84" Turbo Bushmaster ARF

FLOATS MANUAL

Please take a few moments to read this instruction manual before beginning assembly. We have outlined a fast, clear and easy method to assemble this aircraft and familiarizing yourself with this process will aid in a quick, easy build.

Please read the following paragraph before beginning assembly of your aircraft!

THIS IS NOT A TOY! Serious injury, destruction of property, or even death may result from the misuse of this product. Extreme Flight RC is providing you, the consumer, with a very high quality model aircraft component kit, from which you, the consumer, will assemble a flying model. It is beyond our control to monitor the finished aircraft you produce. Extreme Flight RC will in no way accept or assume responsibility or liability for damages resulting from the use of this user assembled product. This aircraft should be flown in accordance with the AMA safety code. It is highly recommended that you join the Academy of Model Aeronautics in order to be properly insured and operate your model at AMA sanctioned flying fields only. If you are not willing to accept ALL liability for the use of this product, please return it to the place of purchase immediately.

Extreme Flight RC, Ltd. guarantees this kit to be free of defects in materials and workmanship for a period of 30 DAYS from the date of purchase. All warranty claims must be accompanied by the original dated receipt. This warranty is extended to the original purchaser of the aircraft kit only. Extreme Flight RC in no way warranties its aircraft against flutter. We have put these aircraft through the most grueling flight tests imaginable and have not experienced any control surface flutter. Proper servo selection and linkage set-up is absolutely essential. Inadequate servos or improper linkage set up may result in flutter and possibly the complete destruction of your aircraft. If you are not experienced in this type of linkage setup or have questions regarding servo choices, please contact us at info@extremeflightrc.com or 770-887-1794. It is *your* responsibility to ensure the airworthiness of your model.

Congratulations on your purchase of the Legacy Aviation 84" Turbo Bushmaster optional float set! Because the float installation process is the same for both the Bushmaster and the Duster, the Duster photos and text are used for both manuals.

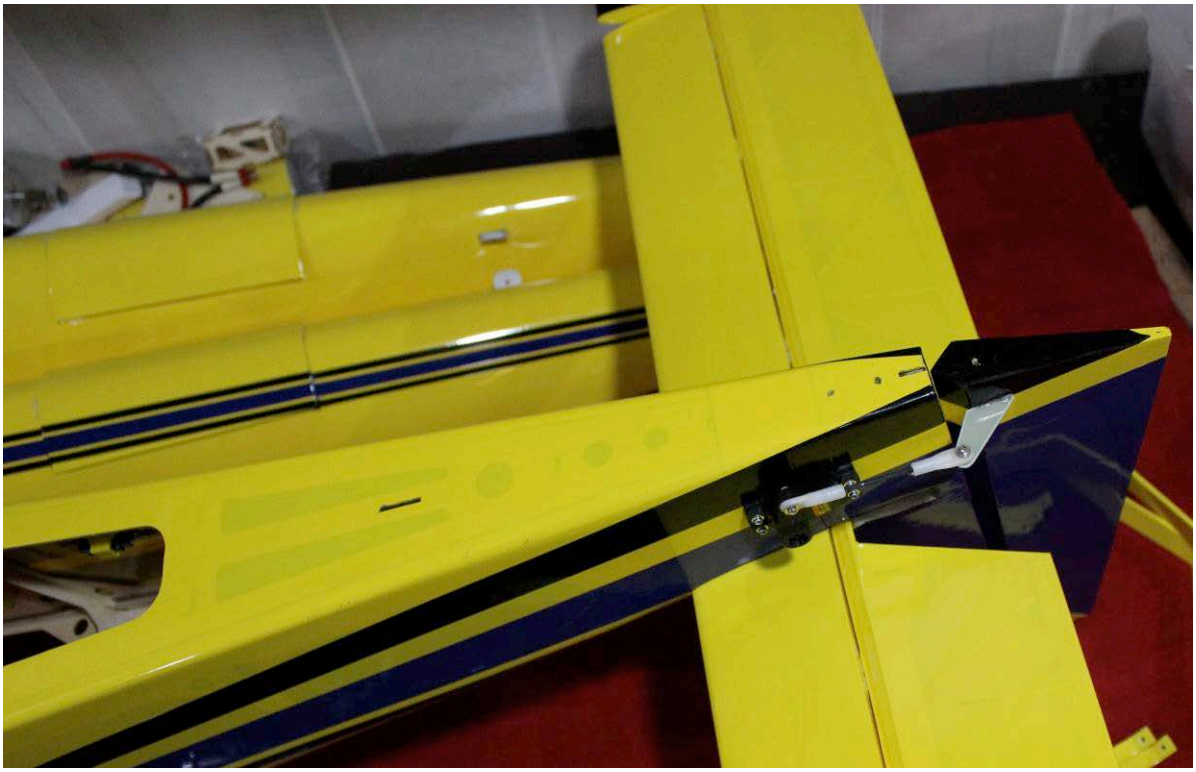
Items needed for completion:

- ✓ **Hobby knife with #11 blades.**
- ✓ **Blue Loctite.**
- ✓ **Silicone lubricant**
- ✓ **Electric drill with an assortment of small drill bits.**
- ✓ **Small flat head and Phillips head screw drivers.**
- ✓ **Standard and needle nose pliers.**
- ✓ **Side cutter.**
- ✓ **Metric ball driver or allen key set.**
- ✓ **1 x METAL GEARED servos with a minimum of 76oz of torque. All flight testing was performed with Hitec HS-5245MG.**
- ✓ **2 x 12" servo extensions**
- ✓ **Clear packing tape.**
- ✓ **Small ZIP ties**
- ✓ **Clear latex or silicone caulk.**

Let's begin!

1. If you are converting from land use, remove the main landing gear and tailwheel from your aircraft. Support the fuselage upside-down on your building table. Remove the covering over the rear float mounts on the fuselage as shown.

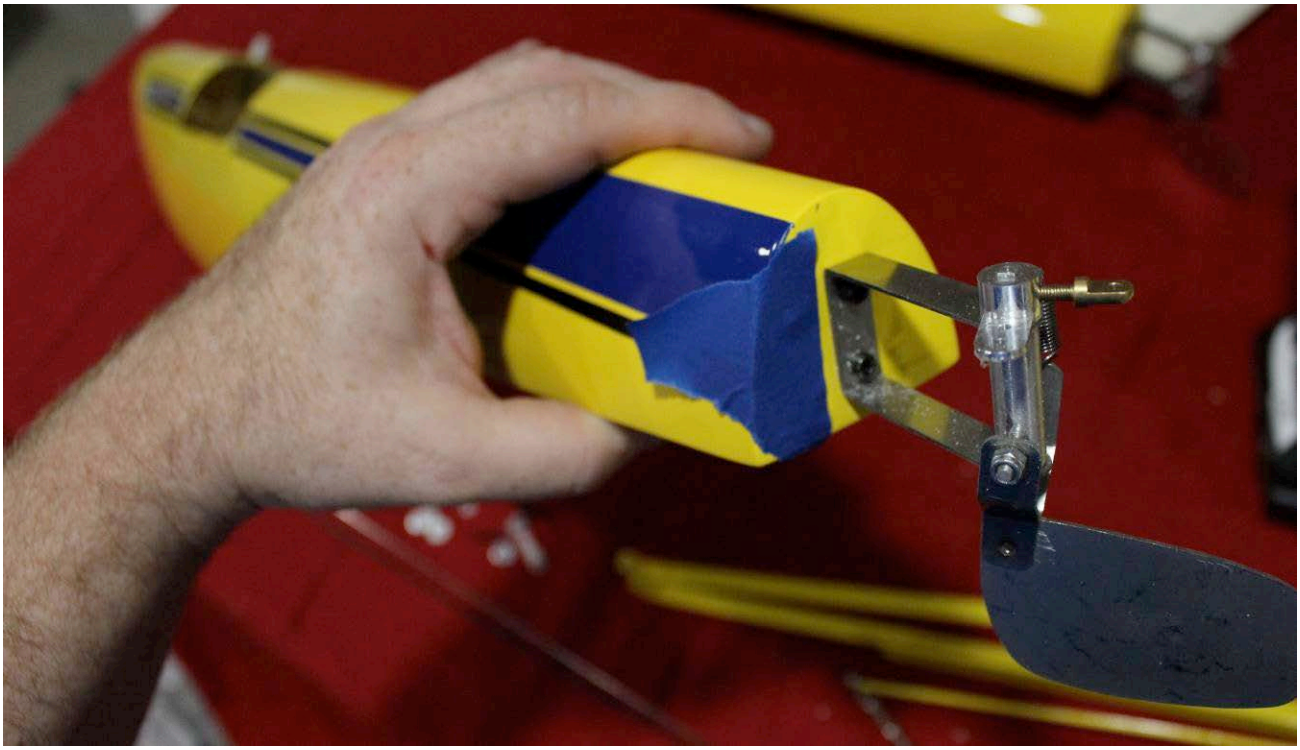
2. Remove the covering over the two slots at the rear of the fuselage as shown.



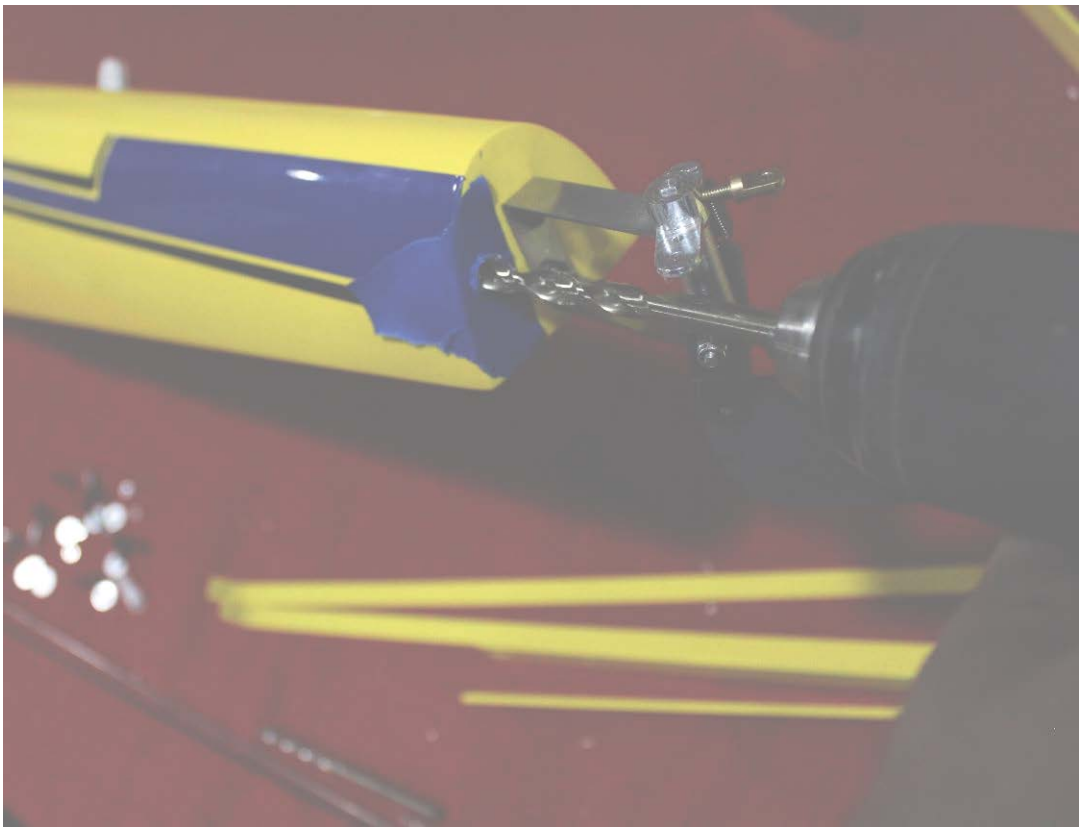
3. If you are permanently converting to floats, glue the sub-fin into the fuselage as shown. If you intend to switch back, we recommend using Blenderm tape to secure the sub-fin to the fuselage, one strip one each side along the joint.

4. Install the water rudders onto the rear of the floats using 3mm screws with Loctite as shown.

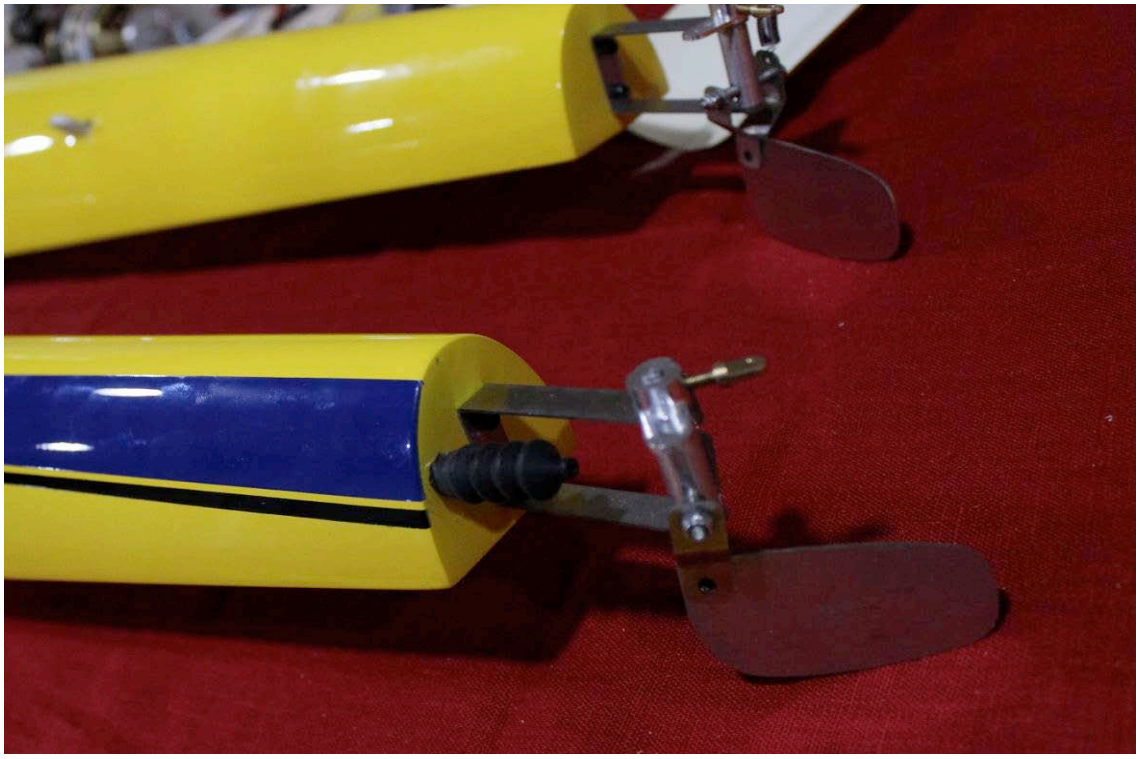
5. Locate the left float – The strut mounts extend to the inside, the left float has its mounts on the right side. Place some painter's tape on the rear of the float as shown to minimize paint chipping while drilling for the pushrod exit.



6. Drill a pushrod exit hole as shown to align with the water rudder steering arm, starting with a 1/8" (3mm) bit and finishing with a ¼" (6mm) bit.



7. Locate the black rubber bellows seal. Apply some clear caulk around its mounting area and push it into the drilled hole. Allow to dry.

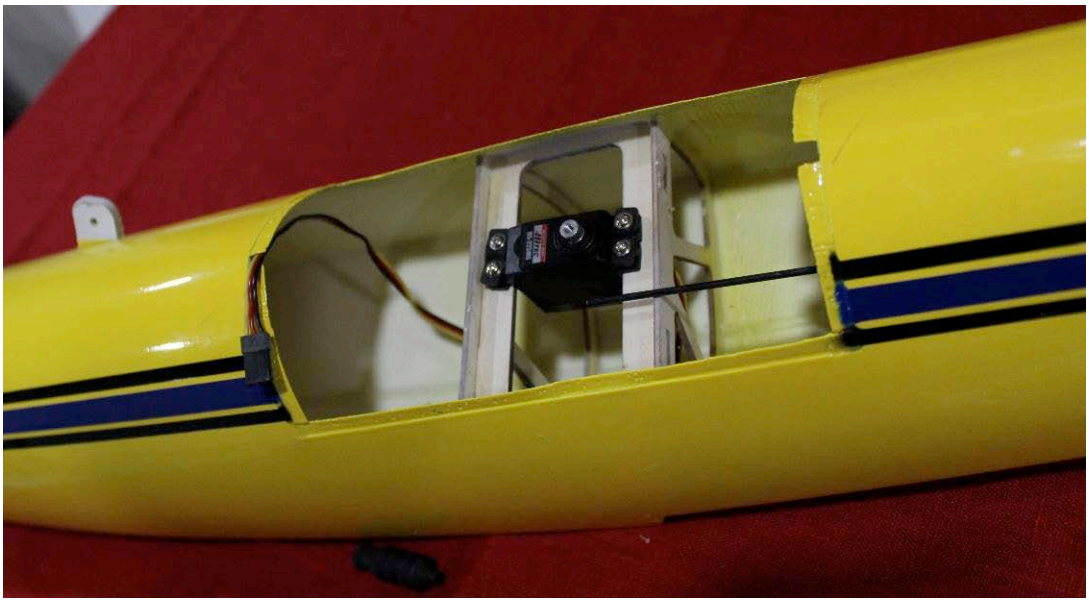


8. Assemble the pushrod by screwing the ball link onto the threaded end as shown. Coat the pushrod in silicone lubricant or oil and push through the bellows seal as shown

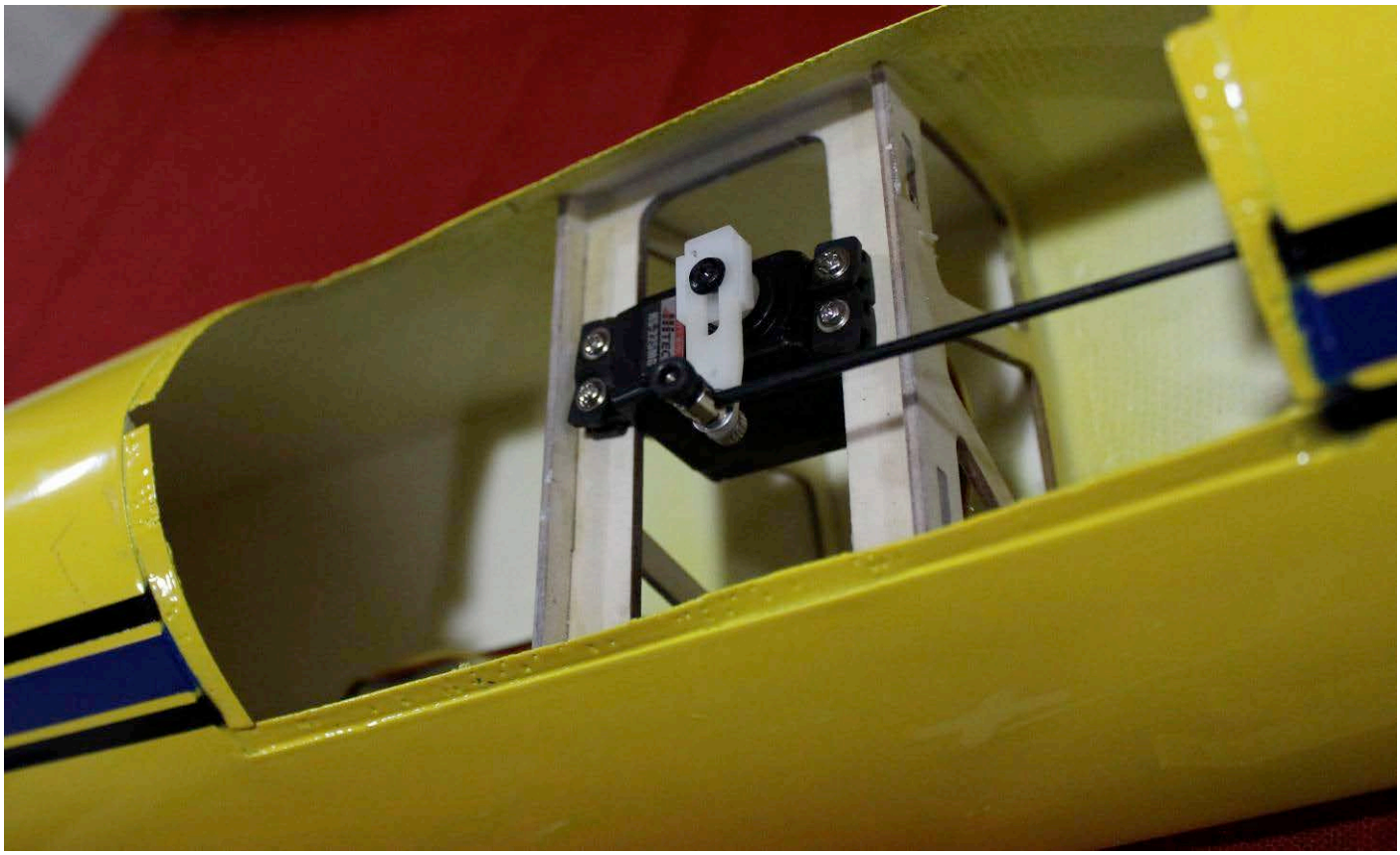
9. Using a 2mm screw and nut, with Loctite, attach the ball link to the water rudder arm as shown.

10. Using Loctite on the nut, attach the cross-rod EZ-connector to the water rudder as shown, loose enough that the connector can easily spin. Do this on both floats.

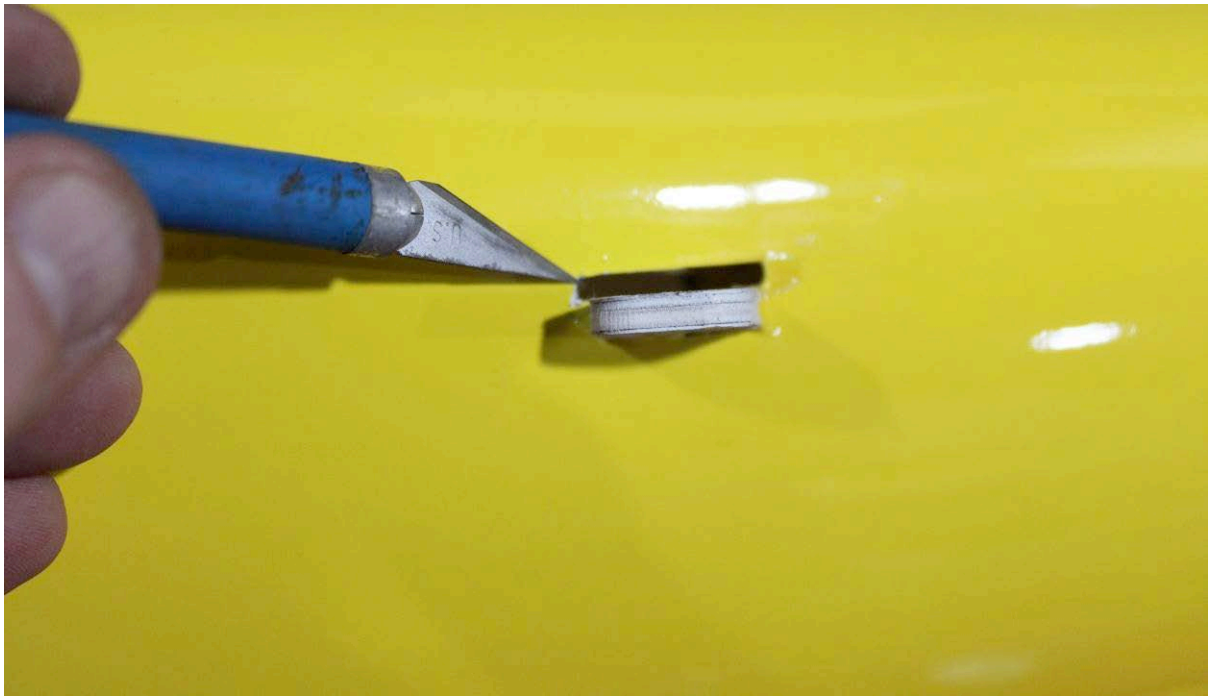
11. Mount your servo as shown onto the tray inside the float.



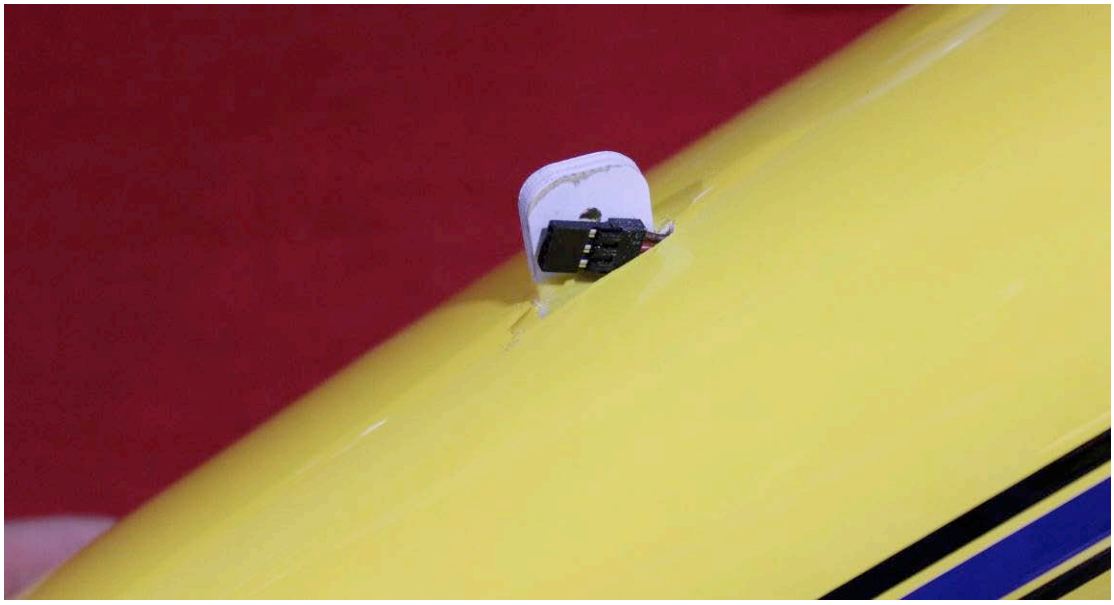
12. Install a pushrod EZ-connector onto your servo arm, loose enough that it can rotate, using Loctite on the nut to retain it. Electronically center your servo and install the arm as shown.

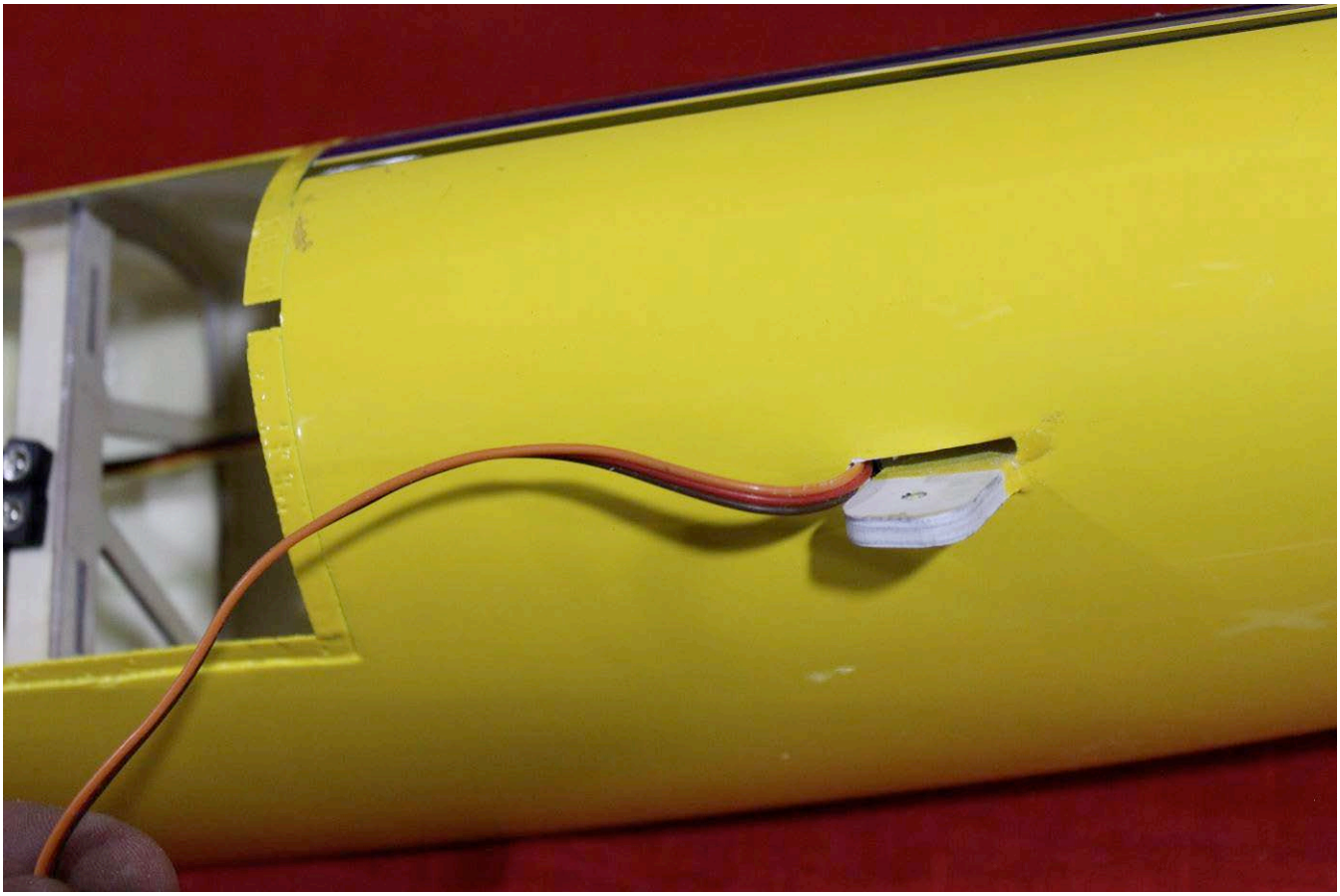


13. Locate the front mount on the float with the servo installed and modify the slot as shown by lengthening it a few mm as shown to allow the servo extension to exit.

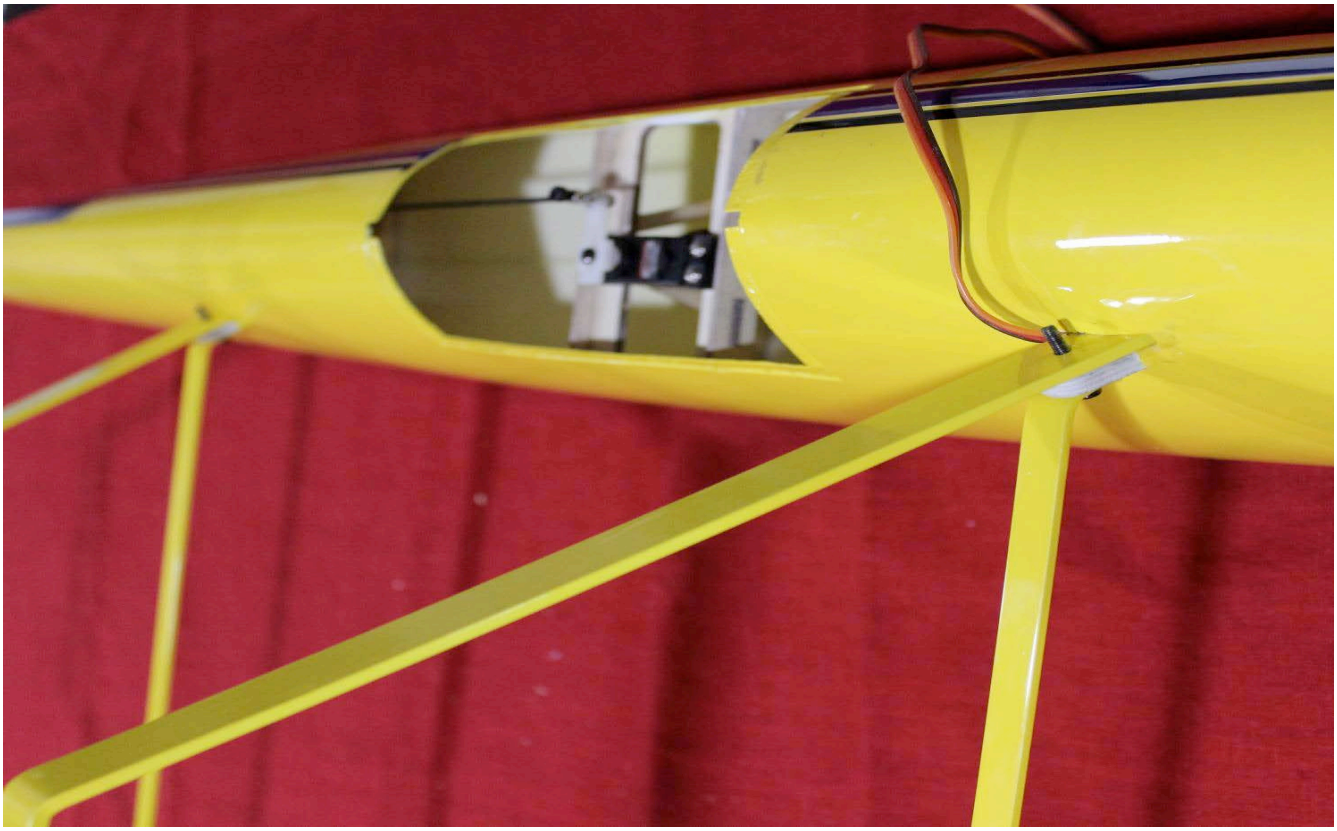


14. Attach a servo extension to the water rudder servo wire, and run the wire through the front mount slot, allowing the wire to rest in the lengthened slot you made.

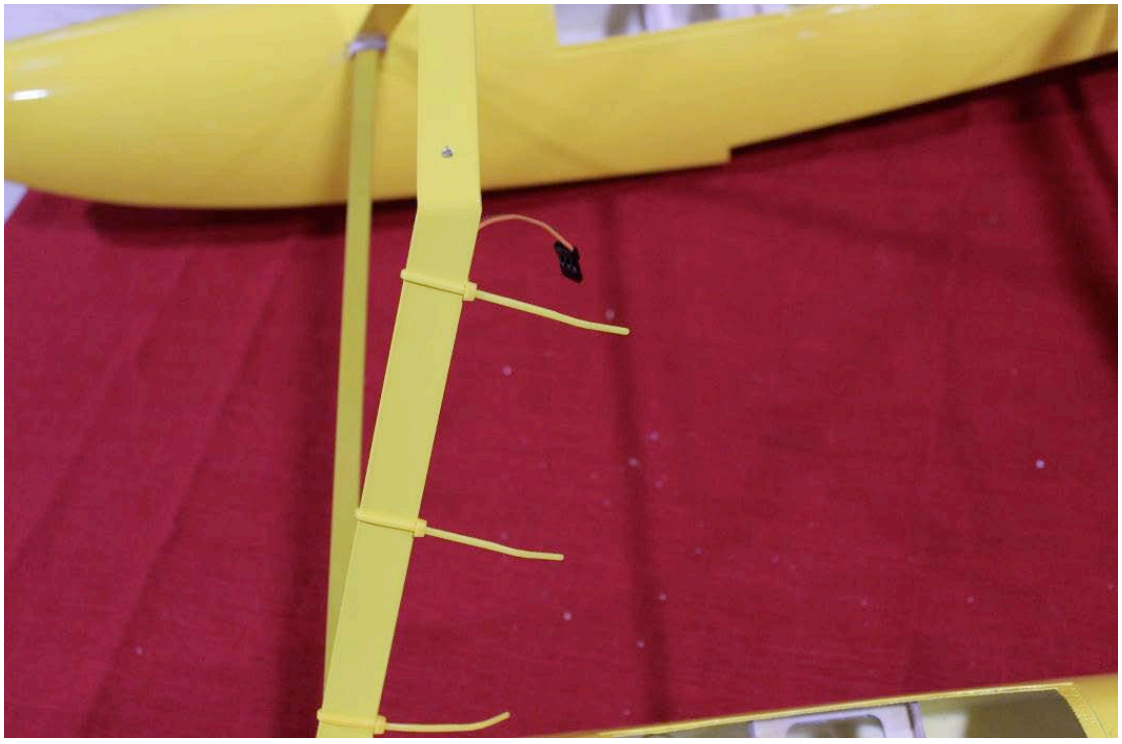




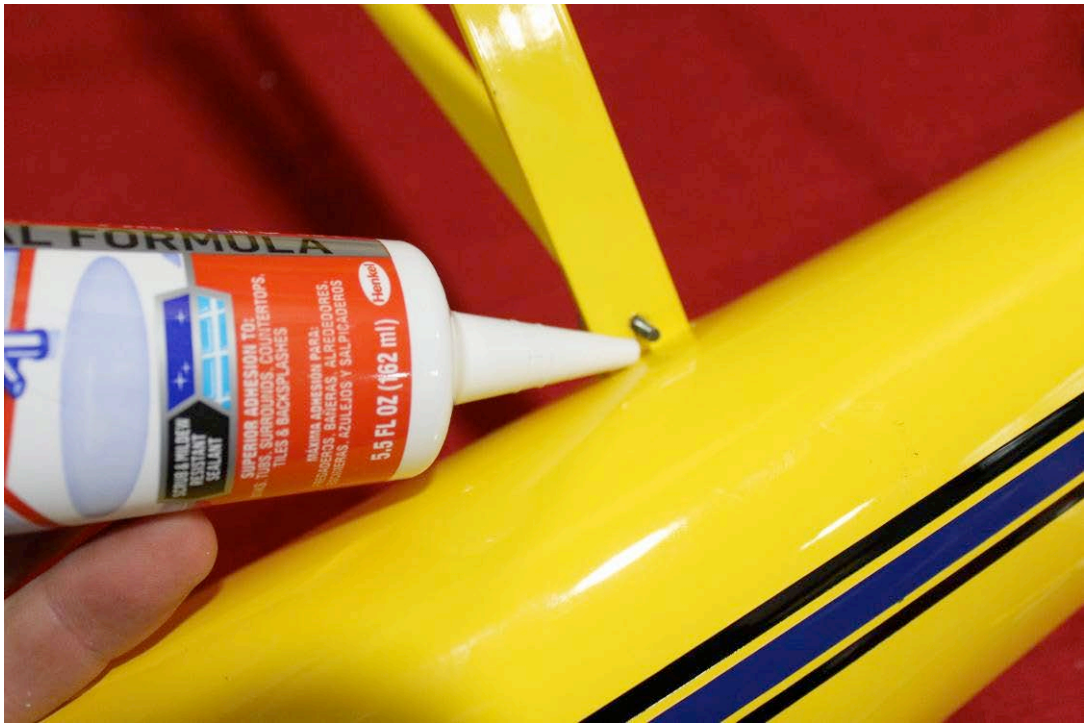
15. Assemble the struts as shown. The bent U-shaped sections slide down into the floats and lock onto the internal plywood bulkheads. Use 3mm screws with Loctite as shown.

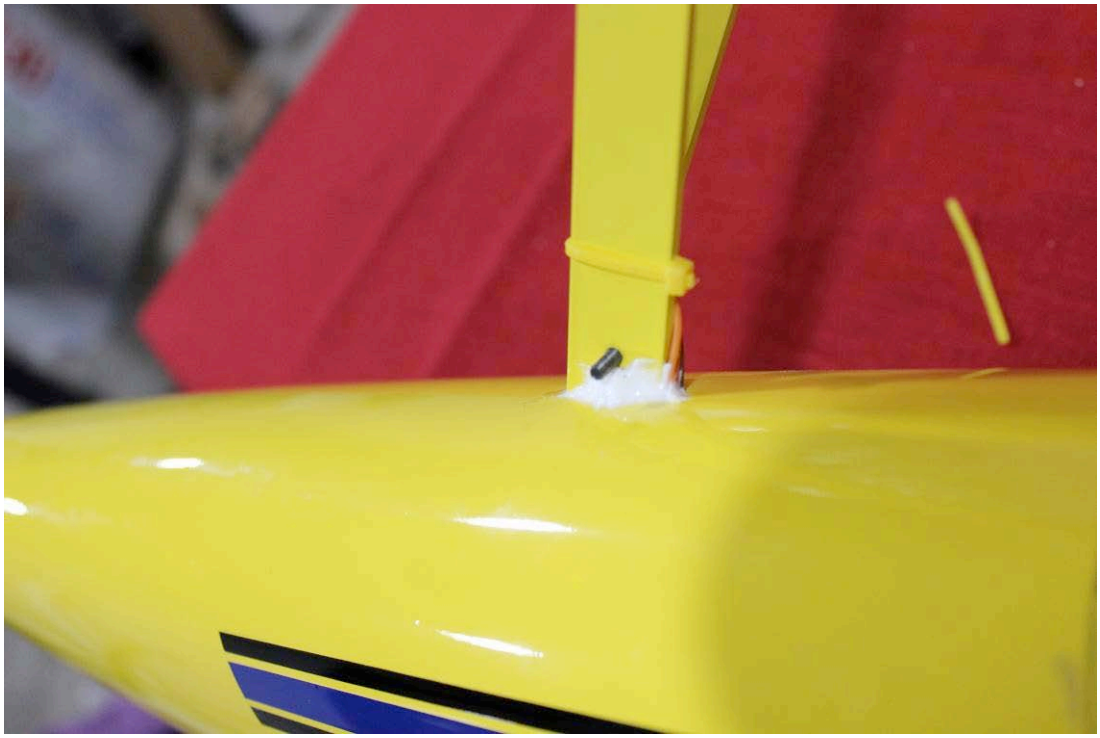


16. Use several zip ties to affix the servo extension along the strut as shown.

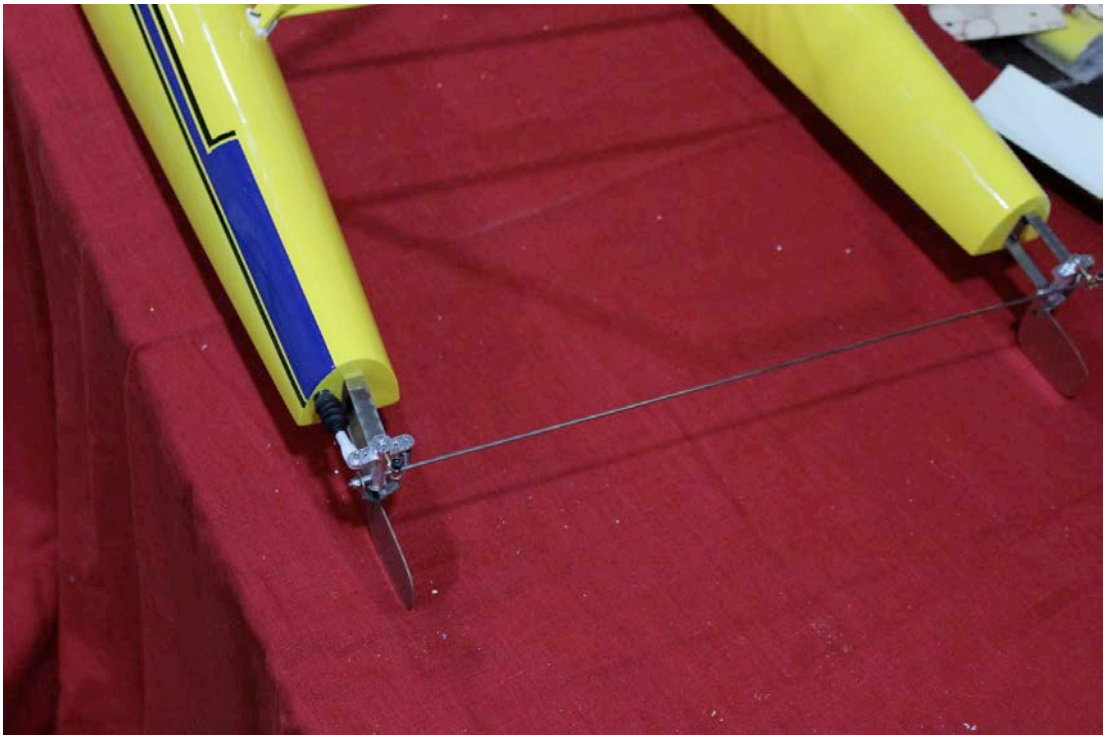


17. Use caulk to seal all of the mounting openings in the floats as shown. The type used for these photos goes on white but dries clear.

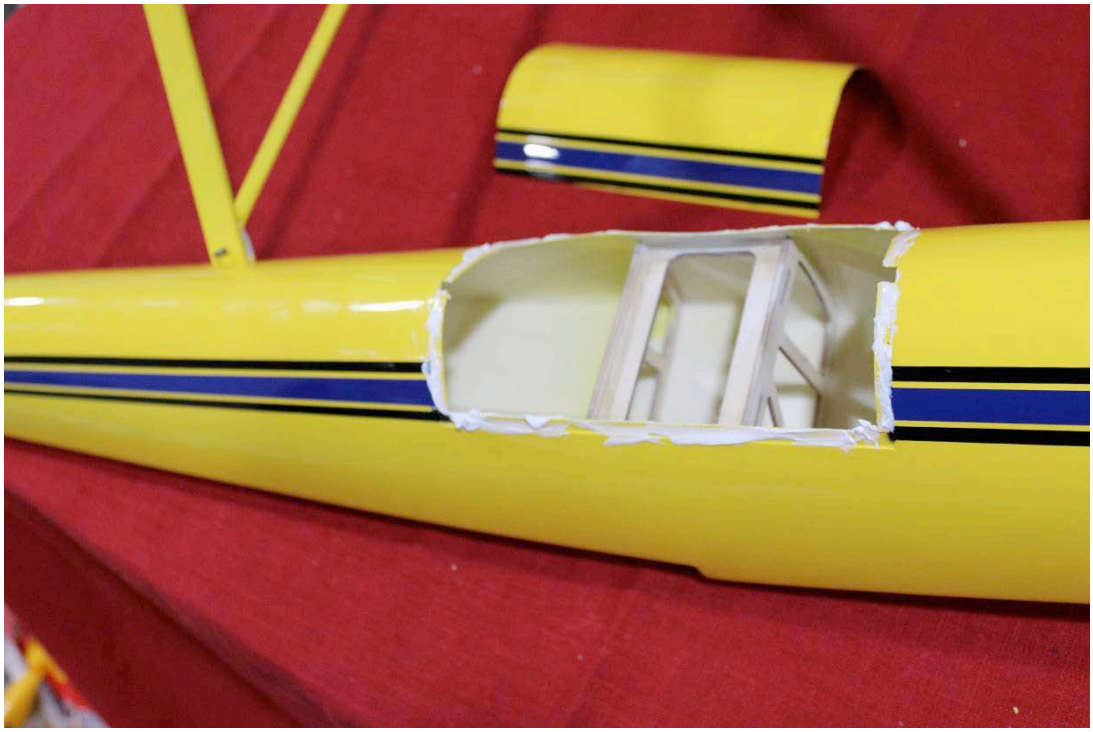




18. Attach the cross-rod between the water rudders as shown, making sure rudders are in perfect alignment.



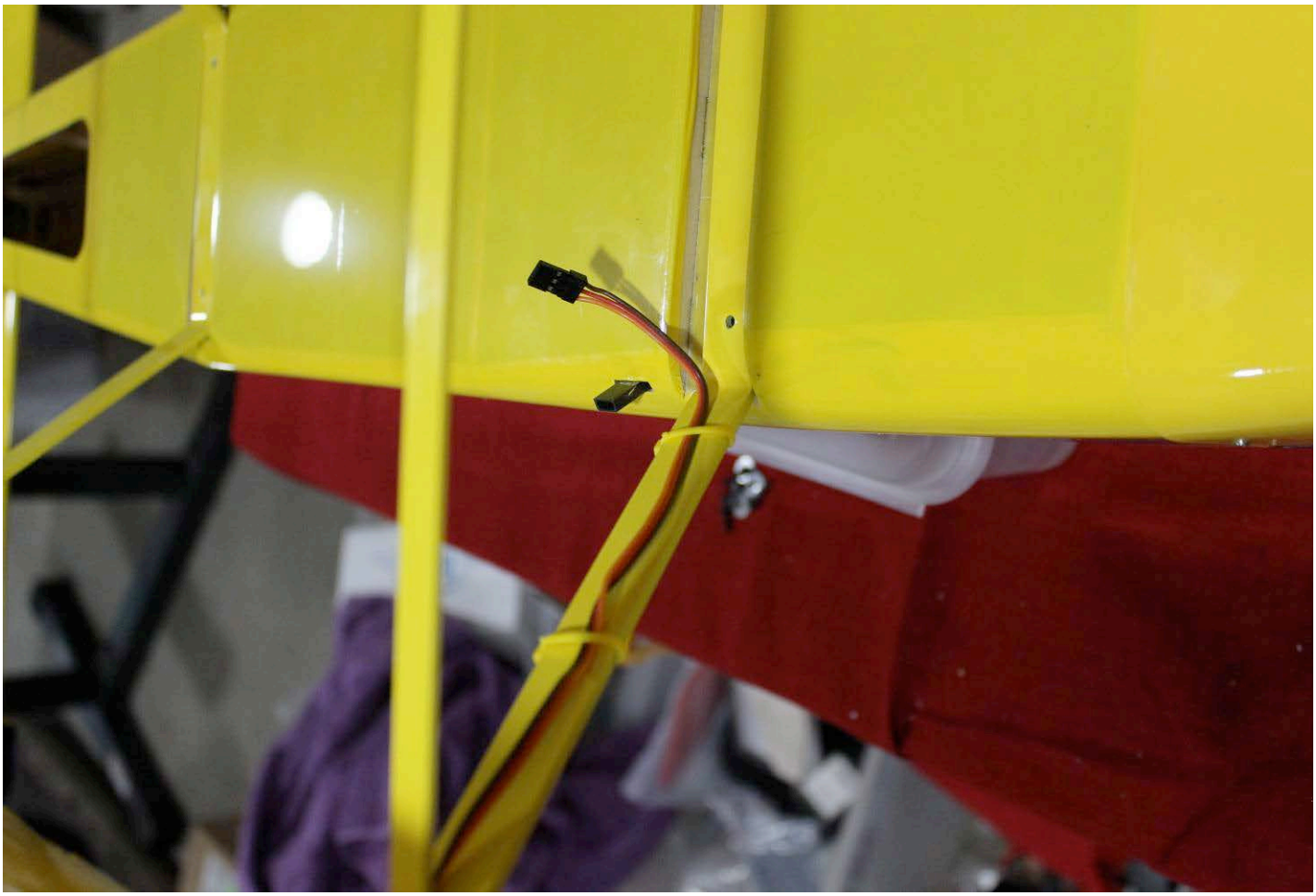
19. If you wish to permanently mount the float hatches for best appearance, spread a bead of caulk onto the mounting surface and hold the hatch in place with painter's tape until the caulk is dry. However…



20. We recommend for your first flights, to hold the hatches in place with clear tape in case you need to adjust your servo.

21. Make a slot in your fuselage where your servo extension from the receiver for your water rudder will exit as shown.

22. Install the float set using 3mm screws threaded into the blind nuts in the fuselage. If you plan to leave them permanently, use Loctite. If you plan to switch back to wheels, do not use Loctite, but check your screws for tightness frequently.



23. It is wise to package your receiver and ESC inside plastic bags, using caulk to seal the wire exists, before float-flying.

We recommend 30 degrees right and left water-rudder throw.

We use a separate channel for water rudder on our receiver, and a mix from the rudder to the water rudder to activate it. This allows many tuning functions for the water rudder.

Your aircraft will handle differently with floats attached. Test fly cautiously to get used to its new handling characteristics, before attempting aerobatics.

You will find that your aircraft can be changed from wheels to floats, or vice-versa, very quickly. Our record is under 4 minutes.

Enjoy!