# MI-8 mechanics assembly manual

**We recommend loctite on all bolts before first flight**

(Screws M2.5 on all gearboxes are pre glued from factory)

## Recommended setup for Goblin mechanics:

| | | *Example* |
|---|---|---|
| Motor: | 300 KV | (X-NOVA 4035/4Y - 300KV ) |
| Motor pulley | 23T | (SAB H0015-23-S or H0175-23-S) |
| Heli speed controller | 80 A | (Kontronic Jive 80+) |
| Battery Li-Po | 12 S | (Gens Ace 5000 mAh) |
| Main blades | 840 mm | (HELITEC HT-5G-840/53) |
| Tail blades | 130 mm | (HELITEC HD-3G-130) |

**Head rotation speed 900 - 1000 rpm**

## Assembly of SAB Goblin mechanics:

For complete this mechanics you need this parts:

| | | | |
|---|---|---|---|
| Tail rotor 3 blade | H0429 | Main gear | H0405 |
| Servo support | H0010 | Pinion T19 | H0156 |
| Column | H0018 | Bearing | HC422 |
| Bearing support | H0024 | Bearing | HC426 |
| Motor mount | H0142 | Secondary shaft | H0157 |

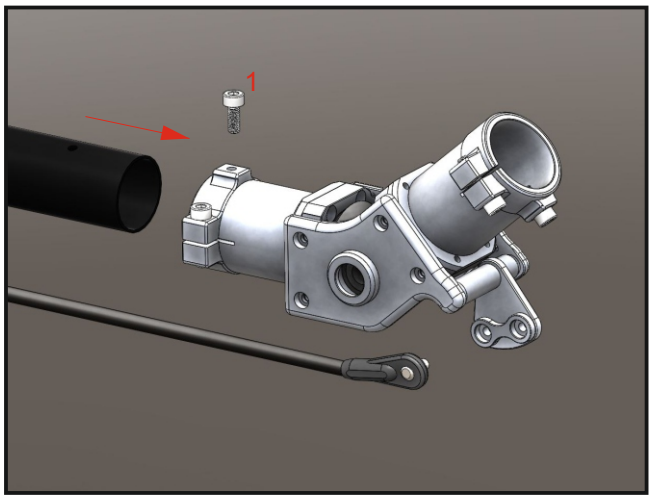
Now you can decide between two versions:

| | **Standart belt version (Goblin770)** | **Big belt version(Goblin770 Competition)** |
|---|---|---|
| One way pulley | H0104 | H0171 |
| Front tail pulley | H0101 | H0172 |
| Motor pulley 23T | H0015-23 | H0175-23 |
| Motor belt | HC308 | HC309 |

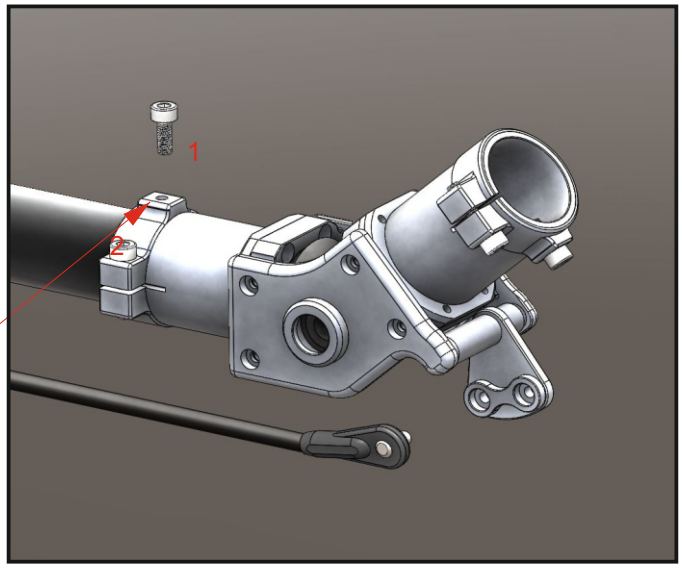
**For assembly please use original SAB Goblin manuals**

For Standart belt version Goblin770 manual

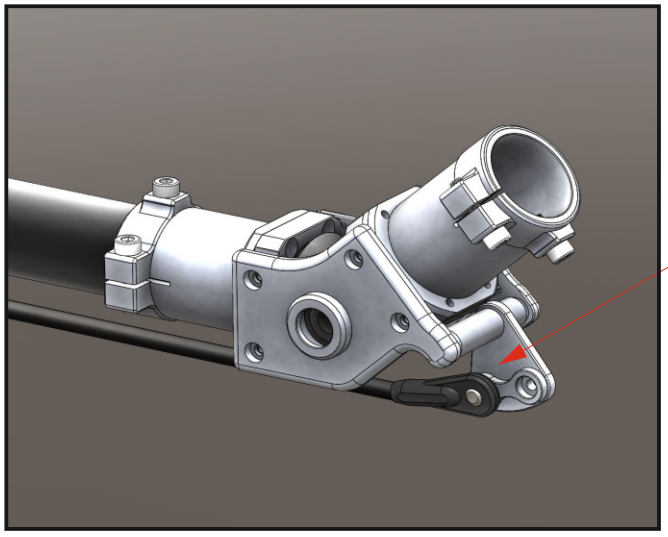
For Big belt version Goblin770-Competition manual



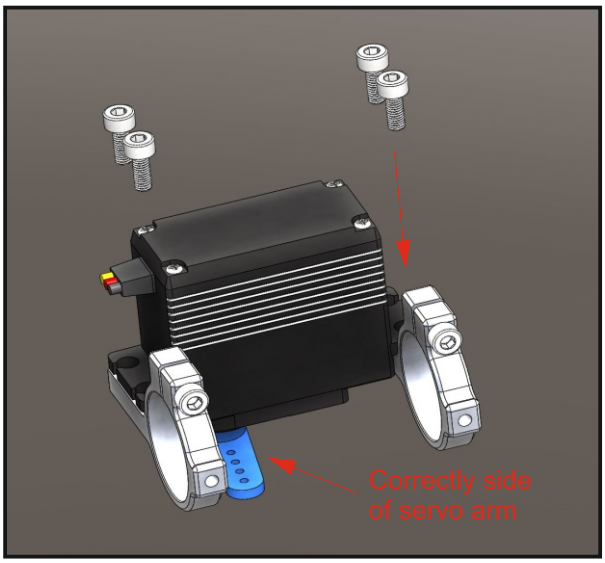

1. Remove screw #1
2. Insert the tail tube into the intermediate gearbox as shown



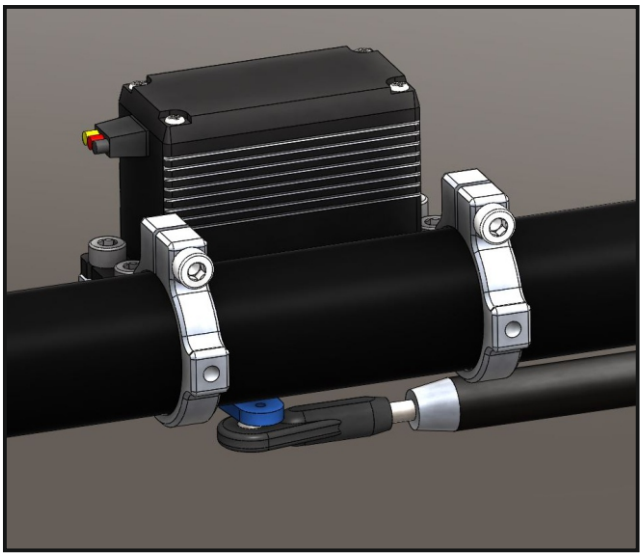

3. Drill a 2.5mm hole through the tail tube
4. Tighten screws #1 and #2



5. Fit the tail rotor push rod and ball

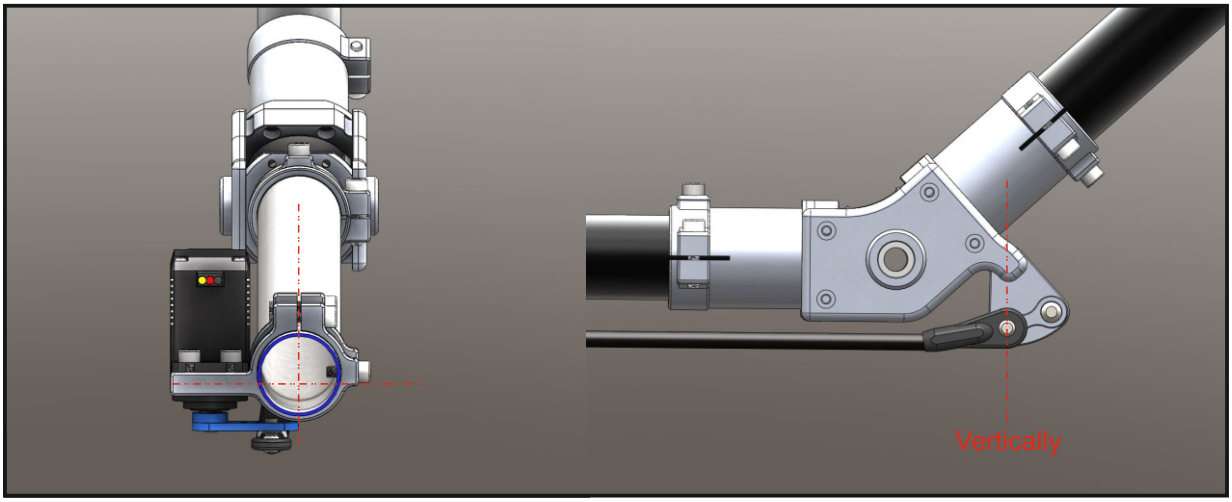



6. Screw the servo to the tail servo mount as shown

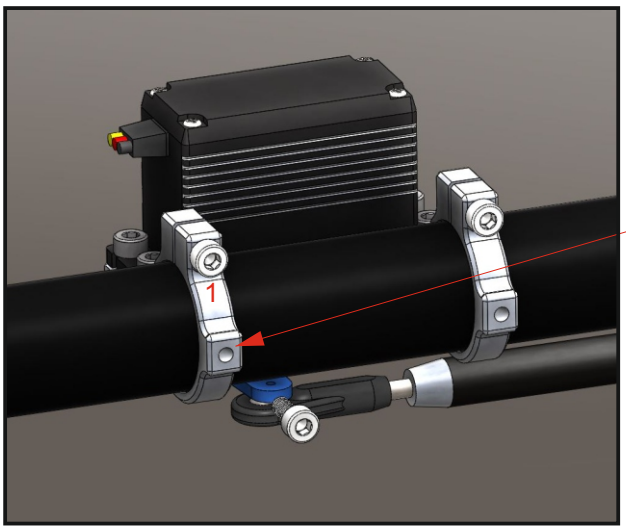


7. With the servo arm at right angles to the servo
   The ball is 16mm from servo screw

8. Slide the servo mount onto the tube and attach the push rod




9. Adjust the servo mount position.
   The servo mount should be as shown

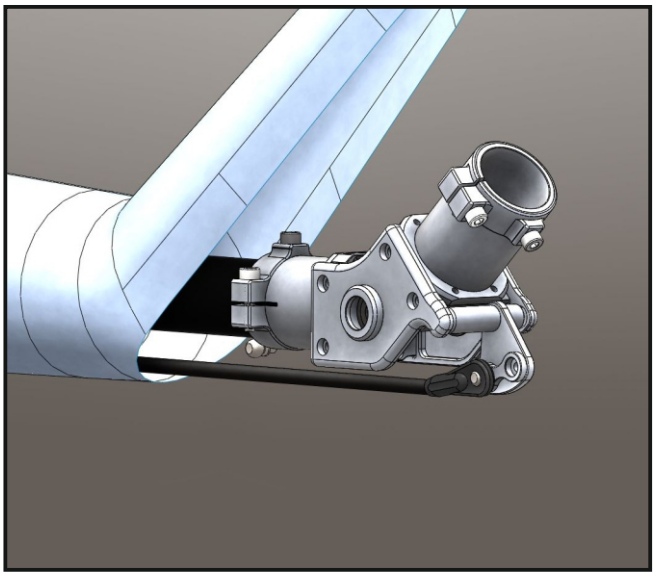



10. The position of the servo mount on the tail tube should be so that the push rod is as shown

11. When the position is correct tighten the servo mount screw #1
12. Drill a 2.5mm hole through the tube

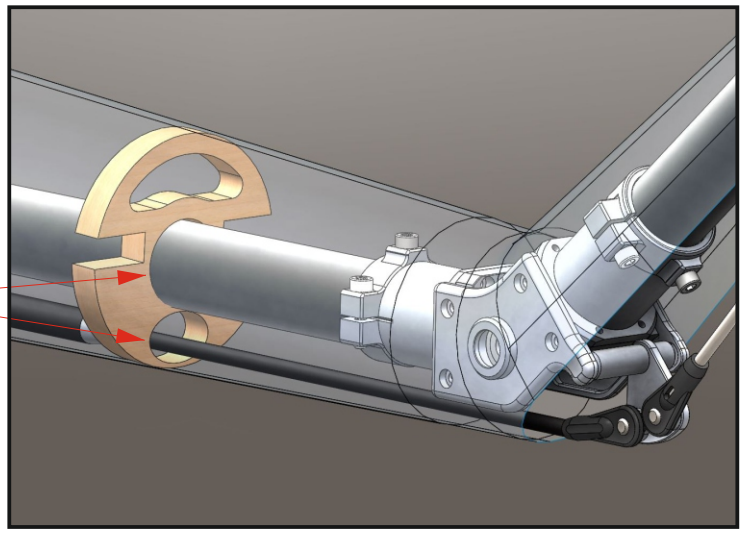
Now you have ready good position of tail servo for next easy assembly ...

13. Slacken screw #1 and remove the servo mount from the tube

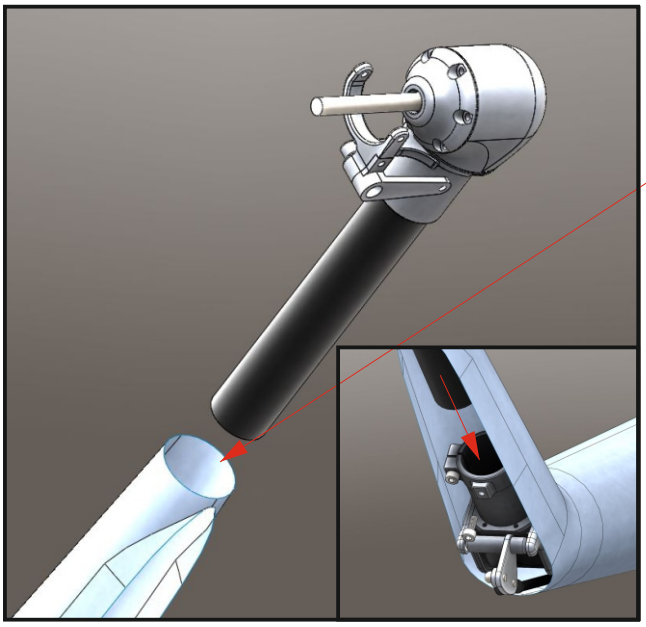


14. Insert the tube from the back to the fuselage

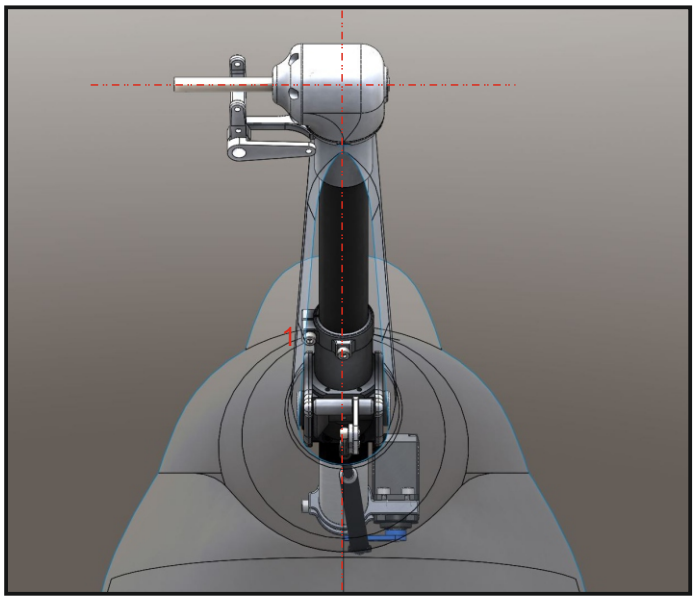
    (Gently stretch the rear of the fuselage)



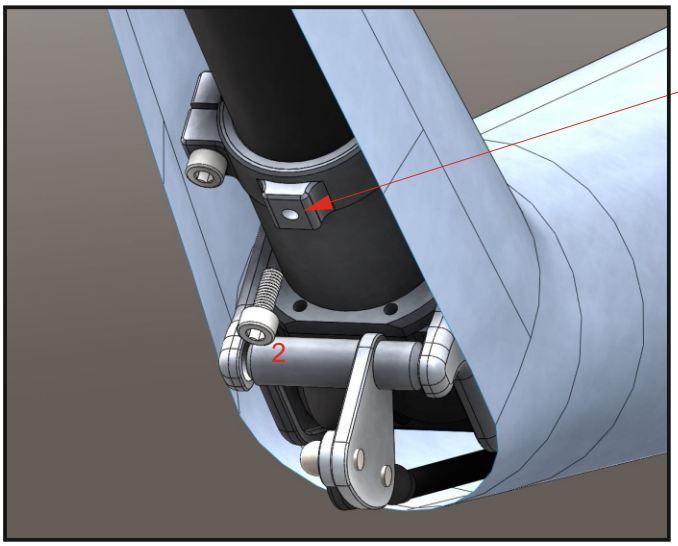
15. If necessary sand the holes in the former to allow a perfect fit



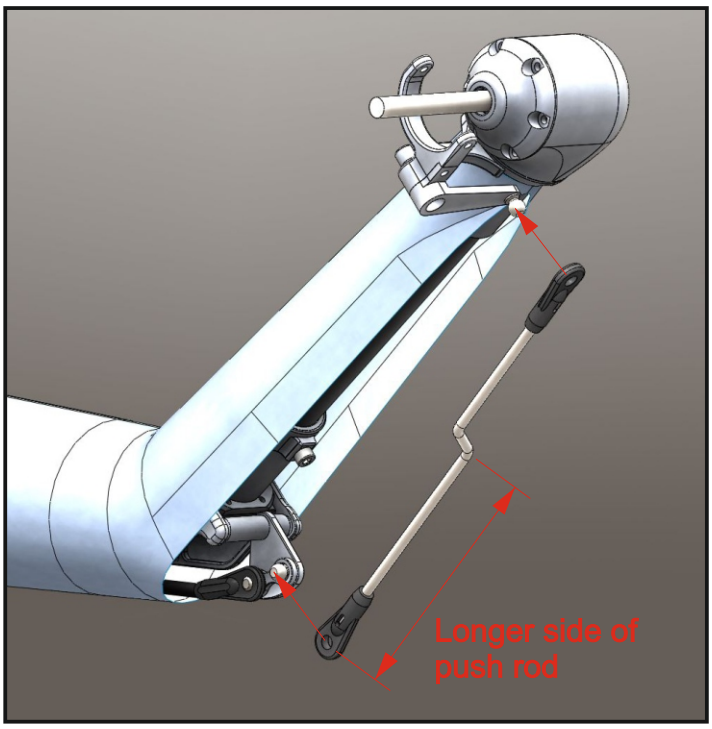
16. Cut a 25mm hole in the fin for the gearbox
17. Insert the tail gearbox and upper tube into the intermediate gearbox



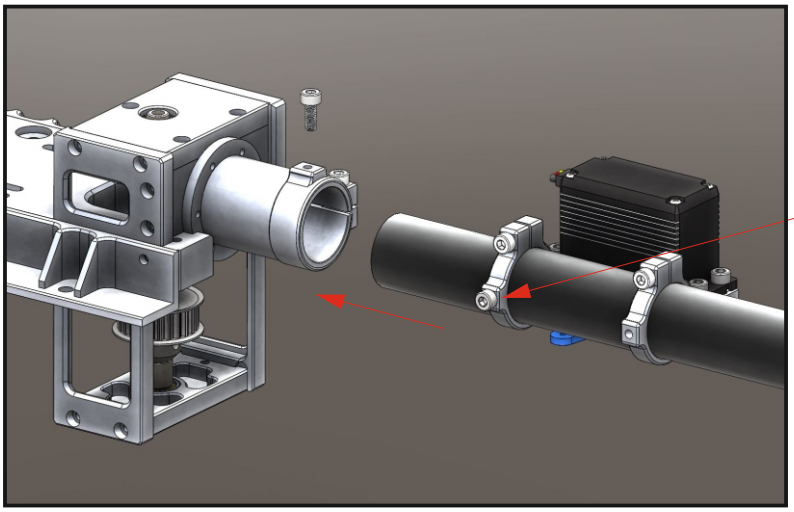
18. Carefully adjust the tail gearbox position as shown
19. Tighten the upper tube clamp #1




20. Drill a 2.5mm hole into the tube as shown
21. Tighten screw #2



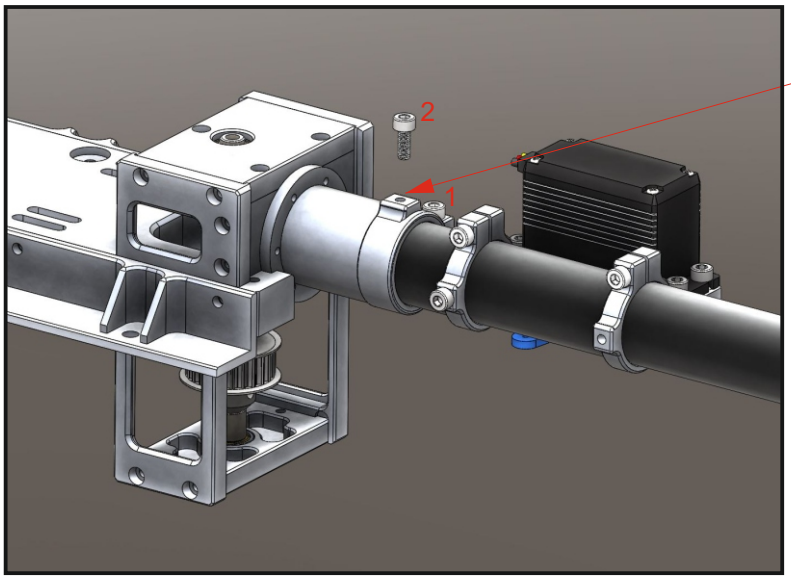

22. Fit the tail push rod



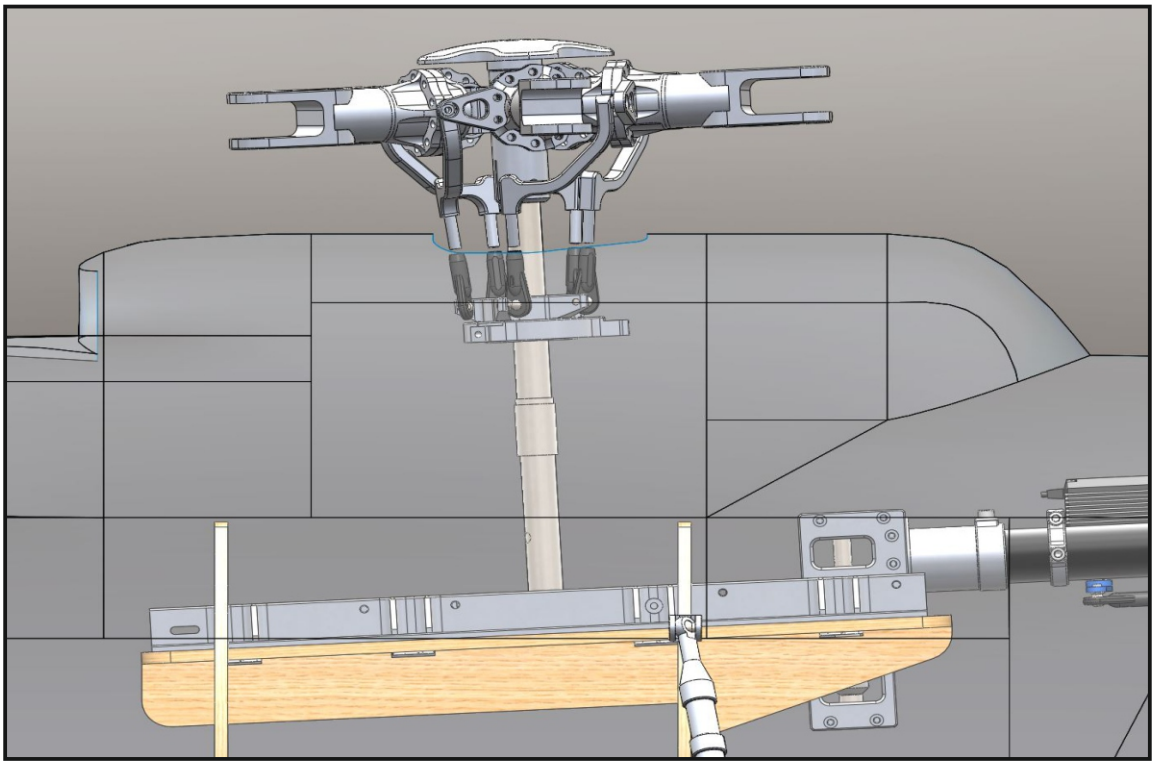
23. Slide the tail servo mount onto the boom
(You are win, because you have pre-drilled hole for good position)

24. Tighten all 3 screws

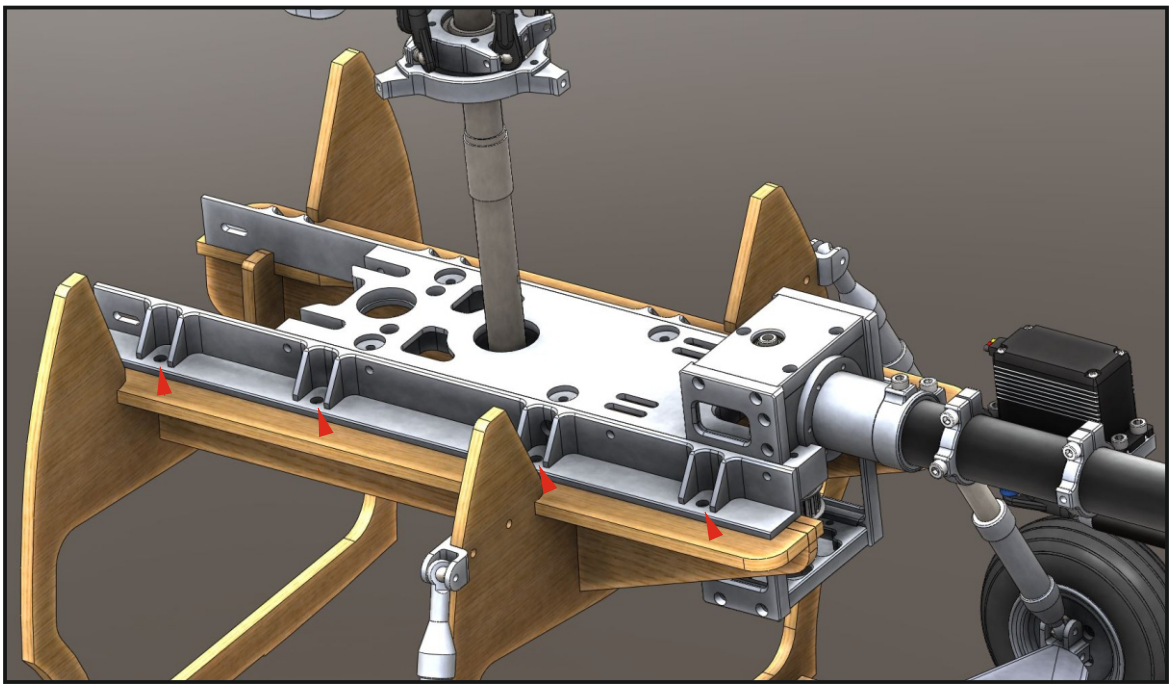
25. Insert the boom into the main gearbox




26. Drill a 2.5mm hole into the tube as shown
27. Tighten screws #1 and #2



Optimal main shaft position



28. Screw main mechanics to the plywood base by screws 8 x M4