## Assembly Instructions For CX5 short aileron and boom.



- All the parts of the new CX5 kit
- Rudder and stabilizer
- Fuse
- Wing
- Accessories bag



Small parts included in the kit

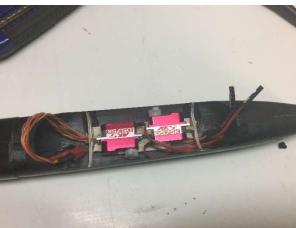
## **Fuse Instructions**



Install servo tray, you have some possibility with original plate like this photo.



Jeremy André build with 3D printer another tray for MKS and KST servo.



And last idea, Plywood servo tray hand made, the lightest solution.

To assembly the servo horn you need to make hole on the nose like the next photo





Use tool to drill hole for insert the wing wire

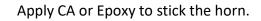
This option is very interesting when you fixed your female plug on the front of you'r wing.



On the left is rudder horn, the other one is the elevator horn. Look at small difference of the two part. Use sandpaper for this horn to adujst it before applying CA.



To install the elevator horn cut the elevator control surface on 12mm with a cutter aligned with the screw hole.





To check the size of the elevator horn, assembly the support and check with similar parts.

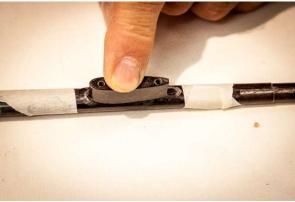


Create a spring for rudder and elevator with CAP.



Insert the spring in the rudder, make a hole with the CAP and mark the position on the other side with a pen, install the second part.

Drill a hole on the stablizer support for wire and horn



Use a pen or tape to mark the limit of the stabilizer support.

Install the stabilizer's trailing edge at 1-2mm of the rudder leading edge.

Use sandpaper on the contact surfaces.

Before sticking the support, drill the hole on the boom to pass the elevator wire.

The forward screw is 78mm from the rudder leading edge. I've 5mm between the elevator and rudder leading edge. Some pilot use 1 or 2 mm.



Before sticking the pod, please be careful about the symetry between the wing tip and the elevator tip. (LH and RH)

Warning : the upper surface of the wing need to down for this operation. See next picture

Once you've found the symetry use tape for fix the wing on the table.

Tape on the LH and RH wing tips



On this photo the stabilier is screwed onto the support

Then, use tape to fix the stabilizer on a think shim, arround 40mm, I used a book for that.

When all is fixed, apply little bit of CA, or epoxy.

Exert a downward vertical pressure on the tube. If you used epoxy use a tape to maintain this pressure during drying.



After this operation apply a fillet of CA or Epoxy on the support.



Use sandpaper to place the rudder.



Now drill hole with tool on the rudder's support (Only to passed the rudder horn wire.)

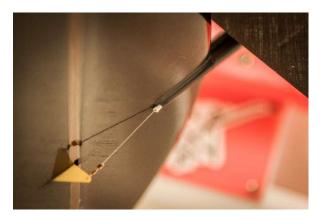


Make hole at the end of the boom support on the right side for right-handed launchers.



Now we are ready to apply a layer of Epoxy on the boom to stick the rudder.

When you stick the rudder, really important to see if the rudder is at 90° of the elevator !!



Don't forget to insert a plastic tube to pass the rudder's wire. Stick with CA or epoxy and cut flush of the rudder shape.

On this photo the wire is fixed but this piture is only for the plastic tube.



Warning : Note the angle of attack of the wire, important to attack the servo horn at 90degrees.

This photo with old fuse is just to explain the angle of attack.



This photo is just to see the installation of plastic tube.

Cut the wire in 2 lenght, one longer for the rudder.

Insert plastic tube arround the wire, in the fuse with 20-25cm lenght CAUTION, the lenght is really important

Insert the first one for the rudder, block the wire to the servo horn with the sleeve and only then on the rudder in the axe with tape.

After this first operation pass a new wire for elevator with CAP to prevent the wires from rolling on themselves.



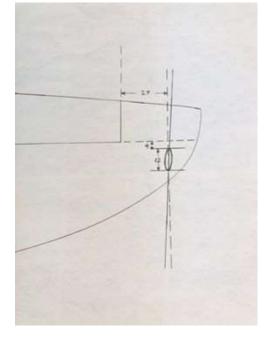
Continue the operation with this manoeuver. Create a loop on the boom. When you disassemble the elevator the wire stay still.

Install the wire on the elevator and only after on the servo horn Block the elevator in the axe with tape.

## Wing Instructions

Use tape to mask the wing tip and mark with a pen the place for peg.

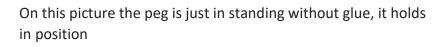
This installation is picture from Roland Sommer ;)





Perform hole with tool in this place

CAUTION: Don't forget to place a second tape on le lower surface. Perform a small drill and try to pass the peg, if it passes with difficulties you have the good shape of hole.







Once you've sticked the peg, use sandpaper arround the hole and on the peg

I used only CA with accelerator but it's possible to use Epoxy.

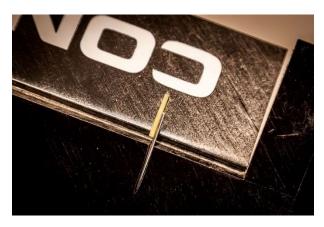


To turn the aileron easier use a cutter and pass the blade into the hinge.

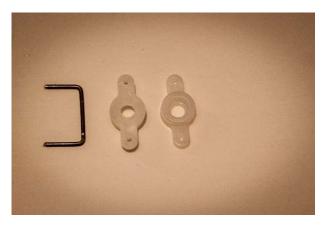


Before sticking the aileron horn, use sandpaper on the lower side.

To stick this part you can use CA or epoxy. I used CA.



Now if you insert the aileron control rod normally you have exactly the same scheme.



To drill the hole for servo horn create a special tool

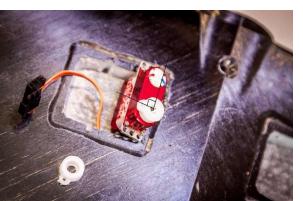
The horns are superimposed and the tool is inserted into the existing holes.

See next picture



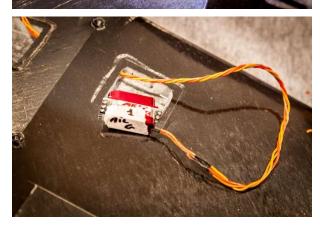
On this image you see the assembly

Now drill new hole on the servo horn as vertial as possible The best tool for this operation is a drill on column.



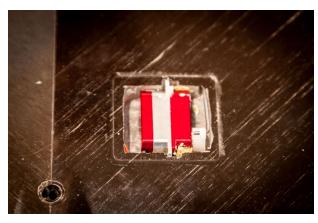
With this operation you have a symetric hole on your horn, really important to have a good assembly.

Don't forget to cut the second part of the horn. Now you have this type of assembly. Be careful to install the horn at 90° from the body's servo.



Perform an extension for the servo wire. I drilled special hole on the wing for this extension. Use this hole for the two wing servo wire.

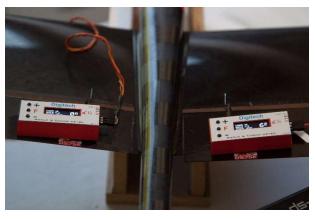
See next picture the installation.



Now it's time to glue the wing servo. Before this operation create the aileron control rod with good lenght and angle for aileron and servo horns.

Be careful, it's really important to lock the aileron in 0 position and the servo horn a 90degrees from the body.

Perform a good lenght and then install the servo and lock this one with wood. Apply CA or Epoxy.



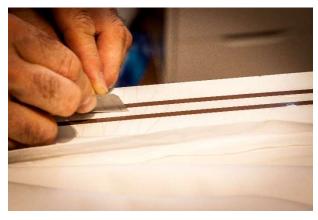
On this two picture you said if your servo installation is good or no. Don't touch the servo setup and normally you have the same range on the two aileron like this one

When you have one aileron at 0 the other aileron have a value, here we have 6.2

Turn at the other side and normally you have the same value.



Install the aerodynamic cover with tape or use double-side tape.



Now, cover slots.

With tape and old audio band.

On the table install arround 1m of tape. Upper surface is sticky. Then apply audio band, of the non-magnetic side. Reapat this operation on the other side of tape, like on the picture and cut the tape in two parts.

See next photo for the installation

Once you've install this part, you have the same result.

Repeat this operation for rudder and elevator.





Use balance to get a good CG. With a long boom you normally need to insert some ballast on the nose.

Good CG arround 70mm from the leading edge of the wing.

Now you need to setup your New CX5

## **Enjoy Your flying**

Autor : Quentin PHILIPPE Assembly : Paul PHILIPPE

With helping from Roland Sommer and Laurynas Ceskevicius