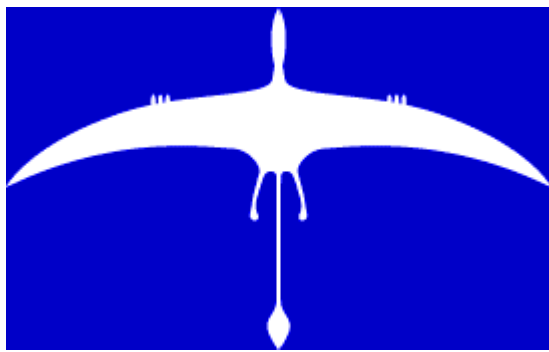


Set up and Break down Manual



Ramphos S –15 Wing



Assembly Manual for the Ramphos S-15 Wing

Introduction :

.This manual will allow you to properly set up and break down the your new Ramphos 15 meter “S” model wing.

Set Up :

Before begining make certain that the terrain being used for the set up is clear and free of debris. It is preferable to use a lawn with low cut and dry grass.



Lay the wing with the zipper side turned upwards and open the bag without removing it. Remove protective padding and carefully open the trapezium.



Assemble trapezium being carefull not to cross the cables and insert the push pin (as shown in photo) . Fasten the safety washer to the push pin and assure that the locking spheres are properly extended.

Note: Be sure that the push pin nylon lanyard is not routed under the control bar as it may be damaged when the wing is upright and resting on the control bar



Attach the wing strut to the appropriate articulating receiver. Hold the trapezium in a vertical position and insert the bolt with the threaded end upwards, install washers and attach wing nut. Attach safety ring to the bolt.

Note: If inserting the bolt is difficult, remove one wing from the bag and separate the wings about three feet.

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At this point the wing should be as shown in photo. The nose wires should be checked for positioning for the next step.



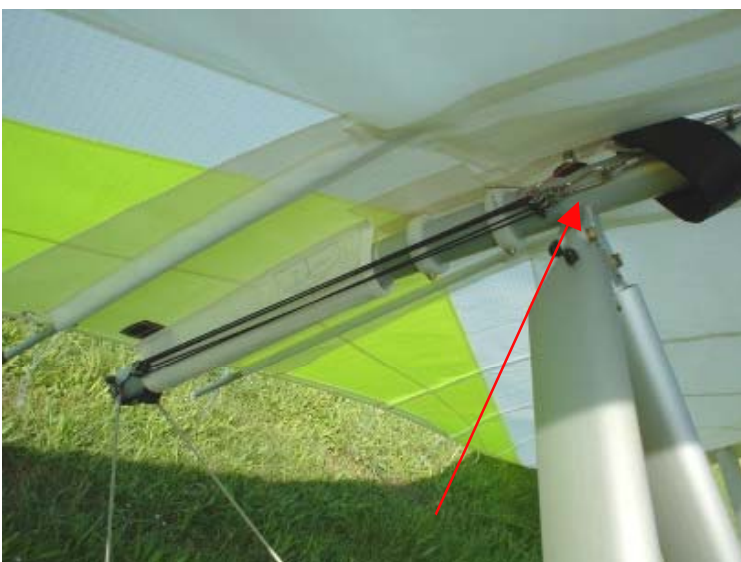
Carefully turn the wing over and remove the protective bag as well as any other protective items



Attach nose wires to Stainless steel bracket fitting at nose with push pin. Pulling down on the nose will make it easier to align hole for push pin.

Note: Normally the safety washer is not necessary as push pin is positioned against stainless steel.

The wing may now be opened and leaned back. The wing tips may rest on the protected plastic strips on the lower trailing edge .



Remove the lanyard from it's bag and connect the hook to the pull cable for the cross bar tension wires.



Attach loop part of the lanyard around the keel tube as shown in photo.



Now, position wing on it's nose.



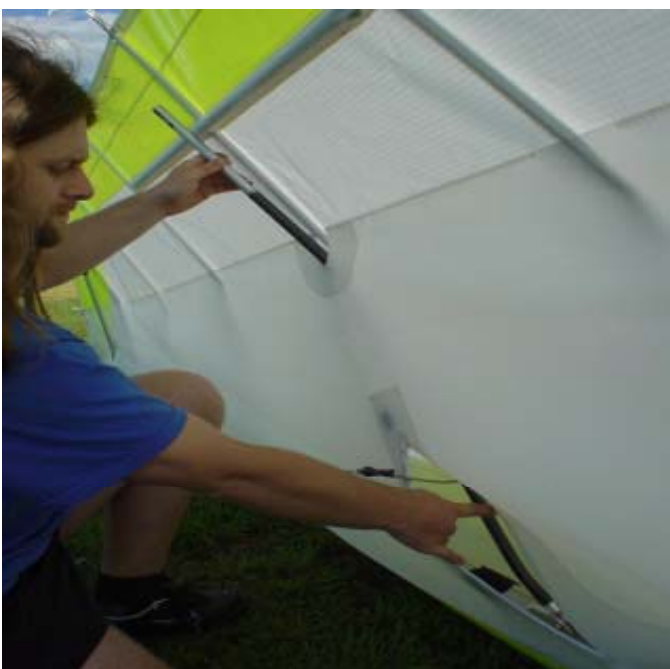
Install nose batten into pocket and position tip onto the locking rivet by using the attached handhold noose. When the batten is in position, pass the loop over and under the nose wire catch (as in photo). This will insure that the nose batten will stay in place for all phases of flight.



Begin installing upper battens start at the keel tube and work outboard . Pull tie safety cords over the nylon batten tips and secure. *** Black tips for right wing and White tips for left wing. ***



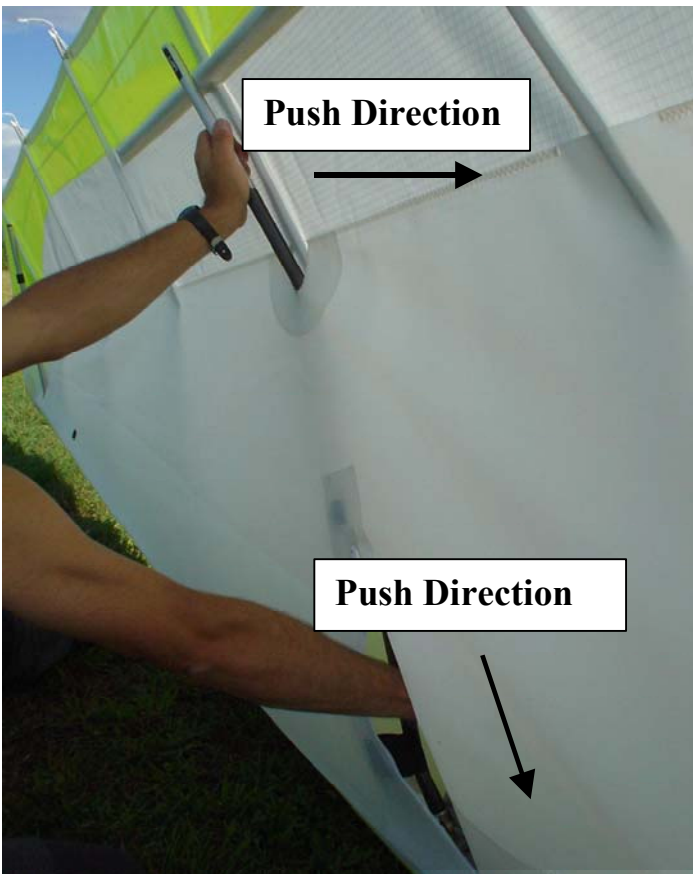
Push trailing edge forward to expose tip tube receiving hole. Push tip tube into hole, making sure it is properly seated. Then release pressure on trailing edge.



Prepare to install swivel tip sprog by inserting tube into zippered pocket and pushing end back out through slit in undersurface of wing. Now insert swivel tip into post at connection of spar and cross tube. The end of sprog will support cross tube under three battens.



To attach the safety cable to the keeper located at the bolt connecting the spar to the crossbar, the sprog tube must be held at point shown and pushed forward. This will allow the slotted hole on cable end to be passed over keeper. Once done release pressure on tube and the slotted end piece will lock under the keeper head. The bungee cord will assure that locking pressure will secure the cable in place.





Attach two pieces of velcro around tube as shown. This will help ensure that undersurface wing will not distort at high speed.



Re-check all connections and then close zipper.



At this point install all underside battens. Slip battens into batten pockets . Be sure to leave cord loops exposed to make removal more convenient.



Now pull lanyard cord to pull slotted plate over the keeper located on the upper side of the keel tube **Ensure that the slotted plate is properly seated over the keeper .** Pressure on the lanyard can now be released and the plate will lock itself into place.



Lanyard can now be removed. **Install safety pin into keeper as per photo at left.**



Attach hang block. **Be sure to install large safety pin through both bolts to secure wing nuts.**



Attach nose covering with velcro attachments. **The wing may be flown without the nose covering. The pilot should be aware that this will result in producing 10 k.p.h. more in cruise speed.**

Folding the wing

Attach lanyard and disconnect crossbar cable at keeper stud.

Remove **all** battens.

Carefully fold wing back taking care to secure fabric.



Break down of wing

Follow all above steps in reverse.

