Golden Skies R/C Aircraft

Tail Dragger Installation Instructions

Thank you choosing to convert you CrossFire to a tail dragger using the Golden Skies Tail Dragger Conversion Kit. The kit consists of the items shown in the picture #1. You elected to purchase the Klett Plastics tailwheel, it will also be included.

Pict #1





NOTE: If you have already assembled your ruddert onto the Vert.Stab., it is much easier to use the Klett tail wheel and it is also much more durable on rought grass fields.



















Assembly Steps:

- 1. Cut the Rudder Block from 1/2" hard balsa using the full size template supplied.
- 2. Cut the tail wheel mounting plate from 1/8" lite Ply using the full size template provided.
- 3. Cut a slot in the rudder to insert the rudder block.

- 4. Cut the rudder slot as shown in picture 3, starting about 1/8" up from the bottom of the rudder and make the slot 1/2" wide. Cut only as far back into the rudder to only cut out the rudder post and not the rudder skin. The rudder post ends at or about the where the "Red & White" trim colors intersect. Carefully remove the white OraCover (C) if you wish to re-apply it when finished, or recover the area with a scrap piece of white covering material.
- 5. Attach the rudder block using 30-minute epoxy into place and be sure the surfaces are flush all around....picture # 4.
- 6. Re-cover the rudder block area with white OraCover (c) or UltraCoat (R).
- 7. Cut the fuselage bottom surface away to accommodate the tail wheel mount plate picture # 5.
- 8. Install the appropriate blind-nuts for the tail wheel bracket and epoxy or CA the plate in place. Mount the tail wheel bracket using the hardware provided. The tail wheel shaft collar should go against the "spring loop" and all the way up against the tail wheel bracket bottom. Install the tall wheel now if you like with the hardware provided.
- 9. Dry fit the rudder and mark the area where the tail wheel rudder arm is to be inserted into the rudder. Drill a 1/16" hole in the rudder at the location marked.
- 10. Insert the main-gear mounting plate into the fuselage as shown in picture # 7. First, dry fit it to check for alignment. Locate the front two screw hole using a pin to punch a hole in the fuselage bottom from the inside. (The 3rd or rear screw hole will be addressed later.). THE LIGHTENING HOLES GO FORWARD.
 - a. Remove the plate and apply 30-minute <u>EPOXY</u> to the inside of the fuselage where the edges of the plate will touch the fuselage sides and formers. (be somewhat liberal with the amount of epoxy.)
 - b. Re-insert the plate and be sure it is in place.
 - c. Use the main landing gear to hold the plate in place while the epoxy cures.
 - i. Hold the mounting plate from moving and put the landing in place, picture # 8 and secure the gear by attaching the two bolts in the forward two holes you previously located. ... picture # 9.
 - ii. Using a 5/32" drill, carefully drill the 3rd hole ... picture # 10..... and place the last landing gear bolt in place. Apply very light drill pressure as to not drill into the bottom of the blind-nut.
 - d. The above procedure will hold the mounting plate in the proper place while the epoxy cures.
 - e. Optional: You may wish to add some "triangle" block around the perimeter of the mounting plate (inside the fuselage) for extra strength.
- 11. Install the wheels (not provided in the conversion kit, see note 2 below) and the wheel pants as shown in picture # 11.
 - a. Install the axle and secure with the self-locking nut.
 - b. Slide on a wheel collar, then the wheel and then the other wheel collar.
 - c. Leave the wheel collars loose to allow for center-positioning the wheel.
 - d. Slide on the wheel pants and secure using the bolts provided from the back side of the landing gear.
 - e. Center the wheel and tighten the wheel collars. Check for free wheel rotation.
- 12. If installing Klett-Plastics Tail wheel. follow Klett's installation instructions. (The Klett rudder arm may not fit the CrossFire rudder. You may wish to consider attaching an spare servo arm to the bottom of the rudder and then the springs to the servo arm and the tail wheel steering-arm.)
- 13. BE SURE TO USE LOCKTITE (C) ON THREADED BOLTS AND SCREWS.
- 14. RECHECK AND RESET THE PLANE'S PITCH AND LATERAL BALANCE AS NECESSARY.
- NOTE 2: The stock CrossFire wheels will not work with the TD Conv. Kit. You may wish to consider using 2.75" to 3.0" wheels if you are flying from a grass field. You may obtain GSRC Super Wheels by calling 866-429-2910.