

MTH HOBBY PRODUCTS INDUSTRIAL CO., LTD.

www.mth.com.tw mthhobby@mth.com.tw © MTH HOBBY 2015





FOKKER D.VII 1:7.4



SPECIFICATION:

Wing span: 1200mm
Wing area: 41 dm²
Length: 990mm

Weight: 1400g, including battery

Radio: 4 channels

Warning

An RC aircraft is not a toy! If misused, it can cause serious bodily harm and damage to property. Fly only in open areas, following all instructions included with your radio.

ESC: 50A

Motor: 800~900 KV brushless

Battery: Li-Po 4-cell 2200mAh and up

Thrust: 1.4 KGS and up

Before beginning the assembly, remove each part from its bag for inspection. Closely inspect the fuselage, wing panels, rudder and stabilizer for damage. If you find any damaged or missing parts, contact the place of purchase.



Contents of Kit / Parts Layout

Recommended radio and equipment (not included in kit):

6 channels radio x 1 piece

Receiver x 1 piece

16g servo x 4 pieces (metal gear with thrust 2.5KGS and up)

30cm extension x 2 pieces

Y-harness x1 pieces

Propeller: 12 x 6"-12 X8"APC

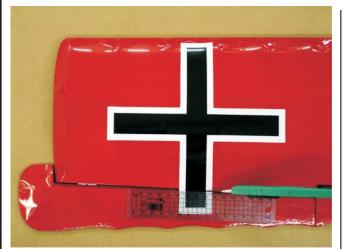
Motor: #600 800KV brushless; Thrust: 1.4 KGS and UP

Battery: Li-Po 4 cells2200mAh and up

ESC: 50A

Tools and suppliers needed (not included in kit):

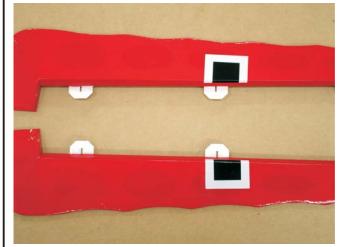
1200mmx 400mm x 10mm flat surface planking / Triangle ruler
Straight aluminum ruler 1000mm / Clips / Heavy object (around 1 KG) / Tissue
Double-side adhesive tape / Vernier scale / 10-12mm thickness planking
Sanding paper #150, #200 / Planer tool / 2mm hand driller / Ironer
Phillips screws driver #0/#1 / Curved scissors / Hobby knife / Hammer / Instant glue
UHU glue / Epoxy 5-10 minutes / Marker / CA glue / Driller 1.5mm/2mm/2.6mm
Transparent Tape / Masking tape / Paper / Black Spray Printing / Brush / Painting
Z-bend pliers / Side-cut pliers / 1.5mm Hex wrench / Solder Iron / Pin



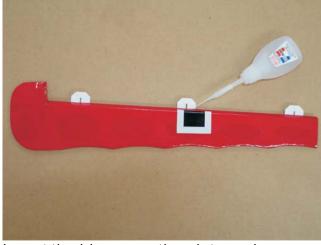
Place the ruler on the conjunction of the main wing and aileron. Use hobby knife to cut the decal and makes the aileron separate from the main wing.



Remove the aileron and insert the hinges into the slots.



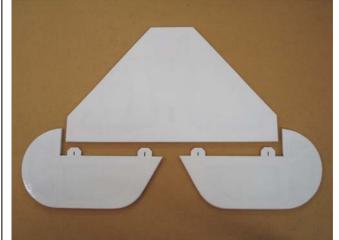
Press the edges of the decal toward the hinge and makes it flat.



Insert the hinges as the picture shown. Spread UHU glue on the surface of hinges and drop instant glue around the edges of hinges for securing the hinges in place.



Install the aileron onto the main wing. Keep the gap between main wing and aileron around 0.5mm and drop some instant glue to secure the hinge into the main wing.

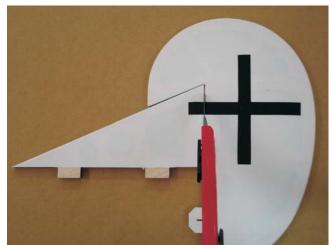


Place the horizontal on the working table. Remove the elevator from it.





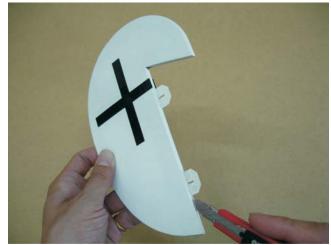
Install the elevator to the horizontal. Keep the gap between horizontal and elevator around 0.5mm and drop some instant glue to secure the hinges into the horizontal.



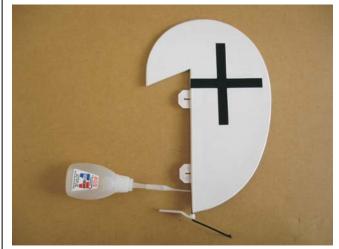
Place the vertical on the working table. Use hobby knife to separate the rudder from vertical.



Drop some instant glue to secure the hinges into the rudder.



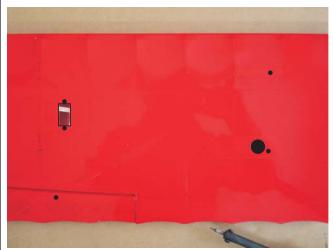
There is pre-serving slot on the bottom of the rudder. Try to find this slot and use hobby knife to remove the covering over this slot.



Try to find the tail gear from the hardware bag and insert the gear into the slot. If satisfy the installation, spread some instant glue on the gear wire and secure it inside the slot.



Try to find the pre-serving holes on the main wing for servo, for cable exit, for screw and for horn as the picture shown.



Use soldering to melt out the covering over these holes. Drop small instant glue on screw holes for reinforcement.



Place the bottom wing and wing reinforcement on the working table with the back facing upward.



Use soldering to melt out the covering over the screw holes.



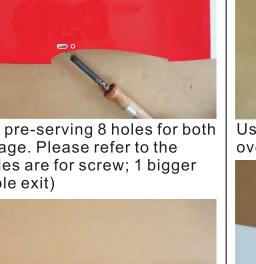
Spread UHU glue on the wing reinforcement and secure it onto the bottom wing. Make sure the alignment of the rear edges and the screw holes.



Use clip to hold the wing reinforcement in place for temporary until the glue dried enough.

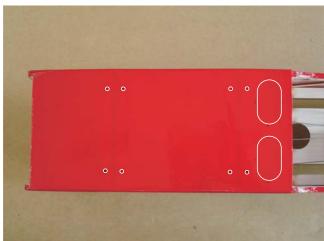


Try to find the pre-serving 8 holes for both sides of fuselage. Please refer to the picture. (7 holes are for screw; 1 bigger hole is for cable exit)

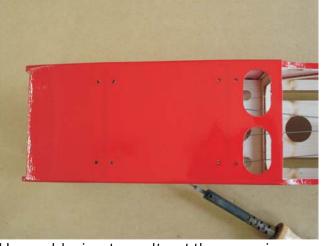


Use soldering to melt out the covering over these holes. Drop some instant glue on the screw holes for reinforcement.

SIZ



Place the front cover of the fuselage on the working table. Try to find the preserving 10 holes on it as the pictures shown.



Use soldering to melt out the covering over these holes.



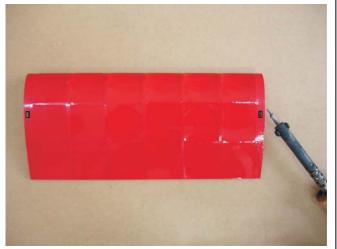
There are two holes on the tail of the fuselage for securing the tail gear mount.



Use soldering to melt out the covering over the holes.



There are two pre-serving holes on the top Use soldering to melt out the covering of sub wing. Please refer to the picture.



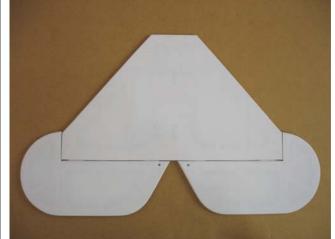
Use soldering to melt out the covering over the holes for installing the gear.



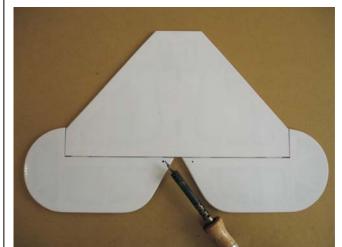
There are pre-serving slots on both sides of the sub wing.



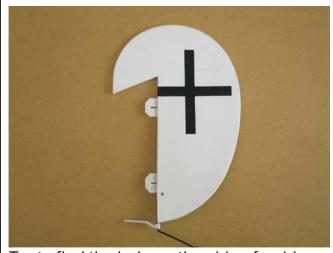
over the slots.



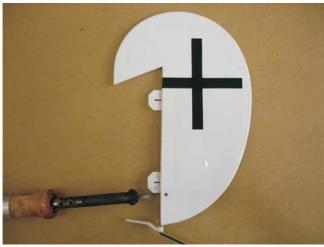
Place the horizontal on the working table. Try to find the holes on the elevator as the picture shown.



Use soldering to melt out the covering over the holes (2mm).



Try to find the hole on the side of rudder (below the second hinge).



Use soldering to melt out the covering over the hole (2mm).



Place the top main wing on the working table with the back facing upward. Try to find the pre-serving slots on the fourth rib. Use hobby knife to cut off the covering over the slots.



Use ironer to trim the edges of the slots.



Place the bottom main wing on the working table. Try to find the pre-serving slots on the second rib.



Use hobby knife to cut off the covering over the slots. Use ironer to trim the edges of the slots.



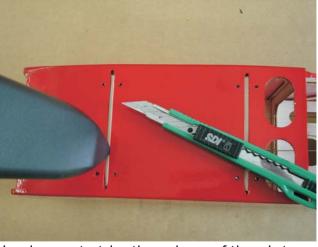
Place the bottom main wing on the working table. Try to find 2 pre-serving slots around the center part.



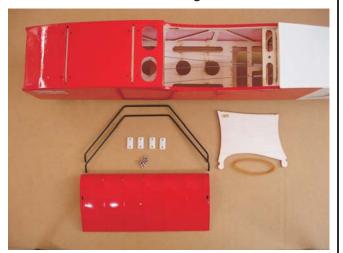
Use hobby knife to cut off the covering over the slots. Use ironer to trim the edges.



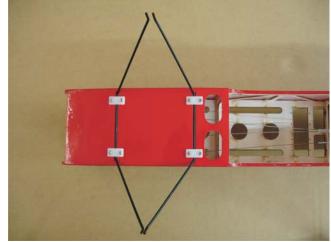
Place the fuselage on the working table with the bottom facing upward. Try to find 2 pre-serving slots. Use hobby knife to remove the covering over the slots.



Use ironer to trim the edges of the slots.



Place the fuselage, 2 pieces of main gear, sub wing, 4 pieces of plastic plates, 8 pieces of 2.6x8mm tapping screws, DW9 gauge and rubber band on the working table for installing main gear.



Try to fit the main gears into the slots; place plastic plates over the gear and secure the gear in place with 2.6x8mm tapping screws.



Place the DW9 gauge on the center position of the sub wing. Use rubber band to hold the DW9 in position for temporary.



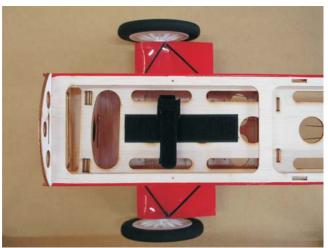
Try to fit the main gears into the slots on the sub wing with DW9 touching the bottom of the fuselage. Use AB glue to secure the main gear inside the slots.



Place 2 pieces of 3x280mm axles, 2 pieces of collars, 2 pieces of M3x4 hex screws, 4 pieces of 3mm washers and 2 pieces of 100mm wheels on the working table.



Insert the axles into the slots on the sides of sub wing. Install the washers, wheels (concave side facing outside), washers and collars in order. Secure the collars with M3x4 hex screws.

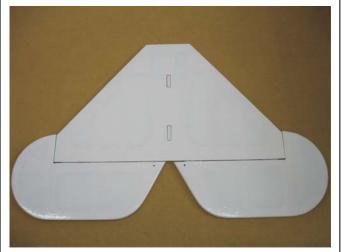


Apply a piece of adhesive Velcro tape inside the fuselage. Insert a piece of Hook-and-Loop through slot.



Try to find the locking rod in the hardware bag. Insert the locking rod from one side of the fuselage (behind the canopy), through the center slot on the latch and exit from another side of the fuselage. Drop some instant glue to secure the rod

on the center slot.



Try to find 2 pre-serving slots on the center part of the horizontal.



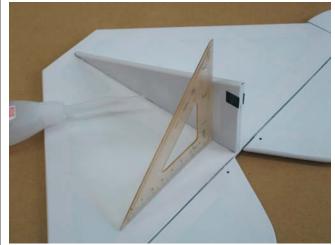
Use hobby knife to remove the covering over the slots.



Try to fit the vertical into the slots. When satisfy the location, use pen to mark the outline of the vertical on the horizontal.



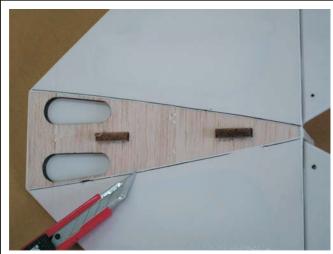
Remove the vertical. Use hobby knife to remove the covering inside the marking area carefully. Don't cut into the wood.



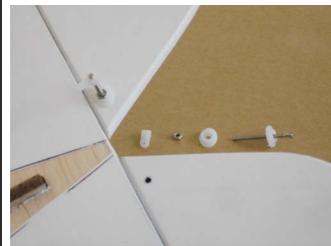
Fit the vertical on the horizontal again. Use a triangle rule as a guide for making sure the angle is 90 degree and secures the vertical in place with instant glue.



Try to fit the tail wing into the fuselage. The vertical must be fitted into the slot on the tail of the fuselage. When satisfy the location, use pen to mark the outline of fuselage on the horizontal.



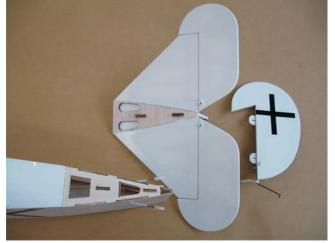
Remove the tail wing. Use hobby knife to remove the covering inside the marking area on the tail wing.



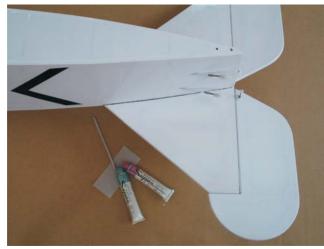
Place the control horn set on the working table, including top and bottom plastic mounts, M2 x 25mm screw, 2mm nut and one plastic horn. Insert the screw through the bottom plastic mount, elevator and top plastic mount and secure the screw with 2mm nut. Screw the horn onto the top the screw until even to the screw.



Place the control horn set on the working table and install onto the rudder.



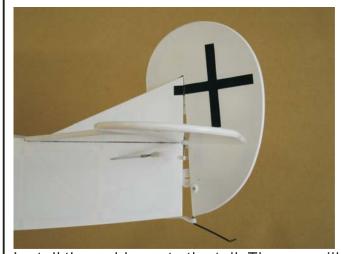
Place the fuselage, vertical and horizontal on the working table. Please refer to the drawing A and try to fit the vertical and horizontal into the fuselage. Place the main wing onto the fuselage for temporary when measure the distance between the main wing and tail wing. Make sure the distance must match the drawing A. This is very important before securing the tail wing into the fuselage.



Remove the vertical. Mix generous AB glue, spread on the balsa wood (the area without covering) of the horizontal and secure the horizontal onto the tail of the fuselage. Use pins to hold the fuselage in place for temporary until the glue dried enough.



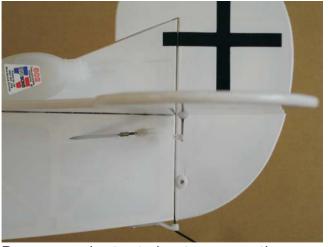
Use hobby knife to cut out the 0.35mm hole for installing rudder hinge on the bottom of fuselage.



Install the rudder onto the tail. The gap will be around 0.3mm.



Install the tail gear into the fuselage and secure it in place with 2x8mm tapping screws.



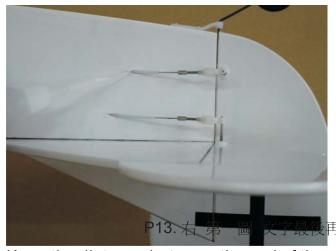
Drop some instant glue to secure the rudder hinges into the vertical and fuselage.



Take tail wheel, 2mm collar and M3x4 hex screw out of hardware bag. Install tail wheel to the tail gear and put on the collar. Keep the distance between the wheel and collar around 1.5mm and secure the collar in place with M3x4 screw.



Attach the clevises onto their respective horns on the elevator and rudder. Slide the silicone tube over the clevises for providing extra insurance against the clevises accidentally coming open.



Keep the distance between the end of the tubing and the end of rod around 15mm; us instant glue to secure the tubing on the fuselage.



Pull the tubing through planking (in the front of the servo tray) tight and use instant glue to secure the tubing in place.



Drop some instant glue onto the servo securing holes on servo tray for reinforcing the securing ability when screw in.



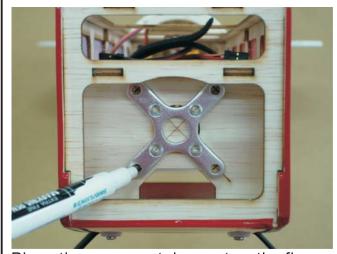
Place the servos, rod connectors, plastic nuts and M3x4mm hex screws on the working table. Use 2mm driller to drill the out-most hole on the servo arm. Install the rod connectors into the out-most hole and secure with plastic nuts and M3x4mm hex crews. Do screw too tight; make sure the rod connector can move freely.



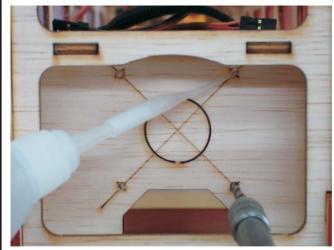
Set the servos at neutral position and secure on the servo tray with provided screws. Release the hex screw and insert the rod through the rod connector. Keep the distance between the end of the rod and the end of the tubing around 15mm; set the elevator align to the horizontal and secure the rods by tightening the hex screw. Set the rudder aligns to the vertical and secure the rod by tightening the hex screw.



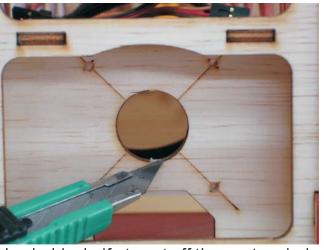
Place the ESC, propeller, aluminum nut, motor and its relative accessories on the working table.



Place the cross metal mount on the fire wall and set the cross mark on the center position of the metal mount. Use maker to mark the out-most 4 holes on the cross mental mount.



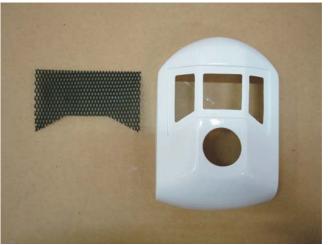
Use 2.6mm driller to drill open the 4 marked holes on the fire wall. Drop dome instant glue into the holes for reinforcement.



Use hobby knife to cut off the center circle hole on the fire wall.



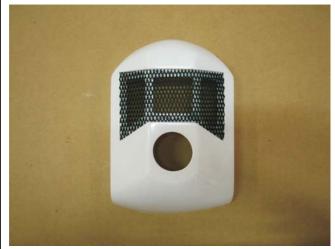
Secure the motor on the cross metal mount with provided screws. Connect the motor with ESC, set the ESC through the hole on the fire wall and secure the ESC on the bottom of the fire wall with Velcro tape. Secure the motor onto the fire wall with 3x16mm tapping screws.



Place the FRP cowl and venting net on the working table.



Try to fit the venting net onto the FRP cowl. Fold the bending part if necessary. Spread some UHU around the edges for attaching the venting net. Wait for 2 minutes and attach the venting net onto the cowl.

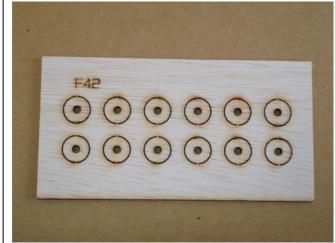


Try to press the venting net onto the cowl until the glue dried enough. It takes around 10 minutes.



Try to install the cowl to the nose, check if it will interrupt the operation of the propeller. When satisfy the location, use 2.8mm tapping to secure the cowl in position. It needs to check and set the

operation of the ESC and motor before securing the propeller. Therefore, please don't secure the propeller right now.



If equipped with short motor; please use the plates on F-42 to make the motor longer.



Place 6 pieces of long carbon fiber tubes, 2 pieces of short carbon fiber tube and 14 pieces of M2 x 25 screws on the working table.



Use nipple pliers to remove the heads of screws.



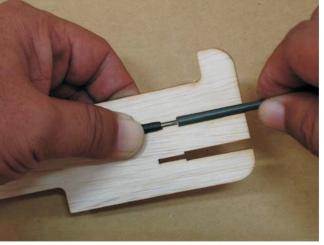
Use sanding paper to trim the ends of screws. Use wing strut gauge (including in the hardware bag) as a guide and insert the screws into the CF tubes to their respective length.



Please refer to the picture and set the length of the screws.



Use instant glue to secure the screws inside the CF tubes. Let dry.



Use the wing strut gauge as the guide and insert the black plastic ball-end to both ends of the CF tubes.



Now, there are 6 pieces of long rods and 2 pieces of short rods. Please use the gauge to make the length is correct.



Insert the metal balls into the plastic ballends. When press the metal ball, one end keeps short metal, another keeps longer metal



The longer metal end will be connected with strut. Please arrange the rods as the picture indicated (two long, one short and one long in order). Use M2x10mm screws and plastic nuts to secure the rods in location.



Repeat the same procedure and connect the rods to the right side strut.



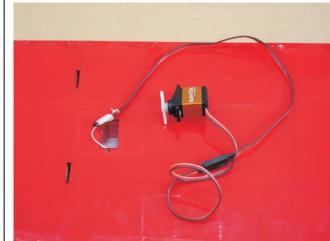
Place the left and right side struts on the sides of fuselage. Secure the rods on the fuselage with 2x15mm tapping screws.



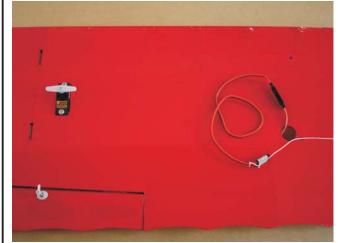
Top view of installing struts to the fuselage.



Secure the control horn set onto the aileron of top wing.



Connect the servo with 30cm cable. Apply a piece of transparent tape on the connecting place for avoiding loosing off. Connect the plug of extension with the cotton string inside the servo tray, and apply a piece of transparent tape to hold the conjunction in place for temporary.



Pull the cotton string from the cable exit until the extension is out of the main wing. Use hobby knife to remove the transparent tape. Fit the servo into the servo tray and secure it in place with the provided screws come with the servo. Connect the extension with the receiver and set the neutral position.



Attach the clevis onto the horn. Use a marker; place a mark on the unthreaded end of the pushrod where it passes the servo arm. Use Z-bend pliers; make a z-bend at the marked location. Cut out the excess rod around 6mm from the z-bend.



Install the z-bend into the outmost hole of the servo arm. Adjust the aileron toque rod length by screwing in or out until the aileron is exactly in the neutral position when the servo is centered and the clevis is in the aileron horn. Place a piece of silicon tube over the clevis for avoiding accidentally coming open.



Use instant glue to secure 2 pieces of MW15 into the slots on the center part of the bottom main wing.



Install the M3x25mm screw with 3x10mm washer into the rear edge of the bottom main wing. Place a piece of 5mm silicon tube on the end for avoiding missing.



Install the wood strut into the bottom main wing. Before inserting into the slots; please use fingers to press both sides of strut near, then into the slots and release fingers. The whole wood strut will be stuck inside the slot.



The completion of installing right and left wood struts into the bottom wing.



Pull the two ends of the Y-harness out of the holes on the sides of front fuselage.



Secure the bottom wing onto the fuselage.



Install the wood struts (MW17) into the long slot on the top wing.



Use the same way to make the struts get stuck inside the slot.



Place the CF tubes aluminum mount align the holes on the top wing and secure it in place with 2.6x8mm tapping screws. Release the screws and drop instant glue into the screw holes. Let dry and secure the screws back again for reinforcement the securing ability.



Connect the extension with Y-harness. Leave some cables on both ends and secure the cable on the CF tubes with cable-tie. Use side-cutter to remove the excess cable-tie. The length of the servo cable must be enough to the exit hole; if too short, please attach a extension.



The cable and plug outside the fuselage can be put into the exit holes on the fuselage and the top wing for neat looking. (When disassemble the main wing set: 1) Get the plug out the exit hole on the top wing. 2) Release the tapping screws on the CF tubes aluminum mount; remove the aluminum mount and thread the screws back to the top wing for avoiding missing. 3) Release the screws on the bottom wing. 4) Press the ends of the struts and remove the strut out of the slots.



Use hand driller to drill 2mm holes on the machine guns mounting slots.



Use hand driller to drill 2.6mm holes on the engine mounting location.



Use hand driller to drill 2.6mm holes on the marking holes of the pilot seat.



Apply the silver decal on the decorative engine.



engine, also drop small amount into the 3

screw holes.

Apply the instrument decal.

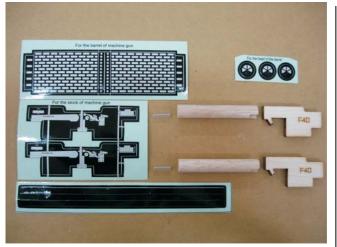


Locate the decorative engine onto the canopy and secure it in place with 2.6x 8 mm tapping screws.

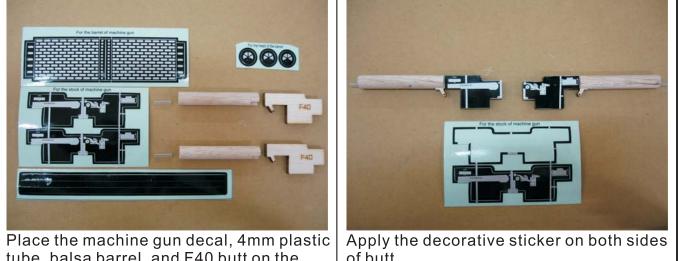


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The top view of the canopy after assembling.



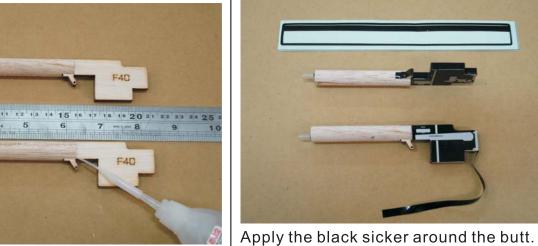
tube, balsa barrel, and F40 butt on the working table.



of butt.

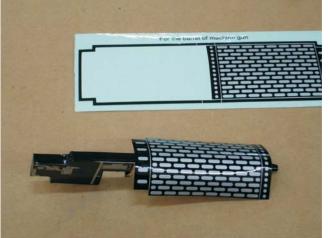


Insert the plastic tube into the barrel. Use instant glue to secure the barrel onto the F40. Place a straight rule on top of it; make sure the top of the machine gun is straight. Drop some instant glue to secure the plastic tube into the barrel.





Apply the decorative sticker on the front of the barrel. Use scissors to remove the excess sticker.



Color the parts w/o decal on the machine guns into black.



Apply the decorative sticker on the barrel.



Place the machine guns inside the slots on the canopy and use 2.0x6mm tapping screw to secure them in place.



The top view of the machine guns on the canopy.



Place the pilot inside the pilot seat. Use 2.6x8mm tapping screws and 3x10mm washers to secure the pilot in place. Don't screw too tight for avoiding thread damage.



Completion of the canopy.



When install the canopy into fuselage; make sure its front can be fitted into the latch on the fuselage; press the canopy into its location, the locking spring will get stuck and won't lose off easily. Move the locking spring backward can remove the canopy for changing battery very easy.

