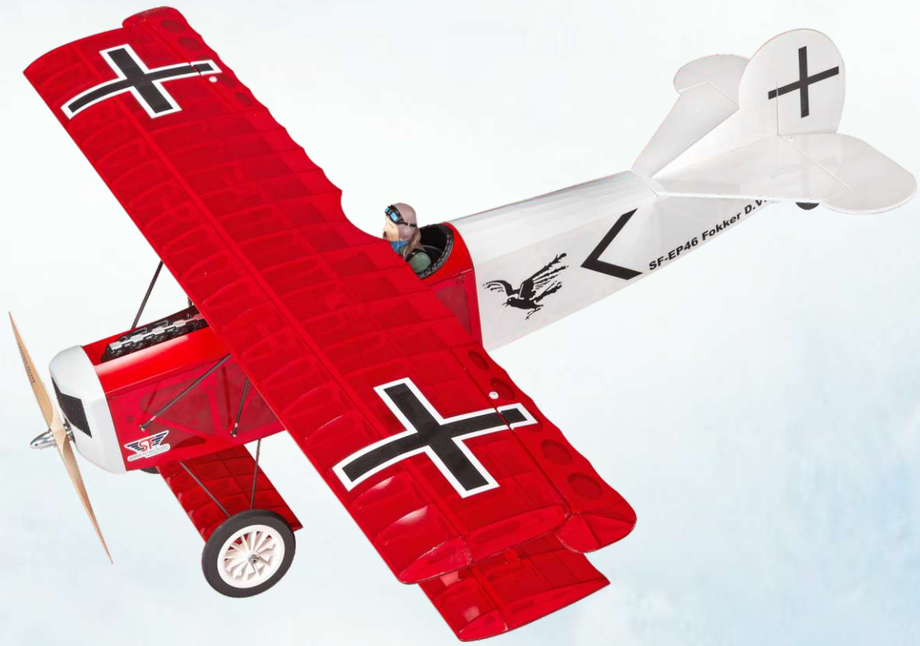
SUPER FLYING MODEL
MANUFACTURE

No.EP-46K

FOKKER D.VII

1:7.4



SPECIFICATION:
Wing span: 1200mm
Wing area: 41 dm
Length: 990mm
Weight: 1400g, including battery
Radio: 4 channels

Motor: 800~900 KV brushless
Thrust: 1.4 KGS and up
Battery: Li-Po 4-cell 2200mAh and up
ESC: 50A

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.
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.

INSTRUCTION MANUAL

SUPER FLYING MODEL
MANUFACTURE

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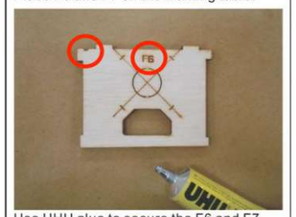
Notice

Please pay attention to the following 3 steps, make sure all the planking and direction is correct before gluing.

1. Please refer to page 18:

Place F6 and F7 on the working table.



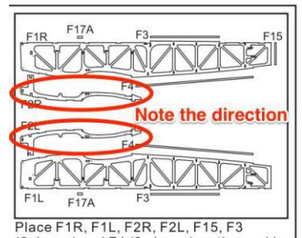
Use UHU glue to secure the F6 and F7 together. Please note the small recess on the top of the left sides and the alignment of every side. Wipe off the excess glue.

2. Please refer to page 19 & 20:

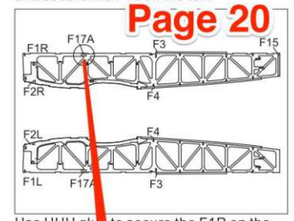
Try to fit the F6, F8 and F9 into the F16. Make sure the angle between F8/F9 and F16 is 90 degree. The cross marking on the F6 must face outside. The angle between F6 and F16 is 92 degree.

Close view of the small recess marking on the F6 and F16.

3. Please refer to page 20:

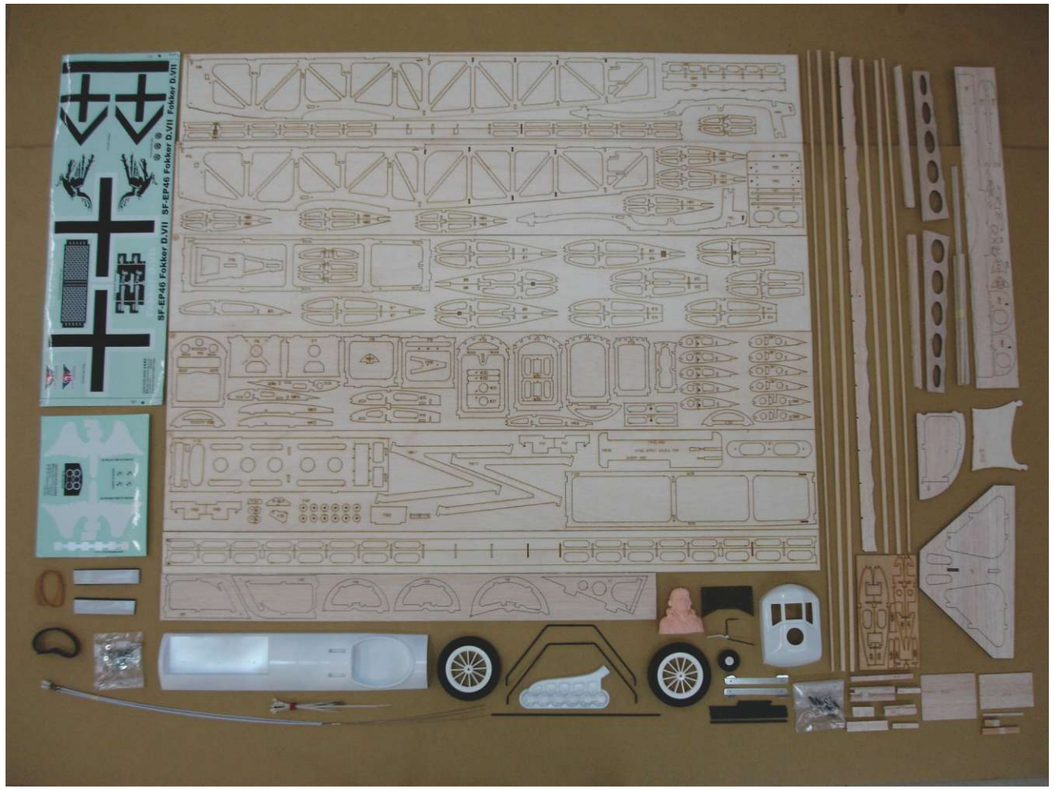


Place F1R, F1L, F2R, F2L, F15, F3 (2pieces) and F4 (2 pieces) on the working table in order for assembling the side boards for fuselage. Use instant glue to secure the F3 on the top of the side board; secure F4 on the bottom of the side board and secure the F15 on the tail.



Use UHU glu to secure the F1R on the F2R and sec e F1L on the F2L.

Place F17A o the side board; don't over the marking line on the picture.



Contents of Kit / Parts Layout

Recommended radio and equipment (not included in kit):

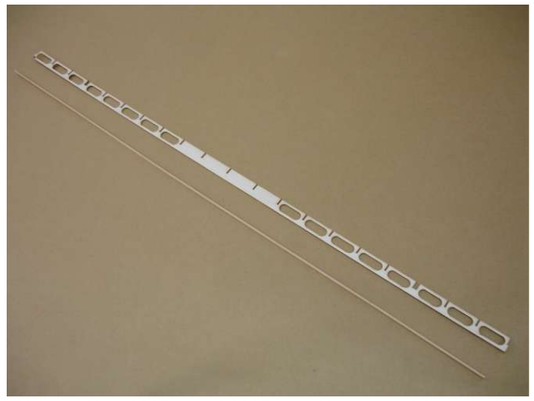
6 channels radio x 1 piece
Receiver x 1 piece
16g servo x 4 pieces (metal gear with thrust 2.5KGS and up)
30cm extension x 2 pieces
Y-harness x1 pieces
Propeller: 12 x 612 X8APC
Motor: #600 800KV brushless; Thrust: 1.4 KGS and UP
Battery: Li-Po 3-4 cells2200mAh and up
ESC: 50A

Tools and suppliers needed (not included in kit):

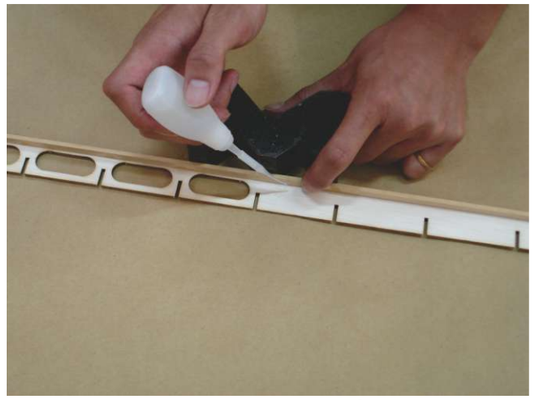
1200mmx 400mm x 10mm flat surface planking / Triangle rule /
Straight aluminum ruler 1000mm / Clips / Heavy object (around 1 KG) / Tissue /
Double-side adhesive tape / Vernier scale / 10-12mm thickness planking /
Sanding paper #150, #200 / Planer tool / 2mm hand driller / Ironer /
Phillips screws driver #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 /

TOP MAIN WING ASSEMBLY

Recommendation:
Try to find a flat surface planking (L:1200 mm; w:400mm) or glass as working table for the following steps.

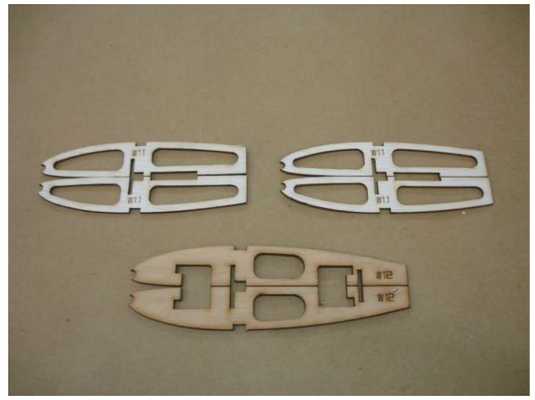


Place the W3 and W2 on the working table and the slot part upward.



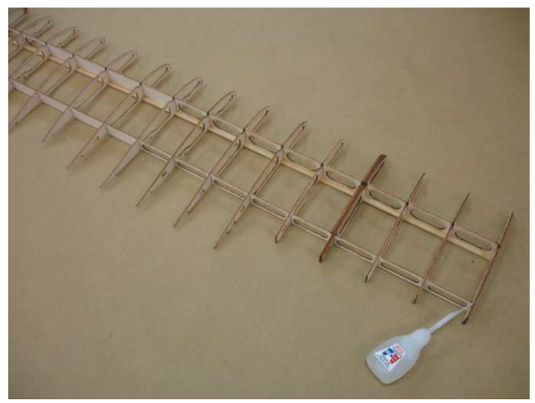
Try to place the 3mm wide of W3 on the bottom of the W2. Use triangle ruler when apply instant glue to secure the W3 on the W2.

Close view after glue. The slot part must be upward. The angle between W2 and W3 is 90 degree.



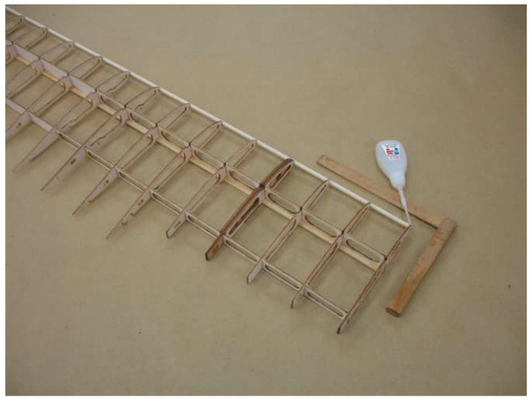
Try to find the 2 pieces of W11 and one piece of W12 from the laser-cutting parts bag and place them on the working table.

Apply UHU glue to secure the W11 on both sides of W12. Use clip to hold them together until the glue is dried enough. Make sure the combination remain aligned. Drop some instant glue on the edges. Repeat the same steps for another combination.

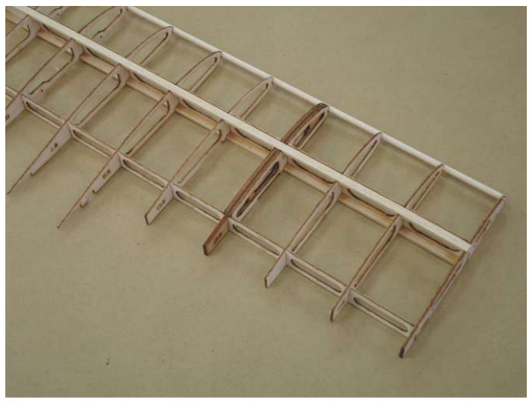


Refer to the assemble drawing; try to fit the W2 and W4. Don't apply any glue on them. Try to fit the W15 and drop very small amount of instant glue on the joint

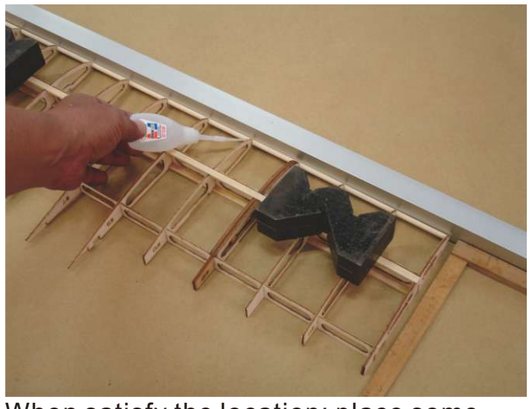
place. Fit the rib W6 from the center part. Fit other ribs W7, W8, W8, W7, W9, W10, W12, W13, W14 in order.



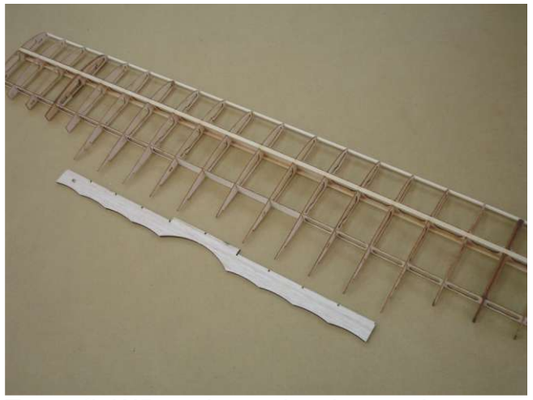
Try to fit the 5mm dowel as the leading edge. Use triangle ruler when drop instant glue to secure the dowel on the W5.



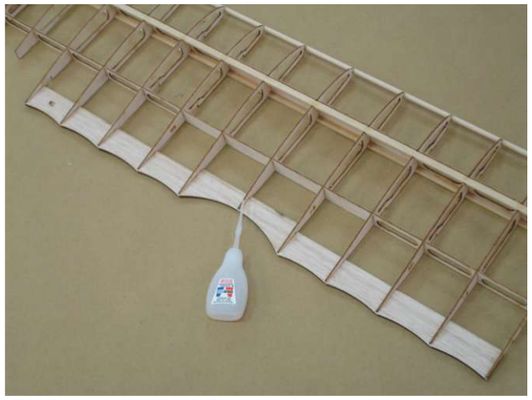
Try to fit the W3 on the main wing as the middle edge.



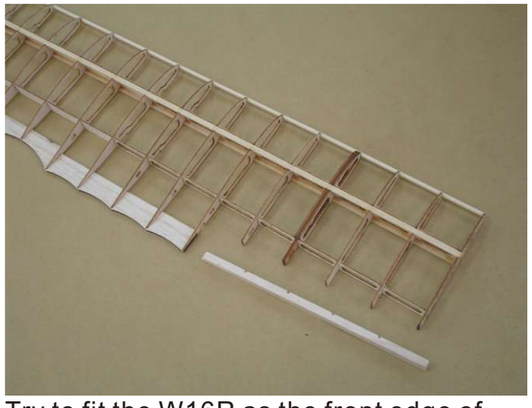
When satisfy the location; place some heavy thing (1 KG) on the middle edge. Place a long straight ruler on the leading edge. Make sure the angle between the ribs and leading edge is 90 degree. Use instant glue to secure the joint places on the leading edge.



Try to fit W5 on the main wing as the rear edge.

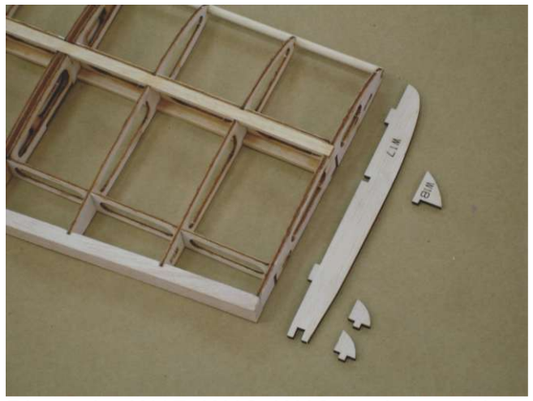


.Make sure the alignment of ribs on the W5. Drop instant glue to secure them in place.

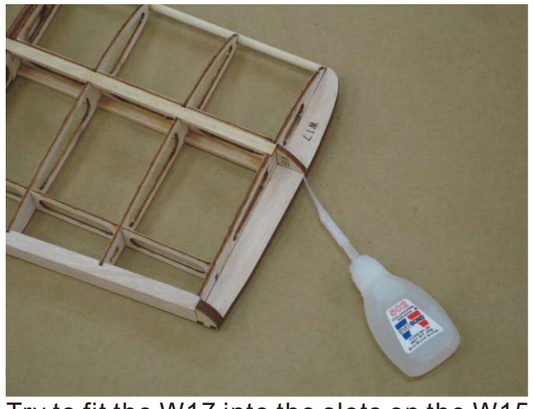


Try to fit the W16R as the front edge of aileron on the main wing. Please note: there is W16R (for the right wing) and W16L (for the left wing). The flat surface must face downward; the thick part must face the wing tip.

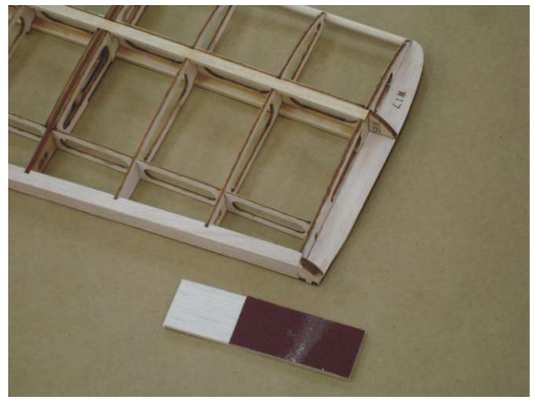
Press the W16R and makes the ribs fit into the slots. Drop some instant glue on the joint places.



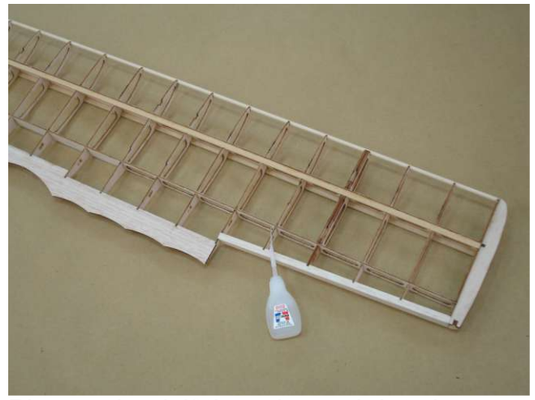
Place the W17, W18, W19 on the working table.



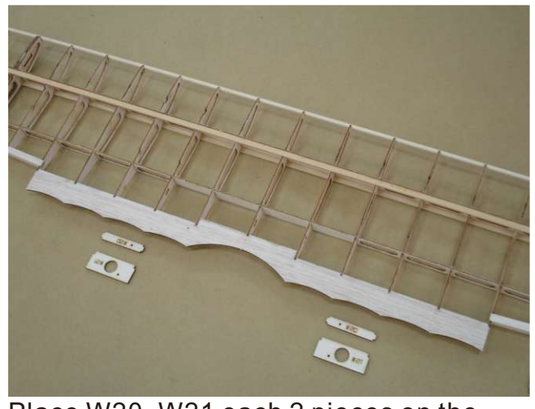
Try to fit the W17 into the slots on the W15. Drop some instant glue to secure the W17 in place. Try to fit the W18 between the middle edge the W17. Please note the angle must be 90 degree. When satisfy the location; use some instant glue to secure the W18 in place. Try to fit the W19 into the W17 and use instant glue to secure it in place.



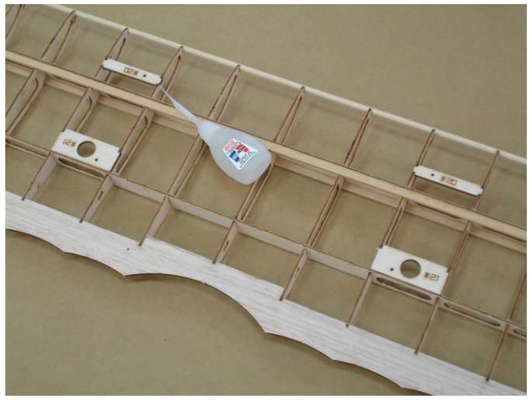
Use A piece of double-side adhesive tape to secure the sand paper on planking; use it to trim the uneven surface or excess glue.



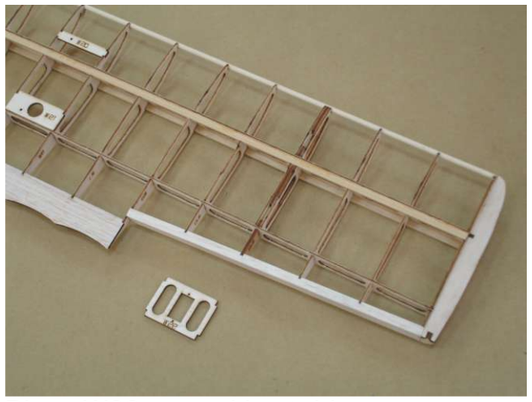
Please check if there is any joint places need to be secured by instant glue. Apply some UHU glue on the joint places of leading edge (dowel) and ribs. Wipe off the excess glue.



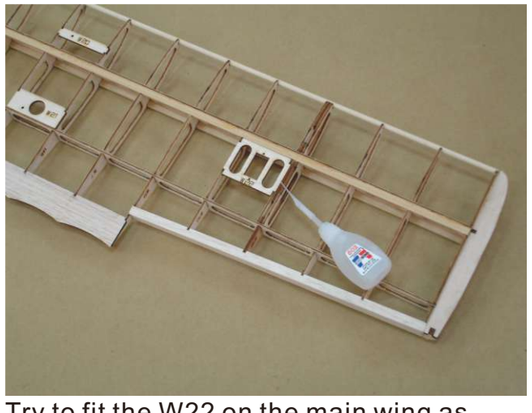
Place W20, W21 each 2 pieces on the working table. Please note the direction. There is one small hole on the W20 and W21. Place the side of the small hole face the center part of the main wing.



Try to fit the W20 on the main wing (near the leading edge); and fit the W21 on the main wing near the rear edge. Press them into the slots and drop some instant glue to secure them in place. Apply some UHU glue from inside for reinforcement.

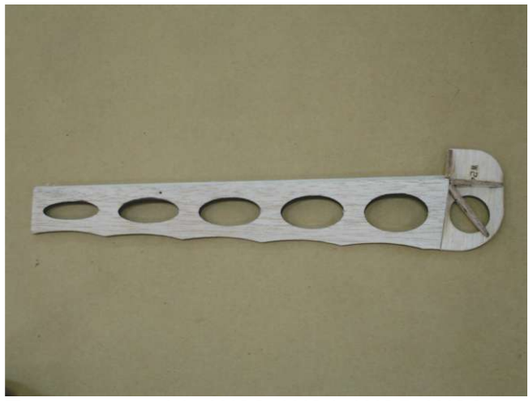


Place W22 on working table.

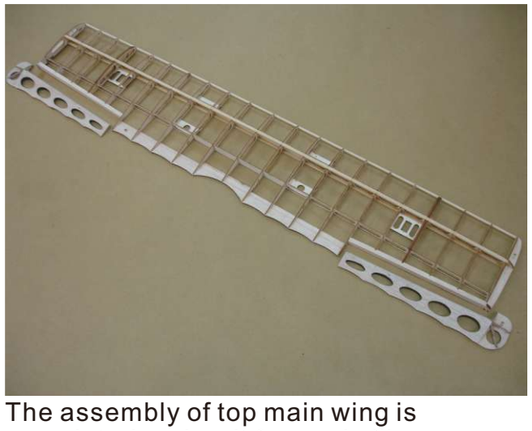


Try to fit the W22 on the main wing as servo tray. Press the W22 into the slots and drop some instant glue to secure it in place.

Place W23, W24, W25, W26, W27 as the picture indicated on the working table.

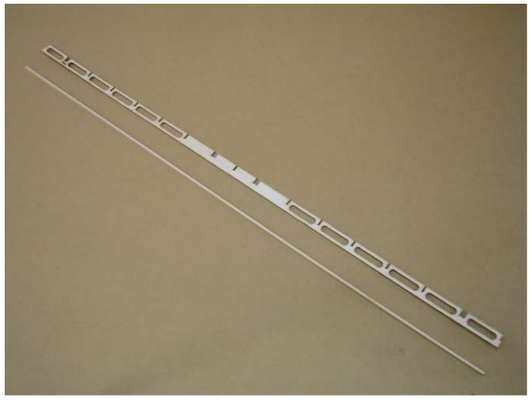


Try to assemble W23, W24, W25, W26, W27 and press them into its relative slots. Make sure the angle must be 90 degree. Drop some instant glue to secure them in place. Use sand paper to trim the uneven surface.



The assembly of top main wing is completed and wait for apply film.

BOTTOM MAIN WING ASSEMBLY



Place the MW3 and MW2 on the working table and the slot part upward.Both parts must be very straight.

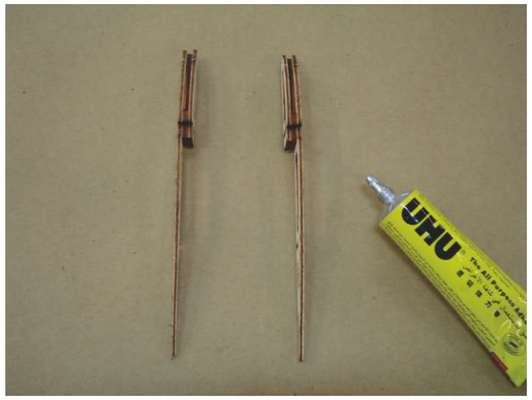
Try to place the 3mm wide of MW3 on the bottom of the MW2 (the side without any gaps). Use triangle rulerwhen apply instant glue.

Close view after gluing MW3 on MW2.

Place MW7 (2 pieces), MW8 (2 pieces) and MW9 (2 pieces) on the working table like the picture shown.

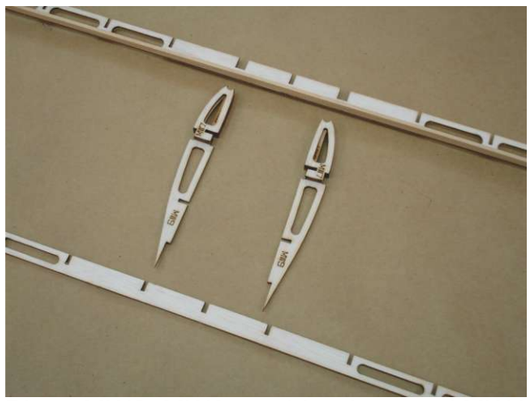
Apply UHU glue to secure MW8 on Mw9. Please refer to the picture. Spread some UHU on the surface of MW8 and place MW7 on MW8. Use clip to hold them together until the glue is dried enough. Make sure the MW9 combinations remain aligned. Drop some instant glue on the edges.

These two MW9 combinations are for left and for the right.



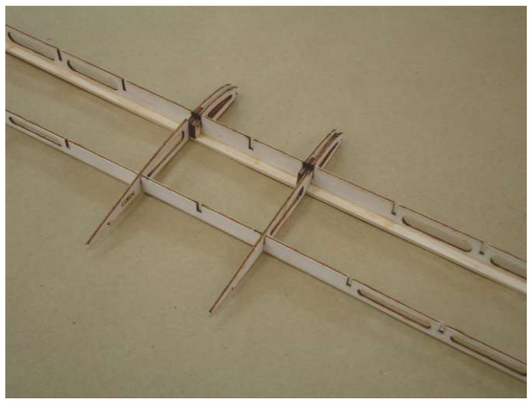
Top view of both MW9 combinations.

Place MW10 (4 pieces) and MW11 (2 pieces) on the working table.

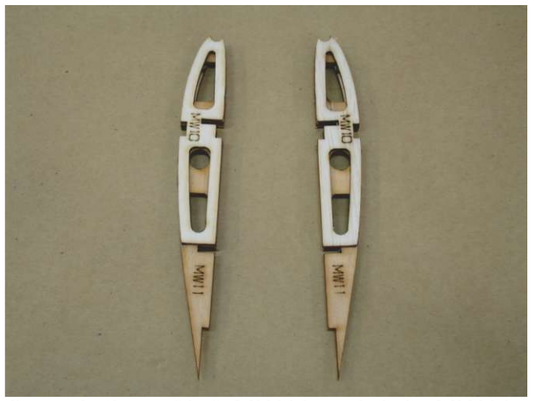


Place MW2, MW9 combinations and MW4 on the working table.

Use UHU glue to secure the MW10 on both sides of MW11. Use clip to hold them in place until the glue is dried enough. Drop some instant glue on the edges.

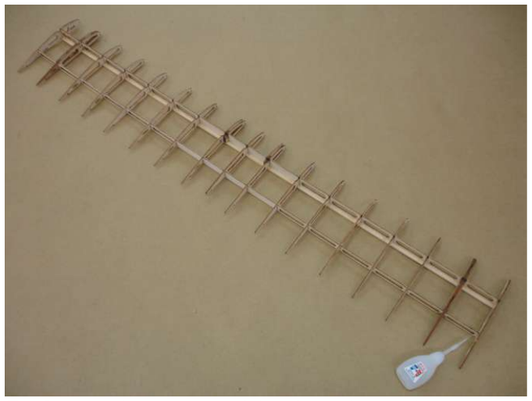


Try to fit the MW9 combinations onto the MW2 and MW4 like the picture shown. Left MW9 combination must be on the left side. Don't use any glue.

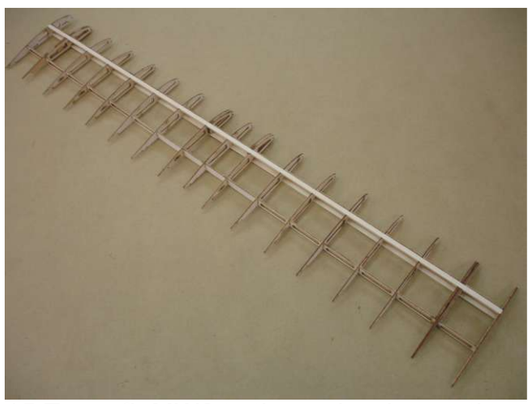


Completion of left MW11 and right MW11 combinations.

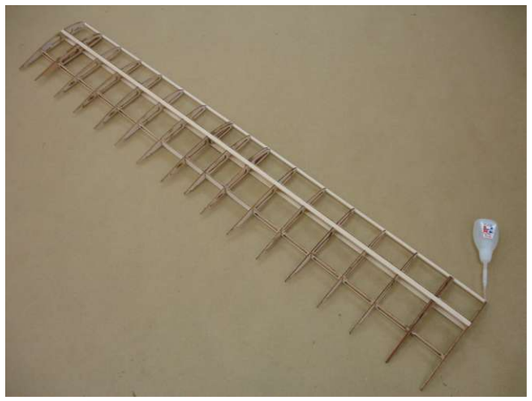
Top view of the left and right MW11 combinations.



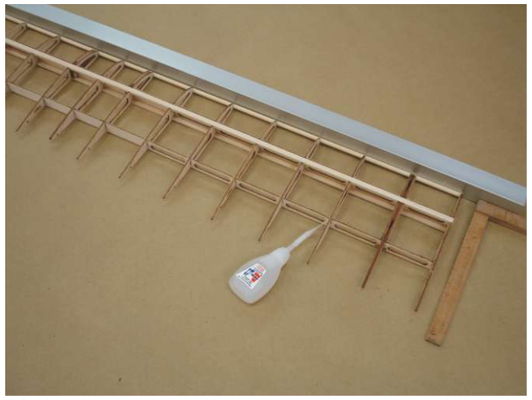
Refer to the assemble drawing when assemble the ribs to the bottom main wing. Try to fit the rib MW6 from the center part. Fit other ribs MW9 (6 pieces), MW11, MW12 in order.Don't apply any glue to the ribs. Fit MW2 and MW4 to the main wing and drop small amount of instant glue to fix them in place temporary. Drop some instant glue to secure the MW12 on the main wing as the wing tip.



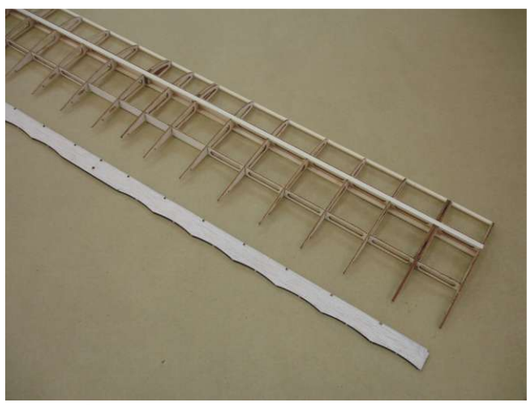
15.Try to fit MW3 to the main wing as the middle edge and press every ribs into its relatives slots. Don't apply any glue to the ribs.



Try to fit the 5mm dowel MW1 as the leading edge. Use triangle ruler when drop instant glue to secure the dowel on the MW12.

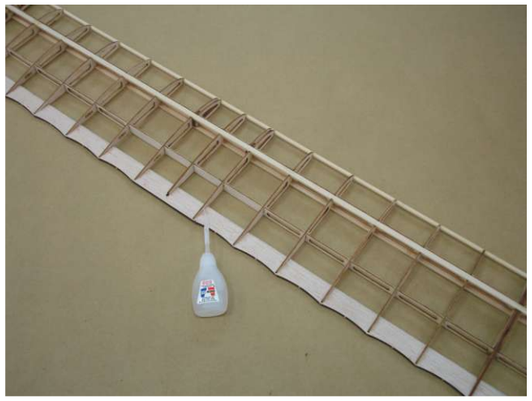


Make sure the alignment of every rib and place some heavy thing (1 KG) on themiddle edge. Place a long straight ruler on the leading edge. Make sure the angle between the ribs and leading edge is 90 degree. Use instant glue to secure the every joint place on ribs.

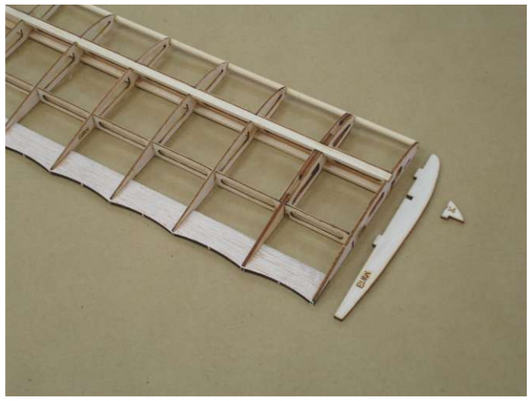


Try to fit MW5 on the main wing as

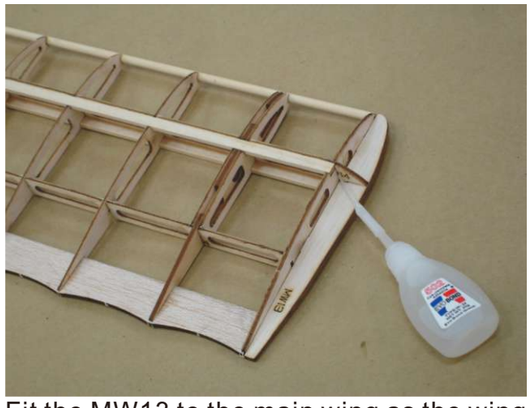
the rear edge.



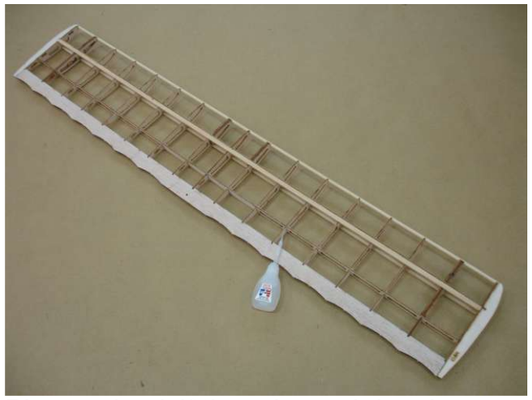
Make sure the alignment of ribs on the W5; press the ribs into its relative slots on the MW5. Drop instant glue to secure them in place.



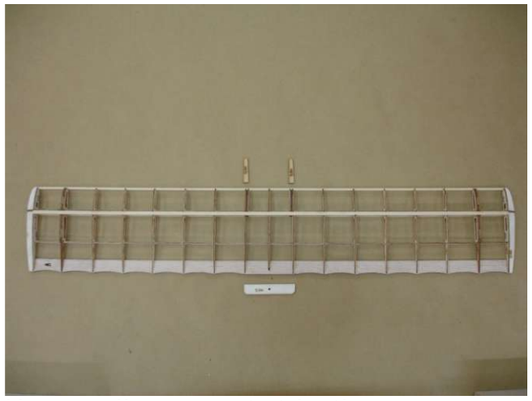
Place MW13 and MW14 on the working table.



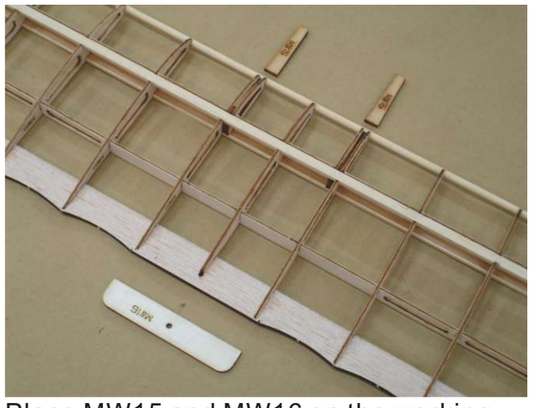
Fit the MW13 to the main wing as the wing tip. Fit the MW14 into the slot on the middle edge between the main wing and MW13. The angle between the MW14 and MW13 must be 90 degree. Drop some instant glue to secure the MW14 in place.



Please check if there is any joint places need to be secured by instant glue. Apply some UHU glue on the joint places of leading edge (dowel) and ribs. Wipe off the excess glue.



Use sanding paper to trim the uneven surface, wing tips and rear edge; wait for apply films.



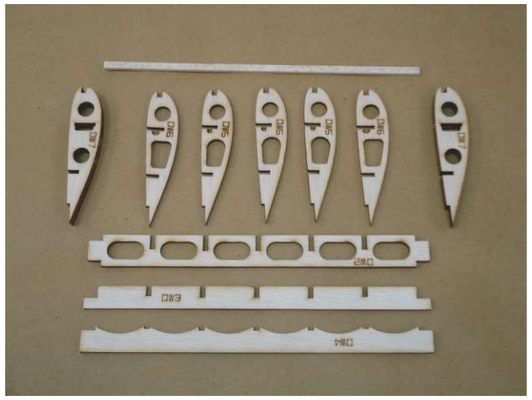
Place MW15 and MW16 on the working table. MW16 will be applied film on one side. MW15 won't need any film. Don't glue MW15 and MW16 to the bottom wing right now.

LANDING GEAR SUB WING ASSEMBLY

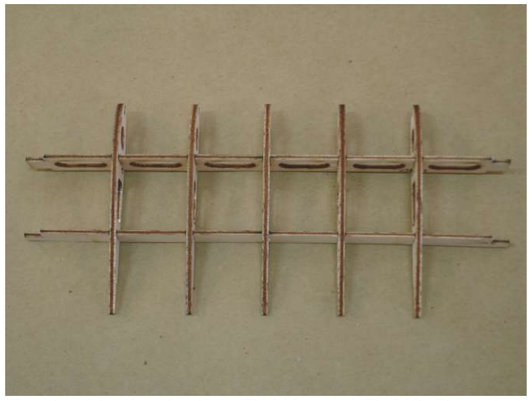
Place the DW7 (4 pieces) and Dw8 (2 pieces) on the working table as the picture shown.

Use UHU glue to secure DW7 on both sides of DW8. Make sure the alignment of the edges and use clip to hold the combination temporary until the glue is dried enough. Drop some instant glue on the edges.

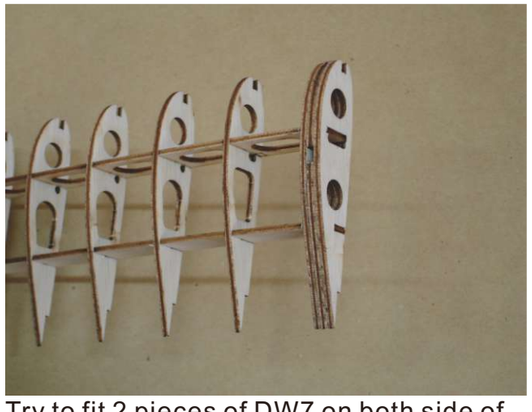
Top view of the DW7 combinations. There is one small hole on the top.



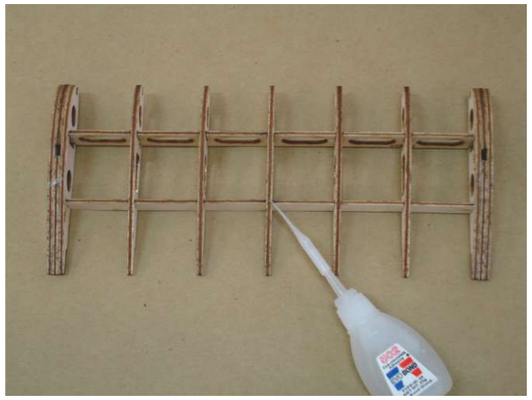
Place the following parts on the working table in order:
DW1leading edge
DW7 (2 pieces)ribs
DW6 (2 pieces)ribs
DW5 (3 pieces)ribs
DW2..middle edge
DW3.secondary edge
DW4.rear edge



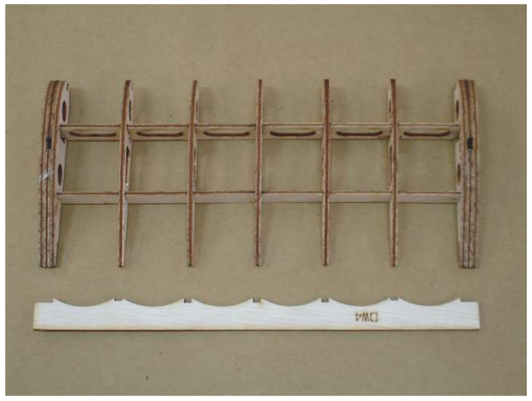
Try to fit ribs to the DW2 and DW3.Don't use any glue now.



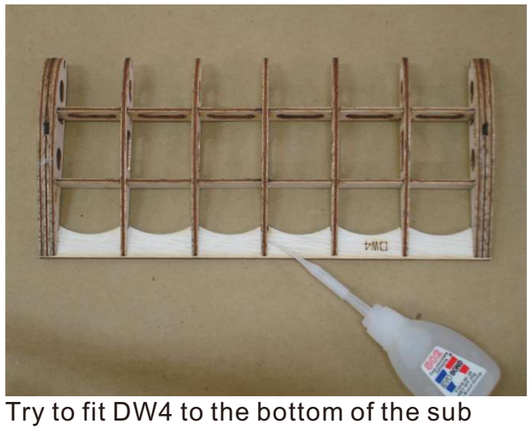
Try to fit 2 pieces of DW7 on both side of sub wing. Please note the hole on DW7 must face the upward.



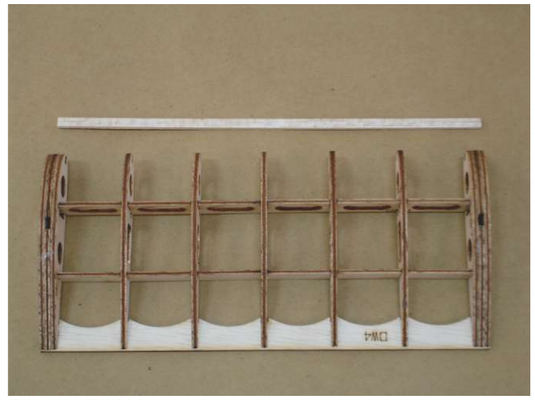
Make sure the alignment of every ribs and every angle must be 90 degree; use instant glue to secure the joint places. Spread some UHU glue on the joint places of DW7 with DW2 and DW3.



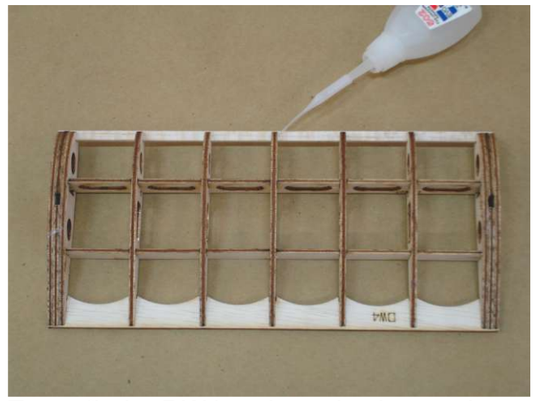
Place DW4 on the working table.



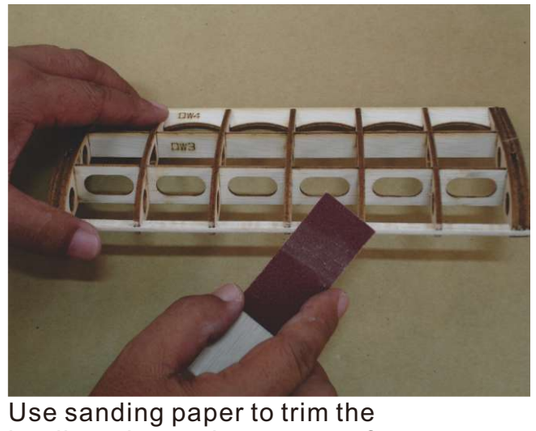
Try to fit DW4 to the bottom of the sub wing as the rear edge. Drop some instant glue to secure it in place.



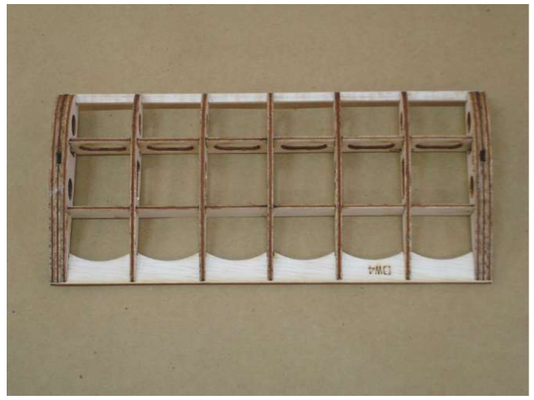
Place DW1 on the working table.



Try to fit the DW1 to the sub wing as the leading edge. Make sure the alignment of every ribs and drop instant glue to secure ribs on the DW1.

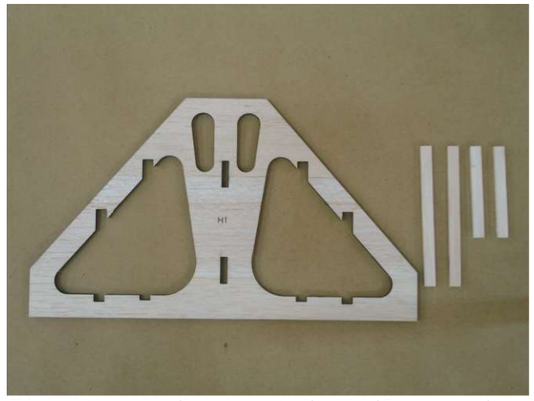


Use sanding paper to trim the leadingedge and uneven surface, chamfer the rear edge.



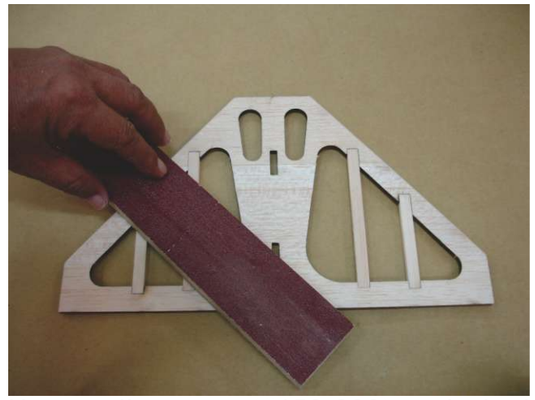
Completion of the sub wing and wit for apply films.

ELEVATOR ASSEMBLY



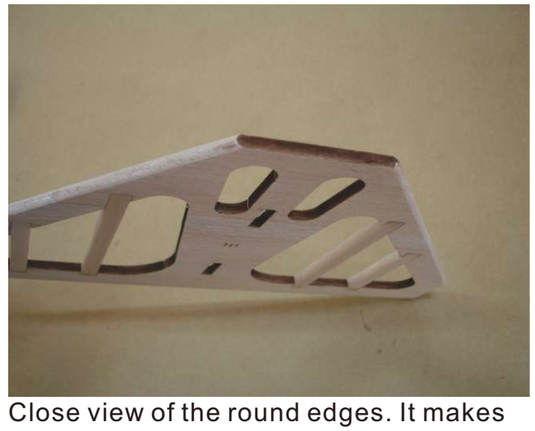
Place the H1 (horizontal), H4(2 pieces) and H5(2 pieces) on the working table.

Try to fit H4 and H5 into its relative slot on the H1. Make sure the surface is flat and drop instant glue to secure them in place.

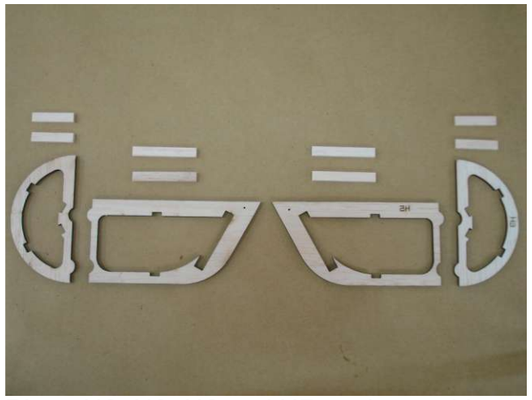


Use sanding paper (#150-200) to trim both sides of horizontal. Don't trim too much; make sure the thickness is 5mm.

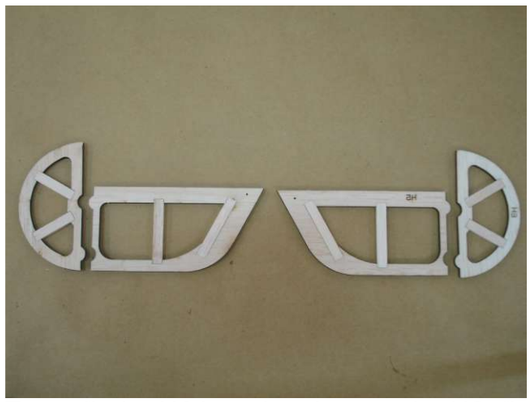
Use sanding paper to trim the side edges into round edges (R5).



Close view of the round edges. It makes the horizontal looking better and avoiding disturbed flow.



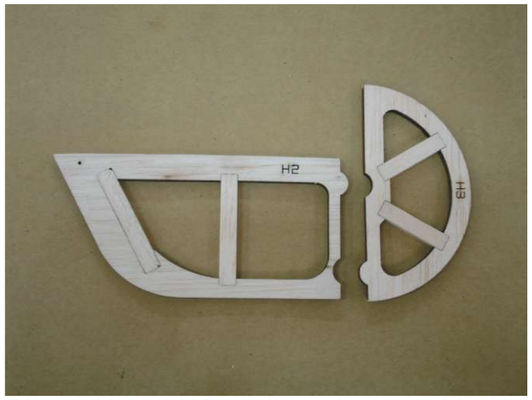
Place H2, H3, H6 and H7 on the working table for assembling elevator.



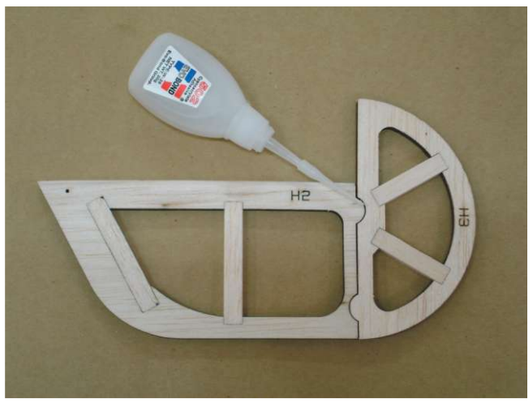
Try to fit the H6 into the slots on the H2; fit H7 into the slots on the H3. Drop some instant glue to secure the H6 and H7 in place. Don't secure H2 to H3 right now.

Use wooden planning tool to trim the tips into V shape on H2 (angle is around 30 degree on one side).

Close view of the V shape on the tip. It is also workable to use sanding paper to trim the tips into V shape; but be careful, don't trim too much.

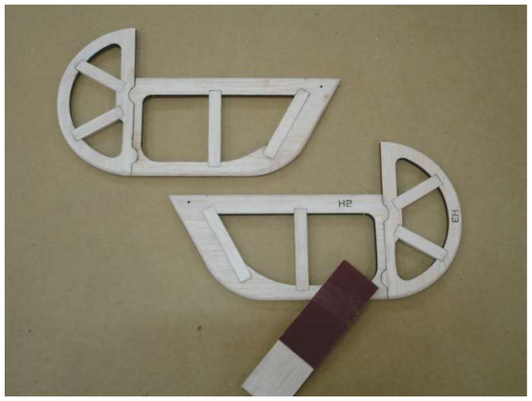


Place H2 and H3 combinations on the working table.



Try to fit the H2 into H3 and use instant glue to secure them in place.

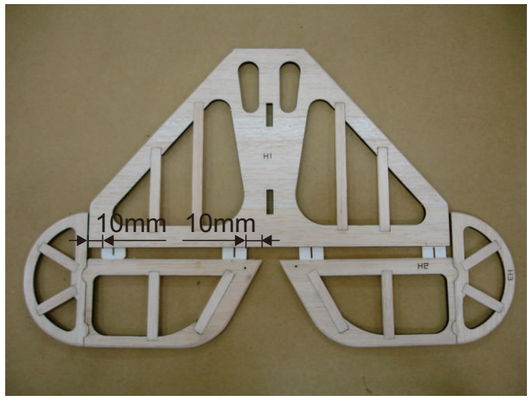
Use sandingpaper to trim the surface. Don't trim too much.



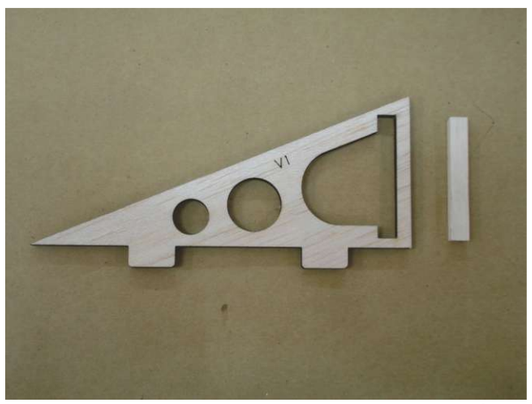
Use sanding paper to trim the edges into round edges (R5).

Close view of the round edges.

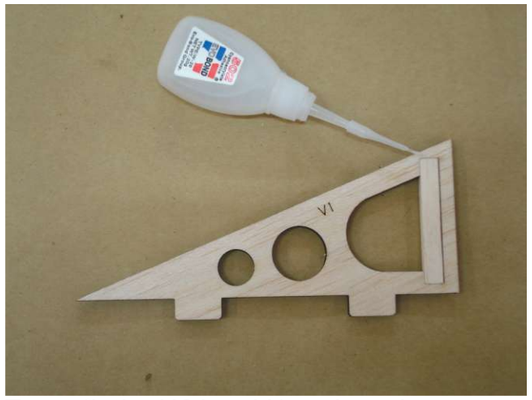
Please refer to the drawing on next step and mark the correct locations for hinges on the elevator and horizontal. Use hobby knife to cut the hole (width is around 0.5mm) for inserting the hinge (0.35mm).



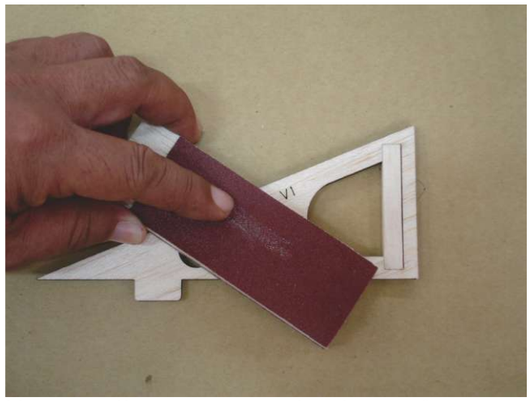
Try to fit the hinges into the holes.



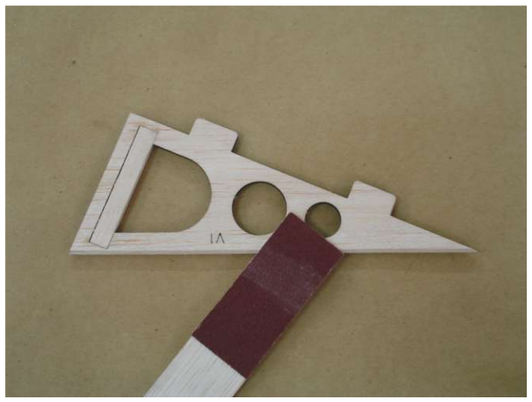
Place V1 and H6 on the working table for assembling the vertical.



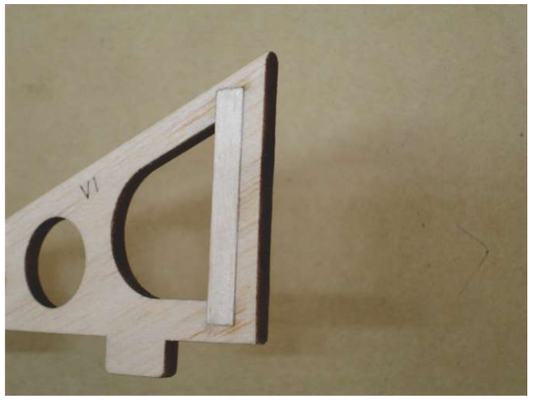
Try to fit the H6 into V1 and use instant glue to secure the H6 in place.



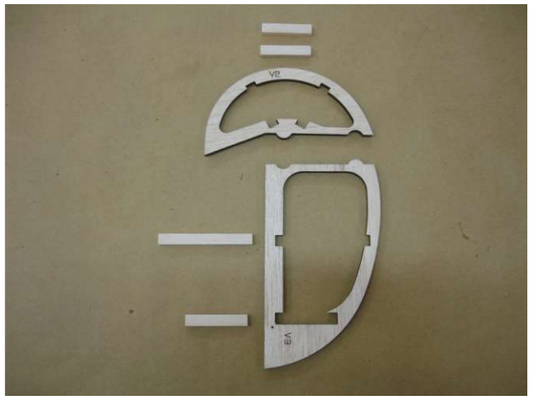
Use sanding paper to trim the surface.



Use sanding paper to trim the top edge into round edge.

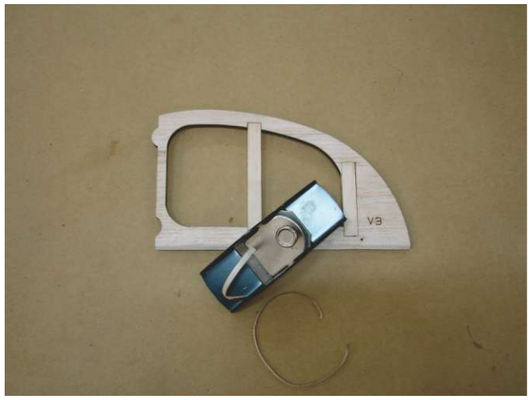


Close view of the round edge.

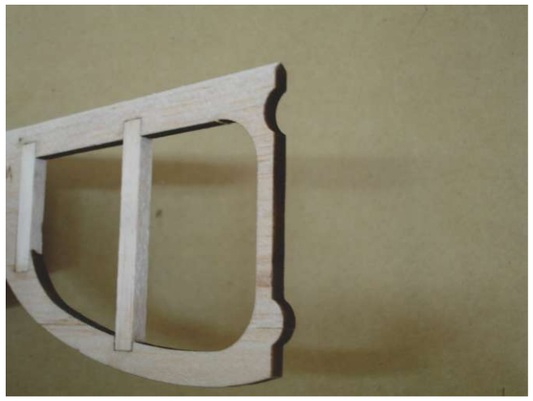


Place V2, V3, V4, V5, H5 on the working table for assembling elevator.

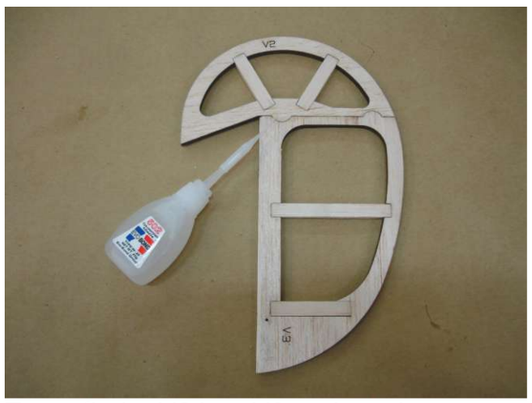
Try to fit V4 into V2; fit H5 and V5 into V3. Use instant glue to secure V4, H5 and V5 in place.



Use wooden planning tool to trim the leading edge of the V3 into V shape (30 degree).

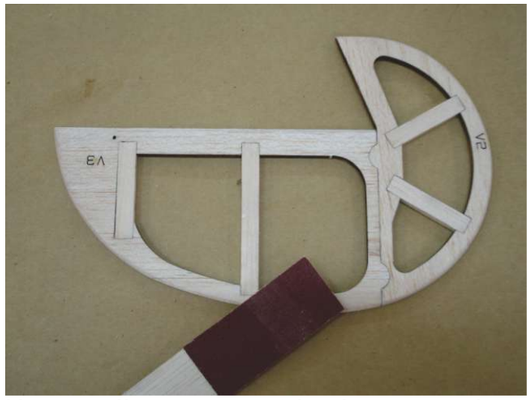


Close view of the V shape.

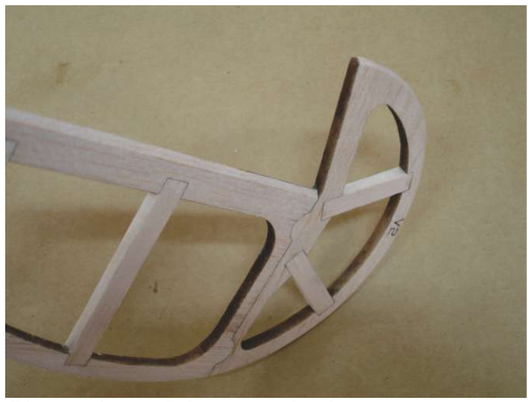


Try to fit the V2 into V3 and use instant glue to secure them in place.

Use sanding paper to trim the surface of the rudder. The thickness is 5mm; don't trim too much.

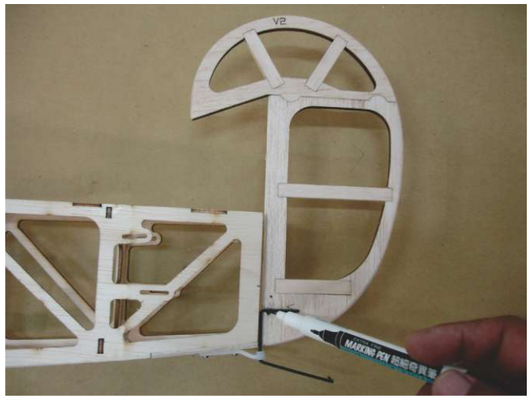


Use sanding paper to trim the outer edge of the rudder into round edge (R5).



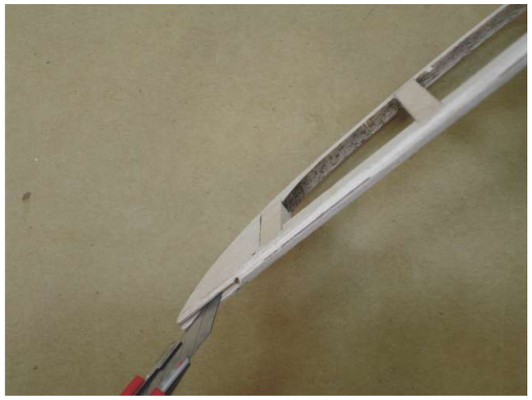
Close view of the round edge.

Use hobby knife to cut the hole on the rudder for inserting hinges.The location for the hole is 10mm from the top and 35mm from the bottom.

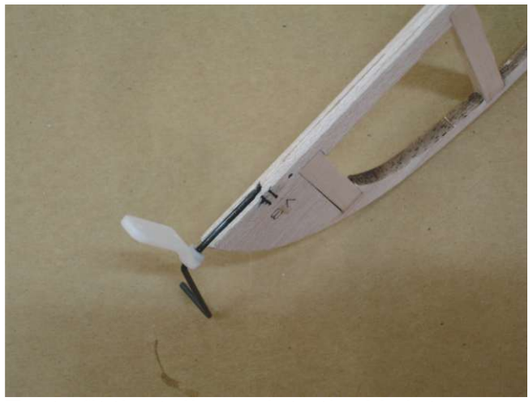


Try to fit the rudder into the fuselage. Insert the tail gear to the tail and use marker to mark the top of the wire on the rudder.

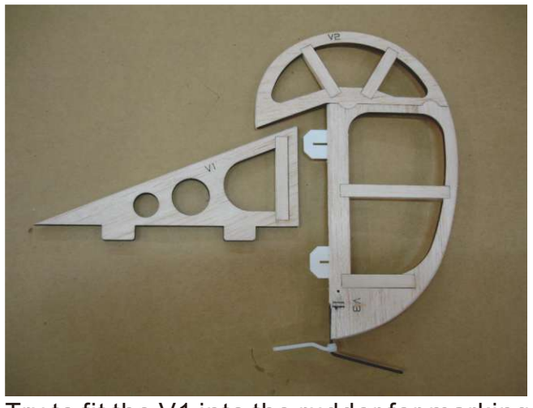
Remove the rudder from the fuselage. Use 2mm driller to drill 24mm depth hole on the marking position.



Use hobby knife to cut a V slot from the drilling holefor installing tail gear.

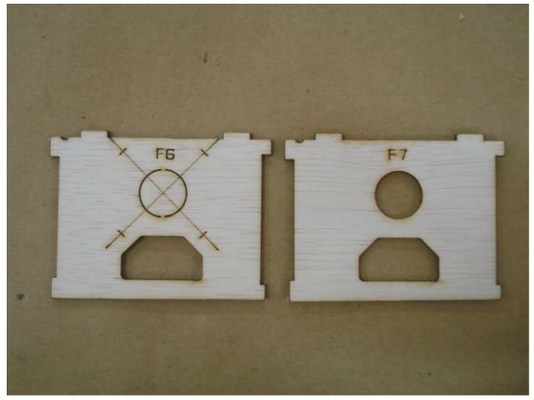


Try to fit the tail gear into the V slot.



Try to fit the V1 into the rudder for marking the hinge location on V1. Use hobby knife to cut the hinge hole on V1. Wait for applying film.

FUSELAGEASSEMBLY

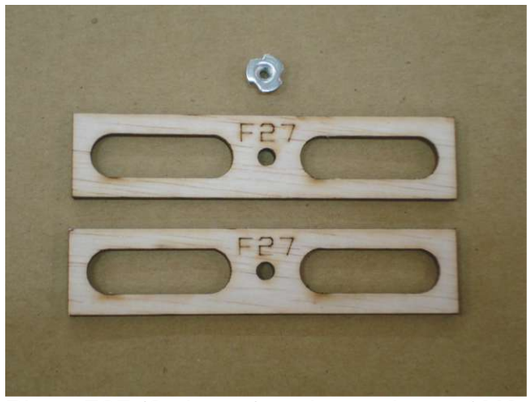


Place F6 and F7 on the working table.

Use UHU glue to secure the F6 and F7 together. Please note the small recess on the top of the left sides and the alignment of every side. Wipe off the excess glue.

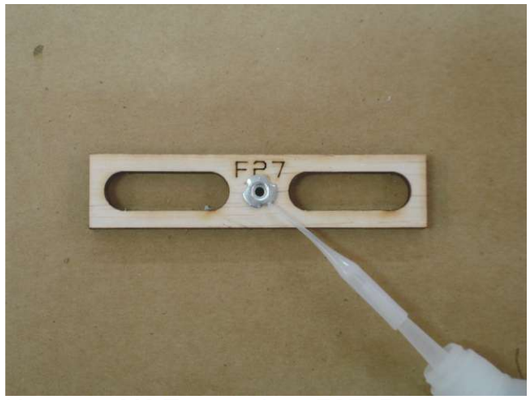
Place F20 (2 pieces), F21 and F22 on the working table.

Try to place the F21 on F20 and the second F20 on F22. Please note the holes positions on planking. Use UHU glue to secure them in place.



Place F27 (2 pieces) and one piece of M3 Tee nut on the working table.

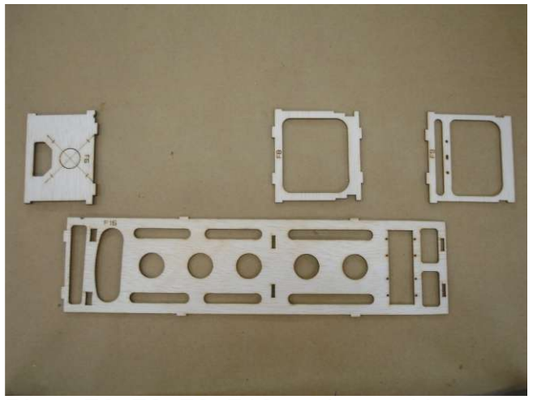
Use UHU glue to secure both F27 together.



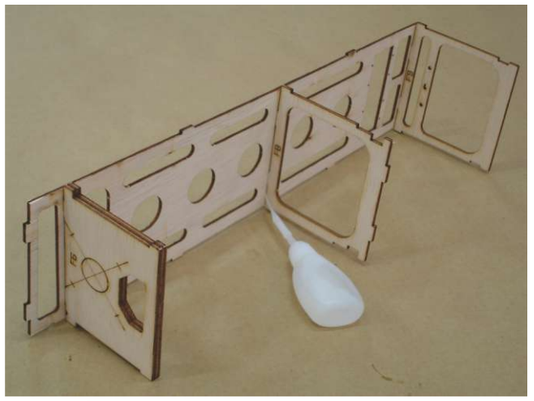
Hammer M3 Tee nut into F27. Drop some instant glue around the nut.

Place 4 pieces of F40 on the working table.

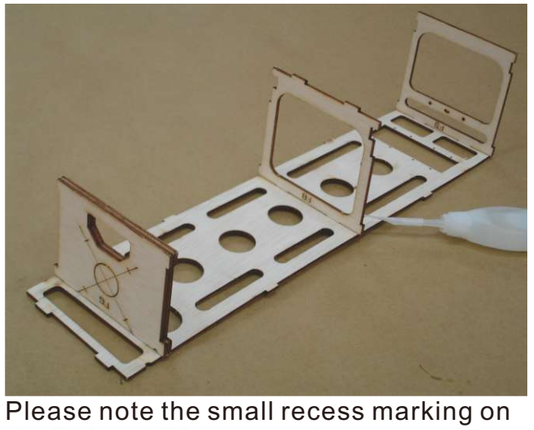
Use UHU glue to secure 2 pieces of F40 together.



Place F6, F8, F9, F16 on the working table. Please note there is a small recess on the right top of the F16.

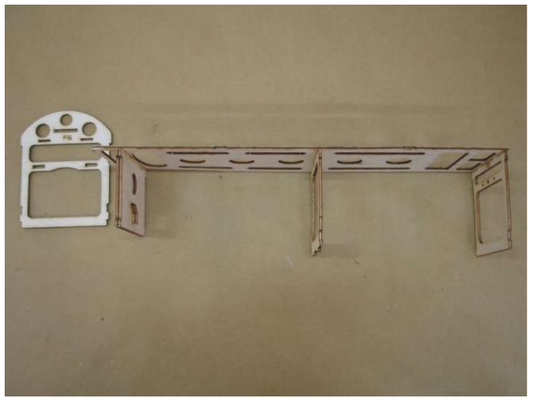


Try to fit the F6, F8 and F9 into the F16. Make sure the angle between F8/F9 and F16 is 90 degree. The cross marking on the F6 must face outside. The angle between F6 and F16 is 92 degree.

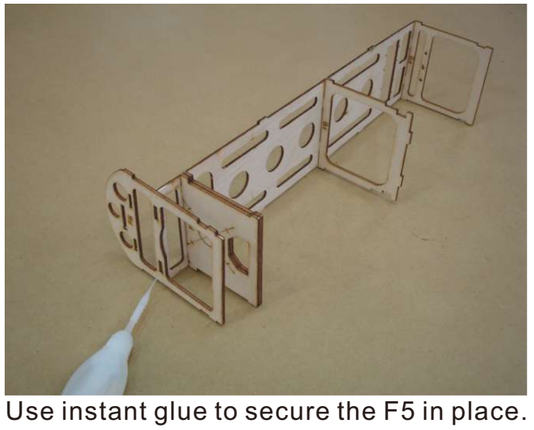


Please note the small recess marking on the F16 and F6 must on the same side. Drop instant glue to secure F6, F8 and F9 in place.

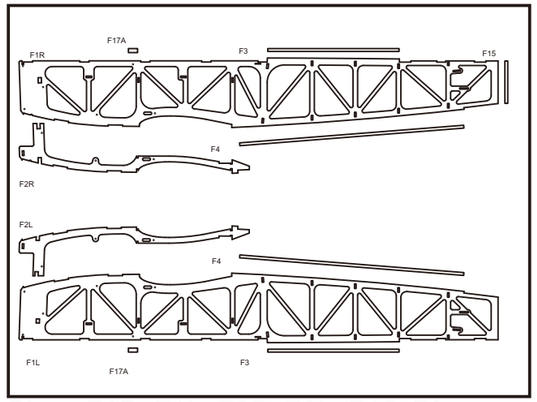
Close view of the small recess marking on the F6 and F16.



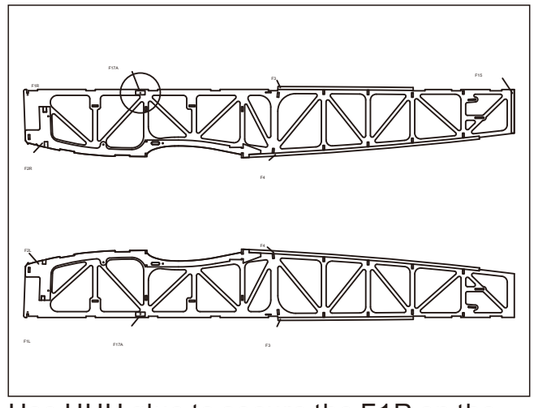
Try to fit the F5 on the F16, before the F6. Make sure the angle between F16 and F5 is 90 degree.



Use instant glue to secure the F5 in place.

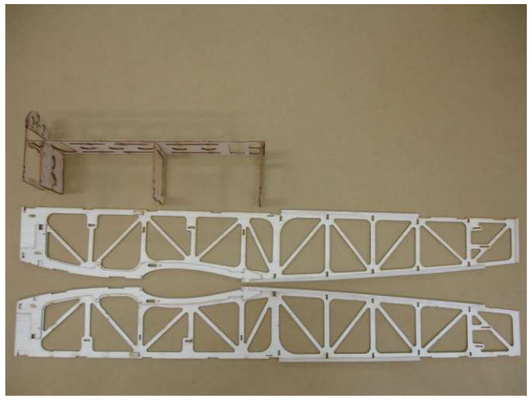


Place F1R, F1L, F2R, F2L, F15, F3 (2pieces) and F4 (2 pieces) on the working table in order for assembling the side boards for fuselage. Use instant glue to secure the F3 on the top of the side board; secure F4 on the bottom of the side board and secure the F15 on the tail.

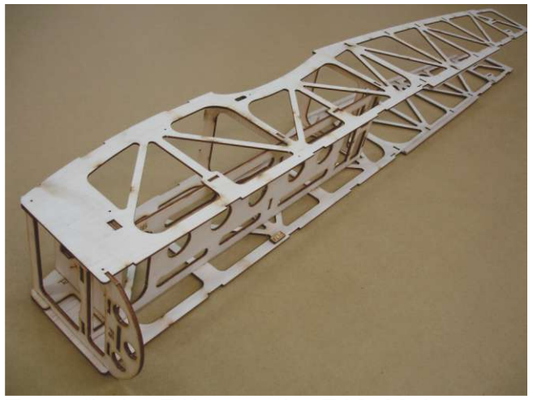


Use UHU glue to secure the F1R on the F2R and secure F1L on the F2L.

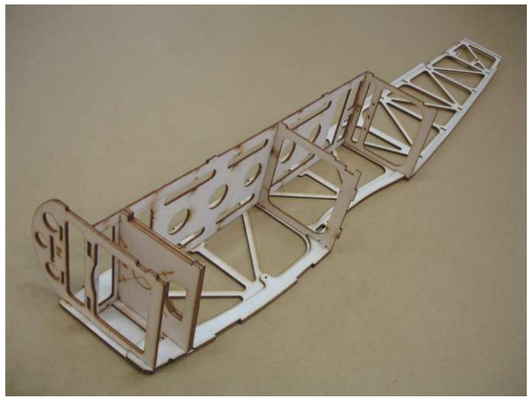
Place F17A o the side board; don't over the marking line on the picture.



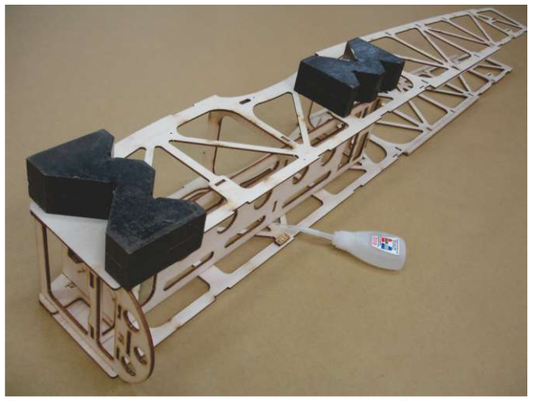
Place F16, F1R and F1L combinations on the working table.



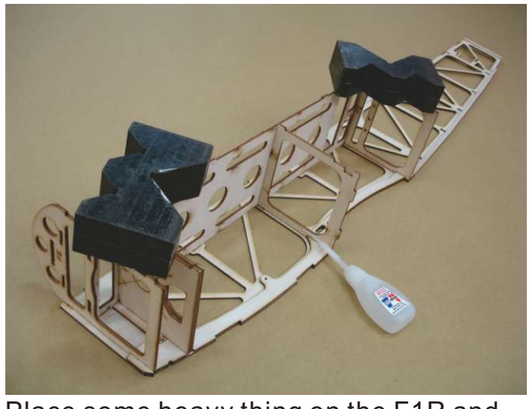
Try to fit the F1L onto the F16. Make sure the angle between two combinations is 90 degree.



Try to fit the F1R onto the F16 combination. Make sure the angle between two combinations is 90 degree.

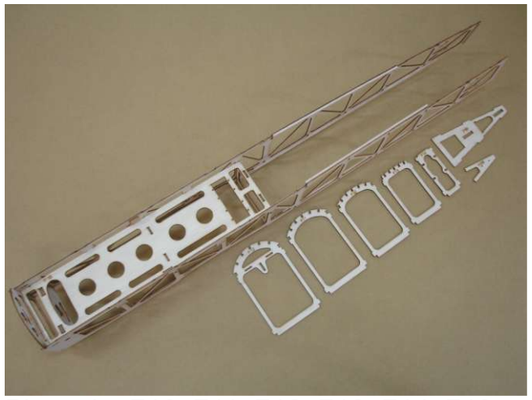


Place some heavy thing on the F1L and use instant glue to secure the F1L on the F16 combination.



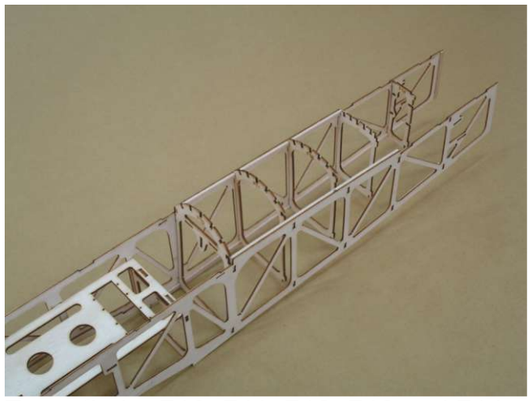
Place some heavy thing on the F1R and use instant glue to secure the F1R on the F16 combination.

Top view of the front fuselage.



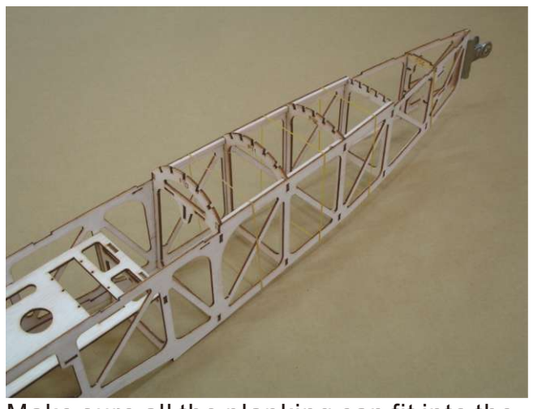
Place the F10, F11, F12, F13, F14, F19 and F28 on the working table as the picture shown.

Use instant glue to secure the contacting places.



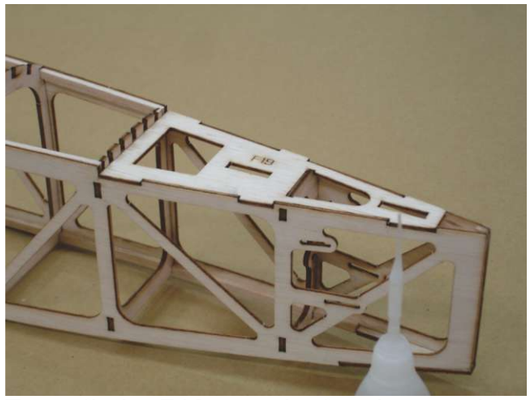
Try to fit the F10, F11, F12, F13 and F14 into the fuselage. Check if planking can fit into the right side of fuselage.

Make sure the alignment of both side boards on the tail.

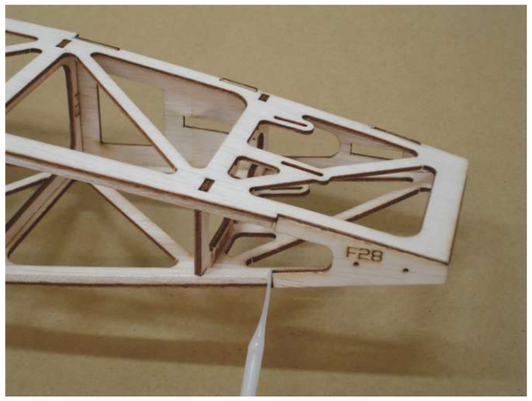


Make sure all the planking can fit into the left side of fuselage. Use rubber band to the hold the fuselage and use clip to secure the tail in place for temporary. Make sure the front and rear part is aligned and straight.

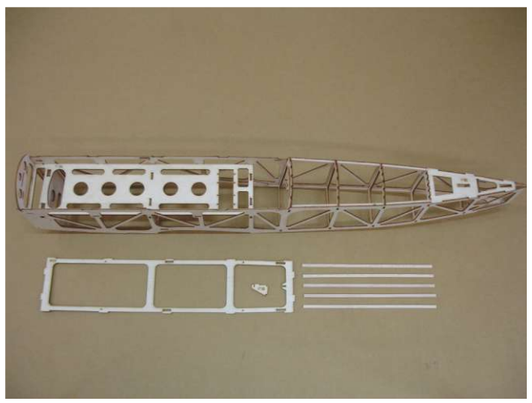
Rear view of the tail fuselage; make sure it is bilateral symmetry.



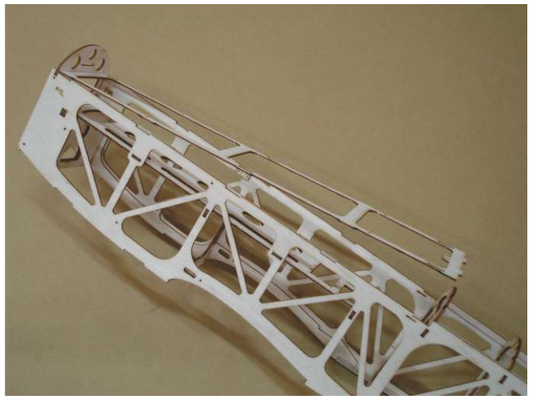
Try to fit the F19 onto the fuselage and drop some instant glue to secure it in place.



Try to fit the F28 onto the fuselage and drop some instant glue to secure it in place.



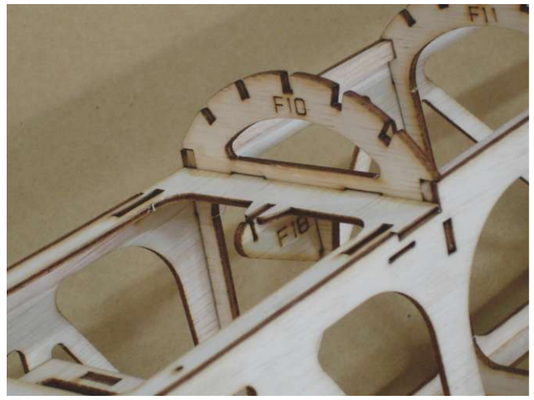
Place F3, F17 and F18 on the working table.



Try to fit the head of F17 into the slot on F5 (the front board on the fuselage).

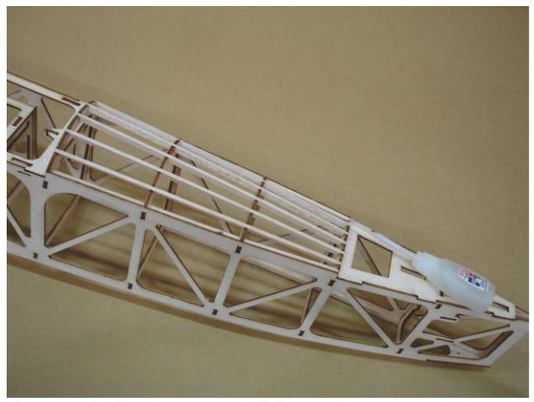
Try to fit the tail of F17 into the slot on F10.

Press F17, make sure it is flat and use instant glue to secure it in place.

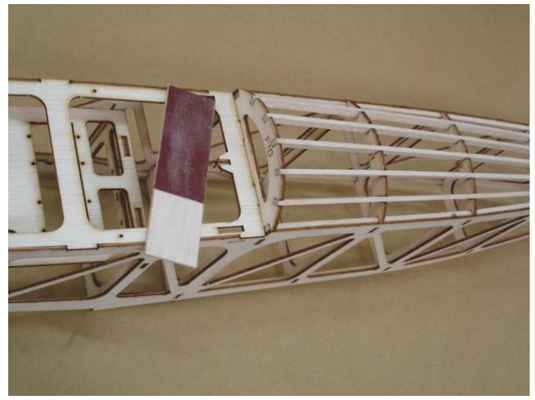


Fit the F18 into the slot on F10.

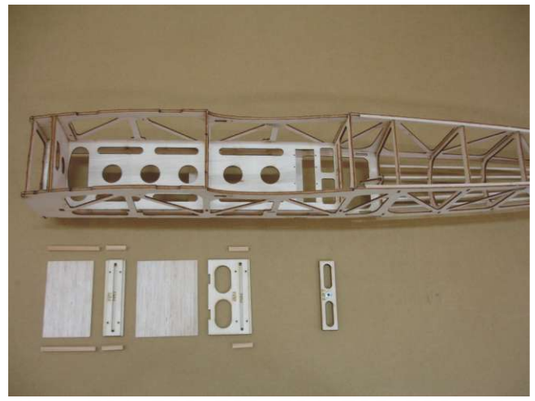
Make sure the top edge of F18 can fit into the slot on F17. Use instant glue to secure the F18 in place.



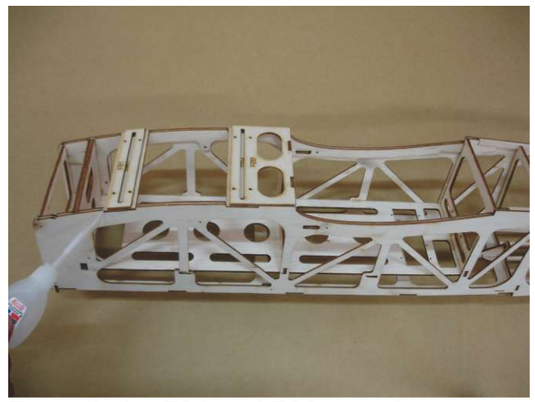
Try to fit 5 pieces of F3 on the top of the fuselage. Use instant glue to secure the F3 in place.



Use sanding paper to trim the excess part of F3.

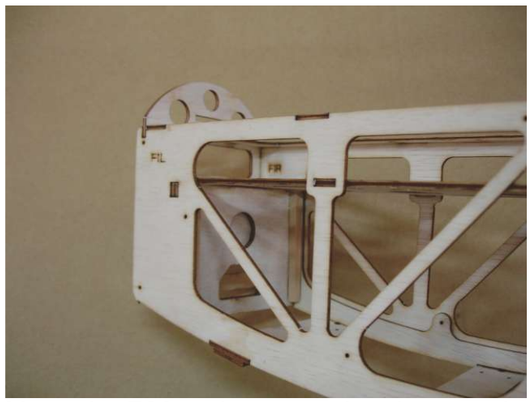


Place F21, F22, F23, F24, F25, F26 and F27 on the working table as picture shown.



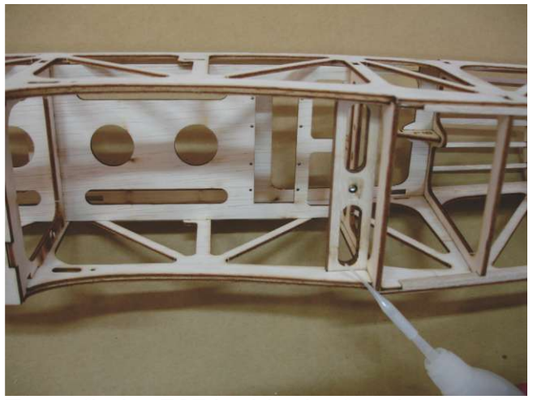
Try to fit the F21 and F22 onto the fuselage. Use instant glue to secure them in place.

Use UHU glue to secure F23 inside the F6 (firewall) for reinforcement.



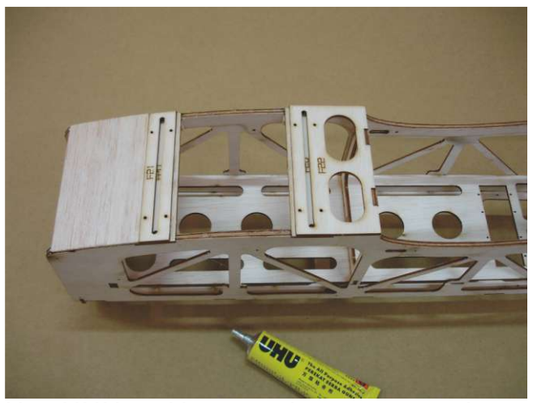
Move the F23 to the top and make sure the reinforcement is strong enough. It is also workable to use AB glue for securing, but it will add some weight and won't allow any mistake during gluing.

Use UHU glue to secure the F24 inside for reinforcing the gear mount.



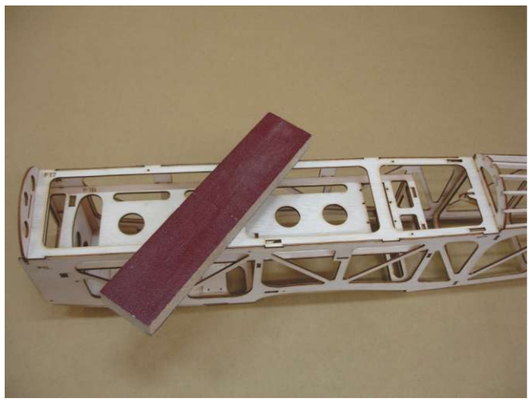
Try to fit the F27 inside the fuselage with the Tee nut face upward. Use instant glue to secure the F27 in place.

Drop some instant glue on two sides of F27 and spread some AB glue on them for better securing.



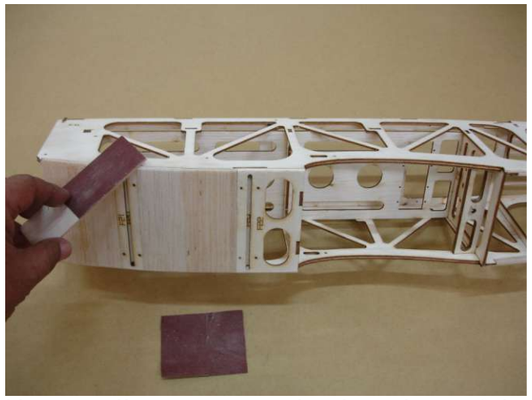
Use UHU and instant glue to secure the F25 on the bottom of the head fuselage.

Use UHU glue to secure the F26 on the center part of the gear mount.



Use sanding paper to trim the parts on the top of head fuselage.

Use sandingpaper to trim the sides of the fuselage.

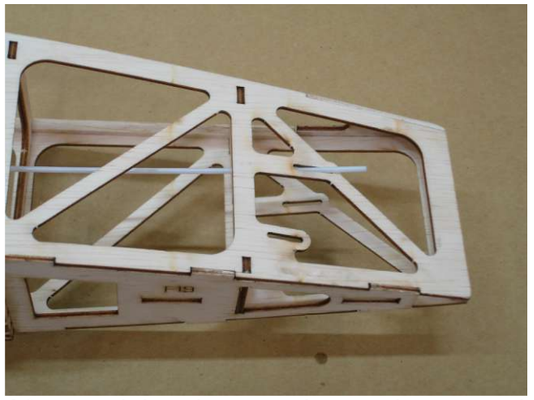


Use sanding paper to trim the edges of the bottom into round edges (R3); also trim the uneven parts on the gear mount and bottom cover.

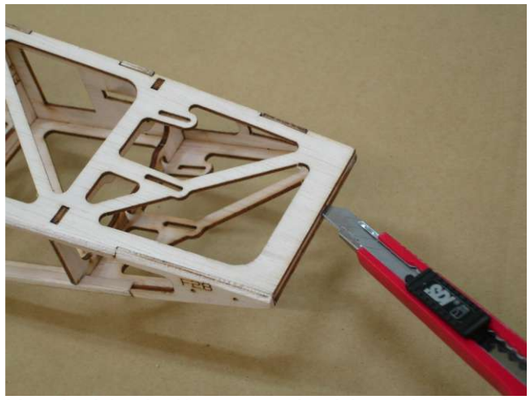
Close view of the round edges R3.

Use sanding paper to trim the edges into round edges on the bottom of the tail fuselage.

Close view of the round edges (R3).

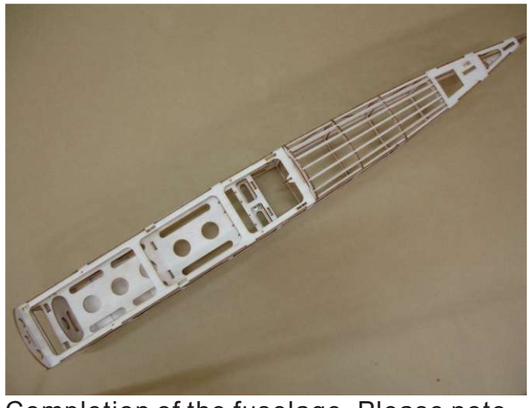


After applying the covering on the top and sides of the fuselage; insert the rod tubing (for elevator rod) through the fuselage and exit from the preserving holes on the tail.



Use hobby knife to cut the hinge hole on the center of the tail.

The elevator rod tubing will go through the center hole on the F9.

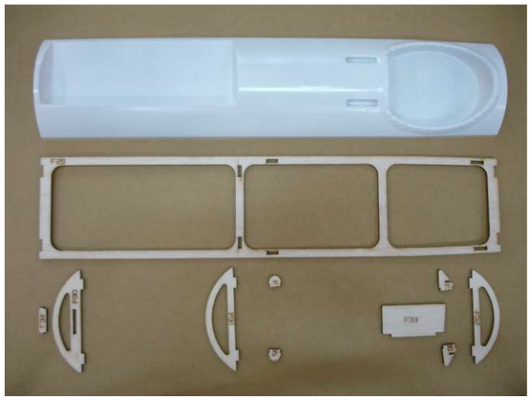


Completion of the fuselage. Please note when hold the fuselage, it is better to hold the sides avoiding the trips on the tail.

Use hobby knife to cut hole on the right side of tail for exit the rudder rod tubing.

The rudder rod tubing will go through the right hole on the F9.Iron on the covering over the bottom of the fuselage.

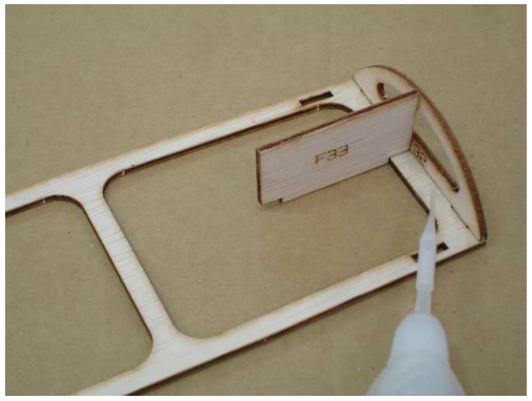
CANOPY ASSEMBLY



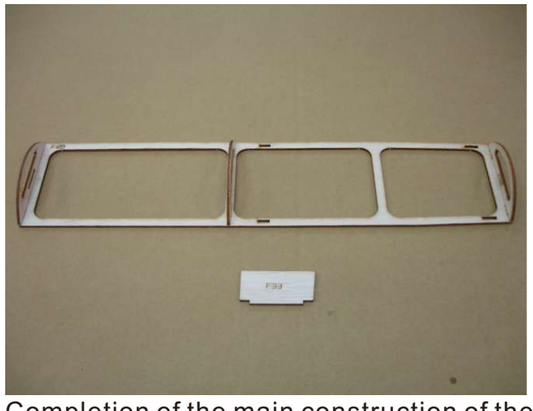
Place F29, F30, F31, F32, F33, F34, F35 and F36 on the working table as the picture shown.

Try to fit the F30 on F29. Use the F33 as the triangle ruler and drop instant glue to secure the F30 on F29. Remove F33.

Use F33 as the triangle ruler and try to fit the F31 on the center part of F29. Use instant glue to secure the F31 in place. Remove F33.



Use F33 as the triangle ruler and try to fir the F32 on the tail of F29. Use instant glue to secure the F32 in place. Remove F33.



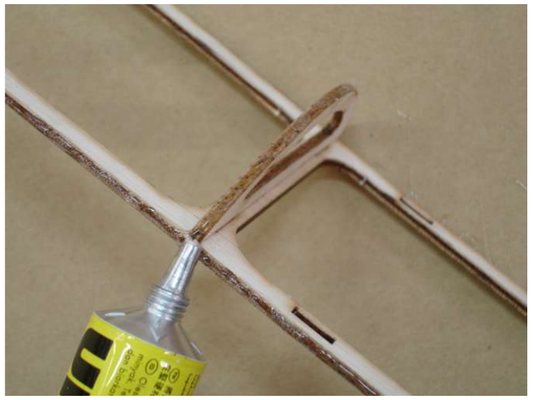
Completion of the main construction of the canopy. F33 is the ruler, cannot be fixed into the kit.

Spray the red color onto the white canopy. Wait for it dried enough.

Apply the masking tape around the edge of the pilot seat.

Place paper over other part on the canopy except the pilot seat. Use the masking tape to secure the paper in place for temporary. Spray the pilot seat into black. Wait for the spray dried enough.

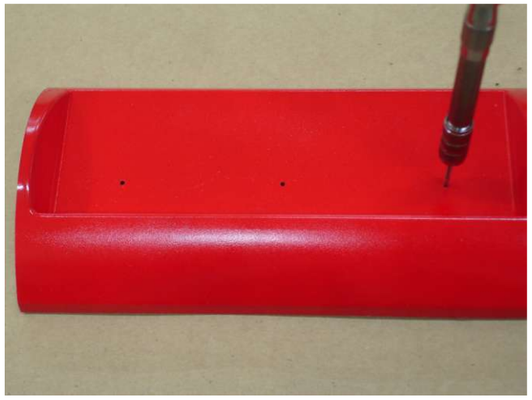
Remove the masking tape and the paper. Place the canopy and main construction (with F32 on the right side) on the working table.



Spread UHU on the main construction.

Place the main construction onto the canopy.

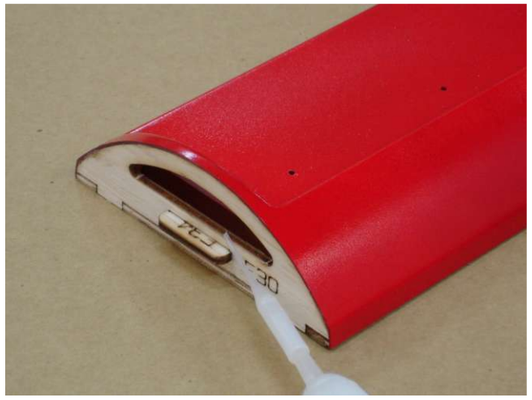
Make sure the alignment of the edges and place some heavy thing on top of it. Wait for the glue dried enough.



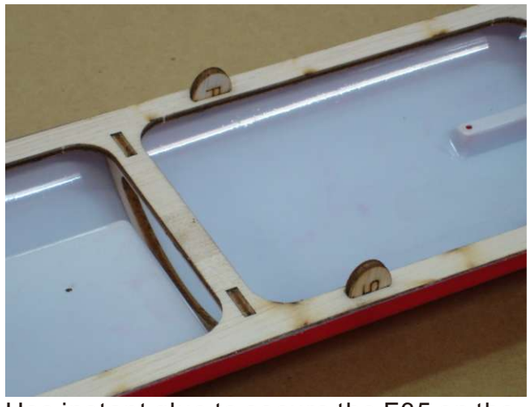
Try to find 3 pieces of preserving markings on the canopy. Use 2.6mm driller to drill holes on the markings.

There are 2 pieces of recess next to the pilot seat. Use 2mm driller to drill holes on the right and left sides inside the recess.

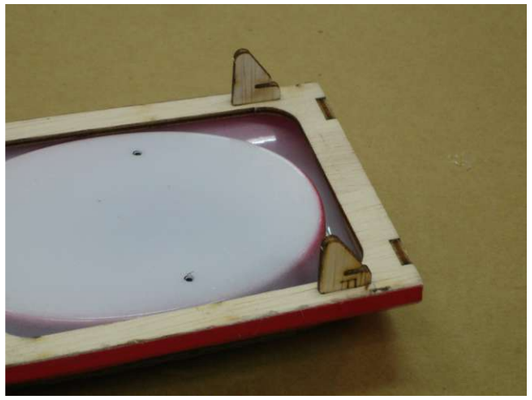
Try to find 2 pieces of preserving markings inside the pilot seat. Use 2.6mm driller to drill holes on the markings.



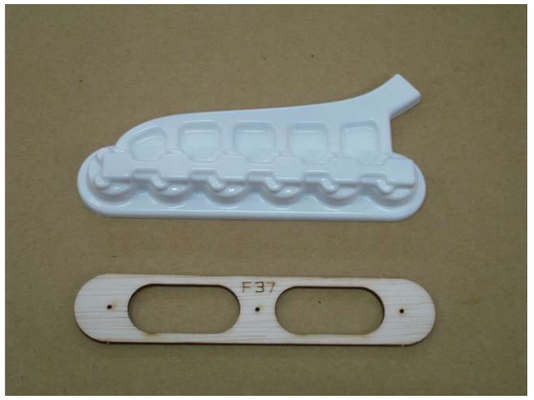
Use instant glue to secure the F34 on the F30 as the latch-lock.



Use instant glue to secure the F35 on the center position of the canopy.



Use instant glue to secure the F36 (with slot facing back) on the canopy closed to F32.

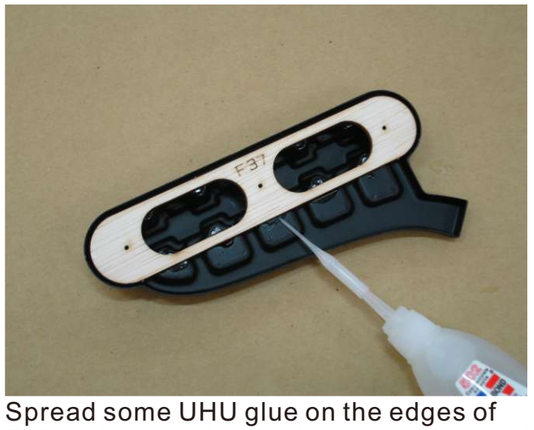


Place the F37 and vacuum formed engine on the working table.

Side view of the canopy with the F36 slots facing back.

Spray the vacuum formed engine into black. Wait for it dried enough.

Apply the instrument sticker on the front side of the pilot seat (under the machine gun slot).

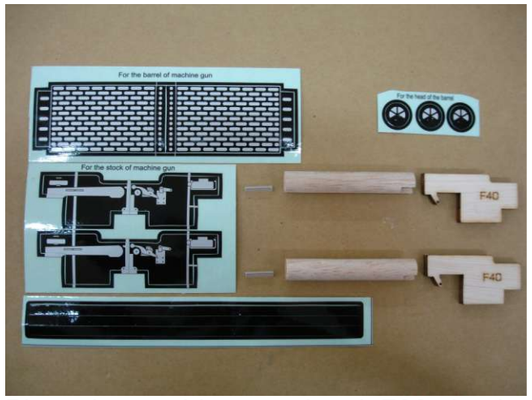


Spread some UHU glue on the edges of F37 and secure it onto the vacuum formed engine. Drop some instant glue for better securing.

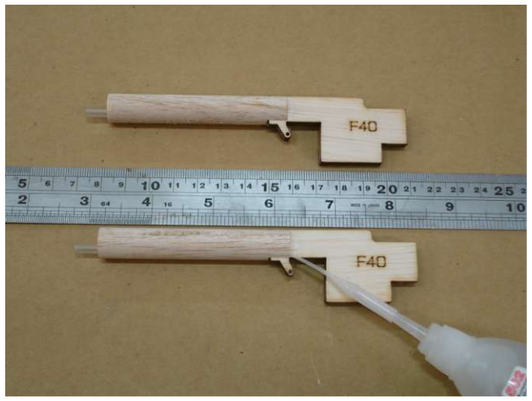
Apply the decorative sticker on the vacuum formed engine.

Place the vacuum formed engine on the canopy and use 2.6 x 8mm tapping screws to secure it in place.

Completion of the canopy.

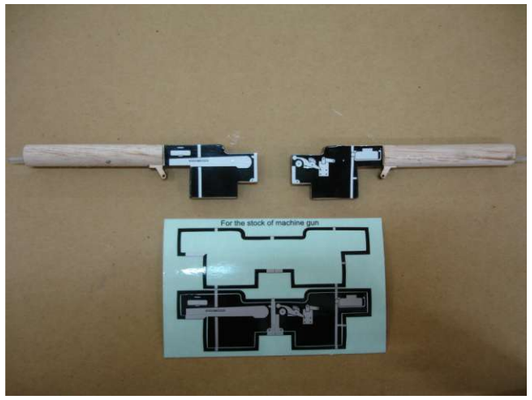


Place the machine gun decal, F38 plastic tube, F39 balsa barrel, and F40 combinations on the working table.

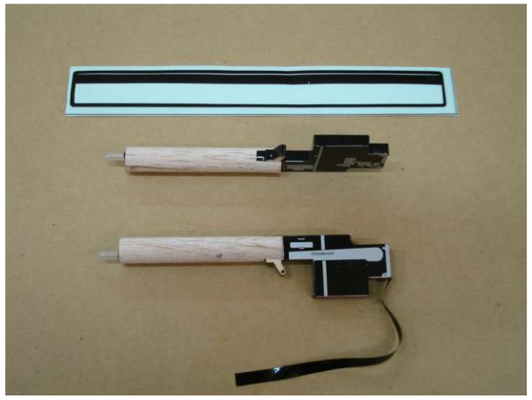


Insert the F38 into the F39 barrel. Use instant glue to secure the F39 onto the F40. Place a straight rule on top of it; make sure the top of the machine gun is straight.

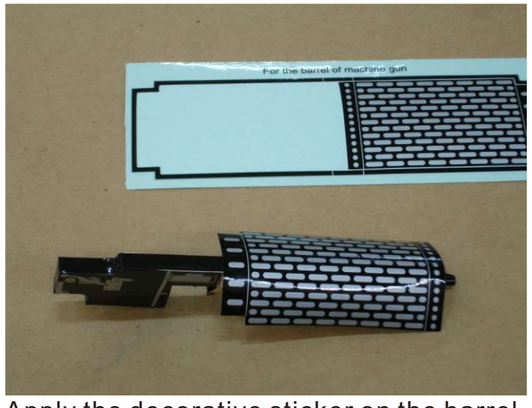
Secure the F38 inside the barrel. Apply the decorative sticker on the front of the barrel. Use scissors to remove the excess sticker.



Apply the decorative sticker on both sides of butt.



Apply the black sicker around the butt.



Apply the decorative sticker on the barrel.

Color the muzzle and trigger into black.

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

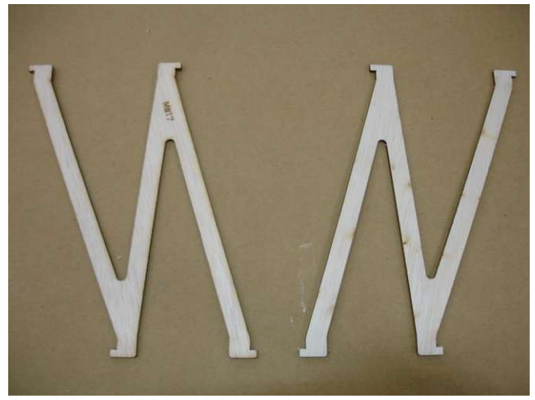
The top view of the machine guns on the canopy.

Color the pilot as the flyer like.

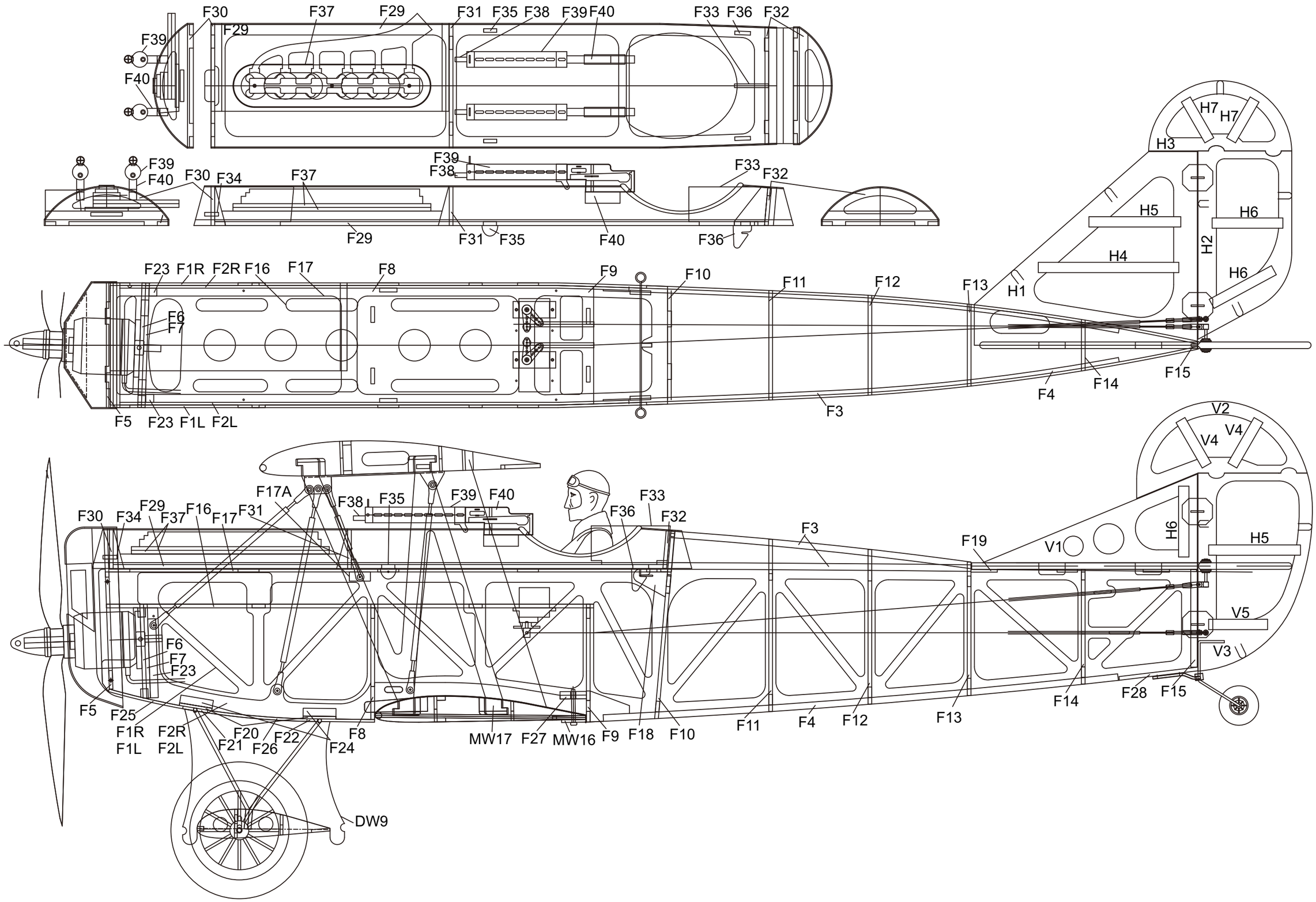
Colored pilot for reference. (It is available in the ARF version.)

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.

Completion of the canopy.



2 pieces of MW17 are for the strut. Use sanding paper to trim the surface and round edge (1R). The tips on the top and bottom don't need the round edge.Wait for applying film.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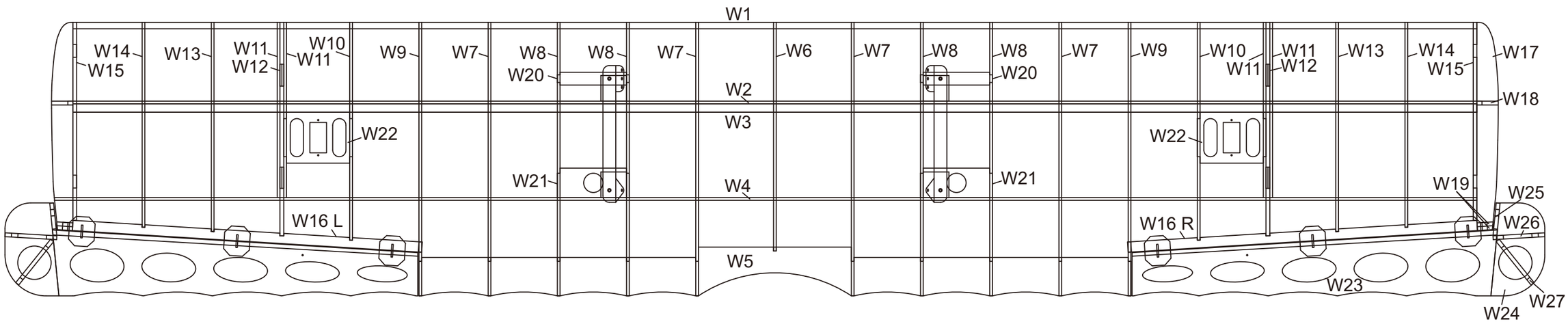
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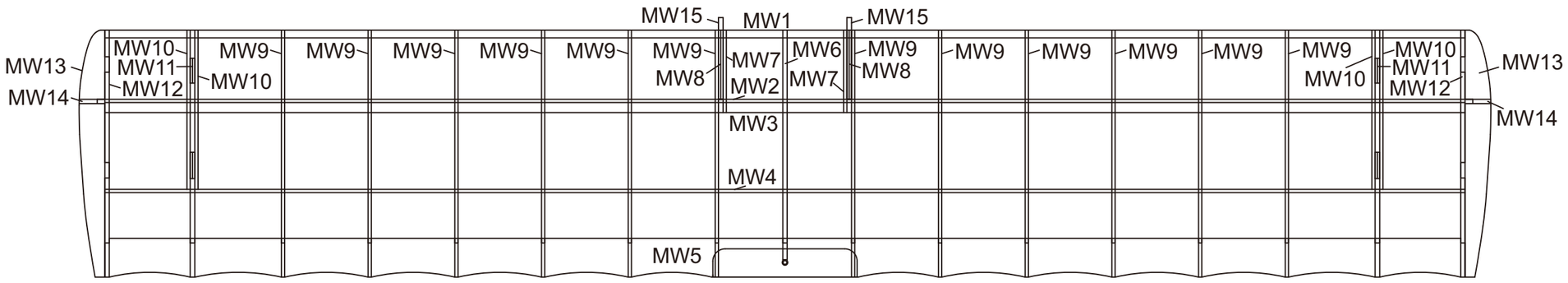
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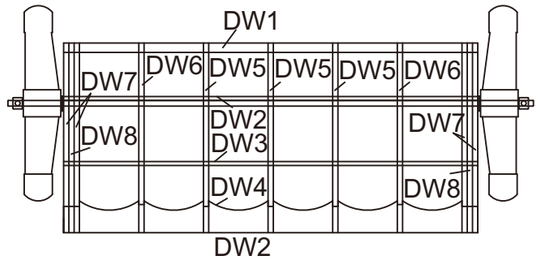
DW1
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DW5
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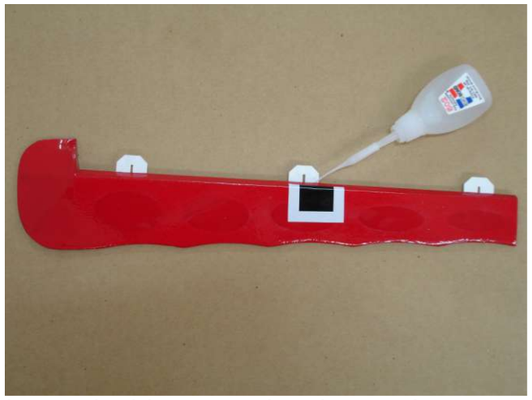
DW2

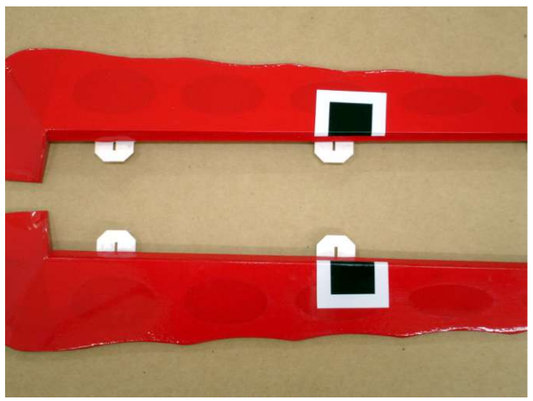
Place the ruler on the conjunction of the main wing and aileron. Use hobby knife to cut the decal and makes the aileron separate from the main wing.



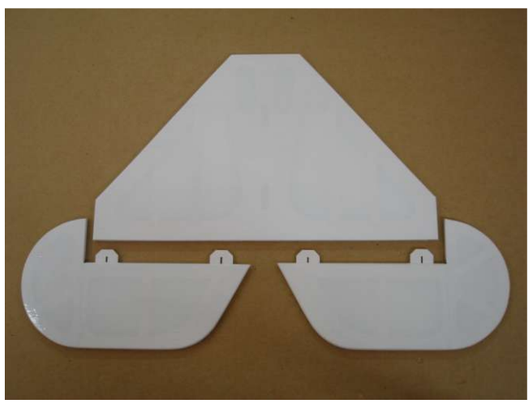
Insert the hinges as the picture shown. Spread UHU glue on the surface of hinges and drop instant glue around the edges of hinges for securing the hinges in place.

Remove the aileron and insert the hinges into the slots.

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.

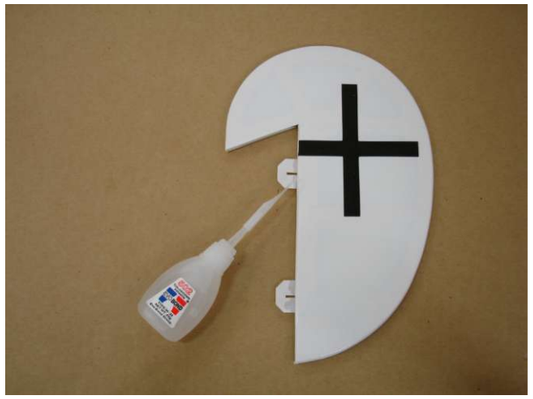


Press the edges of the decal toward the hinge and makes it flat.

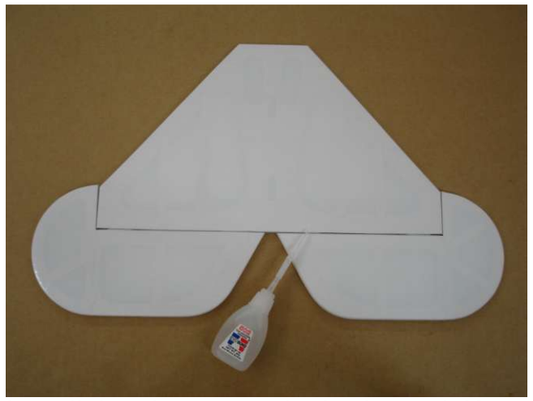


Place the horizontal on the working table. Remove the elevator from it.

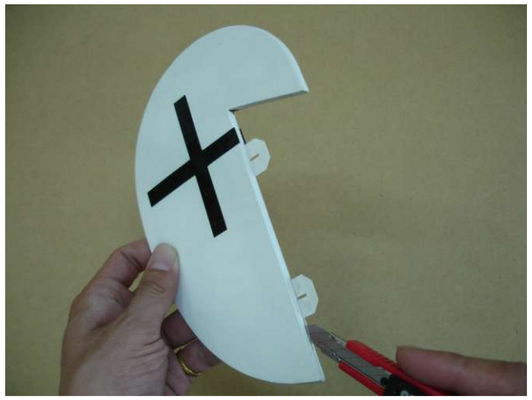
Drop some instant glue to secure the hinges into the elevator.



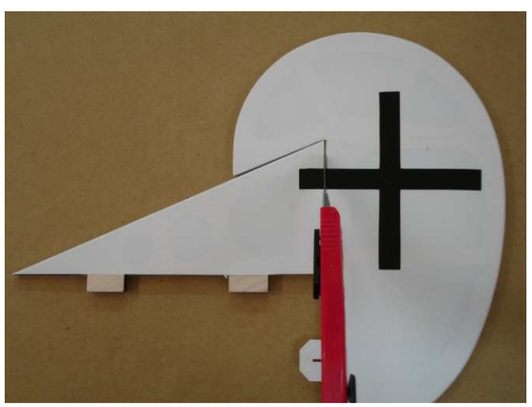
Drop some instant glue to secure the hinges into the rudder.



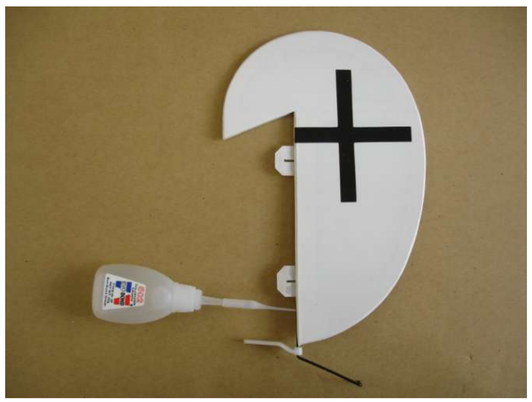
Install the elevator to the horizontal. Keep the gap between horizontal and elevator around 0.5mm and drop some instant glue to secure the hinges into the horizontal.



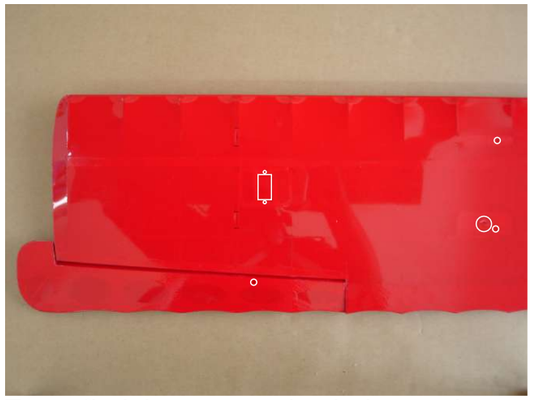
There is pre-serving slot on the bottom of the rudder. Try to find this slot and use hobby knife to remove the covering over this slot.



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

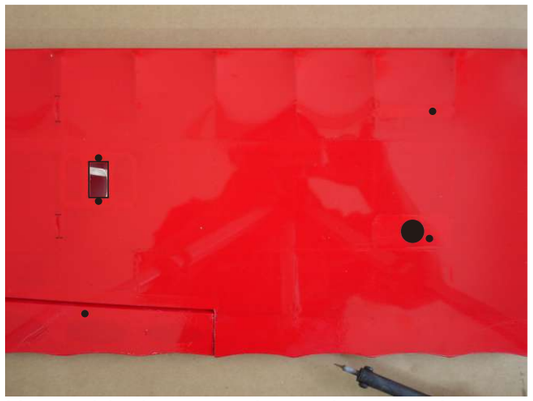


Try to find the tail gear from the hardware bag and insert the gear into the slot. If satisfy the installation, spread some instant glue on the gear wire and secure it inside the slot.



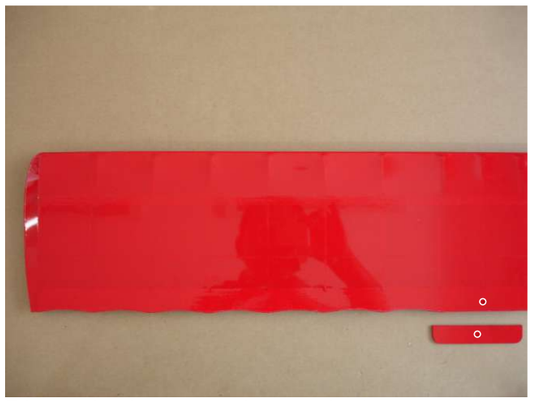
Try to find the pre-serving holes on the main wing for servo, for cable exit, for screw and for horn as the picture shown.

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



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

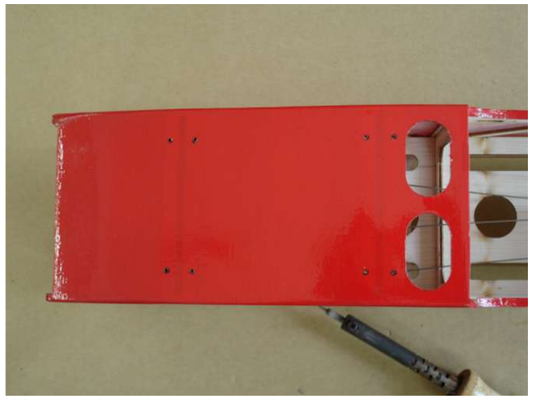
Spread UHU glue on the wing reinforcement and secure it onto the bottom wing. Make sure the alignment of the rear edges and the screw holes.



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

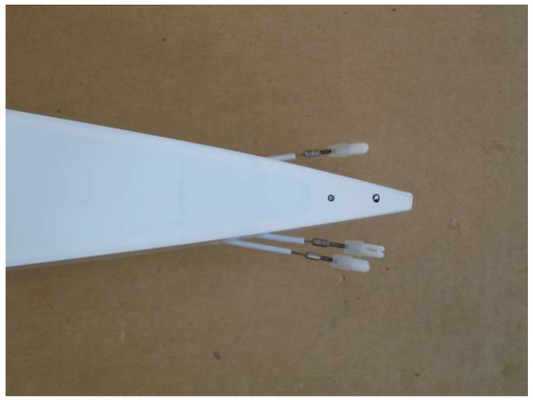
Use clip to hold the wing reinforcement in place for temporary until the glue dried enough.

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)

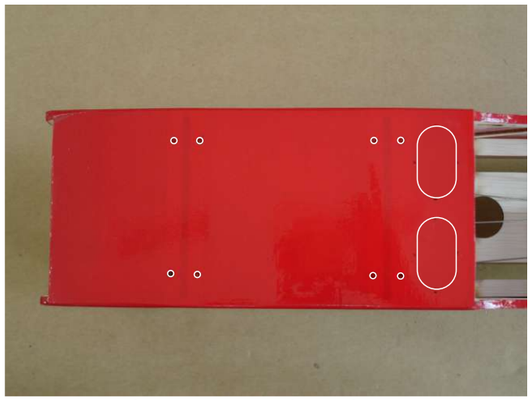


Use soldering to melt out the covering over these holes.

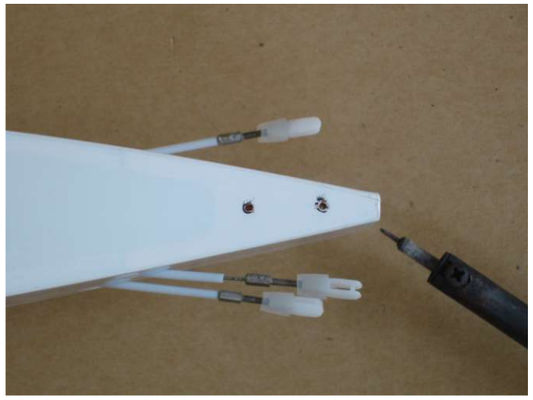
Use soldering to melt out the covering over these holes. Drop some instant glue on the screw holes for reinforcement.



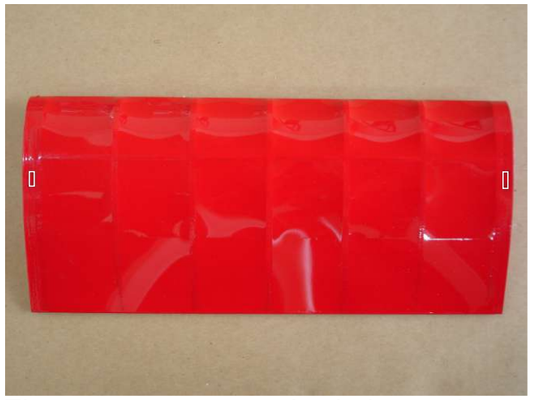
There are two holes on the tail of the fuselage for securing the tail gear mount.



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



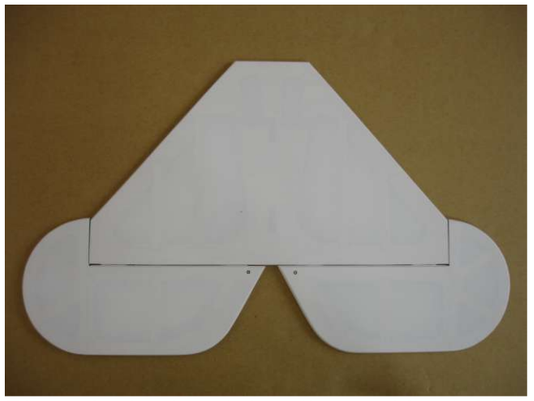
Use soldering to melt out the covering over the holes.



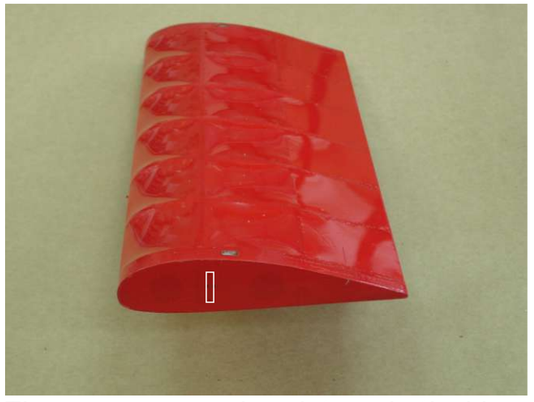
There are two pre-serving holes on the top of sub wing. Please refer to the picture.

Use soldering to melt out the covering over the slots.

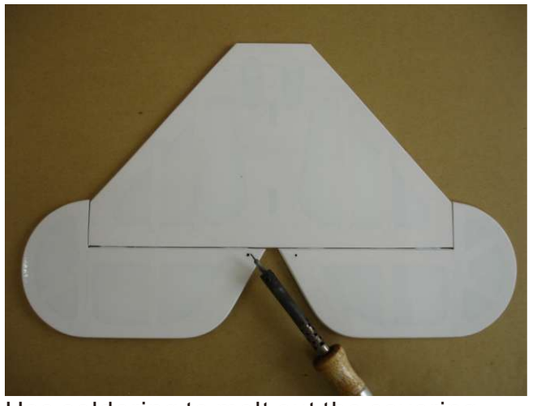
Use soldering to melt out the covering over the holes for installing the gear.



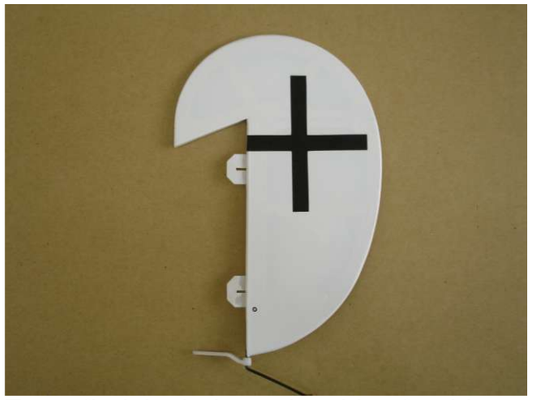
Place the horizontal on the working table. Try to find the holes on the elevator as the picture shown.



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

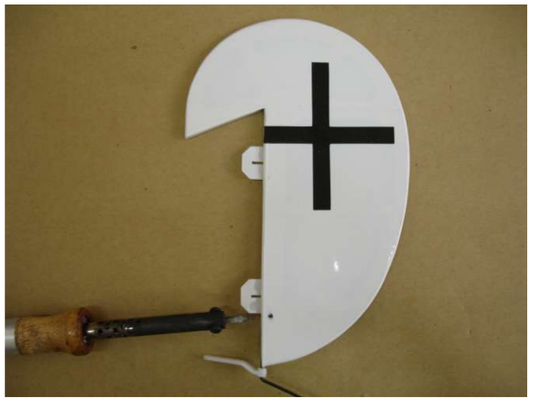


Use soldering to melt out the covering over the holes (2mm).



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

Use ironer to trim the edges of the slots.

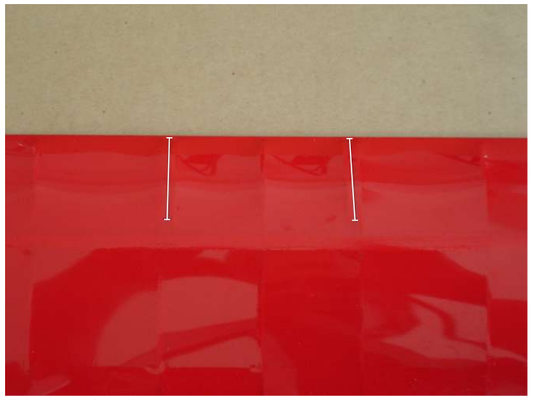


Use soldering to melt out the covering over the hole (2mm).

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

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.

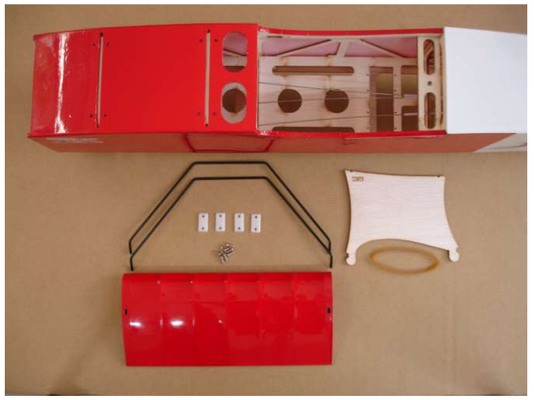
Use hobby knife to cut off the covering over the slots. Use ironer to trim the edges of the slots.



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

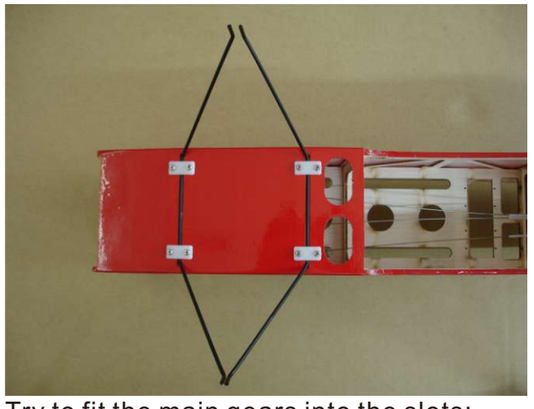
Use ironer to trim the edges of the slots.

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

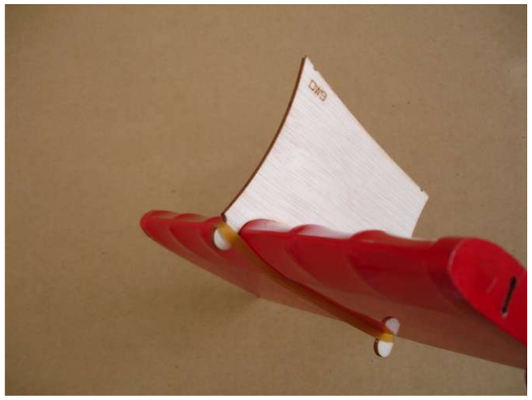


Place the fuselage, 2 pieces of main gear, sub wing, 4 pieces of plastic plates, 8 pieces of 2.6x8mm tapping screws, DW9 gauge and rubber band on the working table for installing main gear.

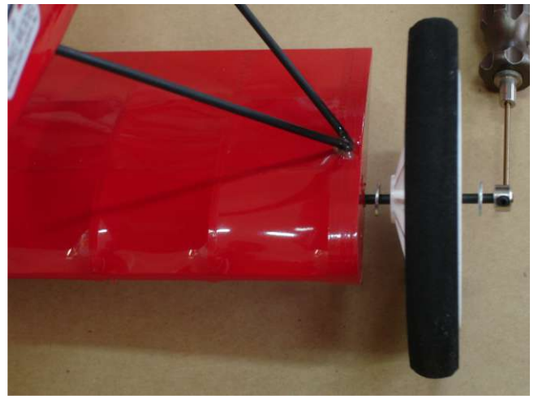
Place the fuselage on the working table with the bottom facing upward. Try to find 2 pre-serving slots. Use hobby knife to remove the covering over the slots.



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.

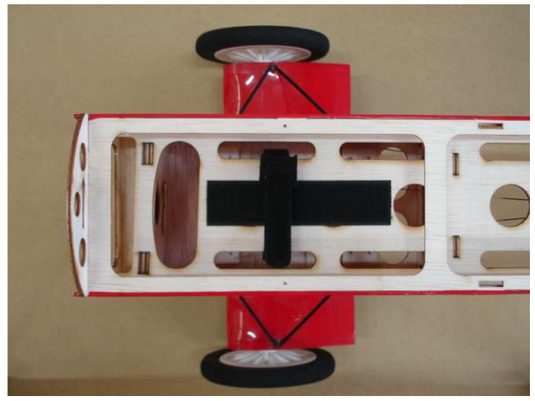


Place the DW9 gauge on the center position of the sub wing. Use rubber band to hold the DW9 in position for temporary.

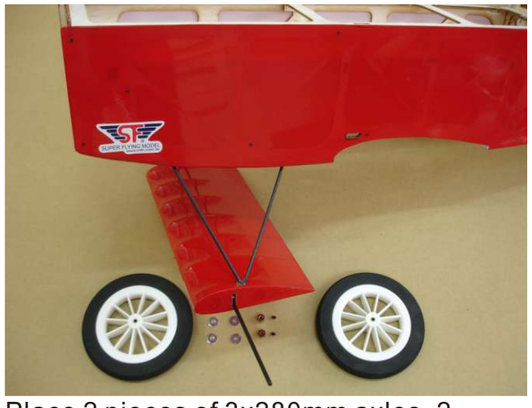


Insert the axles into the slots on the sides of sub wing. Install the washers, wheels (concave side facing outside), washers and collars in order. Secure the collars with M3x4 hex screws.

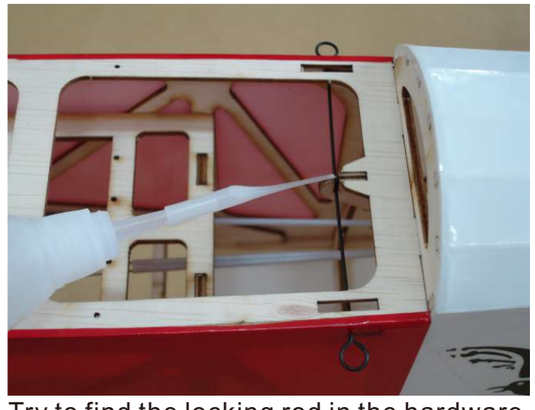
Try to fit the main gears into the slots on the sub wing with DW9 touching the bottom of the fuselage. Use AB glue to secure the main gear inside the slots.



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



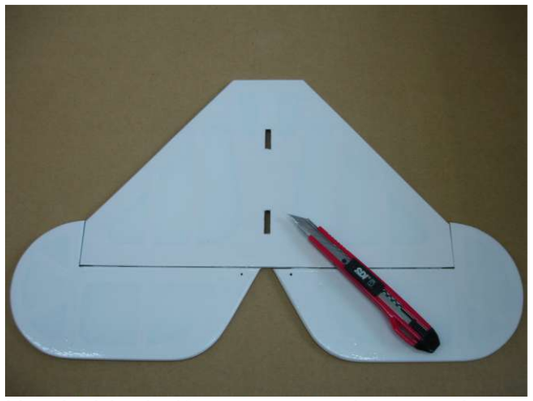
Place 2 pieces of 3x280mm axles, 2 pieces of collars, 2 pieces of M3x4 hex screws , 4 pieces of 3mm washers and 2 pieces of 100mm wheels on the working table.



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

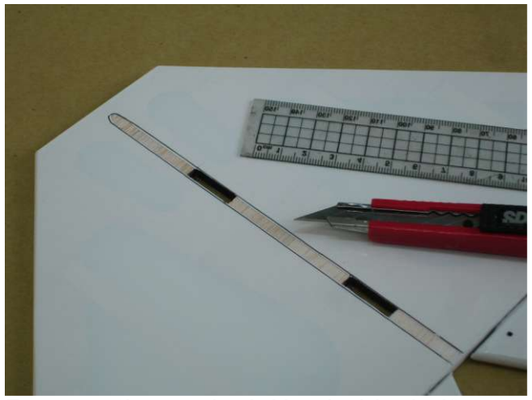
on the center slot.

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

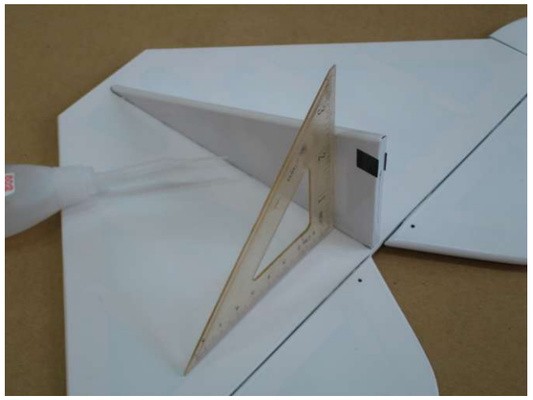


Use hobby knife to remove the covering over the slots.

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

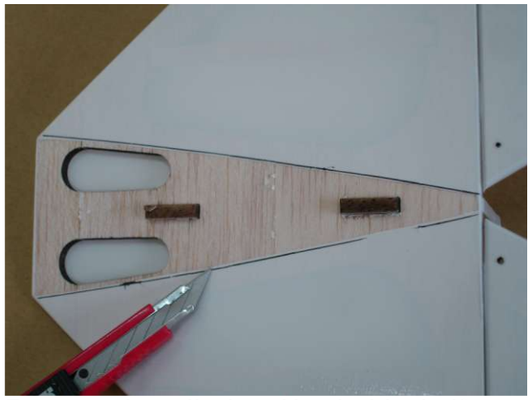


Remove the vertical. Use hobby knife to remove the covering inside the marking area carefully. Don't cut into the wood.

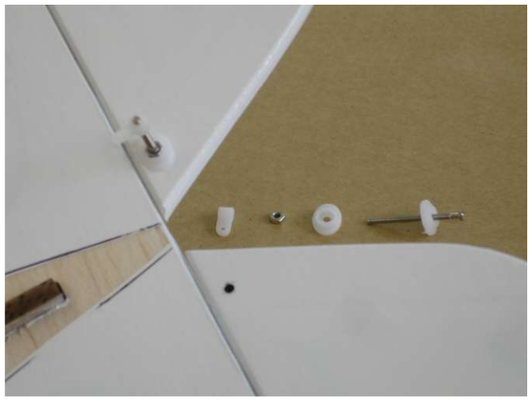


Fit the vertical on the horizontal again. Use a triangle rule as a guide for making sure the angle is 90 degree and secures the vertical in place with instant glue.

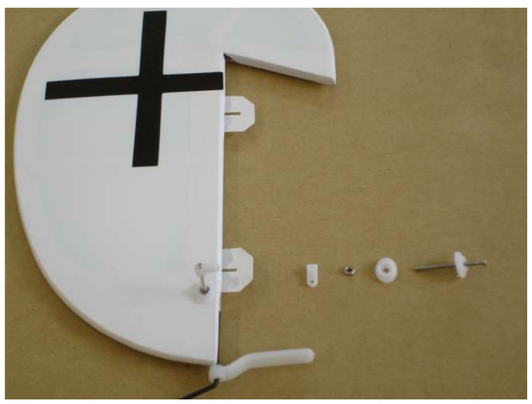
Try to fit the tail wing into the fuselage. The vertical must be fitted into the slot on the tail of the fuselage. When satisfy the location, use pen to mark the outline of fuselage on the horizontal.



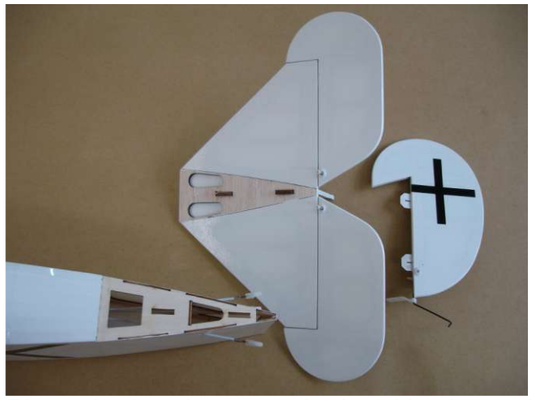
Remove the tail wing. Use hobby knife to remove the covering inside the marking area on the tail wing.



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.



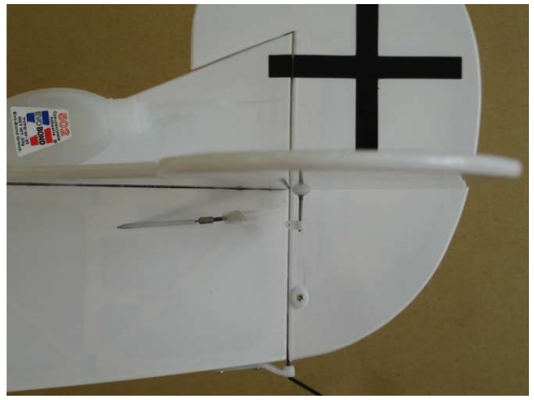
Place the control horn set on the working table and install onto the rudder.



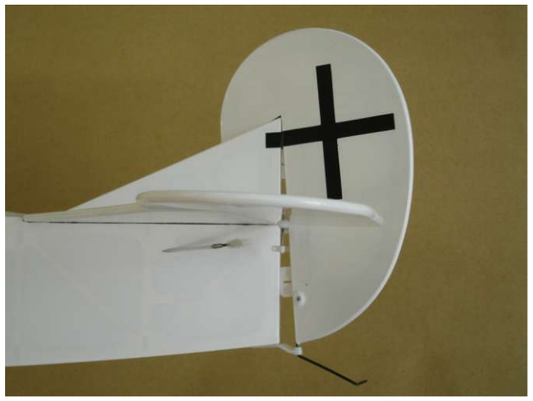
Place the fuselage, vertical and horizontal on the working table. Please refer to the drawing A and try to fit the vertical and horizontal into the fuselage. Place the main wing onto the fuselage for temporary when measure the distance between the main wing and tail wing. Make sure the distance must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

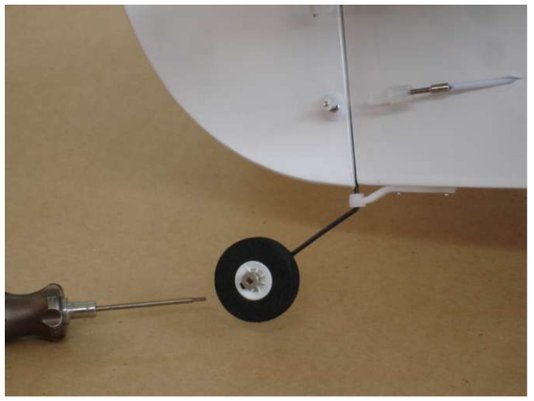
Use hobby knife to cut out the 0.35mm hole for installing rudder hinge on the bottom of fuselage.



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



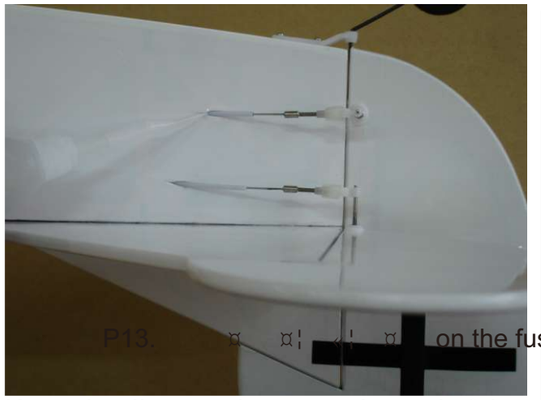
Install the rudder onto the tail. The gap will be around 0.3mm.



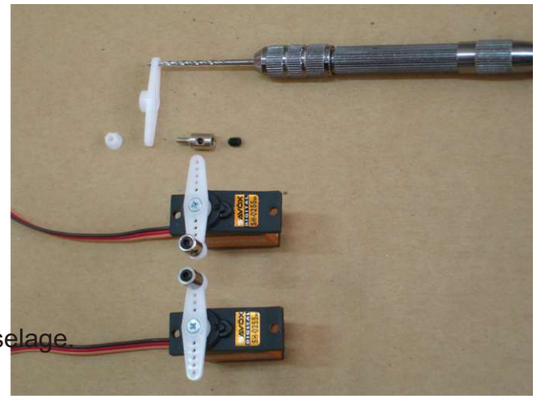
Take tail wheel, 2mm collar and M3x4 hex screw out of hardware bag. Install tail wheel to the tail gear and put on the collar. Keep the distance between the wheel and collar around 1.5mm and secure the collar in place with M3x4 screw.

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

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.



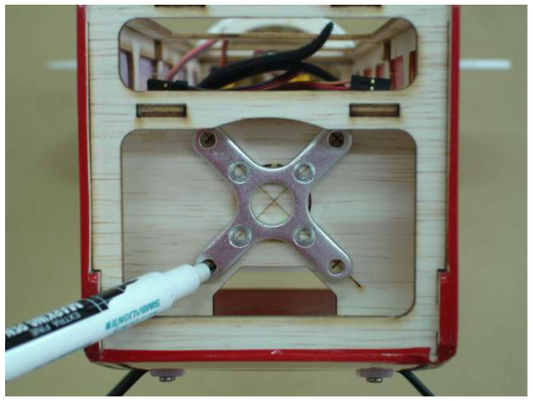
Place the servos, rod connectors, plastic nuts and M3x4mm hex screws on the working table. Use 2mm driller to drill the out-most hole on the servo arm. Install the rod connectors into the out-most hole and secure with plastic nuts and M3x4mm hex crews. Do screw too tight; make sure the rod connector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

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

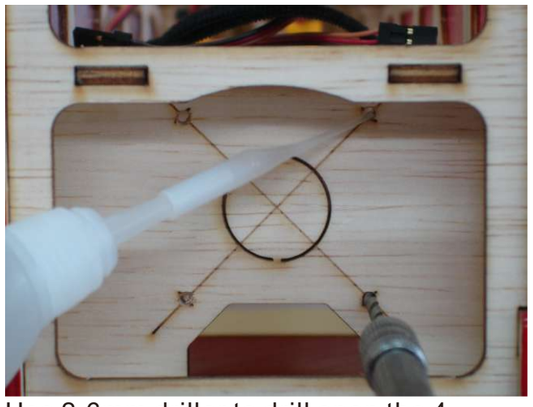
Set the servos at neutral position and secure on the servo tray with provided screws. Release the hex screw and insert the rod through the rod connector. Keep the distance between the end of the rod and the end of the tubing around 15mm; set the elevator align to the horizontal and secure the rods by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

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

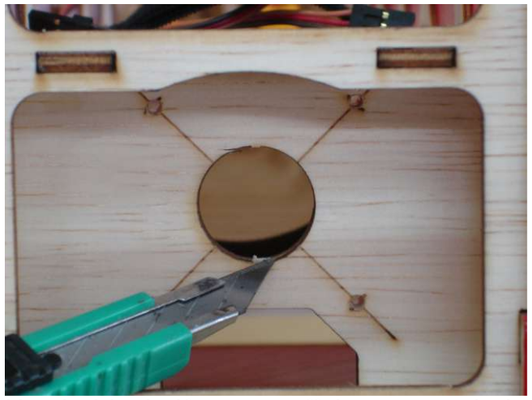
Place the ESC, propeller, aluminum nut, motor and its relative accessories on the working table.



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.

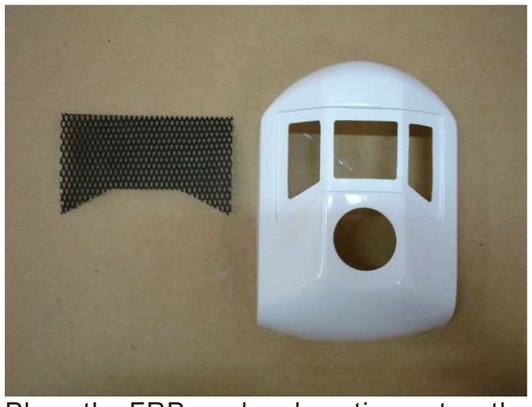


Use 2.6mm driller to drill open the 4 marked holes on the fire wall. Drop dome instant glue into the holes for reinforcement.



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

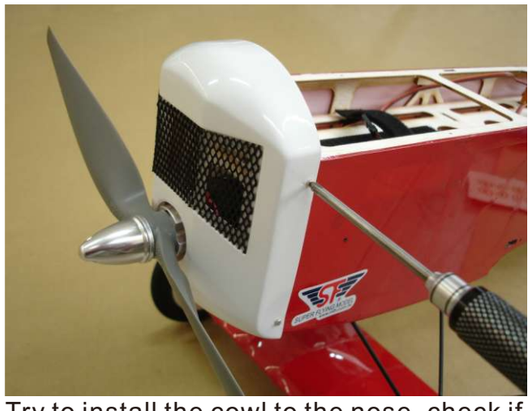
Secure the motor on the cross metal mount with provided screws. Connect the motor with ESC, set the ESC through the hole on the fire wall and secure the ESC on the bottom of the fire wall with Velcro tape. Secure the motor onto the fire wall with 3x16mm tapping screws.



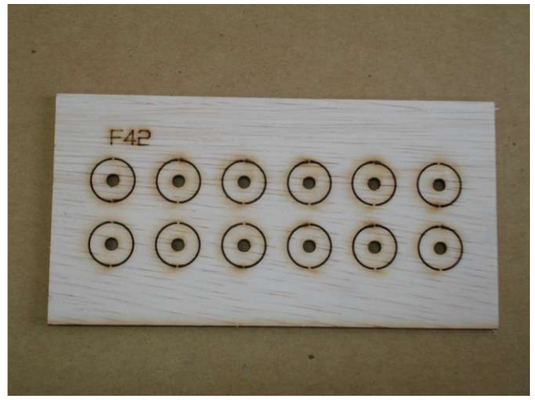
Place the FRP cowl and venting net on the working table.

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.

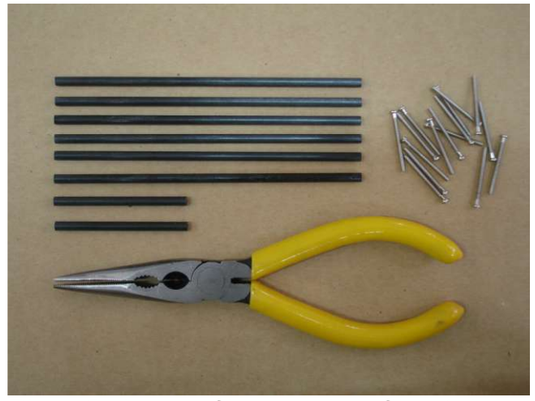
Try to press the venting net onto the cowl until the glue dried enough. It takes around 10 minutes.



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.

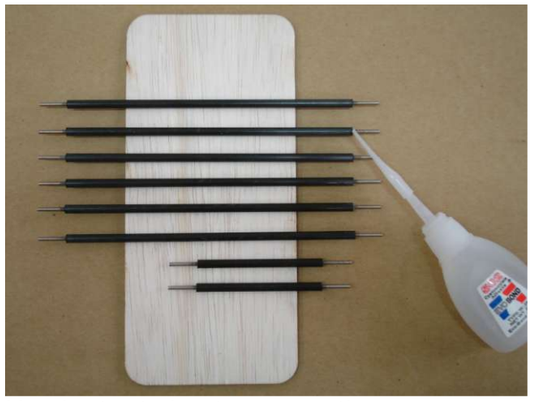


Place 6 pieces of long carbon fiber tubes, 2 pieces of short carbon fiber tube and 14 pieces of M2 x 25 screws on the working table.

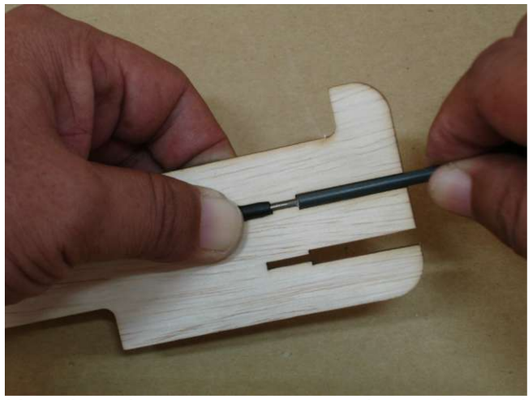
Use nipple pliers to remove the heads of screws.

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.

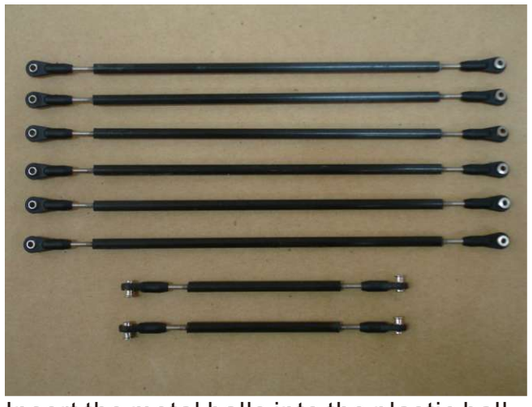


Use instant glue to secure the screws inside the CF tubes. Let dry.



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.

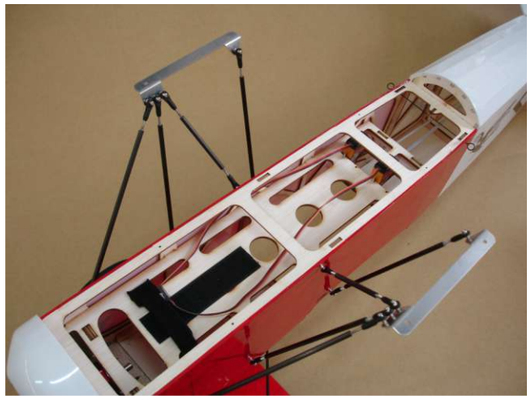


Insert the metal balls into the plastic ball-ends. When press the metal ball, one end keeps short metal, another keeps longer metal.

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.

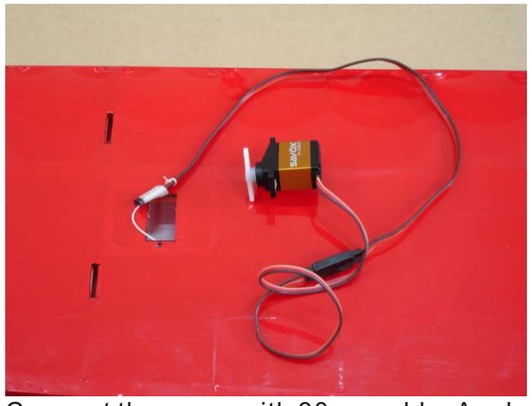
Repeat the same procedure and connect the rods to the right side strut.

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

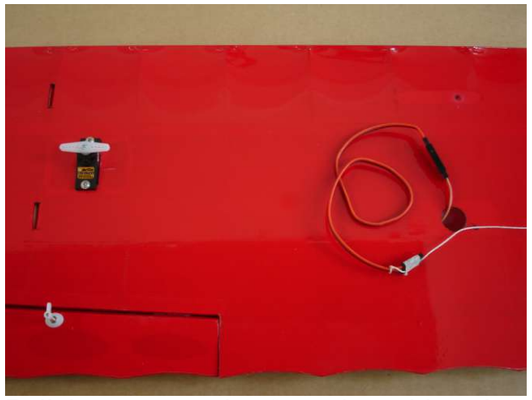


Top view of installing struts to the fuselage.

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



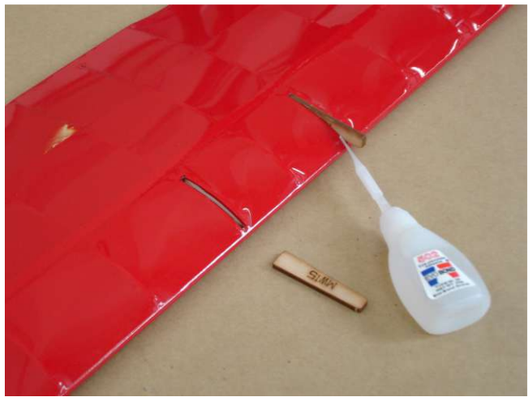
Connect the servo with 30cm cable. Apply a piece of transparent tape on the connecting place for avoiding loosing off. Connect the plug of extension with the cotton string inside the servo tray, and apply a piece of transparent tape to hold the conjunction in place for temporary.



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.

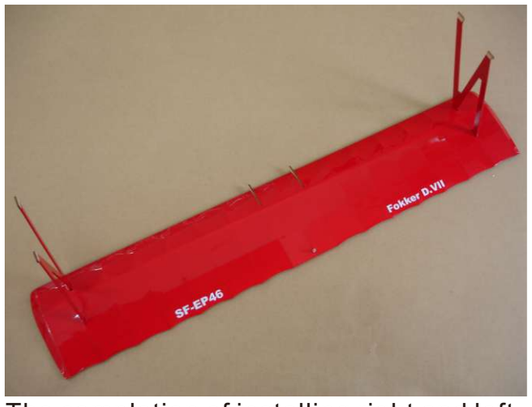
Install the z-bend into the outmost hole of the servo arm. Adjust the aileron toque rod length by screwing in or out until the aileron is exactly in the neutral position when the servo is centered and the clevis is in the aileron horn. Place a piece of silicon tube over the clevis for avoiding accidentally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



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

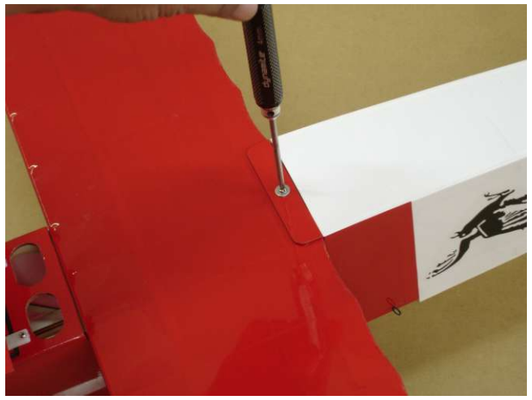
Install the M3x25mm screw with 3x10mm washer into the rear edge of the bottom main wing. Place a piece of 5mm silicon tube on the end for avoiding missing.

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.

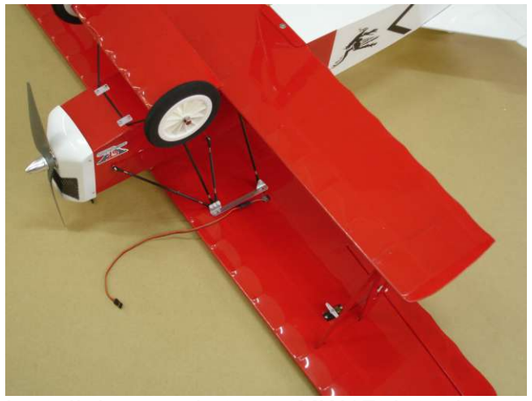


The completion of installing right and left wood struts into the bottom wing.

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.

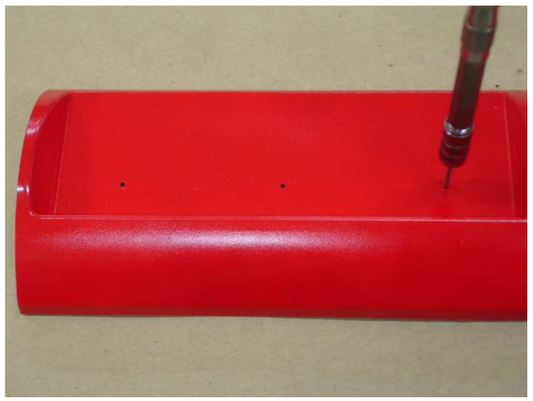
Use the same way to make the struts get stuck inside the slot.

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.

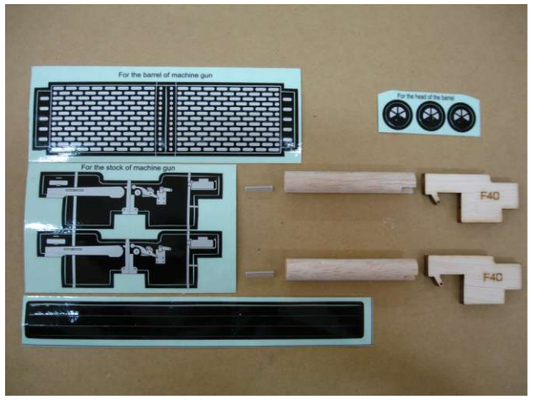
Apply the instrument decal.

Use instant glue to secure the F37 planking onto the decorative plastic engine, also drop small amount into the 3 screw holes.

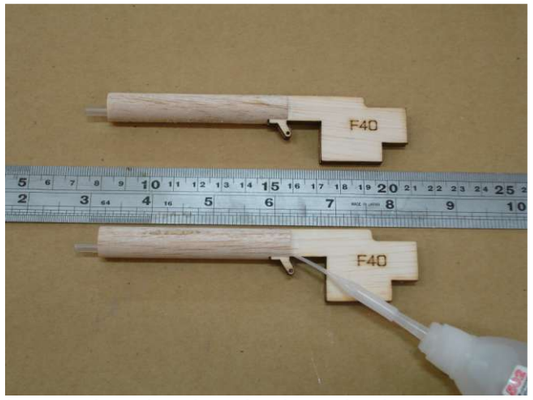
Apply the silver decal on the decorative engine.

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

The top view of the canopy after assembling.

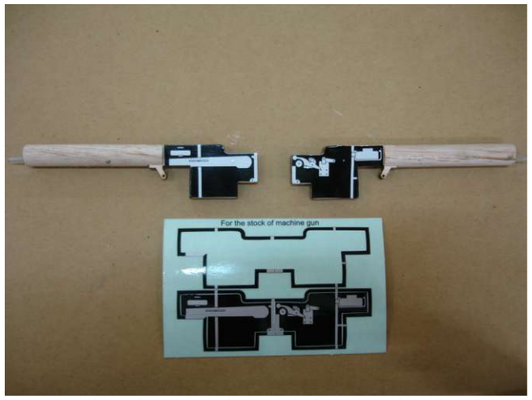


Place the machine gun decal, 4mm plastic tube, balsa barrel, and F40 butt on the working table.

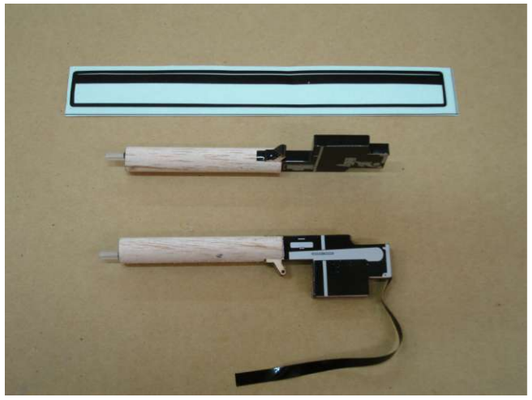


Insert the plastic tube into the barrel. Use instant glue to secure the barrel onto the F40. Place a straight rule on top of it; make sure the top of the machine gun is straight. Drop some instant glue to secure the plastic tube into the barrel.

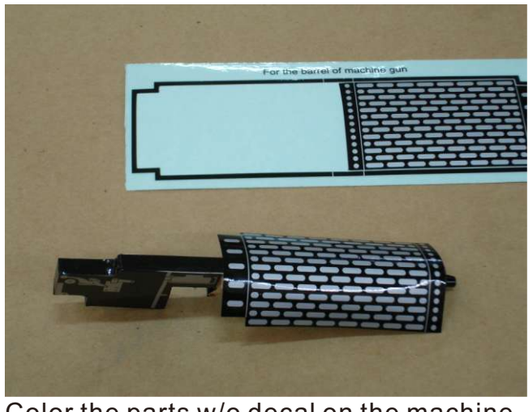
Apply the decorative sticker on the front of the barrel. Use scissors to remove the excess sticker.



Apply the decorative sticker on both sides of butt.



Apply the black sicker around the butt.



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

Apply the decorative sticker on the barrel.

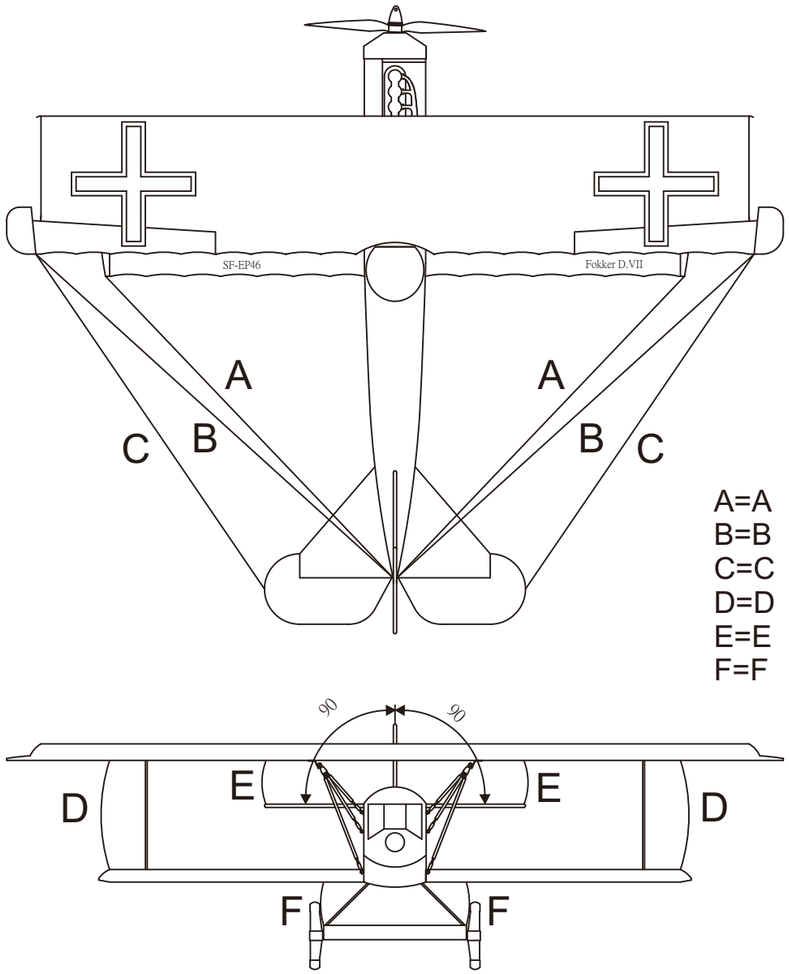
Place the machine guns inside the slots on the canopy and use 2.0x6mm tapping screw to secure them in place.

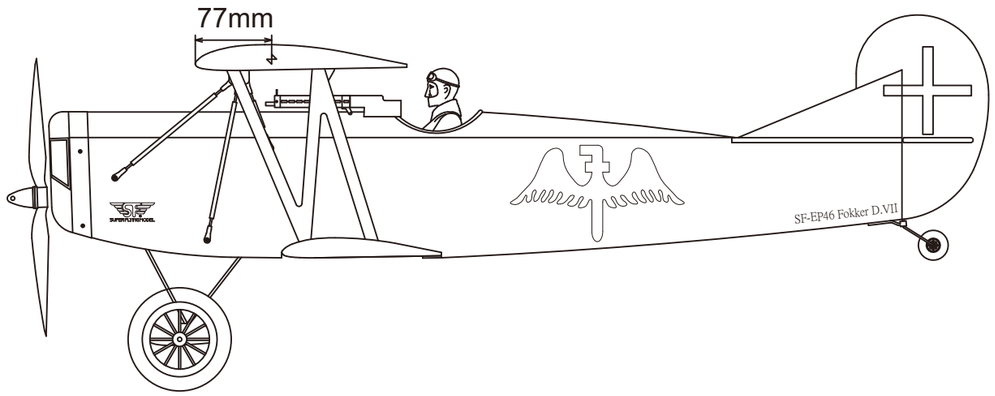
The top view of the machine guns on the canopy.

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.

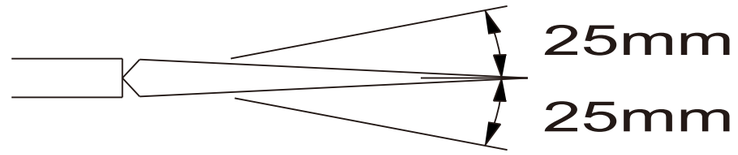
Completion of the canopy.

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.

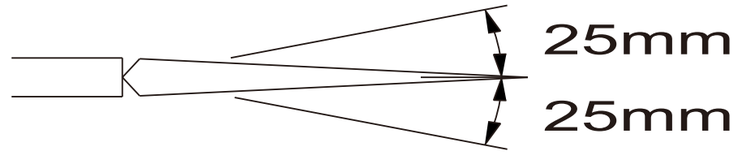




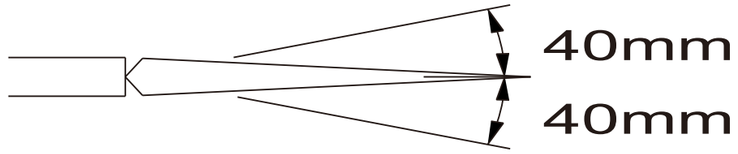
CG point is 77mm from the leading edge of the top main wing.



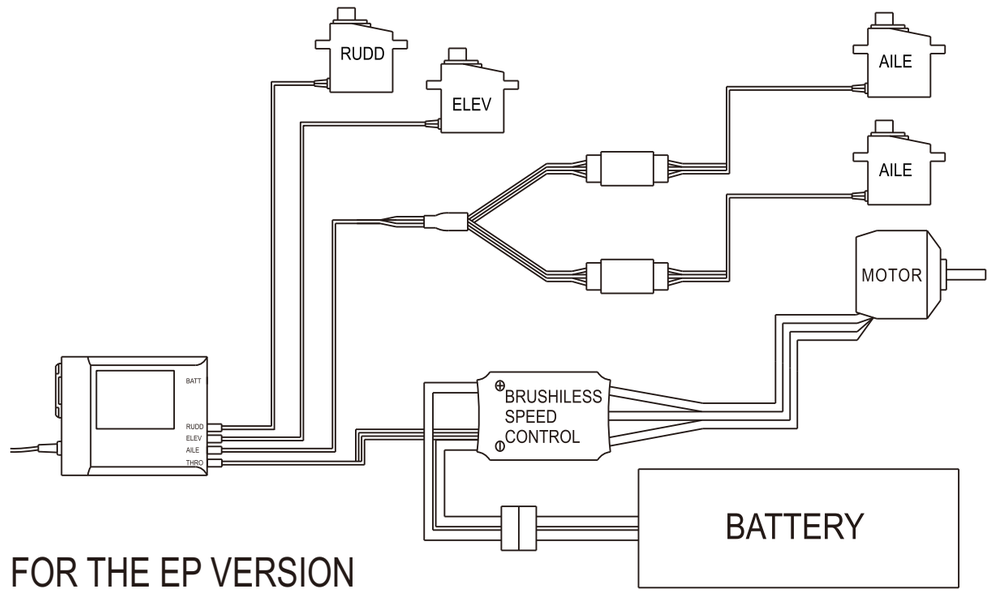
AILERONS THROW



ELEVATOR THROW



RUDDER THROW



FOR THE EP VERSION