

# **HIGH-END TECHNOLOGY** RC

## **Me262 for electric ducted fan**



First we want to thank and congratulate you with your decision in buying one of our Kits.

The ME-262 puts together easily but read the text carefully.

Just look carefully at the pictures .

This is not a plane for beginners, and you should have some experience with putting together ARFs.

### **DATA:**

Wingspan: 1260 mm

Length: 1080 mm

Weight: 2000-2400 gram

Ducted fans 2 x 72mm (6904 fanunit)

Items needed to complete:.

4 ch. Computer Radio system w/ 3 servos.

2 Electronic brushless speed controllers

2 fan-units 6904 HETFAN or MF 480.

2 480 size brushless motors e.g. EDF 2W , 3W, 4W or 2W20  
3W recommended

Lipo battery

5 or 30 minute epoxy

micro balloons

CA Glue w/ accelerator

Velcro.

Standard tools:

Drill or Dremel tool

Pliers /cutter

Scissor

X acto Knife

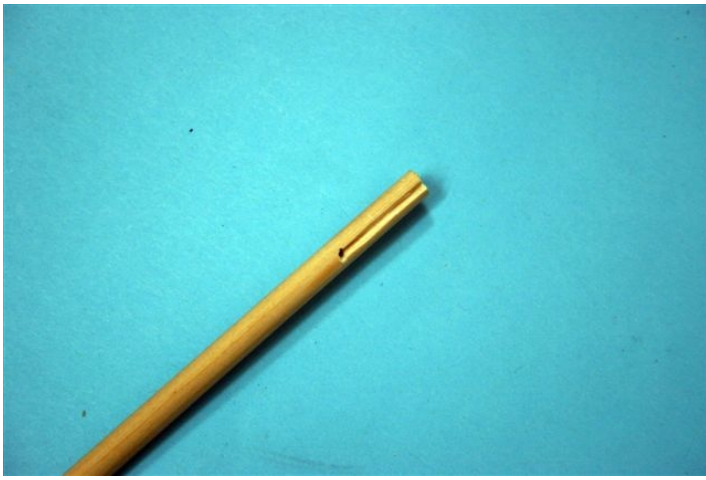
Soldering iron.

Half round file

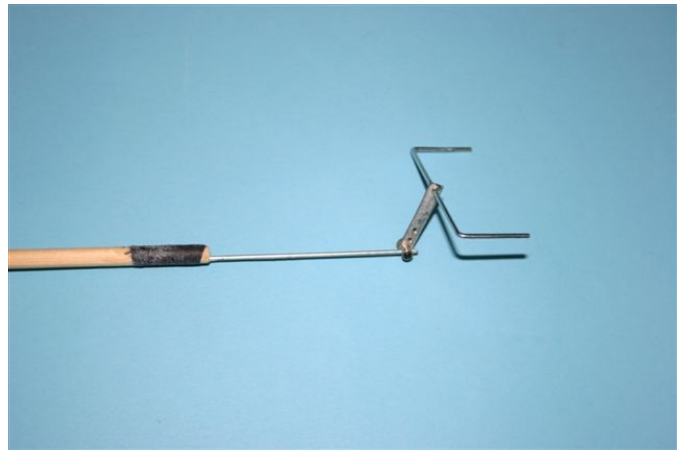
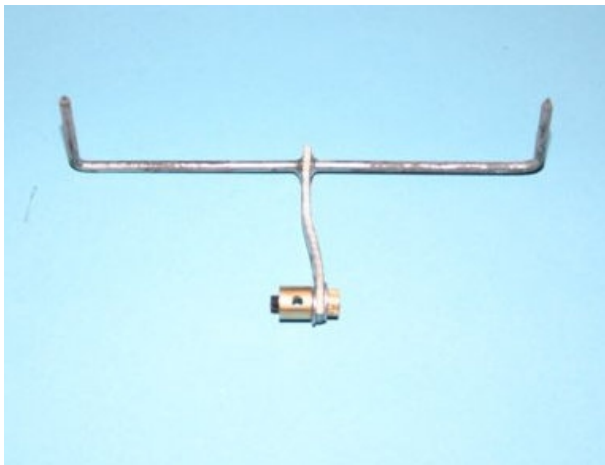
Sanding block (fine grid sanding paper)







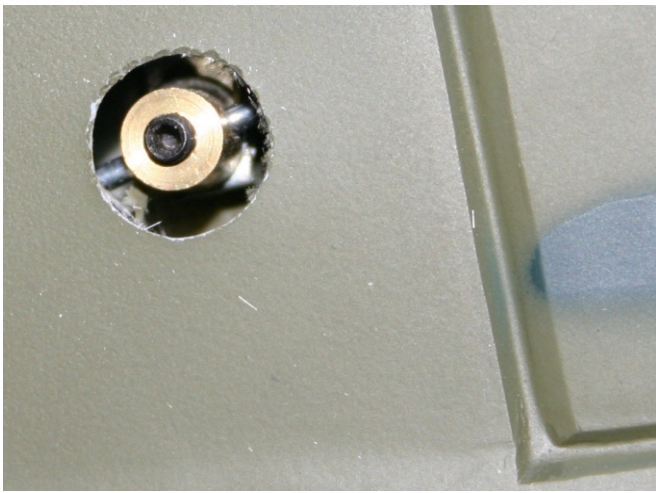
Start by making the pushrod, drill a 2mm hole on both ends about 1 inch from the end , than cut a small pocket toward the end . Make a 90 degrees bend in the 2mm steel pushrod. Use CA glue to glue the steel pushrod in the wood. Note at the picture below, wrap yarn tight around the wooden pushrod end and the steel pushrod and seal with CA glue.



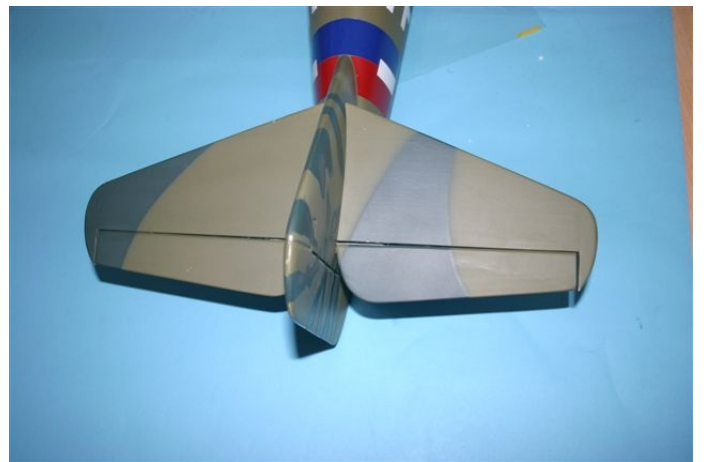
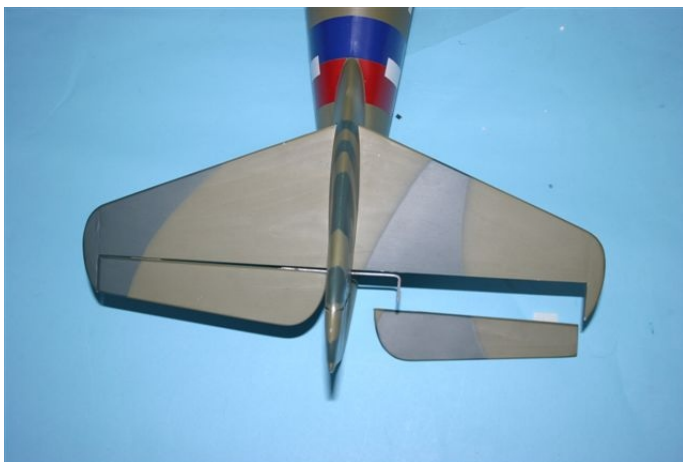
Make a S bend in the control-horn from the elevator crank like in the above picture. Install the pushrod connector in the control-horn use the small washers supplied to get rid of the slop. The hole of the pushrod connector should line up the middle of the crank.



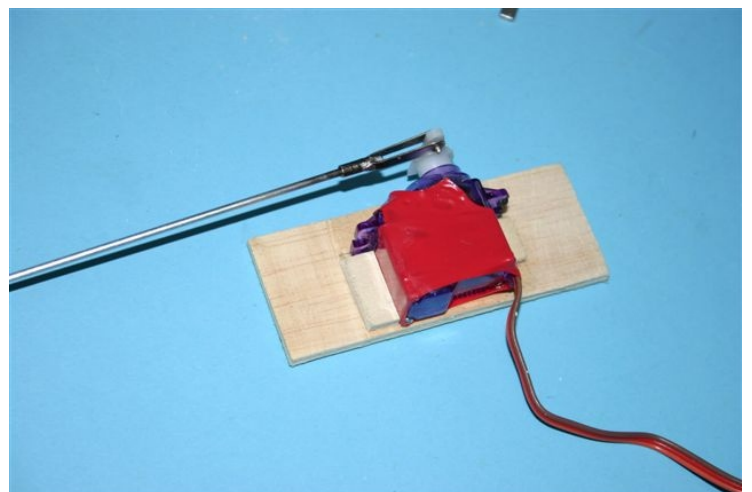
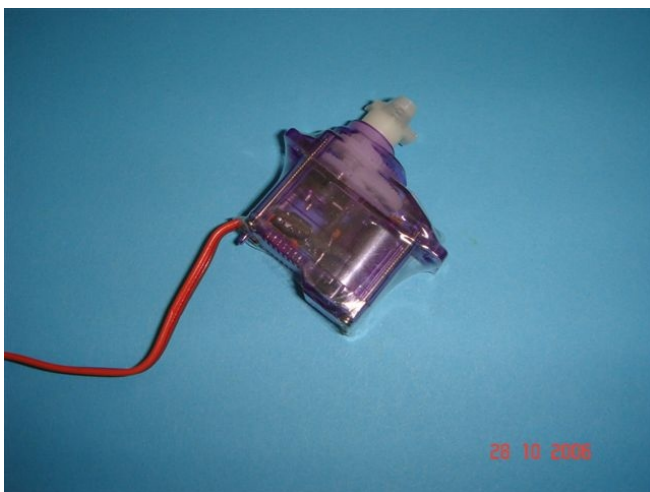
Put the crank in the stabilizer slot in the fuselage with the control horn inside the fin. Now slide in the stabilizer carefully with the supplied piece of clear ABS (to protect the paint) in the slot, when the stabilizer is in place remove the ABS sheet. Check with a ruler or measuring tape the alignment of the stabilizer. Now glue the stabilizer in place with thin CA.



Here You can see the pushrod connector with the hex setscrew. And again the stabilizer before it was glued in.

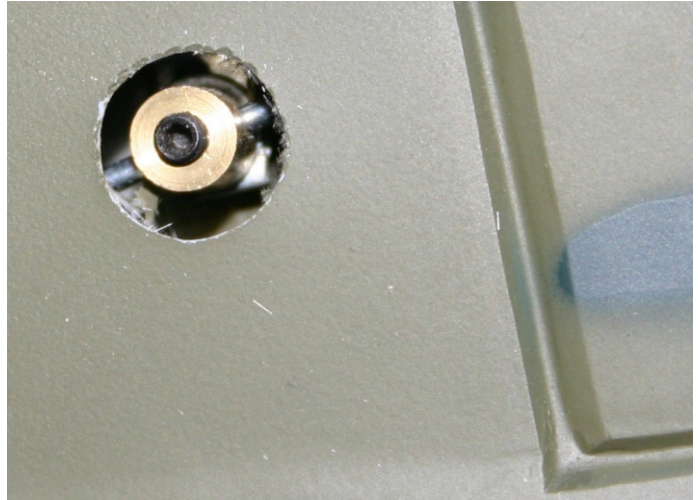
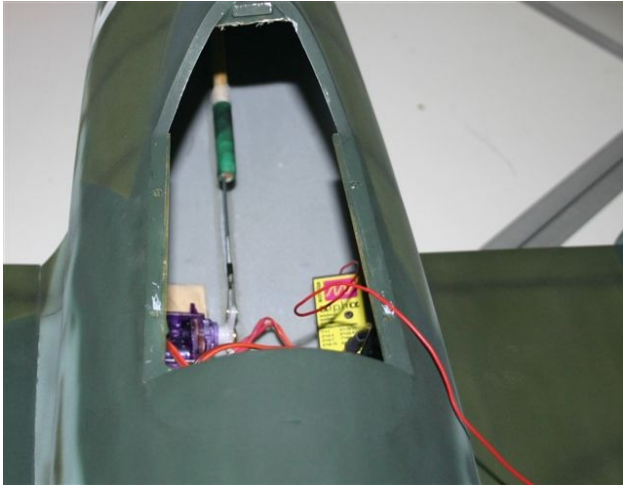


First glue the hinges with CA glue in the stabilizer, next glue the elevator crank with 5 minute epoxy in the elevator halves. Before you glue the crank in position it is advisable to put some plastic film between the stabilizer and crank, so the crank won't stick to the stabilizer. Now glue the hinge with CA glue in the elevator halves. ( see also next page)



Put tape or a shrinktube around the servo, place the servo on the Plywood former and glue the wood sticks (6x6mm) on the ply wood plate against the servo. Use CA glue. As You can see on the top picture the pushrod and devis are already installed on the servo control horn.

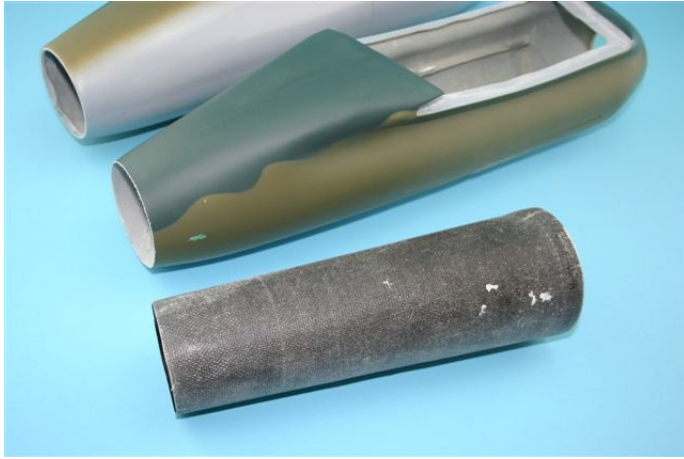




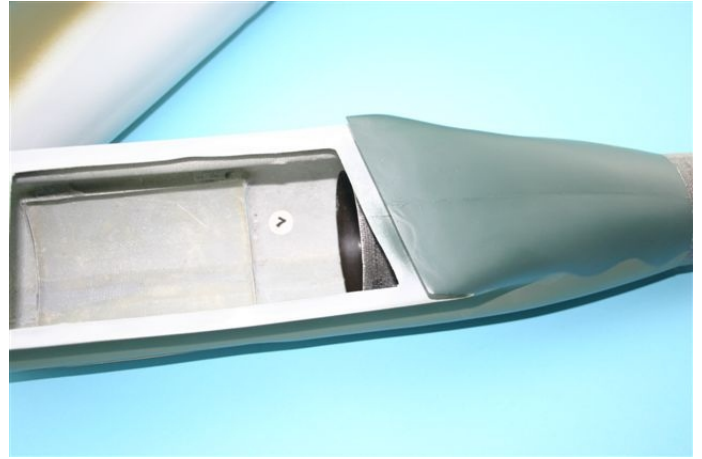
Route the pushrod from inside trough the fuselage, and insert the pushrod in the connector mounted on the control-horn. Check for free movement of the pushrod. Now you can glue the servo-tray in place with 5 minute epoxy. Make sure the elevator and servo are set to their middle position



Glue the hinge in place with thin CA glue from the bottom side look at the above picture. In the picture the elevator is shown, but the aileron hinges are glued in the same manner.



Now we start with the nacelles. We advise to go slowly. Use a half-round file to open up the front and back opening, file the opening until you have a thin wall. See pictures above. Now sand the edge back with a fine grid sanding paper on a block. Always sand carefully toward the centre not to damage the airbrush paint. Intake should be around 60 mm diameter. Exhaust 58 mm.



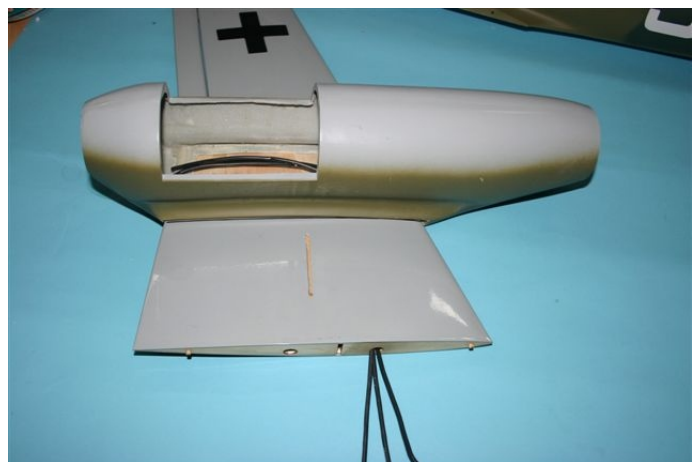
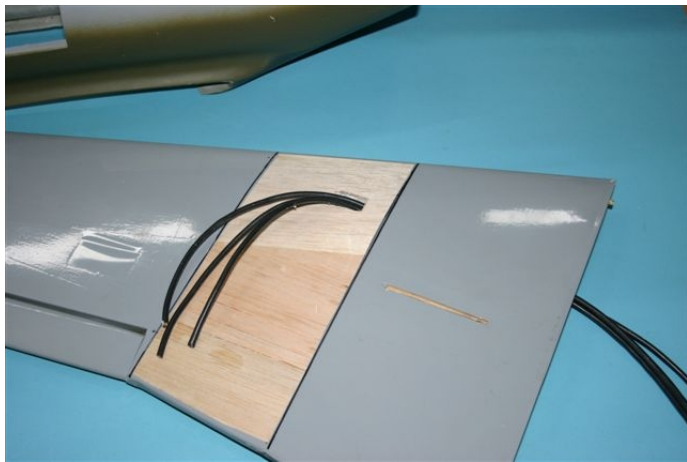
Now fit the intake tube in the nacelle. It should protrude around 50 mm in the front. Look at the above pictures. Both nacelles should be symmetrical.



Now you can glue the intake tube in place with 5 minute epoxy. Apply only a bead of epoxy inside the front of the nacelle then put the intake-tube in place. Use a fan-unit with the connector tabs trimmed off to align the intake tube. Note in the above picture that we put a 60 mm long abs ring around the fan unit, this makes the alignment easier. After the glue has set you can cut off the front protruding intake tubes. And sand the front flush use a sanding block with a fine grid sanding paper.



Use the supplied cardboard template to position the nacelles on the wings. ( about 109-110 mm parallel to the wing root) Mark the position of the nacelle with a marker on the wings. Now remove the covering leaving a small edge inside the marked area. Now you can enlarge the hole for the motor wires . this makes it easier to route the wires through the wing.

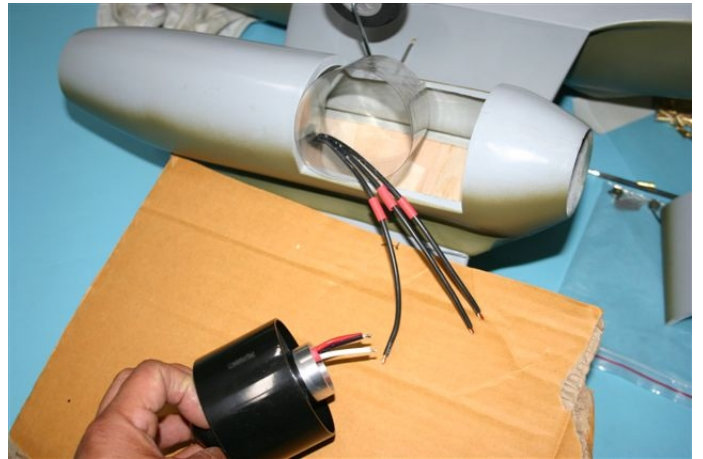


We advise to put the ESC inside the fuselage and route 3 pieces 400 mm long 14 AWG or 2.5mm<sup>2</sup> wires through the wing like in the picture. Now you can glue the nacelle in place with 5 Minute epoxy. If the edge is a little deformed you can make it soft with some hot air from a hairdryer . Only apply epoxy on the nacelle.

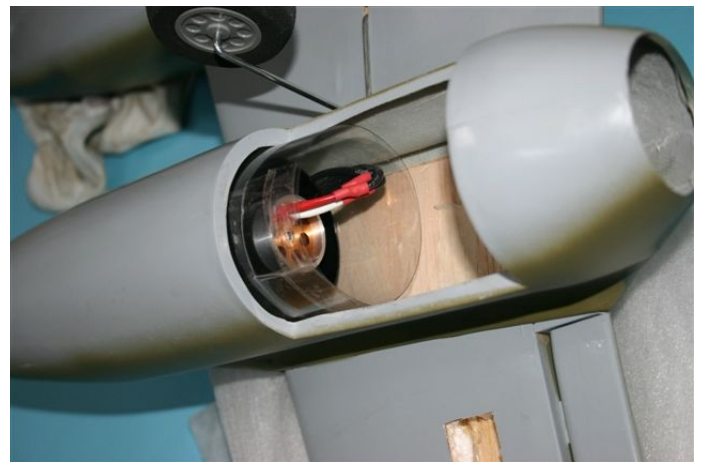
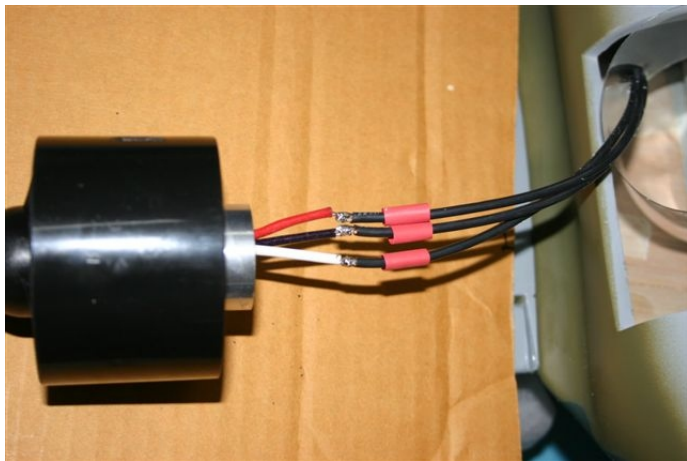


Fit the hardwood wing joiner in the fuselage and wing and see if the wing fits nicely. Start by gluing one wing panel with 5 or 30 minute epoxy. First apply some epoxy inside the wing joiner slot in the fuselage. Press the wing joiner inside the fuselage. Remove excess epoxy. Now apply epoxy in the wing joiner slot in the wing root and also apply epoxy on the wing root. Slide the wing over the hard wood wing joiner and press the wing against the fuselage. Make the leading- and trailing edge align with the fuselage. Remove the excess epoxy with a clean cloth and cleaning alcohol. When the epoxy has cured you can do the other wing panel the same way.





Before you start make sure the connectors are soldered on the ESC side. We trimmed of 10 mm from the front of the 6904 fan-unit shroud and installed a 3W motor. We also made a 60 mm long abs ring which fits tight around the fan-unit . Also we cut off the mounting tabs from the shroud. Make a hole in the abs ring for the wires to come trough. See picture above and pull the wires a little outside . Place an old blanket under the fuselage to protect the paintjob.

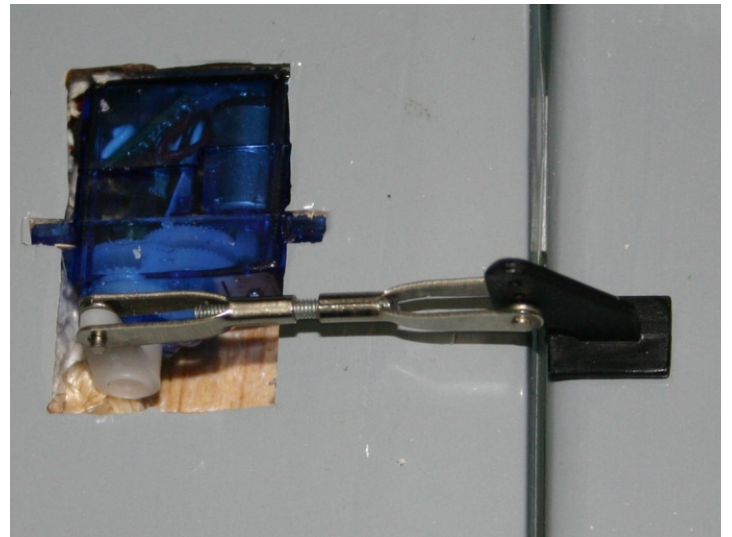
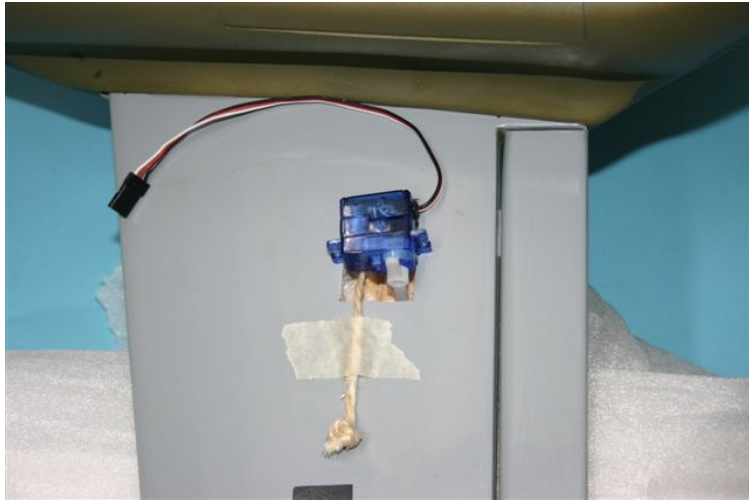


Put shrink-tube around the wires. Solder the wires to motor, shrink the tubes over the solder joints. So there can't be a short circuit. Now slide the abs ring over the fan-unit. And tape the abs ring to the fan-unit. Slide the faint in the intake tube of the nacelle. You could chamfer the front edge of the fan-unit before you install it.



Now you can make the back trust-tube. Just role the Abs sheet as in the picture .make a tight fit around the front abs ring and mark its position also mark the exit of the nacelle. Take the abs sheet out and cut it to size and tape it together. Than tape the abs tube to the abs ring. Install the esc inside the fuselage And check if the motor turns in the right direction. Change it if necessary.

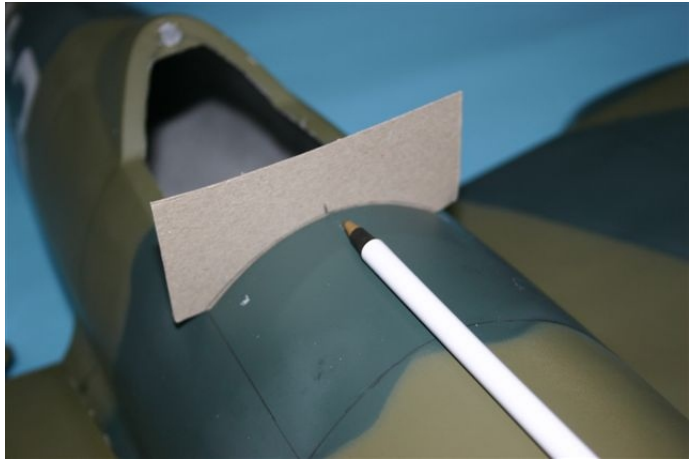




Install the servos in the wings, Cut the servo hole to match your servo's lengthen the servo cables to 350 mm. Make the pushrod as in the picture with 2 clevises and only the treaded part of the steel pushrod. Cut a small slot in the aileron and fit the control horn. Trim the tab of the control so it sits nicely in the aileron. Than glue it in place with 5 minute epoxy. Route the servo wire trough the wing and glue the servo in place with 5 minute epoxy.



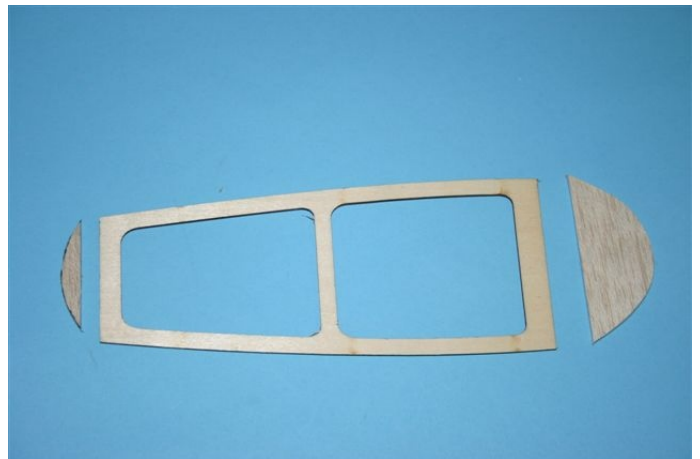
Now you can cover the servo hole with the supplied covering film. Use CA glue to glue the hinges of the aileron.



Make a cardboard template as in the picture.



Mark the curve to the canopy and trim the canopy so that it fits flush with the fuselage.



Assemble the canopy frame ( our F104 shown here).



## CANOPY:

Don't get confused about the below pictures because we also show the canopy of our F104 but the steps for the F15 are exact the same.



Get the canopy bottom, front and the back plate, place on the fuselage. secure the bottom plate with some tape. Now glue the front and back plate to plywood canopy bottom.



Drill a 3 mm hole through the front plate and fuselage. Let the dowel stick out a couple of mm and glue the dowel to the plywood front former. Remove canopy frame from the fuselage. Now sand the edges of the canopy frame so that it fits within the outlines of the fuselage.



Put the Canopy floor on the fuselage, and do some last adjustments to the canopy floor and ABS canopy. Glue 2 magnets in the back edges of the cockpit floor. Also glue them inside the fuselage direct under the other magnets.



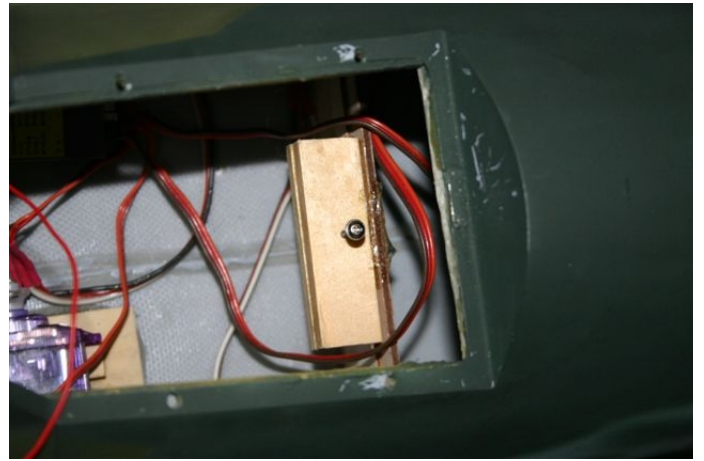
Now place ( after the paint has dried) a piece of plastic film (cut-open plastic bag)  
under the frame .  
Now you can glue the abs canopy in place with 5 minute epoxy or canopy glue.



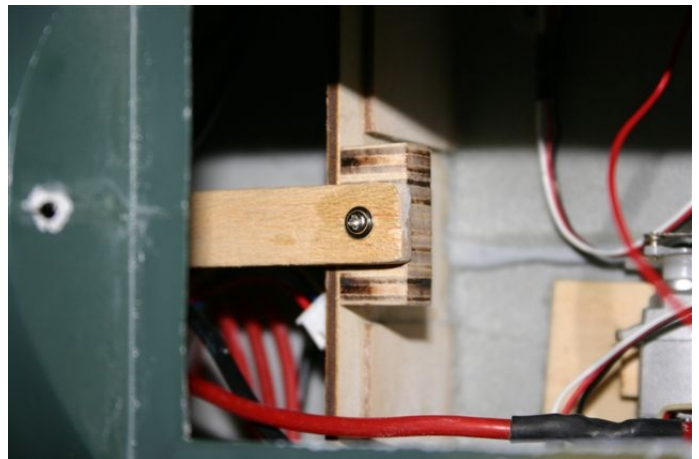
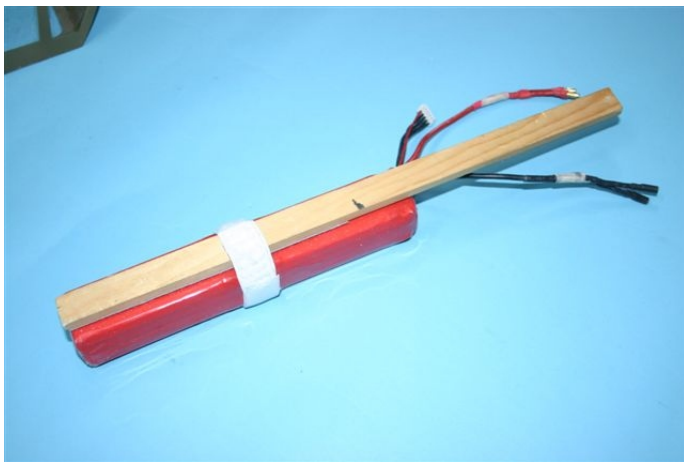
Install the landing ger as shown in the picture. Don't glue the front leg in the brass-tube. Ju bed it  
a little and insert it in the tube. The fuselage you have a little down pitch.  
Bend the bottom of the leg backward as in the picture below ( like a shopping cart wheel)



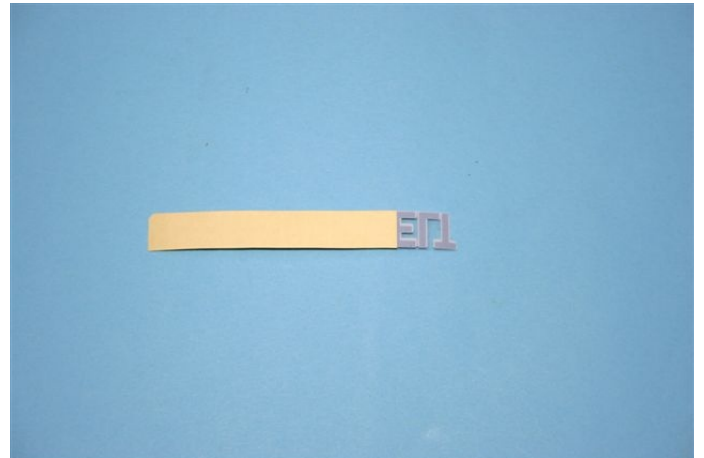




Battery installation mount you battery to the stick as shown in the picture below . glue the mounting tab to the former in fuselage as in the picture above don't forget to pre-drill the hole for the fastening screw.



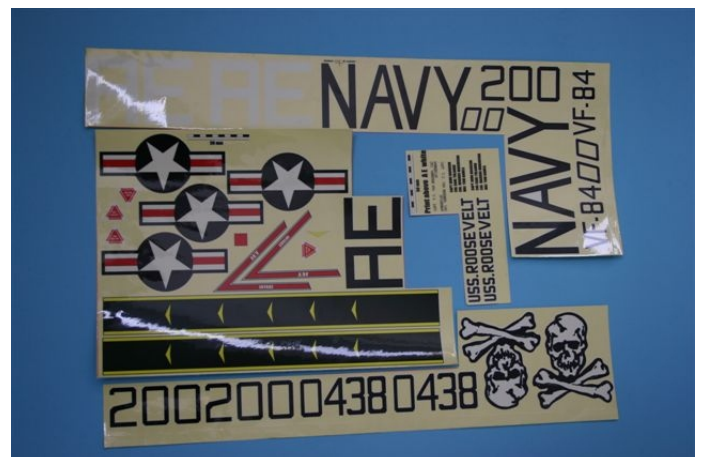
This page shows you how to apply decals ( our phantom is shown here)



Cut the decal from the decal sheet leave the protective back on the decal. Trim of 10 mm from the protective back.



Line out the decal on the area where you want to put the decal. Press the adhesive part. Check if the decal is lined out and remove the rest of the protective back.



Do this for all the decals



Settings:

C.G. 80-85 mm from the leading edge of the wing.

Elevator throws 8 mm up 8 mm down. Use 40% exponential

Ailerons throws 8 mm up 6 mm down. Use 30% exponential.

Aileron servos  $\geq 1.1$  kg torque

Elevator servo  $\geq 2.5$  kg torque

First Flight.

Use a bungee to start the plane. Before start is good to use some up trim. After start level the plane don't attempt to turn, climb and trim the plane. The ME262 can be flown very slow with a high AOT But never make turns with a high angle of attack (nose high position) You risk to drop a wing. It is possible to start from grass with the landing gear.

You will find the airplane is very nimble but has excellent stability. Loops and snap rolls are easily obtained with adequate entry speeds.. **Just remember to land level; as to avoid damage to the plane** . Happy Flying.

## WARNING!

Although the Starfighter is a stable airplane, it is not a trainer or first EDF airplane. This airplane is capable of very high speeds and therefore can cause serious personal injury and property damage. We strongly urge you to seek the help of an AMA approved instructor if this is your first aircraft of this type.

Please use common sense

***Fly in suitable areas for a high-speed aircraft such as an AMA approved field.***

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