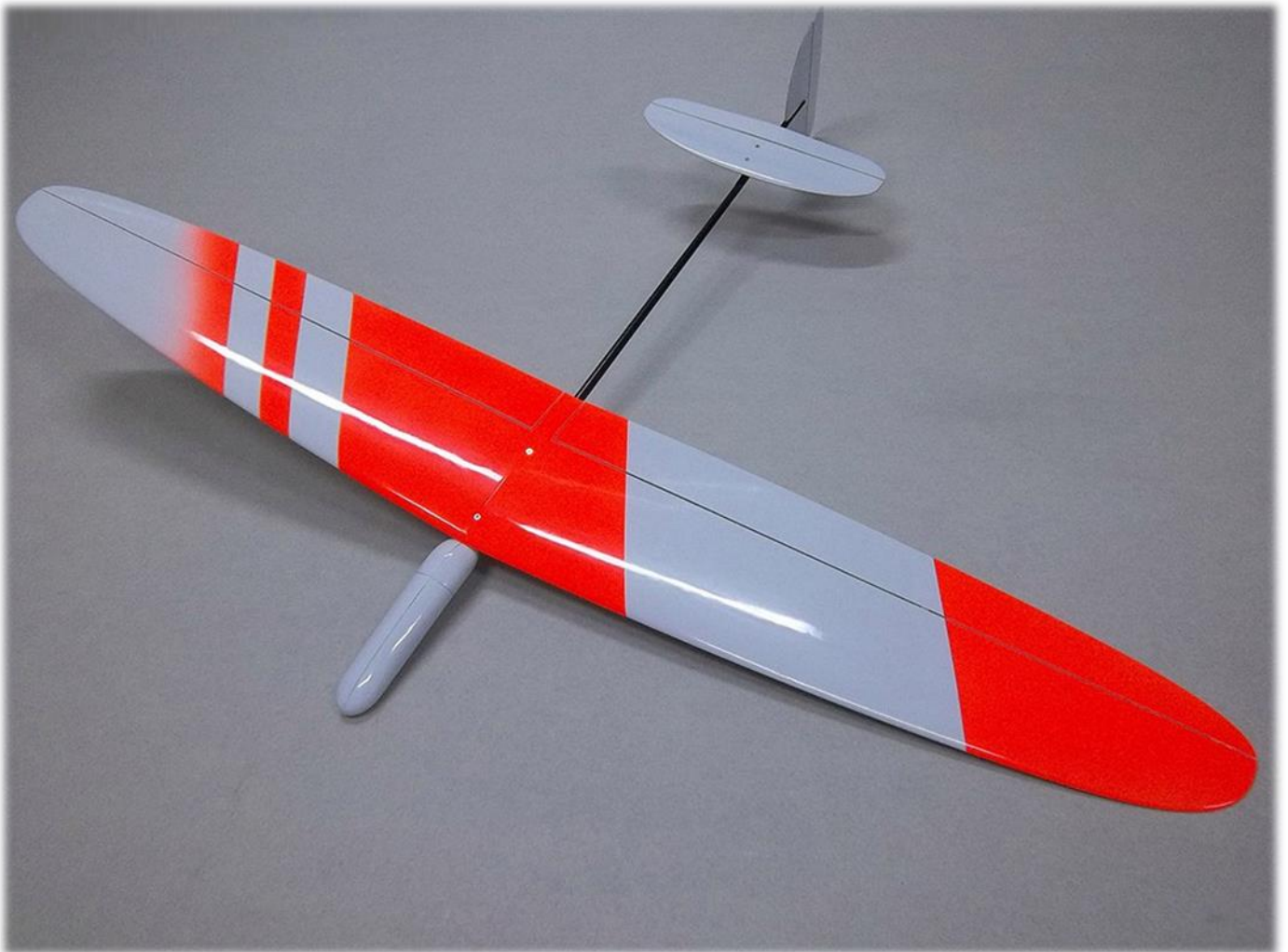


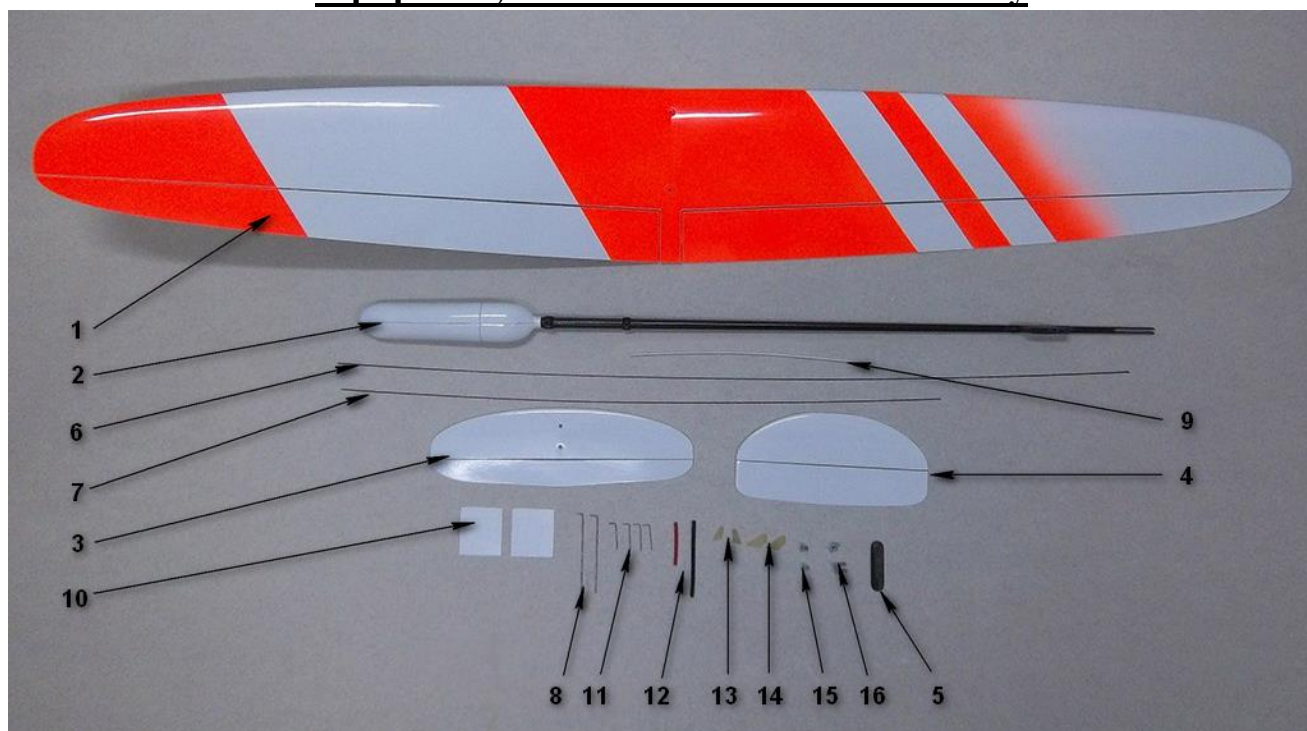
# Cheeper

## Assembly instruction



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### 1. Equipment, materials and tools for assembly



Picture 1.1. Supply kit

- |  |   |
|--|---|
| 1 – Wing;                                      | 11 – Rod tips (4 pieces);   |
| 2 – Fuselage;                                  | 12 – Heat shrink tube;  |
| 3 – Stabilizer;                                | 13 – Tail control horns (2 pieces);                                       |
| 4 – Fin;                                       | 14 – Aileron control horns (2 pieces);                                    |
| 5 – Dowel for throwing;                        | 15 – Screws for mounting of the stabilizer M2*6 (2 pieces + 2 spare ones) |
| 6 – Rudder rod;                                | 16 – Screws for mounting of the wing M2,5*8 and M2,5*10 (1 spare set)     |
| 7 – Elevator rod;                              |   |
| 8 – Aileron rod (2 pieces);                    |   |
| 9 – Rod housing;                               |   |
| 10 – Hatches of the aileron servos (2 pieces); |   |

Materials and tools for the installation of the model:



- 1) Liquid superglue (Akfix 702);
- 2) Superglue activator;
- 3) Epoxy;
- 4) Masking tape;
- 5) Sandpaper №240-320;
- 6) Drills Ø2, Ø5;
- 7) Needle file (round and flat);
- 8) Pliers;
- 9) Screwdriver;
- 10) Ruler;
- 11) Stationery knife;
- 12) Pencil.

Picture 1.2. Materials and tools

Necessary radio equipment for the assembly:

- 1) Battery 250-300 mAh, recommended sizes 17\*30 mm;
- 2) Servos Dymond D-47 (4 pieces);
- 3) 6-channel receiver.

## 2. Assembly

### 2.1. Insert of control horns

Cut the grooves for the control horns with a knife as it is shown in the pictures

2.1-2.4

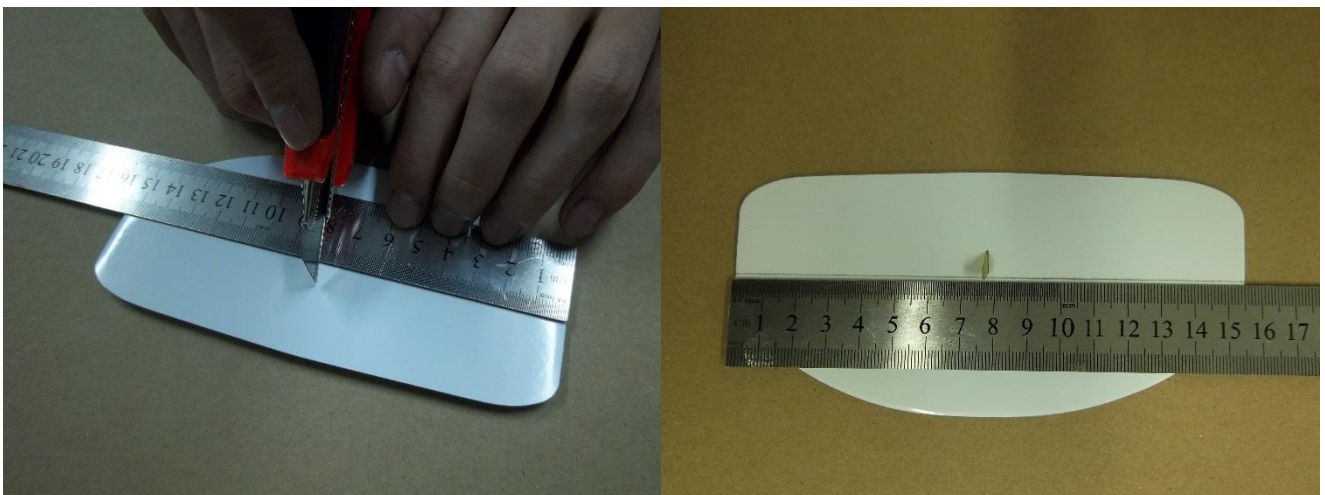
In the rudder in the right in the middle

In the elevating rudder at the distance of 103 mm from the left edge

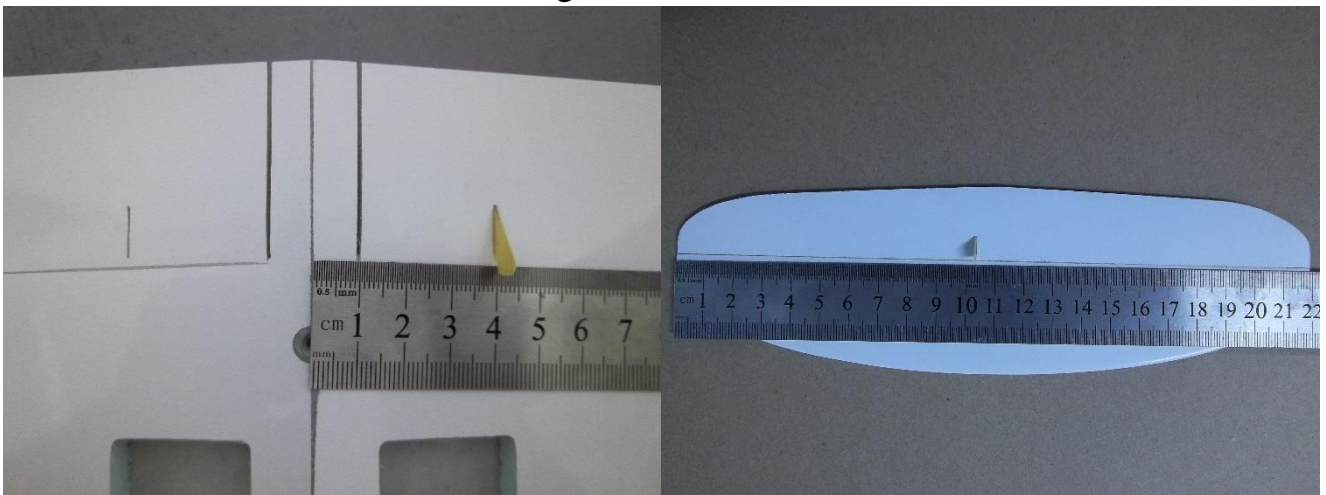
In ailerons at the distance of 40 mm from the centre of the wing

Paste in the control horns using the epoxy.

**Avoid contact of the superglue with the foam plastic of the wing and the tail cores!**



Picture 2.1. Pasting in the control horn of the rudder

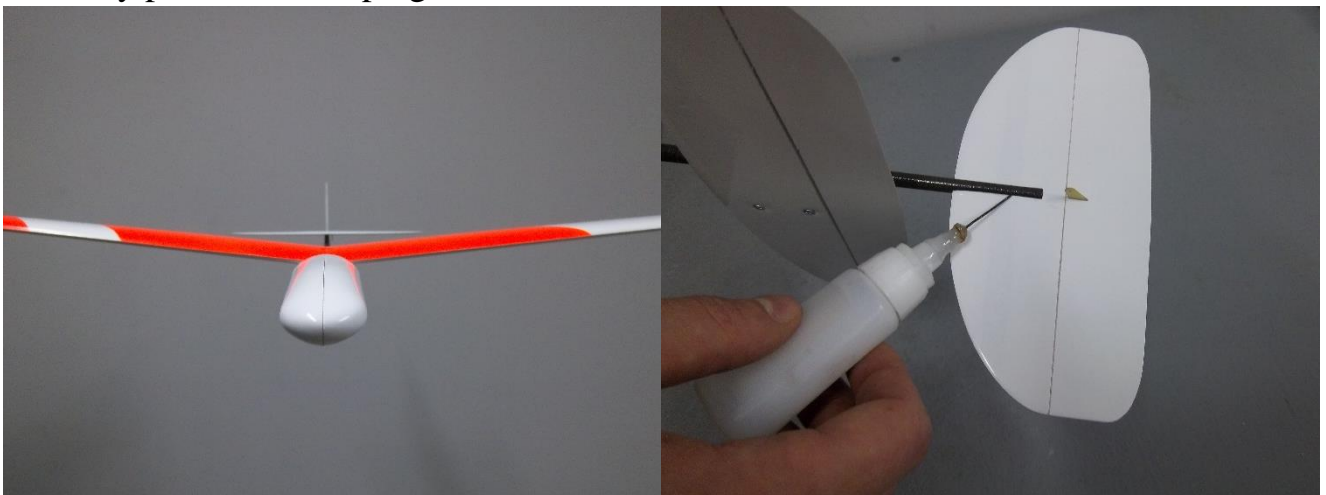


Picture 2.2. Pasting in the control horns of the ailerons

Picture 2.3. Pasting in the control horn of the elevator

### 2.2.Pasting in the fin

Set up the wing and the stabilizer, insert the fin into the groove, set it vertically and carefully pour it with superglue.

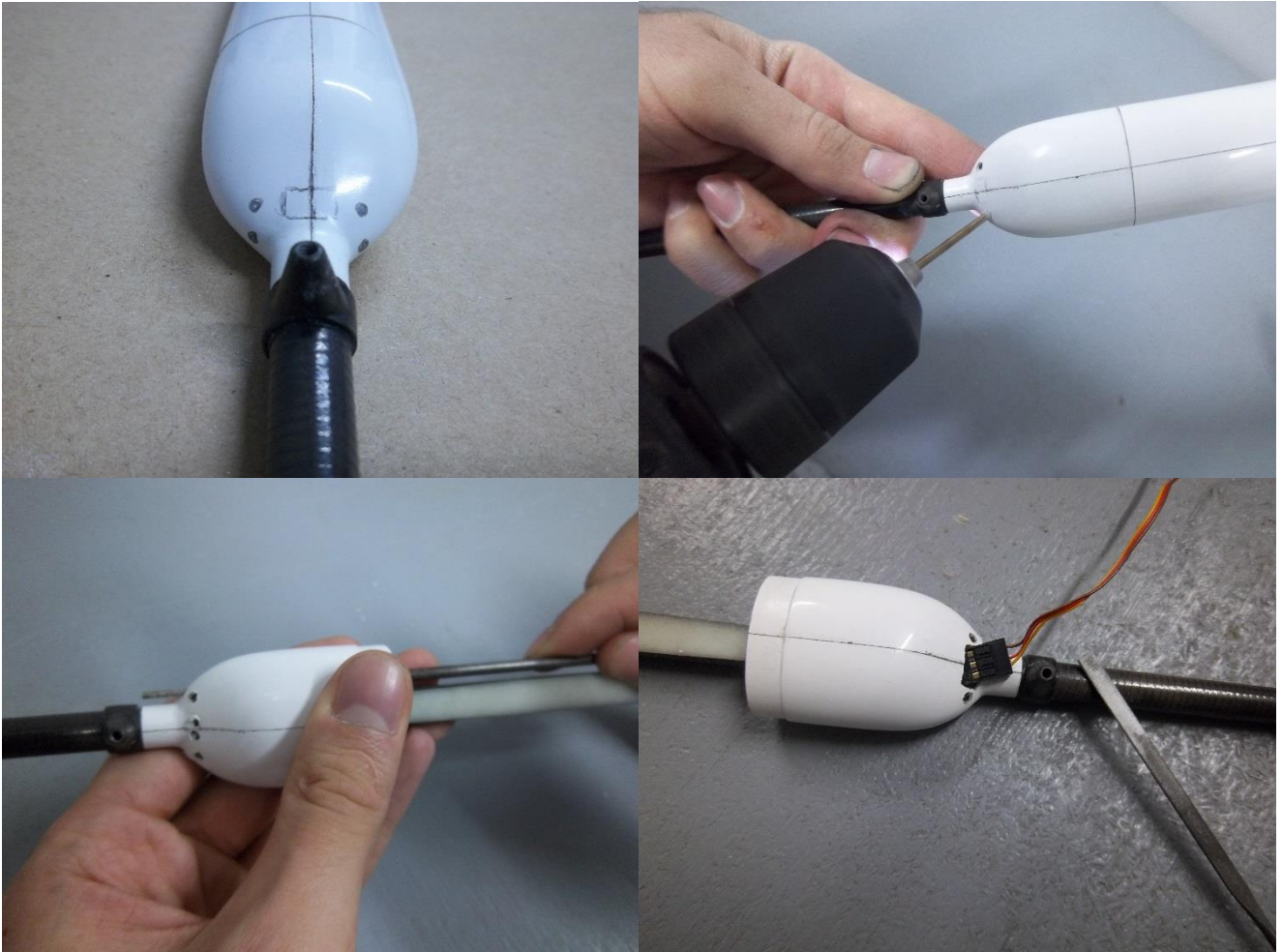


Picture 2.3. Installing the fin

Picture 2.4. Pasting in the fin

### 2.3. Installing servos and tail rods

Mark out the holes for tubes, transmitter antennas and wires of the aileron servos with a pencil, drill with a  $\varnothing 2$ -mm drill and finish with a needle file.



Picture 2.5. Rework of the pod

Glue the tip to one of the ends of the carbon fiber rods, put on the thermal shrinkage and heat shrink.

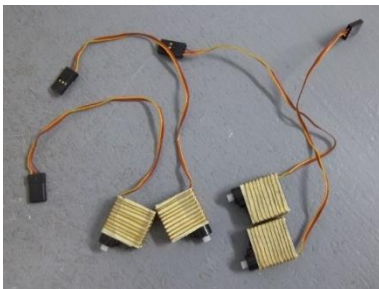


Picture 2.6. Pasting in the rod tip.

Cut off two 60-mm-long tubes, glue them like in the picture 2.7, glue the other 5-mm-long ones with superglue to the beam with the pace of 50-60 mm

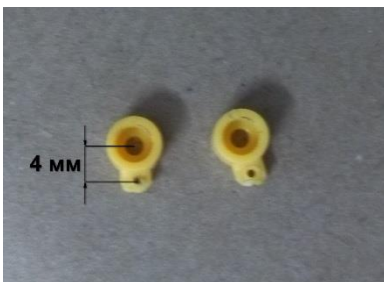


Picture 2.7. Pasting in the rod housing tubes



Cut off the eyelets on servos, wrap them with masking tape and, if possible, with thin strong thread.

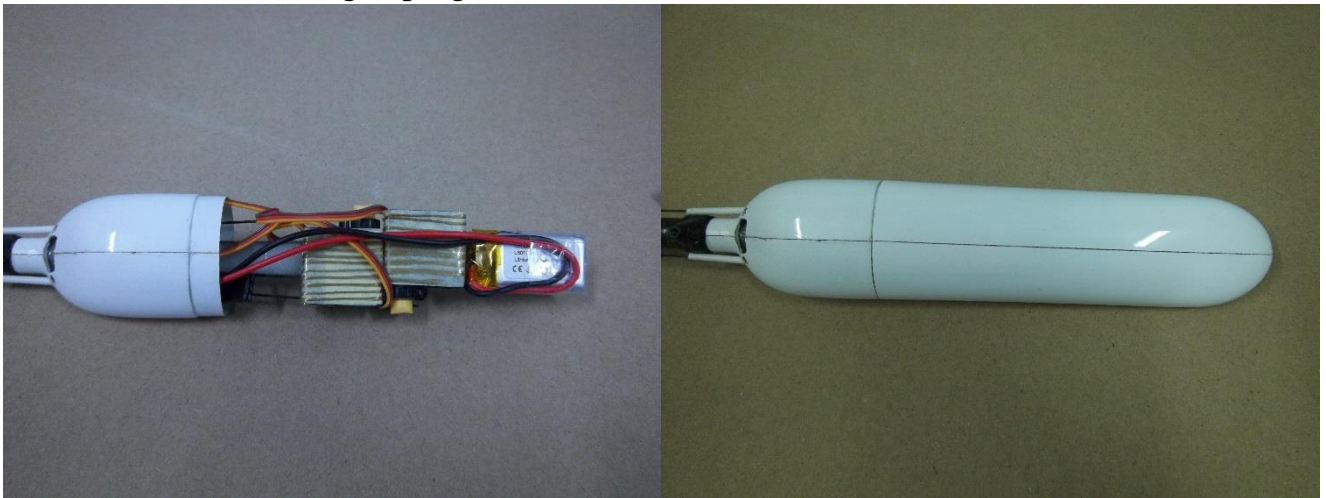
Picture 2.8. Preparation for the servo installation



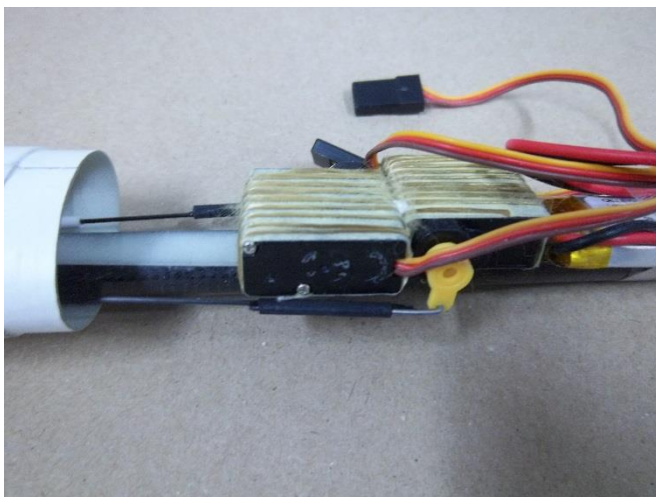
Finish the rockers of the tail servos in such a way that an arm is 4 mm long

Picture 2.9. Tail rockers

Temporarily glue 2 servos and an battery with tape to the beam in the most forward position. Make sure the cap can be put on and machine rockers don't touch it. Glue the servos to the beam using superglue.



Picture 2.10. Installing the servos and the battery



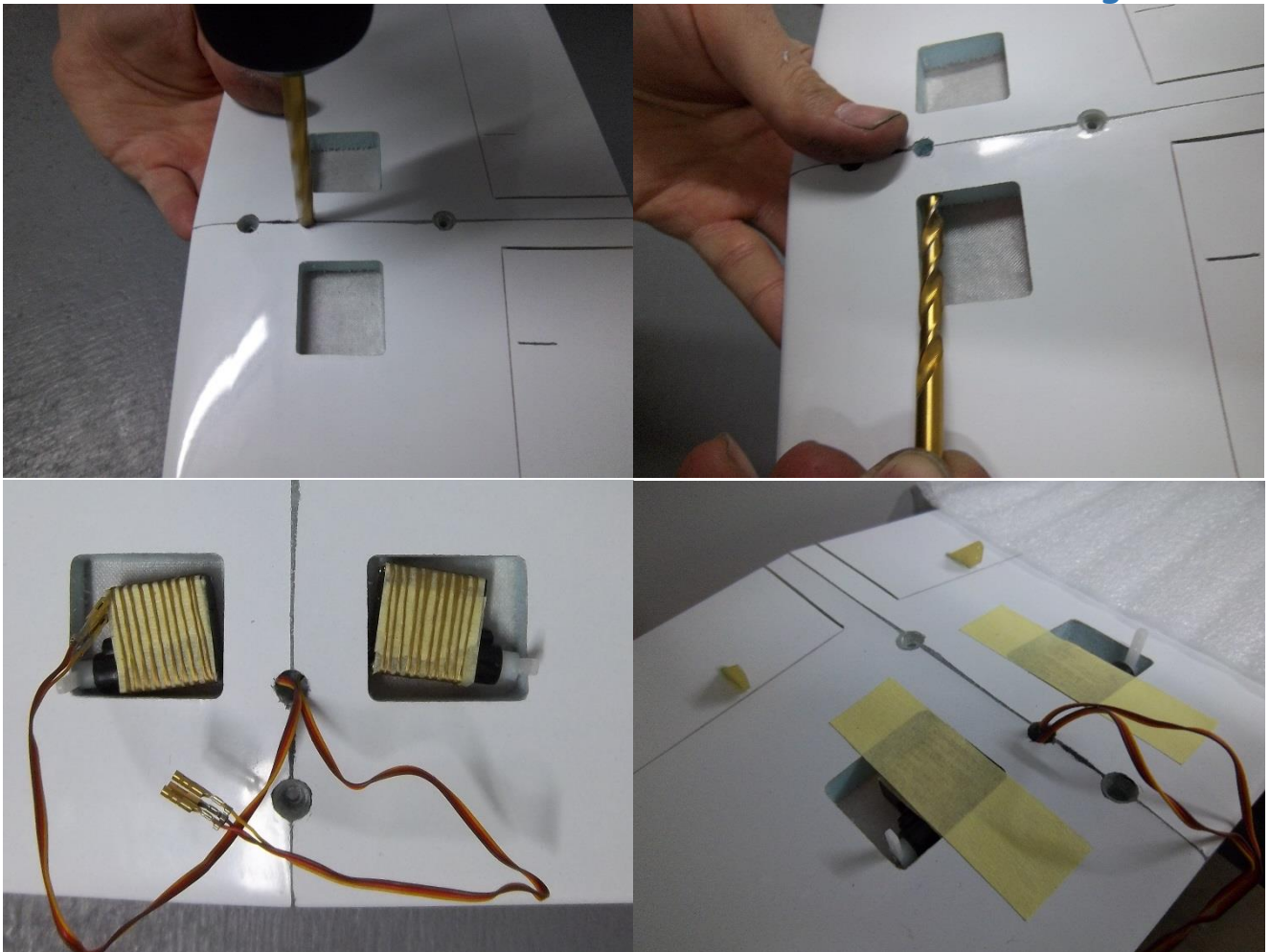
Picture 2.11. Installing the tail rods

Insert the rods into the tube and glue the second set of tips, having set the average position of the servos and the rudders.

#### 2.4. Installing the aileron servos

Drill a hole for the wires of the servos with a  $\varnothing 5-6$  mm drill. Take off the plastic cases of the connectors to pass the wires through the holes, glue the servos using epoxy.

**Don't forget to set up the rocker in the right position and tighten the screw beforehand!**



Picture 2.12. Installing the aileron servos.

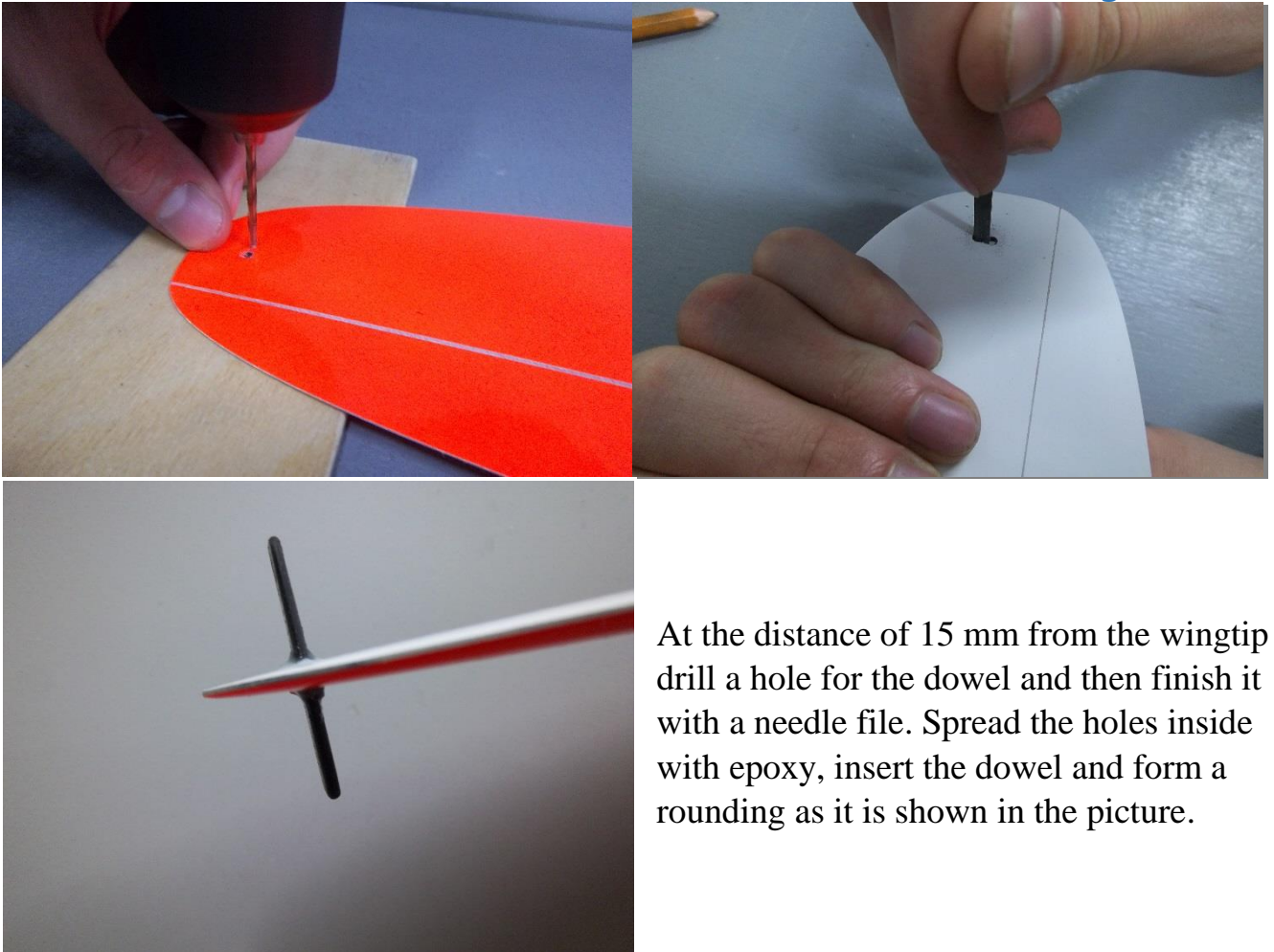
### 2.5. Inserting the dowel for throwing

Round the dowel with sandpaper until the shape is comfortable for you to use



Picture 2.13. Dowel for throwing



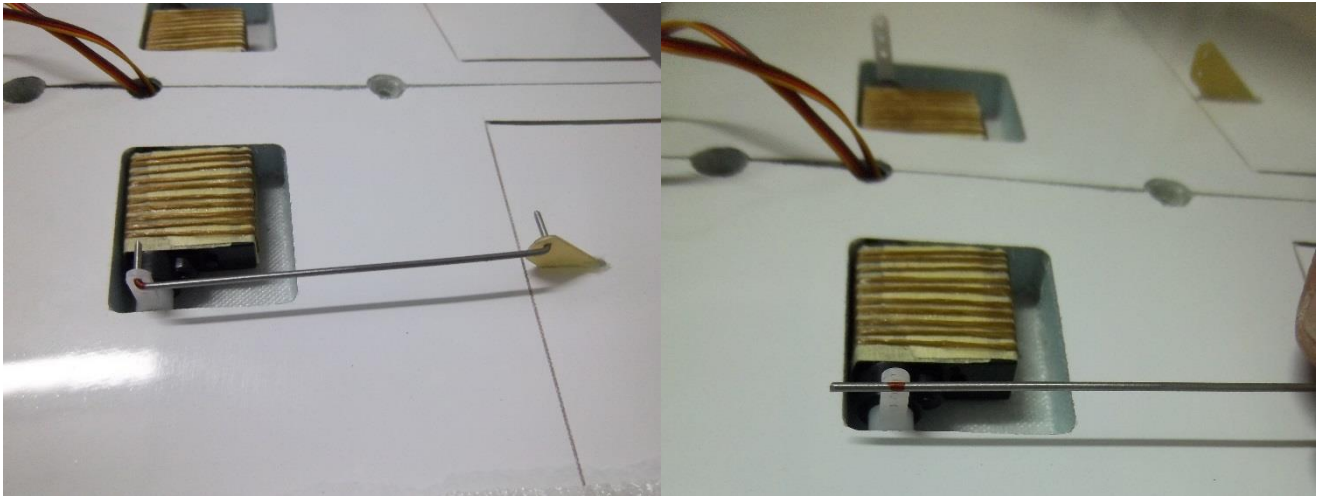


At the distance of 15 mm from the wingtip drill a hole for the dowel and then finish it with a needle file. Spread the holes inside with epoxy, insert the dowel and form a rounding as it is shown in the picture.

Picture 2.14. Inserting the dowel for throwing.

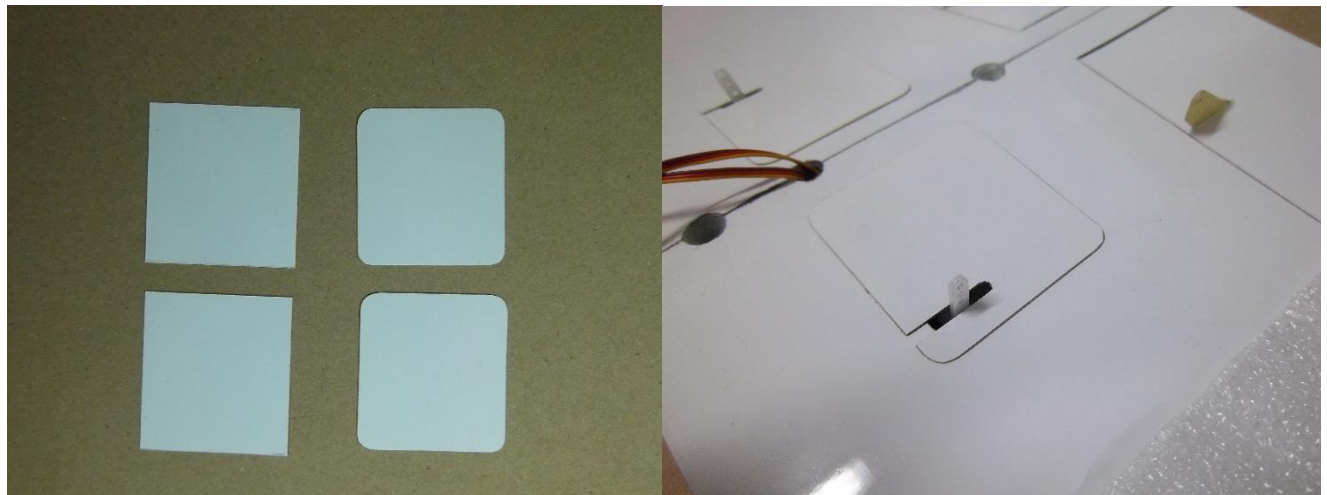
## 2.6. Installation of the aileron rods

Insert the rod into the control horn, denote the position of the hole of the machine rocker with a marker, bend the edges of the rods with pliers.



Picture 2.15. Installation of the aileron rods

## 2.7. Installation of the aileron machine covers



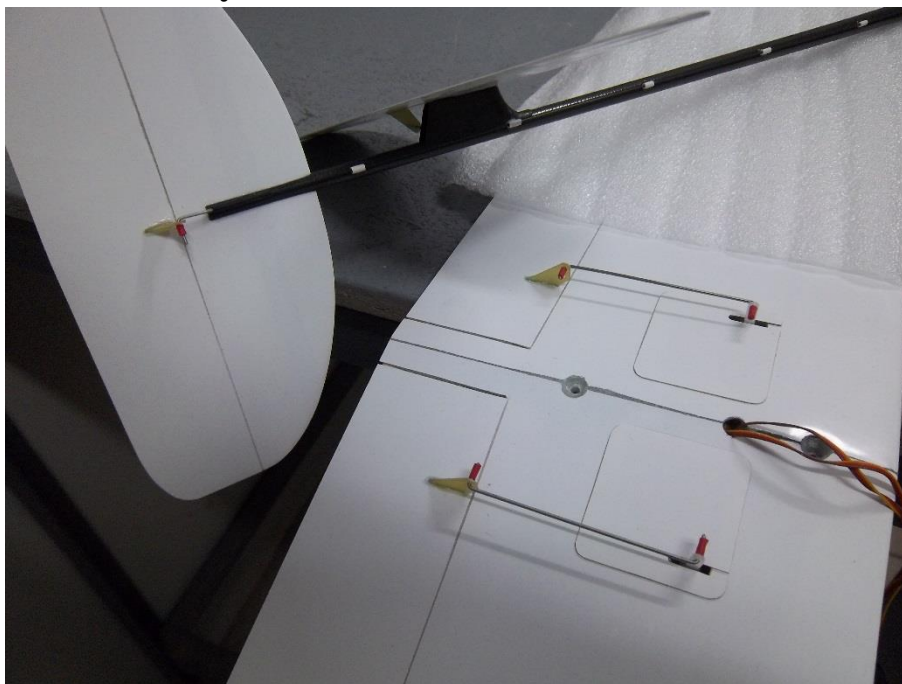
Picture 2.16. Installation of the aileron machine covers

Round the cover angles with sandpaper.

Cut through the groove for the rocker with a knife and finish it off with the needle file.

Glue the covers on the double-sided tape.

**2.8.Final assembly**



Fix the rods in the control horns by the pieces of the thermal shrinkage (except the elevating rudder rod)

Picture 2.17. Fixation of the rods in the control horns

Stretch the wires of the aileron servos out through the hole in the pod and attach the wing with the screws

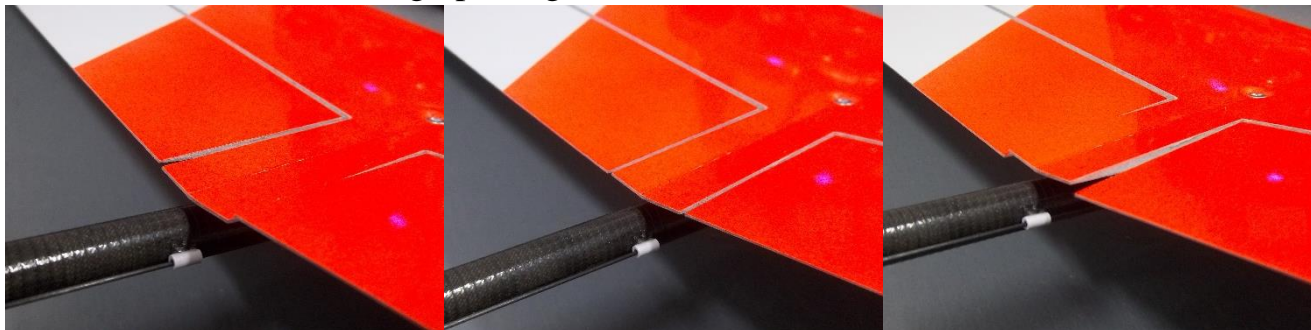


Picture 2.18. Wing installation

**3. Setting of the model**

Set up the receiver and establish the alignment at the distance of 50-52 mm from the front edge.

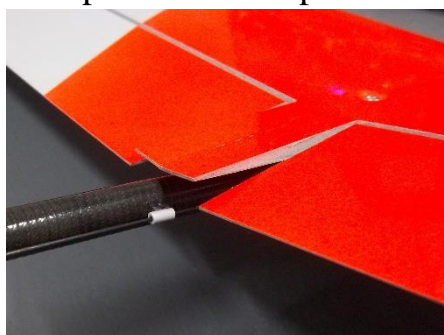
We recommend setting up 5 flight modes on the transmitter



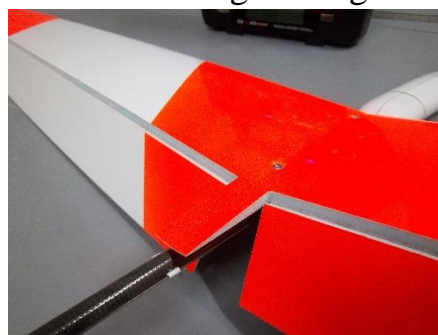
Start - 0,5mm up

Speed - 0

Regular flight -1,5mm down



Thermal – 3mm down



Braking - maximally down