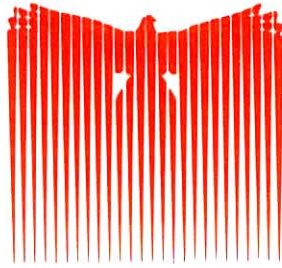


mainair sports



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Ref JH/WS

SERVICE BULLETIN

BULLETIN 24 - CIRCULATION ALL DEALERS AND ALL ALPHA OWNERS.

We hope you are enjoying your Gemini Flash 2 Alpha and from the general feedback we have received, are certain it is a better aircraft than the Flash 2. However, a new model brings in its own problems and we would like to draw your attention to the following:-

(1) TYRE PRESSURES.

The early aircraft had 10/12 PSI in the tyres which is far too low. A soft front tyre will cause problems in turning whilst taxiing up gradients. We recommend you check and pressurize your tyres to 22 PSI all round.

(2) FRONT WHEEL TYRE MOVEMENT.

An indication of too low a pressure is "tyre creep". This can happen as the wheel is braked and the tyre creeps around the rim, straining the inner tube valve. Examine the valve where it comes out of the grommet and if it looks angled in any way, release the pressure, put on the brake and slide the tyre back around until the valve lines up correctly. Re-inflate to 22 PSI. A white paint mark on the wheel rim and tyre will show up any subsequent creep.

(3) FRONT WHEEL BRAKE.

We had 2 reports of the back plate fork opening up where it slides on the peg. We are designing a fix for this which will probably be a simple bolted link plate. However, we have noticed ourselves and had reports of pilots treating this brake as a brake for goodness sake. I mean putting it on to stop! No, joking aside, it is only a 4" diameter brake and using it to stop 1/3 of a ton at 30 MPH is asking a lot. It is a very effective brake but we really designed it for ground taxiing at just a few miles per hour and not as a landing aid. Please bear in mind what it is and use it with care to slow down during taxiing or holding on during a stationary power check.

(4) FRONT BRAKE CABLE AND THROTTLE CABLE ATTACHMENT.

We really do hang our head in shame over the cable fixing on the early models. Clamping directly to the cable is poor design and our only excuse is that it worked fine on both the prototypes. However, production techniques have resulted in over-tightening and subsequent failure of the cables.

A new method involves replacing the brake and foot throttle cables for ones with swaged thimble eyes in the end. If your machine is one with the old style, you will find a replacement set with this letter.

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If there is not a set enclosed, you have either had the fix done by a dealer or have a machine with the up-rated cable fixing. If this is not the case and you have the cables clamped by drilled bolts then it's not my fault it's our computers - give us a ring and we will send you a set. We would appreciate the old style sets returned to us.

(5) FRAGILE COCKPITS.

Brakes and suspension add weight. I'm sure you think they are worth it but one result has been a necessity to reduce weight in other areas. The larger sealed cockpit is one area and everyone will just have to accept that the Alpha cockpit is not as robust as the standard Gemini one. It is well strong enough for the job but owners will have to take a little more care during ground handling. Lift the trike by the seat frame and not by the cockpit nose. Take care getting in and out and watch out for passenger damage. Be careful where you rest your feet during flight and ground taxiing.

If you do crack the cockpit, repairs can be easily carried out by purchasing a fibreglass repair kit from any motorist accessory shop and we have kits of gell coat in our standard range of colours.

(6) SHORT REACH STEERING.

Despite being less than 2" longer than a standard Gemini, the consensus is that the steering bar is too far away and in general we agree. It is much better for dual flying since it gives the rear passenger more room, but flying solo can be a bit of a stretch. We have designed a short reach foot steering bar option which will be available in two weeks to all Alpha owners. Simply send in your serial number - not registration, and we will exchange your old bar for the new one. To stay flyable we do not mind sending one out against an invoice which will be cancelled on receipt of the long reach bar in exchange. This free exchange offer is only open for a limited period until the option is available when aircraft are ordered.

(7) FRONT WHEEL - AGAIN!.

Changing a puncture can be a real chore with the front wheel since it means unscrewing the nylon bearings from the fork legs. We are working on a design change for this and will let you know when we have an answer. In the meantime, be prepared to support the front end and to remove the telescopic legs to enable you to remove the tyre. A neat trick for solving problems is to carry an aerosol emergency puncture unit which will fix punctures during cross-country flight and although it terminates the future life of the inner tube, I wouldn't fly cross-country without one regardless of which microlight I happened to be flying. Punctures do not seem to be a major problem with the Alpha (we've had only one reported to us) but you can guarantee it will happen to you when you happen to be miles from home and a tool kit.

Another good tip is to put puncture sealing liquid into the wheels. This magic solution seals punctures as they occur. One Alpha owner operates from a field full of large thistles and swears by this treatment.

(8) SUSPENSION

Both the front and rear slider units will benefit from regular oiling, as pointed out in the manual. Use an oil can to reach between the rear springs to oil the telescopic as it enters the aerofoil.

a) ALL WHEELS

All three wheels have ball bearings and are adjustable via a screwed cone to take up wear. These should be re-adjusted after the first 10 hours and checked regularly afterwards.