

Assembly Instructions for:

# SONICMODELL Mini Skyhunter V2



## Thank you for purchasing the SONICMODELL Mini Skyhunter V2!

It is important to read the manual in its entirety before your maiden flight. This model is intended to be a short to medium range FPV aircraft, but it can be lots of fun for line of sight as well.

The Mini Sky Hunter V2 is easy to operate with excellent flight characteristics, but we do not recommend it as a beginner airframe for FPV unless helped by an experienced pilot.

Please obey all current laws and use common sense for safety when operating.

Most importantly, *have fun!*

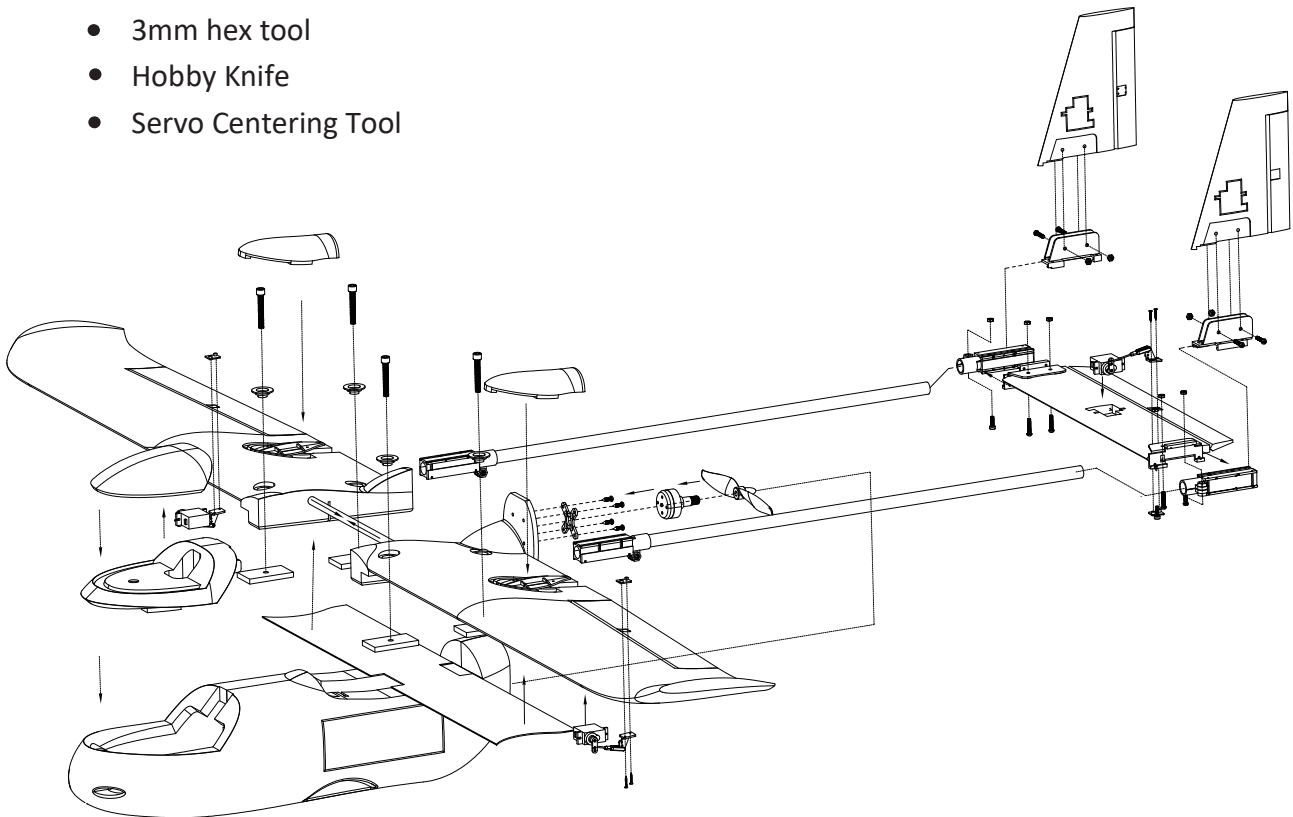
**Note:** We reserve the right to modify information presented and cannot be held liable for errors within.

### Required to operate:

- Motor – 2217 1250KV (Included in PNP)
- Propeller – 8x4E (Included in PNP)
- ESC – 40A w/ 5V 3A BEC (Included in PNP)
- Servos – 9x3pcs (Included in PNP)
- Battery – 2200-5000mah 3s-4s (May vary depending on additional gear)

### Required for assembly:

- Contact Cement, Medium CA, or personal choice of glue
- Blue thread lock
- Small Phillips screw driver
- 3mm hex tool
- Hobby Knife
- Servo Centering Tool



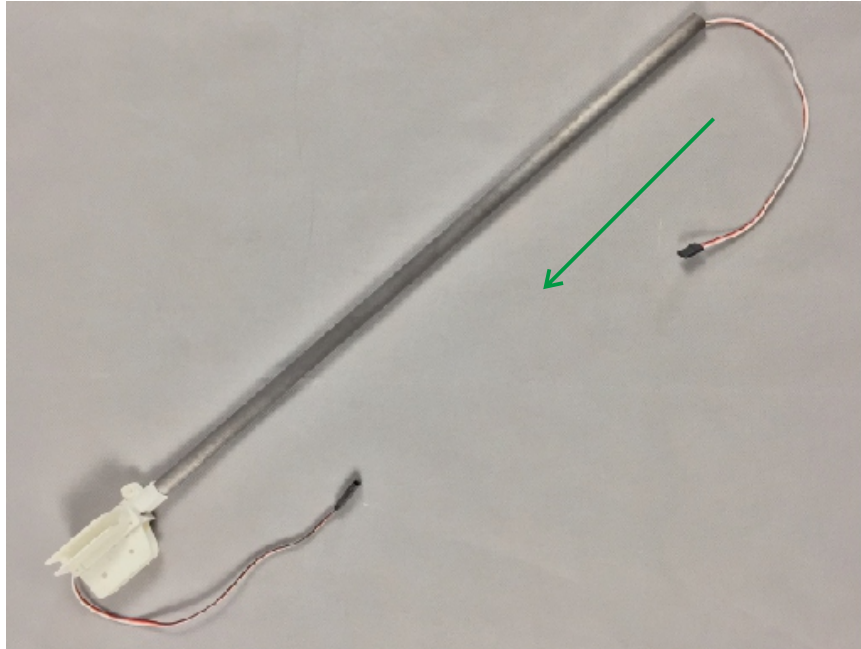
## Package Contents: (KIT version Shown)



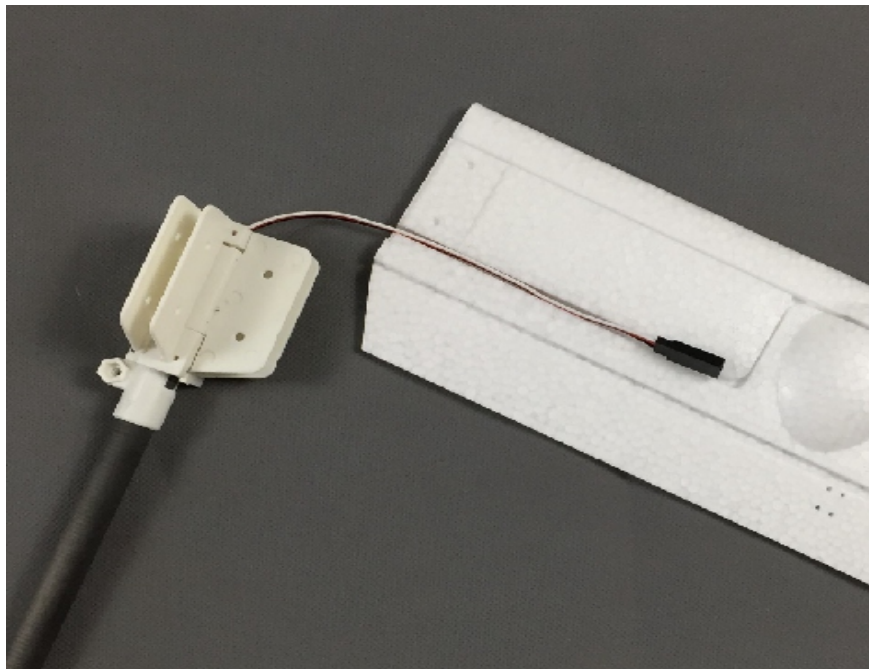
- Fuselage
- Hardware Package
  - Elevator Servo Extension
  - FRP Wing reinforcements (1)
  - Wing Bolts (2 long, 2 short)
  - Tail screws and nuts (8 each)
  - Hook and Loop Tape
- Main Wings
- Main Spar
- Tail Booms and Tail Anchors
- Elevator
- Rudders
- Decal Sheet

## Assembly

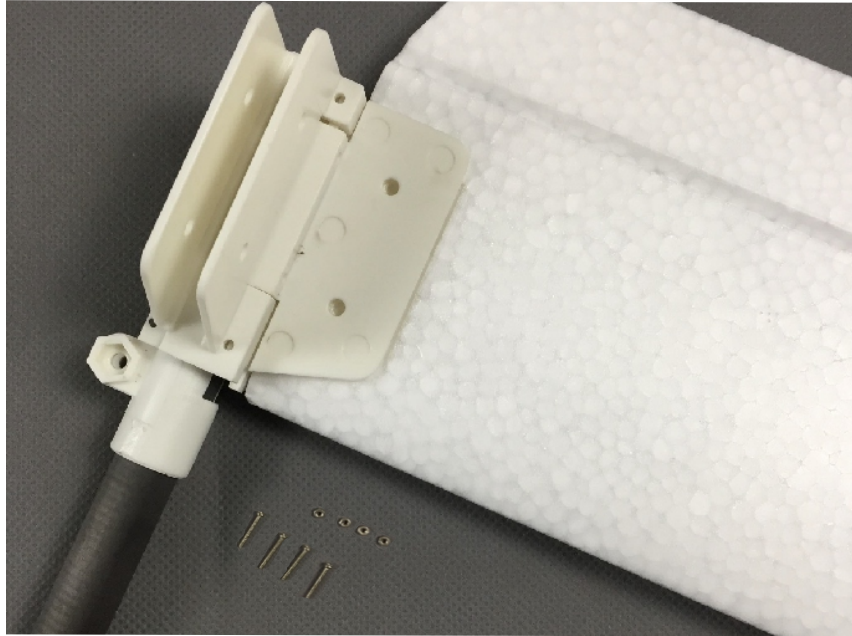
1. **Locate Servo Extension** and feed it through the left tail boom. Note correct Male/Female orientation.



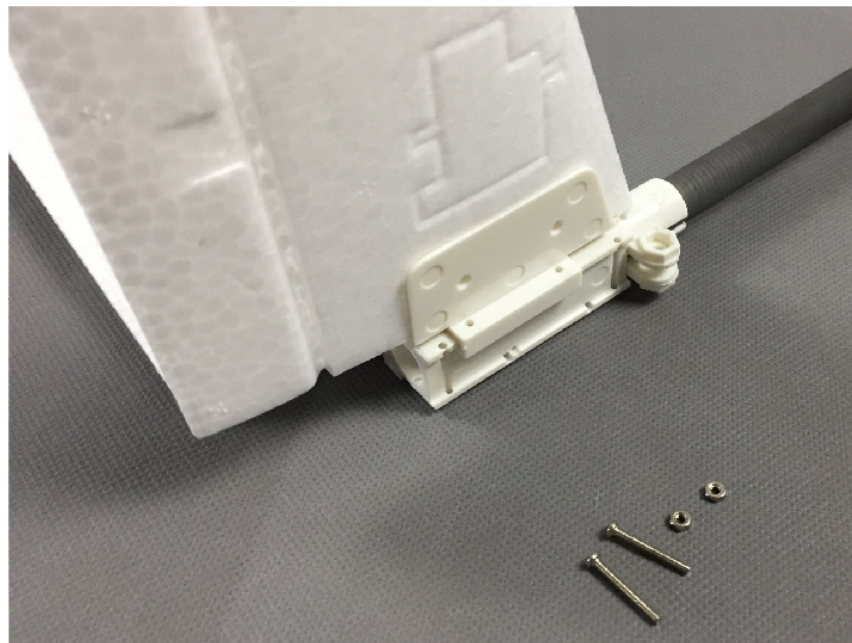
2. **Connect elevator servo wires.** You may wish to secure the connection with tape or servo clip for added security.



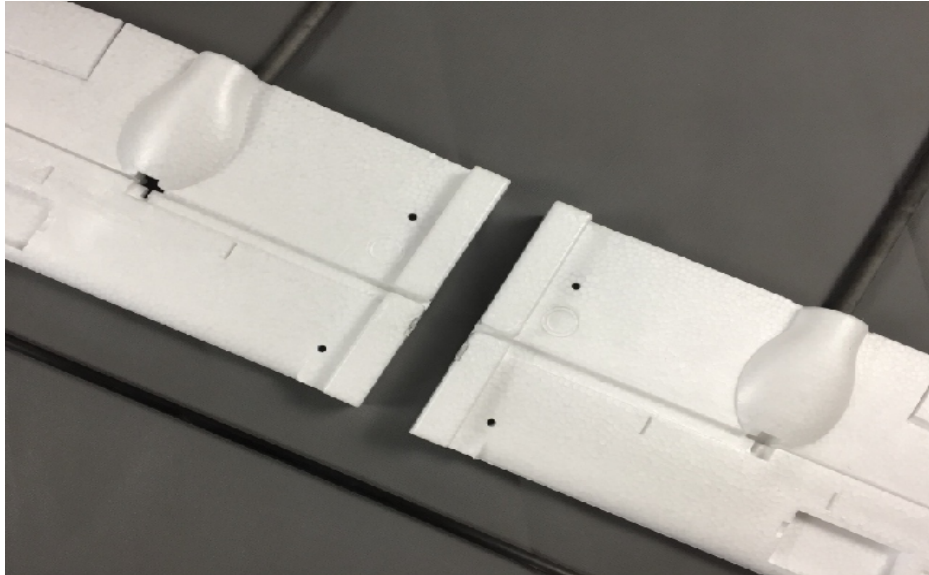
3. **Locate 4x small screws and nuts from hardware bag** and secure horizontal stabilizer to tail boom anchors.
  - a. Use blue thread lock to help secure the nuts. Be careful to not get any thread locker onto the plastic bracket as it can cause it to weaken.



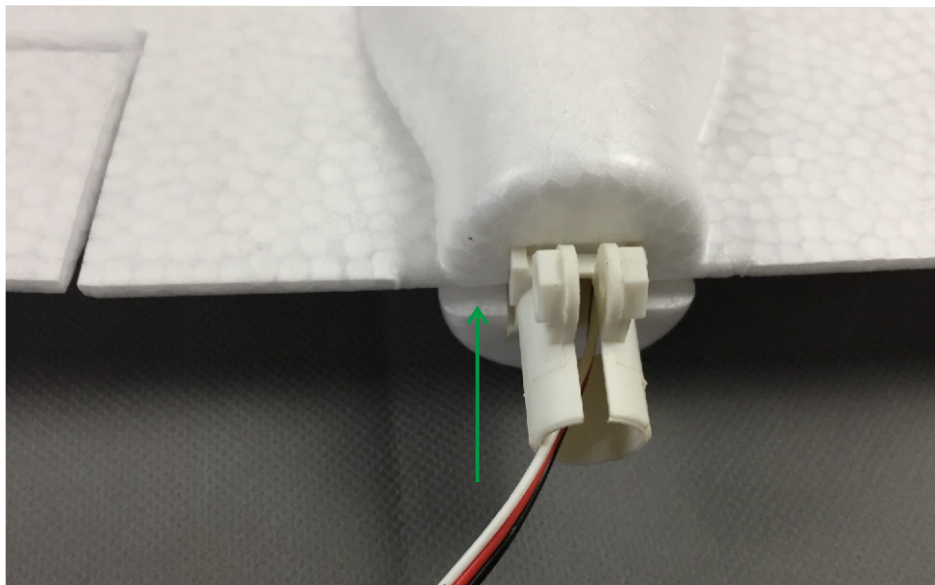
4. **Repeat this process for the rudders**



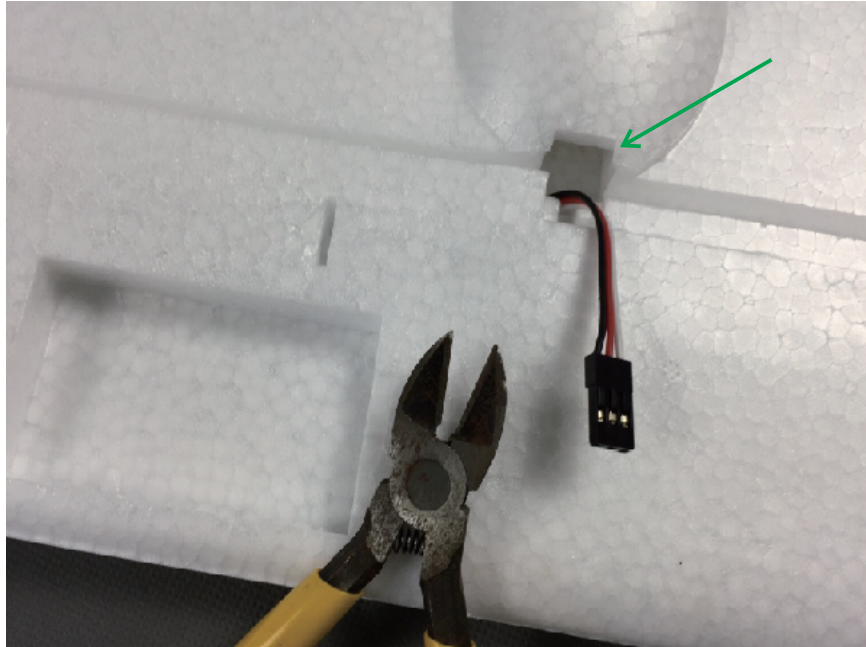
5. **Locate main wings and spar as shown.** Insert spar into wing halves and push wings together.



6. **Carefully feed elevator cable into the boom housing** on the main wing. You will see a small space for the servo connector to pass through.
  - a. You can now carefully insert the tail booms into the housings.



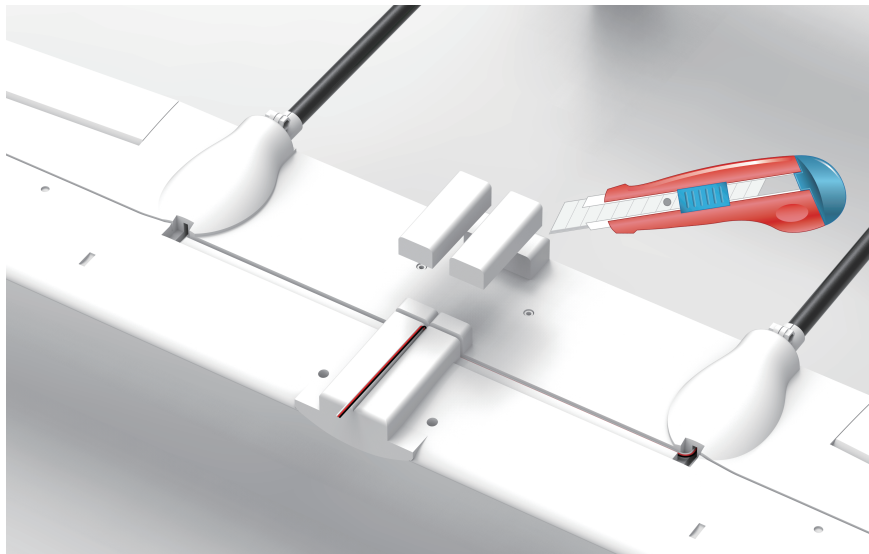
7. Carefully pull the connector through the opening with a small pair of pliers.

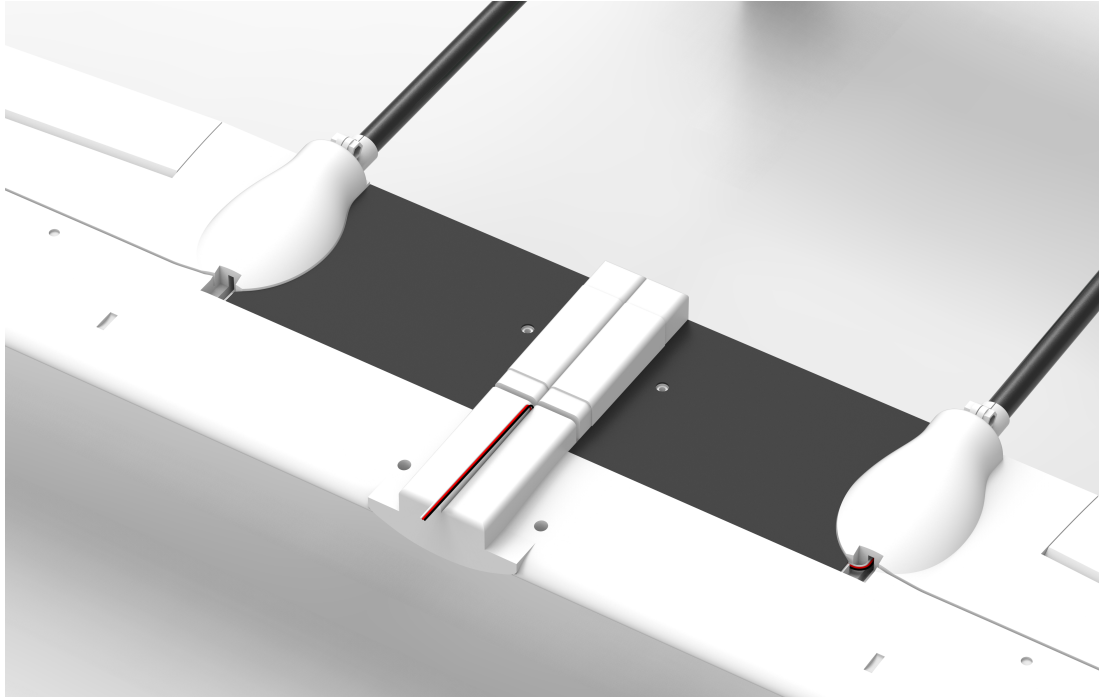


8. In order to reinforce the main wing, we suggest you to install the FRP wing reinforcements as below:

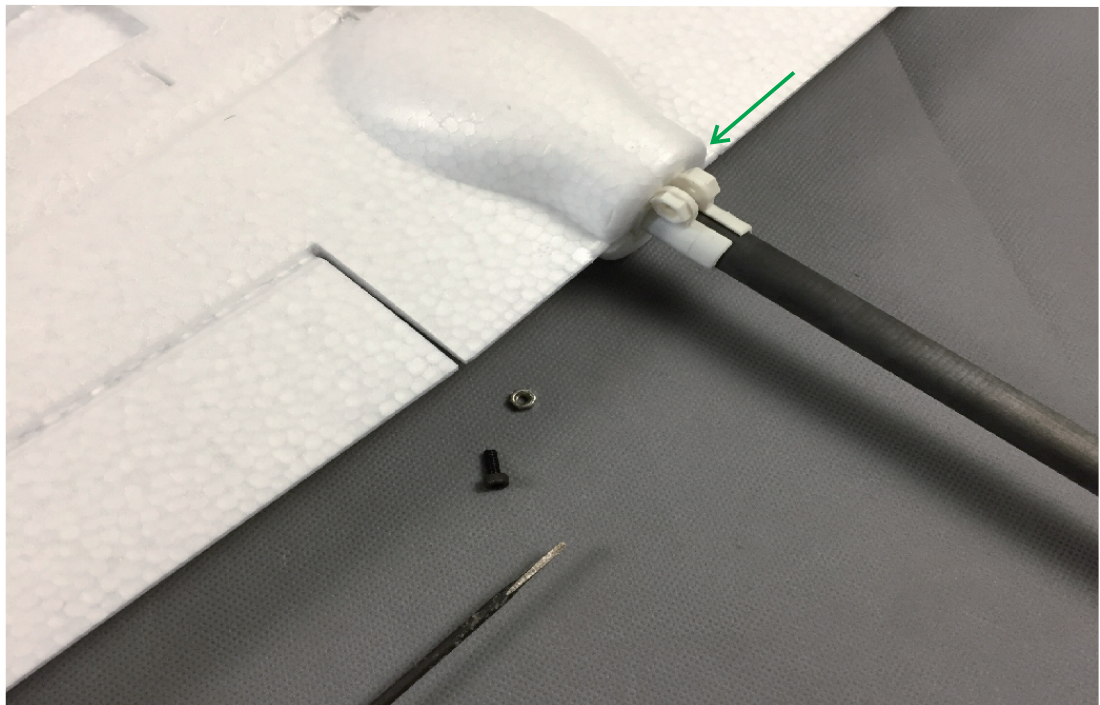
- 1- Cut the foam according to the reinforcements sheet
- 2- Locate the reinforcements sheet and glue into place
- 3- Put the original foam back and glue into place

Attention: By doing this, the main wing will be reinforced, but the main wing cannot be disassembled any more.



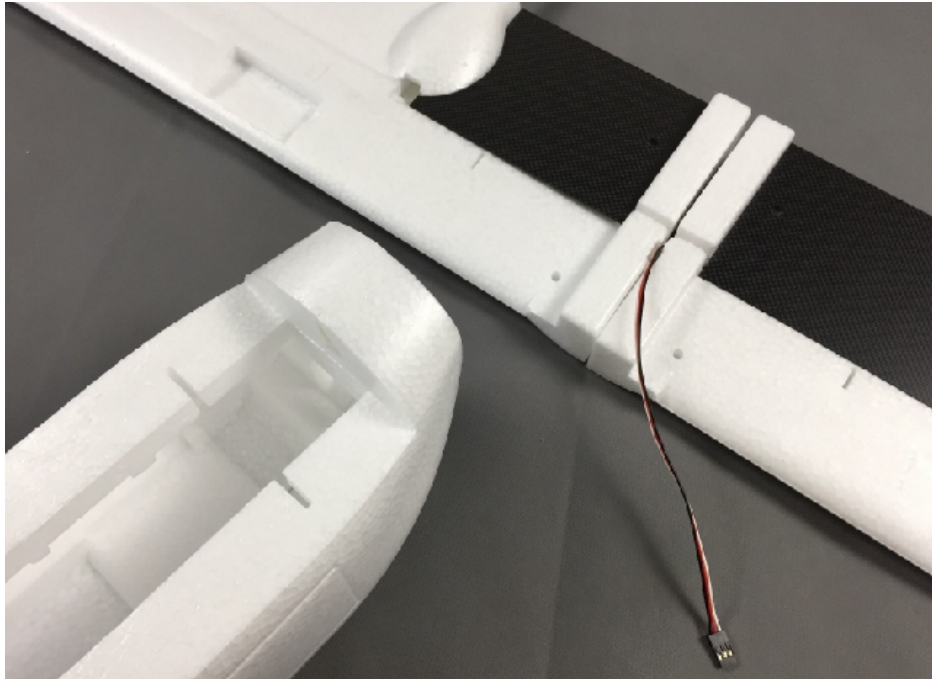


9. **Locate the M3x10 screws and M3 nuts** and install them into the main wing boom anchors, but do not tighten them fully yet.

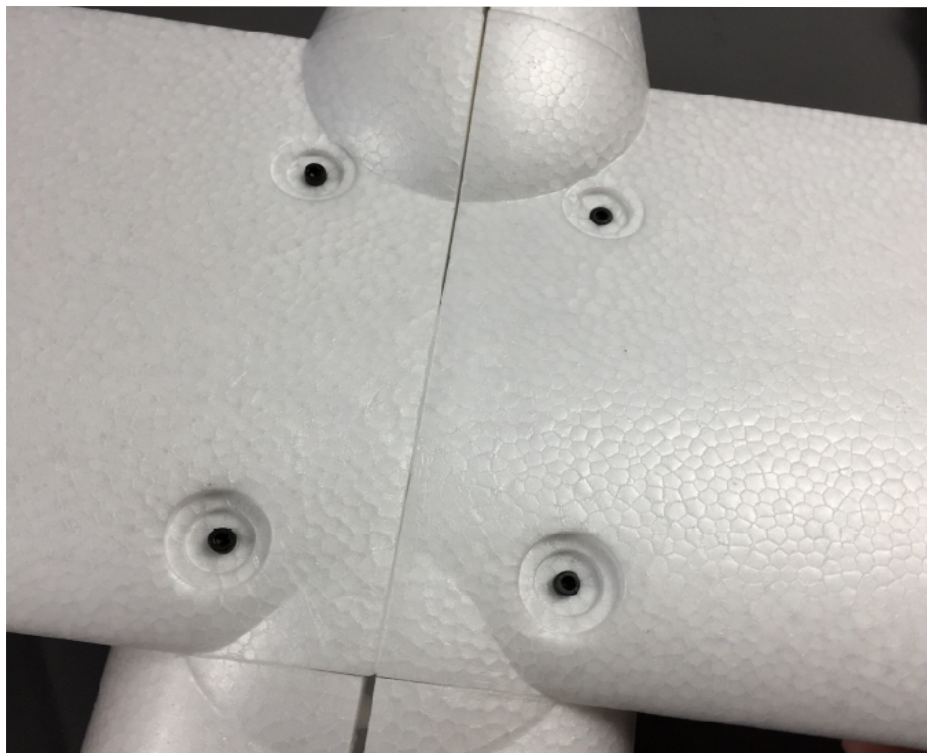




10. Depending on where you plan to mount your RC receiver, you may wish to install it at this time if you need access to where the wings will be covering.

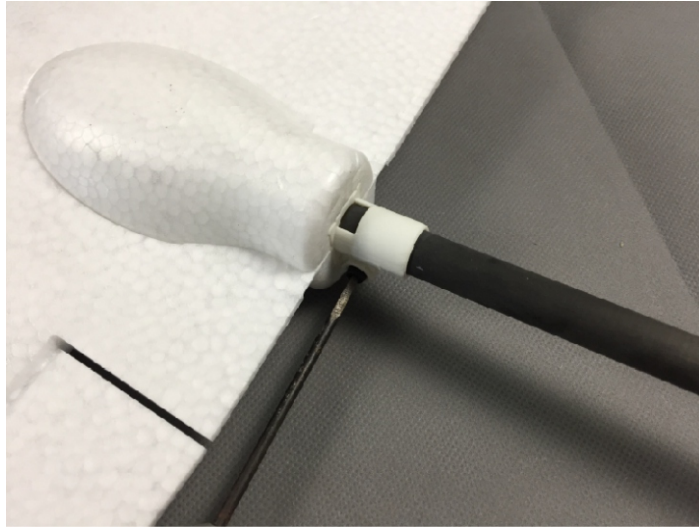


11. Locate main wing bolts and screw into place. Notice that the short bolts go towards the tail of the airframe.



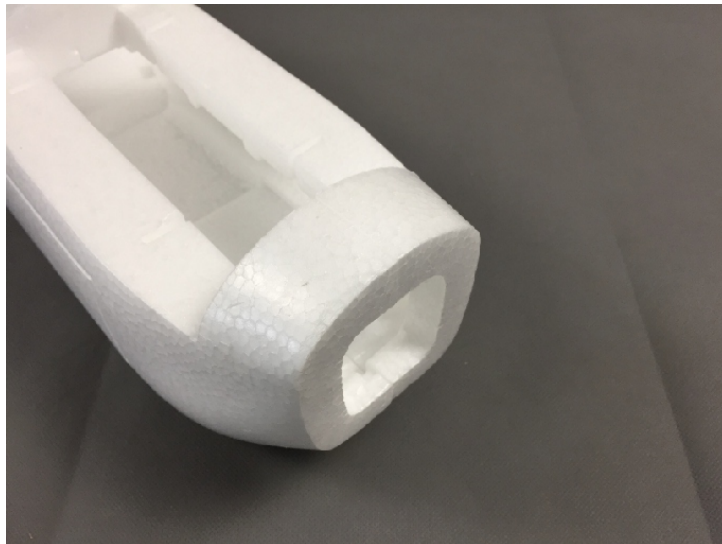
12. You can now tighten all 4 tail boom clamps.

- a. **Important!** Make sure you have proper alignment by measuring the boom lengths and looking at the main wing/tail from different angles.
- b. **Important!** If the surfaces are skewed in relationship to the main wing, it can negatively affect flight characteristics.

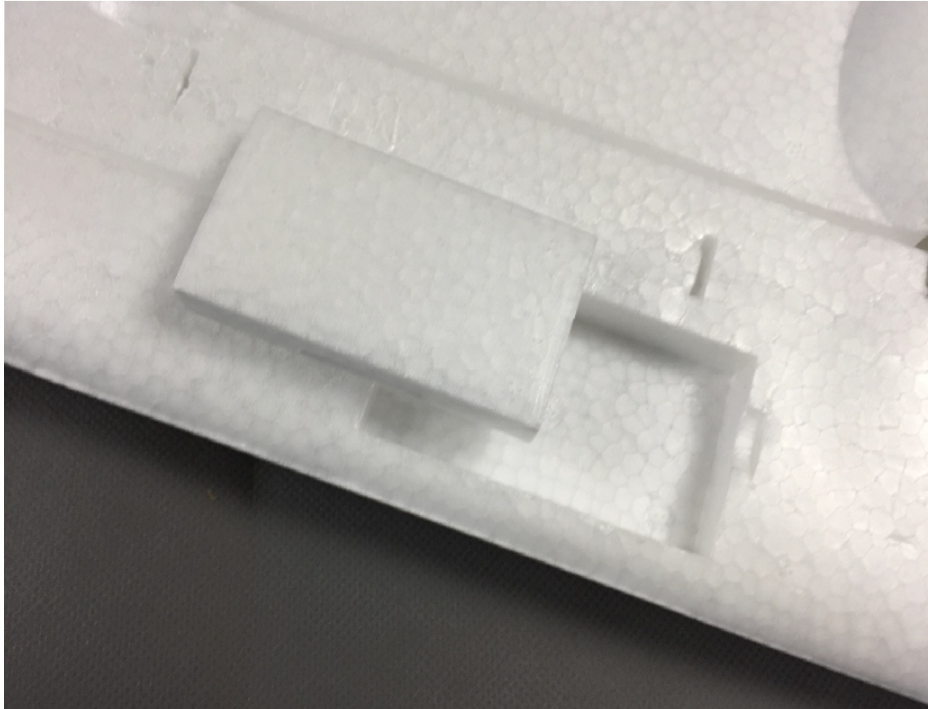


13. Locate prop adapter, propeller, and adapter rings. Install onto motor shaft and tighten completely.

- a. It is always best to balance the propeller before flying.
- b. **Note proper direction.** The “letters” printed on the prop always face the front.
- c. Also ensure that motor screws are fully seated from the factory.



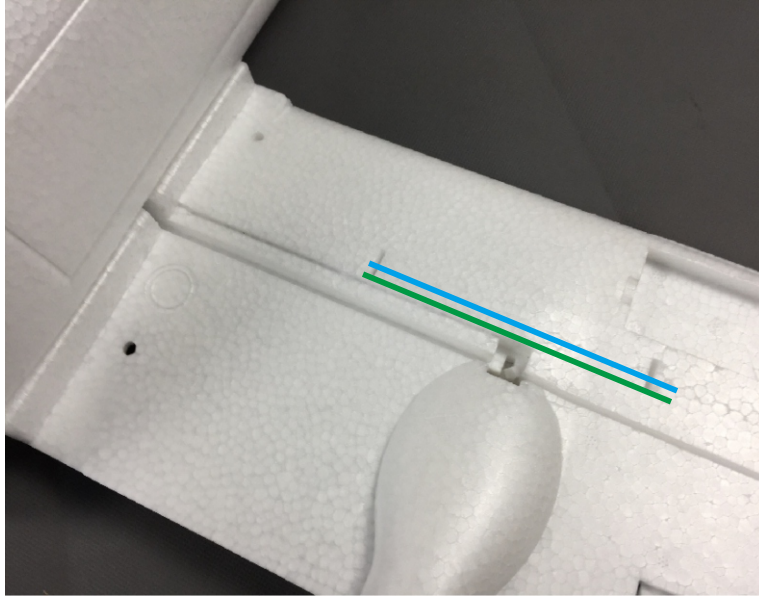
14. **Optional** – If you are not planning on using the equipment cut-outs located under each wing, you will want to glue or tape them in place before flying.



**15. Setting up the Mini Skyhunter V2 for maiden flight:**

- a. After you have successfully bound your radio and receiver, verify that all channels are operating on the correct controller input and in the correct direction for flight.
- b. Set the elevator throw to 60% - The Mini Skyhunter V2 does not need much elevator travel. Too much travel and it can roll out of a hard loop.
- c. Ailerons are okay to leave at 100% - For tighter rolls; you may wish to extend the throws to 125%.
- d. Center of Gravity (CG) is achieved directly on the wing spar (**Green Line**). For your maiden flight, we recommend slightly forward of this position (**Blue Line**).
- e. Without FPV gear installed, we fly with an 4200 3s battery in the full forward position.
- f. While the Mini Skyhunter V2 is an easy plane to hand launch, we recommend having a qualified person to launch for the maiden flight.

**Center of Gravity:**



**Finished the Mini Skyunter V2 :**



***Enjoy your Mini Skyhunter V2! Please fly responsibly.***