## Manual tails

## Parts provided with the kit:

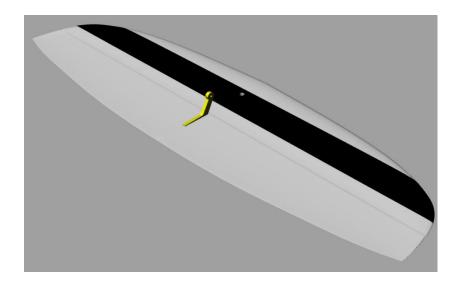
- -control horn (x2)
- -0.3mm steel wire
- -plastic tube 2mm
- -torsion springs (x4)

## **Needed tools:**

- -set of flat nose pliers
- thin CA

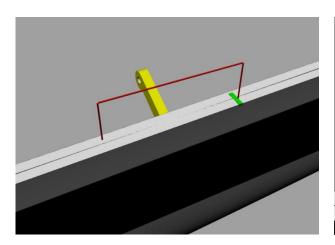
## Steps:

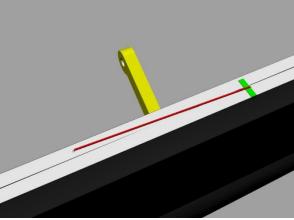
1. Glue the horn into to cnc machined slot using CA or epoxy.

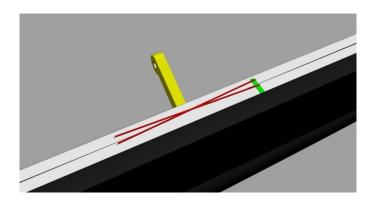


2. The spring now in red for better visibility needs to be mounted as follows.

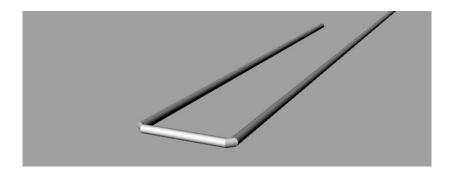
Deflect the moving surface 180°, put a mark (shown in green) 15mm aside from the horn (doesn't matter which side) and insert one end of the torsion spring into the fixed surface of the stab, the other end goes into the moving part of the stab. Repeat but this time start on the moving part, both springs will cross each other in the middle.



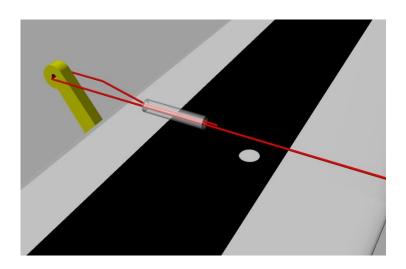


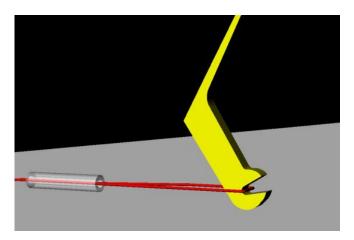


3. Take out the 0.3mm diameter 1meter length steel wires (2) and bend the as follows. Put a mark at 15 & 18mm from the end, bend 90° on each mark to the same direction.



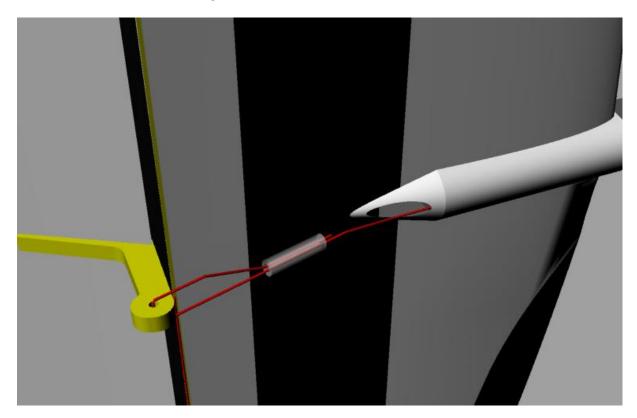
4. Insert it in the control horn and cut a piece of the plastic tube provided with the kit (about 8mm long). Slide it over both ends like shown and press it with some flat nose pliers, now add a drip of thin CA. (If you want a removable stab first cut the horn like shown below)



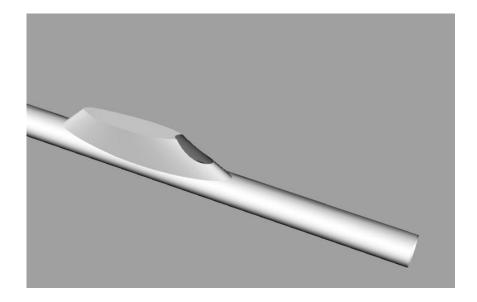


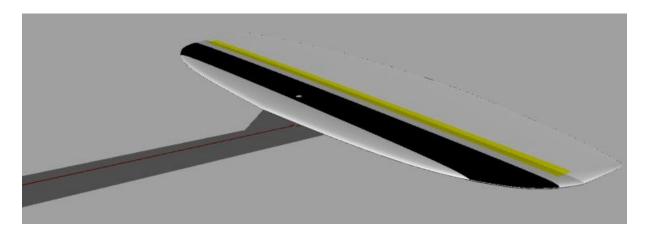
Repeat this procedure for the vertical fin, don't cut out this horn, the vertical is not removable.

The steering line goes thru the rear end of the fuselage, make sure the plastic tube is close the horn so it cannot cause problems where it goes into the end of the fuselage (when rudder is deflected it should still be outside the fuselage)

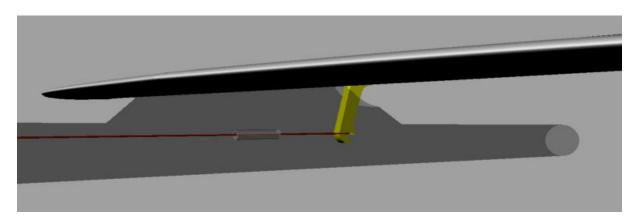


5. Open up the rear end of the stab pylon, make sure you don't make sharp corners in the cut out, as these are stress points and can cause a break while under stress (rough landing for instance)





Stab mounted and fuselage made 70% transparent, you can see the horn and steering line.



6. Install the vertical, check for proper alignment and let some thin CA run in between the fuselage end the vertical (green arrow), you can clearly see the CA filling up the space between fuselage and vertical .Do not insert the steering line yet as you might glue it to the fuselage.

