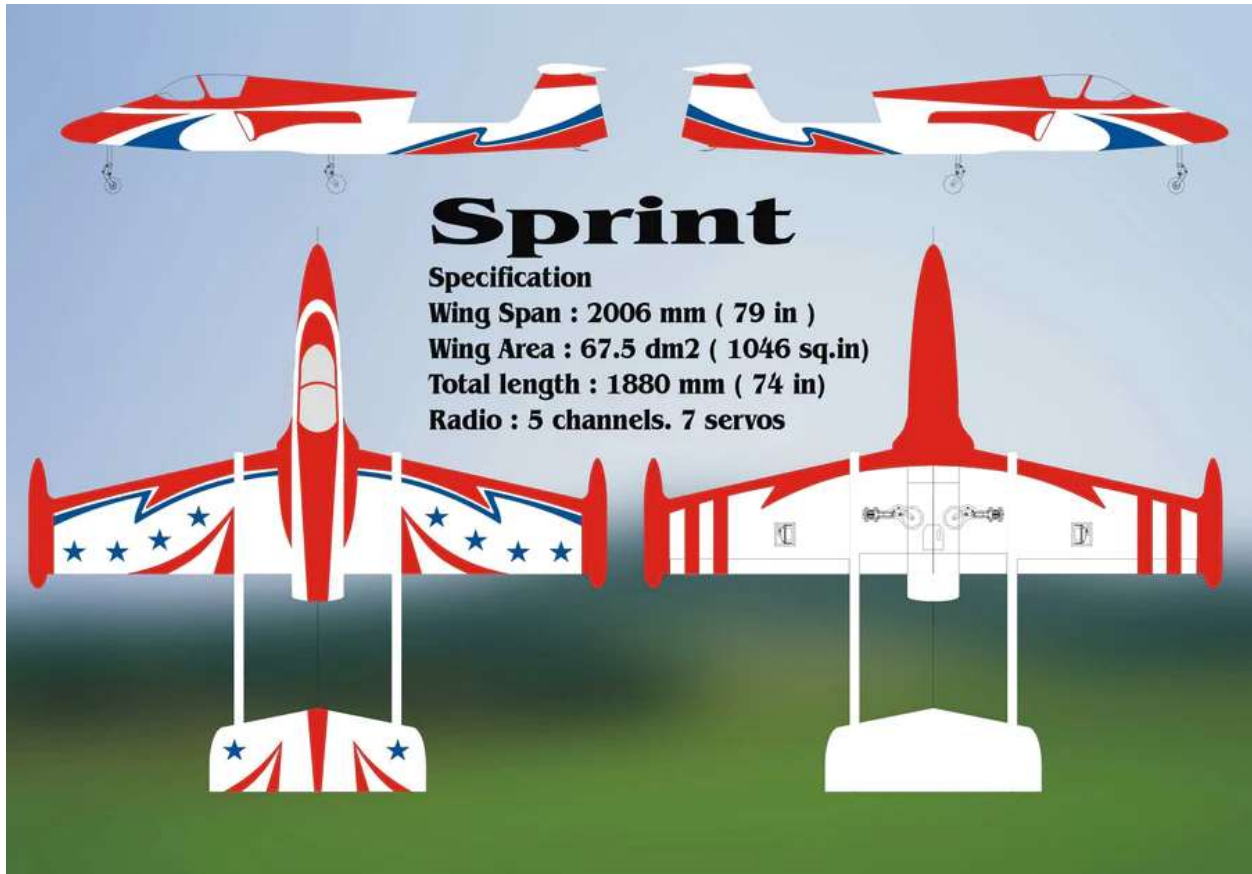


## Boomerang Sprint V2 Directions



### **Required for Flight:**

- (1) 9+ Channel Transmitter
- (1) 9+ Channel Receiver
- (1) 80 – 120 Sized Turbine
- (7) Standard Sized Servos

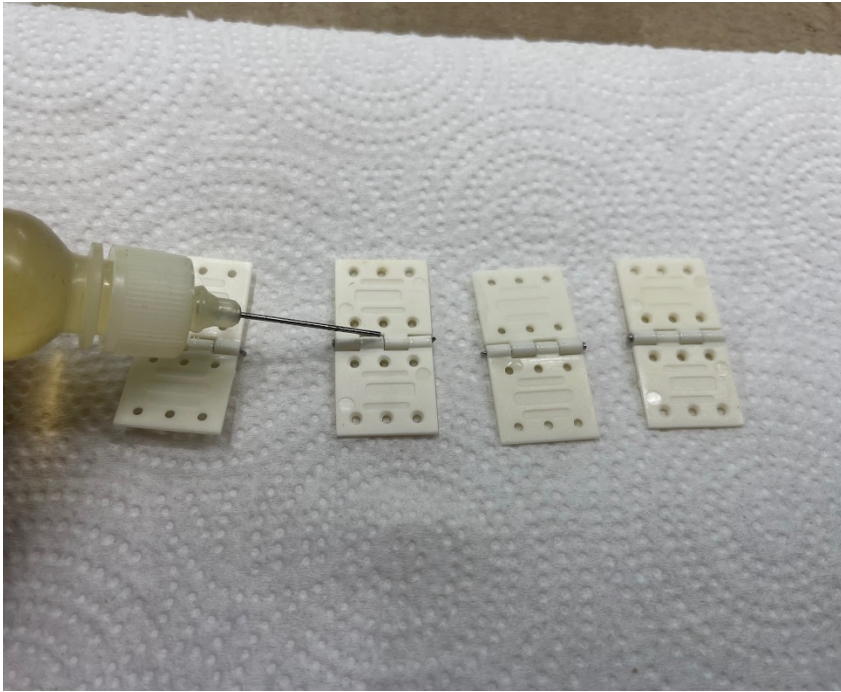
### **What's Included:**

- (1) Boomerang Sprint V2 ARF Jet Kit
- (1) 125 Ounce Composite Fuel Tank
- (1) Hardware Package
- (1) Electric Retract System w/ Electric Brakes

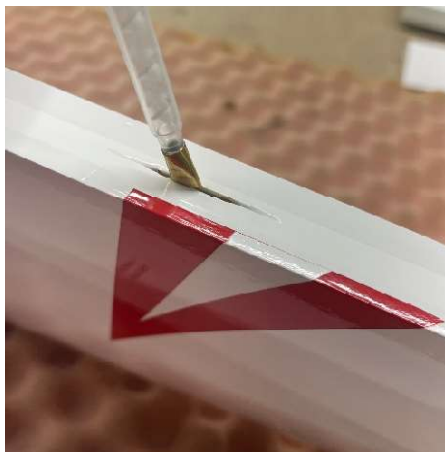
1. Unpack the Sprint and examine all components. At this time, you can also tighten down any lose covering using a covering iron with a sock to prevent any scratches or damage.

## Hinging

2. Make sure all hinges fit into the slots and line up with their respective slot on the other side.
3. Remove all hinges and place on a paper towel and apply a small amount of oil along the pin on each of the hinge to prevent the glue from sticking and gluing the hinge straight.

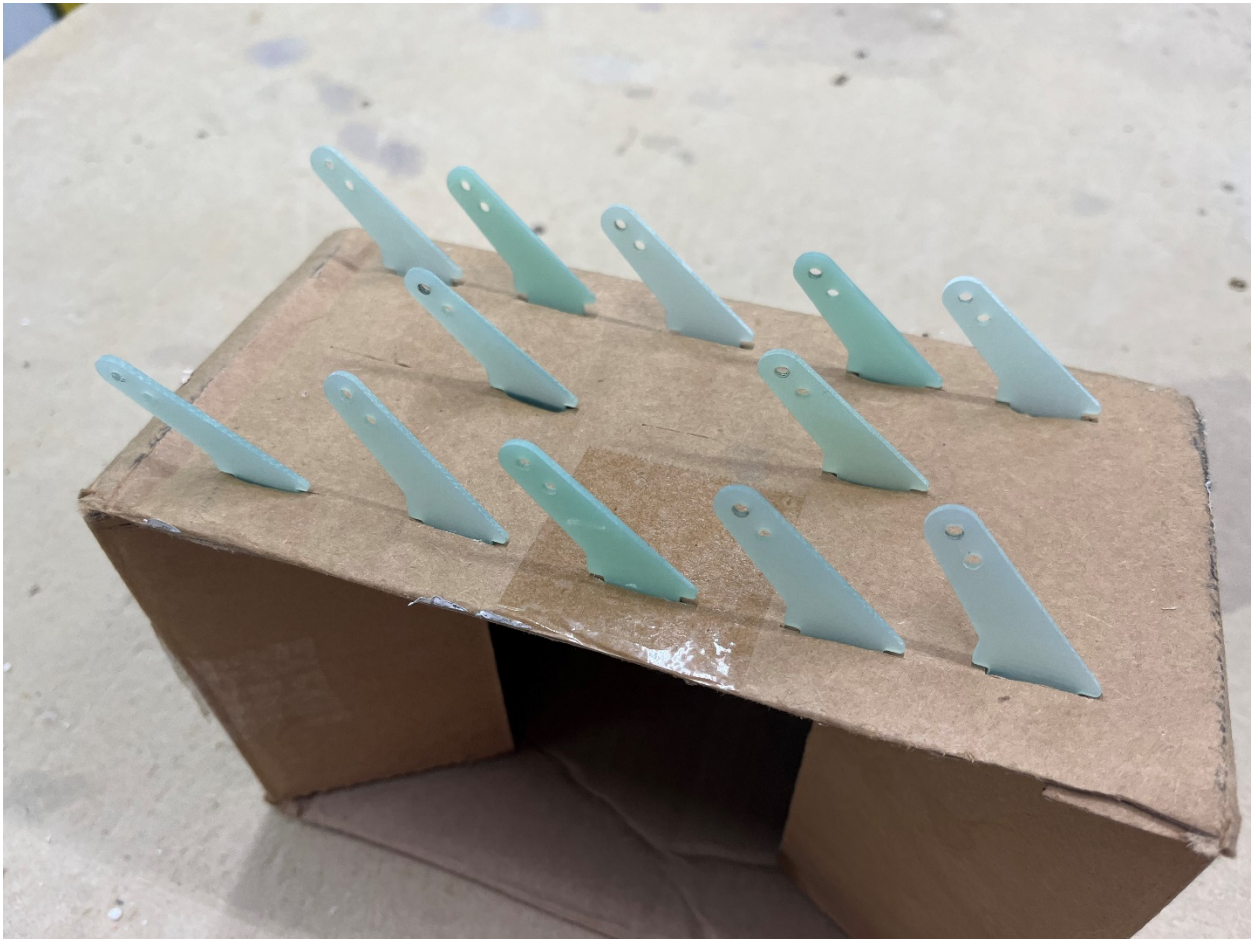


4. Gluing all the hinges can be done at this time, for this Hysol was used with a small piece of brass tubing crimped down to fit into the hinge slot so the glue could easily be put in. Do one side then the other and use tape to hold tight till dry.



5. Control horns are up next. If you would like to paint them, now is a good time to do so. We using a box to slice to hold the control horn is a great and easy way to hold them as well as does

not require having to tape off the bottom section that will be getting glued later.

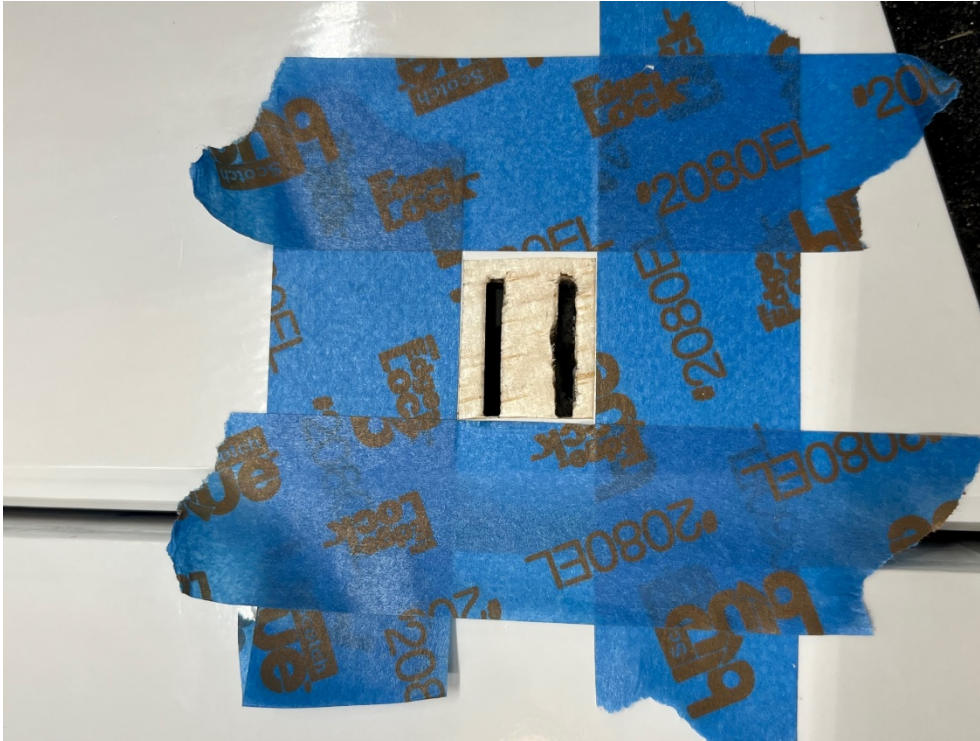


6. Trim the control horns to the proper length, keep in mind the flap horns will be installed backwards.

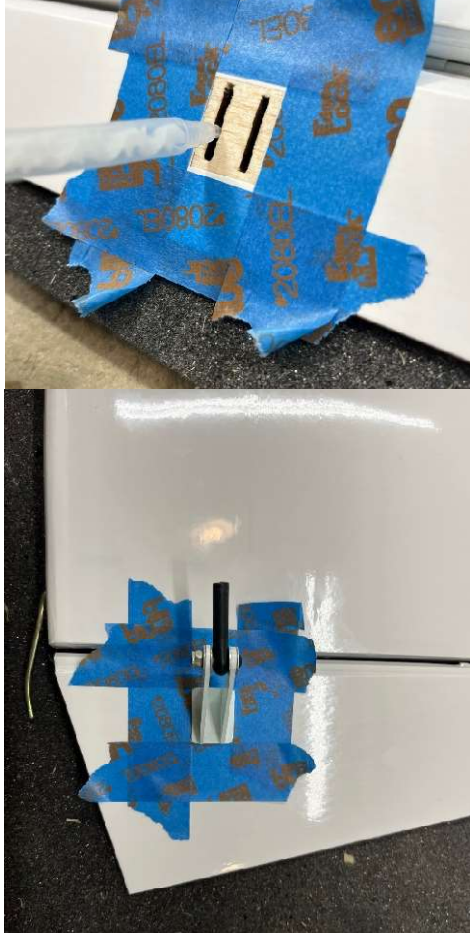


7. Scuff the lower section of the control horn that will help make a stronger bond with the Hysol later when we glue the control horns into the surface.

8. Assemble the control horns with the ball links, this will keep the horns lined up later when glued in.
9. Test fit the control horns and mark off with tape the edges. Cut within the edges to remove the covering.



10. Insert glue into the slots as well as a lite coat on the surface of the exposed wood, then insert the assembled control horn.



11. Remove the tape before the glue has dried to prevent it from getting glued down and making any mess from the excess glue.



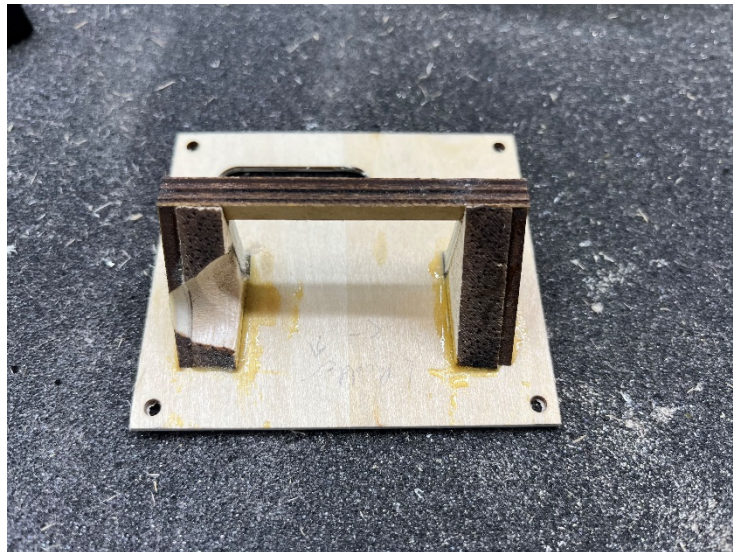
12. Remember the Flap control horn goes in reversed, see next picture!!



13. Use a soldering iron to remove all the covering from the servo arm slots and any other opening on the airframe that may need to be opened, for example the side intakes for air to the turbine and the sides of the boom for the wing tubes and servo leads.



14. Something that we like to do, is to shorten the servo wires so that all of the wire stays under the hatch. This is done incase you need to work on the servo or extension the plug is right there easily accessible and not a hassle to get back out. This is done on all of the servos.



15. Test fit and trim the servo mount so that the wire is not crunched.



16. Insert the servos and drill the for the servo screws. Insert the screws and remove and remove the servo. Put 2-3 drops of thin CA into the holes to harden the threads and then re insert the servos and secure.

17. Make Pushrods:

- a. Ailerons should be about 75mm
- b. Elevator should be about 65mm
- c. Rudders should be about
- d. Flap should be about



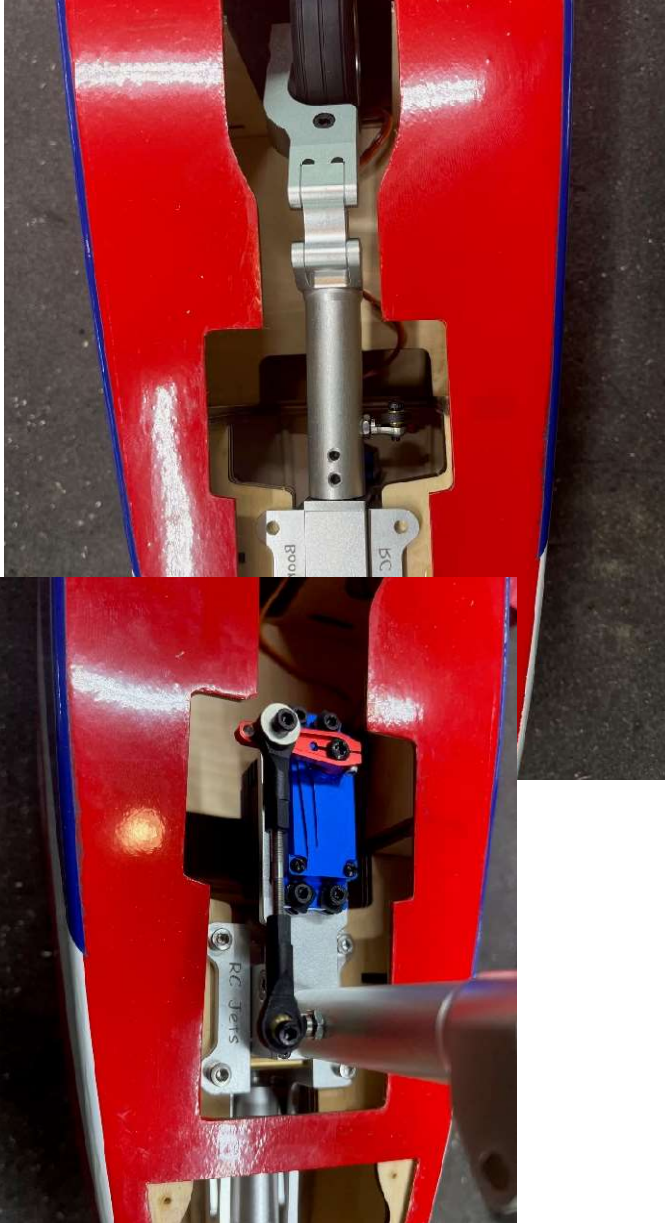
18. Make Servo Extensions: (keep in mind our measurements are used to make it all the way to the servo hatch.)

- a. Elevator in the stab 12 inch
- b. Elevator in the Boom 25 inches
- c. Elevator in the Center Section 23 inches
- d. Rudders for the Booms 25 inches
- e. Rudders for the Center Section 23 inches
- f. Flap for the center section 12 inches
- g. Ailerons 26 inches for the Center Section
- h. You will need extensions now from the center section of the wing to your receiver and that will be whatever length you require to reach your receiver.

19. Run all of your servo extensions and install all the servos. We found using a yellow nyrod down the booms made it very easy to fish the extensions to the center.



20. The main Landing Gear is next. Place the retracted landing gear onto the rails and into the gear bays. Drill the holes for the landing gear screws. Drill one at a time and then install a screw to hold in place. Once all done, remove and put 2-3 drops of CA into the holes to harden the threads. Do this on both sides as well as the nose wheel.



21. Follow the same procedure from above for the nose wheel. Once done run all the wires.



22. The engine we used needed to have small shims built and installed, these were assembled and installed with Hysol and then screwed in as well so that there was no chance of them moving.



23. You can use the turbine to help with CG by sliding it forward or back. Once you have decided where it will go drill for your mounting screws and install the turbine.



24. Trim out the covering on both sides so that it looks like this, this will provide the air for the turbine. Test fit the air intakes, one on each side.



25. Now we used silicon and screws to hold the air intakes into place.



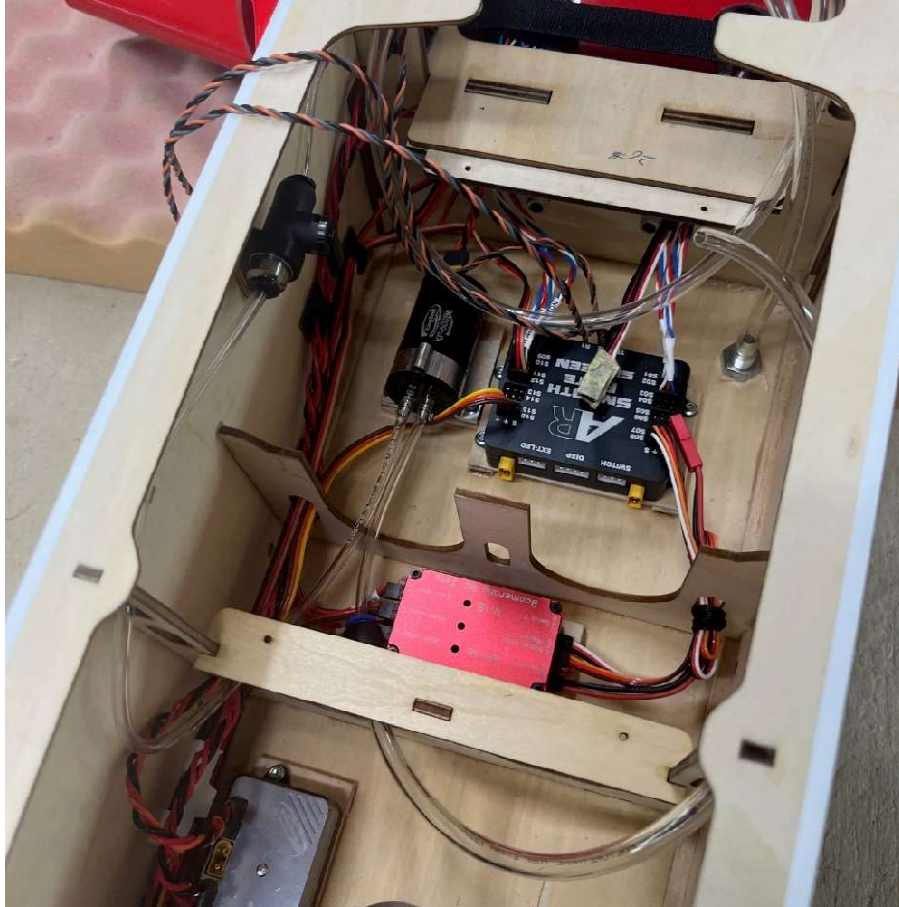
26. Insert the metal boom and wing support rods. Once test fit, remove and put a drop of thread lock on and thread them all back in. Once you test fit the wing you can put a flat spot on the rod.

27. At this point put the horizontal stab on top of the fins, connect the elevator servo and bolt the stab on with the 4 provided bolts.



28. All of the servo wires can be seen exiting the center section here.





29. Start wiring and plumbing, this can be done many different ways, this is just how we did it, make sure nothing can get tangled on the nose wheel.



30. Finished internals shot to give an idea.