

# **Skywalker X8 Assembly Procedure**

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## **1. Glue the Winglet Butt-Plates:**

### **1.1. Material (Image 2.1):**

- 2 x Winglet
- 2 x Winglet Butt Plate (unmarked)
- Super Glue/Epoxy as necessary

### **1.2. Instructions:**

Spread a generous amount of glue on one side of the wooden butt plate AND the winglet bottom. Stick them together while ensuring proper alignment and let dry for 10 minutes. The use of protective gloves is recommended.



Image 1.1



Image 2.1

## **2. Glue the Winglet Butt-Plates to the Wings:**

### **2.1. Material (Image 3.1):**

- 2 x Wings
- 2 x Winglet Butt-Plates (marked with a 'T')

### **2.2. Instructions:**

Spread a generous amount of glue on one side of the wooden butt plate AND the wing tip. Stick them together while ensuring proper alignment and let dry for 10 minutes. It is recommended to wait until arriving at the launch site before screwing the wings and winglets together in order to avoid causing damage during transport.



Image 2.1



Image 2.2

### 3. Mount the Servo Module.

#### 3.1. Material (Image 3.1)

- 2 x Wooden servo base components
- Superglue

#### 3.2. Instructions:

Assemble the wooden servo base as shown in Image 3.2. Use of glue for holding the base together is optional, but not necessary. Apply a thin layer of glue to the bottom of the servo, and insert in the base as shown. Wait 10 minutes until the parts dry.

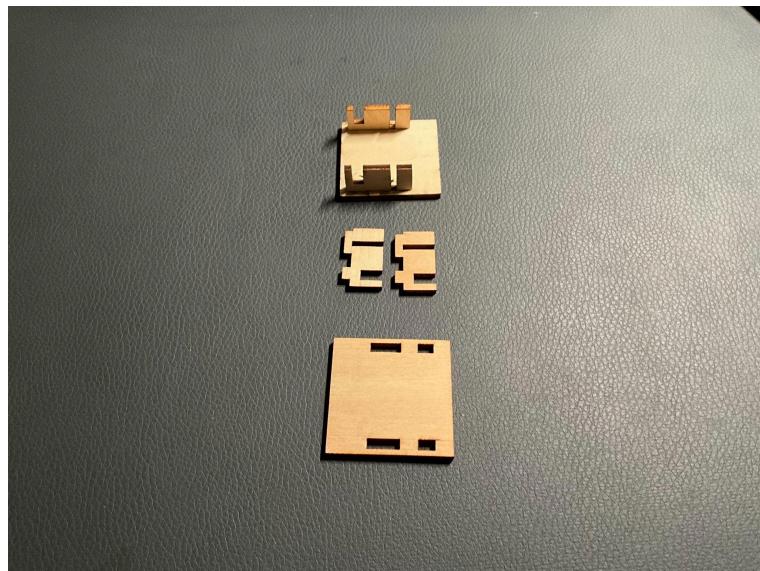


Image 3.1

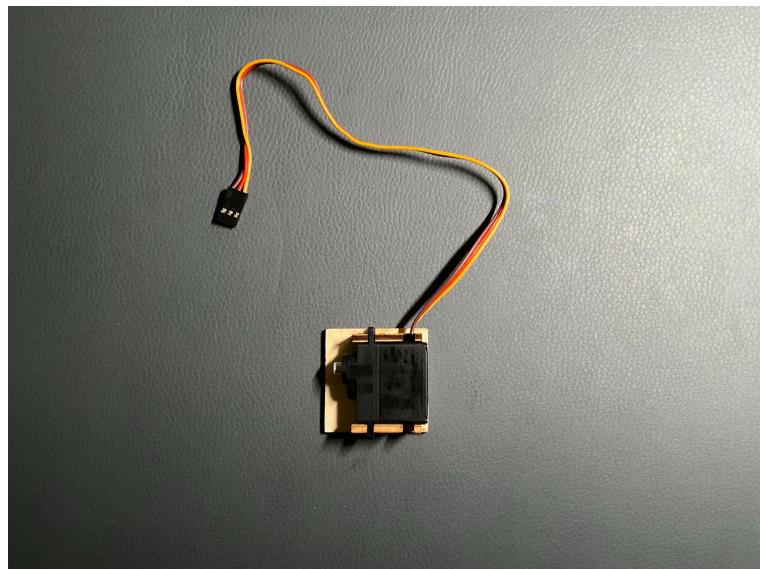


Image 3.2

#### 4. Insert the Servo Unit into the Wing

##### 4.1. Material (Image 4.1)

- Servo unit
- Servo Arm
- Servo Arm Screw
- Superglue

4.2. Instructions: Start by calibrating the servo in its neutral position: attach the servo arm to the servo. Then, connect the servo to the receiver. Power the circuit and ensure the servo arm is in its desired ‘neutral’ position (this will likely be perpendicular to the wing). Once the servo is calibrated, it can be tightened with the screw. Next, liberally apply glue on the backside of the servo module as well as at the bottom of the servo module cavity on the wing, and insert the servo module. Wait 10 minutes until the parts dry.

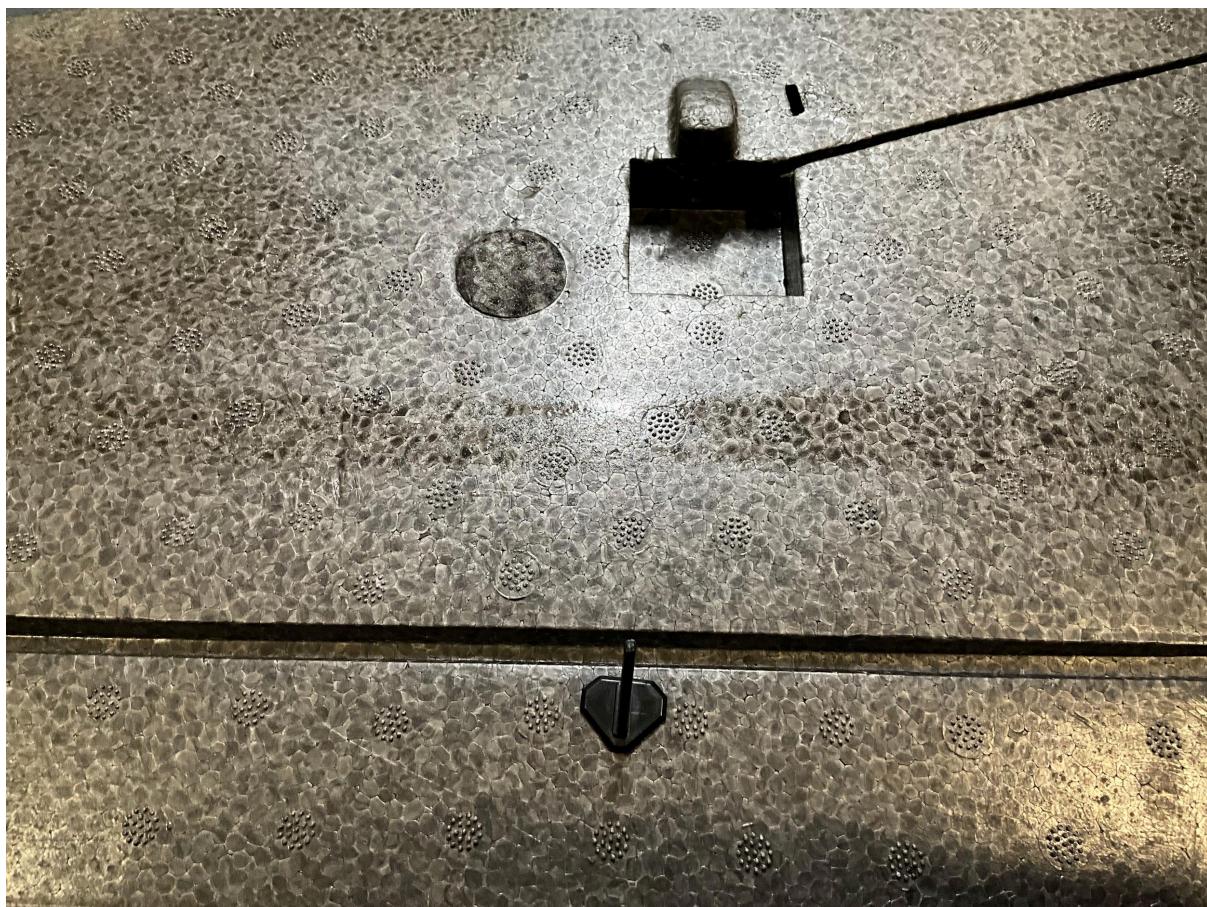
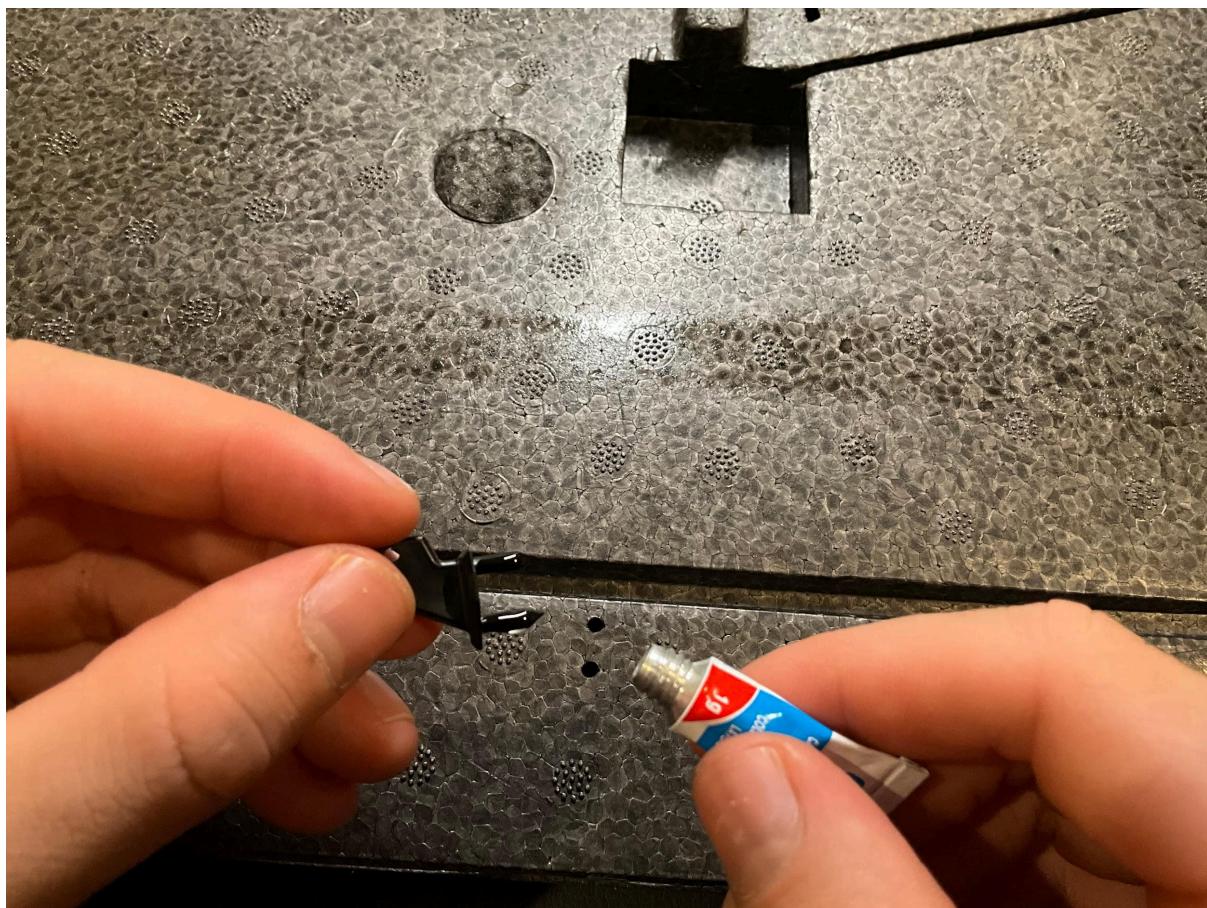
#### 5. Glue the Rudder Horns

##### 5.1. Material (Image 5.1)

- 1 x Rudder Horn
  - Superglue
- 5.2. Instructions: Apply a very small amount of glue onto the rudder horn spikes, or directly into the pre-marked holes on control surface. Immediately insert the rudder horn into the pre-marked holes. Wait 10 minutes until the parts dry.



Image 5.1



## Image 5.3

### 6. Fit the Pushrod

#### 6.1. Material (Image 6.1)

- Pushrod
- Pushrod Connector
- Pushrod Connector Screw

#### 6.2. Instructions: Insert the pushrod into the uppermost hole of the servo arm.

Insert the pushrod connector onto the pushrod and attach it to the rudder horn using the supplied pushrod connector screw. If necessary, cut any excess length off the pushrod.

#### 6.3. Material (Image 6.1)

- Pushrod
- Pushrod Connector
- Pushrod Connector Screw

Insert image. Then steps will be: Cut the control surfaces and ensure correct motion (although we may be able to put that before the 'adjusting the servo phase'), Then, it'll be leading the extension through the slit, carving a new slit for the extension joint, then gluing the underwing cover.

Slightly worried about the level of calibration needed for the servos. Ensure that Laurent properly understands and implements pitch (matching control surface movement) and roll (opposite control surface movement) controls the the transmitter. Also am slightly worried about the range of motion of the servos – Ask laurent to figure out whats wrong with that,.