

MB339 edf 90mm – Mounting instruction



➤ **Materials / items required for assembly:**

- Bonding/glue: Cyanoacrylate medium, activator for cyanoacrylate and cyan spouts dispensers;
- Finishing sandpaper 500/320;
- 1 x Carbon tube diameter 12 mm (1mt);
- 1 x Carbon tube diameter 6 mm;
- 1 x Carbon tube 4 mm;
- Ethyl alcohol
- Cloth for ethyl alcohol (for cleaning surfaces to be bonded)

➤ **Preparative surfaces before bonding:**

The MB339 model is composed of several sections, which need to be glued together



Each section before being glued must be sanded very quickly to further refine the plan already created by the press, so that it is smooth and free of debris that might not do well pave surfaces. (Use abrasive paper 500/320).

Afterwards degrease with cloth soaked in ethyl alcohol the surfaces before bonding.

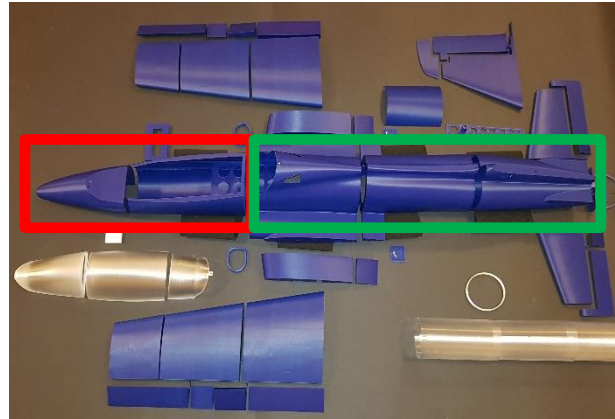
The above operations are very fast to perform, are indications to make the perfect job for the KIT assembly.

Use the cyanoacrylate medium to glue the sections between them, to avoid frittering of glue, use the cyan spouts dispensers for medium cyan and apply the glue in the edge inside of the plane (not to exaggerate with the amount, the cyanoacrylate on this type of materile has a strong seal and performs as a weld

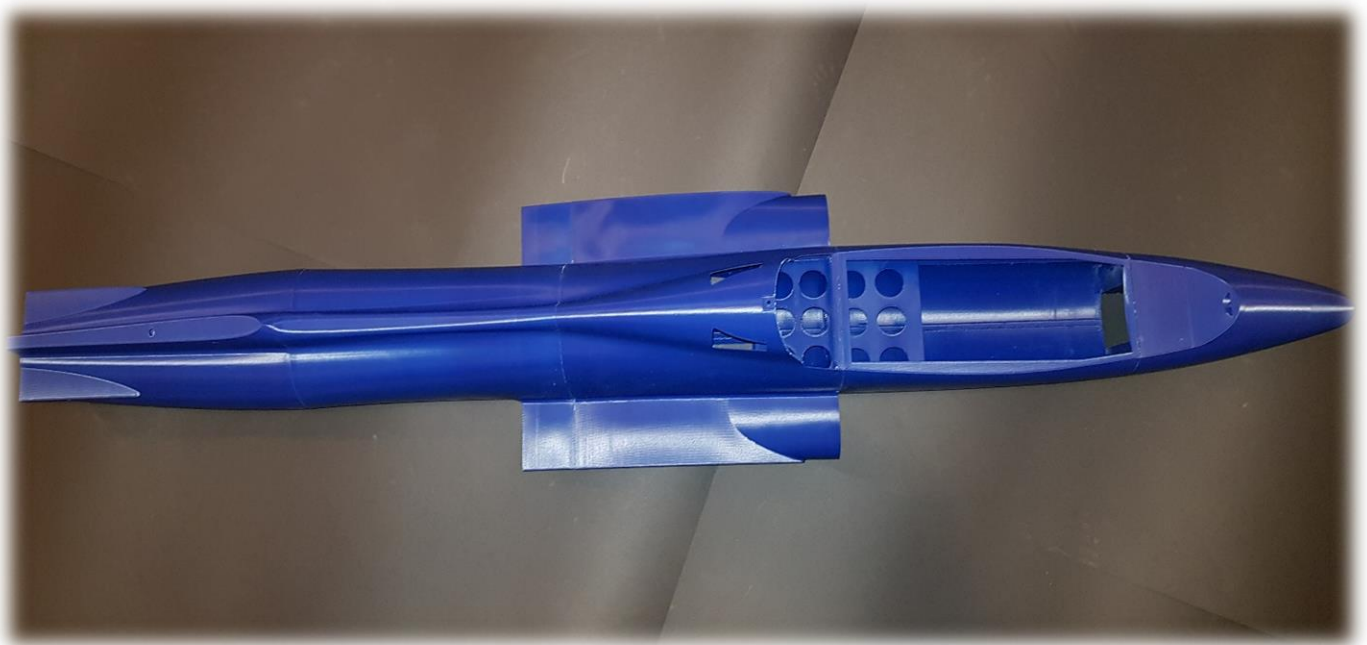
between the glued parts) use the activator to accelerate the drying of the glue. It is important to use the activator and nebulize in small quantities to avoid too rapid drying of the glue.

Once pasted section, in the inner part of the fuselage wipe across the board always with cyanoacrylate medium, the sections have been designed to allow the creation of this bonding also internally in the fuselage.

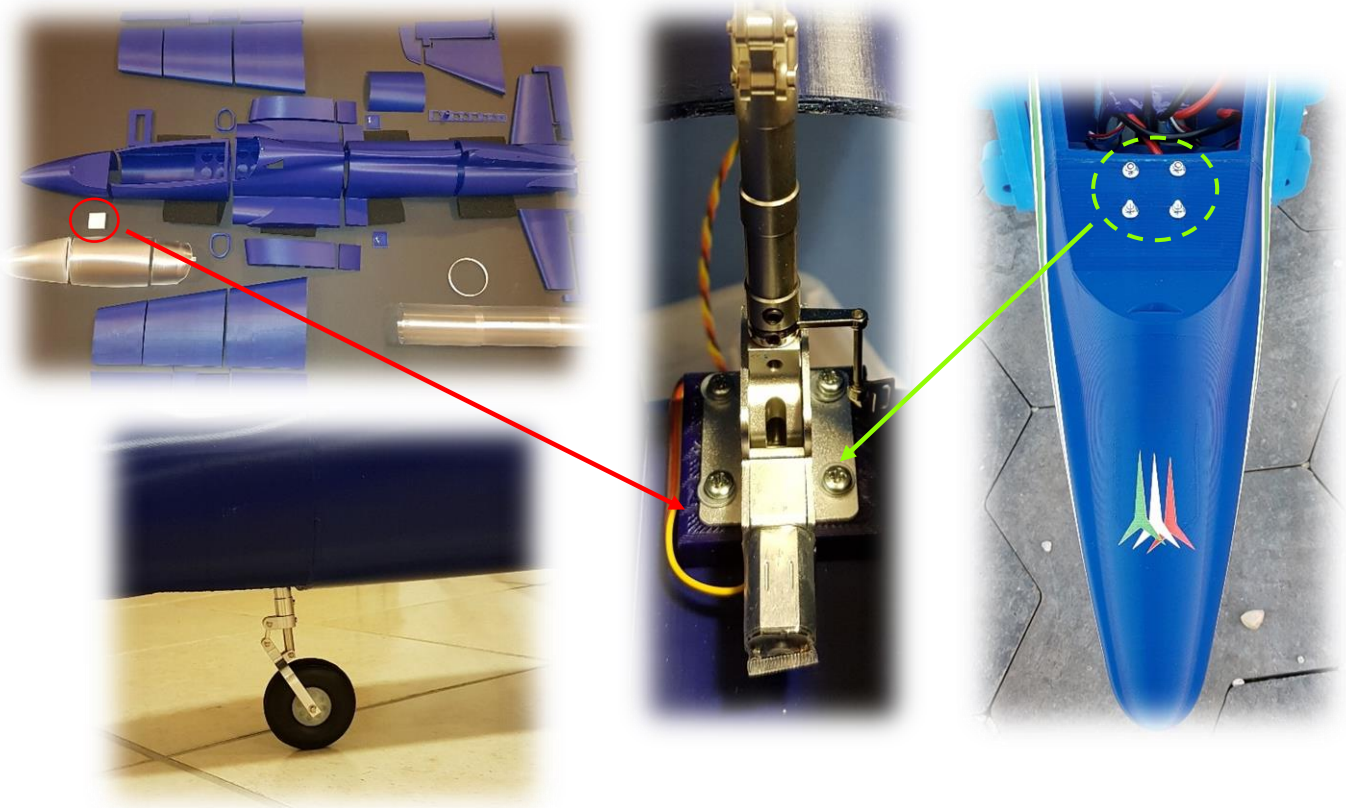
For facilitate the gluing of fusolsgr, divide the fuselage into two parts as in the following picture:



And then subsequently bonding the two sections as follows:



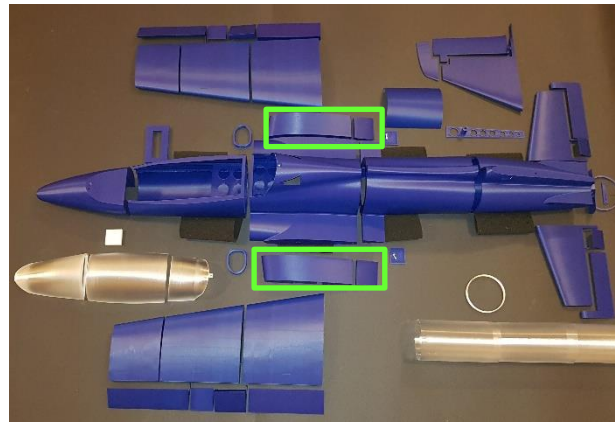
A practical tip is to make the front section for the front landing gear before bonding, see photo below:



In particular photo assembly of the front retractable maker, use the dowel **shown in photos** for the installation of the machine in the front section. NB: the dowel has a direction, see the perfect 90 ° angle position of the leg once extended. Use for attaching the machine **screws with self-locking bolt** tightening on the upper part of the front section.

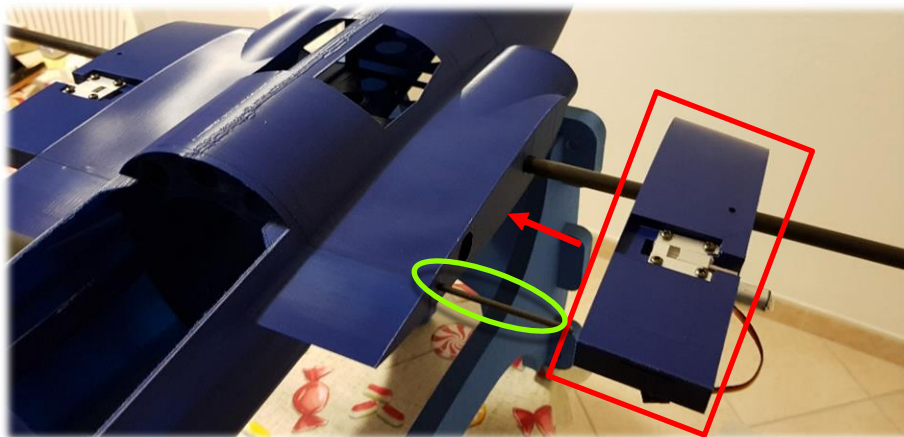
The KIT of landing gear system is available in the online shop of Passione 3D made for the MB339 also the springs are calibrated with the right force to properly support the model during all phases of takeoff / landing.

➤ Installation of wings :

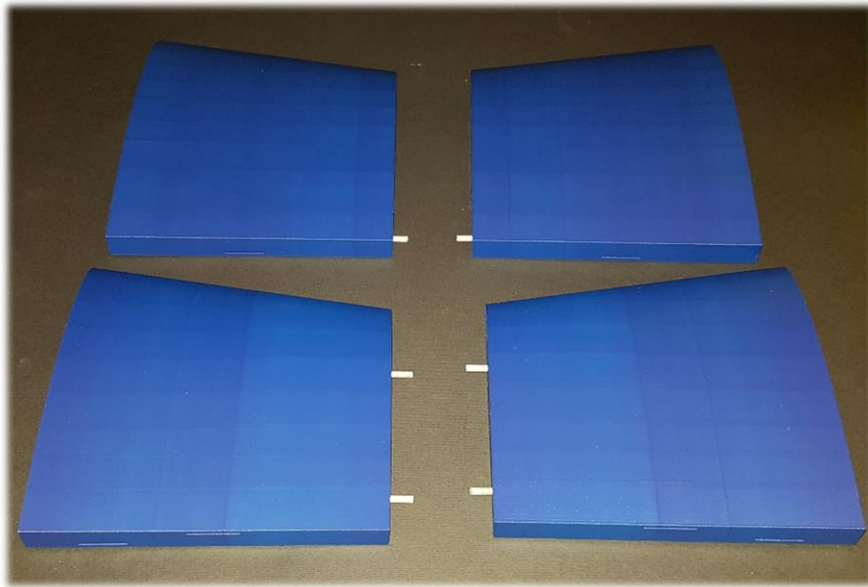
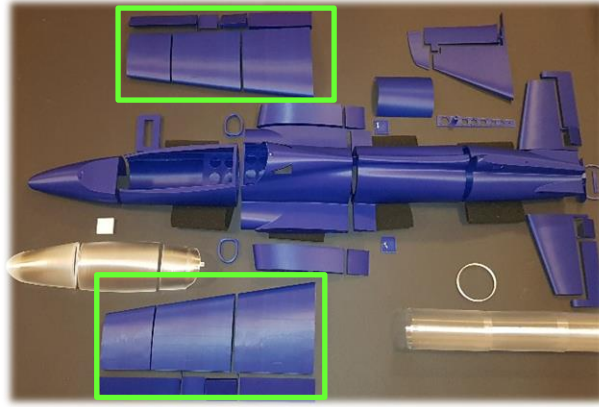


Before proceeding with the bonding of the first wing section, engage in the central section of the fuselage carbon tube diameter 12 mm diameter and 4mm diameter that it will use to keep the correct positioning axis of the first section of the wing. NB. **The 4mm diameter carbon** not cross inside the fuselage and it must be inserted up to the inner rib of the central section of the fuselage and must pass across the first section of the wing, see following pictures.

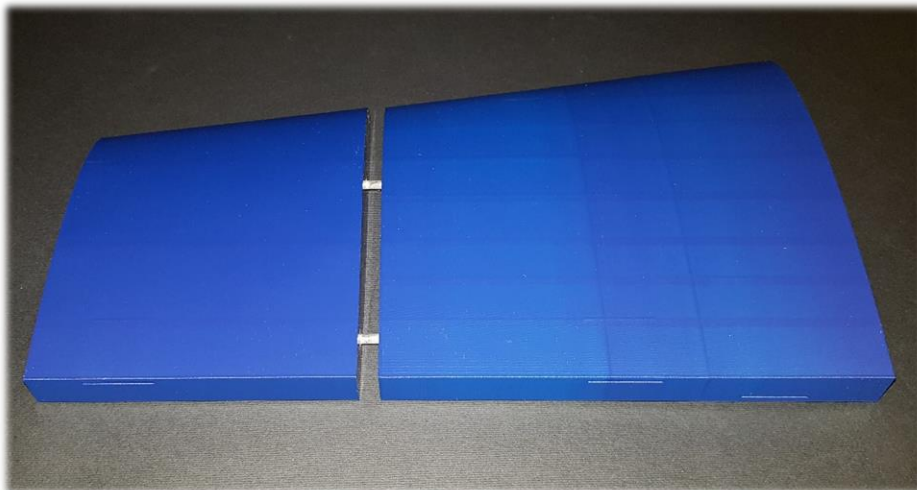
Proceed with the bonding with cyanoacrylate medium of the first section highlighted in red as picture :



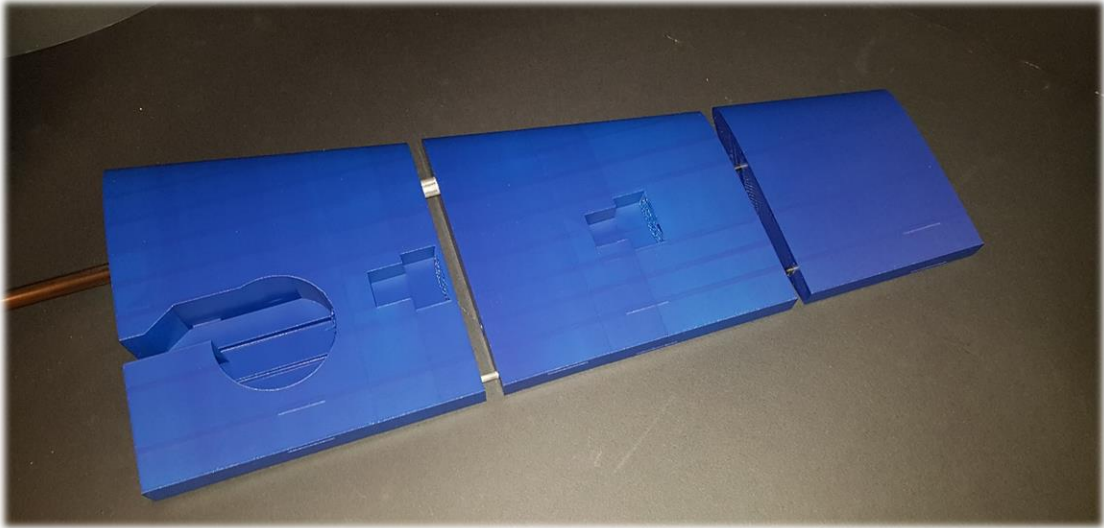
We proceed with the assembly of the remaining wing sections:



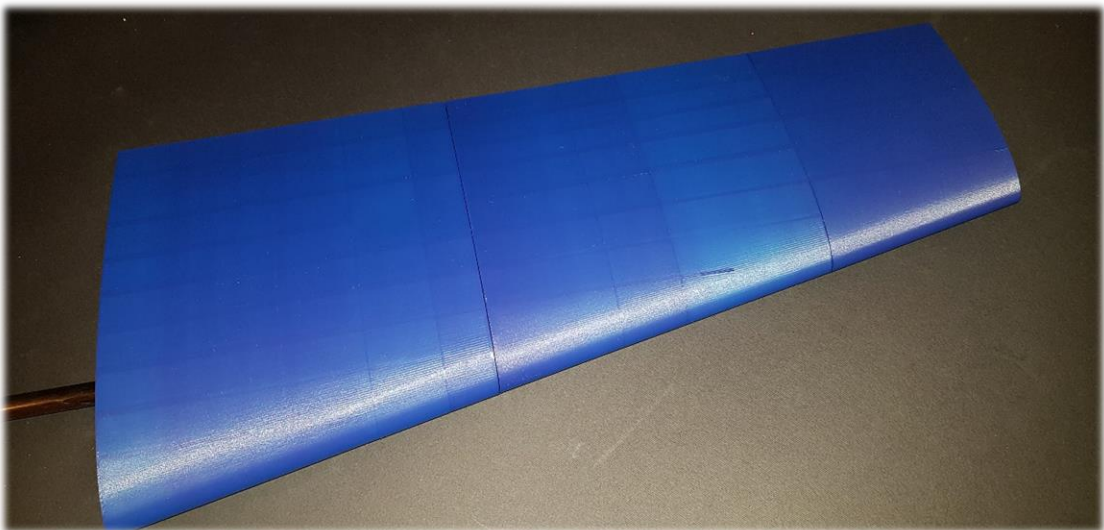
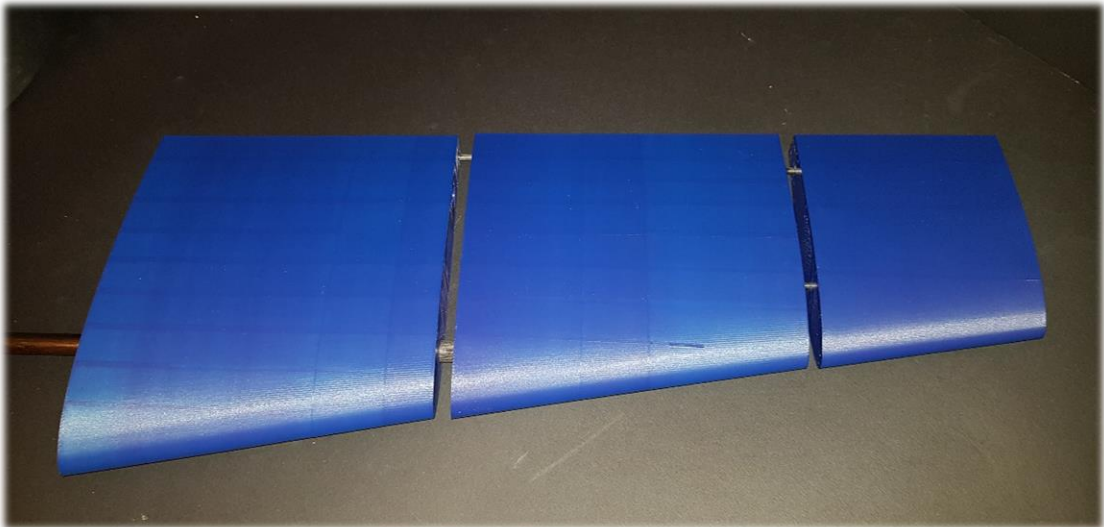
Engage and glue the carbon diameter 4mm in the wing sections



Connect the wing sections respecting the left and right side, before gluing the two sides with cyanoacrylate medium remember always to use abrasive paper 500/320 to remove on the surface the residual and degrease the parts to be bonded with ethyl alcohol in order to remove the glue used during the printing phase

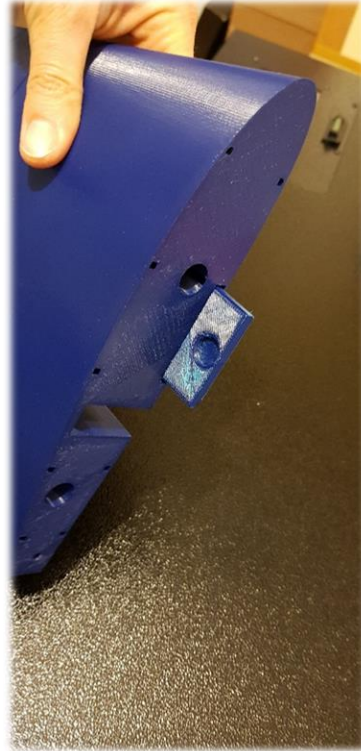
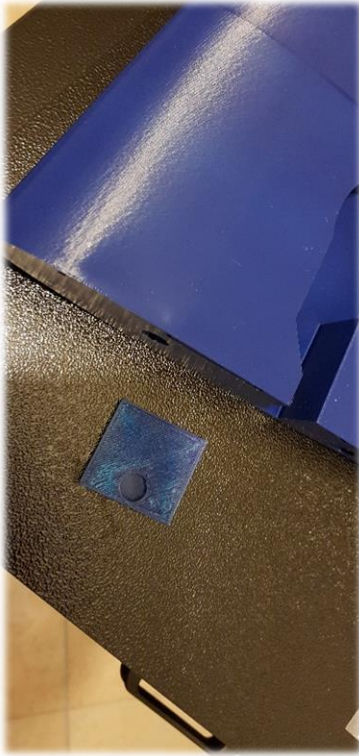


Help also with the engagement of carbon tube diameter 12 mm to align the wings and facilitate the bonding

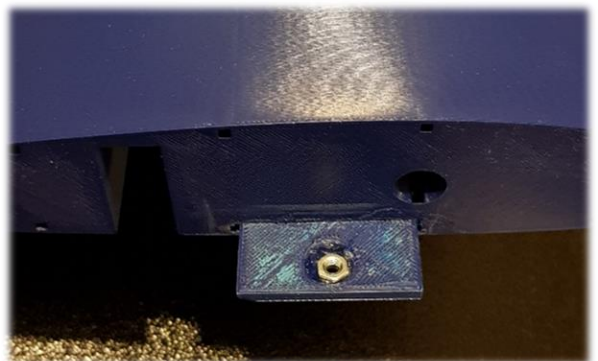
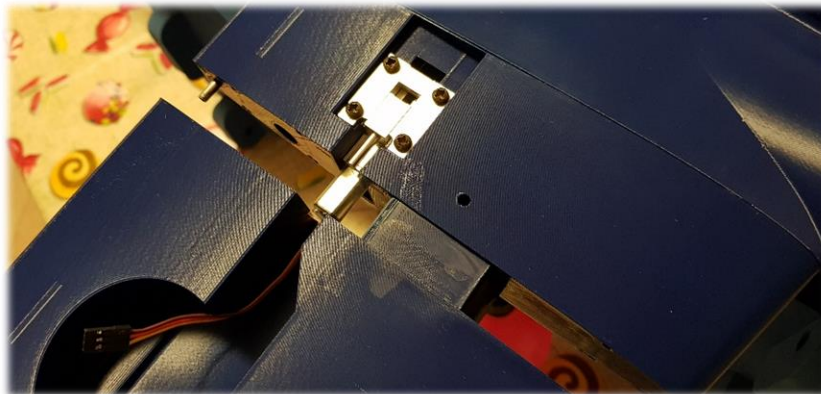


Wing detail, carbon tube diameter 12 mm at this point can also be removed

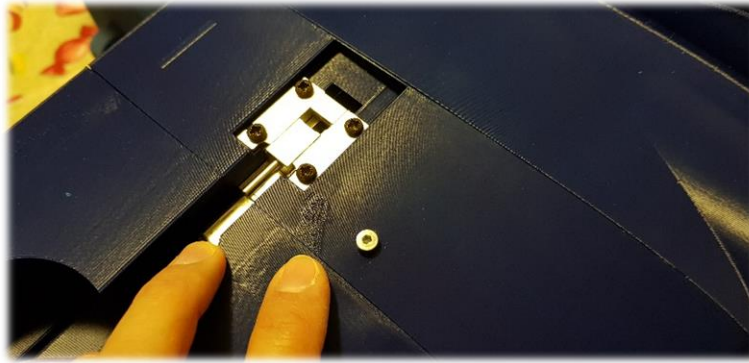
Bonding of the lock system for the wing, take the dowel and add it to the newly assembled wing seat and glue with the use the cyanoacrylate medium



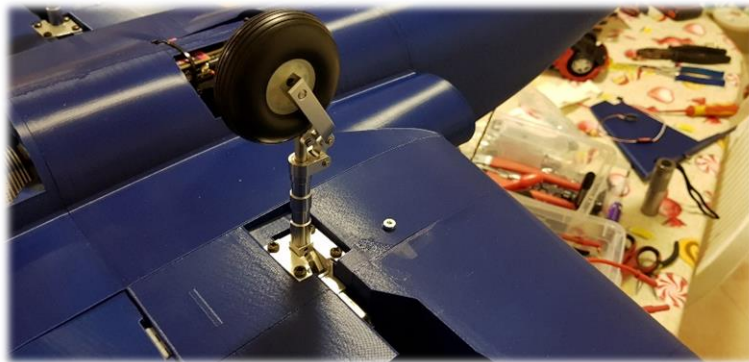
Glued the dowel proceed with the insertion of the wings in the section attached to the fuselage and with the aid of a tip with a diameter of 4mm pierce the dowel and proceed with the gluing of the bolt on the opposite side, see the following picture:



At this point, the wing can be mounted directly on the fuselage see next photo, use the M4 screw supplied

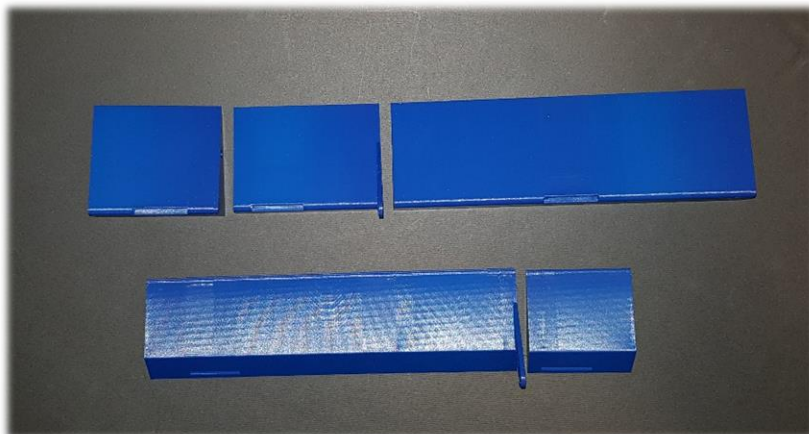


At this point you can also screw the wing machine

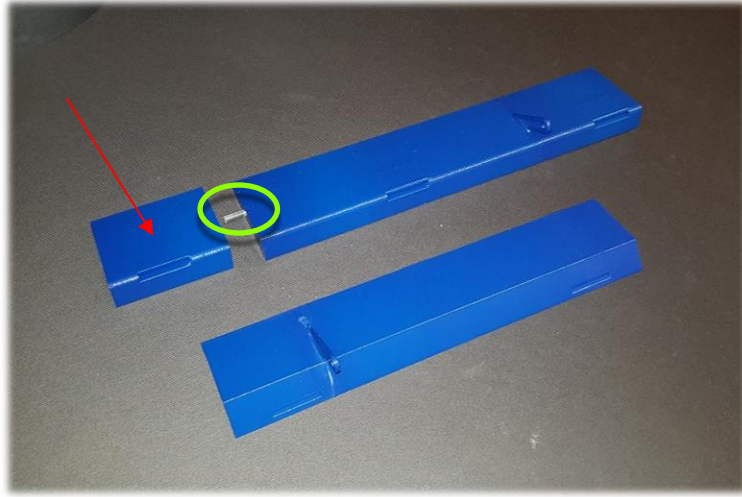


➤ **Assembly of moving parts :**

All moving parts of the model are arranged for housing the hinges provided in the kit:

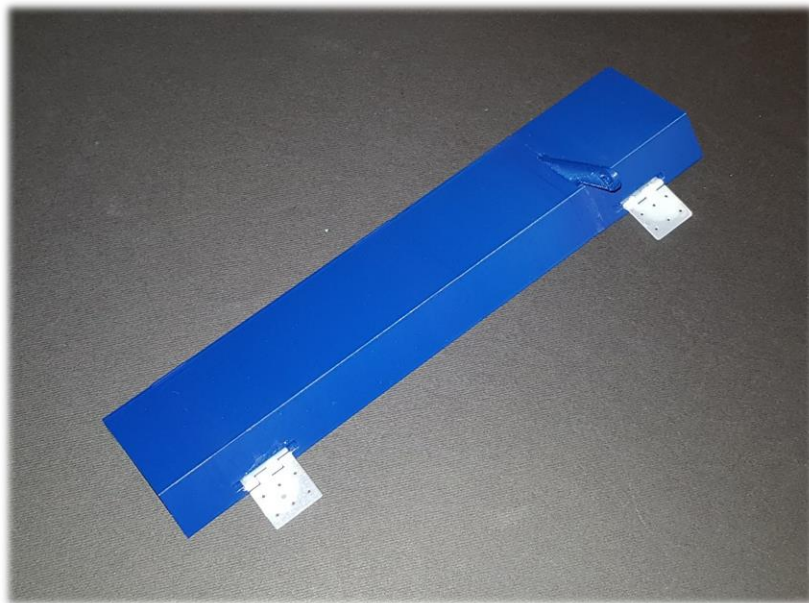
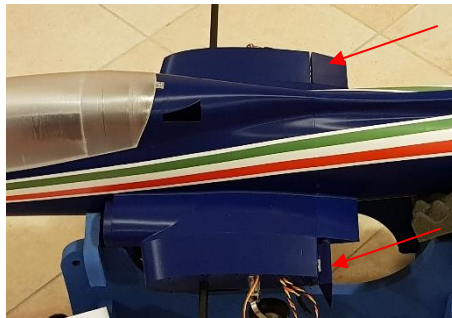


Detail of the flap and aileron

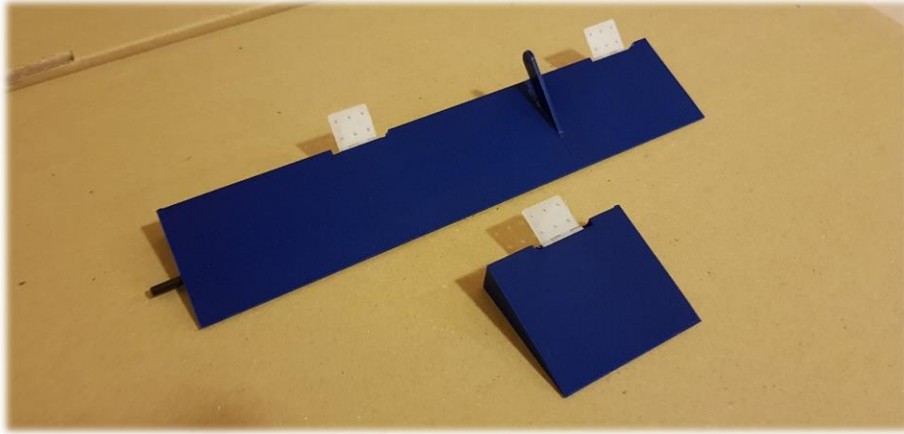


Glue the sections of the flap and aileron.

NB: To use the flap diameter carbon 4mm as shown in the picture, **This last section** It must not be glued because it allows the removal of the wing and the part of the flap that remains attached to the fuselage as shown in the following pictures.



Details of the wing hinges with bonding



Details of the flap with bonding of the hinges



Dettaglio dell'ala assemblata con relativi servi

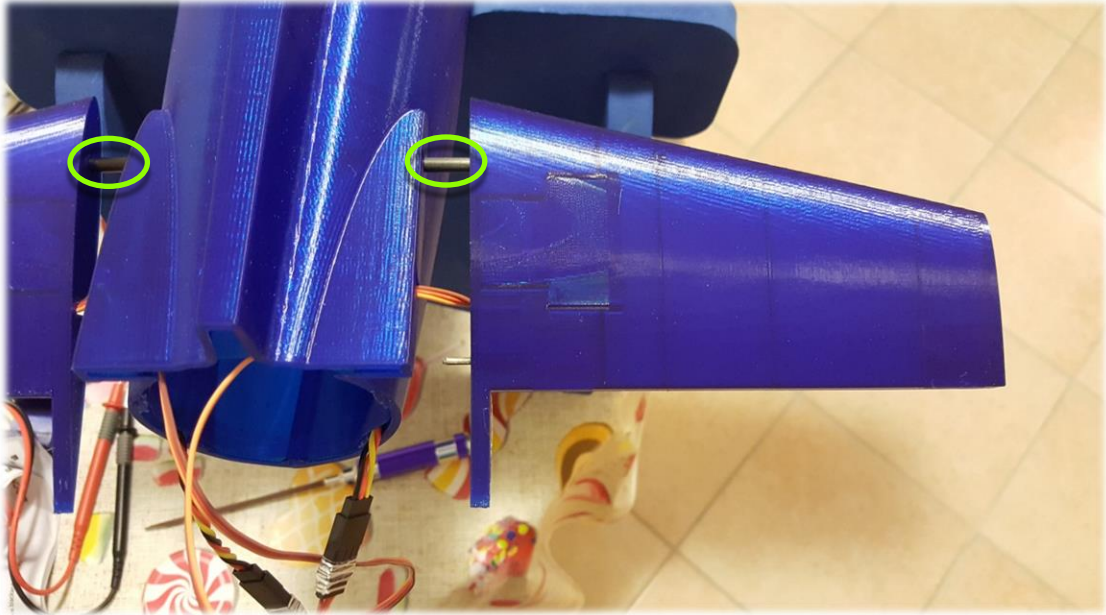
➤ **Assembly tail (horizontal stabilizer) and rudder (vertical stabilizer) :**

For the assembly of tails and the rudder it must be a carbon tube diameter 6mm (which will be passing through both tail) and a tube with 4mm diameter that will only use exclusively for the alignment of the tail to the rest of the fuselage then not passing, see photos next page.

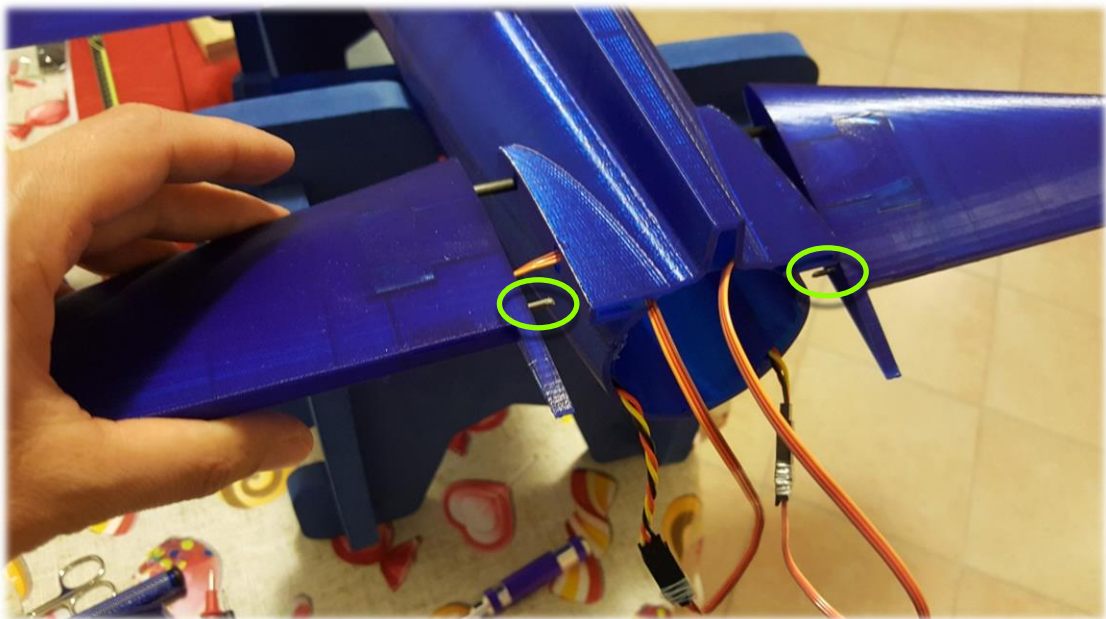
Note : All parts must be glued to each other subsequently with medium cyan.

The photos on the next page are the same as the version of KIT dell'MB339 EDF 70mm steps and bonding shown are identical to EDF 90mm version

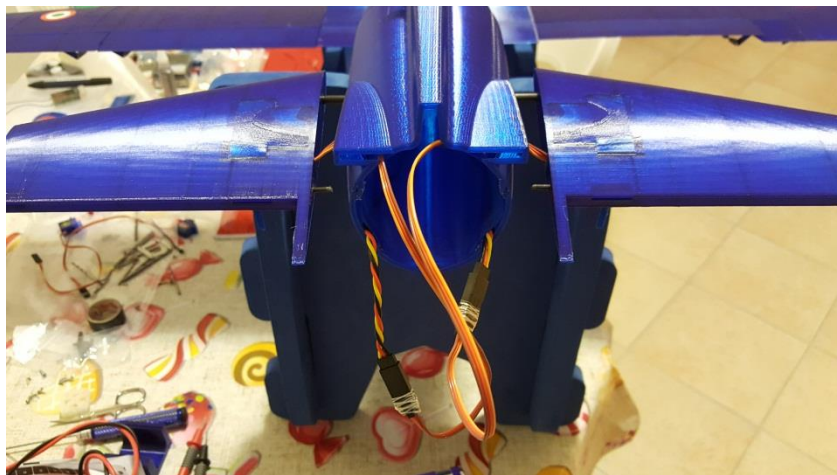


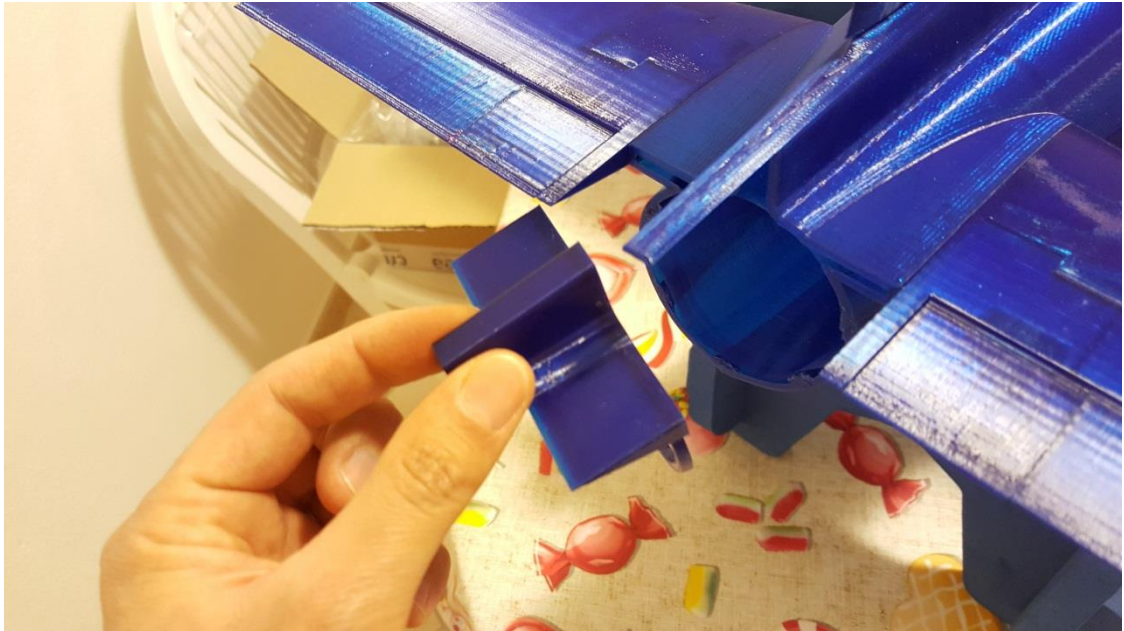


Insert the carbon fiber diameter 6mm in the tail (passing)



Glue the carbon 4 mm diameter that performs the alignment of the parts to the fuselage

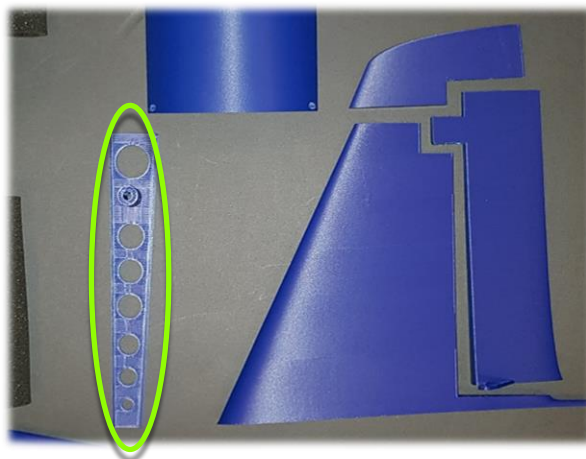




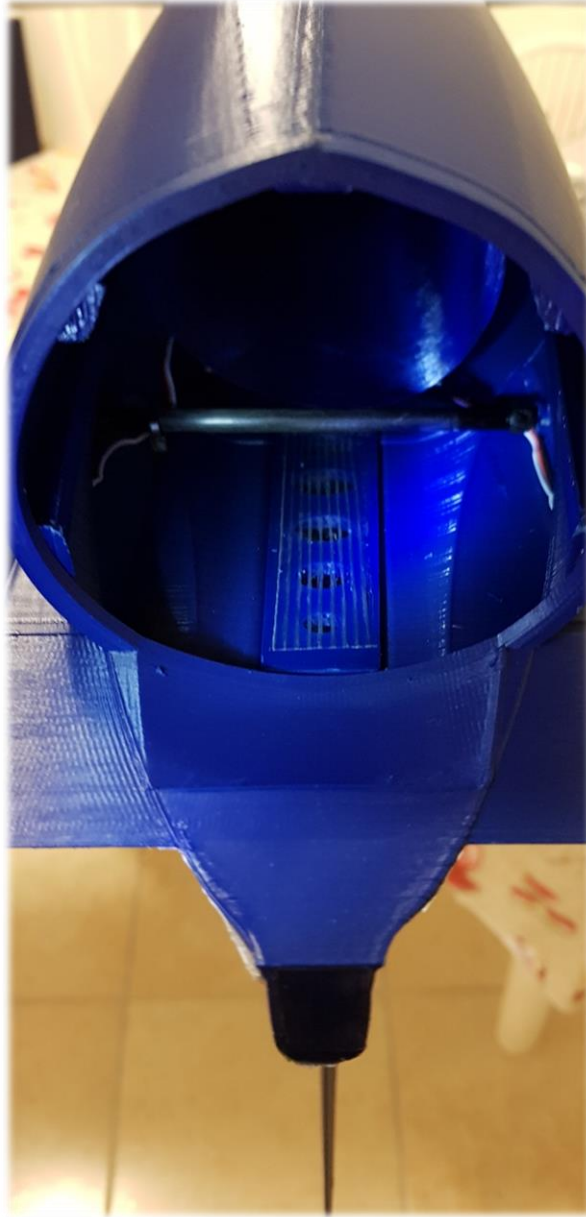
Glue the tail to the fuselage and install the elevator



Glue subsequently the parts of the final part of the fuselage section



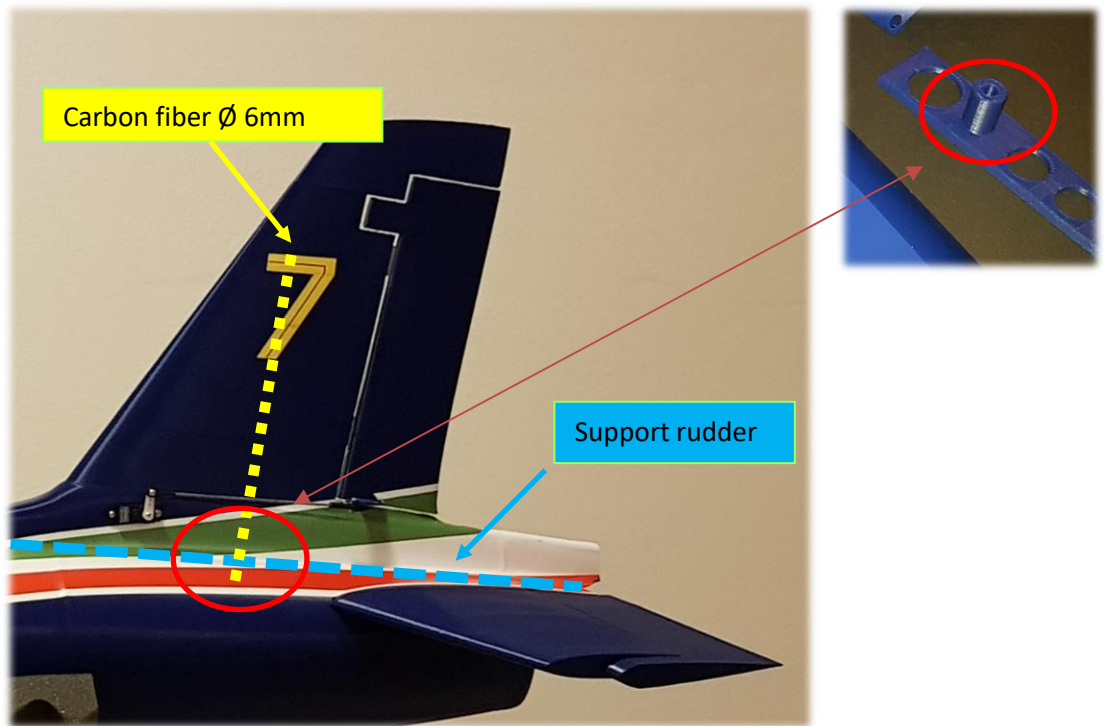
Installation of the rudder : support to be bonded in the last section of the fuselage



Full bonding of the support of the rudder, it is important to match the hole to fixing carbon diameter 6mm from the upper section of the rudder.



As show in the picture the holes in the support of the rudder are closed because with this solution the exhaust pipe can be cut before the carbon fiber. Note the exhaust pipe can also be cut flush with the fuselage, the kit is provided to be used in both solutions.

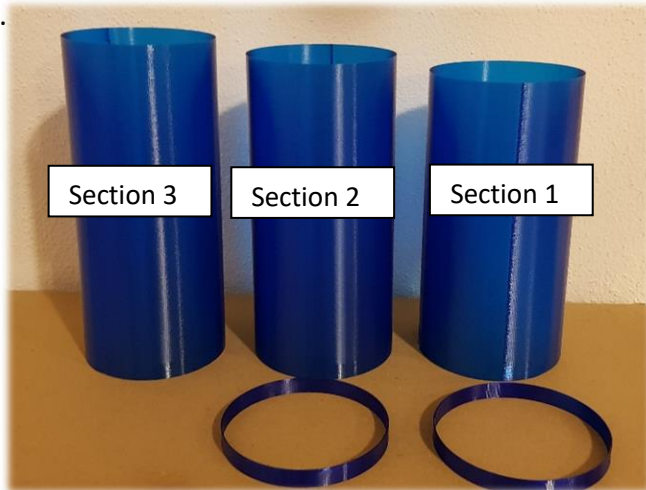


It is important to match the carbon rudder inside of the support of the fuselage to have the right mechanical strength.

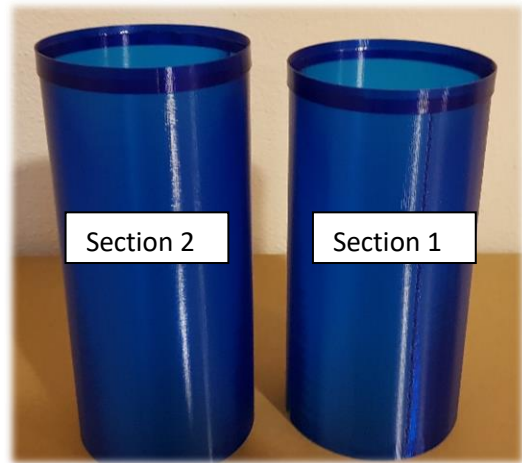
➤ **EDF unit :**

The edf unit is housed immediately after the middle section of the fuselage and is accessible by a screwed panel under the fuselage. The model was created for edf 90mm, so it can accommodate different types, the fan installation is carried out simply by screwing the screws.

The venturi tube is provided in the model kit is composed of three sections to allow easy insertion inside the fuselage, once inserted inside the fuselage sections can be glued together



Section 1: the outlet of the ducted fan
Section 2: the central part
Section 3: final part (optional mounting)



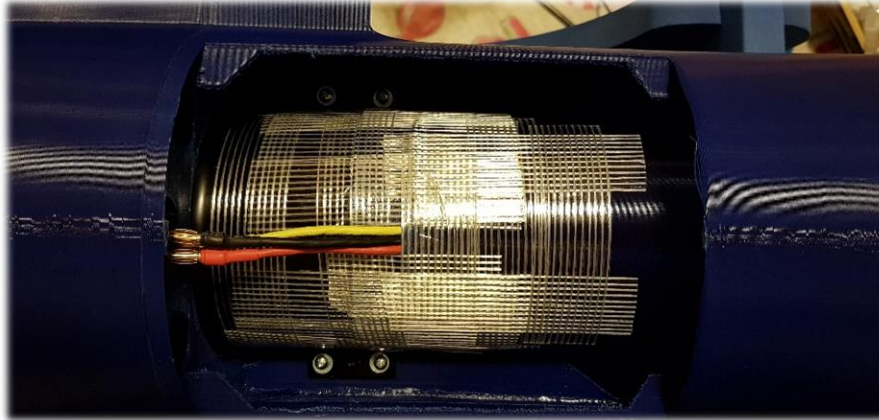
Bonding of connecting rings for connecting the sections



Once you glued the connecting rings insert in the sections inside the fuselage on and engage with each other by gluing subsequently externally

Insert the motor inside the fuselage and tighten screws





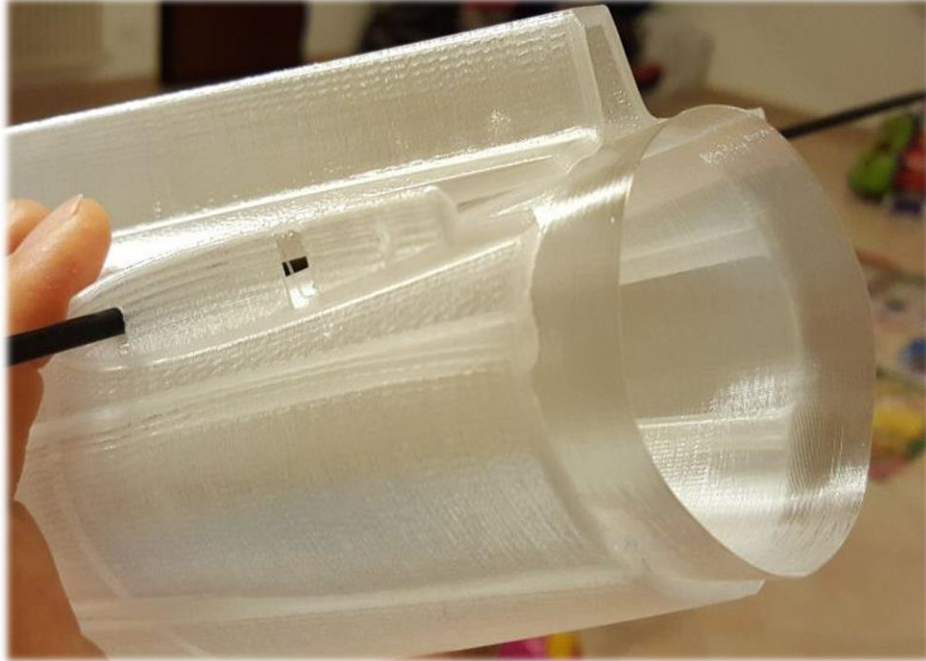
Lock the drain with the fabric tape only on the top of the ducted fan



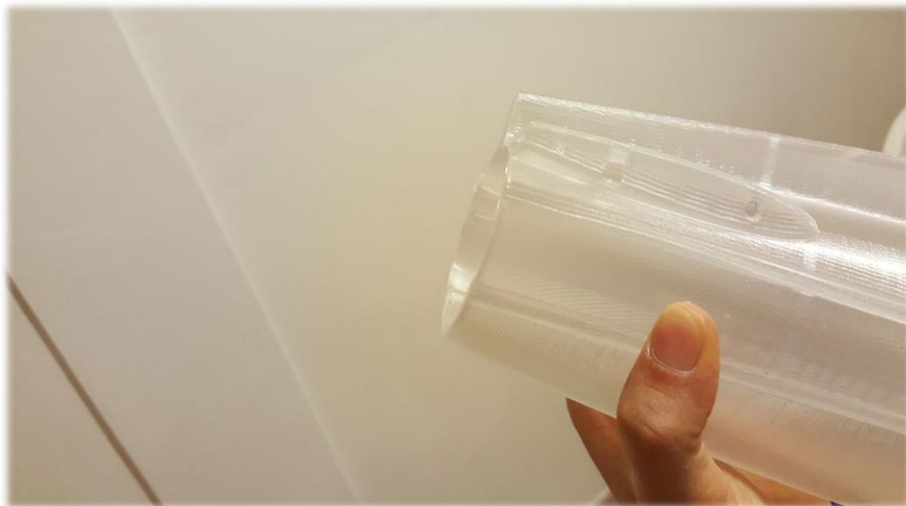
Option 1: Full with installing the exhaust cone only with section 1 and 2. In this case it is advisable to close with duct tape the holes in the support of the rudder as shown previously, in such a way that the exhaust air has a clean outflow



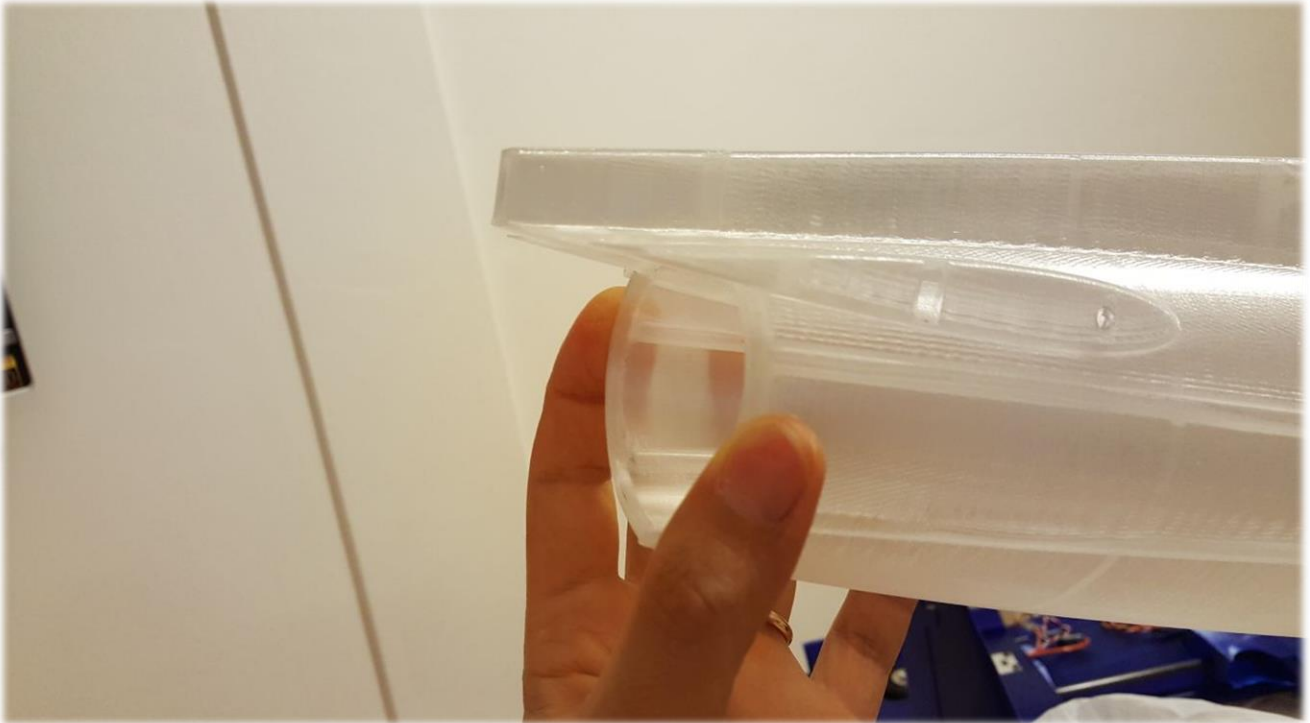
Option 2: the cone outlet with three sections provided in the kit. The photos on these pages are the same as the version of KIT dell'MB339 70mm EDF, are demonstration to give a good idea with the use and cone assembly with three sections.



Venturi tube with gluing final section of fuselage.



Venturi tube cut flush with the fuselage



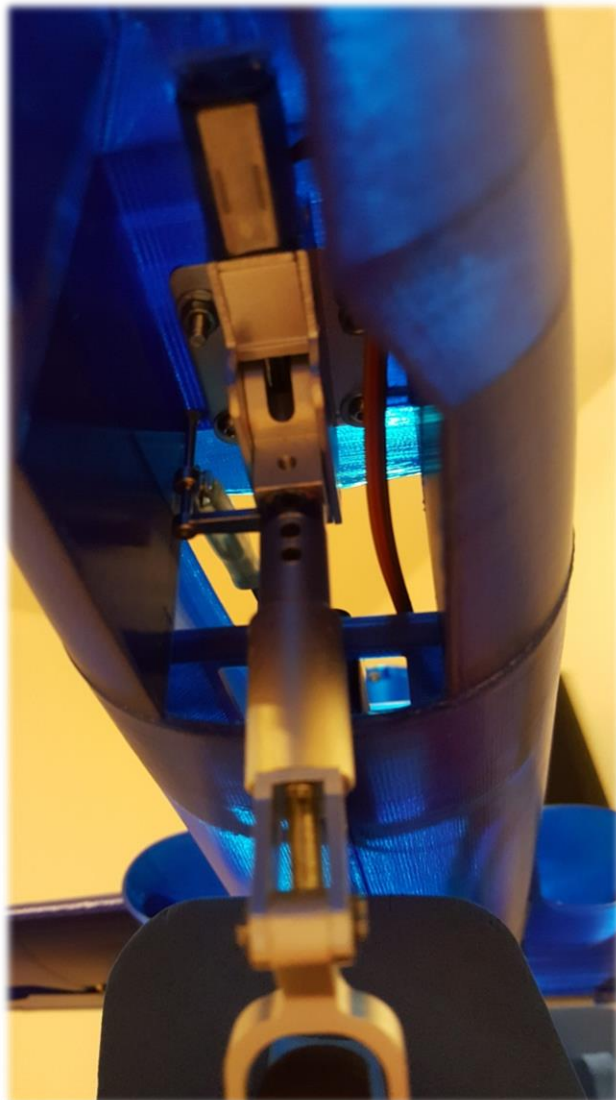
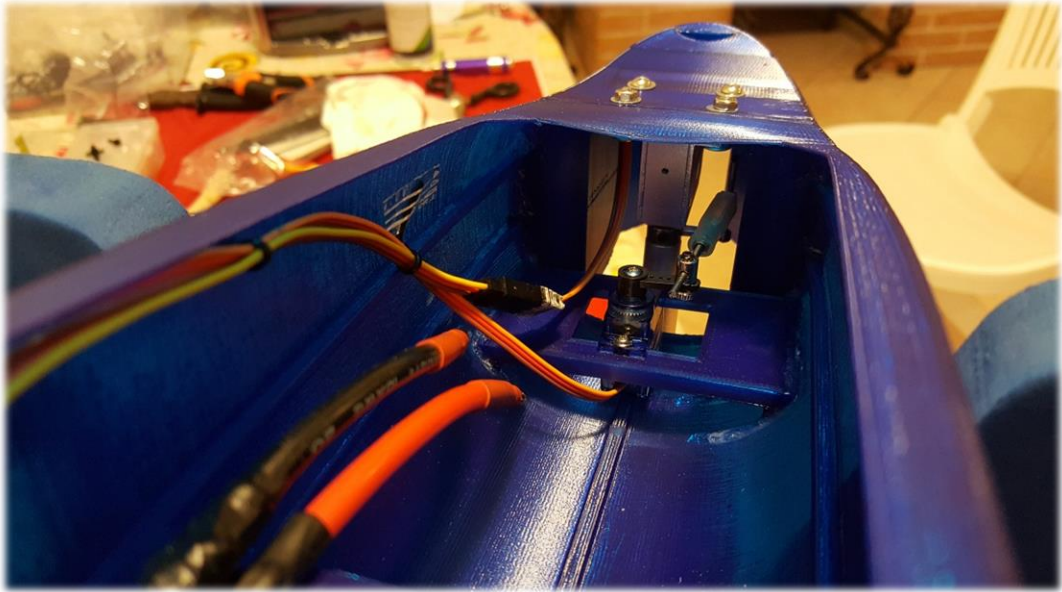
Venturi tube with gluing the final section of the fuselage



Details venturi rear final section

➤ **Front support for servo :**

Install the servo holder base for the rotation of the front leg as in the picture (example photo taken from the KIT edf 70mm):



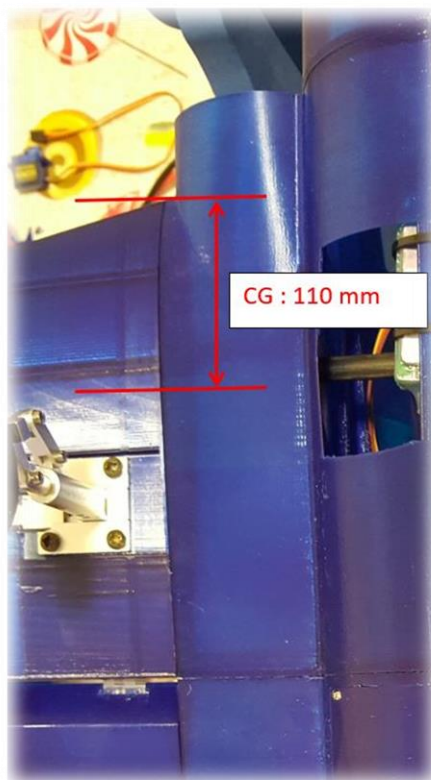


Possible battery lock system with rigid adhesive velcro and screw fastened strap.



➤ **CG model :**

In the following picture the CG of the model (already in safety), it is advisable to unbalance forward (not exaggerate) the model with respect to the CG reported.



➤ **Excursion of moving part (reference) :**

Aileron = $\pm 20\text{mm}$

Elevator = $\pm 20\text{mm}$

Rudder = $\pm 30\text{mm}$

Flap = Medium : - 30mm

Full : - 40mm

(flaps are not needed during take-off, the model takes off in a small space)

➤ **Canopy :**



For the centering and alignment of the canopy parts, use paper adhesive tape, as in the picture

➤ **Decals PAN :**

The decals PAN kit is available on our website (Accessories) at the following address

<https://shop.passione3d.it/>