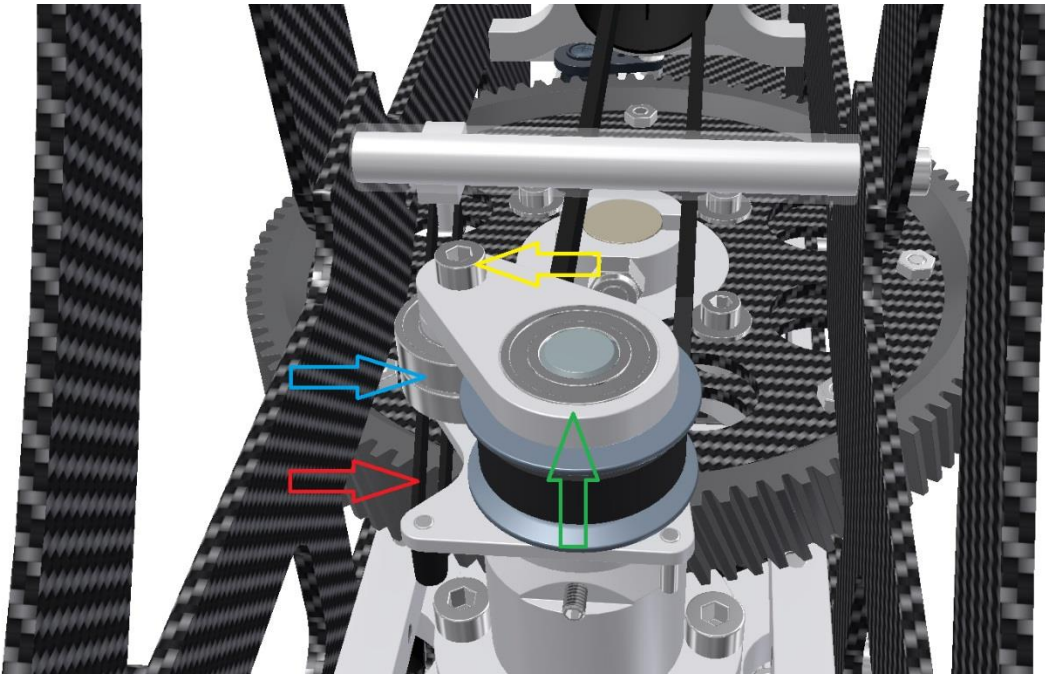


# Manual for the 28mm carbon boom conversion



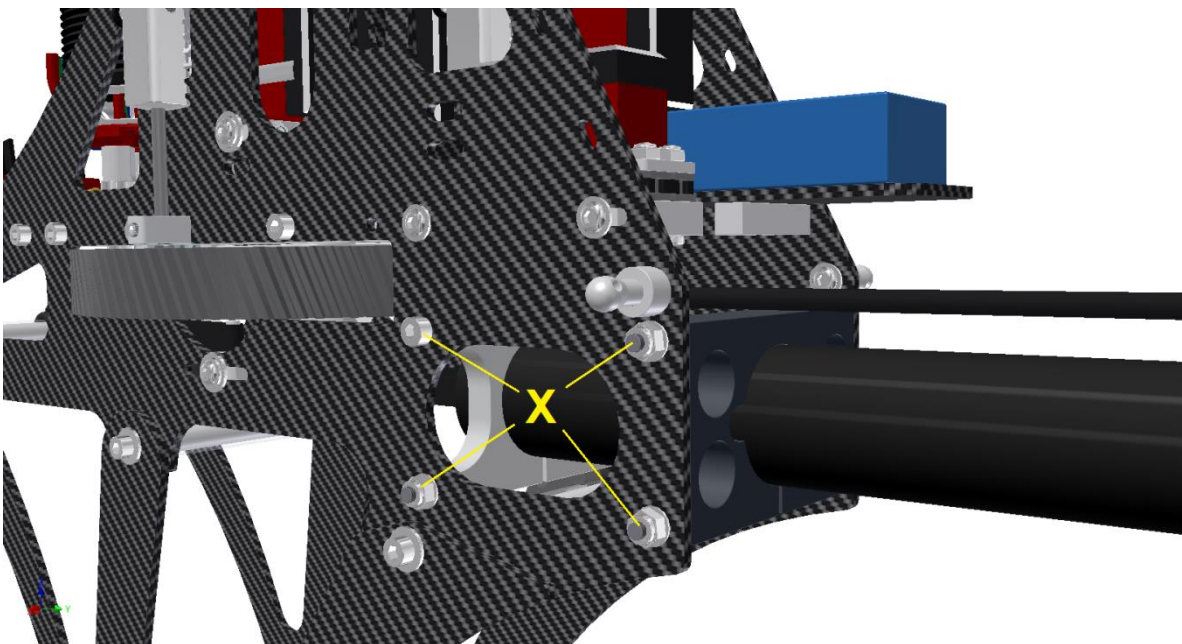
The best procedure is to remove the belt from the timing belt pulley at the front at first.

To do this, unhook the rubber of the belt tensioner (**red arrow**).

Then loosen the allen screw (**yellow arrow**).

Now the swivel arm with the bearing (**green arrow**), can be deduced from the pinion shaft.

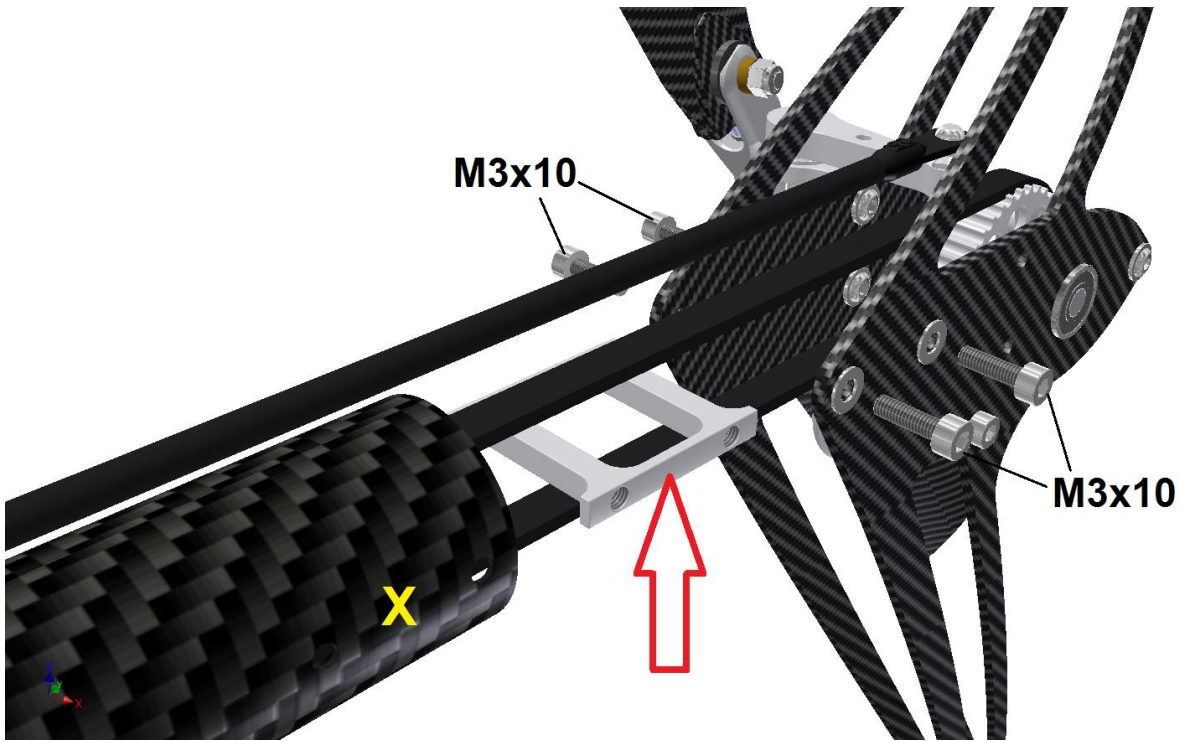
The two tensioner bearings (**blue arrow**), and the shim between them are taken away to be able to remove the belt after loosening and advancing the tail boom.



First, remove the two struts and all the connectors of the old tail boom support rods. They are not necessary anymore.

The screws or nuts and threaded rods marked with the **yellow "X"** are loosened to push the tail boom a little forward for relaxing the belt.

Also release the ball joint of the tail rotor link rod from the tail servo to then pull the entire tail tube assembly together with the two clamp brackets out of the chassis.



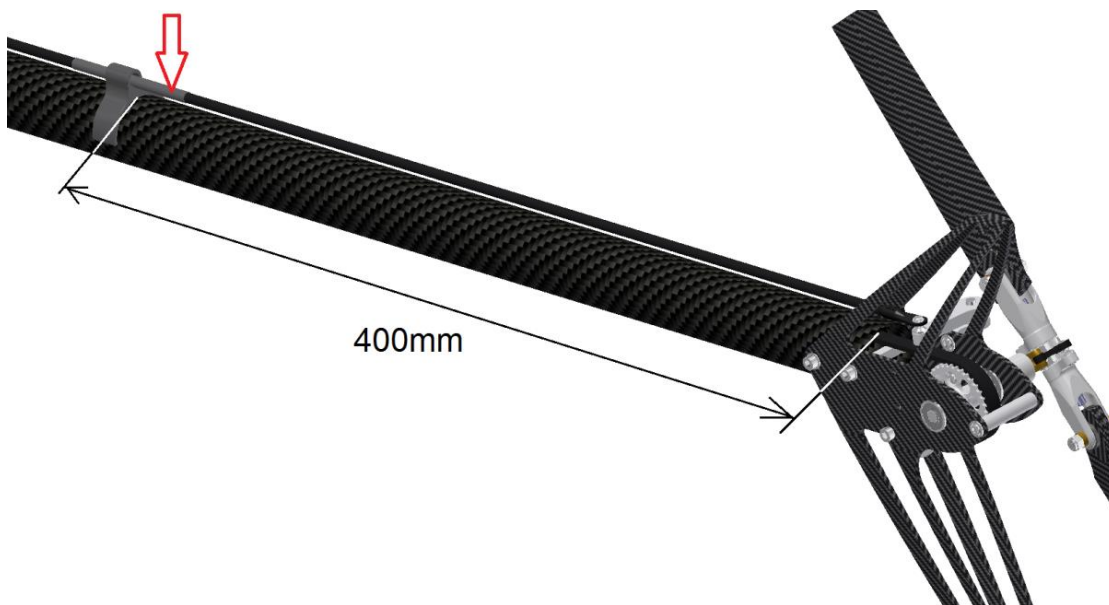
Remove the complete tail rotor assembly from the old tail boom. All you need to do is remove the old four M3x12 screws. Everything else remains assembled and will not be dismantled!

Now pull the belt through the new carbon boom tube and mount the tail rotor gear unit with the new enclosed M3x10 allen screws (see picture above). Be sure to insert the new tail tube insert (red arrow) between the belt straps in the tail tube (secure the screws with some Loctite and tighten them well).

**Attention!** The old fittings 0905 (see TDF manual) for vertical stabilizer attachment are no longer used. The vertical stabilizer plates lie directly on the tailboom itself (see yellow "X")

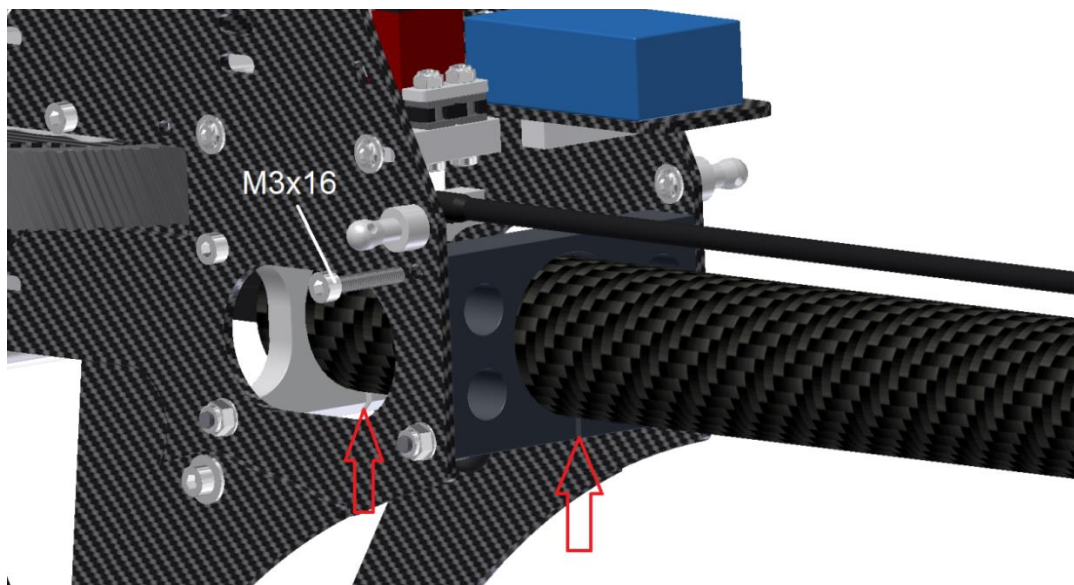
Ready assembled tail rotor see picture below.





Due to the omitted strut clamp in the last third of the old tail boom now only one push rod guide in the middle will be fine. This is glued with double-sided adhesive tape at a distance of 400mm from the rear of the tail boom to the front of the clamp on to the tail boom. You can take the boom seam as a guide for vertical positioning. Spread the semicircular opening slightly apart when fitting so that the clamp with the center can first be placed on the tail boom. Otherwise, there is a risk that the clamp first sticks to one of the side legs and then tilts laterally when further pressed onto the tail pipe. The clamp is previously pushed onto the push rod. One of the two ball joints must be unscrewed before. Finally, push one of the two heat-shrinkable hoses, which are mounted on the push rod, into the new correct position in the middle of the push rod guide.

If you want to attach a new logo, it will be pasted completely behind the clamp and will not be split anymore.



Now mount the tail boom with the new clamp holders in the mechanics. Make sure that the clamping slots of the clamp holders are facing downwards (see red arrows).

**Attention!** In contrast to the old tail boom, the new version in the upper hole of the rear plastic clamp no longer uses a continuous threaded rod, but the two enclosed M3x16 allen screws. Everything else stays like the old version. Tighten these two screws with some feeling to avoid damaging the plastic threads.

Now push the tail boom forward so that you can put the tail belt on the front of the pulley. Be sure to turn the belt 90 degrees in the correct direction (counterclockwise when looking at the tail tube from the front). The pull side (the belt side, which runs at the top of the tail boom) must run towards the pulley on the opposite side of the belt tensioner.

Then pull the tail boom backwards until the belt is tensioned and align the bottom seam with the slot of the clamping flange. Mount the belt tensioner in the reverse order of disassembly (see also manual).

The tail boom is roughened in the front area and reinforced inside with two additional carbon layers, so you can tighten the two lower clamping screws of the clamping flanges well.