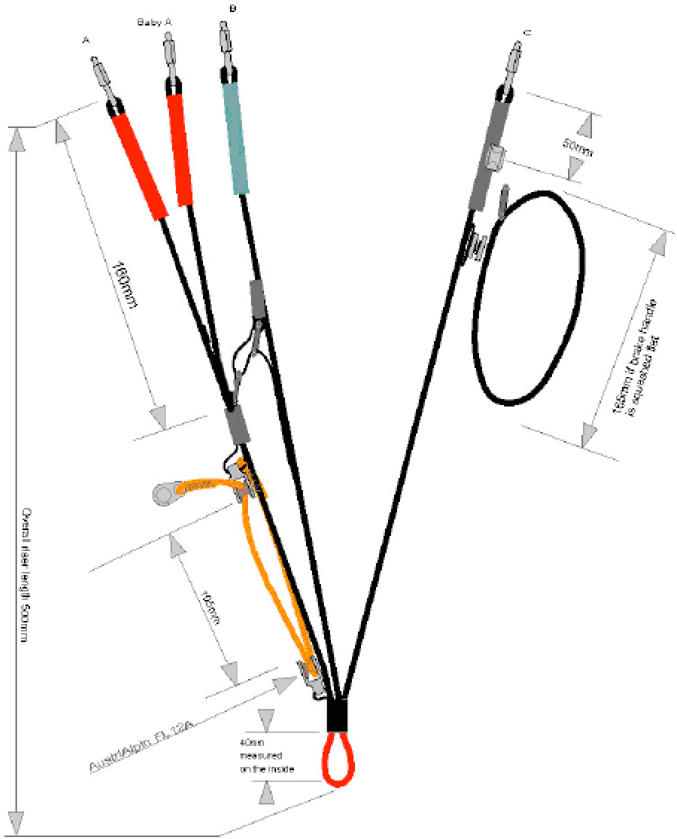
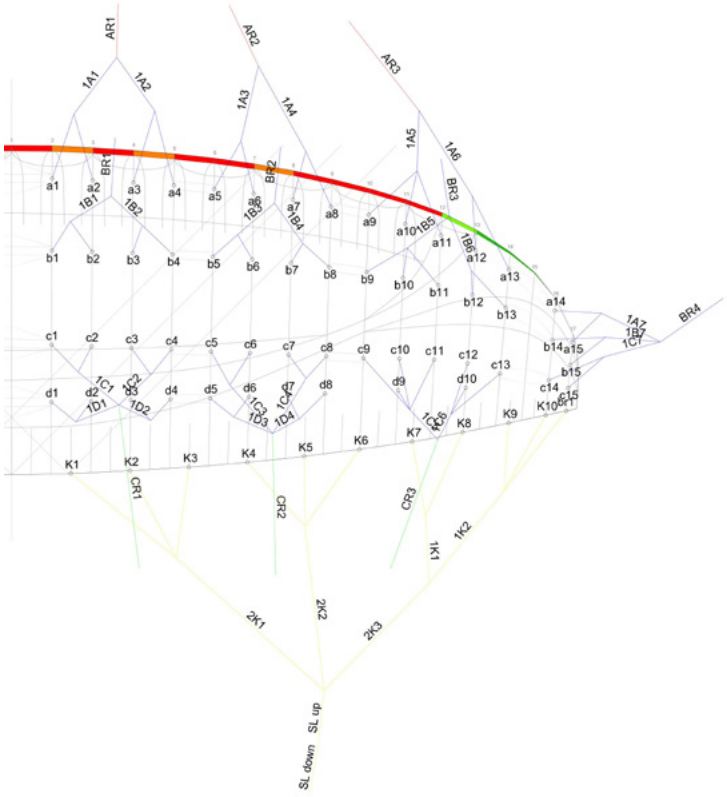
Risers


A
Baby A
B
C
160mm
50mm
165mm if brake handle is squashed flat
Overall riser length 500mm
105mm
AustriAlpin FL 12A
40mm
measured
on the inside

Line layout and lengths



Size S

Check table

	A	B	C	D	K
1	5687	5622	5687	5798	6516
2	5639	5573	5659	5767	6270
3	5624	5559	5647	5751	6168
4	5650	5589	5660	5758	6011
5	5630	5571	5649	5739	5894
6	5585	5527	5621	5704	5921
7	5578	5523	5613	5691	5915
8	5613	5563	5634	5703	5904
9	5596	5543	5627	5625	5939
10	5541	5489	5566	5560	5953
11	5535	5489	5556		5938
12	5505	5470	5537		
13	5475	5460	5555		
14	5216	5231	5329		
15	5137	5169	5241		

Single lines

A		B		C		D		K	
a1	830	b1	821	c1	823	d1	854	k1	1634
a2	783	b2	772	c2	795	d2	823	k2	1387
a3	796	b3	785	c3	804	d3	834	k3	1286
a4	821	b4	814	c4	817	d4	841	k4	1445
a5	810	b5	800	c5	805	d5	906	k5	1328
a6	766	b6	756	c6	777	d6	871	k6	1354
a7	746	b7	735	c7	757	d7	782	k7	722
a8	780	b8	776	c8	778	d8	794	k8	711
a9	1259	b9	1157	c9	1173	d9	1171	k9	810
a10	1204	b10	1103	c10	1112	d10	817	k10	824
a11	1198	b11	1103	c11	1102			k11	809
a12	884	b12	866	c12	784				
a13	854	b13	856	c13	801				
a14	808	b14	698	c14	446				
a15	728	b15	636	c15	358				
1A1	1157	1B1	1053	1C1	1872	1D1	1952	2K1	2201
1A2	1129	1B2	1027	1C2	1851	1D2	1924	2K2	1885
1A3	1101	1B3	1002	1C3	1744	1D3	1733	1K1	687
1A4	1114	1B4	1019	1C4	1757	1D4	1809	1K2	624
1A5	1091	1B5	925	1C5	685			2K3	1824
1A6	1375	1B6	1143	1C6	984				
1A7	801	1B7	926	1C7	1276				
AR1	3699	BR1	3748	CR1	2992			SL up	1057
AR2	3718	BR2	3768	CR2	3100			SL down	1625
AR3	3246	BR3	3461	CR3	3789				
		BR4	3608						

Size M

Check table

	A	B	C	D	K
1	6030	5961	6060	6187	6887
2	5980	5909	6008	6134	6615
3	5964	5895	5998	6121	6507
4	5992	5927	6035	6151	6348
5	5972	5911	6012	6117	6254
6	5926	5869	5971	6072	6323
7	5921	5871	5983	6039	6358
8	5961	5921	6042	6089	6345
9	5958	5894	6009	5977	6320
10	5902	5844	5946	5905	6302
11	5898	5849	5935		6297
12	5867	5829	5907		
13	5831	5803	5896		
14	5538	5553	5656		
15	5454	5488	5565		

Single lines

A		B		C		D		K	
a1	883	b1	873	c1	878	d1	927	k1	1749
a2	833	b2	821	c2	826	d2	873	k2	1477
a3	846	b3	834	c3	837	d3	886	k3	1370
a4	873	b4	866	c4	874	d4	916	k4	1523
a5	862	b5	851	c5	858	d5	980	k5	1429
a6	816	b6	809	c6	817	d6	934	k6	1497
a7	792	b7	779	c7	781	d7	818	k7	797
a8	831	b8	829	c8	839	d8	867	k8	803
a9	1338	b9	1237	c9	1267	d9	1235	k9	957
a10	1282	b10	1187	c10	1204	d10	900	k10	919
a11	1278	b11	1191	c11	1193			k11	914
a12	969	b12	965	c12	901				
a13	933	b13	938	c13	890				
a14	859	b14	743	c14	476				
a15	776	b15	678	c15	384				
1A1	1230	1B1	1119	1C1	1972	1D1	2050	2K1	2346
1A2	1202	1B2	1093	1C2	1951	1D2	2025	2K2	2034
1A3	1169	1B3	1062	1C3	978	1D3	962	1K1	735
1A4	1189	1B4	1094	1C4	1027	1D4	1046	1K2	577
1A5	1168	1B5	1003	1C5	758			2K3	2015
1A6	1446	1B6	1211	1C6	1022				
1A7	853	1B7	984	1C7	1355				
AR1	3917	BR1	3969	CR1	3210			SL up	1166
AR2	3941	BR2	3998	CR2	4175			SL down	1625
AR3	3452	BR3	3654	CR3	3983				
		BR4	3826						

Size ML

Check table

	A	B	C	D	K
1	6355	6283	6356	6480	7246
2	6303	6229	6325	6446	6962
3	6288	6215	6314	6429	6848
4	6318	6250	6329	6438	6674
5	6297	6231	6340	6444	6550
6	6248	6183	6288	6386	6589
7	6241	6179	6284	6374	6599
8	6281	6225	6331	6409	6598
9	6264	6205	6301	6320	6645
10	6203	6147	6233	6266	6663
11	6197	6147	6223		6648
12	6165	6127	6203		
13	6133	6117	6224		
14	5844	5860	5970		
15	5756	5791	5872		

Single lines

A		B		C		D		K	
a1	927	b1	917	c1	919	d1	953	k1	1836
a2	875	b2	863	c2	889	d2	920	k2	1552
a3	888	b3	875	c3	897	d3	931	k3	1438
a4	917	b4	910	c4	913	d4	940	k4	1608
a5	904	b5	893	c5	901	d5	1027	k5	1483
a6	856	b6	845	c6	850	d6	969	k6	1523
a7	832	b7	820	c7	825	d7	865	k7	801
a8	872	b8	866	c8	872	d8	901	k8	800
a9	1401	b9	1287	c9	1305	d9	1305	k9	901
a10	1341	b10	1228	c10	1237	d10	940	k10	920
a11	1335	b11	1229	c11	1227			k11	905
a12	1011	b12	991	c12	897				
a13	979	b13	981	c13	918				
a14	902	b14	779	c14	498				
a15	813	b15	710	c15	400				
1A1	1291	1B1	1174	1C1	2095	1D1	2185	2K1	2452
1A2	1263	1B2	1148	1C2	2075	1D2	2156	2K2	2108
1A3	1228	1B3	1118	1C3	1039	1D3	1017	1K1	767
1A4	1246	1B4	1139	1C4	1059	1D4	1109	1K2	712
1A5	1220	1B5	1035	1C5	765			2K3	2073
1A6	1511	1B6	1252	1C6	1076				
1A7	895	1B7	1034	1C7	1425				
AR1	4138	BR1	4192	CR1	3342			SL up	1333
AR2	4164	BR2	4220	CR2	4399			SL down	1625
AR3	3643	BR3	3884	CR3	4231				
		BR4	4047						

Size L

Check table

	A	B	C	D	K
1	6681	6605	6681	6812	7637
2	6628	6550	6651	6777	7341
3	6613	6536	6639	6760	7221
4	6644	6573	6656	6770	7040
5	6623	6554	6668	6777	6910
6	6573	6504	6615	6717	6952
7	6566	6501	6610	6705	6963
8	6608	6550	6660	6742	6962
9	6590	6529	6630	6660	7012
10	6527	6468	6559	6603	7032
11	6521	6469	6548		7016
12	6487	6447	6528		
13	6453	6437	6550		
14	6150	6168	6282		
15	6058	6095	6179		

Single lines

A		B		C		D		K	
a1	971	b1	960	c1	962	d1	998	k1	1923
a2	917	b2	905	c2	932	d2	964	k2	1626
a3	930	b3	916	c3	940	d3	975	k3	1507
a4	961	b4	953	c4	956	d4	985	k4	1684
a5	948	b5	936	c5	944	d5	1076	k5	1554
a6	897	b6	886	c6	891	d6	1016	k6	1596
a7	871	b7	859	c7	864	d7	906	k7	838
a8	913	b8	908	c8	914	d8	944	k8	838
a9	1468	b9	1348	c9	1367	d9	1378	k9	944
a10	1405	b10	1287	c10	1296	d10	995	k10	964
a11	1398	b11	1287	c11	1286			k11	948
a12	1060	b12	1038	c12	939				
a13	1025	b13	1028	c13	962				
a14	945	b14	816	c14	522				
a15	852	b15	744	c15	419				
1A1	1352	1B1	1229	1C1	2218	1D1	2312	2K1	2567
1A2	1324	1B2	1204	1C2	2199	1D2	2284	2K2	2209
1A3	1286	1B3	1171	1C3	1088	1D3	1065	1K1	803
1A4	1306	1B4	1194	1C4	1110	1D4	1163	1K2	747
1A5	1278	1B5	1084	1C5	801			2K3	2174
1A6	1583	1B6	1312	1C6	1127				
1A7	938	1B7	1083	1C7	1493				
AR1	4359	BR1	4416	CR1	3501			SL up	1522
AR2	4389	BR2	4448	CR2	4636			SL down	1625
AR3	3844	BR3	4097	CR3	4461				
		BR4	4268						

SERVICE BOOKLET

Test Flight Record

Model	
Size	
Serial Number	
Colour	
Date of test flight	
Company signature and stamp	

Service Record

Service No 1:
Date :

Stamp - Signature :

No flights :

Type of service :

Service No 2:
Date :

Stamp - Signature :

No flights :

Type of service :

Service No 3:
Date :

Stamp - Signature :

No flights

Type of service :

Owner Record

Pilot No 1

First name	
Family name	
Street	
City	
Post code	
Country	
Telephone	
Email:	

Owner Record

Pilot No 2

First name	
Family name	
Street	
City	
Post code	
Country	
Telephone	
Email:	