Master Scale Kit Edition

P-51 Mustang 56.3"

Code : MSK01.276

ASSEMBLY MANUAL

"Graphics and specifications may change without notice".

SG SINCE 1998 MODELS

Specifications:

Wingspan---------- 56.3 in---------- 143 cm.
Wing area---------- 563.6 sq.ins---------- 36.4 sq.dm.
Weight---------- 6.6 - 6.8 lbs---------- 3.0 - 3.10 kg.
Length---------- 45.3 in---------- 115.1 cm.
Engine/Motor size --------- 10cc.
Radio---------- 7 channels with 7 servos.

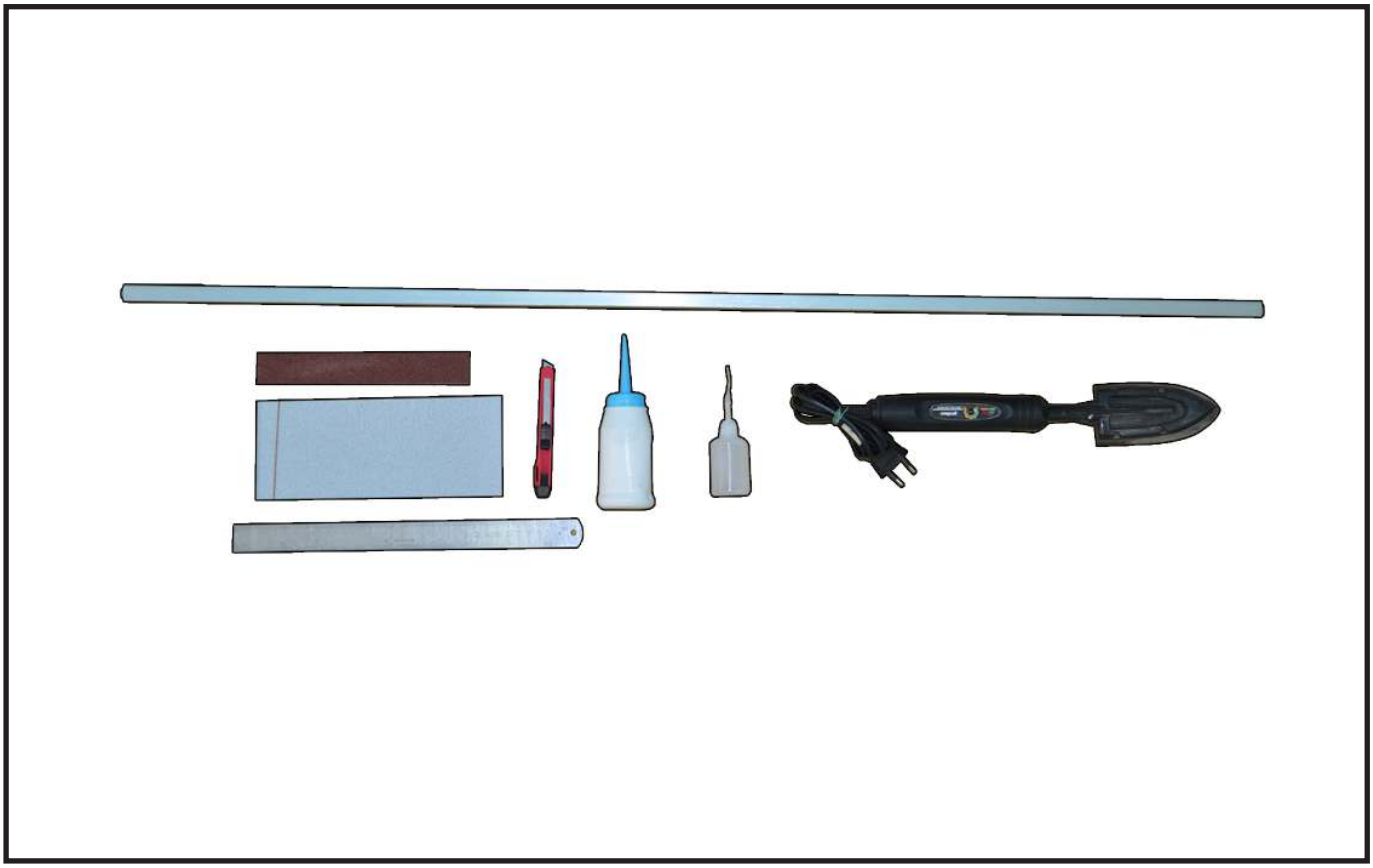
INTRODUCTION

- Congratulations and thank you for purchasing the **Master Scale Kit Edition P-51 Mustang 56.3”** We are pleased to bring you this scale P-51. with this kit you can achieve whatever level of detail you like. Just by following the instruction and finishing the plane in scale-looking trim scheme, beginning scale modelers will end up with a model that very much represents and full-size P-51. Experienced builders will find ways to add even more detail, making the **Master Scale Kit Edition P-51 Mustang 56.3”** competitive in scale contents.

GETTING PREPARE TO BUILD AS

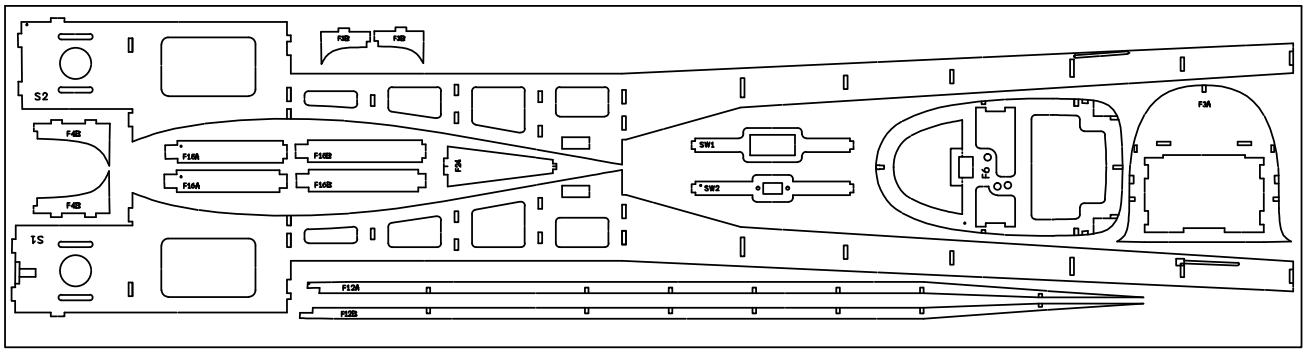
- Here is a list of supplies you should have on hand while you are building. Some of these are optional. Use your own experience to decide what you need.

- Getting prepare to build as:
- Flat Iron
- White Glue
- CA Glue
- Epoxy Glue
- Ruler
- Cutter
- Sandpaper Bar
- Aluminum Square Fixed Tool

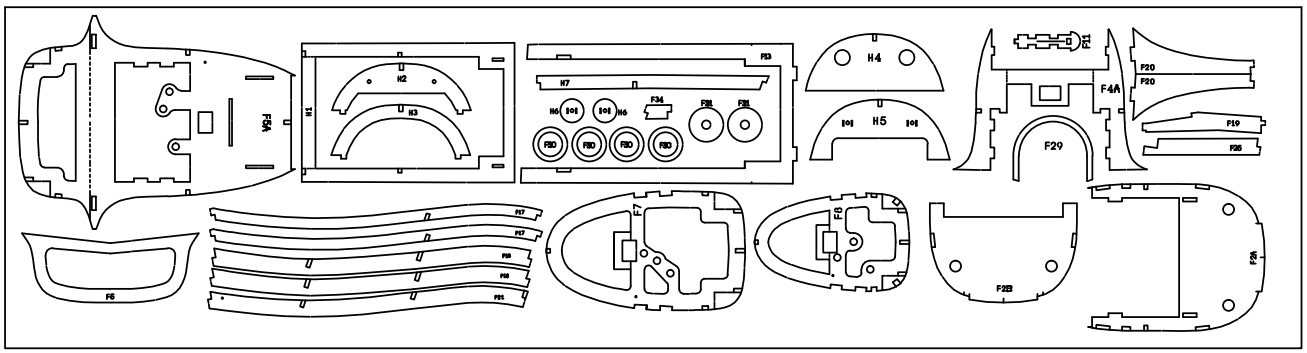


DIE-CUT PATTERNS

2.7mm balsa plywood 950mmx250mm (1 per kit)



2.7mm balsa plywood 950mmx250mm (1 per kit)



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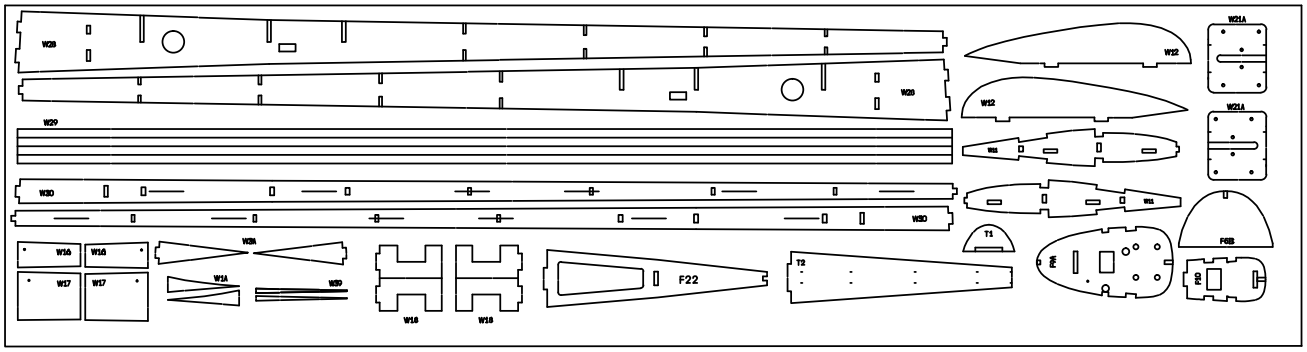
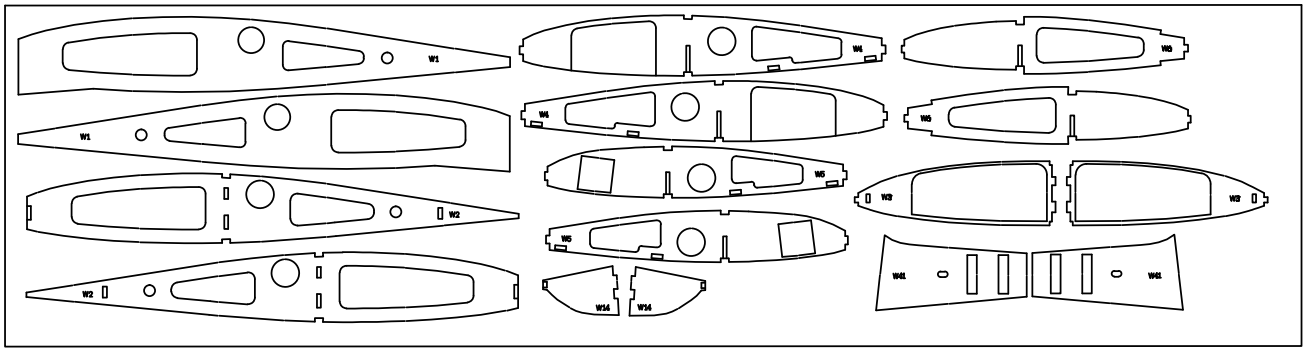
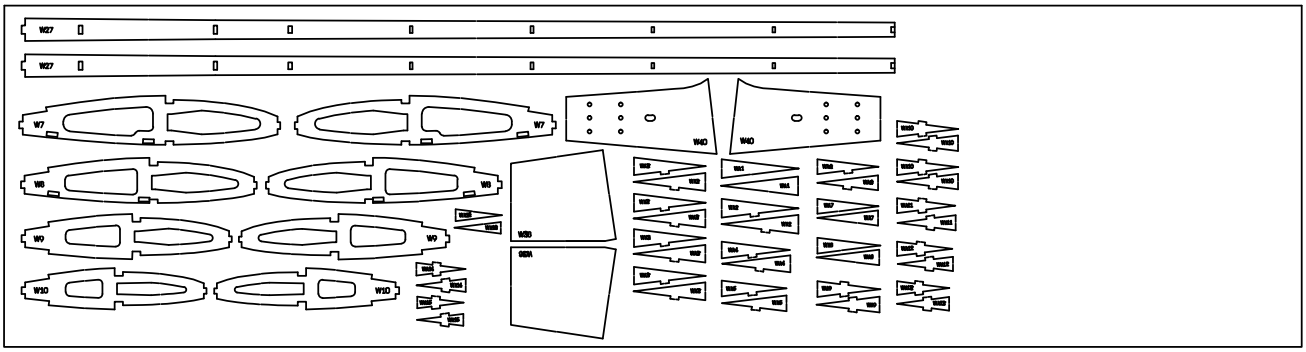


2.7mm balsa plywood 950mmx250mm (1 per kit)

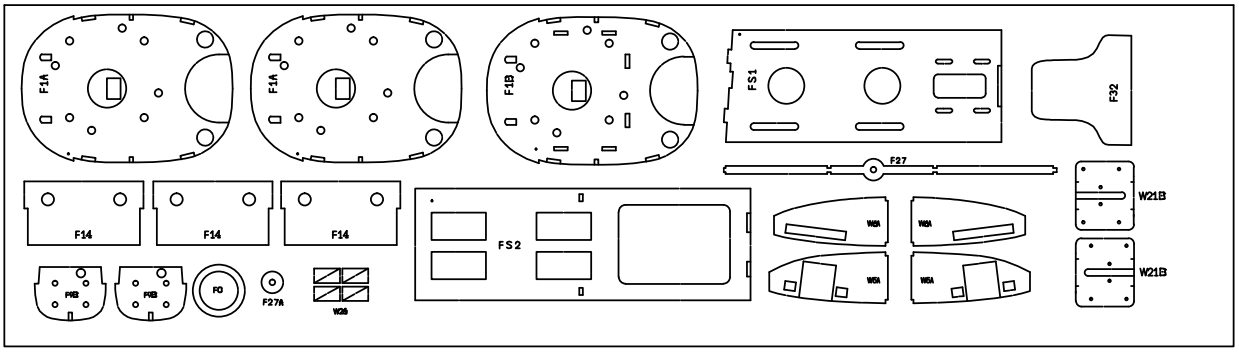


DIE-CUT PATTERNS

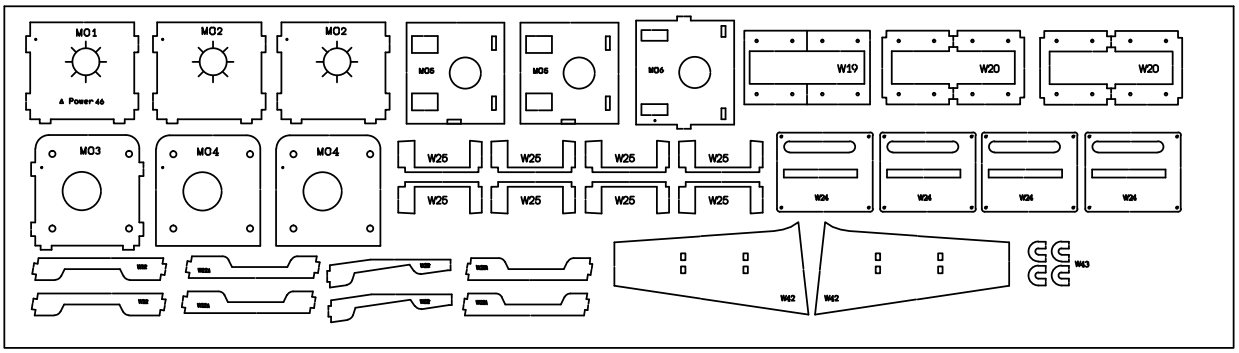
2mm balsa plywood 950mmx250mm (1 per kit)



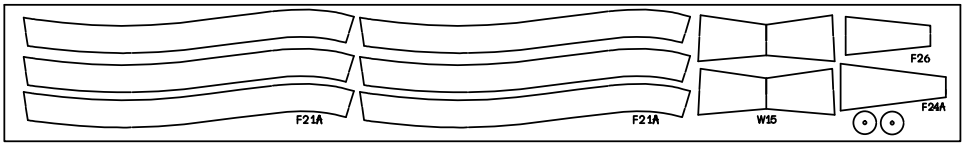
3mm plywood 900mmx250mm (1 per kit)



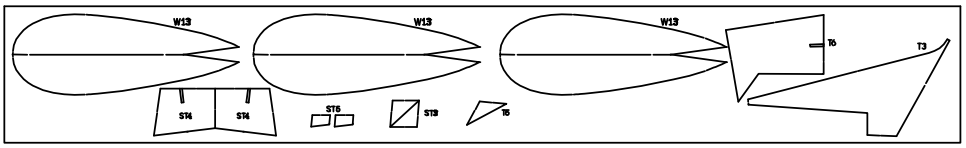
3mm plywood 900mx250mmm (1 per kit)



8mm balsa 700mx100mmm (1 per kit)

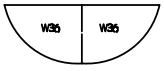


8mm balsa 700mx100mmm (1 per kit)



4mm balsa (1 per kit)

10mm balsa (1 per kit)



2mm phip (1 per kit)

DIE-CUT PATTERNS

2mm balsa sheet 900mx100mmm (2 per kit)

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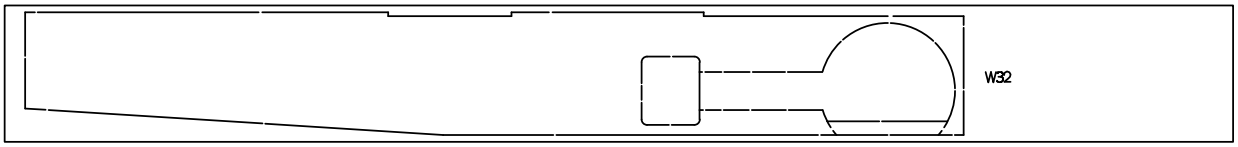
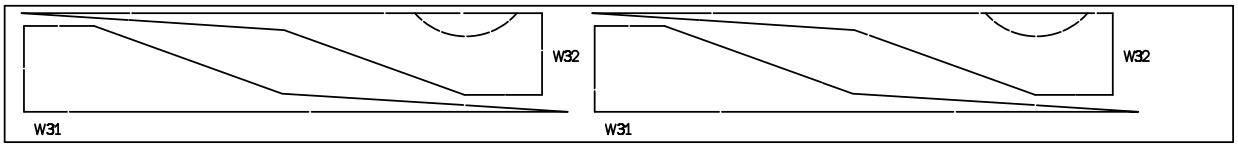
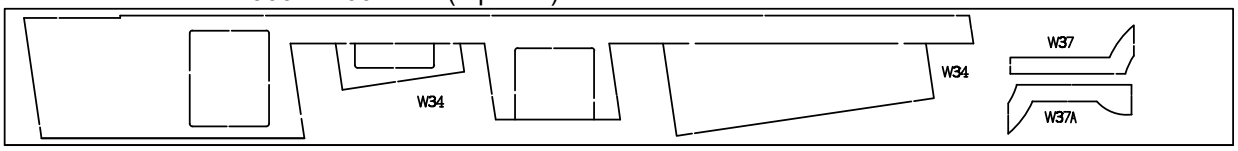


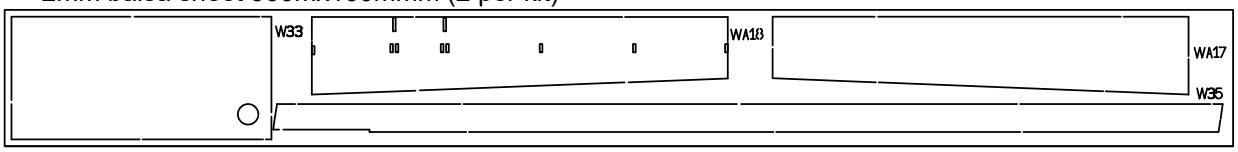
2mm balsa sheet 900mx100mmm (1 per kit)



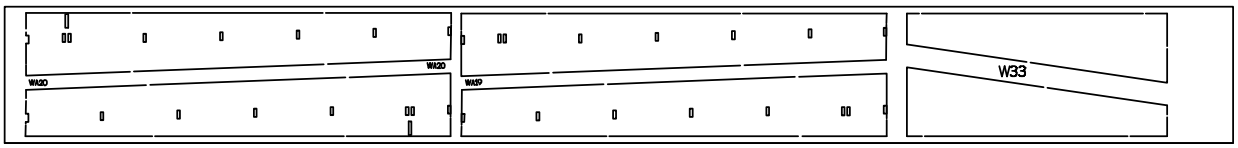
2mm balsa sheet 900mx100mmm (2 per kit)



2mm balsa sheet 900mx100mmm (2 per kit)



2mm balsa sheet 900mx100mmm (1 per kit)



DIE-CUT PATTERNS

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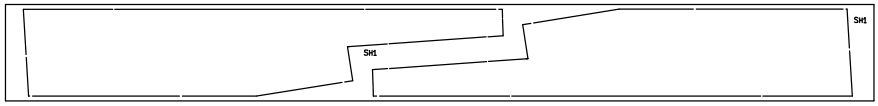
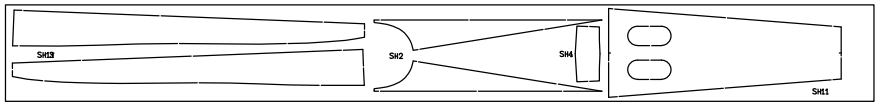
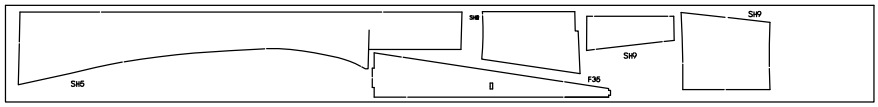


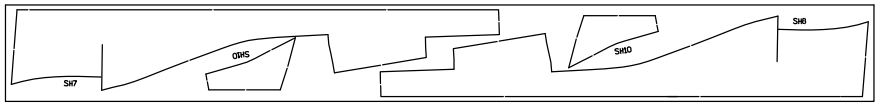
2mm balsa sheet 900mx100mmm (1 per kit)



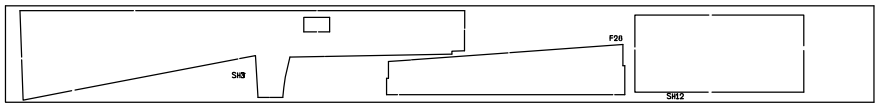
2mm balsa sheet 900mx100mmm (2 per kit)



2mm balsa sheet 900mx100mmm (1 per kit)



2mm balsa sheet 900mx100mmm (2 per kit)



PREPARE BEFORE BUILDING

Please kindly see the plan drawing and compare to die-cut pattern to pick the parts of fuselage, the parts of wing, the parts of rudder and stabilizer. They were shown by the difference name code. Please lightly remove the die-cut parts by paper cutter blade. Please make lightly clean smoke stains on them by a sanding tool so that the glue absorbs quickly.

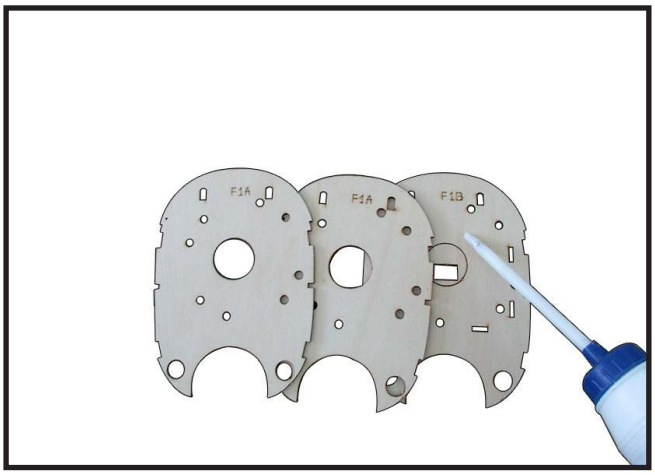
THE FUSELAGE

As if you were sitting in the cockpit and distinguish left side and right side of model . **NOTE: Regulations for the right side. It is small point which was marked on each former and fuselage side.**

*** Firewall**

Locate and assemble 3 layers of engine mount include F1A (2pcs) and F1B (1pcs) by epoxy as photo shown (photo 1). **NOTE: The small point is regulations for the right side.** And then, use heavy flat thing pressed on F1 block (3 layers assembled) until epoxy dries to ensure firewall block is not warped.

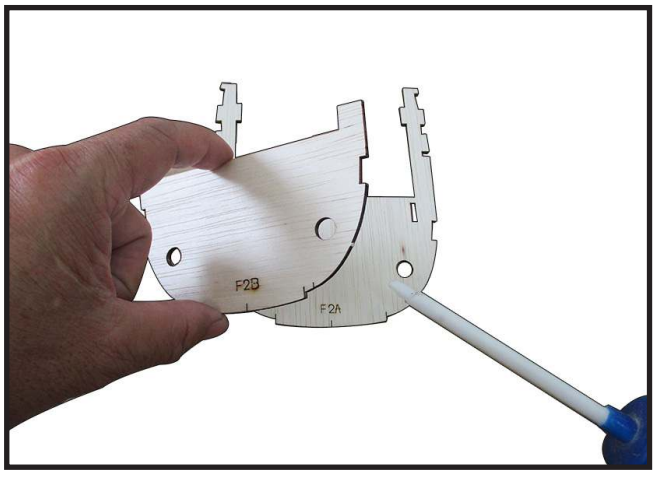
1.



*** Position hole of pin for wing on fuselage at front.**

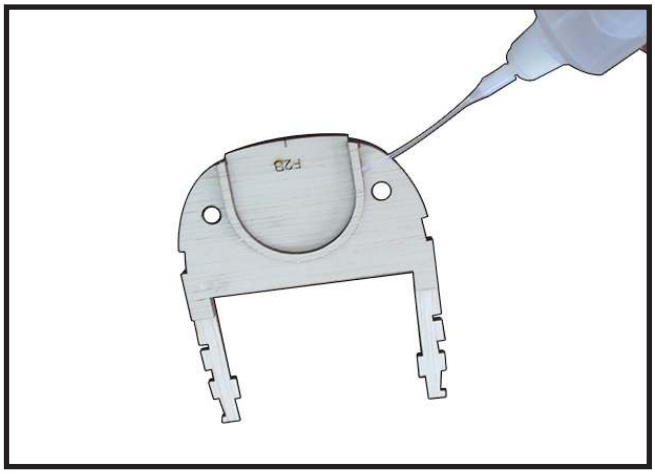
Locate and assemble 2 layers F2A and F2B by epoxy as photo shown (photo 2).

2.



As photo shown (photo 3), you can use 100% epoxy glue. And then, use heavy flat thing pressed on F2 block until the glue dries. Or you can use CA glue at some places to help holding them temporarily. At this time, you can do next step to save more time while waiting epoxy dries.

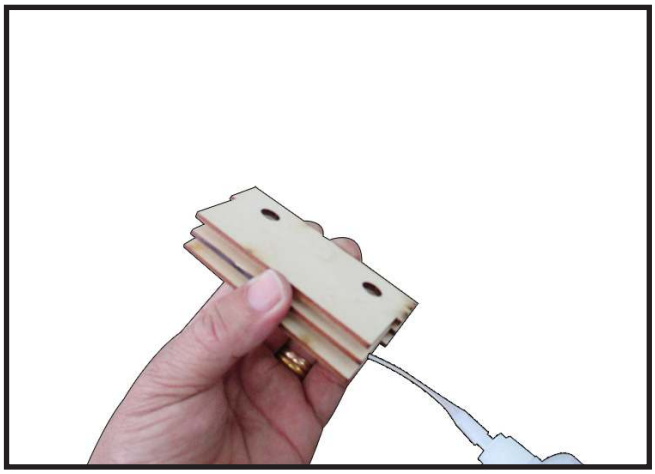
3.



*** The wing mount on fuselage at rear.**

Locate and assemble 3 layers F14 by epoxy as photo shown (photo 4 and photo 5).

4.

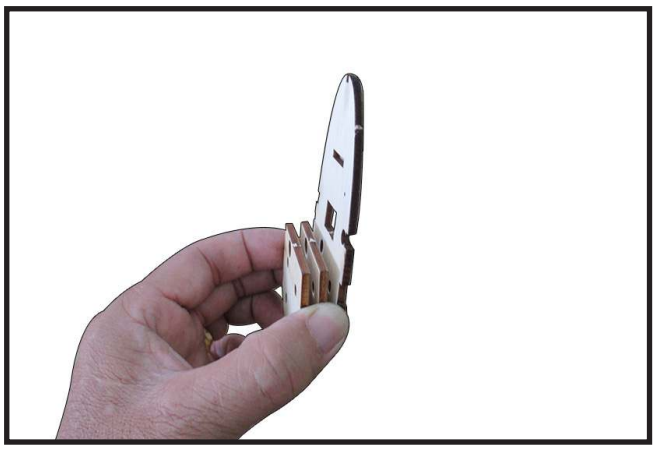


5.

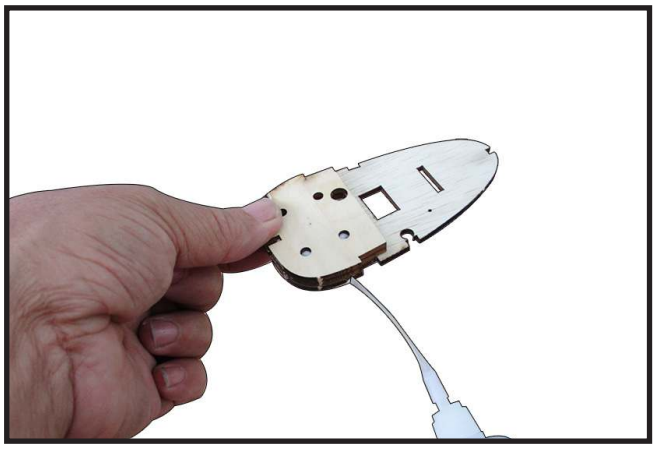
*** Tail gear mount.**

Locate and assemble 3 layers of tail gear mount include F9B (2pcs) and F1A (1pcs) by epoxy as photo shown (photo 6 and photo 7). **NOTE: The small point is regulations for the right side.**

6.



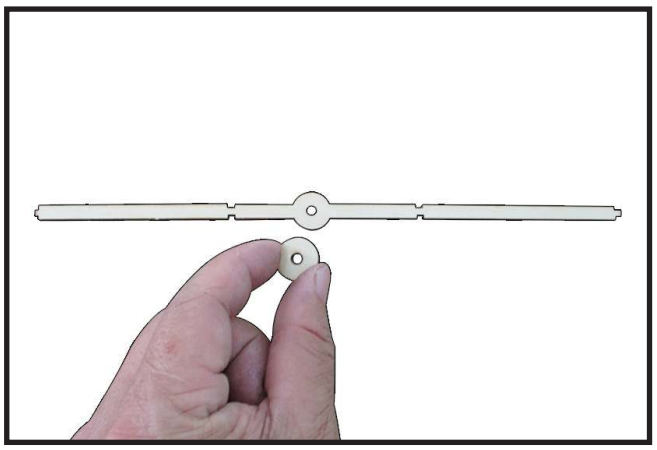
7.



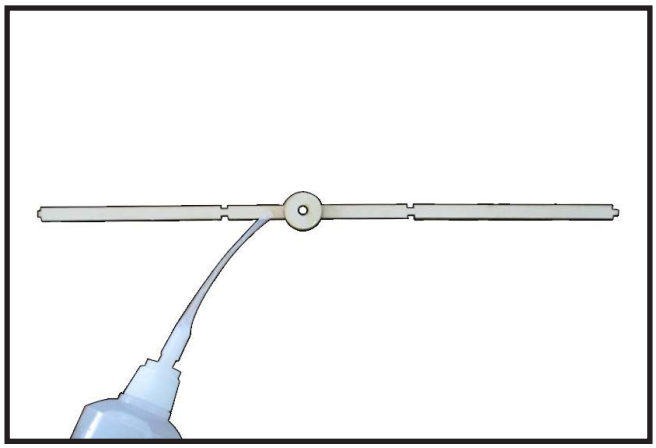
*** Antenna mount.**

Locate and assemble F27A and F27B by epoxy as photo shown (photo 8 and photo 9).

8.



9.



*** Assemble hard- wear to the position of holes were drilled available on Firewall, Tail gear mount, Wing mount , Antenna mount.**

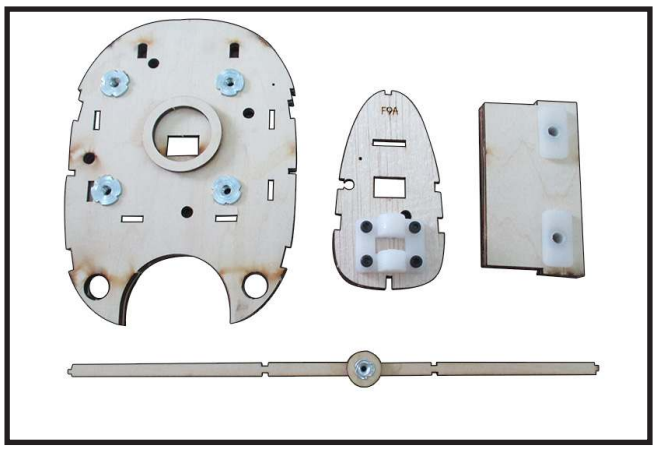
Locate and assemble Pronged T-Nuts M4 to engine holes of F1(firewall) as photo shown (photo 10). Please choose the fit engine. Depending on the engine’s exhaust pipe, you can rotate the engine horizontally or vertically.

Locate and assemble Pronged T-Nuts M3 to F9 (tail gear mount). The next assembly is Plastic Gear Mount and Bolt as photo shown (photo 10).

Locate and assemble Plastic Nut M6 to F14 (the wing mount) by CA glue as photo shown (photo 10).

Locate and assemble Pronged T-Nuts M3 to F27(antenna mount) as photo shown (photo 10). The Antenna is removable at here.

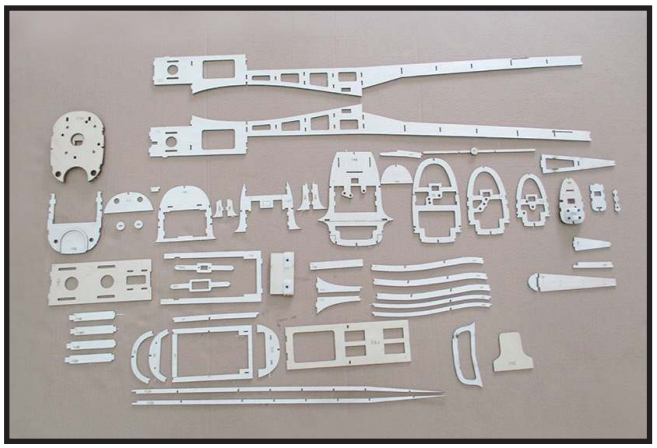
10 .



*** All parts of fuselage.**

As shown (photo 11). All parts are available for fuselage assembly.

11.

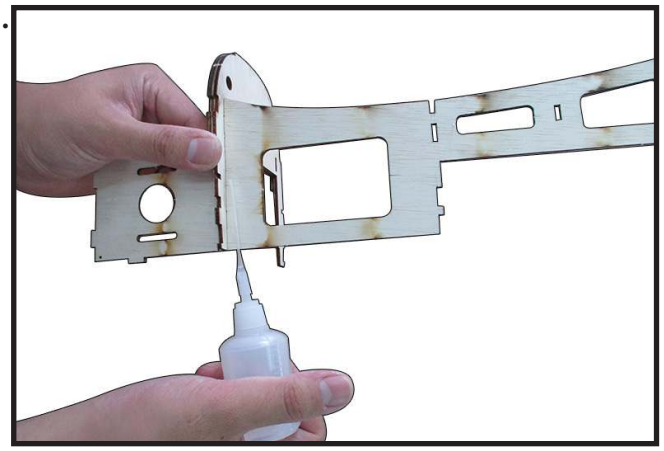


*** Build the fuselage.**

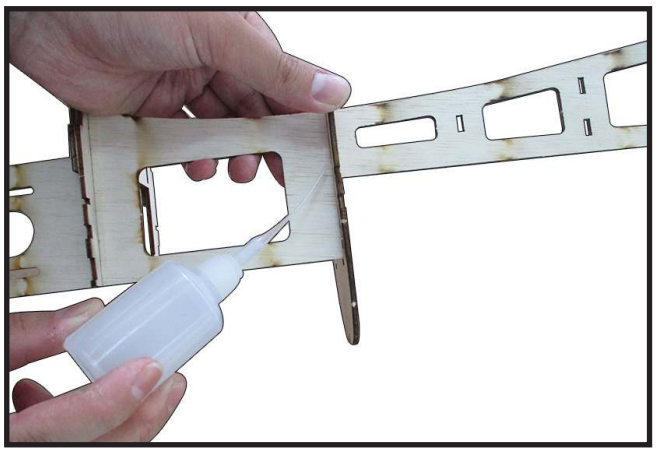
Arrange the left fuselage side S1, and the right fuselage side S2. **NOTE: The small point is regulations for the right side.**

Locate and assemble F2 block, F3A, F4A, F5A to right fuselage side S2 by CA glue as photo shown (photo 12,13,14). **NOTE: The small point is regulations for the right side.**

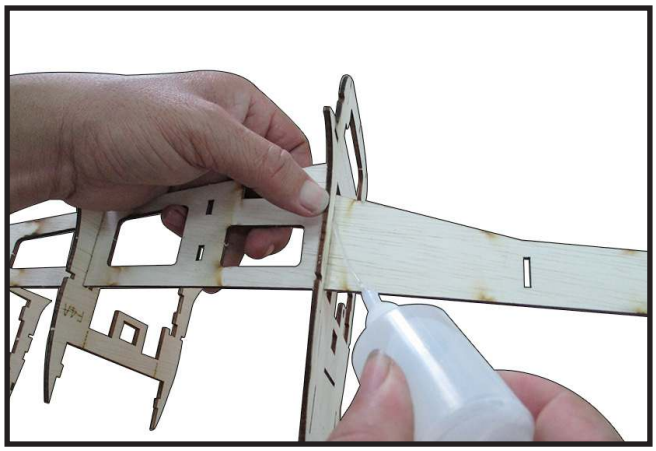
12 .



13.

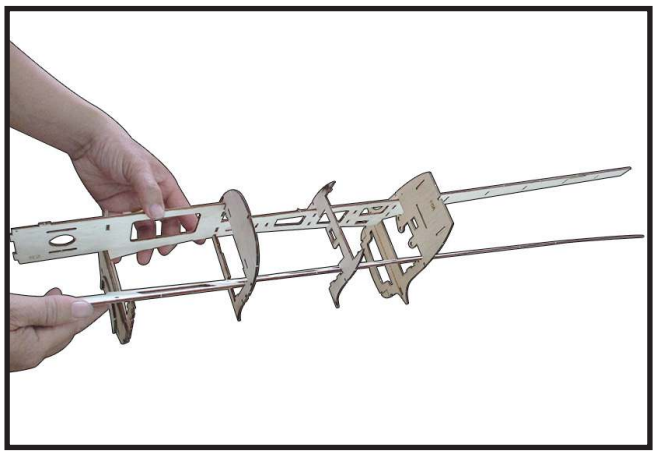


14.



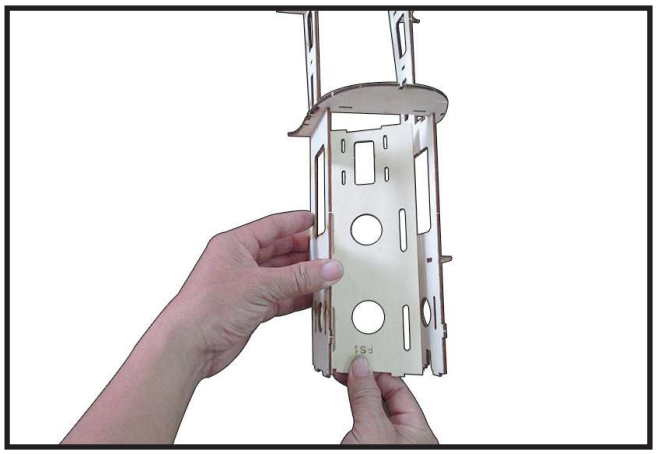
Locate and assemble left fuselage side S1 to F2 block, F3A, F4A, F5A by CA glue as photo shown (photo 15).

15.

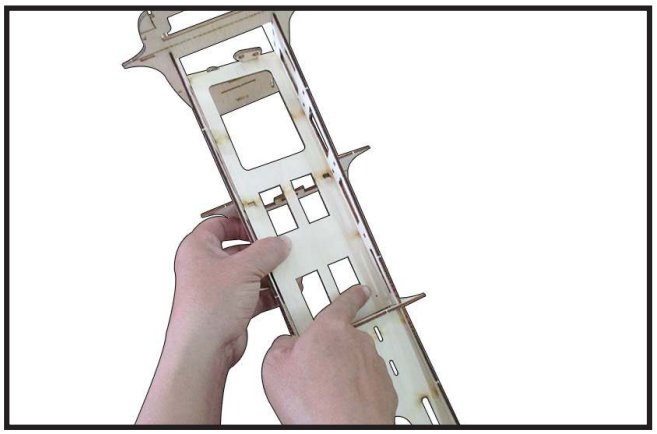


Locate and assemble FS1 to FS2 to fuselage by CA glue as photo shown (photo 16,17,18). **NOTE: The small point is regulations for the right side.**

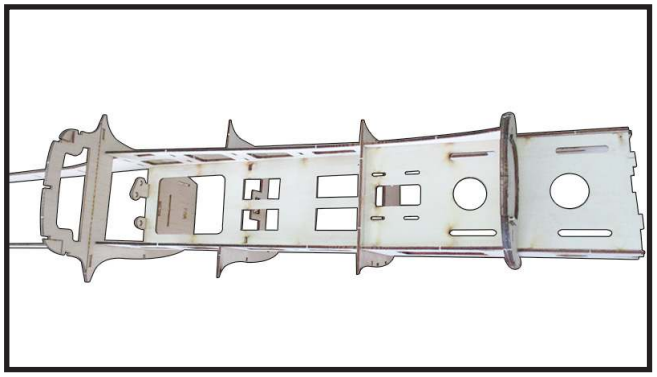
16.



17.

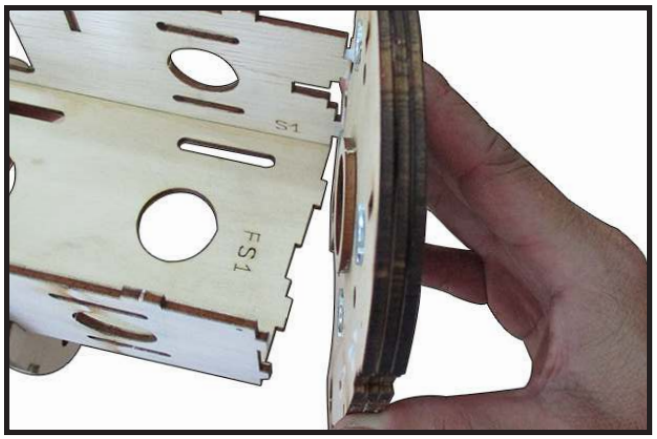


18.



Locate and assemble F1 (firewall) to fuselage by CA glue as photo shown (photo 19,20). **NOTE: The small point is regulations for the right side.**

19.



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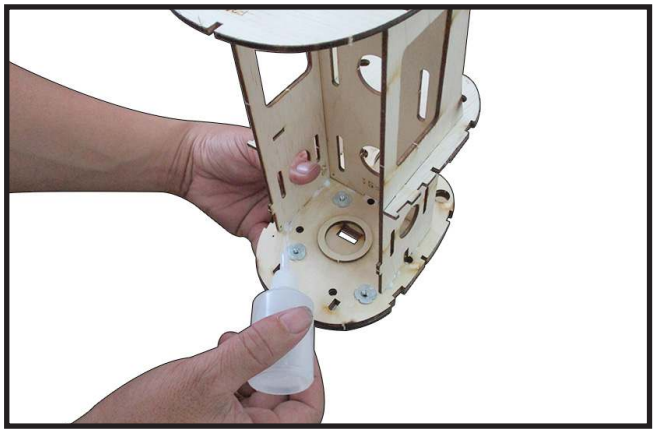
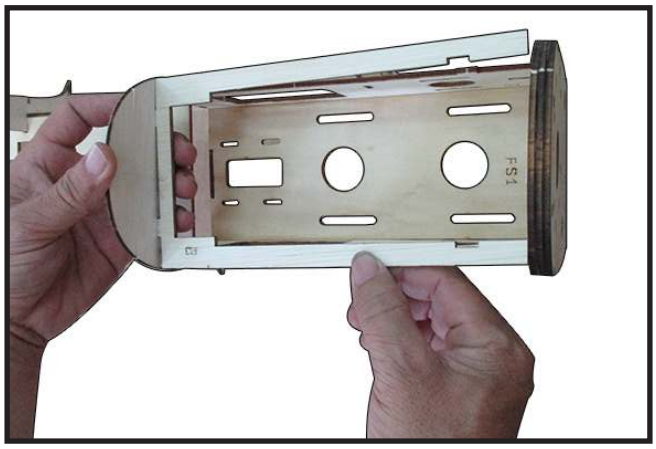


Locate and assemble F13 to fuselage by CA glue as photo shown (photo 21,22).

21.



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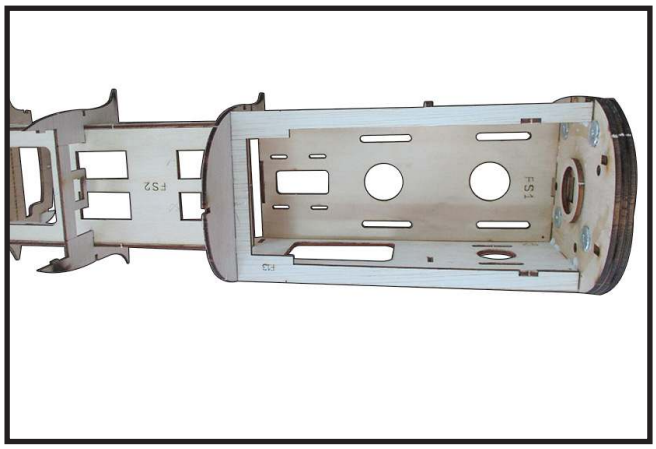
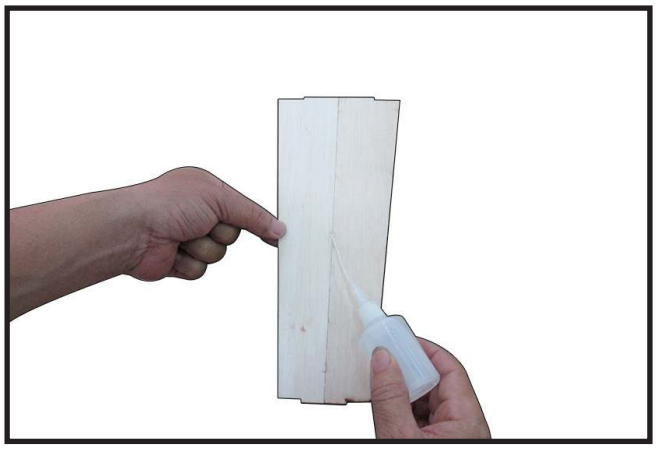


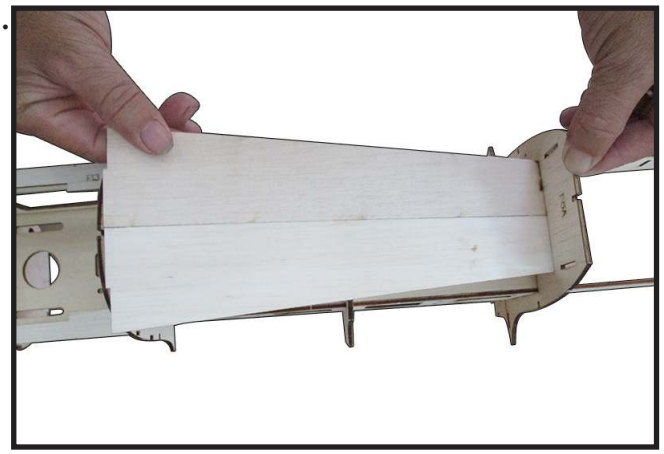
Weld together two pieces F28 by CA glue as photo shown (photo 23).

23.



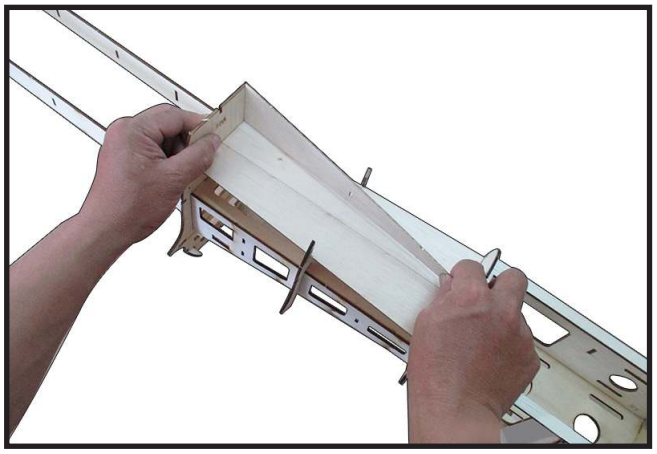
Locate (cockpit’s area) and assemble F28 to fuselage by CA glue as photo shown (photo 24).

24 .



Locate and assemble F35 to two sides of cockpit's area by CA glue as photo shown (photo 25,26).

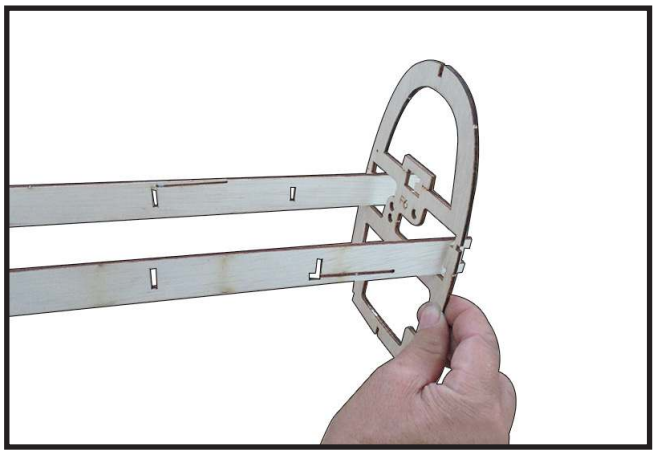
25.



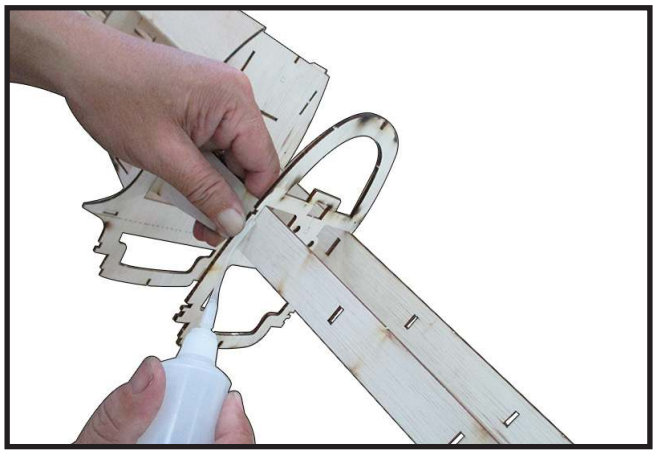
26.

Step by step, locate and assemble F6 to F11 to fuselage by CA glue as photo shown (photo 27,28,29,30,31,32,33). **NOTE: The small point is regulations for the right side.**

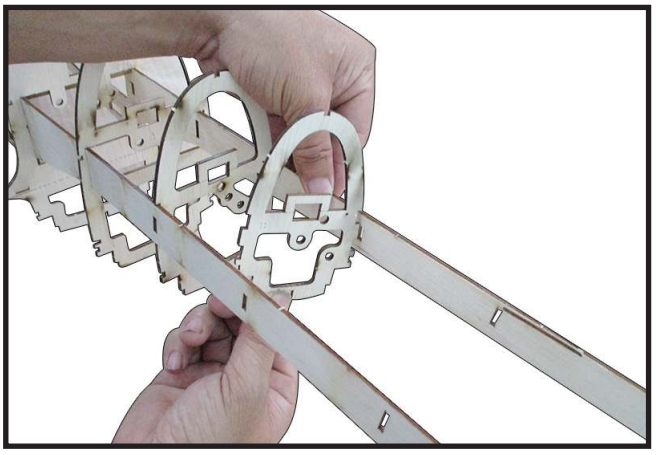
27.



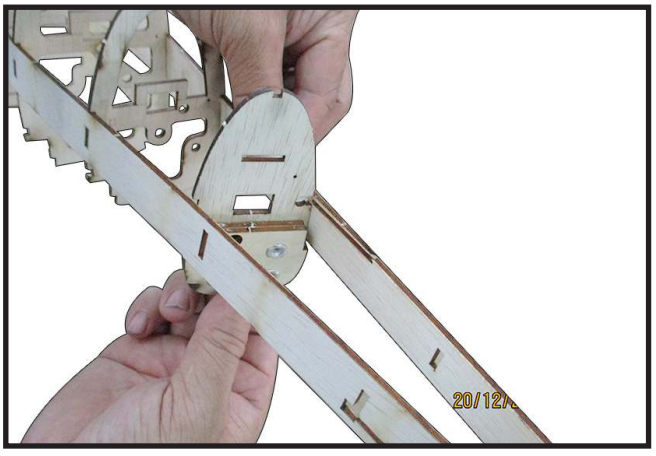
28.



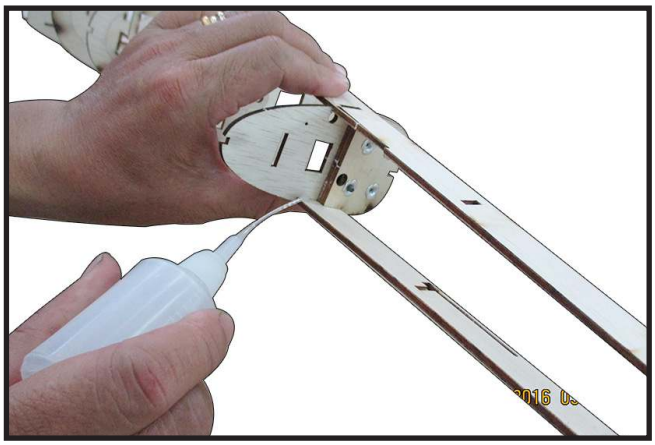
29.



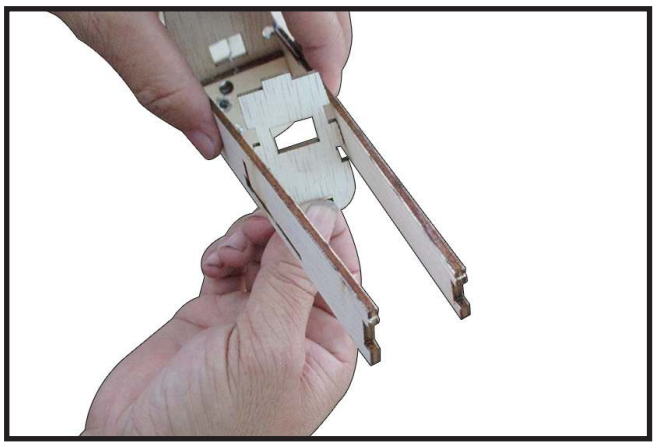
30.



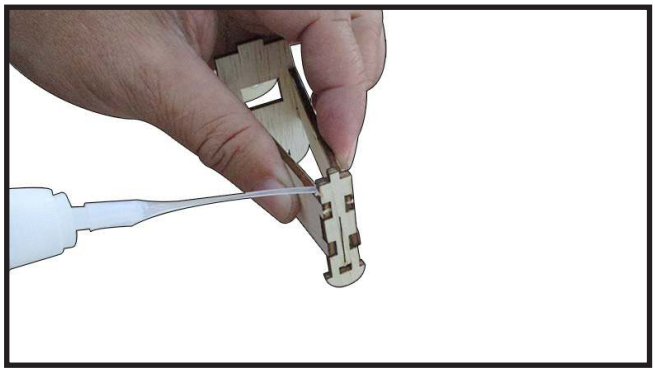
31.



32.

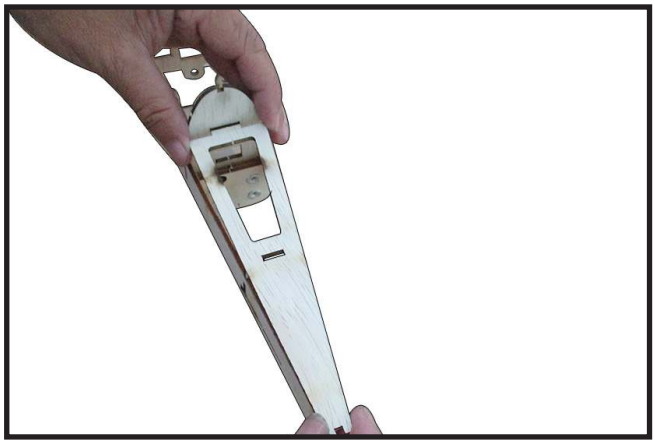


33.



Locate and assemble F22 to fuselage by CA glue as photo shown (photo 34).

34.

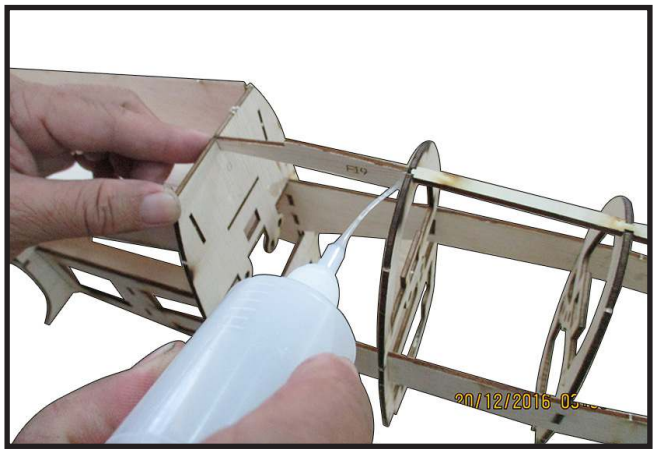


Locate and assemble F27 (Antenna mount) to fuselage by CA glue as photo shown (photo 35).

35.

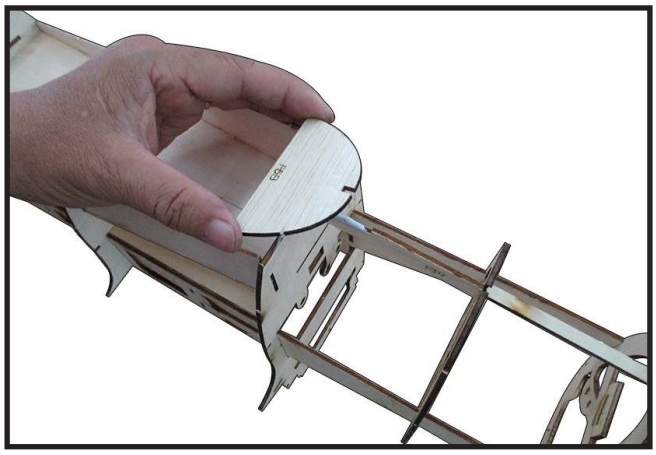
Locate and assemble F19 to fuselage by CA glue as photo shown (photo 36).

36.



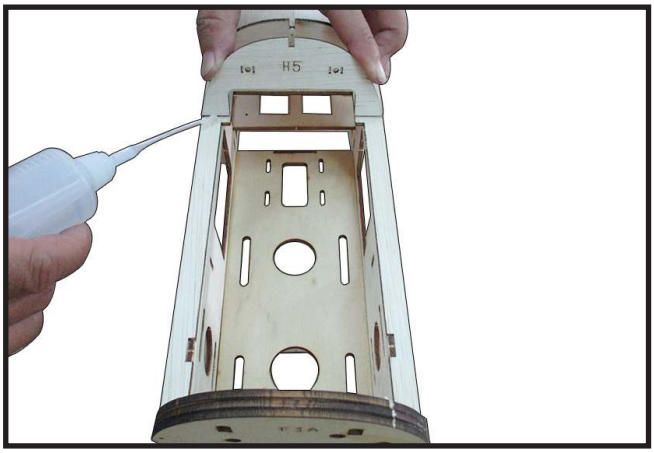
Locate and assemble F5B to fuselage by CA glue as photo shown (photo 37).

37.

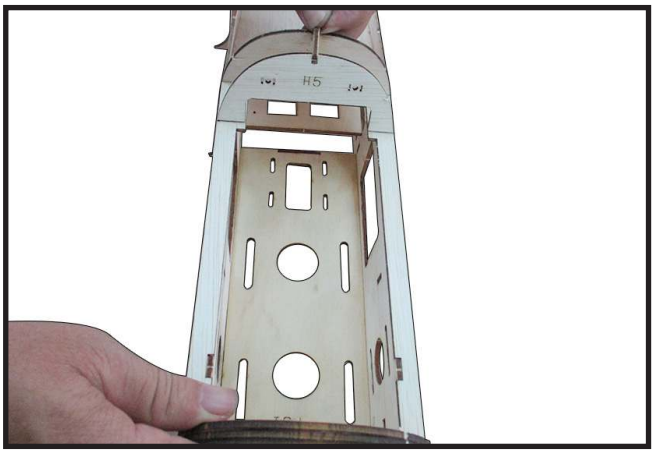


Locate and assemble H5 and F34 to fuselage by CA glue as photo shown (photo 38,39).

38.

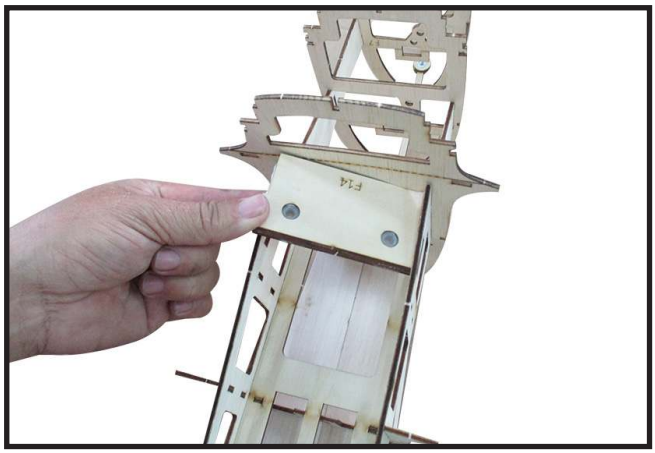


39.



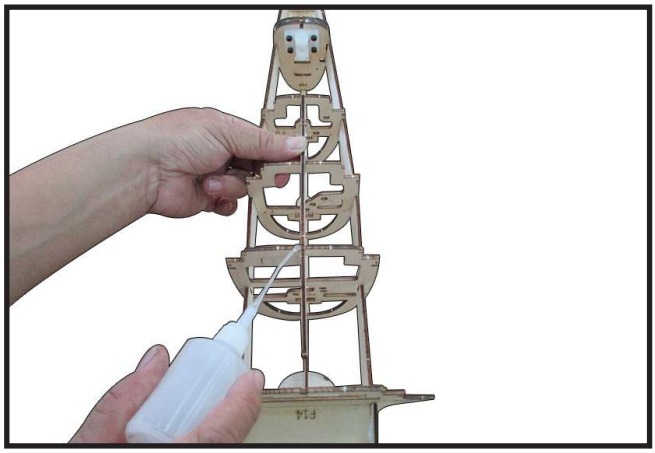
Locate and assemble F14 block (wing mount) to fuselage by Epoxy glue as photo shown (photo 40).

40.



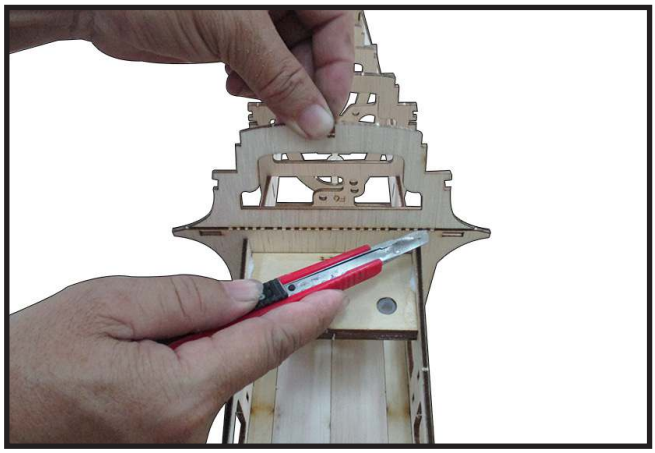
Locate and assemble F21 to fuselage by CA glue as photo shown (photo 41).

41.

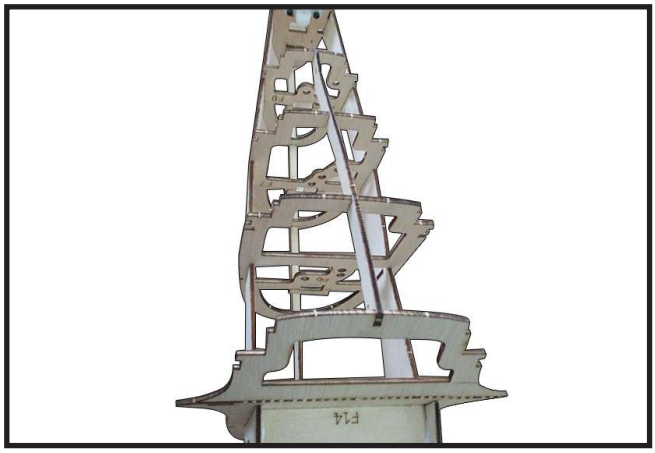


Use the cutter blade to cut as the hyphen on F5A ,and then you light break the below part of F5A to rear until it touch to F21. Locate and weld them CA glue as photo shown (photo 42,43).

42.

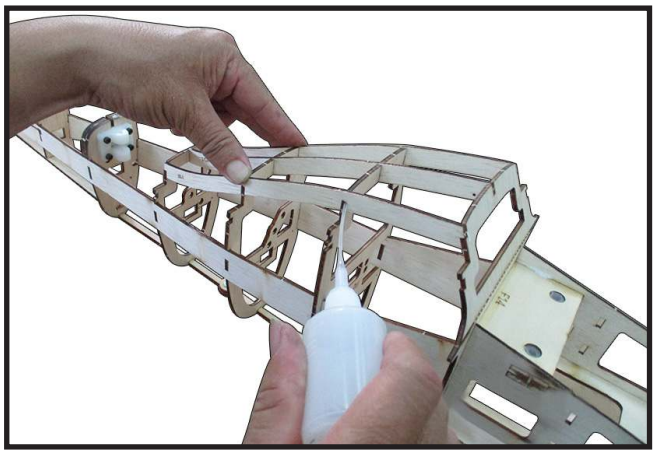


43.



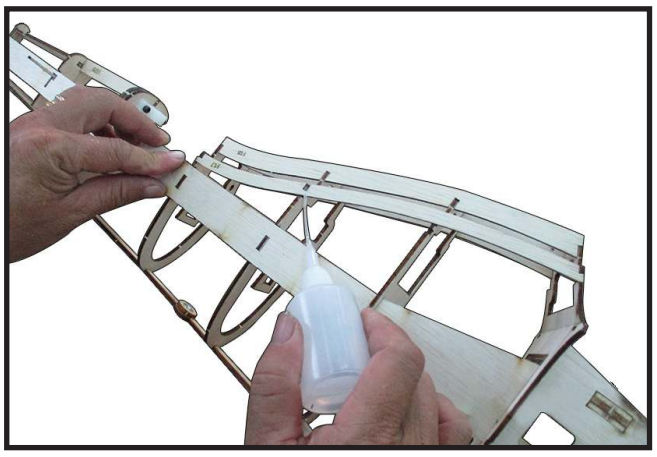
Locate and assemble F18 to fuselage by CA glue as photo shown (photo 44).

44.



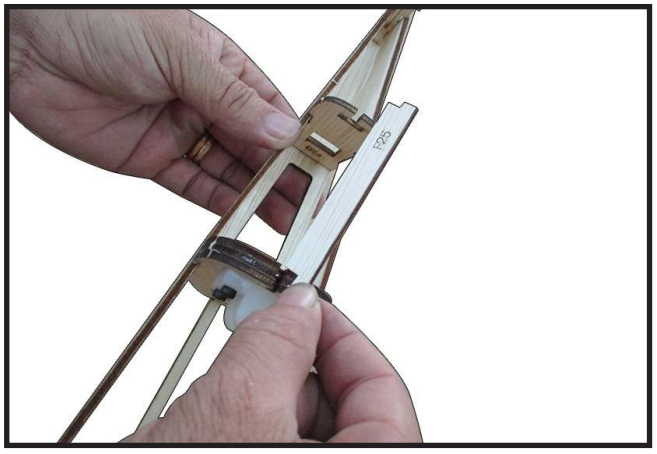
Locate and assemble F17 to fuselage by CA glue as photo shown (photo 45).

45.



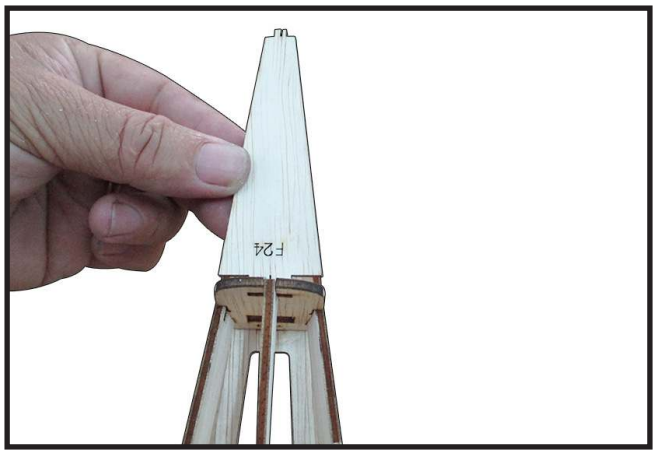
Locate and assemble F25 to fuselage by CA glue as photo shown (photo 46).

46.

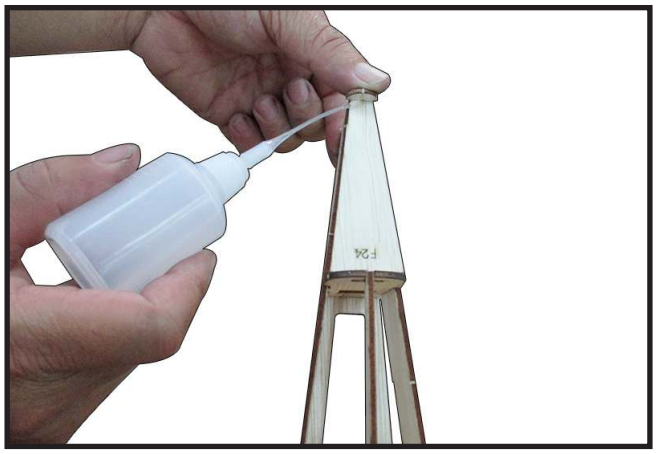


Locate and assemble F24 to fuselage by CA glue as photo shown (photo 47,48).

47.

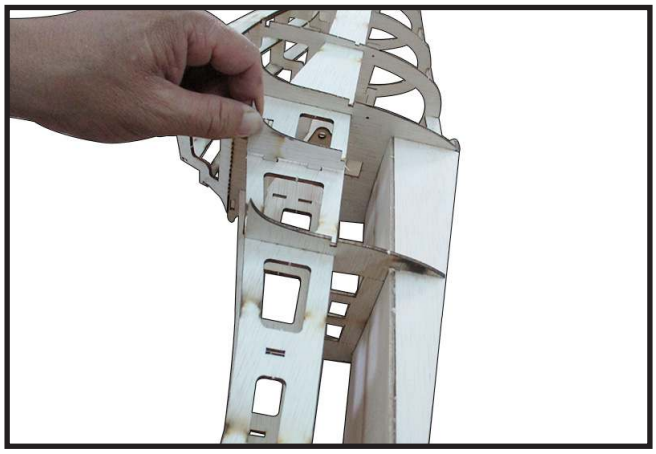


48.



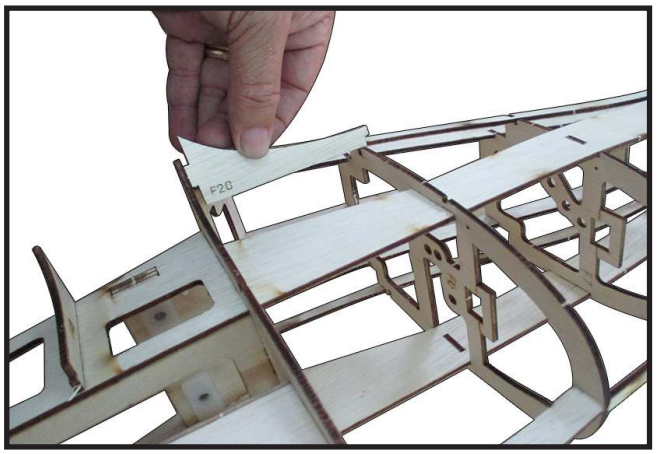
Locate and assemble F3B and F4B to fuselage by CA glue as photo shown (photo 49).

49.



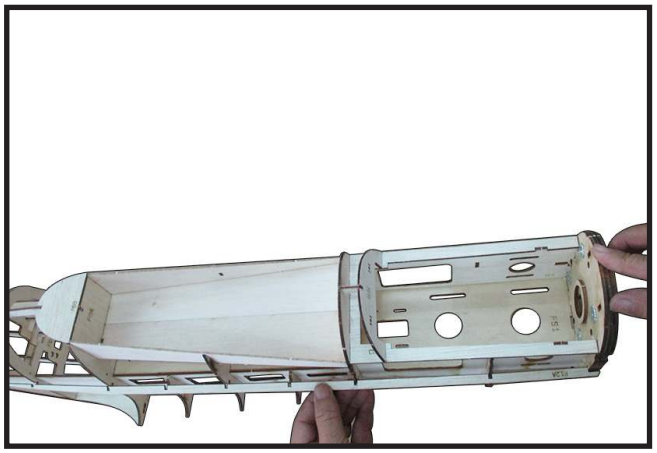
Locate and assemble F20 to right fuselage side by CA glue as photo shown (photo 50). Then, you attach F20 to the left side.

50.



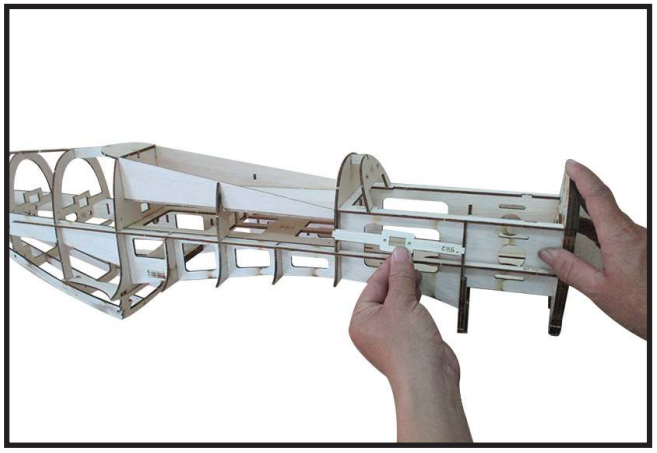
Locate and assemble F12A to right fuselage side by CA glue as photo shown (photo 51). Then, you attach F12B to the left side.

51.



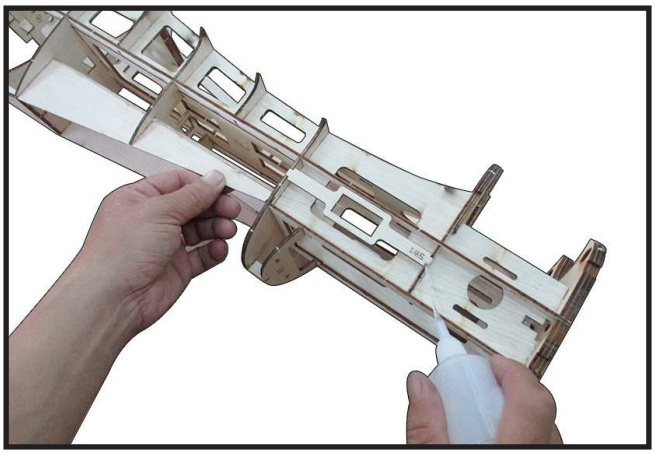
Locate and assemble SW2 to right fuselage side by CA glue as photo shown (photo 52).

52.



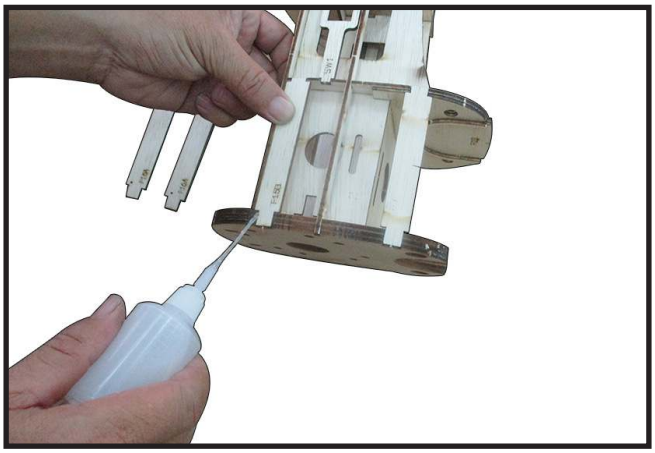
Locate and assemble SW1 to left fuselage side by CA glue as photo shown (photo 53).

53.



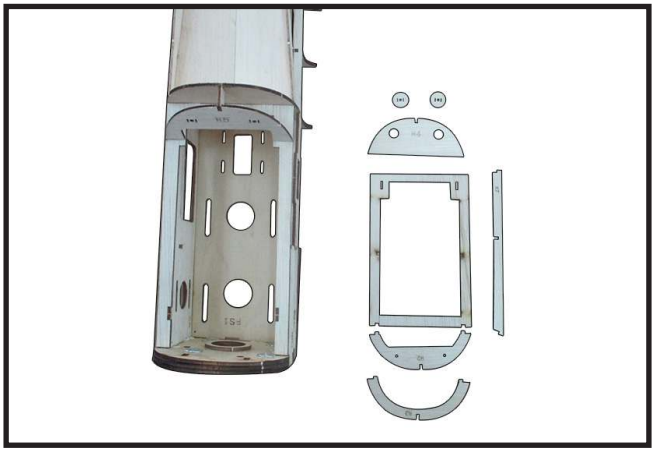
Locate and assemble F15A and F16A to right fuselage side by CA glue. Then, you attach F15B and F16B to the left side as photo shown (photo 54).

54.



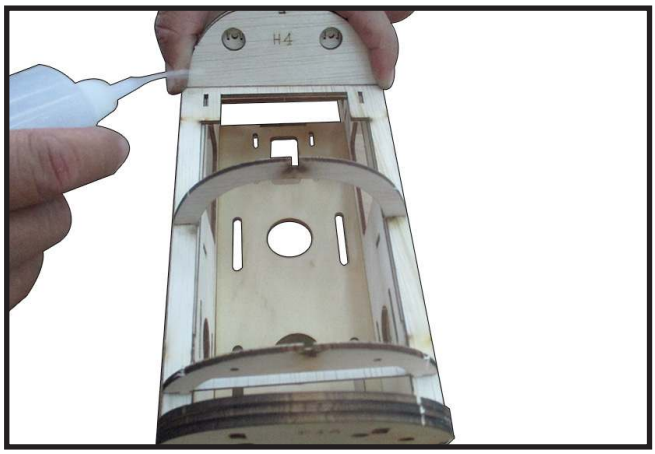
The die-cut part for building the hatch of fuselage (photo 55).

55.



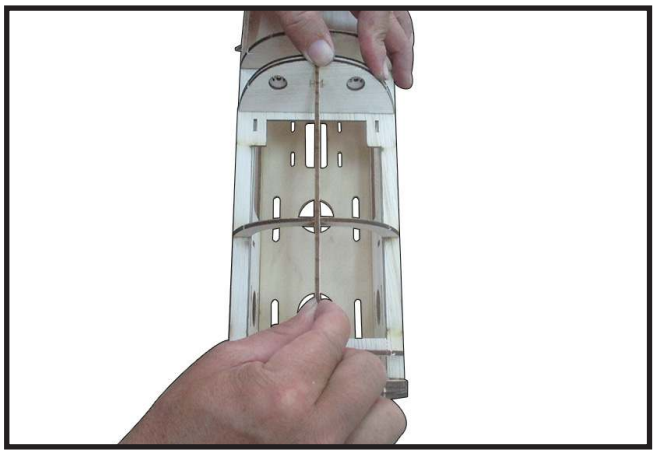
Step by step, locate and assemble H2, H3, H4 to H1 by CA glue as photo shown (photo 56).

56.



Locate and assemble H7 to H2,H3,H4 by CA glue as photo shown (photo 57).

57.

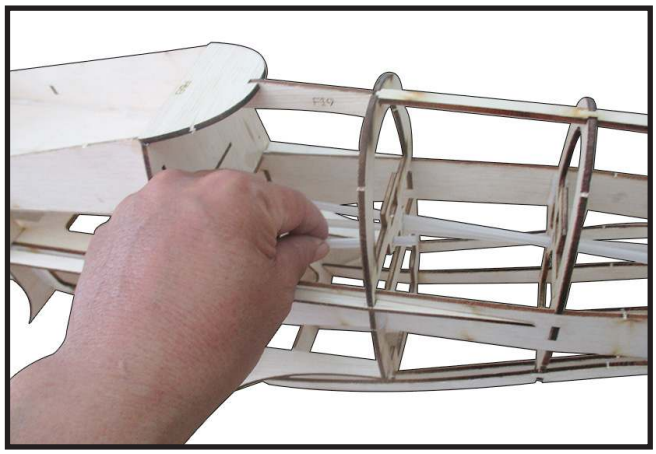


Finished the hatch as (photo 58).

58.

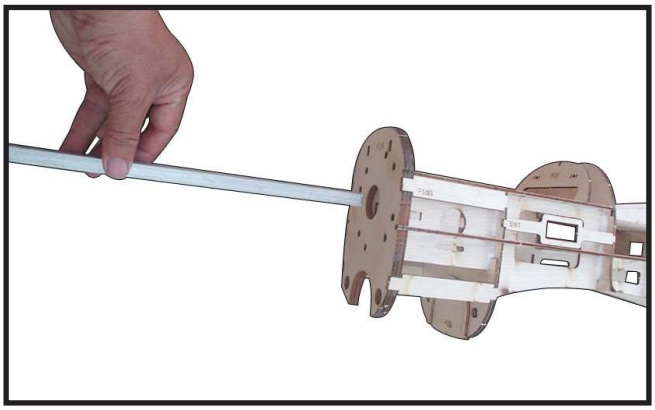
Attach the plastic pushrod tube to the push-rod hole at each former fuselage as photo shown (photo 59).

59.



Attach the aluminum square tool bar to the square hole at each former. It is through along to fuselage to adjust to fuselage straight. Remove it after finishing covering balsa sheet for fuselage (photo 60).

60.

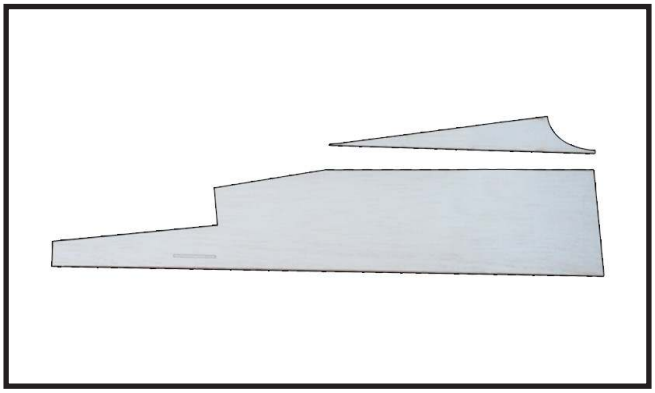


*** Sheeting of the fuselage (cover to the ribs of fuselage).**

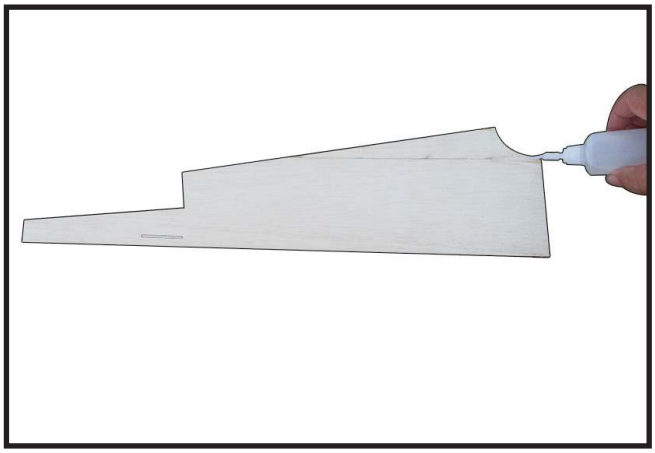
If the balsa sheet quite hard, we should use the wet towel so that making soft the balsa sheet.

Weld together SH1 and SH2 to become a sheet by CA glue as photo shown (photo 61,62).

61.

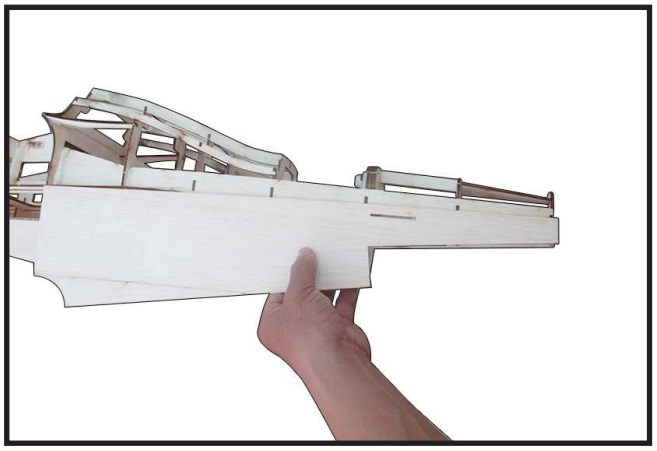


62.



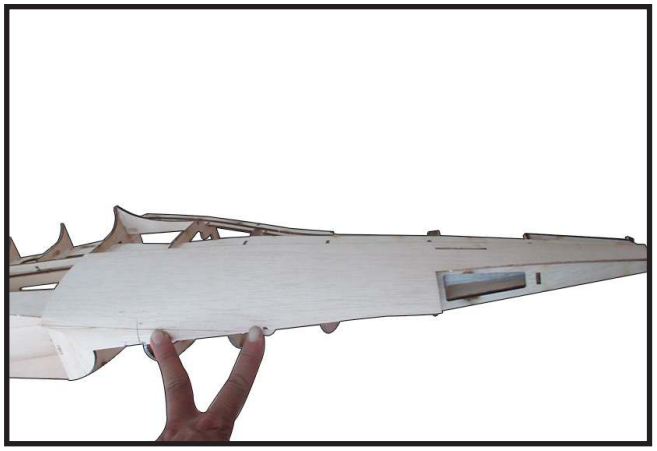
Put the sheet at top area and toward rear of fuselage as photo shown (photo 63).

63.



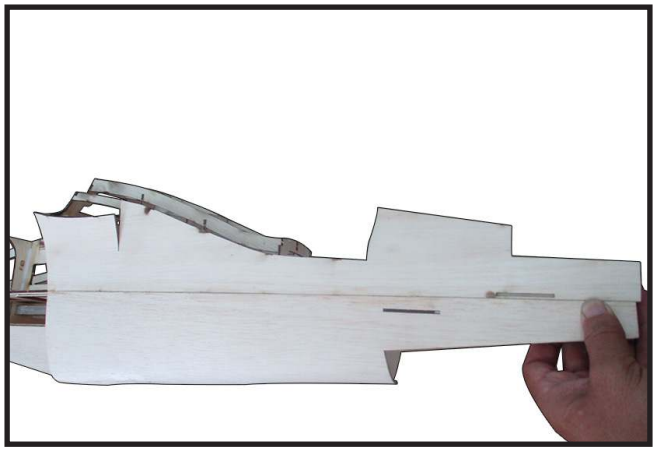
Bend the balsa sheet go to the curve of top area. Then, add CA glue and use the finger at this place until the glue dries as photo shown (Photo 64). Do the same for the other half of the top area, so that the balsa sheet keep fixed fuselage.

64.



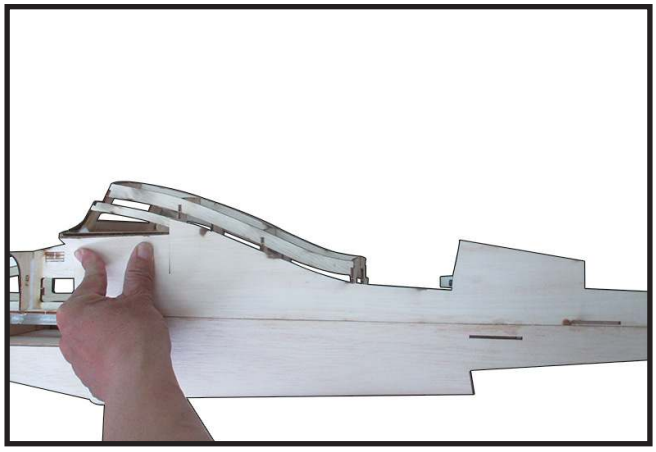
Put the sheet SH7 at bottom area and toward rear of fuselage as photo shown (photo 65).

65.



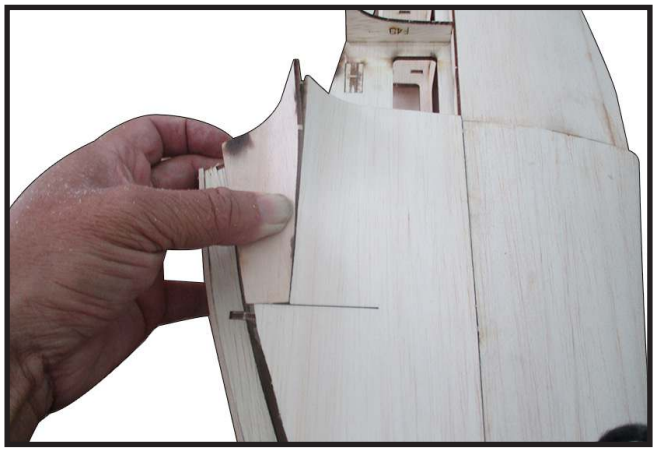
Bend the balsa sheet go to the curve of bottom area. Then, add CA glue and use the finger at this place until the glue dries as photo shown (photo 66). Do the same for the other half of the bottom area, so that the balsa sheet keep fixed fuselage.

66.



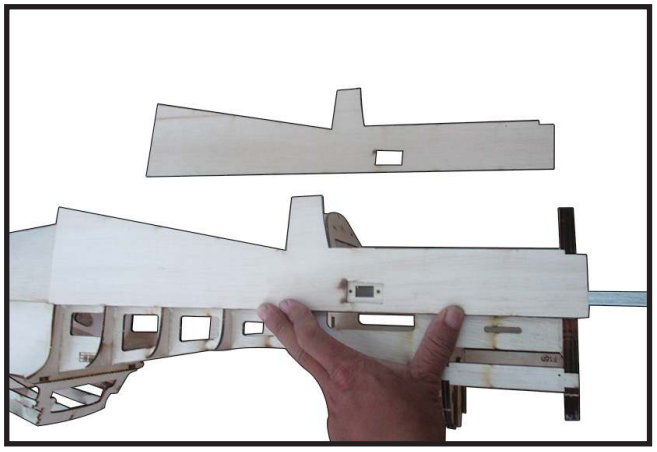
Locate and apply the sheet SH10 to fuselage (left side and right side) by CA glue as photo shown (photo 67).

67.



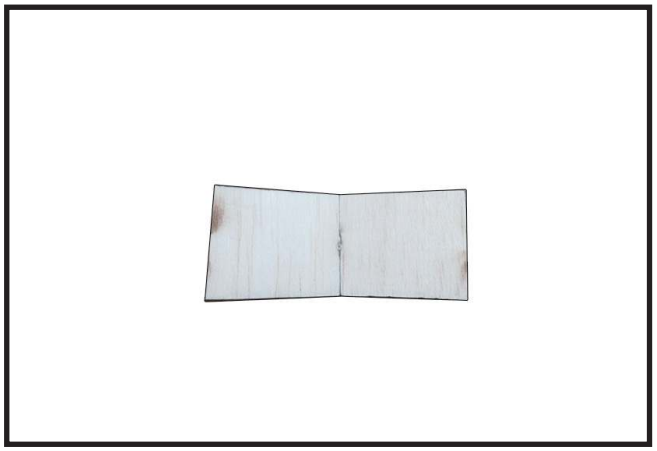
Put the sheet SH3 at forward area of fuselage as photo shown (photo 68). Then, add CA glue and use the finger at this place until the glue dries. Do the same for the other half.

68.

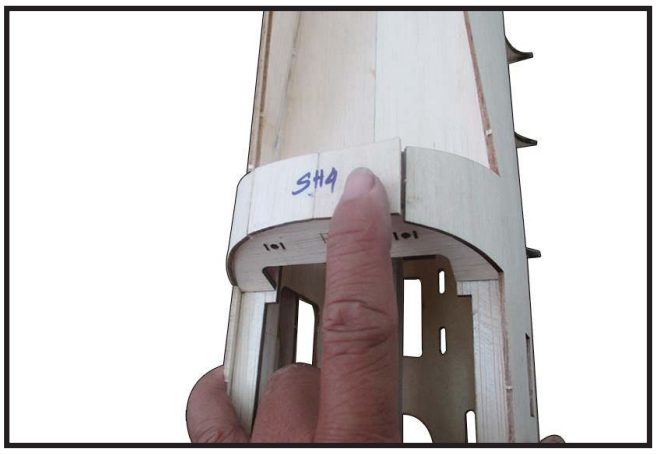


Locate and apply the sheet SH4 to fuselage (at top) by CA glue as photo shown (photo 69 &70).

69.

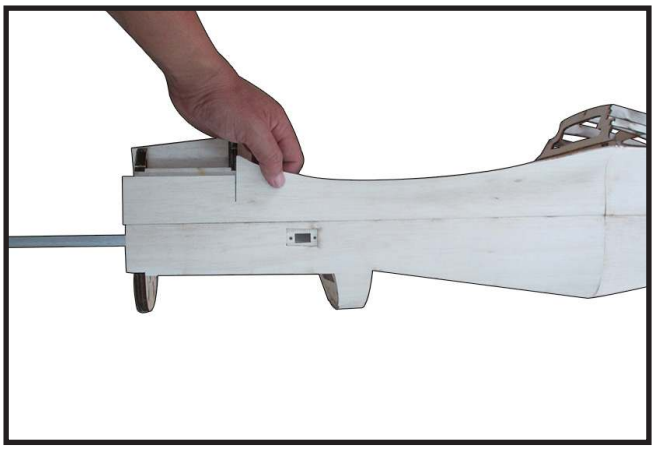


70.



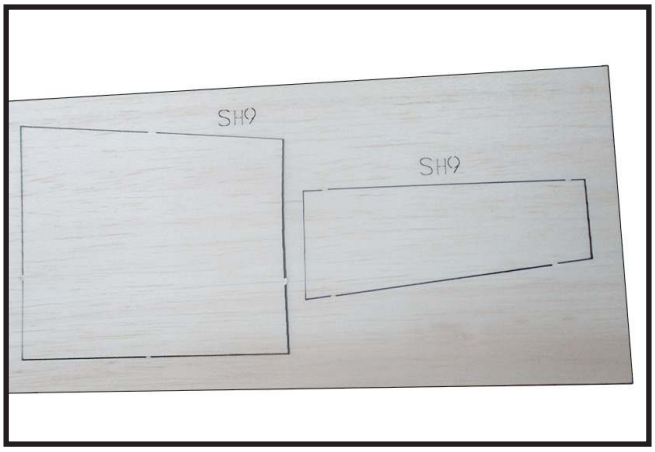
Locate and apply the sheet SH5 to fuselage (left side and right side) by CA glue as photo shown (photo 71).

71.



Weld together two different pieces SH9 (photo 72) to become a sheet by CA glue as (photo 73).

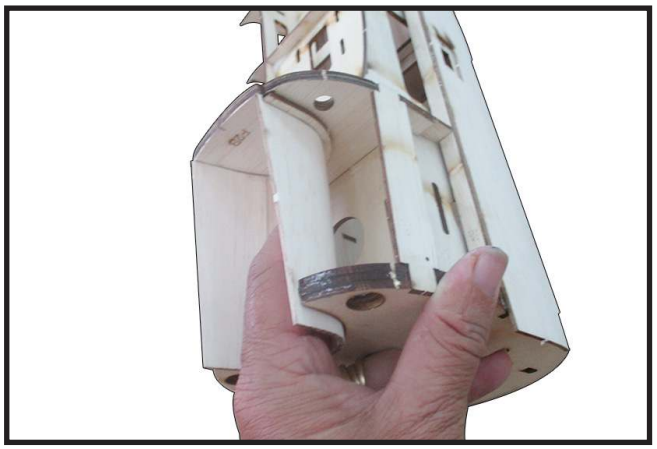
72.



73.

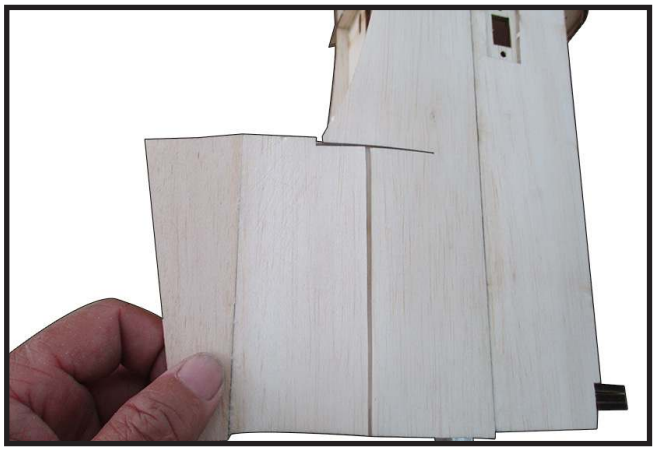
Put the sheet SH9 at concave down place of fuselage as photo shown (photo 74).

74.



Locate and apply the sheet SH6 to fuselage (left side and right side) by CA glue as photo shown (photo 75).

75.

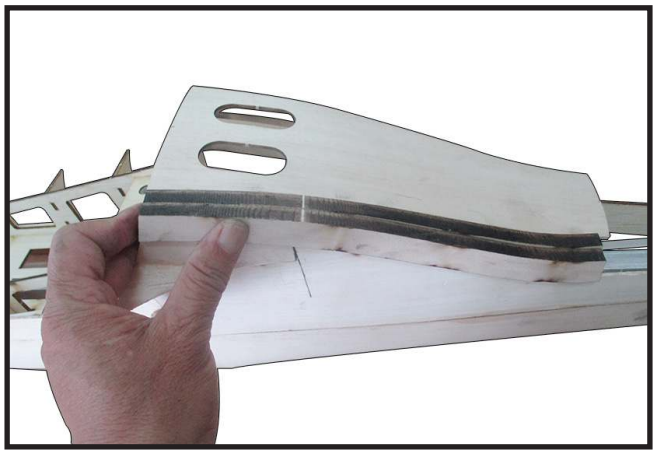


Locate and apply the sheet SH11 to fuselage by CA glue as photo shown (photo 76).

76.

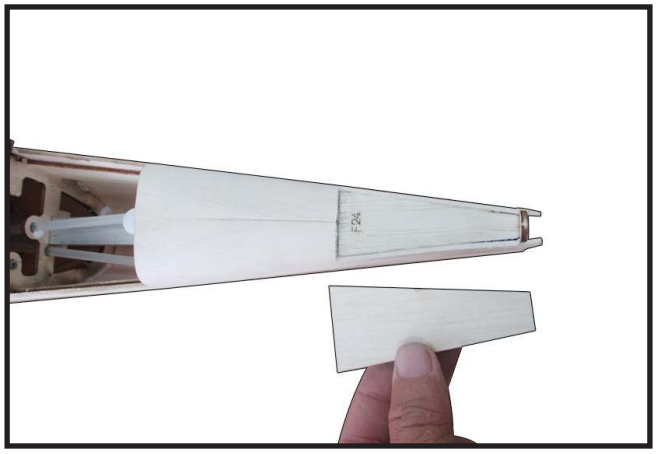
Locate and apply double 8mm balsa F8A to fuselage (left side and right side) by CA glue as photo shown (photo 77).

77.



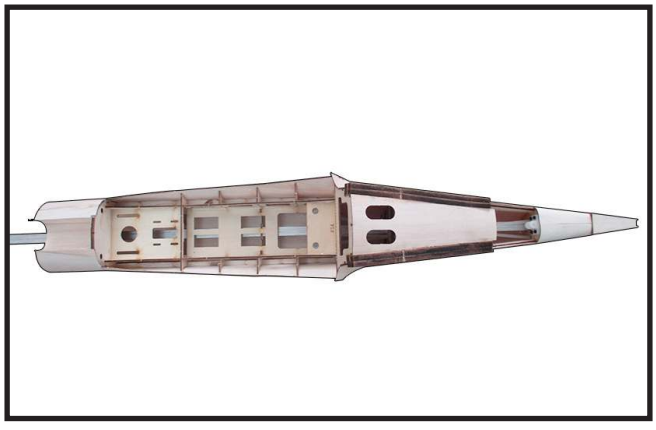
Locate and apply 8mm balsa F24A to fuselage by CA glue as photo shown (photo 78).

78.



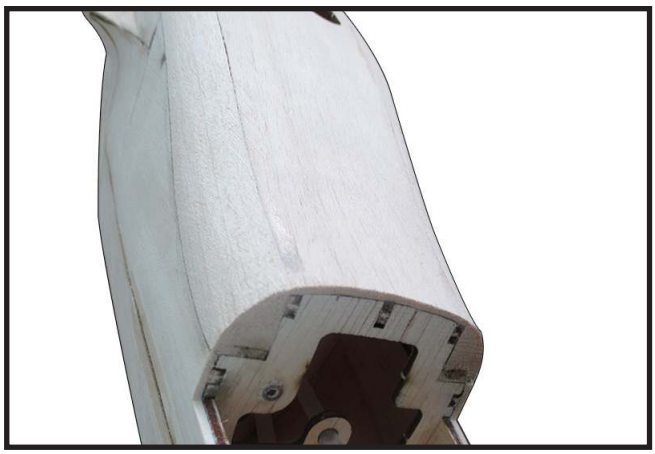
Some place can't bend by balsa sheet because curve shape is too short, the balsa sheet will break easily. So the balsa block is inserted. Then, cut down the balsa block to shaping curve and sanding (photo 79, 80, 81).

79.



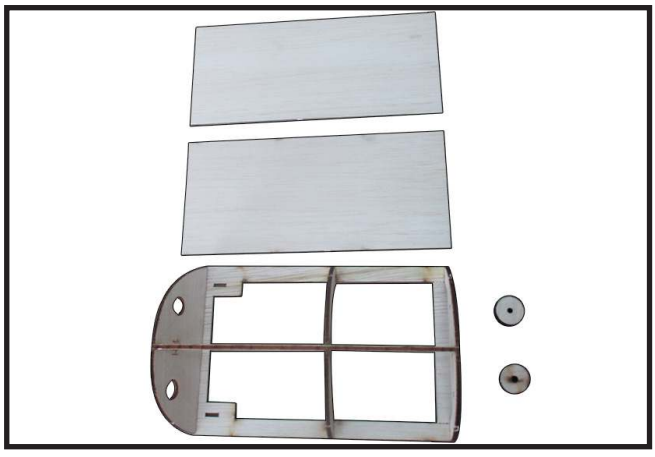
80.

81.



Cover sheet the top hatch of fuselage. Locate and apply the balsa sheet SH12 and bend the balsa sheet go to the curve (left side and right side) by CA glue as photo shown (photo 82,83).

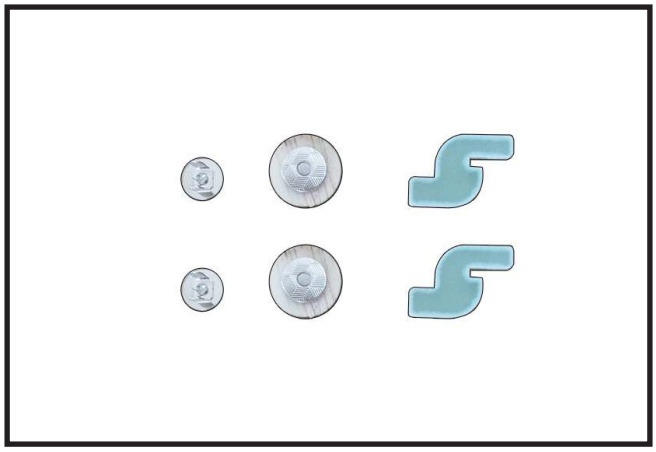
82.



83.

Locate and assemble Magnets and Hook to the top hatch by CA glue as photo shown (photo 84, 85).

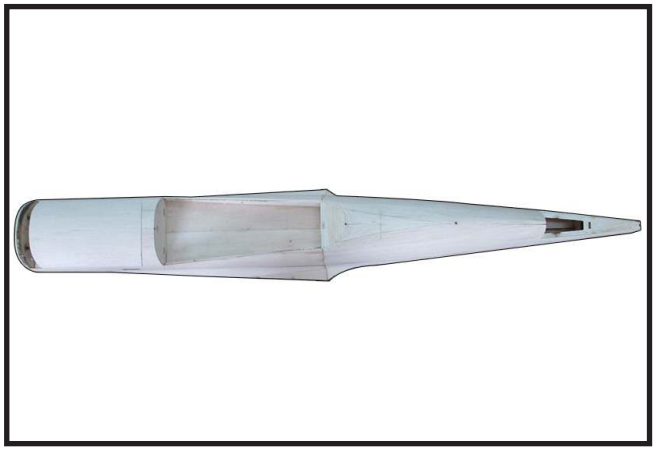
84.



85.

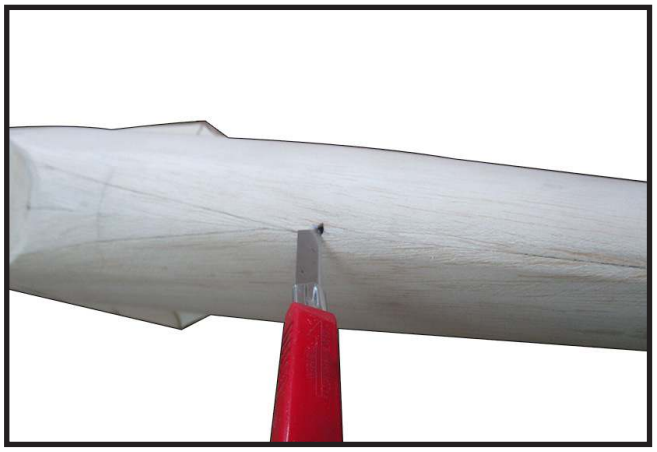
Setup the hatch and the fuselage so that the top of hatch seamless the top of fuselage by sanding tool (photo 86).

86.



Locate and cut the balsa sheet at hole for antenna by (photo 87).

87.

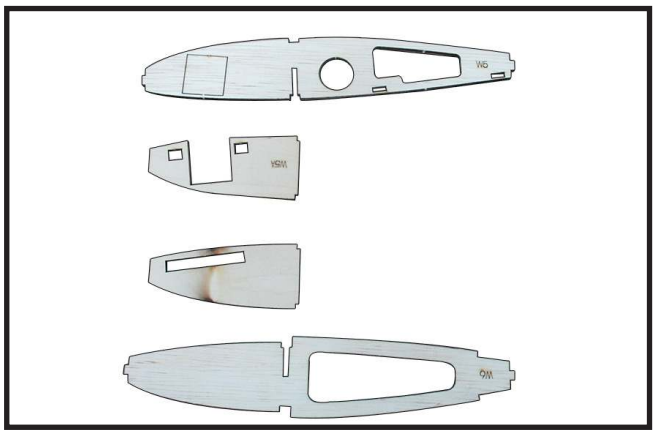


THE WING

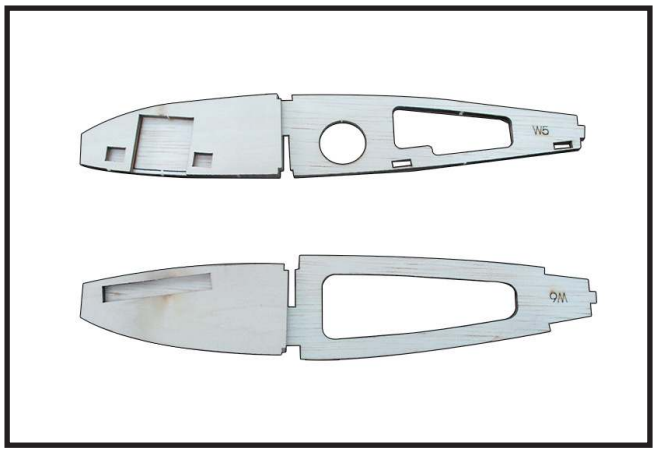
*** Prepare the gear mount of wing.**

Locate and assemble W5A to W5; W6A to W6 by epoxy as photo shown (photo 1 and 2). **NOTE: Apply to assemble ribs of wing left and ribs of wing right are symmetrical to each other.**

1.

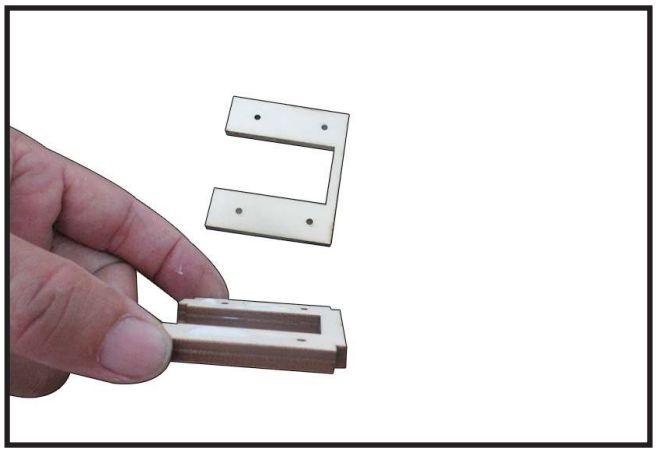


2.



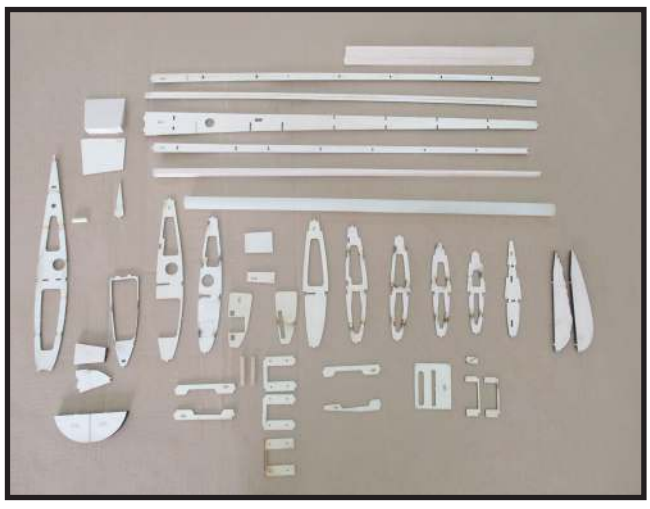
Locate and assemble W19 to W20 by epoxy as photo shown (photo 3). **NOTE: Apply to assemble gear mount of wing left and gear mount of wing right are symmetrical to each other.**

3.



Prepare all parts to assemble a wing (Photo 4). **NOTE: It is recommended to divide all parts into groups of the wing left and groups of wing right before building to avoid assembling them in the same direction.**

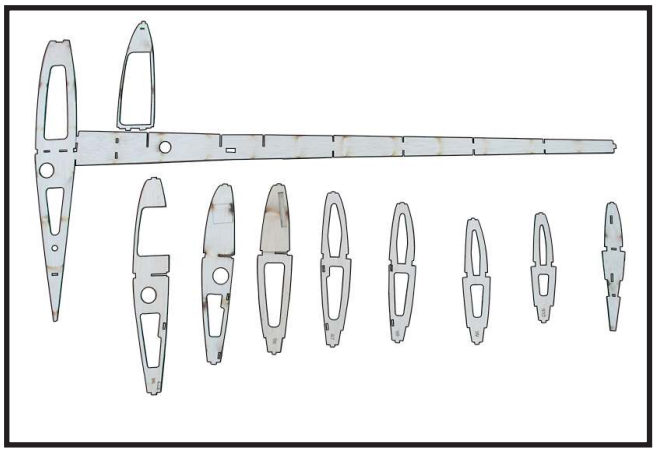
4.



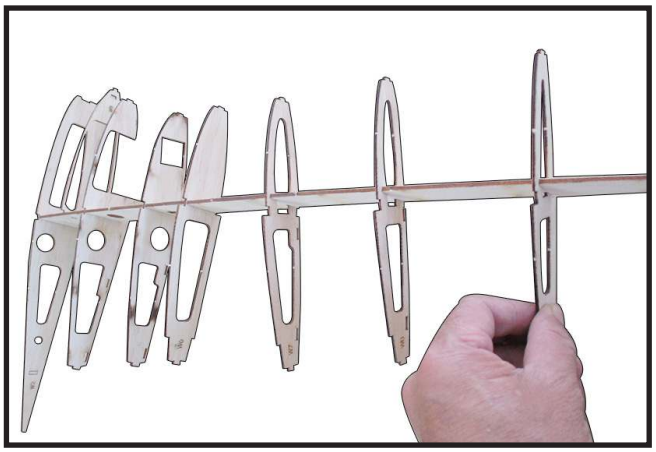
*** Build the wing.**

Locate and assemble W2 to W11 with W28 (main wing spar) as shown photo (Photo 5,6,7).

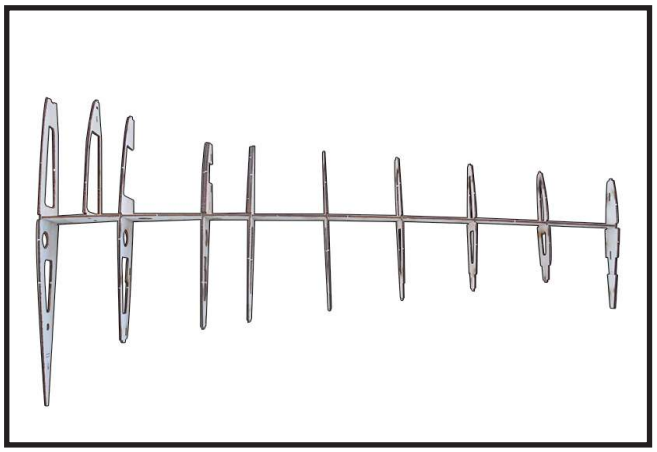
5.



6.

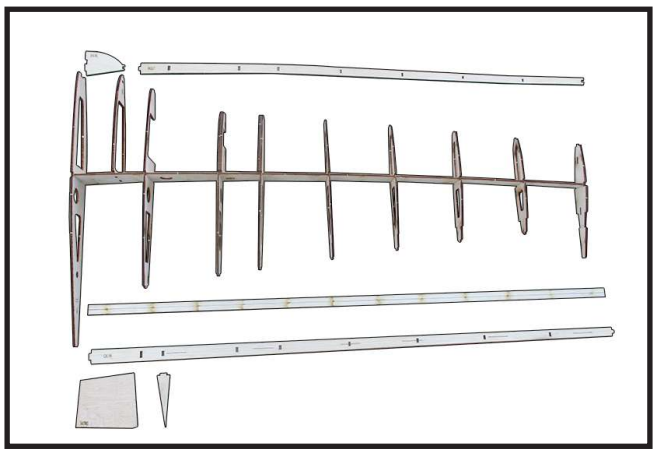


7.

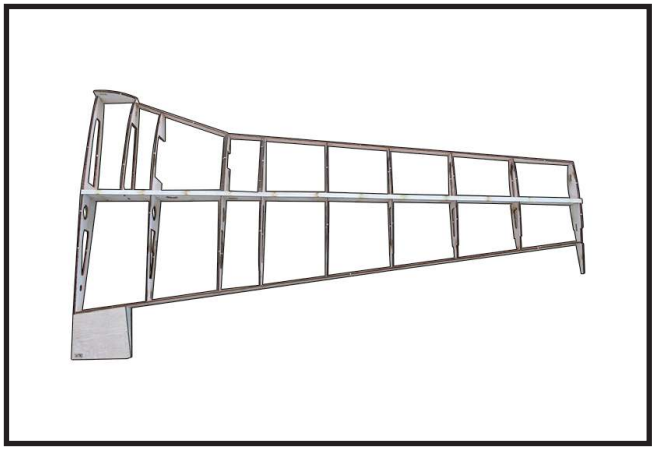


Locate and assemble W27 (Leading Edge) to front of wing, and W30 (Trailing Edge) to rear of wing as shown photo (Photo 8,9).

8.

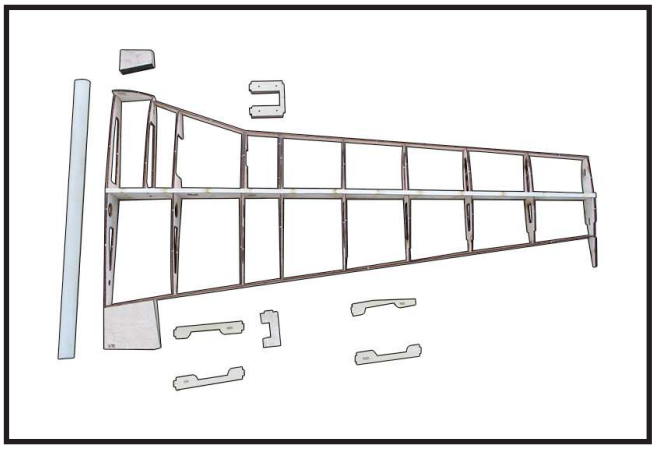


9.



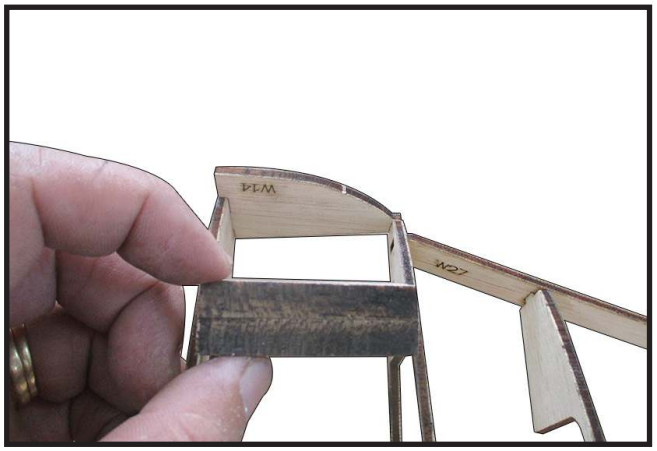
Prepare to assemble the balsa block, gear mount, servo mount, wing tube, lock wing tube as shown photo (Photo 10).

10.



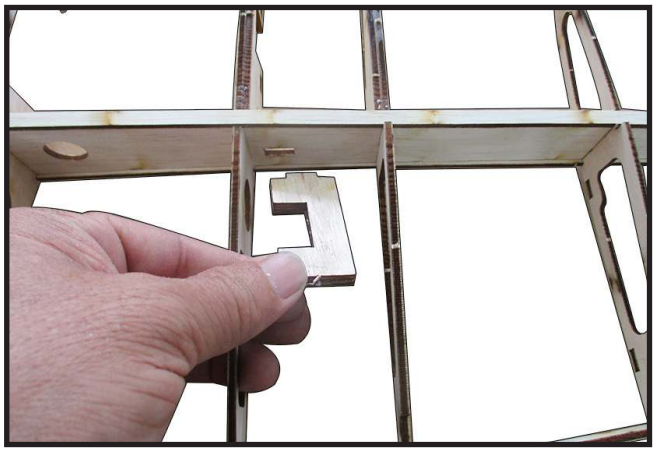
Locate and apply the balsa block (W15) to front of wing (W14) to increase the thickness at here (Photo 11).

11.



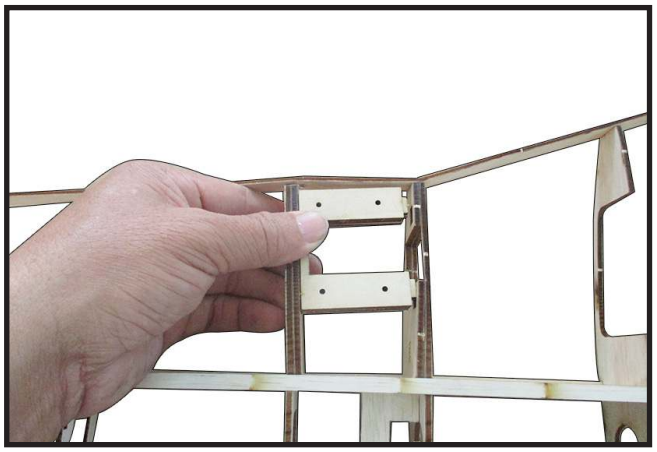
Locate and assemble lock wing tube (W18) as shown photo (Photo 12).

12.

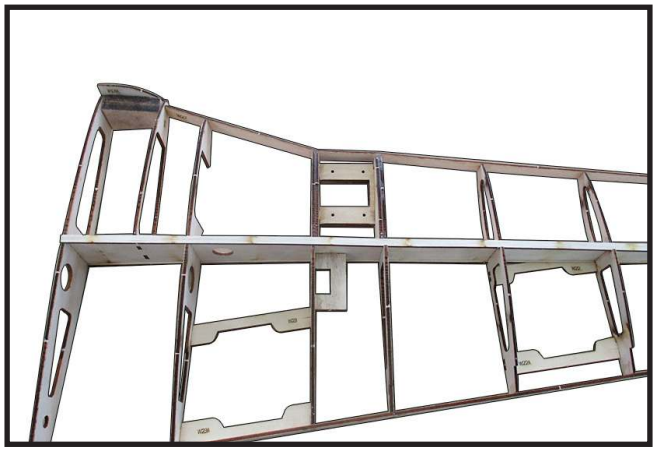


Locate and assemble gear mount (W20) by Epoxy to sure hardly as photo shown (Photo 13, 14).

13.

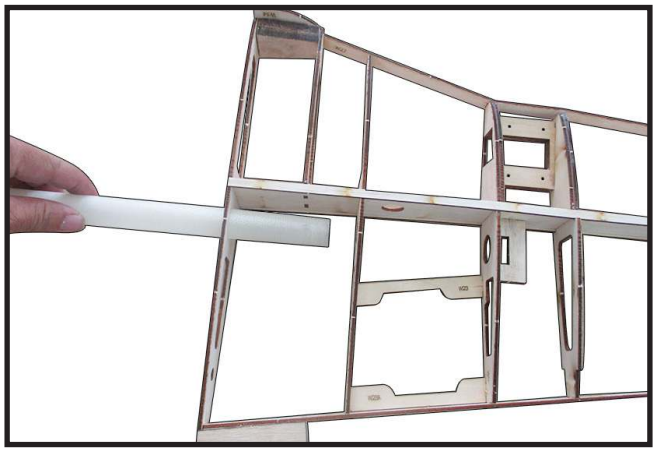


14.



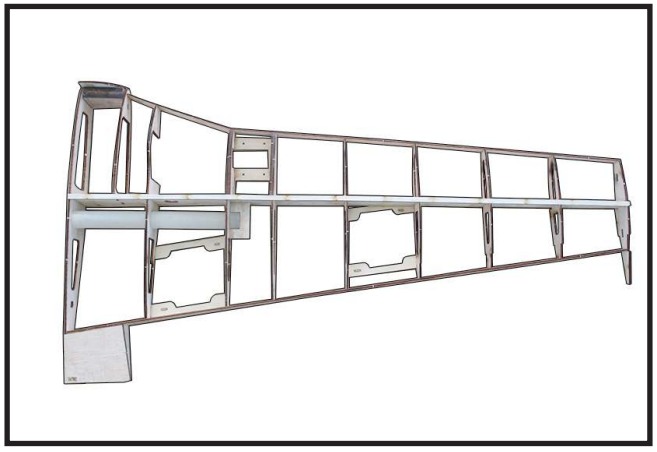
Locate and assemble wing tube. Light sanding the wing tube to it can through to holes easily as photo shown (photo 15).

15.



Apply the 8mm balsa block spar to W27 (Leading Edge) at front of wing, and sanding for them semless together as shown photo (Photo 16).

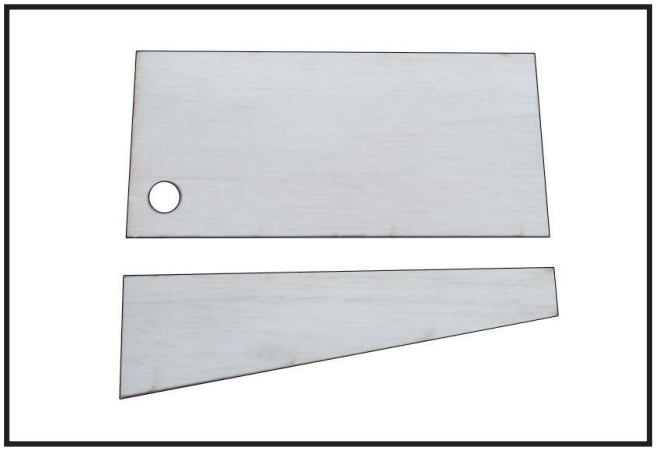
16.



*** Finishing The Outer Wing Panels.**

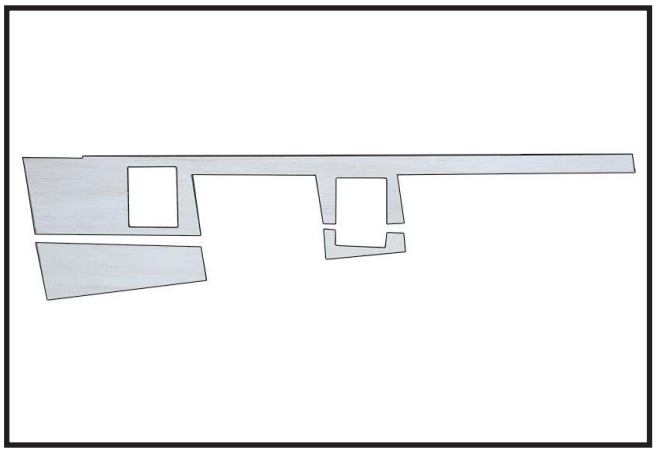
Weld together two different balsa sheet pieces W33 to become a sheet by CA glue as (photo 17).

17.



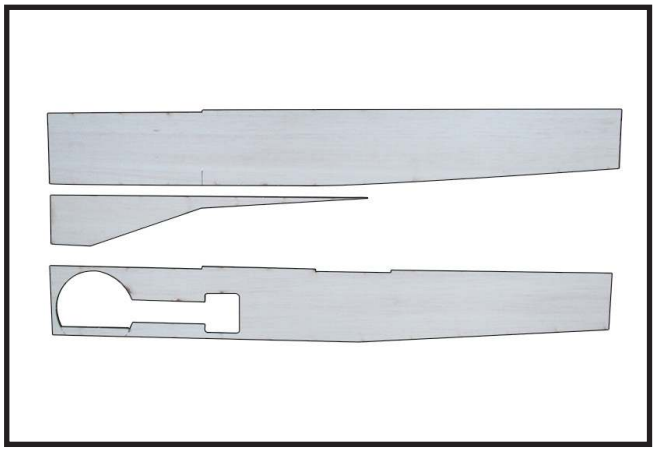
Weld together three different balsa sheet pieces W34 to become a sheet by CA glue as (photo 18).

18.

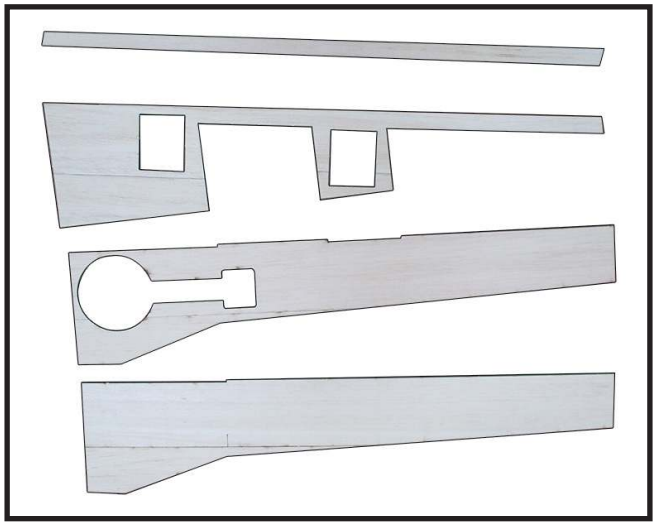


Weld together the balsa sheet of W31; the balsa sheet of W32 as photo shown (photo 19,20).

19.

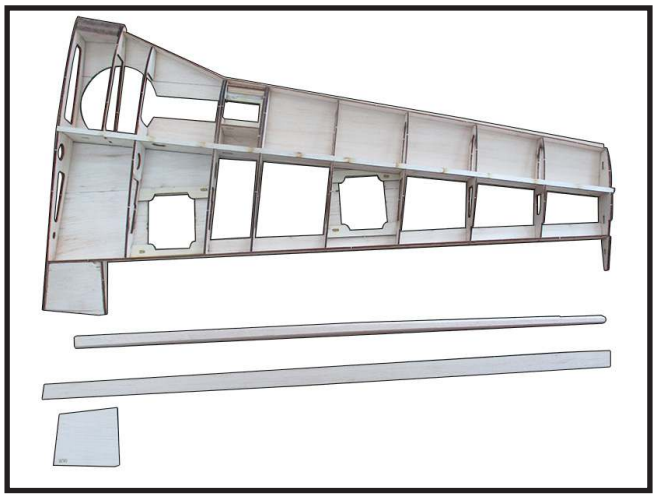


20.



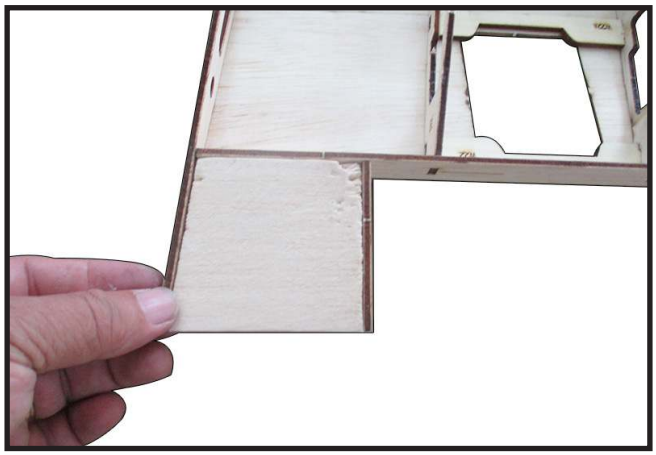
Cover sheet for wing. First, covering the bottom of wing. Step by step do it one after another in order W32-W33-W34 as (photo 21).

21.



Insert the special balsa block at place as (photo 22).

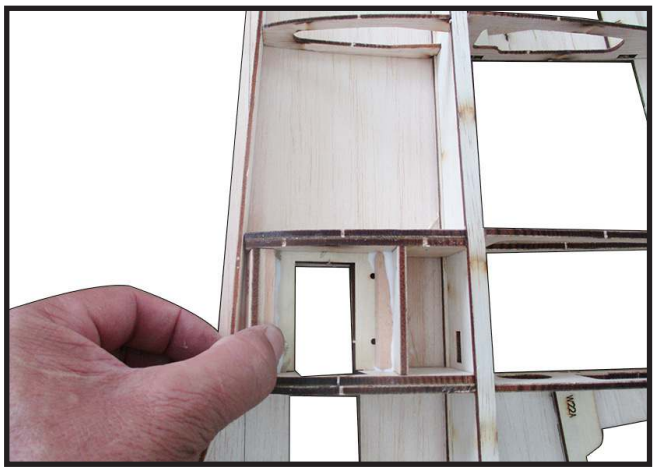
22.



Locate and assemble W16, W17 and two hard wood bar to sure hardly by epoxy glue as photo shown (photo 23,24).

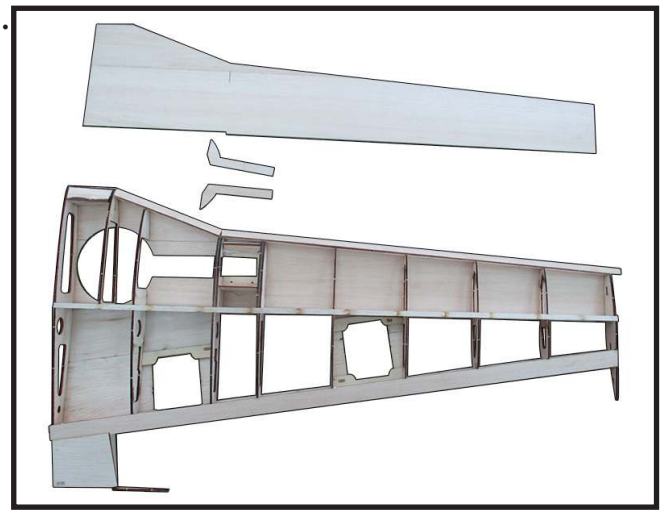
23.

24.

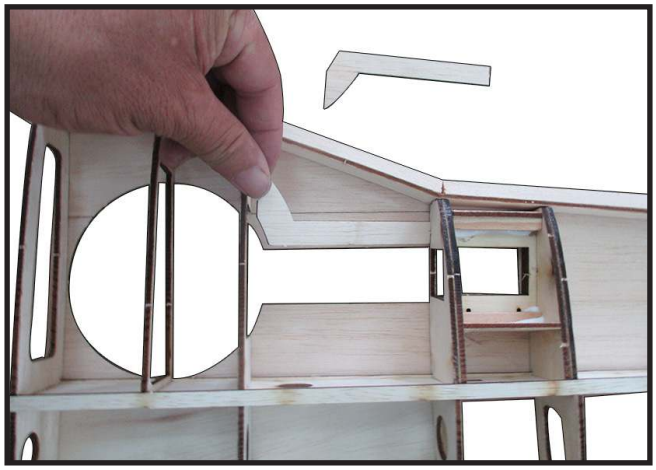


Reinforced W37 to sheeting at the wheel area as photo shown (photo 25,26,27). Then, step by step cover sheet one after another in order W31-W33-W35-W38 for top of wing.

25 .



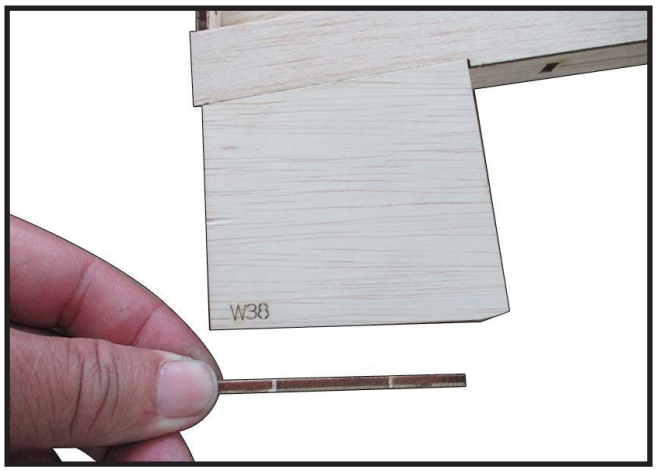
26.



27.

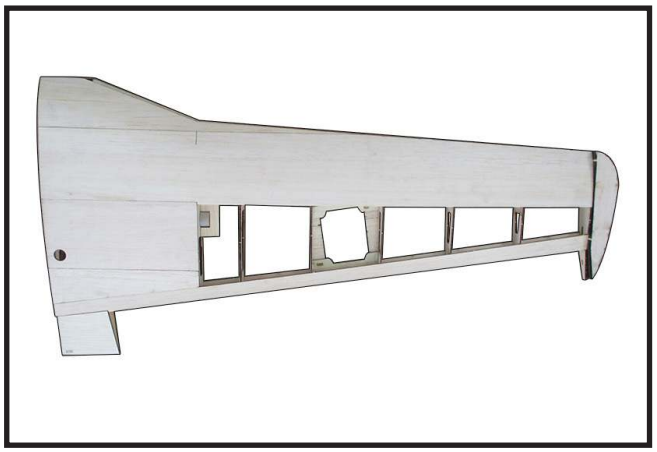
Assemble W39 so that covering the open slot between two sheets W38 as (photo 28).

28.



Finish as (photo 29).

29.

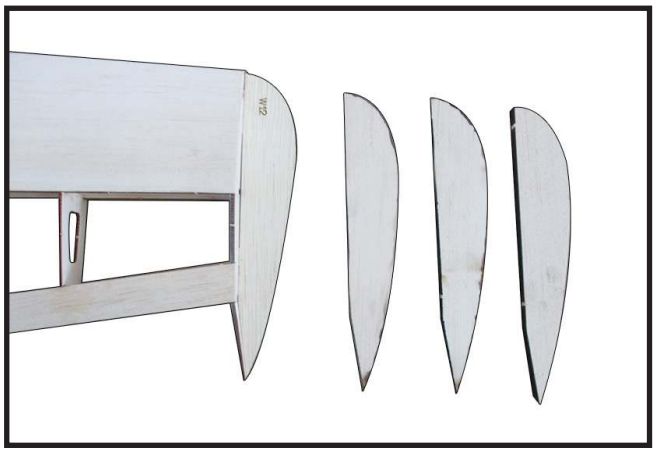


Locate and assemble W12 (wing tip) by epoxy glue as photo shown (photo 30).

30.

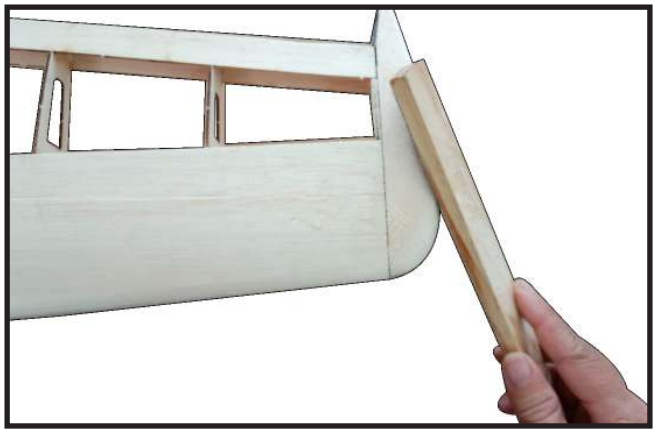
Apply two 8mm balsa sheets W13 into W12 (top and bottom) by epoxy glue. Then, cut down W13 so that shaping as wing tip , use sanding tool to smooth as photo shown (photo 31,32,33).

31.



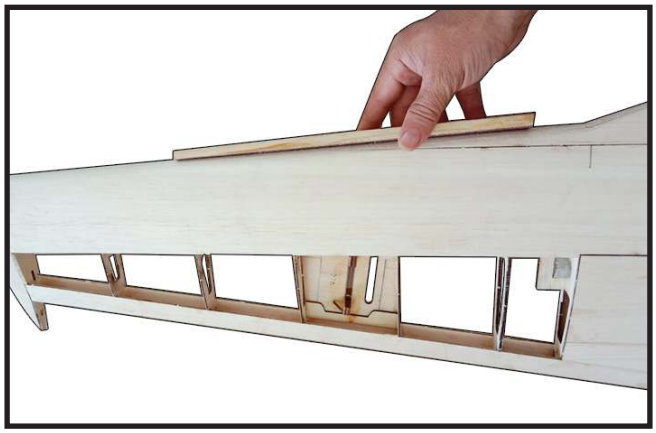
32.

33.



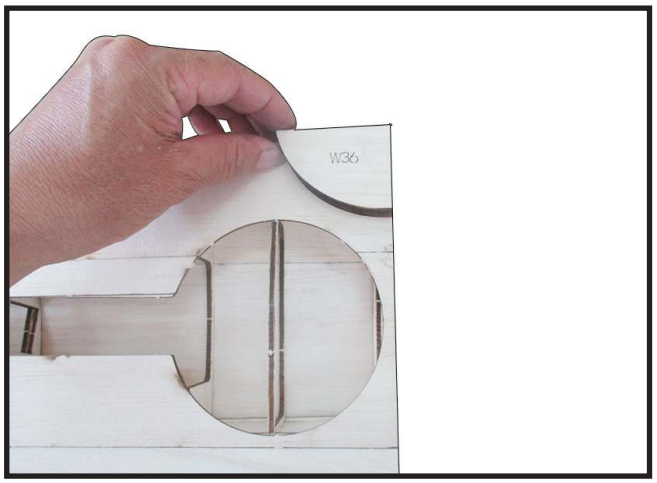
Use sanding tool to make curve shape for L.E area so that it semless as curve of ribs, and make smooth for L.E. Note: need to keep straight (avoid rough) as photo shown (photo 34).

34.

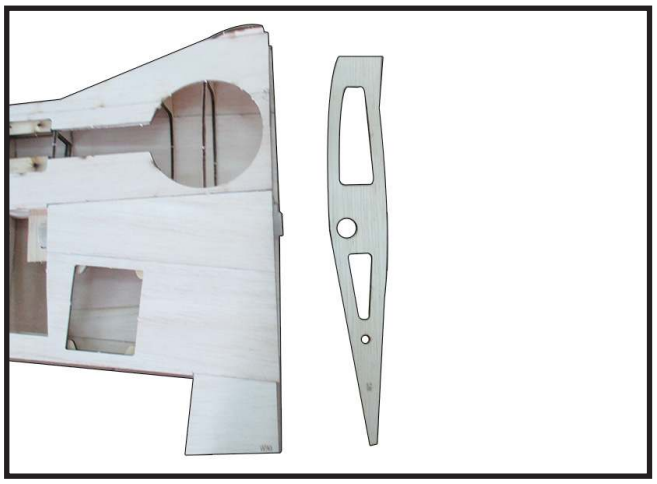


Assemble spiecial 8mm balsa sheet W36 to wing left and wing right as photo shown (photo 35). Then, cut down W36 so that shaping as W2, use sanding tool to smooth (do like this for wing left and wing right). Join two wing panel together by wing tube (Ø 19mm). Set up two wings until they have to close touch at bettween (no gap) by the sanding tool. Then, locate and assemble W1 at each of wing (left and right) (Photo 36,37).

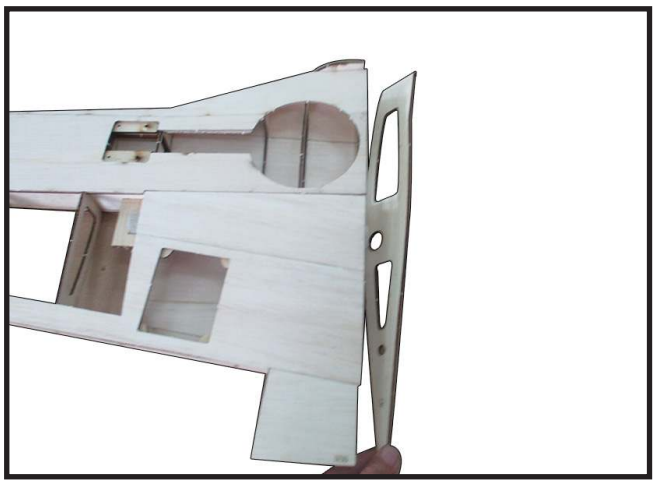
35.



36.

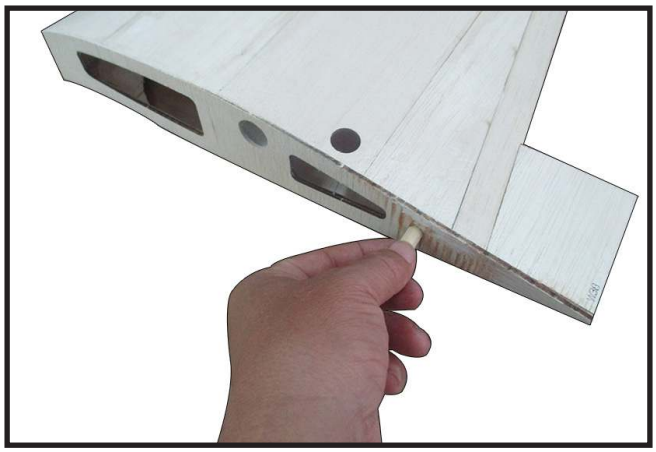


37.



Locate and assemble the 8mm dowel at wing root for a side as (photo 38).

38.



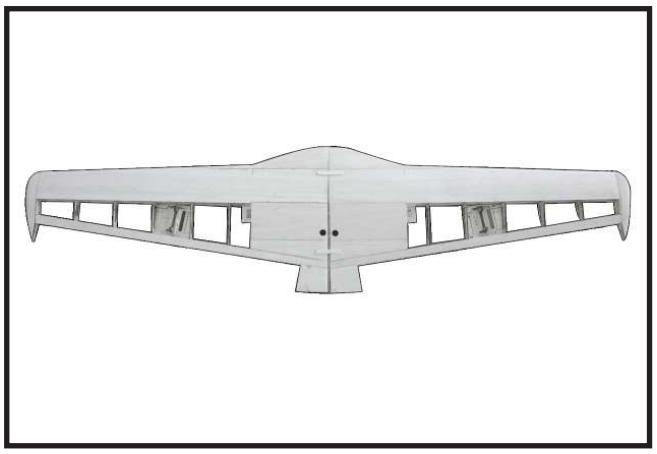
Sanding to smooth for sheet and W1 as (photo 39).

39.

Finish as (photo 40,41).

40

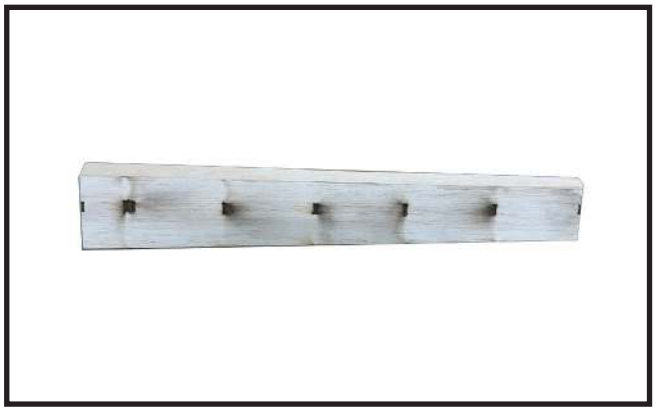
41.



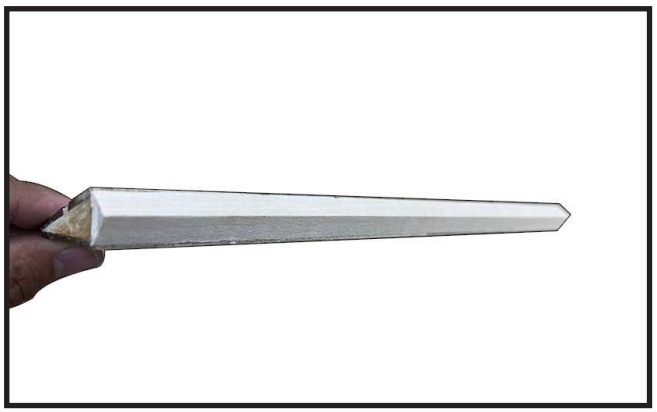
Locate and assemble the aileron (all ribs and triangle balsa bars) as (photo 42,43,44).

42.

43.

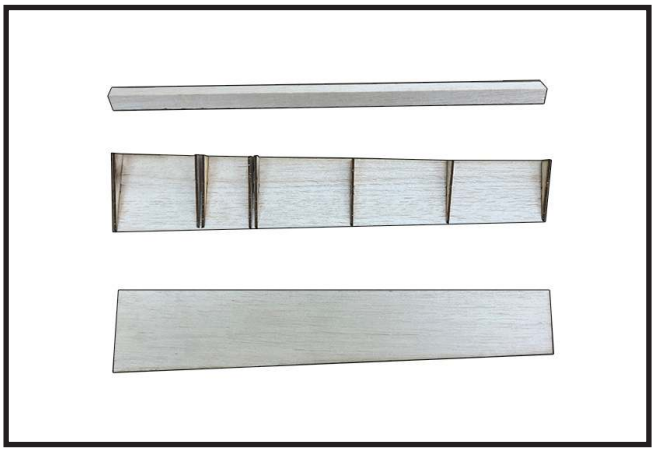


44.

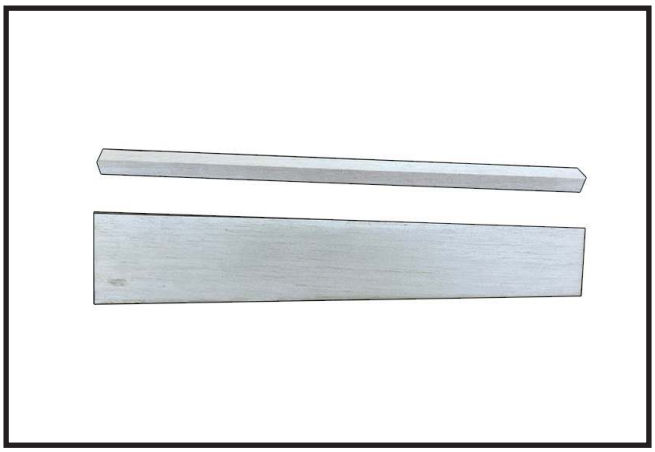


Locate and assemble the flap (all ribs and triangle balsa bars) as (photo 45,46,47).

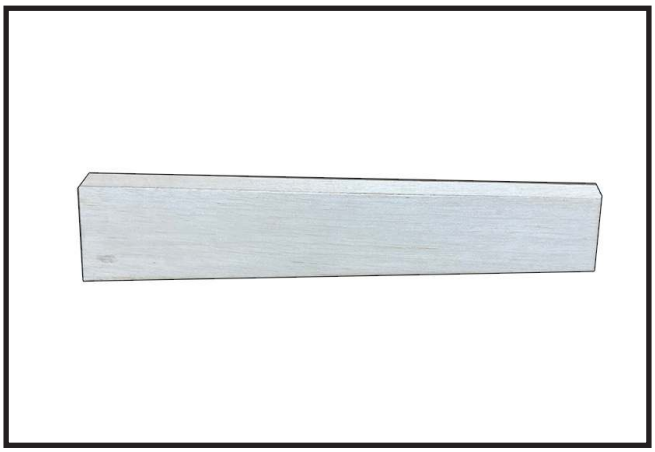
45.



46.

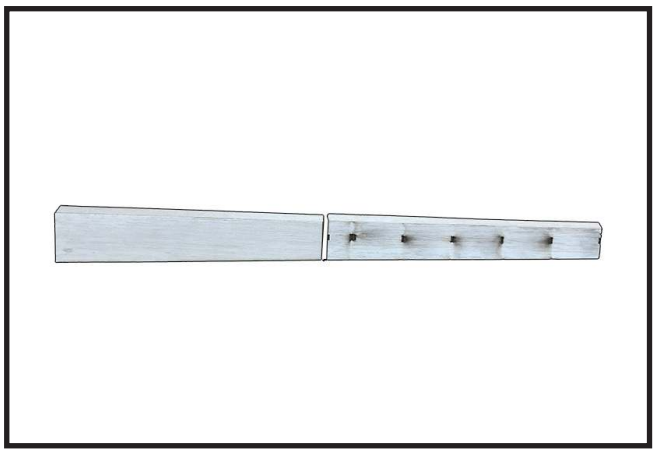


47.



Finish for Flap and Aileron. (Photo 48).

48.



*** Assemble the servo mount for Flap and Aileron.**

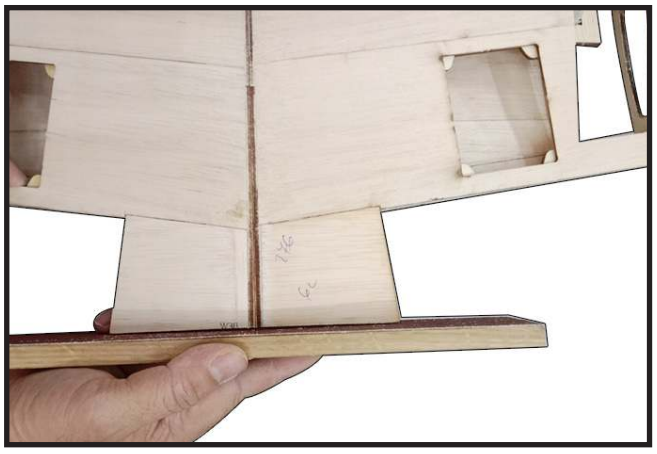
Locate and assemble W25 (2pcs), W24, W26 as photo.

42.

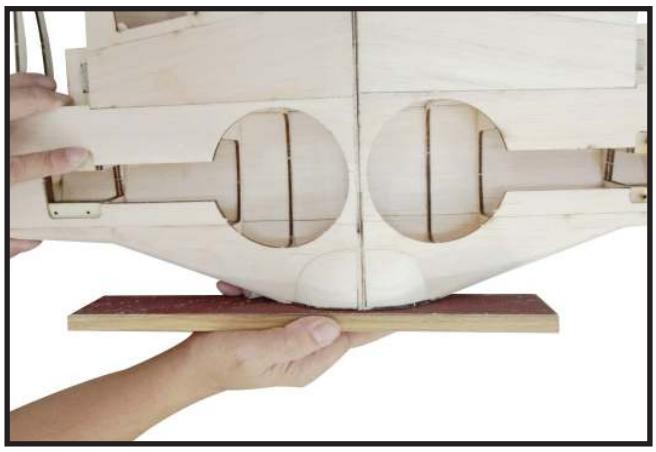
FITTING THE WING TO THE FUSELAGE

Sanding to flat the edge at forward (front dowel area) and edge at rear (wing bolt mount area) as photo shown (Photo 1,2).

1.

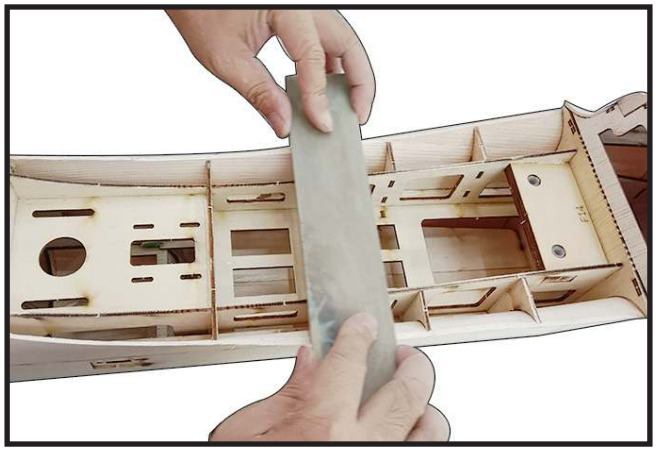


2.



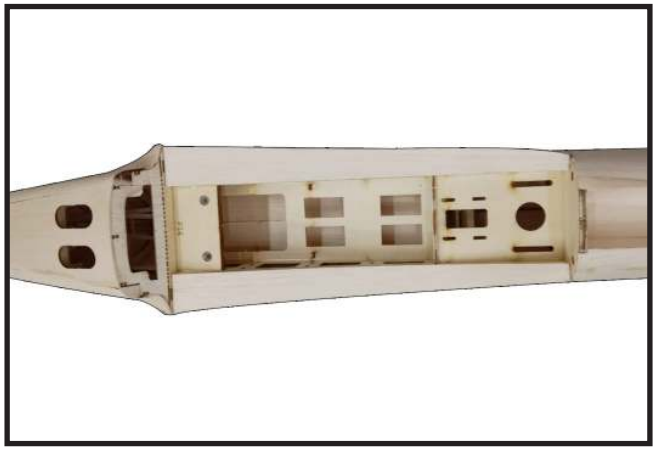
Sanding to smooth (not rough) at interface on fuselage (the edges of fuselage where the wing panel intersect to the fuselage) as photo shown (Photo 3).

3.



Cover the ribs at interface by SH13 sheet (Photo 4).

4.

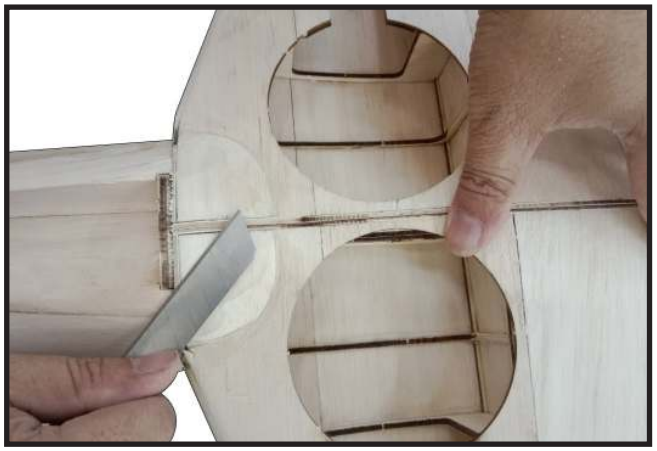


Fitting the wing to the fuselage and adjust the SH13 sheet so that there is not gap at interface. Then, add CA glue to keep fixed SH13 (Photo 5).

5.

Use the paper blade cut down and use sanding tool to make flat and seamless from the fuselage to the bottom of wing (Photo 6).

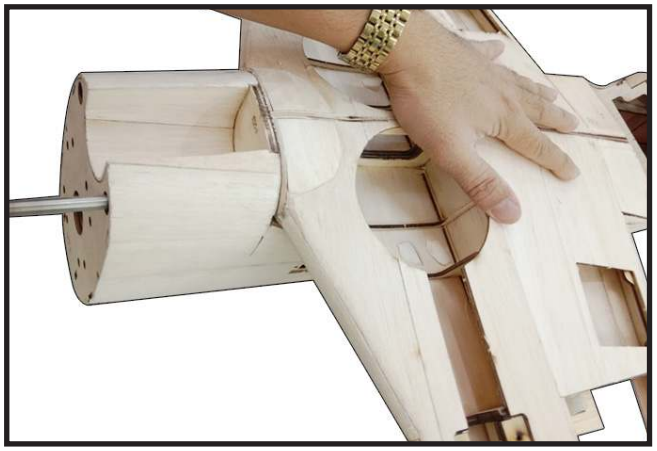
6.



***Attach dowel to front of wing.**

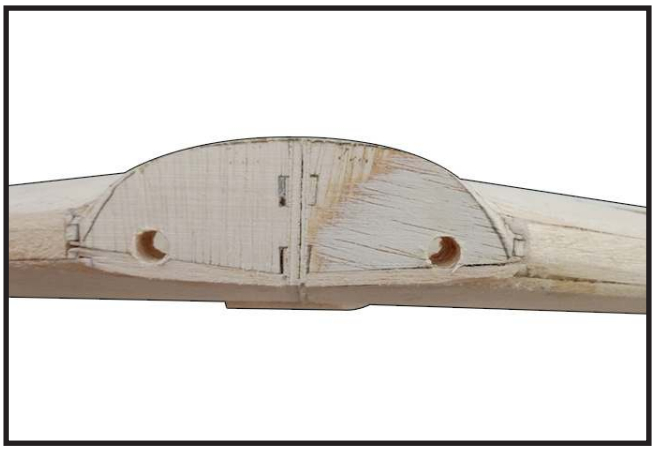
Attach to the pen through from hole on F1, go on until it touch the front of wing to take the ink mark. This is position of the 8mm dowel on wing (Photo 7).

7.



At the front of wing, drill two holes (Ø 8mm) for mounting two dowels, the center of hole is ink mark point. (Photo 8).

8.



Attach dowel into wing so that dimension of a remaining dowel part outside is 10mm (Photo 9).

9.

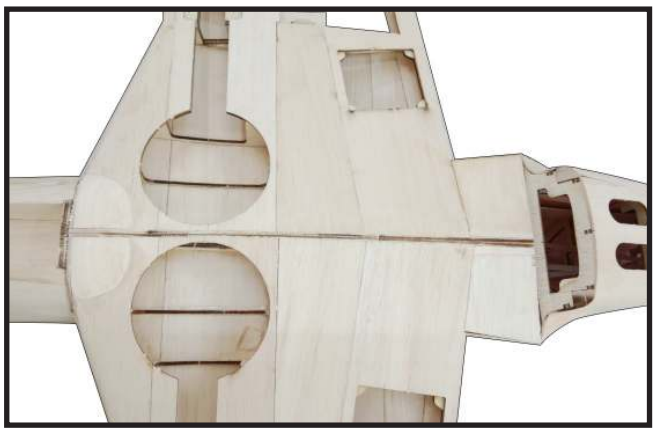
*** Drill the holes for bolt at rear of wing.**

Use the sharp screw to take point of mark so that locating of hole (Photo 10). Then, put the wing on fuselage and light press down at the sharp (take two points). Next step, from the center point drill two holes (Ø 6.5 mm) (Photo 11, 12, 13). These are the bolt hole so that fixed wing to fuselage.

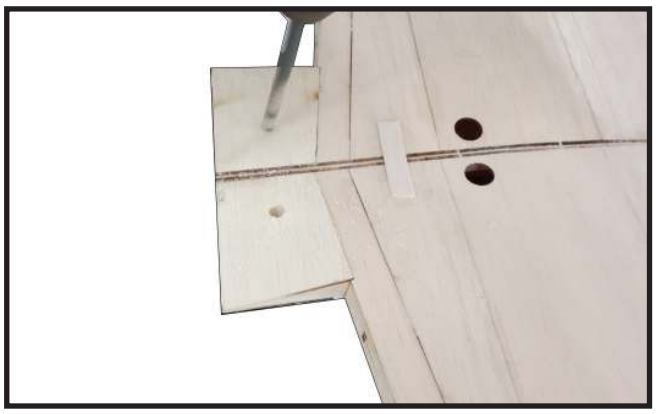
10.

11.

12.



13.



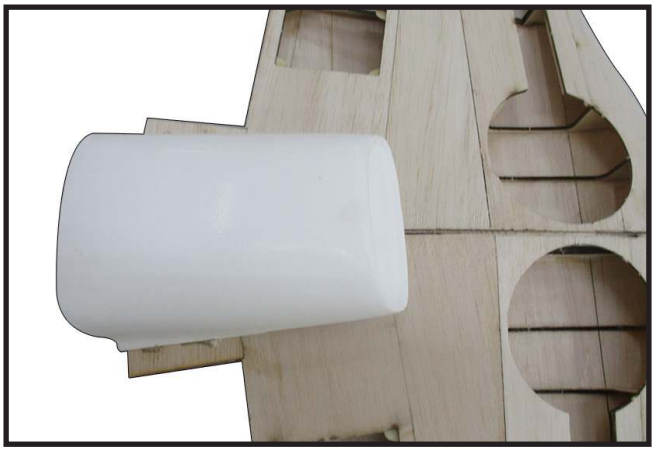
*** Assemble the special fiberglass part at bottom of wing.**

Assemble F5 to fiberglass part (Photo 14).

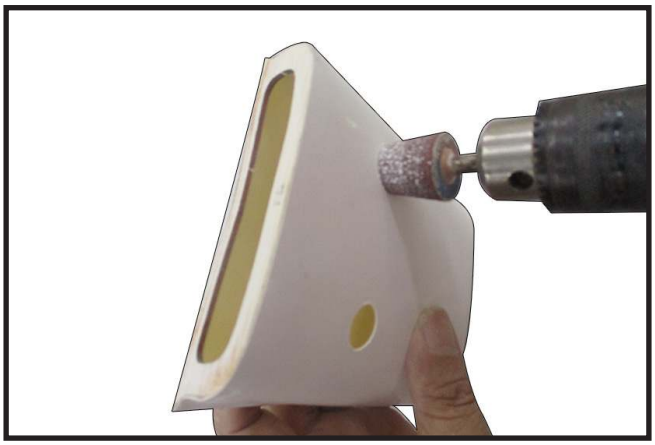
14.

Put fiberglass part on wing to locate place of holes. Then, drill two holes on the special fiberglass part. (Photo 15,16).

15.

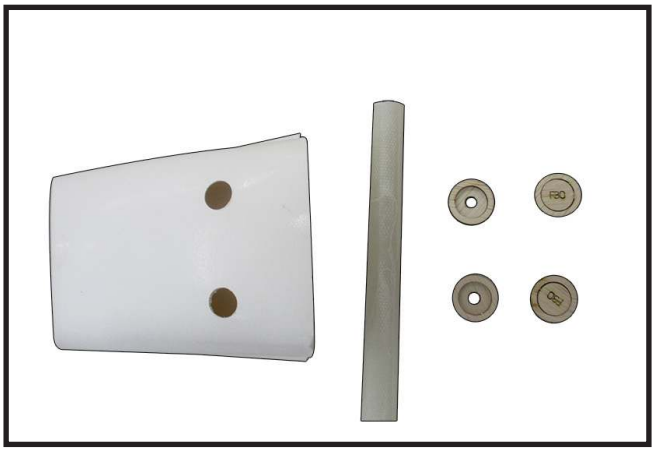


16.

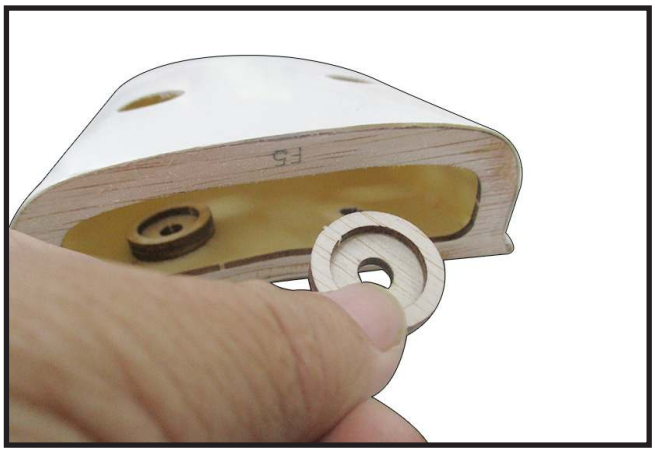


Locate at holes and assemble the plywood washer ring and the fiberglass tube inside special fiberglass part. These are the tunnel for the bolt through. (Photo 17,18,19).

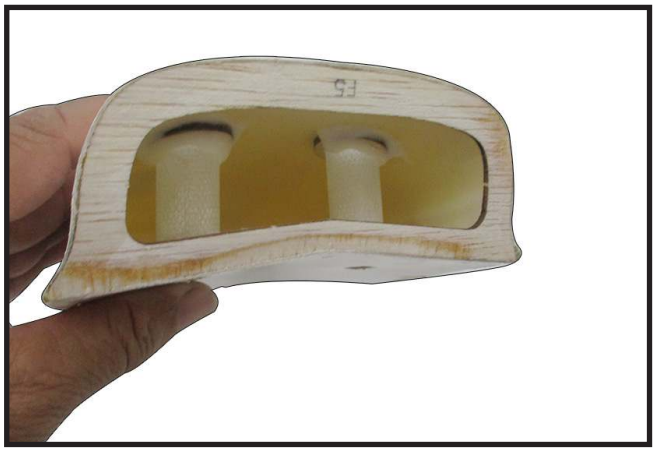
17.



18.



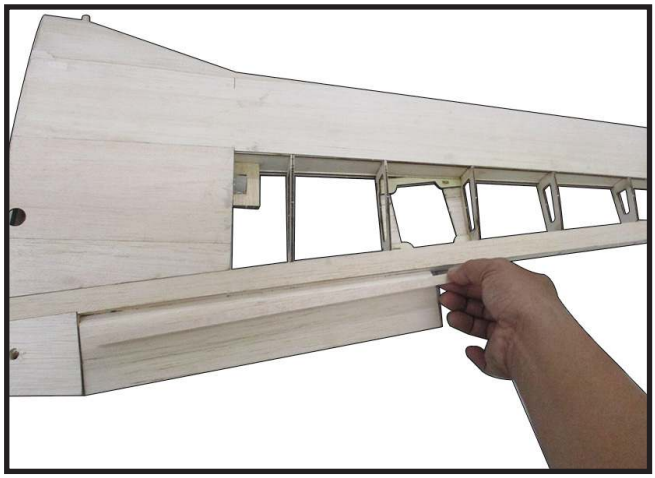
19.



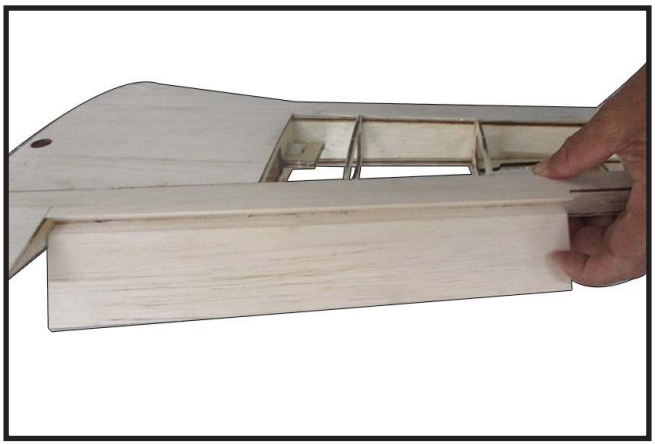
*** Flap and Aileron.**

Apply to trailing edge a triangle block spar with length value equal length of flap. It will allow flap go down only (Photo 20, 21).

20.



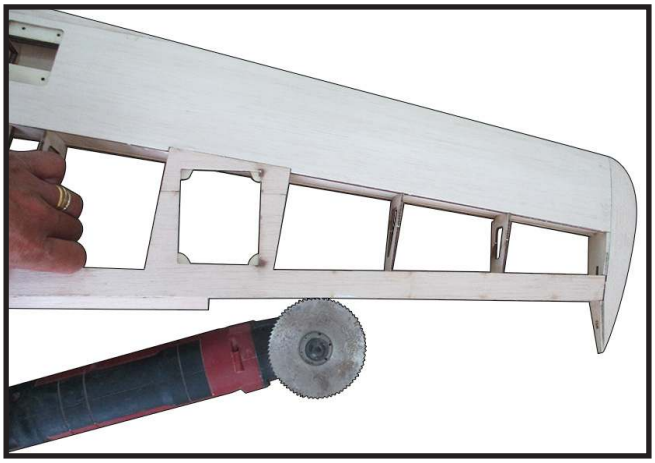
21.



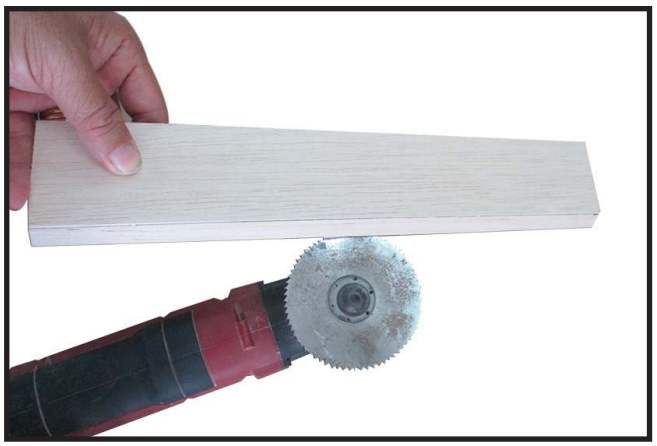
Reference and compare position of the laser cut line available (hinge’s slot) at trailing edge of wing with Flap and Aileron so that locate position of hinge’s slot at Flap and Aileron. Then, use the blade tool sawn the slot for hinge at Flap and Aileron (Photo 22,23,24).

22.

23.



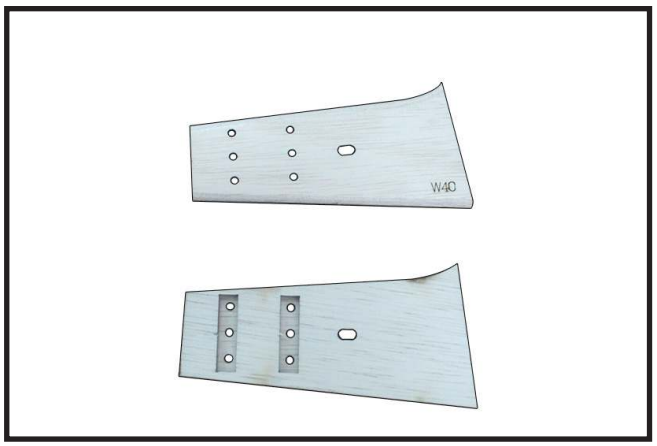
24.



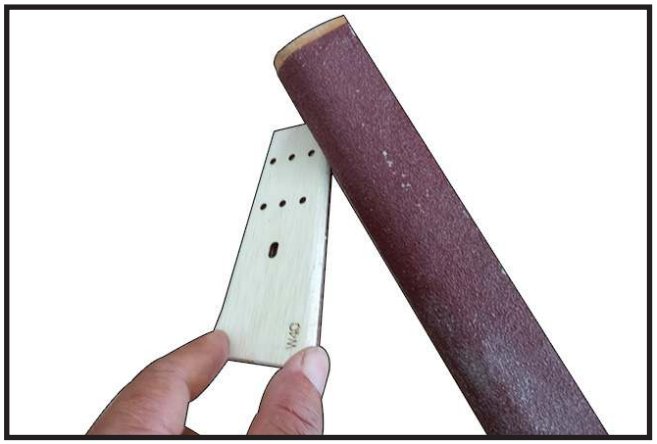
*** Gear door .**

Locate and apply W40 to W41 by CA glue. Then, make rounded the edge by sanding tool (Photo 25, 26).

25.



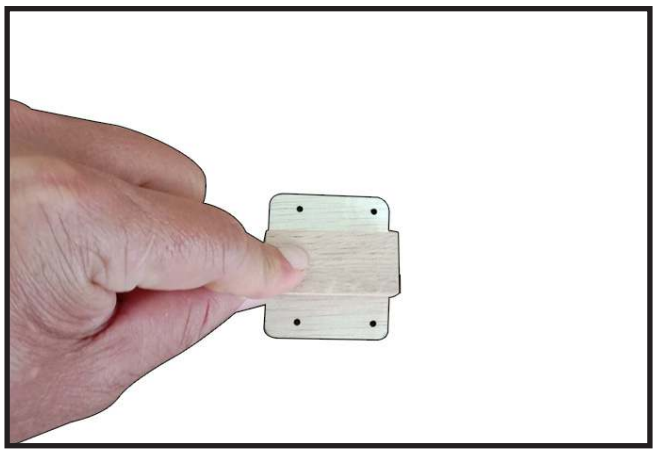
26.



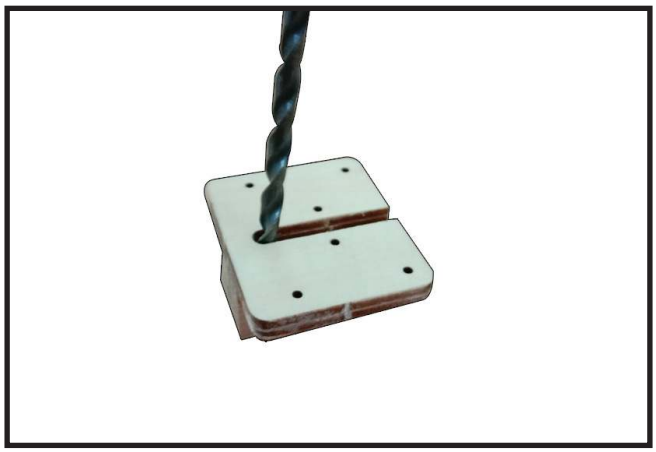
*** Landing Gear mount.**

Locate and apply W21 (2pcs) to balsa square block by CA glue. Then, drill a hole(Ø 4.2mm) for Fixed Landing Gear (Photo 27,28,29).

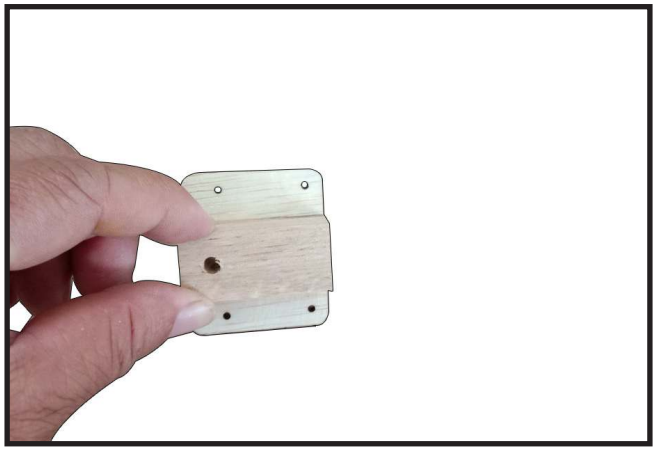
27.



28.



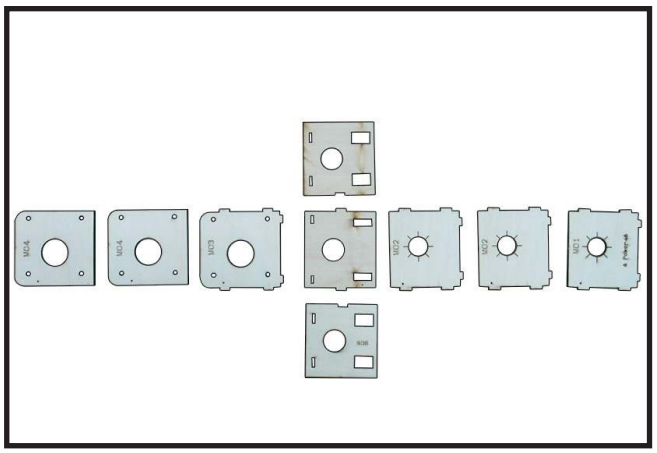
29.



*** Electric Motor mount.**

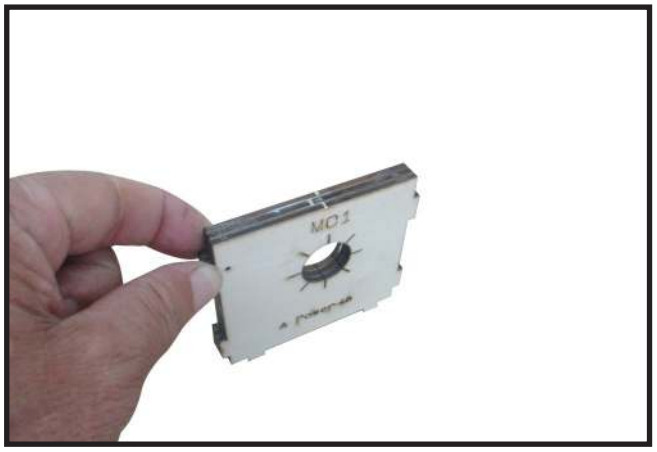
As shown (photo 30). All parts are available for assembly the mount of motor.

30.

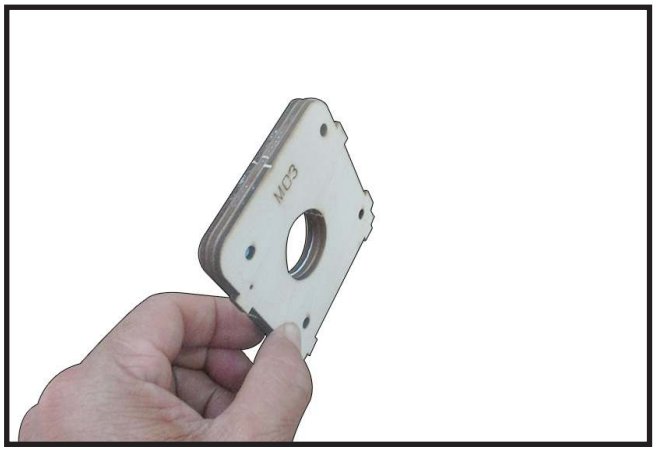


Locate and apply MO1 to MO2 (2pcs); MO3 to MO4 (2pcs) (Photo 31, 32).

31.

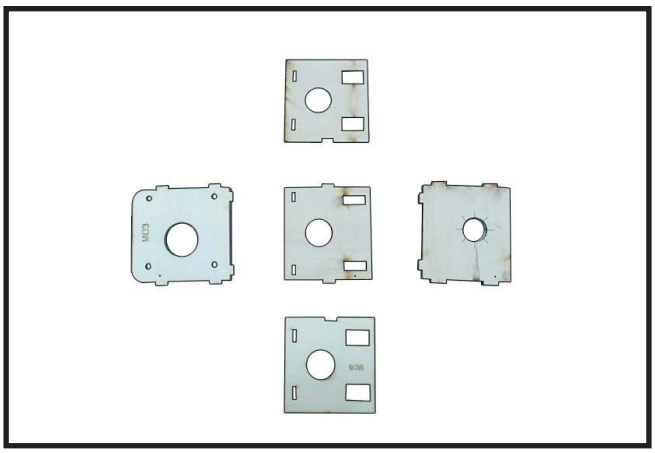


32.



Locate and assemble 5 pieces to become the box (photo 33,34).

33.

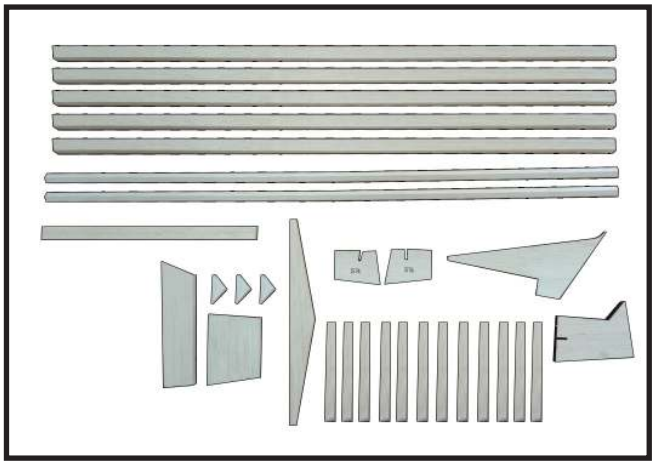


34.

STABILIZER AND ELEVATOR

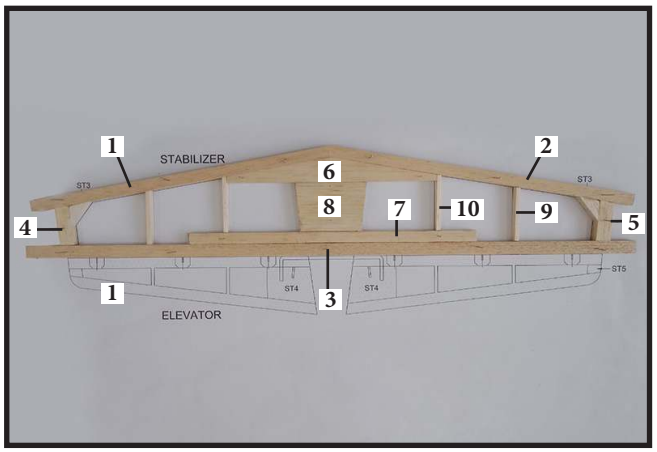
As shown (photo 1). Balsa 8mmx10mm x550mm spars and the laser cut parts are available for assemble the Stabilizer and Elevator.

1.



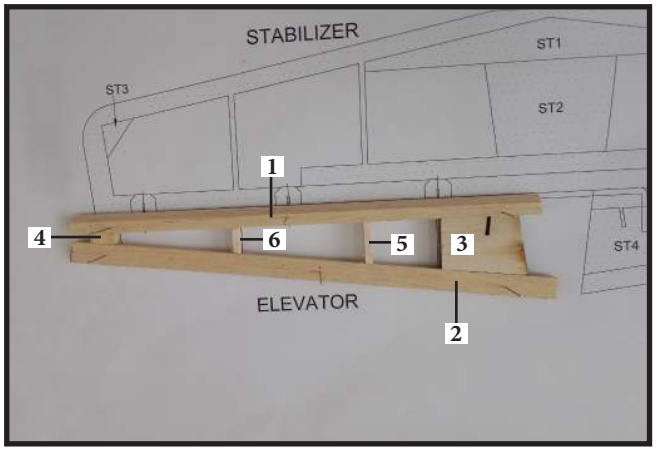
Locate and assemble the Stabilizer as the plan. Step by step do it one after another in order 1-10. Use the nail to plug in keep the rib on the paper plan and add CA glue. (Photo 2).

2.



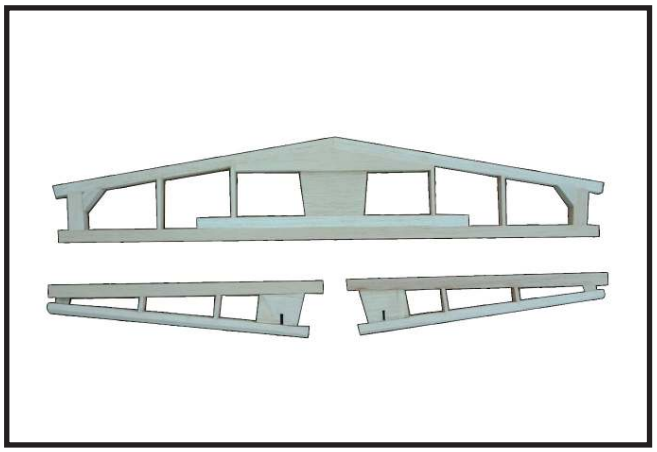
Locate and assemble the Elevator as the plan. Step by step do it one after another in order 1-6. Use the nail to plug in keep the rib on the paper plan and add CA glue. (Photo 3).

3.



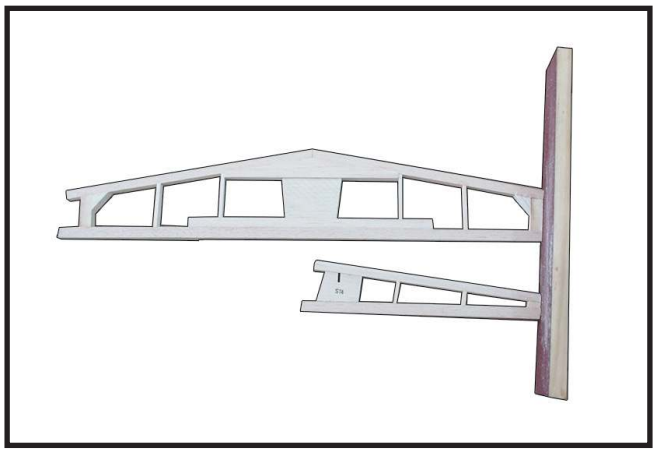
Remove nail Stabilizer and Elevator after glue dries (Photo 4).

4.



Cut off the excess balsa wood part and sanding smooth and flat the edge (Photo 5).

5.

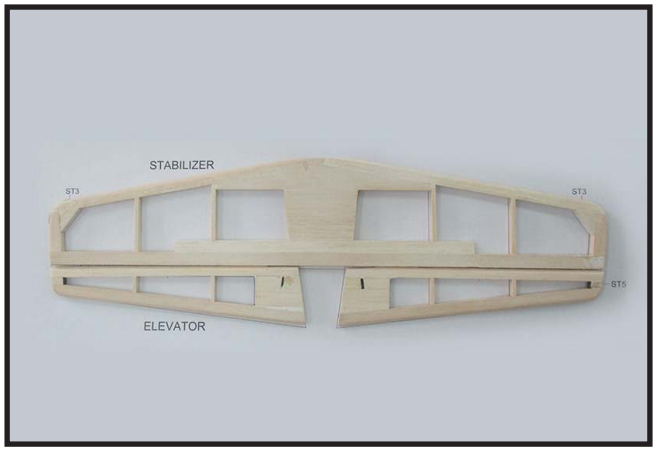


Rounded the edge around of Stabilizer and Elevator by sanding tool (Photo 6).

6.

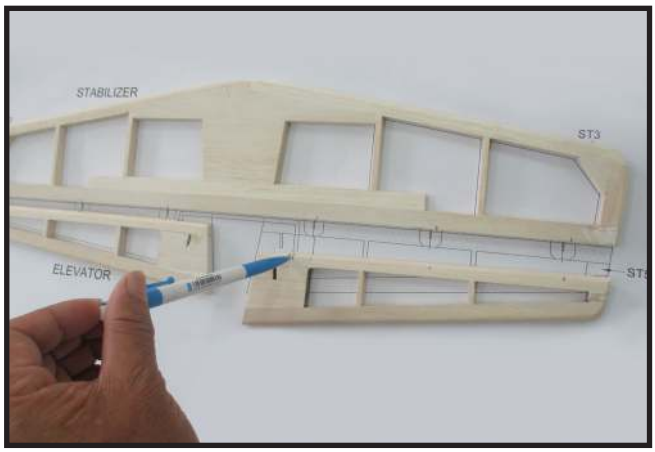
Finish assemble Stabilizer and Elevator (Photo 7).

7.

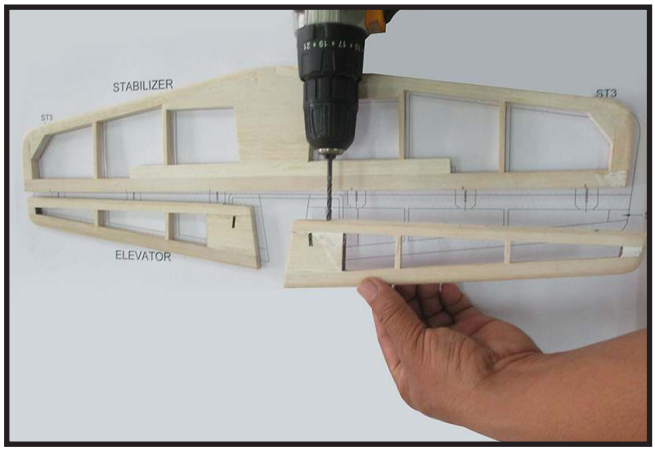


Locate position of metal elevator joiner wire (Photo 8).Then, drill the (Ø 3mm) round well inside Elevator. The deep value of well is equal to dimention of the wire part which bends 90 degree angle like a hook. (Photo 9).

8.

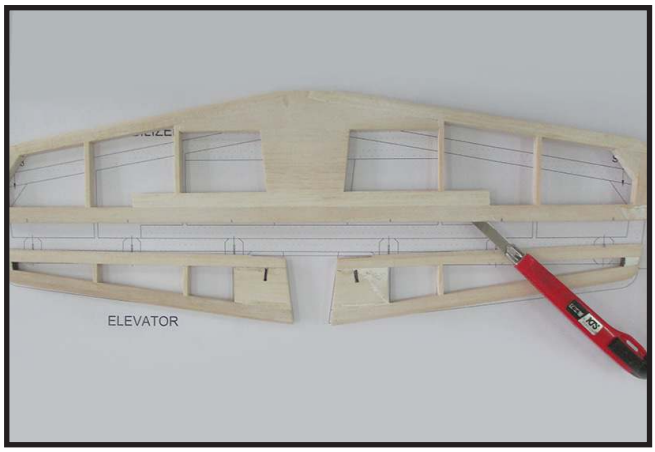


9.



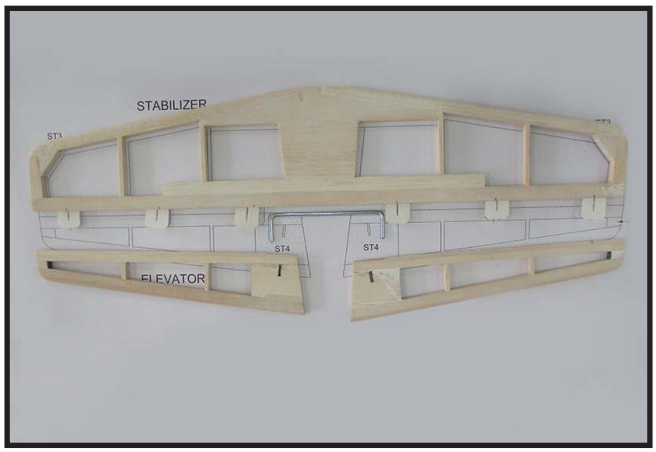
Locate position of paper hinge for Stabilizer and Elevator as plan. Then, sawn the slot (for 6 hinges) by the blade tool (Photo 10).

10.



First, assemble 6 paper hinges to Stabilizer. Then, link to Elevator (Photo 11).

11.



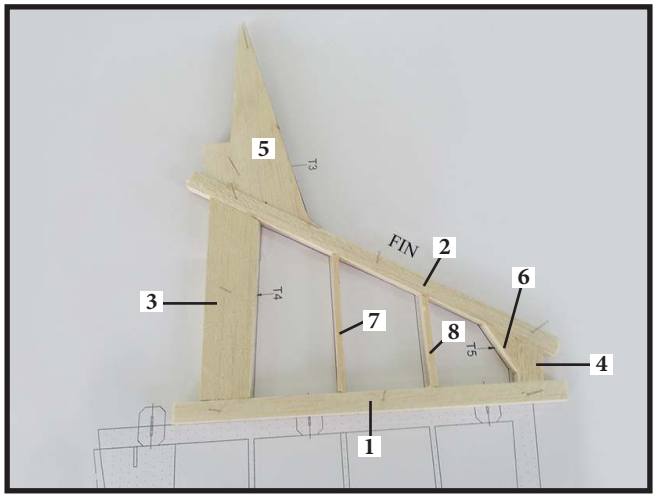
FIN AND RUDDER

Prepare Balsa 8mmx10mm x550mm spars
Balsa 8mmx12mm x200mm spars
Balsa 3mmx8mm x100mm spars

And the laser cut parts are available for assemble the Fin and Rudder.

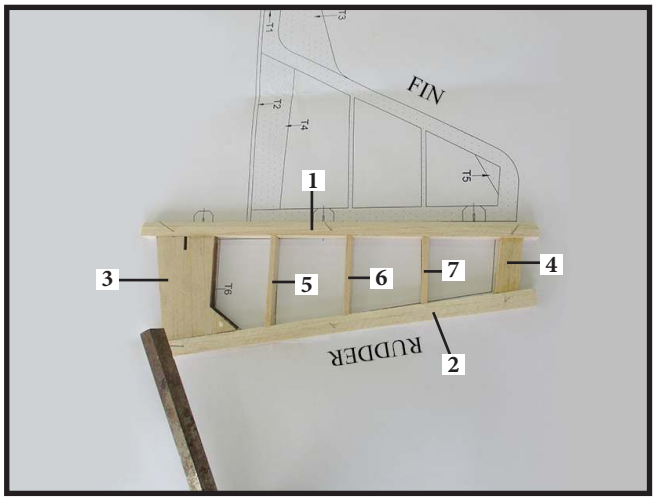
Locate and assemble the Fin as the plan. Step by step do it one after another in order 1-8. Use the nail to plug in keep the rib on the paper plan and add CA glue. Remove nail after glue dries. (Photo 1).

1.



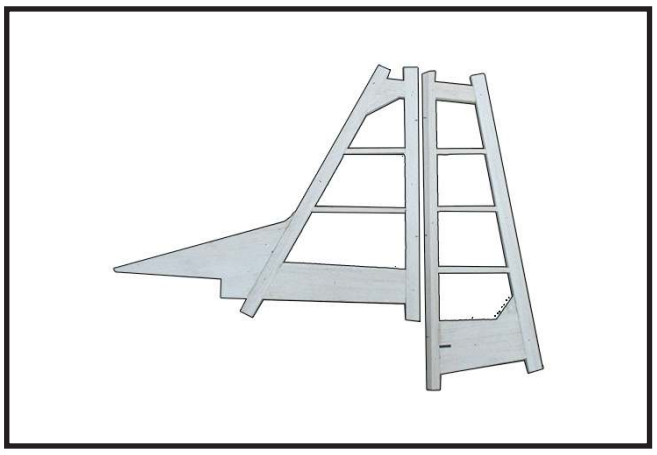
Locate and assemble the Rudder as the plan. Step by step do it one after another in order 1-7. Use the nail to plug in keep the rib on the paper plan and add CA glue. Remove nail after glue dries (Photo 2).

2.

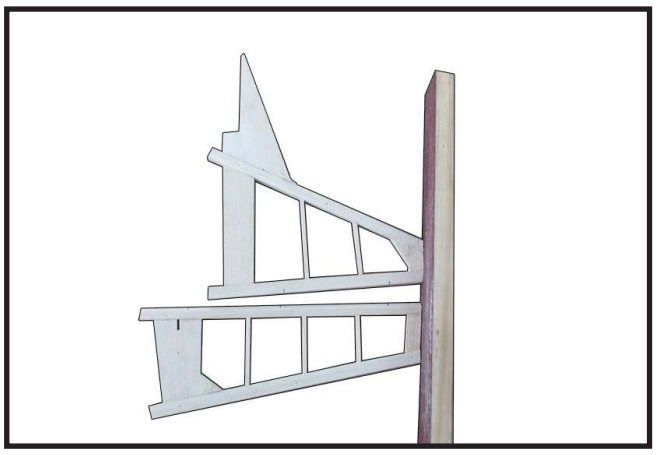


Cut off the excess balsa wood part and sanding smooth and flat the edge. Then, rounded the edge around of Fin and Rudder by sanding tool (Photo 3,4,5).

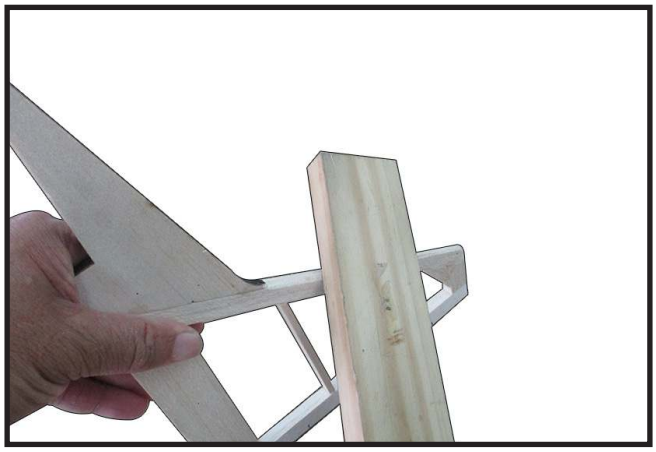
3.



4.

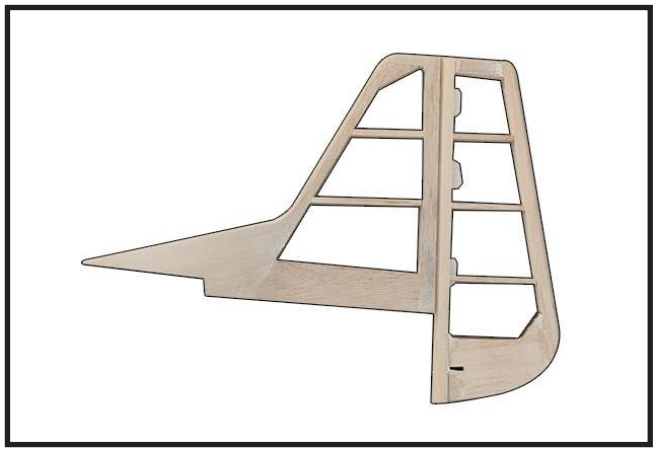


5.



Locate position of paper hinge for Fin and Rudder as plan. Then, sawn the slot (for 3 hinges) by the blade tool. First, assemble 3 paper hinges to Fin. Then, link to Rudder. Finish assemble Fin and Rudder (Photo 6).

6.



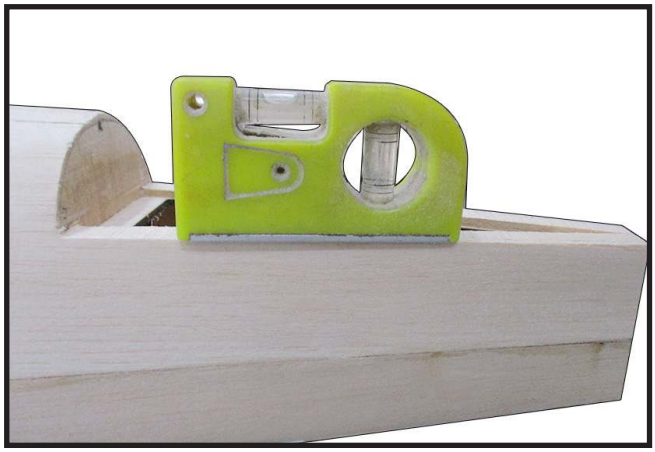
SET UP

Set up the model (Photo 1).

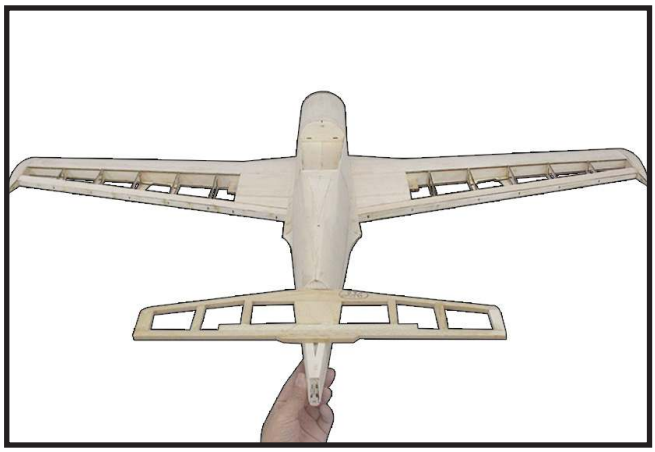
Use Model incidence meter tool as photo show, so that setting proper thrust for wing and stabilizer are 0 degree. First, measure incidence of wing. Then, sanding the stabilizer until incidence of thrust is equal to wing, not misalignment.

1.

2.



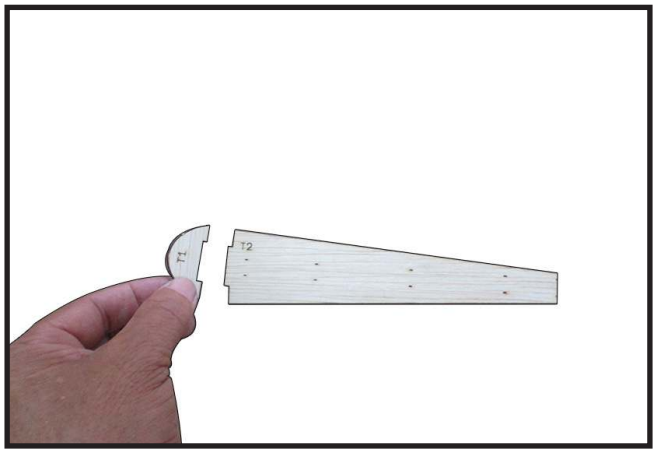
3.



ASSEMBLE THE STABILIZER AREA (THE PLACE FIXED VERTICAL STABILIZER WITH HORIZON STABILIZER)

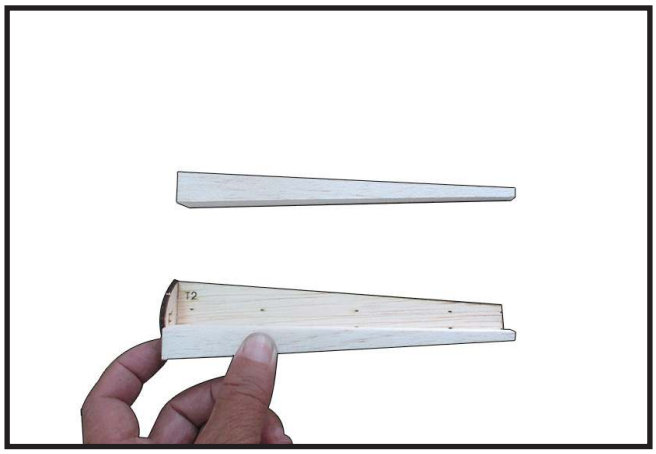
Assemble T1 and T2 by CA glue (Photo 1).

1.

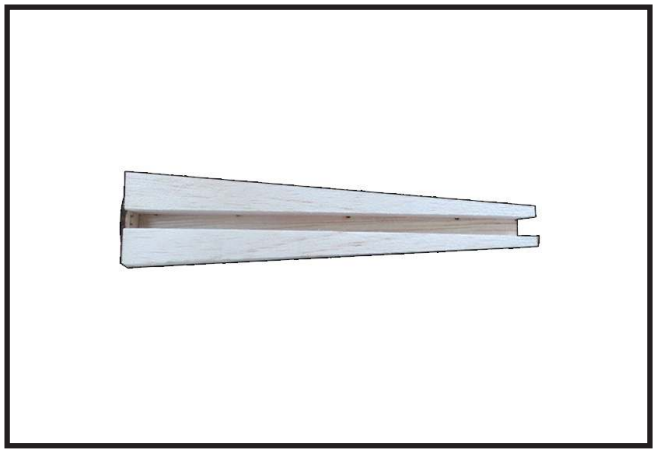


Assemble the triangle balsa block and cut down the excess part to rounded shape like T1 at intersect place .Then, sanding around it until it look like seamless with the end of fuselage (Photo 2,3,4,5).

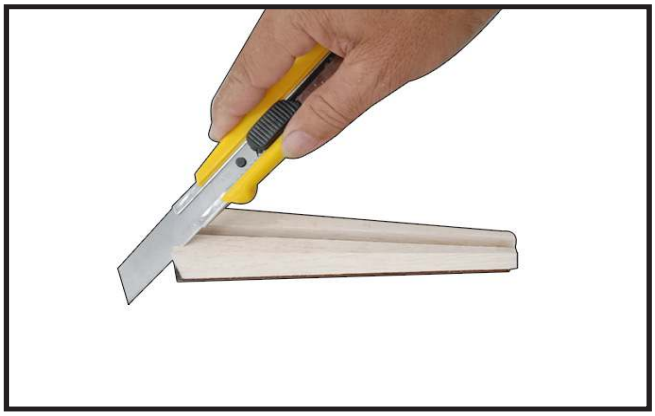
2.



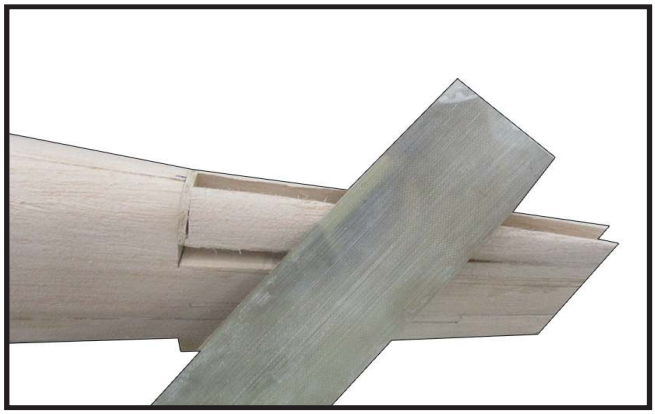
3.



4.



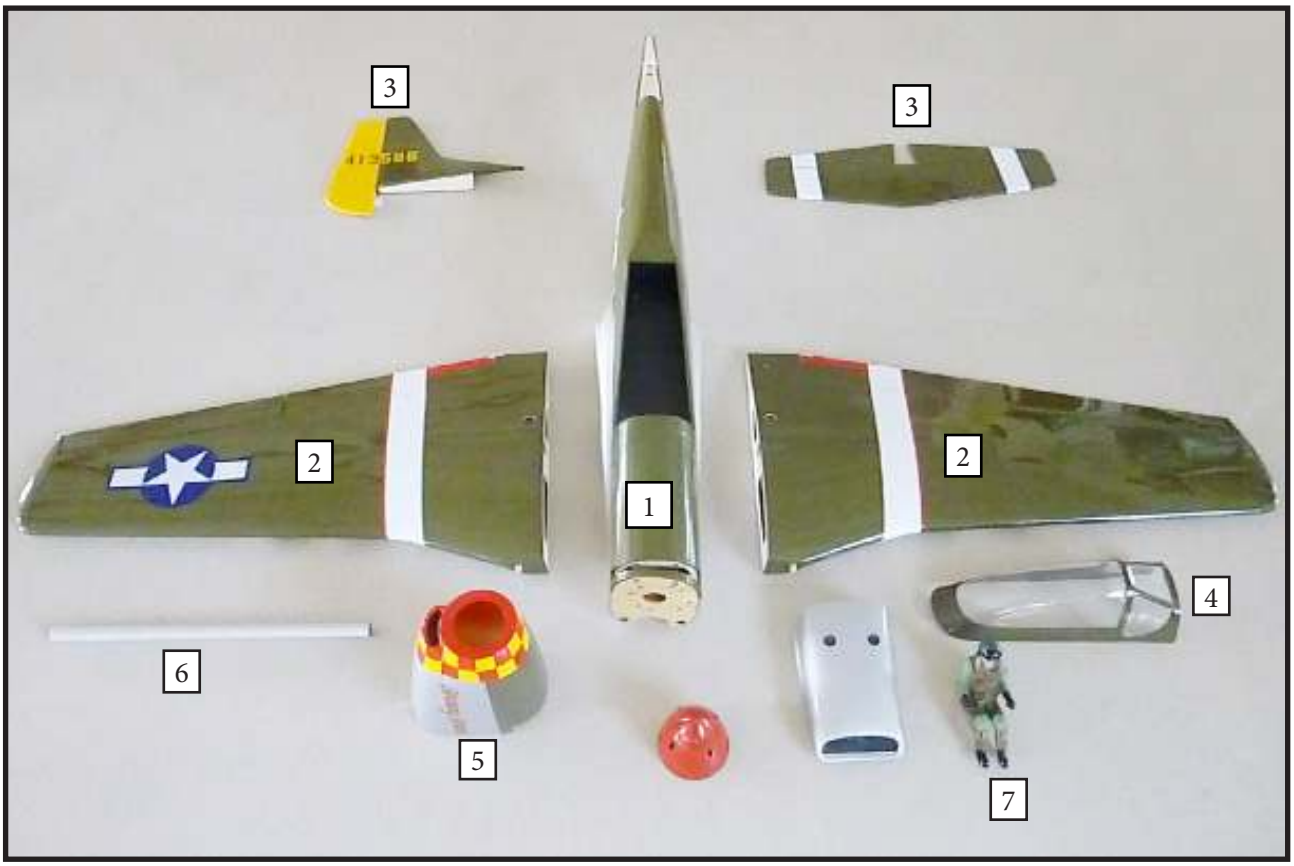
5.



FINAL ASSEMBLY.

NOTE: To avoid scratching your new aero plane we suggest that you cover your work-bench with an old towel. Keep a couple of jars or bowls handy to hold the small parts after you open the bags. Please trial fit all parts. Make sure you have the correct parts and that they fit and are aligned properly before gluing! This will ensure proper assembly as the Master Scale Kit Edition P-51 Mustang 56.3" is made from natural materials and minor adjustments may have to be made. The paint and plastic parts used in this kit are fuel proof. However, they are not tolerant of many harsh chemicals including the following: paint thinner, cyanoacrylate glue accelerator, cyanoacrylate glue de-bonder and acetone. Do not let these chemicals come in contact with the colours on the covering and the plastic parts.

KIT CONTENTS



KIT CONTENTS.

SEA276K Master Scale Kit Edition P-51 Mustang 56.3”

1. Fuselage
2. Wing set
3. Tail set
4. Canopy
5. Cowling
6. Aluminium tube
7. Pilot

ADDITIONAL ITEMS REQUIRED.

- ☐ 10cc gasoline engine.
- ☐ Computer radio 7 channels with 7 servos.
- ☐ Glow plug to suit engine.
- ☐ Propeller to suit engine.
- ☐ Protective foam rubber for radio system.

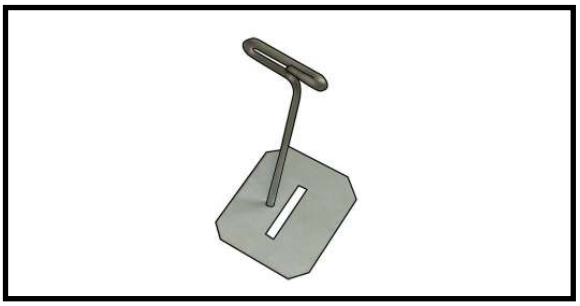
TOOLS & SUPPLIES NEEDED.

- ☐ Thin cyanoacrylate glue.
- ☐ Medium cyanoacrylate glue.
- ☐ 30 minute epoxy.
- ☐ 5 minute epoxy.
- ☐ Hand or electric drill.
- ☐ Assorted drill bits.
- ☐ Modelling knife.
- ☐ Straight edge ruler.
- ☐ 2mm ball driver.
- ☐ Phillips head screwdriver.
- ☐ 220 grit sandpaper.
- ☐ 90° square or builder’s triangle.
- ☐ Wire cutters.
- ☐ Masking tape & T-pins.
- ☐ Thread-lock.
- ☐ Paper towels.

HINGING THE FLAP.

Note : *The control surfaces, including the ailerons, elevators, and rudder, are prehinged with hinges installed, but the hinges are not glued in place. It is imperative that you properly adhere the hinges in place per the steps that follow using a high-quality thin C/A glue.*

1) Carefully remove the flap from one of the wing panels. Note the position of the hinges.

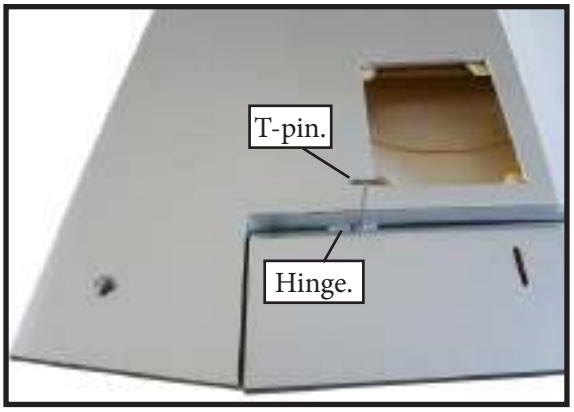


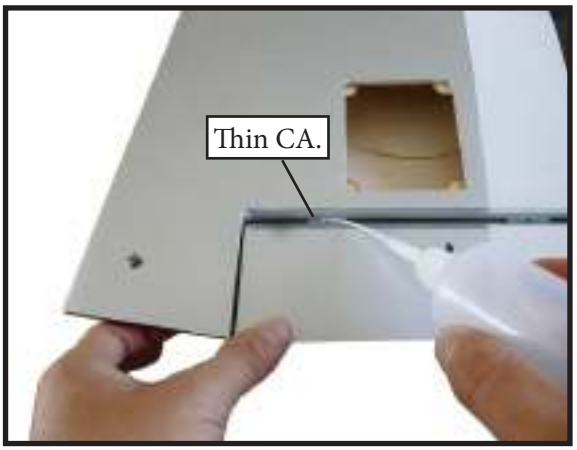
2) Remove each hinge from the wing panel and flap and place a T-pin in the center of each hinge. Slide each hinge into the wing panel until the T-pin is snug against the wing panel. This will help ensure an equal amount of hinge is on either side of the hinge line when the flap is mounted to the wing.

3) Slide the wing panel on the flap until there is only a slight gap. The hinge is now centered on the wing panel and flap. Remove the T-pins and snug the flap against the wing panel. A gap of 1/64” or less should be maintained between the wing panel and flap.

4) Deflect the flap and completely saturate each hinge with thin C/A glue. The flap's front surface should lightly contact the wing during this procedure. Ideally, when the hinges are glued in place, a 1/64" gap or less will be maintained throughout the lengh of the flap to the wing panel hinge line.

NOTE : The hinge is constructed of a special material that allows the C/A to wick or penetrate and distribute throughout the hinge, securely bonding it to the wood structure of the wing panel and flap.



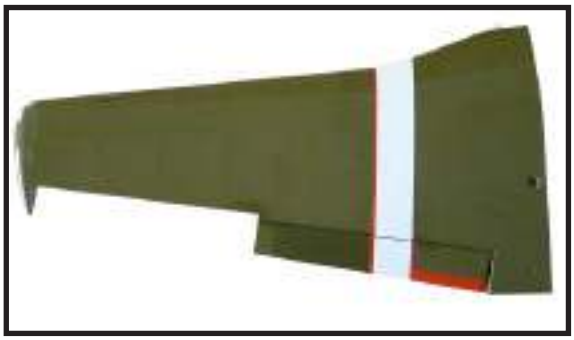


5) Turn the wing panel over and deflect the flap in the opposite direction from the opposite side. Apply thin C/A glue to each hinge, making sure that the C/A penetrates into both the flap and wing panel.

6) Using C/A remover/debonder and a paper towel, remove any excess C/A glue that may have accumulated on the wing or in the flap hinge area.

7) Repeat this process with the other wing panel, securely hinging the flap in place.

8) After both flap are securely hinged, firmly grasp the wing panel and flap to make sure the hinges are securely glued and cannot be pulled out. Do this by carefully applying medium pressure, trying to separate the flap from the wing panel. Use caution not to crush the wing structure and/ or flap.

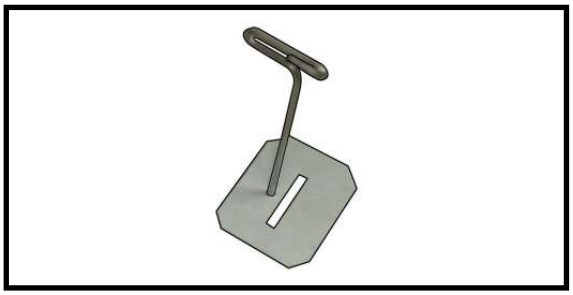


Note : Work the flap up and down several times to "work in" the hinges and check for proper movement.

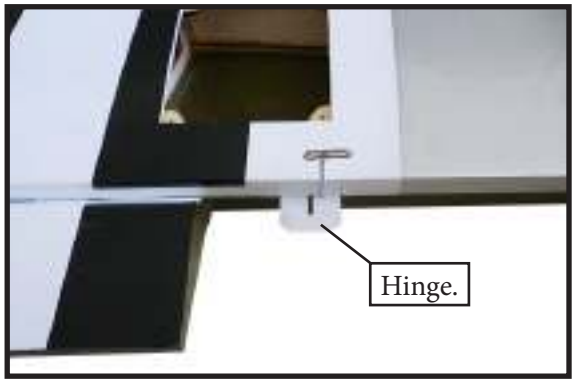
HINGING THE AILERON.

Note : *The control surfaces, including the ailerons, elevators, and rudder, are prehinged with hinges installed, but the hinges are not glued in place. It is imperative that you properly adhere the hinges in place per the steps that follow using a high-quality thin C/A glue.*

1) Carefully remove the aileron from one of the wing panels. Note the position of the hinges.



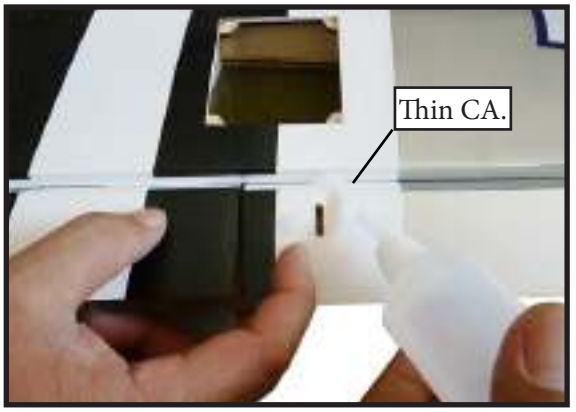
2) Remove each hinge from the wing panel and aileron and place a T-pin in the center of each hinge. Slide each hinge into the wing panel until the T-pin is snug against the wing panel. This will help ensure an equal amount of hinge is on either side of the hinge line when the aileron is mounted to the aileron.



3) Slide the wing panel on the aileron until there is only a slight gap. The hinge is now centered on the wing panel and aileron. Remove the T-pins and snug the aileron against the wing panel. A gap of 1/64” or less should be maintained between the wing panel and aileron.

4) Deflect the aileron and completely saturate each hinge with thin C/A glue. The ailerons front surface should lightly contact the wing during this procedure. Ideally, when the hinges are glued in place, a 1/64” gap or less will be maintained throughout the lengh of the aileron to the wing panel hinge line.

NOTE : The hinge is constructed of a special material that allows the C/A to wick or penetrate and distribute throughout the hinge, securely bonding it to the wood structure of the wing panel and aileron.



5) Turn the wing panel over and deflect the aileron in the opposite direction from the opposite side. Apply thin C/A glue to each hinge, making sure that the C/A penetrates into both the aileron and wing panel.

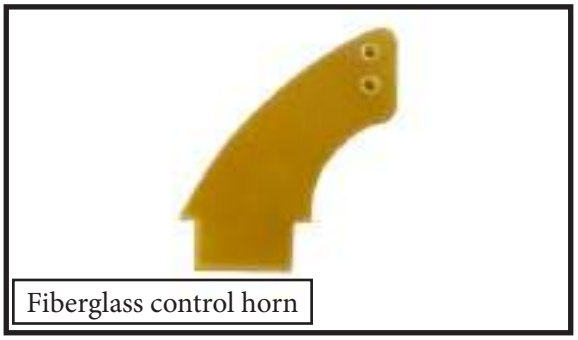
6) Using C/A remover/debonder and a paper towel, remove any excess C/A glue that may have accumulated on the wing or in the aileron hinge area.

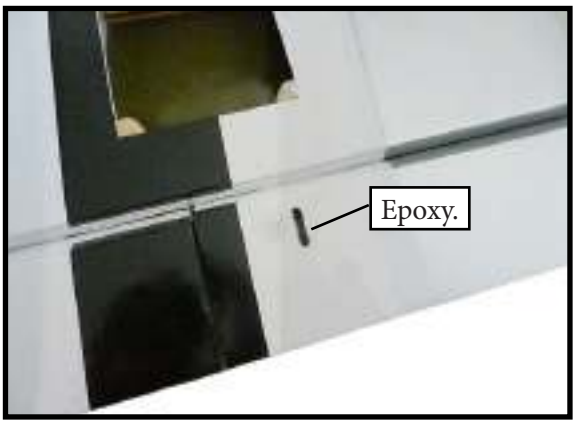
7) Repeat this process with the other wing panel, securely hinging the aileron in place.

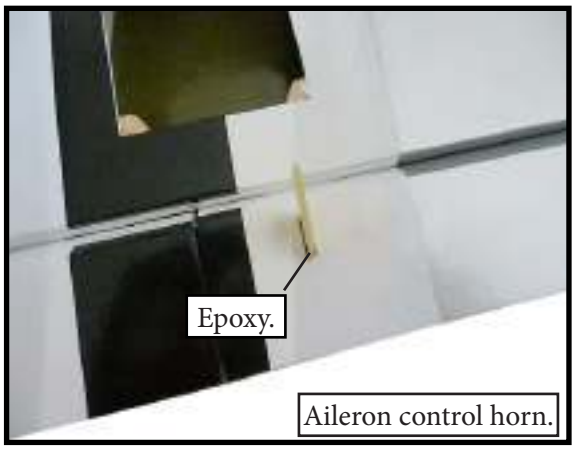
8) After both ailerons are securely hinged, firmly grasp the wing panel and aileron to make sure the hinges are securely glued and cannot be pulled out. Do this by carefully applying medium pressure, trying to separate the aileron from the wing panel. Use caution not to crush the wing structure.

Note : Work the aileron up and down several times to “work in” the hinges and check for proper movement.

INSTALL THE AILERONS CONTROL HORN.

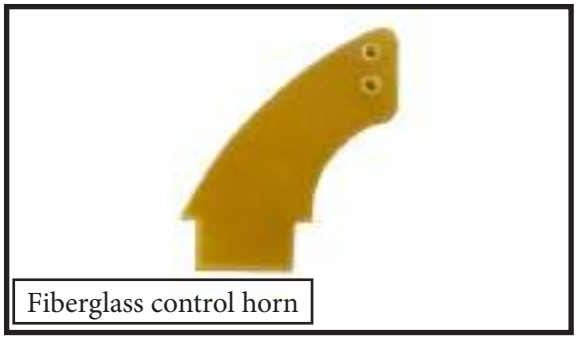


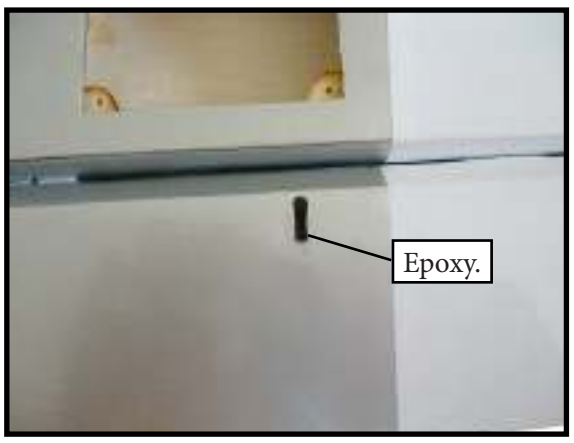


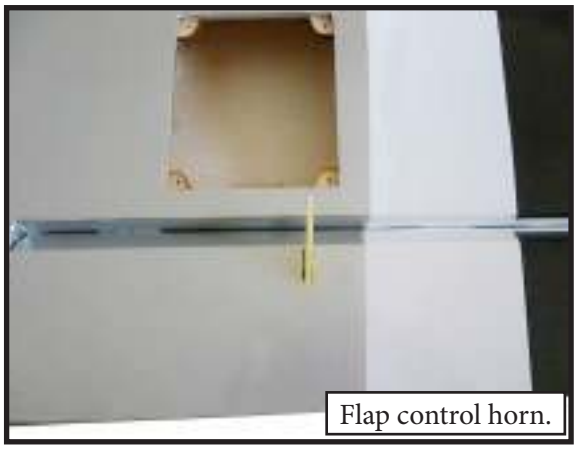


INSTALL FLAP CONTROL HORN.

Install the flap control horn using the same method as same as the aileron control horns.





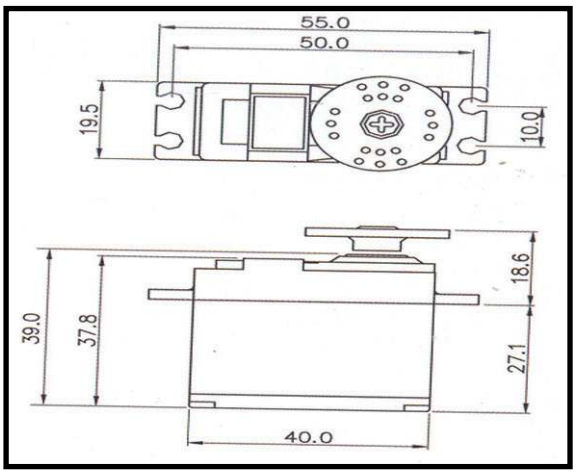


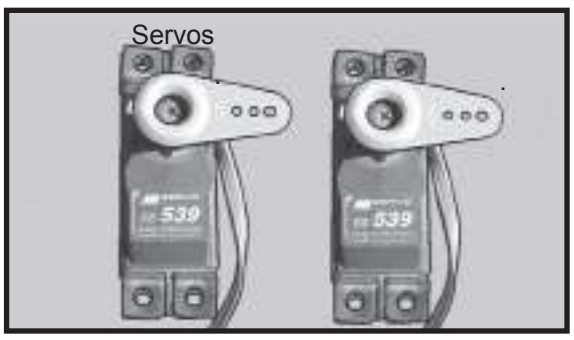
WING ASSEMBLY.

Please see below pictures.

Attach the aluminum tube into wing.

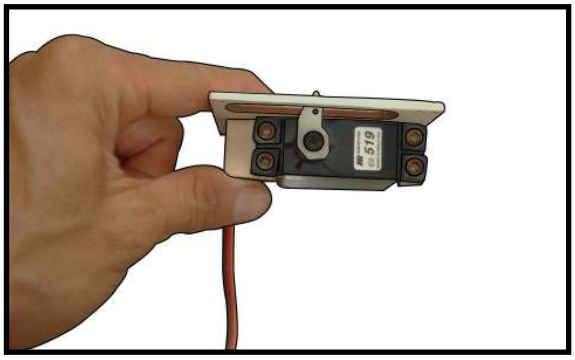
INSTALLING THE AILERON SERVOS.



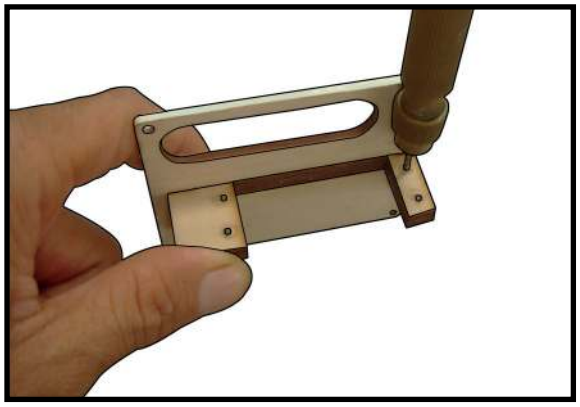


⚠ Because the size of servos differ, you may need to adjust the size of the precut opening in the mount. The notch in the sides of the mount allow the servo lead to pass through.

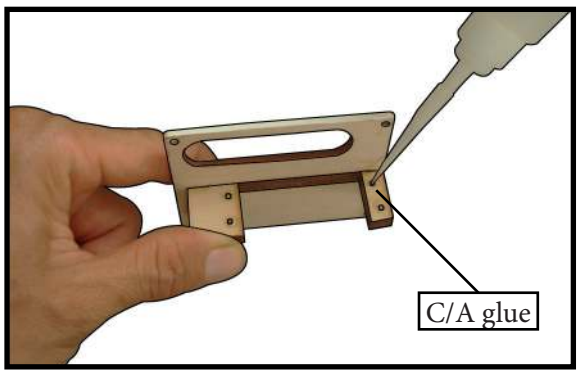
1) Place the servo between the mounting blocks and space it from the hatch. Use a pencil to mark the mounting hole locations on the blocks.



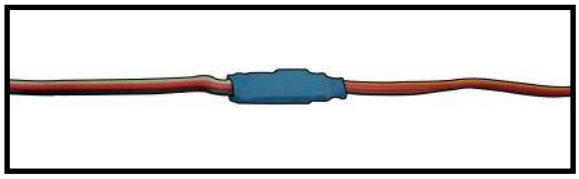
2) Use drill bit in a pin vise to drill the mouting holes in the blocks.



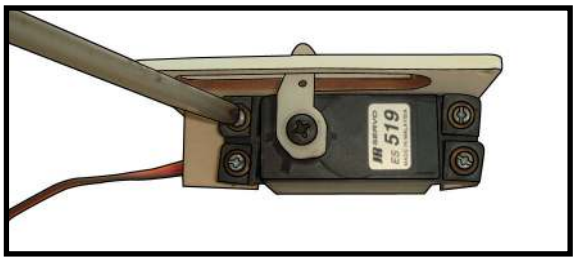
3) Apply 2-3 drops of thin C/A to each of the mounting holes. Allow the C/A to cure without using accelerator.



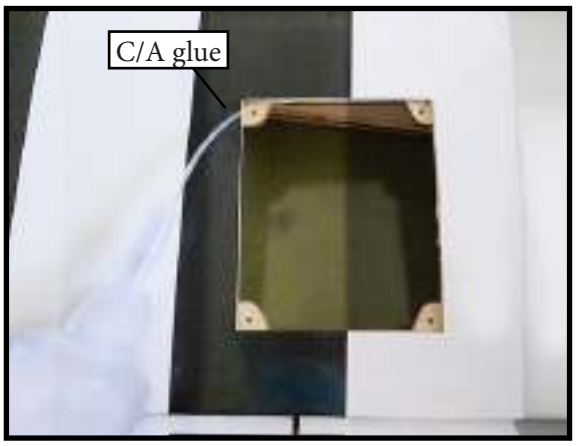
4) Use dental floss to secure the connection so they cannot become unplugged.



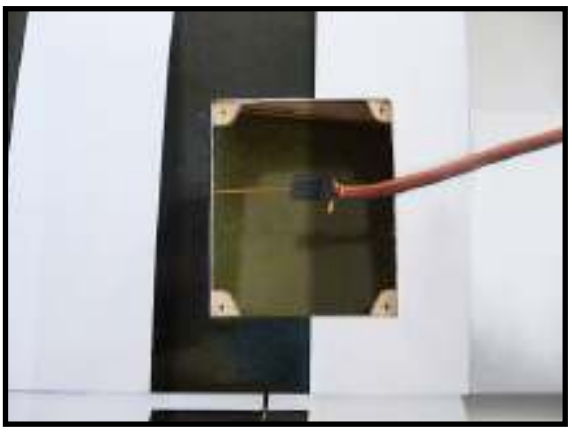
5) Secure the servo to the aileron hatch using Phillips screwdriver and the screws provided with the servo.

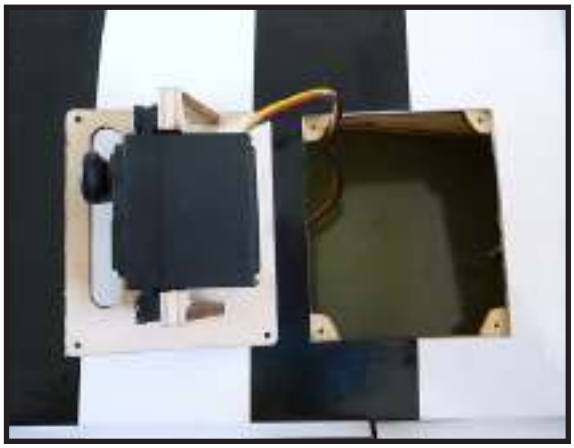


6) Apply 1-2 drops of thin C/A to each of the mounting tabs. Allow the C/A to cure without using accelerator.

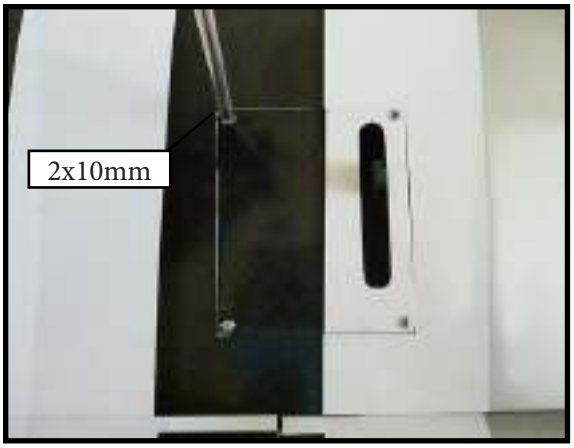


7) Remove the string from the wing at the servo location and use the tape to attach it to the servo extension lead. Pull the lead through the wing and remove



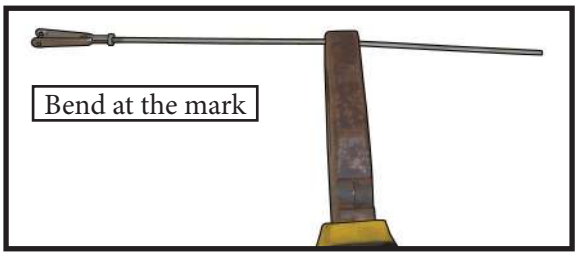


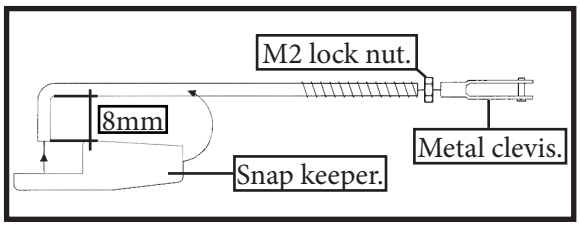
8) Set the aileron hatch in place and use a Phillips screw driver to install it with four wood screws.

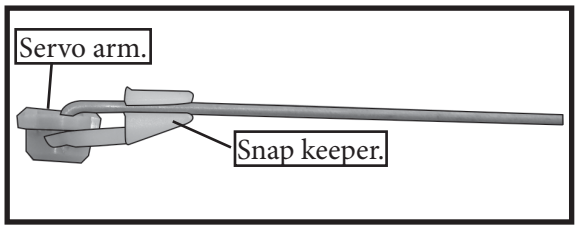


INSTALLING THE FLAP SERVO.

Repeat the procedure for the flap servo.

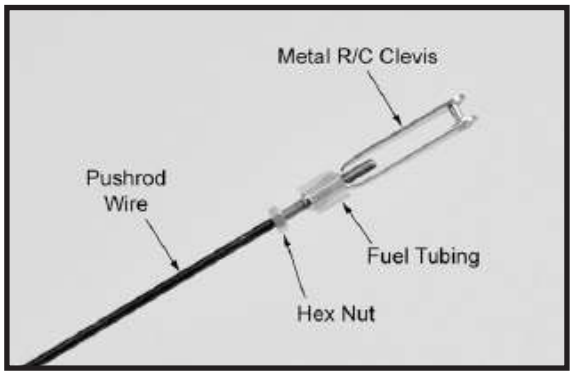


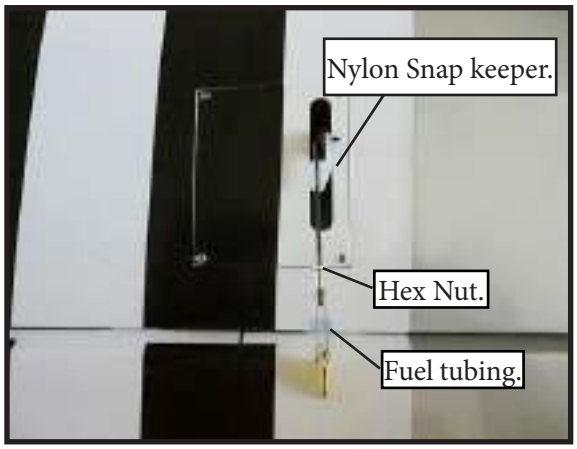




AILERON PUSHROD INSTALLATION.

Please see below pictures.

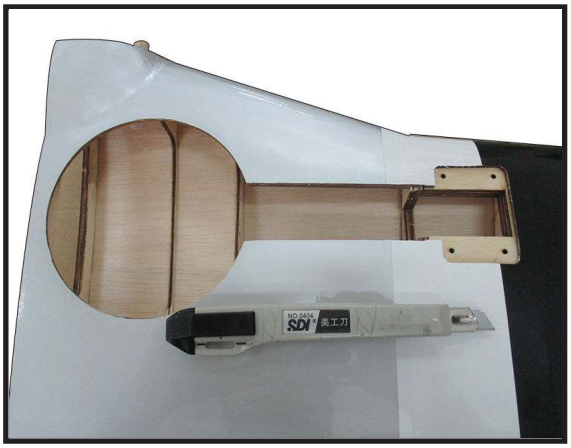




Use a felt tip pen to mark the wire where it crosses the hole. Use a pair of pliers to put a shrp 90-degree bend in the wire at the mark.

INSTALLING THE FLAP PUSHROD.

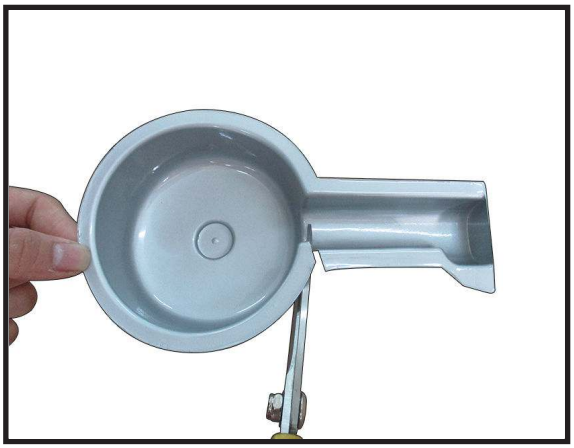
Repeat the procedure for the aileron pushrod.

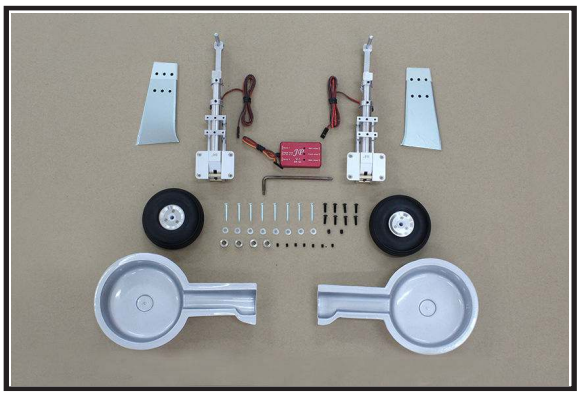


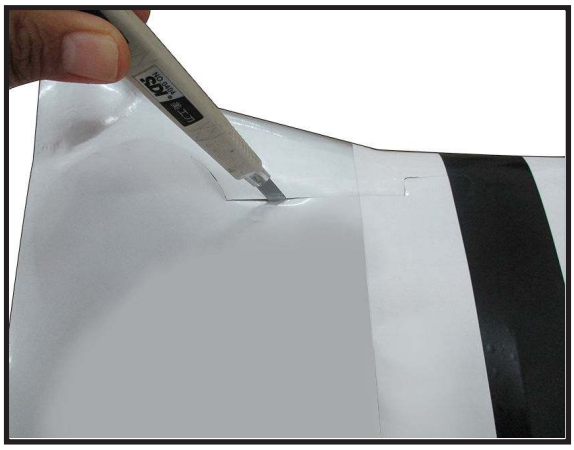
INSTALLING RETRACTABLE LANDING GEAR.

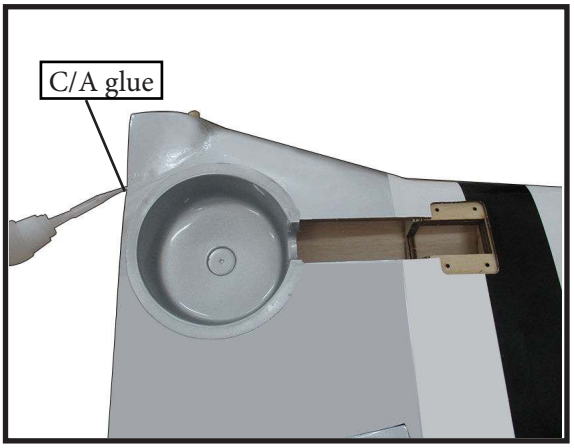
Locate items necessary to install Sprin Landing Gear.

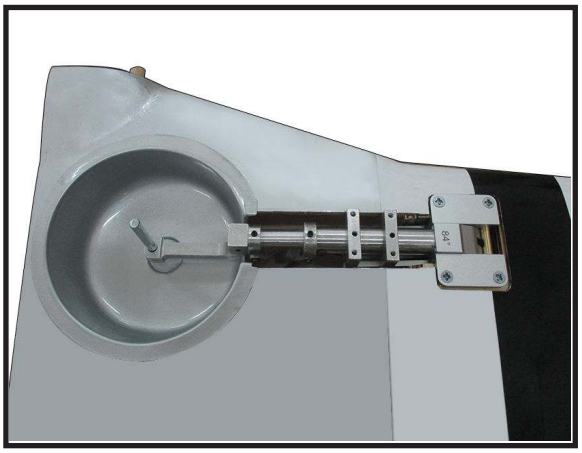
You use this fork set JP ER-120-84degree.

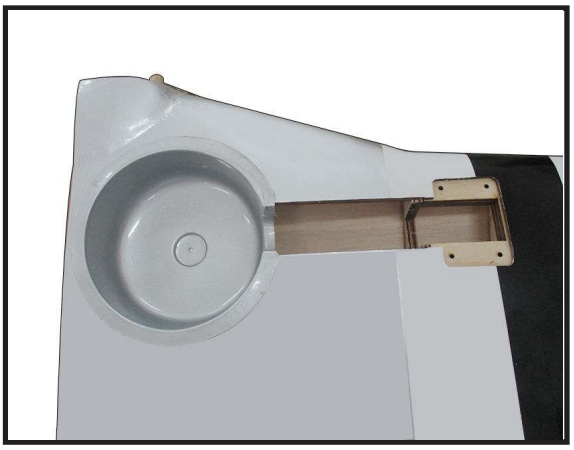


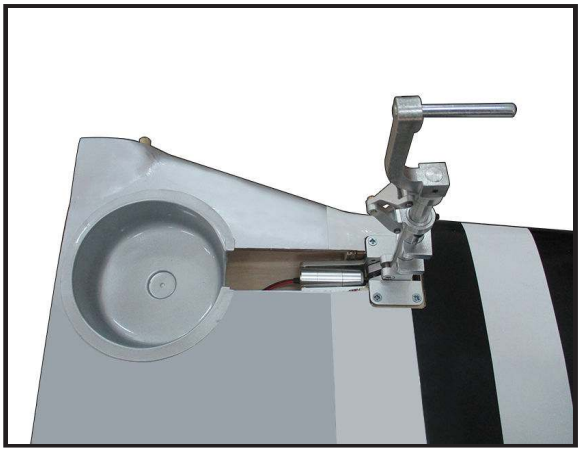


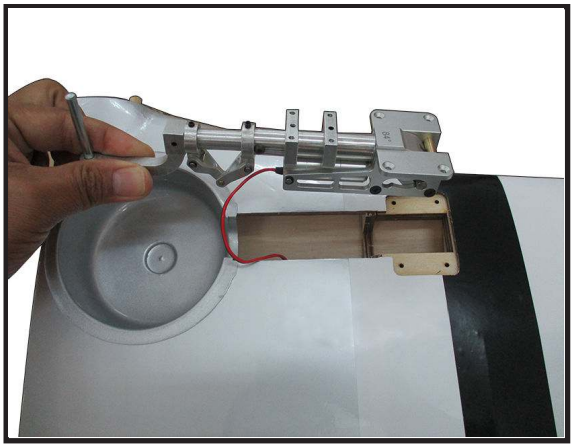


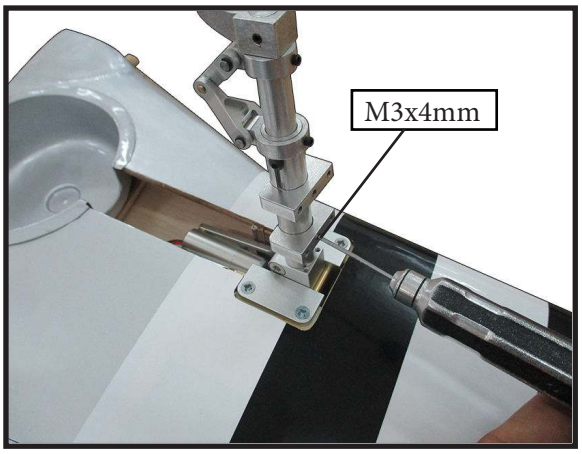

C/A glue

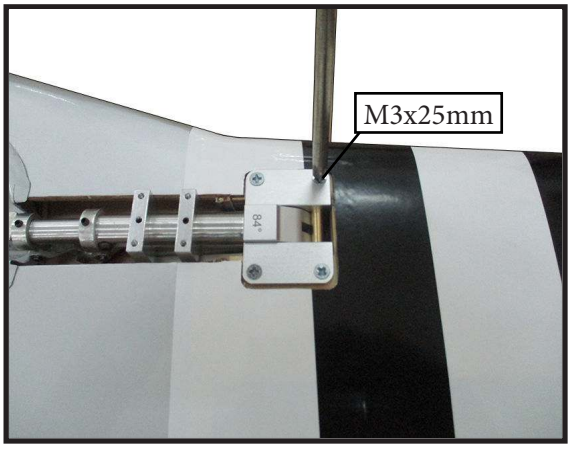


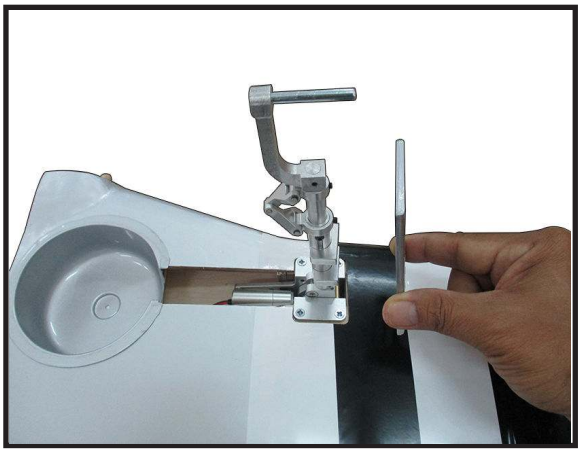


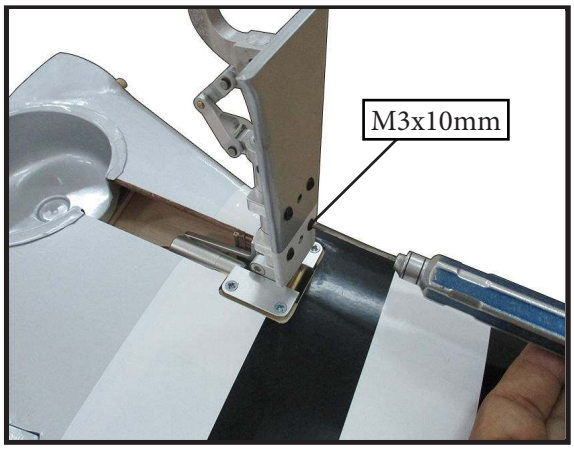


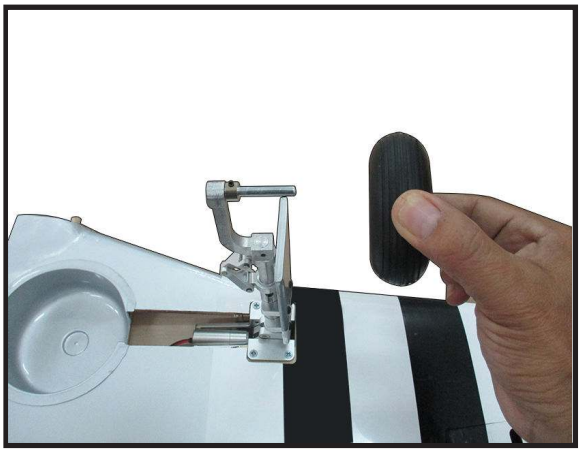


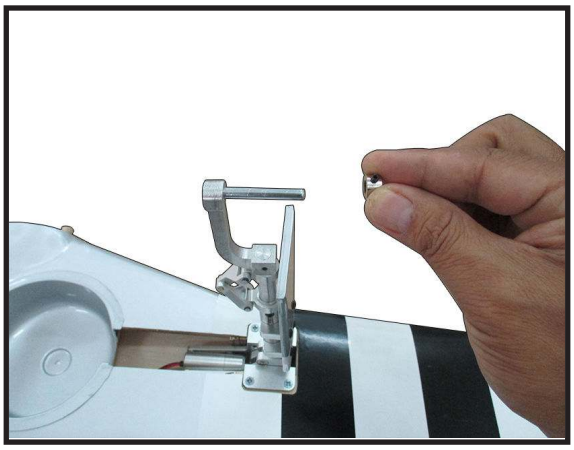

M3x4mm

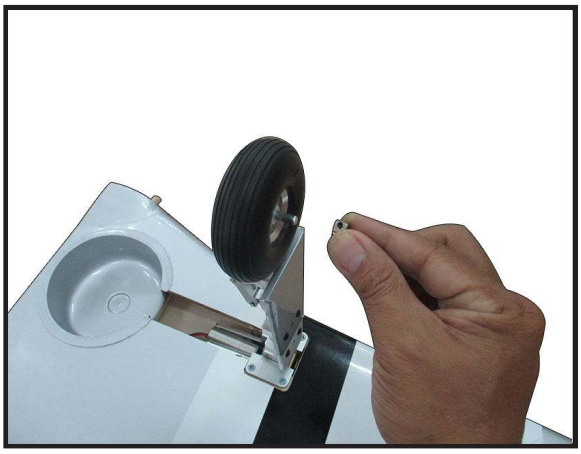

M3x25mm

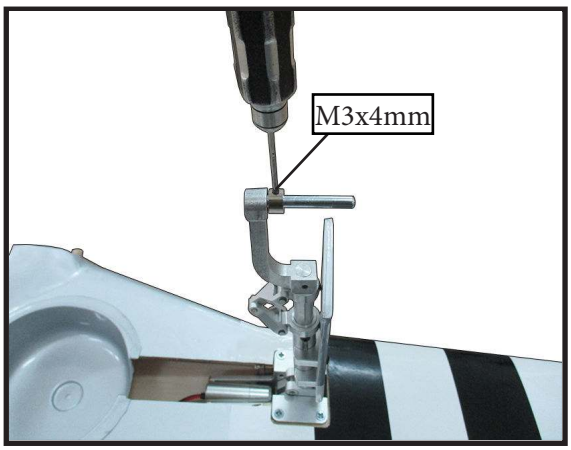


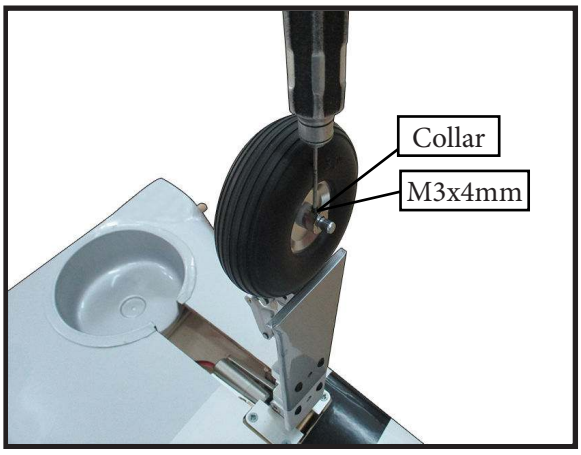

M3x10mm

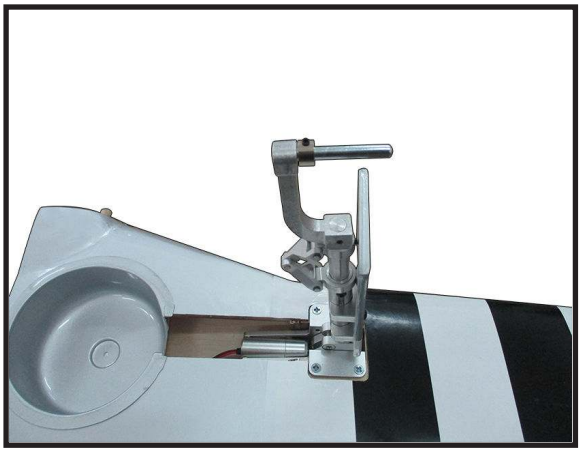


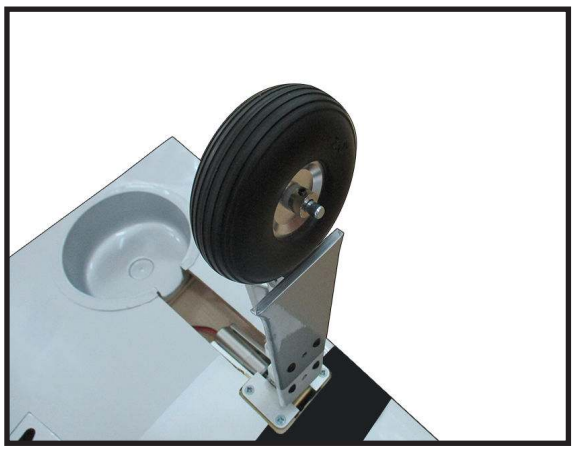




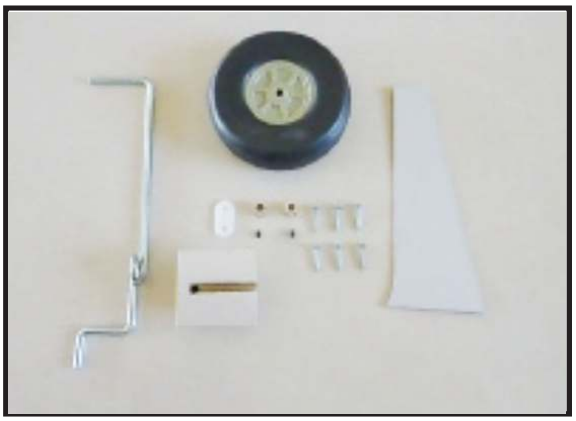

M3x4mm


Collar
M3x4mm

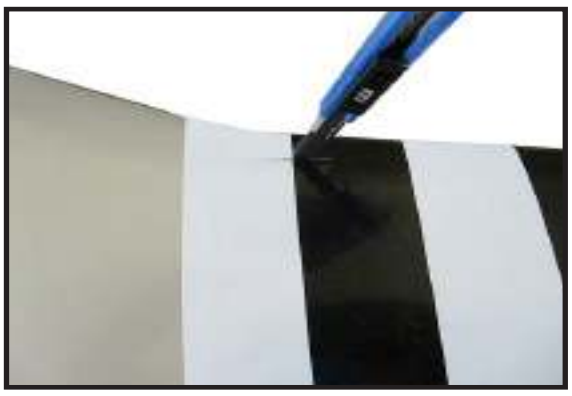


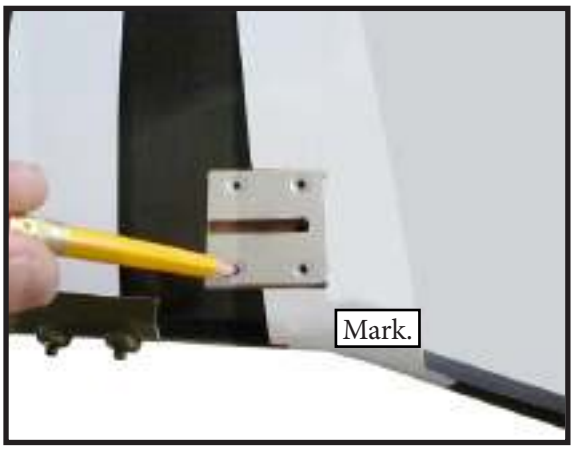


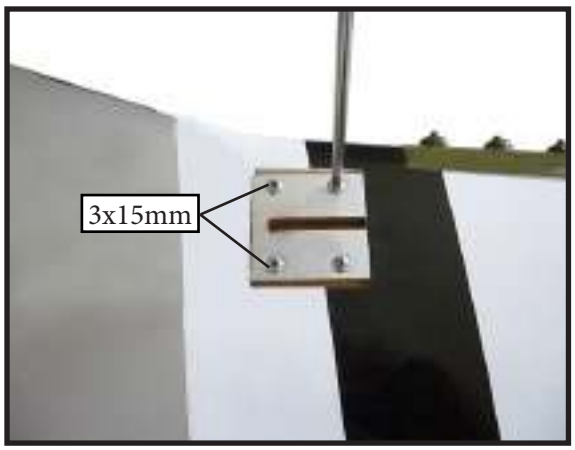
STANDARD FIXED LANDING GEAR.



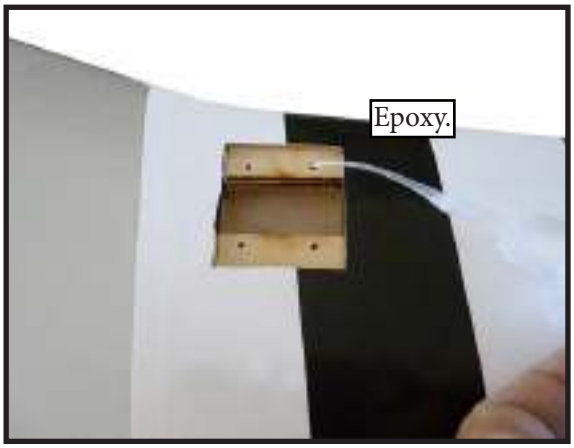
1) Remove the covering from the wing to fit the fixed gear mounting blocks.

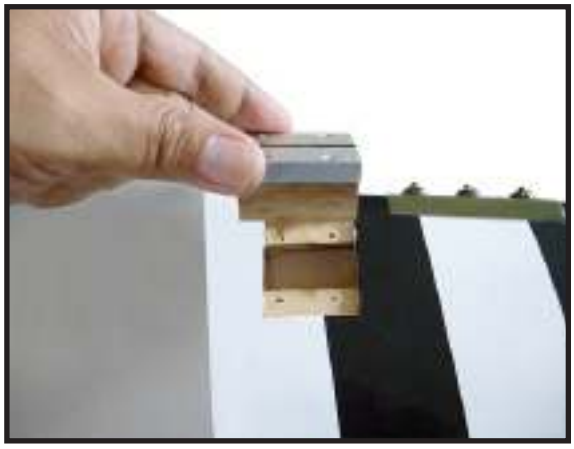


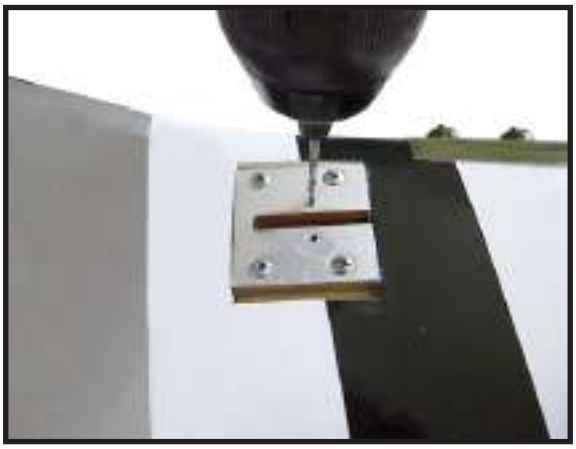

Mark.

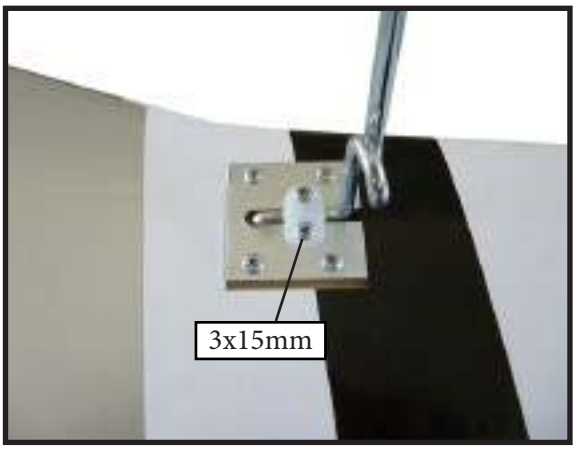

3x15mm


Drill 2mm

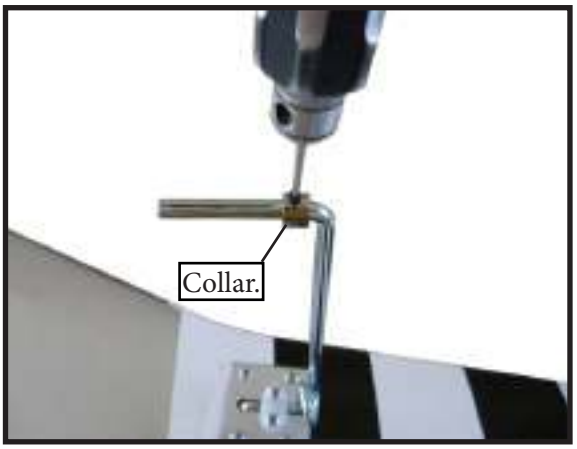

Epoxy.

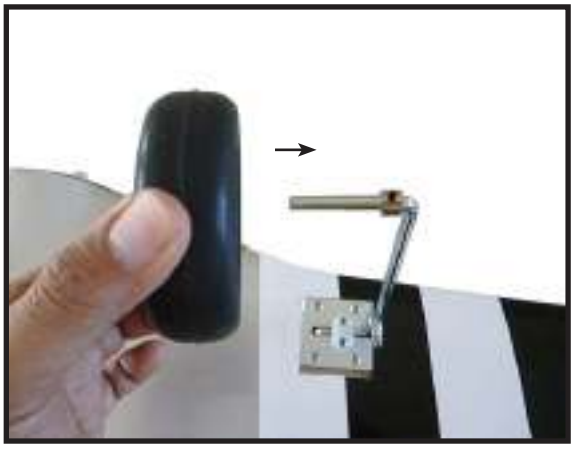


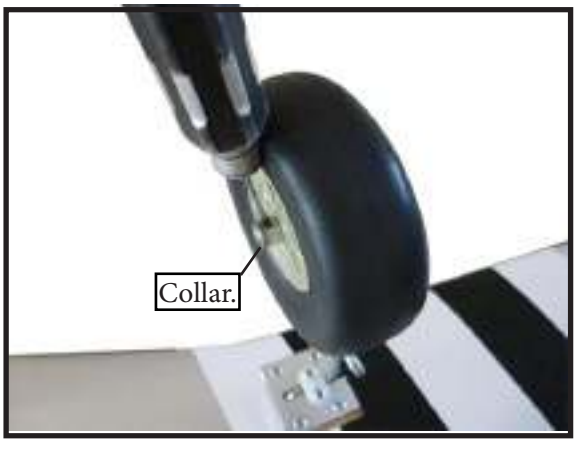




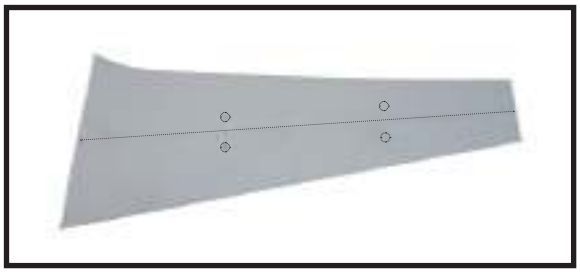
2) Slide the wheel on the axle, then secure it using the wheel collar.

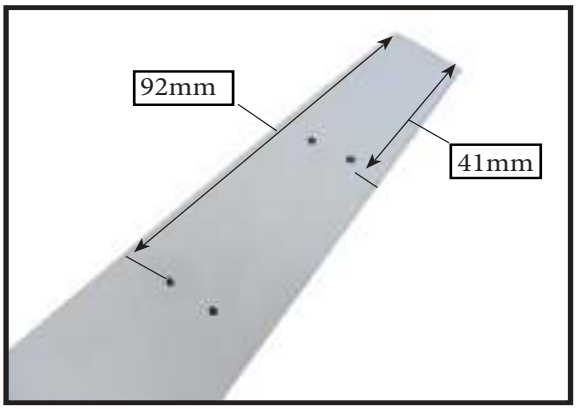






7) Draw a centerline on the back of the landing gear door. Use a pin vise and drill bit to drill holes for the tie wraps that secure the gear door. Space the holed on either side of the centerline drawn in the previous step.





8) Secure the landing gear doors to the landinggear struts using tie wraps and a small amount of silicone adhesive.

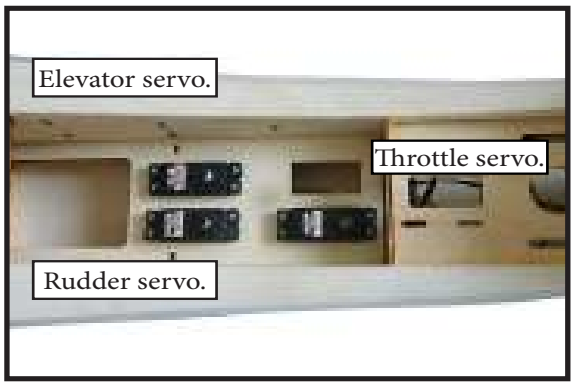
PLASTIC COVER ASSEMBLY.

INSTALLING THE FUSELAGE SERVOS.

⚠ Because the size of servos differ, you may need to adjust the size of the precut opening in the mount. The notch in the sides of the mount allow the servo lead to pass through.

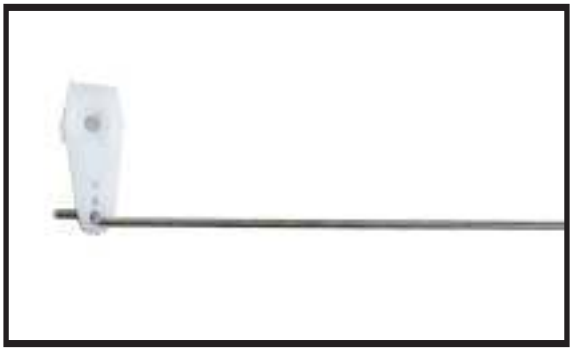
1) Install the rubber grommets and brass collets onto all servos. Test fit the servos into the servo mounts.

2) Secure the servos with the screws provided with your radio system.



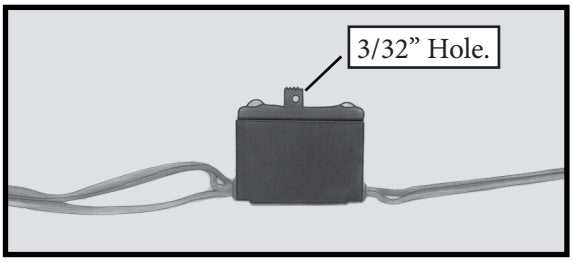
THROTTLE SERVO ARM INSTALLATION.

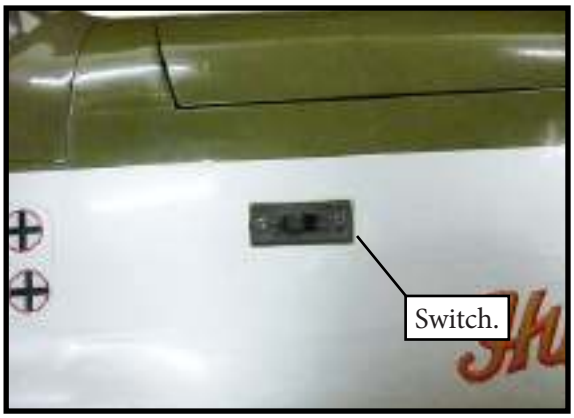
Install the Z-bend in the servo arm as same as picture below:



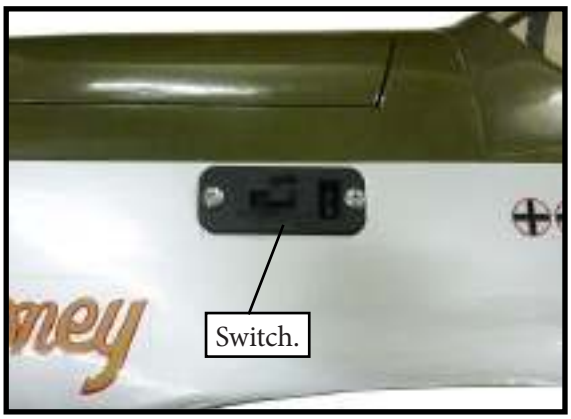
INSTALLING THE RECEIVER SWITCH.

Install the switch into the precut hole in the side, in the fuselage.





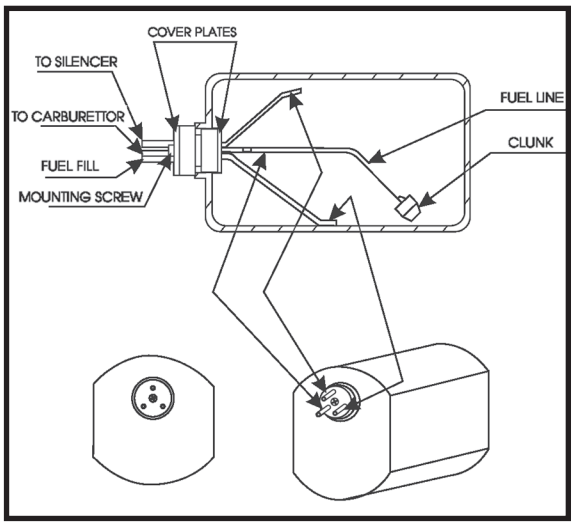
INSTALLING THE ENGINE SWITCH.

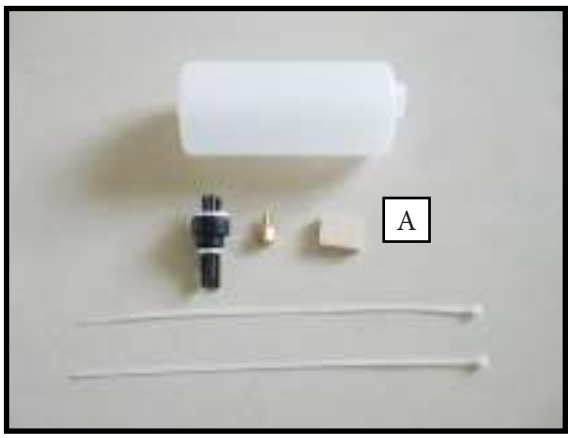


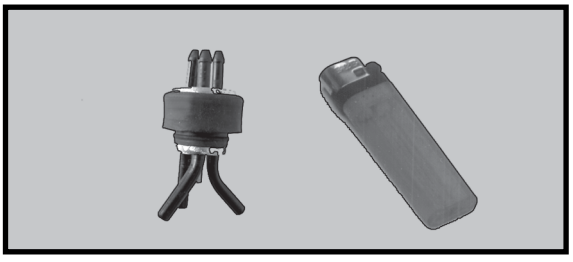
INSTALLING THE STOPPER ASSEMBLY.

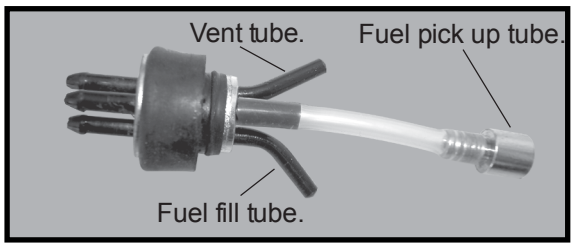
1) Using a modeling knife, carefully cut off the rear portion of one of the 3 nylon tubes leaving 1/2” protruding from the rear of the stopper. This will be the fuel pick up tube.

2) Using a modeling knife, cut one length of silicon fuel line. Connect one end of the line to the weighted fuel pick up and the other end to the nylon pick up tube.









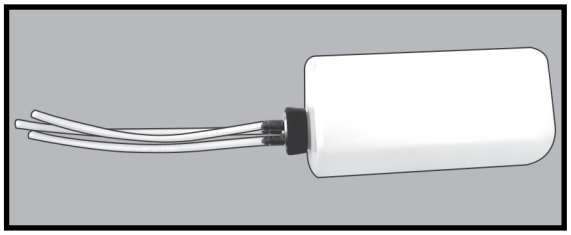
3) Carefully bend the second nylon tube up at a 45º angle. This tube is the vent tube.

4) Test fit the stopper assembly into the tank. It may be necessary to remove some of the flashing around the tank opening using a modeling knife. If flashing is present, make sure none falls into the tank.

5) With the stopper assembly in place, the weighted pick-up should rest away from the rear of the tank and move freely inside the tank. The top of the vent tube should rest just below the top of the tank. It should not touch the top of the tank.

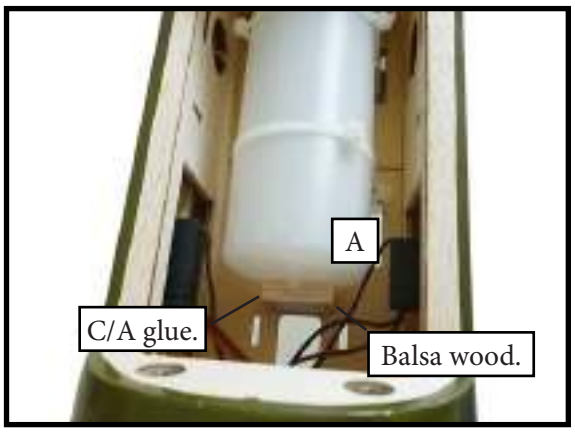
6) When satisfied with the alignment of the stopper assembly tighten the 3 x 20mm machine screw until the rubber stopper expands and seals the tank opening. Do not over-tighten the assembly as this could cause the tank to split.

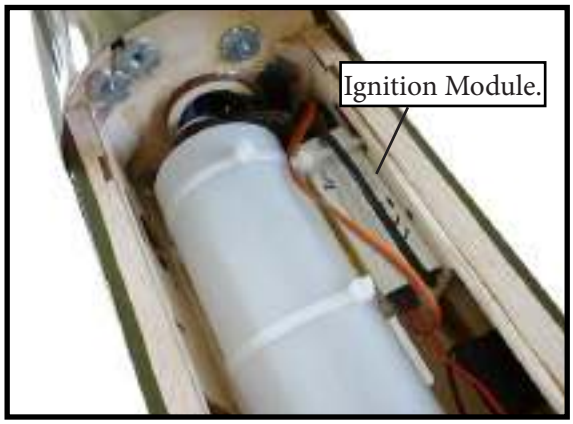
FUEL TANK INSTALLATION.

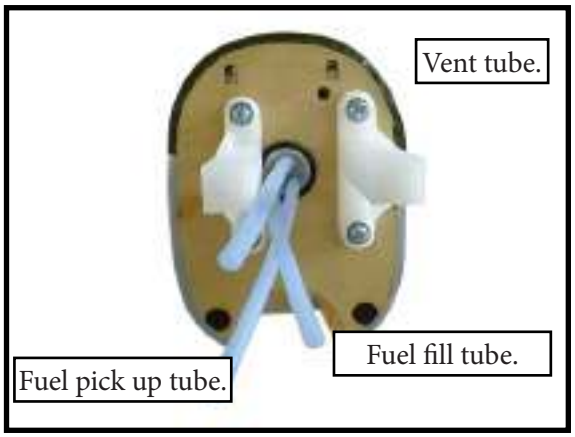


- *You should mark which tube is the vent and which is the fuel pickup when you attach fuel tubing to the tubes in the stopper. Once the tank is installed inside the fuselage, it may be difficult to determine which is which.*

7) Slide the fuel tank into the fuselage. Guide the lines from the tank through the hole in the firewall.





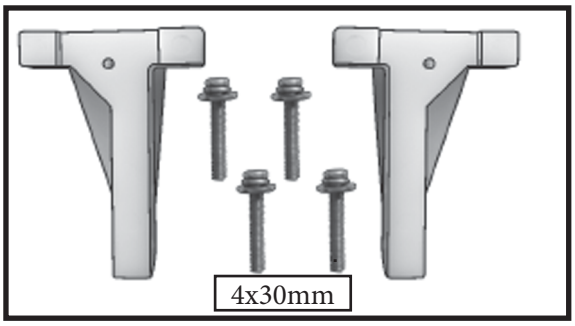


8) Connect the lines from the tank to the engine and muffler. The vent line will connect to the muffler and the line from the clunk to the carburetor.

Blow through one of the lines to ensure the fuel lines have not become kinked inside the fuel tank compartment. Air should flow through easily.

ENGINE MOUNT INSTALLATION.

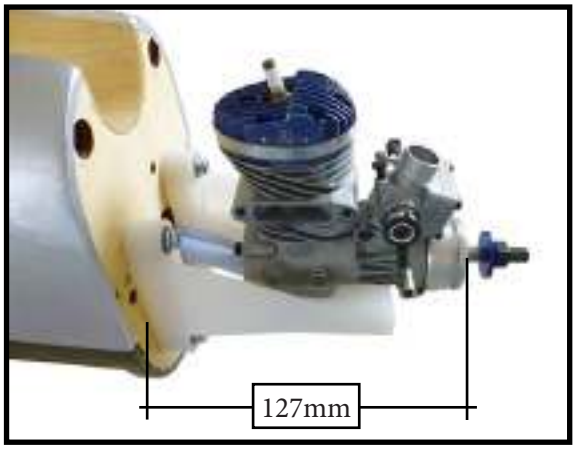
1) Locate the items necessary to install the engine mount included with your model.



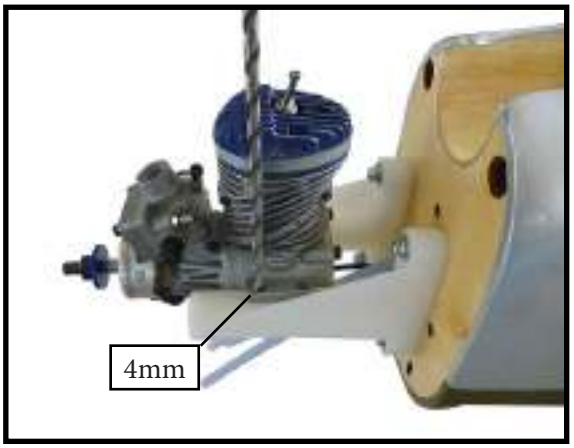
2) Use four 4x30mm head bolts and four 4mm washers to attach the engine mount rails to the firewall. Tighten the screws . Make sure to use threadlock on the screws to help prevent them from vibrating loose.

MOUNTING THE ENGINE.

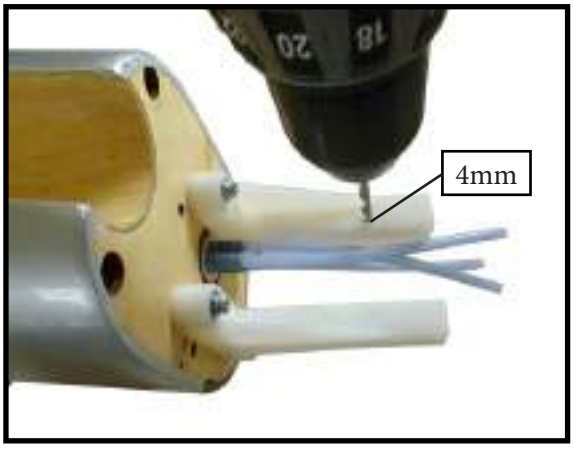
1) Position the engine with the drive washer (127mm) forward of the firewall as shown.



2) Use a pin drill and 4mm drill bit to drill a small indentation in the mount for the engine mounting screw.



3) Use a drill to drill the four holes in the engine mount rails.



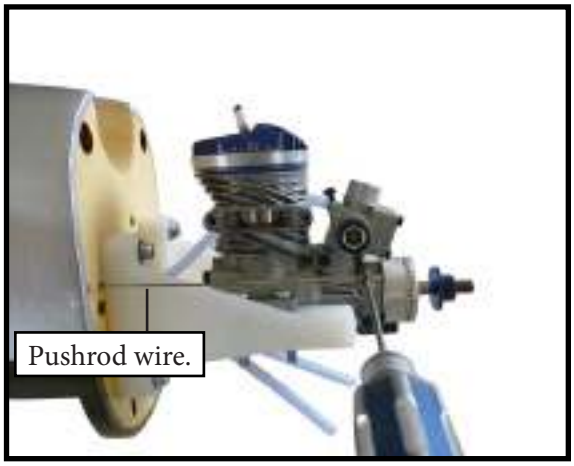
4) On the fire wall has the location for the throttle pusshrod tube (pre-drill).

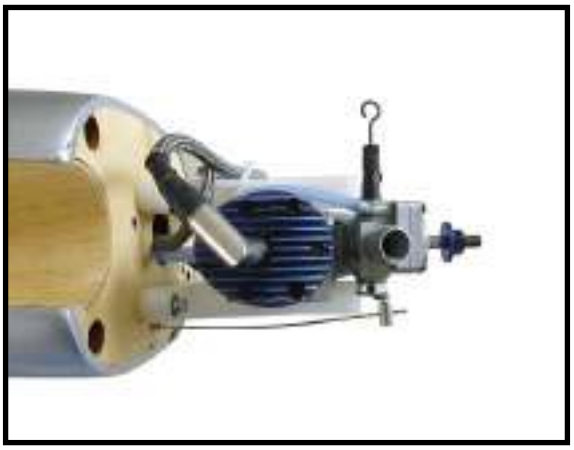
5) Slide the pushrod tube in the firewall and guide it through the fuel tank mount. Use medium C/A to glue the tube to the firewall and the fuel tank mount.

6) Connect throttle pushrod to adjustable servo connector of the carburetor arm as shown below. Trim any excess pushrod wire using side cutters.

Use a 2.5mm hex wrench to tighten the screw that secures the throttle pushrod wire. Make sure to use threadlock on the screw so it does not vibrate loose.

7) Position the engine between the mounts. Use four M4x30mm machine screws to secure the engine to the mount as shown.





8) Connect the Z-bend in the 450mm throttle pushrod to the outer hole of the thottle servo arm.

COWLING.

1) Tape the cowl to the fuselage using low-tack tape.

2) Use a drill and drill bit to drill the holes for the cowl mounting screws. Make sure the cowl position is correct before drilling each hole.

3) Tape a piece of card stock to the fuselage to indicate the location of the mufflr, needle valve, and any other items that may require access when the cowl is mounted. Slide the cowl on the fuselage, and transfer these locations onto the cowl. Use a drill, rotary tool and sanding drum to make any cut-outs in the cowl before securing it to the fuselage.

4) Slide the muffler screws through the engine. Place the mufflr extension and gaskets included with the engine on the screws. Be careful when mounting the cowl so the screws and extension remain in position until the mufflr can be attached.

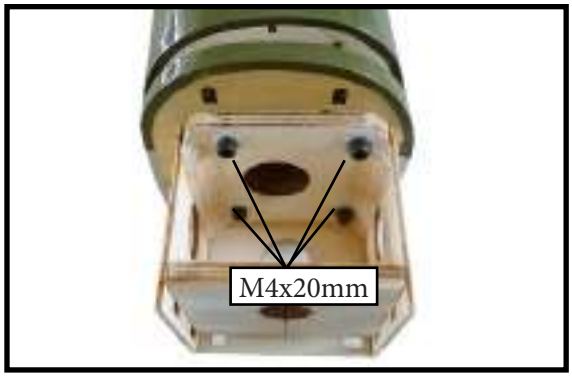
ELECTRIC POWER CONVERSION.

1) Locate the items neccessary to install the electric power conversion included with your model.

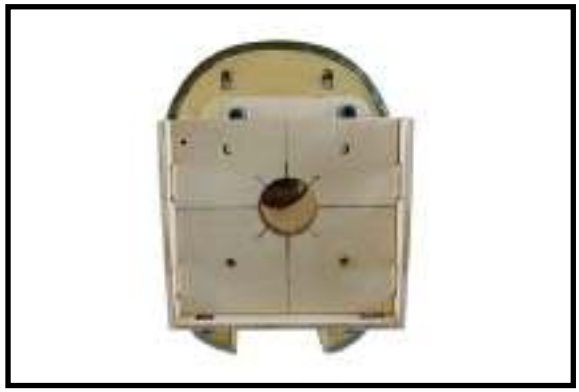
2) Recommend the items necessary to install the electric power conversion parts included with your model.

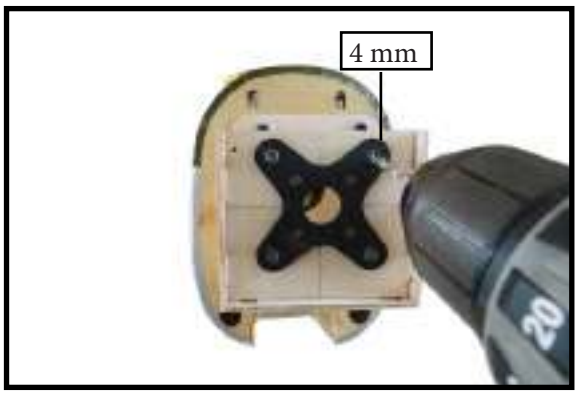
- **Motor: 46 (925-1200 Watt)**
- **Propeller: 12 x8 ~ 14x10**
- **ESC: 60A- 80A**
- **Lipo Batteries: 4S - 5S**

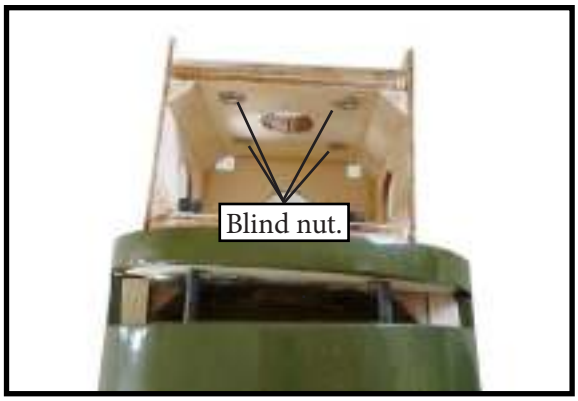
3) Attach the electric motor box to the firewall suitable with the cross lines drawn on the electric motor box and firewall. Using M4x20mm to secure the motor box to the firewall. Please see pictures below.



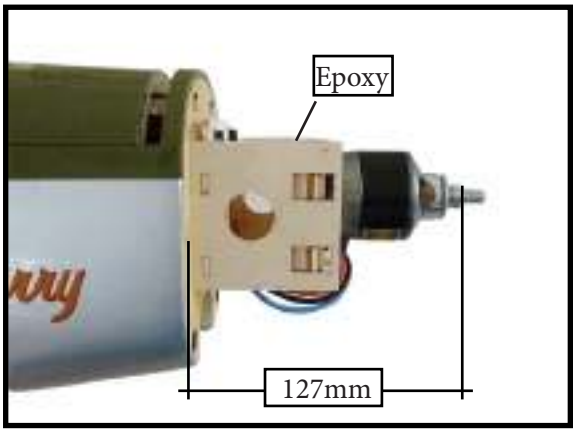
4) Attach the motor to the front of the electric motor box using four 4mm blind nut, four M3x15mm hex head bolts to secure the motor. Please see picture shown.

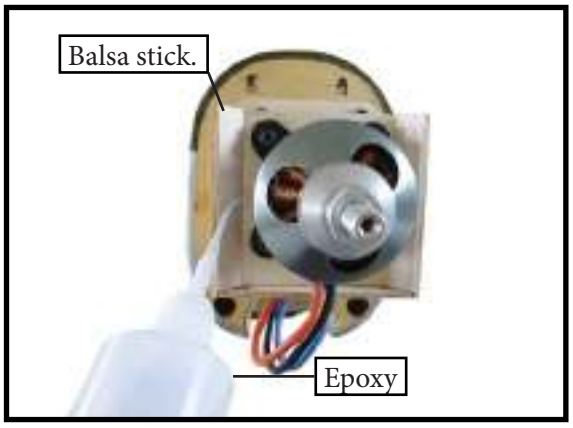




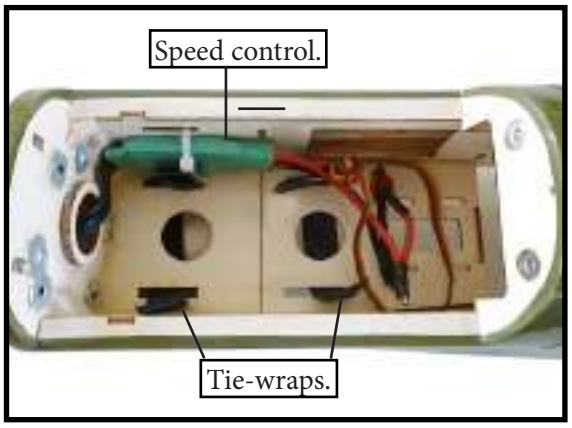


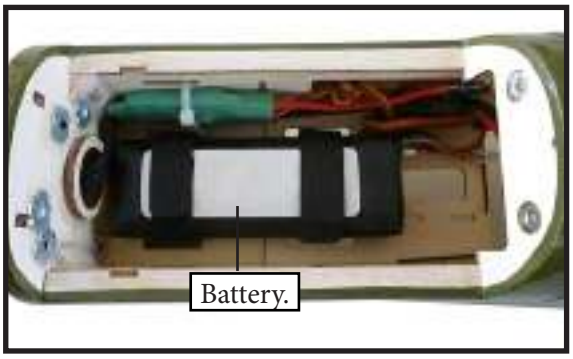
5) Attach the motor to the front of the electric motor box using four 4mm blind nut, four M3x15mm hex head bolts to secure the motor. Please see picture shown.





6) Attach the speed control to the side of the motor box using two-sided tape and tie wraps. Connect the appropriate leads from the speed control to the motor. Make sure the leads will not interfere with the operation of the motor.



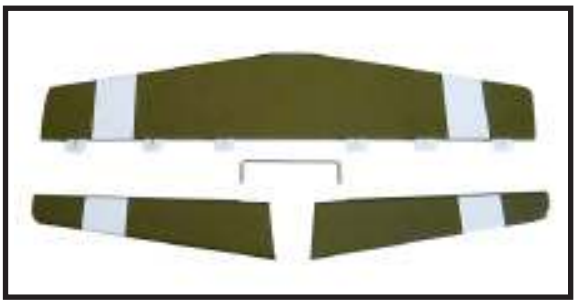


INSTALLING THE SPINNER.

⚠ The propeller should not touch any part of the spinner cone. If it does, use a sharp modeling knife and carefully trim away the spinner cone where the propeller comes in contact with it.

HINGING THE ELEVATORS.

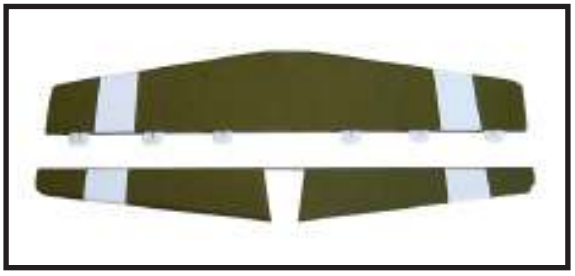
1) Locate the items for this section of the manual.



2) Carefully remove the elevator from one of the horizontal stabilizer panels. Note the position of the hinges.

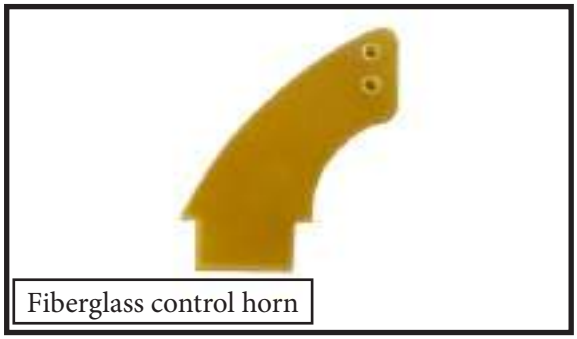
3) Remove each hinge from the horizontal stabilizer panel and elevator and place a T-pin in the center of each hinge.Epoxy the wire elevator joiner into the predrilled elevator halves.

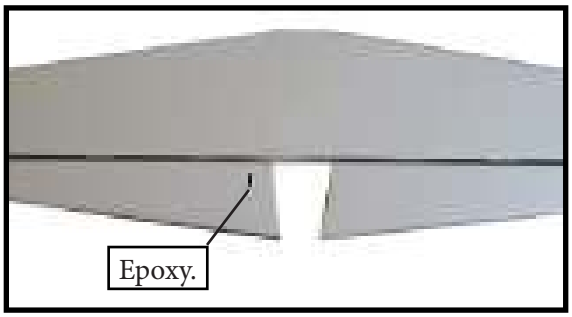
4)) Slide each hinge into the elevator until the T-pin is snug against the elevator. This will help ensure an equal amount of hinge is on either side of the hinge line when the elevator is mounted to the horizontal stabilizer panel.

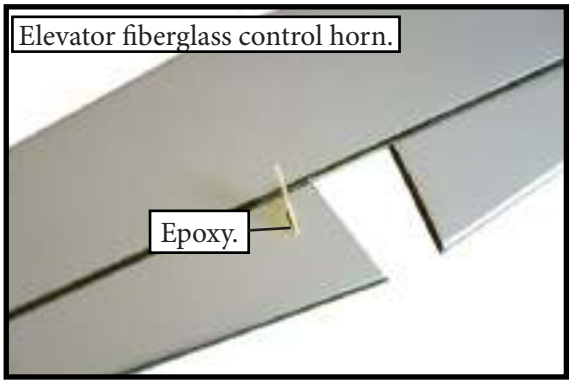


Glue the hinge hinges in place using the same techniques used to hing the ailerons.

INSTALL ELEVATOR CONTROL HORN.

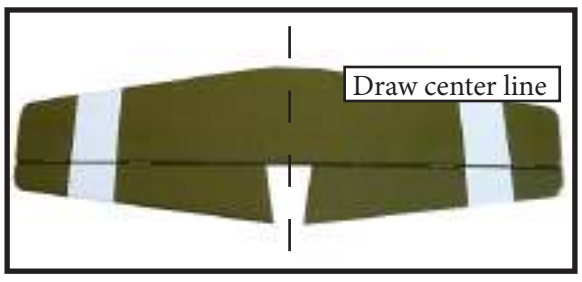




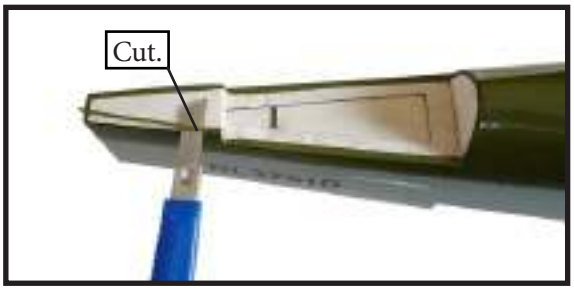


INSTALLING THE HORIZONTAL STABILIZER.

1) Using a ruler and a pen, locate the centerline of the horizontal stabilizer, at the trailing edge, and place a mark. Use a triangle and extend this mark, from back to front, across the top of the stabilizer. Also extend this mark down the back of the trailing edge of the stabilizer.

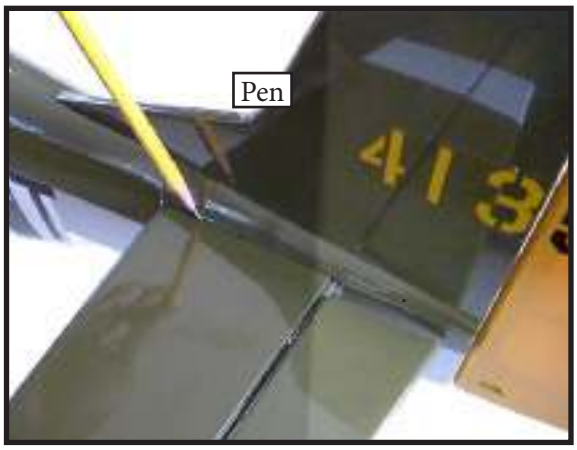


2) Using a modeling knife, carefully remove the covering at mounting slot of horizontal stabilizer (both side of fuselage).

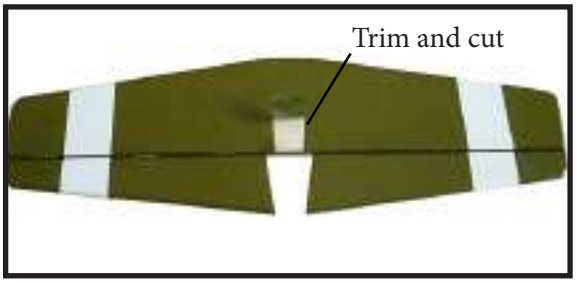


3) Slide the stabilizer into place in the precut slot in the rear of the fuselage. The stabilizer should be pushed firmly against the front of the slot.

4) With the stabilizer held firmly in place, use a pen and draw lines onto the stabilizer where it and the fuselage sides meet. Do this on both the right and left sides and top and bottom of the stabilizer.

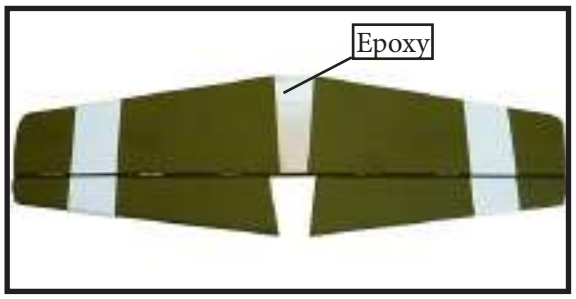


5) Remove the stabilizer. Using the lines you just drew as a guide, carefully remove the covering from between them using a modeling knife.

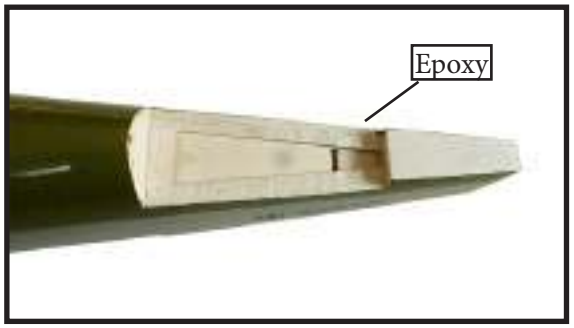


When cutting through the covering to remove it, cut with only enough pressure to only cut through the covering itself. Cutting into the balsa structure may weaken it.

6) Using a modeling knife, carefully remove the covering that overlaps the stabilizer mounting platform sides in the fuselage. Remove the covering from both the top and the bottom of the platform sides.



7) When you are sure that everything is aligned correctly, mix up a generous amount of 30 Minute Epoxy. Apply a thin layer to the top and bottom of the stabilizer mounting area and to the stabilizer mounting platform sides in the fuselage. Slide the stabilizer in place and realign. Double check all of your measurements once more before the epoxy cures. Hold the stabilizer in place with T-pins or masking tape and remove any excess epoxy using a paper towel and rubbing alcohol.



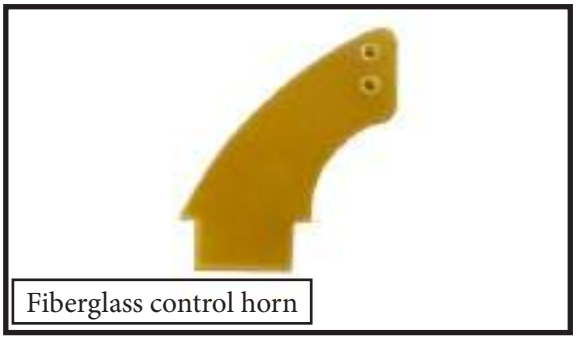
HINGING THE RUDDER.

Glue the top two rudder hinges in place using the same techniques used to hinge the ailerons.

The lower hinge will be glued when the fin/rudder assembly is attached to the fuselage.

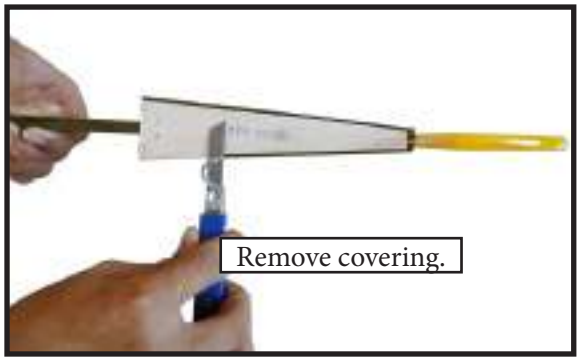
INSTALL RUDDER CONTROL HORN.

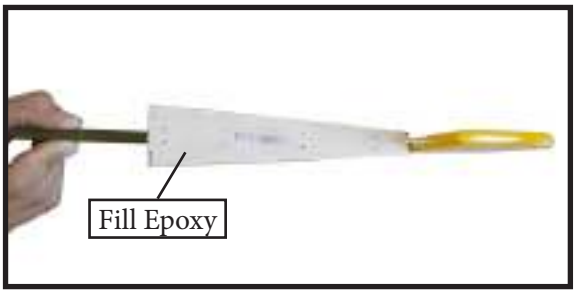
Repeat steps to install the rudder control horn as same as steps done for ailerons.



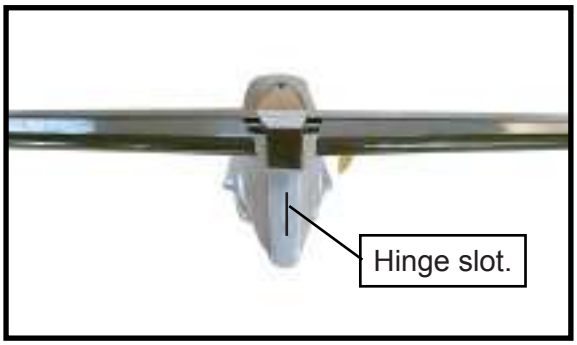
INSTALLING VERTICAL STABILIZER

1) Using a modeling knife, remove the covering from over the precut hinge slot cut into the lower rear portion of the fuselage. This slot accepts the lower rudder hinge.

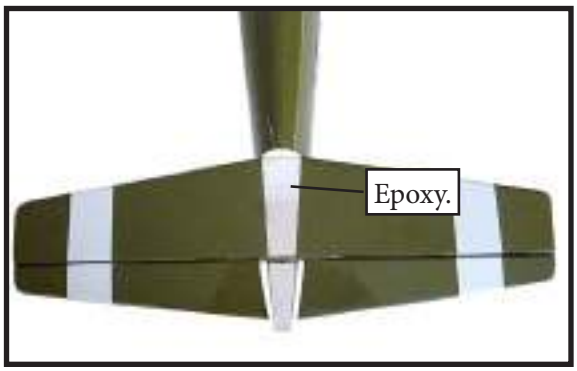




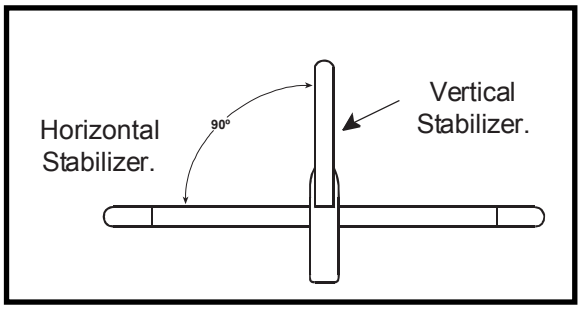
2) Slide the vertical stabilizer into the slot in the top of the fuselage. The rear edge of the stabilizer should be flush with the rear edge of the fuselage and the lower rudder hinge should engage the precut hinge slot in the lower fuselage. The bottom edge of the stabilizer should also be firmly pushed against the top of the horizontal stabilizer.



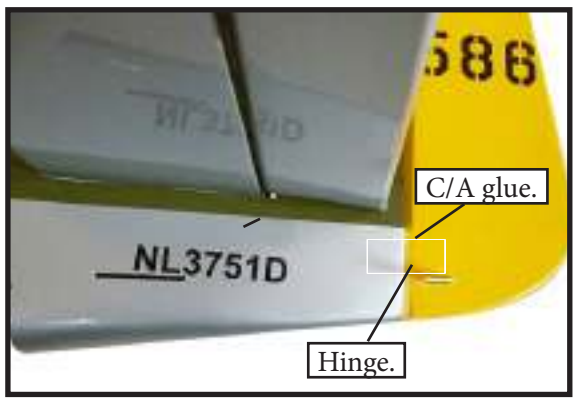
3) While holding the vertical stabilizer firmly in place, use a pen and draw a line on eachside of the vertical stabilizer where it meets the top of the fuselage.



4) Slide the vertical stabilizer back in-place. Using a triangle, check to ensure that the vertical stabilizer is aligned 90º to the horizontal stabilizer.



5) When you are sure that everything is aligned correctly, mix up a generous amount of Flash 30 Minute Epoxy. Apply a thin layer to the mounting slot and to bottom of the vertical stabilizer mounting area. Apply epoxy to the bottom and top edges of the filler block and to the lower hinge also. Set the stabilizer in place and realign. Double check all of your measurements once more before the epoxy cures. Hold the stabilizer in place with T-pins or masking tape and remove any excess epoxy using a paper towel and rubbing alcohol. Allow the epoxy to fully cure before proceeding.



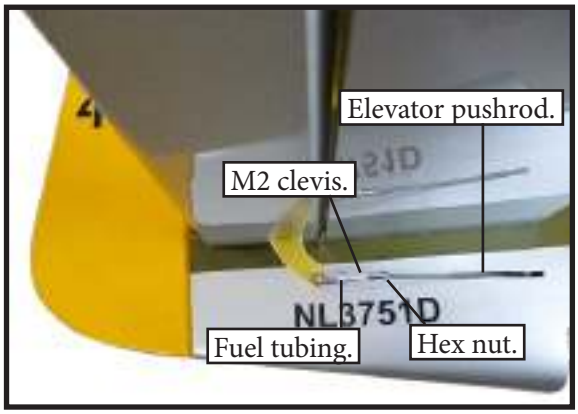
ELEVATOR PUSHROD INSTALLATION.

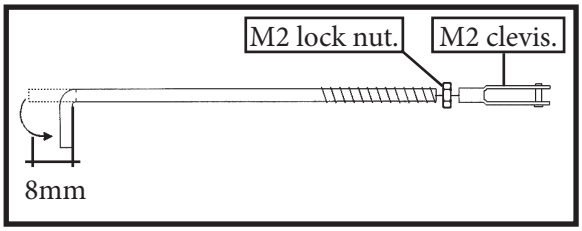
1) Install the elevator control horn using the same method as with the aileron control horns.

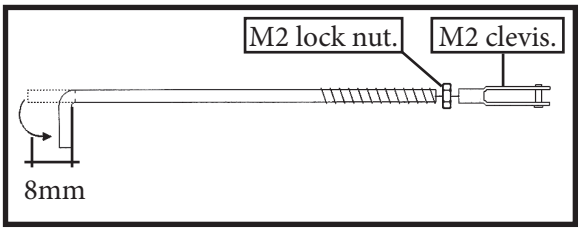
2) Position the elevator control horn on the both side of elevator.

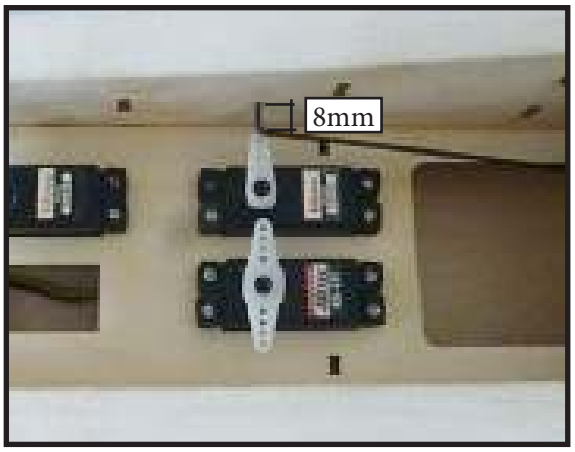
3) Thread one clevis and M2 lock nut on to each elevator control rod. Thread the horns on until they are flush with the ends of the control rods.

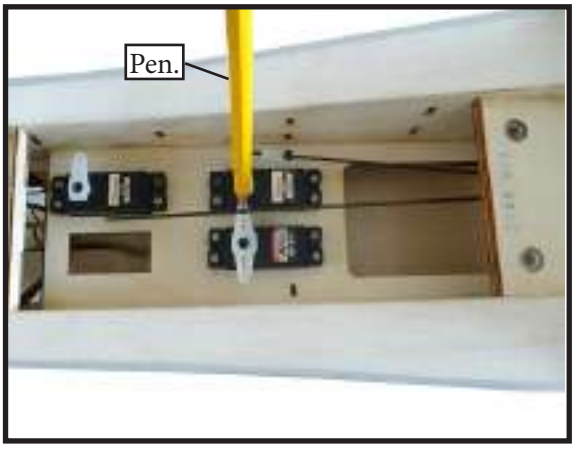
4) Elevator pushrods assembly as pictures below.











RUDDER PUSHROD INSTALLATION.

Repeat steps as same as steps done for elevator.

MOUNTING THE TAIL WHEEL.

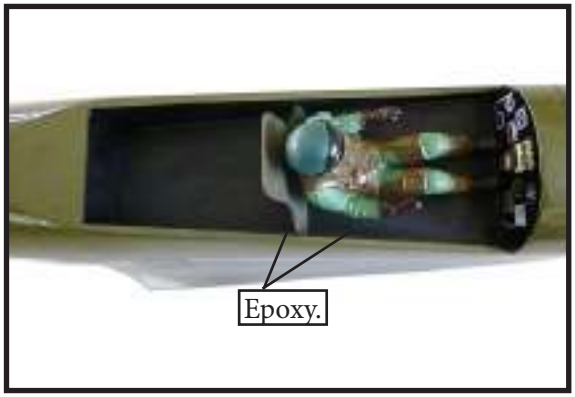
INSTALLATION PILOT AND CANOPY.

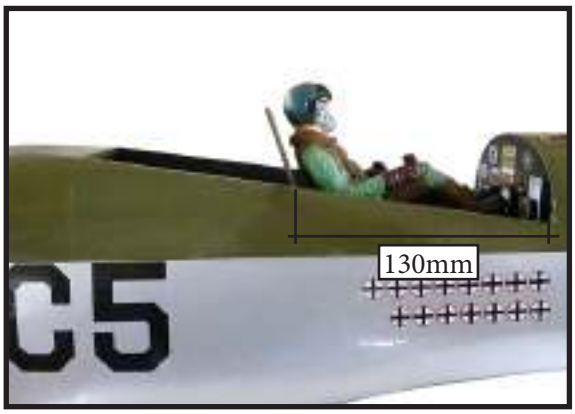
1) Locate items necessary to install pilot, seats.

2) A scale pilot is included with this ARF. The Pilot included fitting well to the cockpit. (or you can order others scale pilot figures made by SG Models. They are available at SG Models distributors.)

If you are going to install a pilot figure, please use a sanding bar to sand the base of the figure so that it is flat.

3) Position the pilot figure on the canopy floor as shown. Use epoxy to glue the base of the pilot figure to the cockpit floor, please see pictures as shown.





4) Position the canopy onto the fuselage. Trace around the canopy and onto the fuselage using a felt-tipped pen. Carefully cut and remove covering material from the fuselage where the canopy makes contact, exposing the bare wood. Then permanently glue the canopy in place with epoxy glue or special "canopy glue".

APPLY THE DECALS.

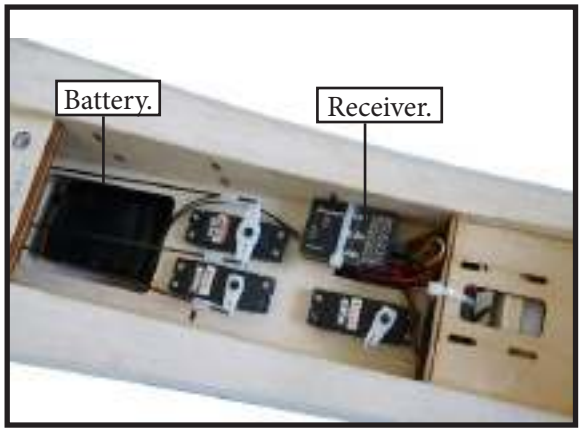
1) If all the decals are precut and ready to stick. Please be certain the model is clean and free from oily fingerprints and dust. Position decal on the model where desired, using the photos on the box and aid in their location.

2) If all the decals are not precut, please use scissors or a sharp hobby knife to cut the decals from the sheet. Please be certain the model is clean and free from oily fingerprints and dust. Position decal on the model where desired, using the photos on the box and aid in their location.

INSTALLING BATTERY - RECEIVER.

1) Plug the servo leads and the switch lead into the receiver. Plug the battery pack lead into the switch also.

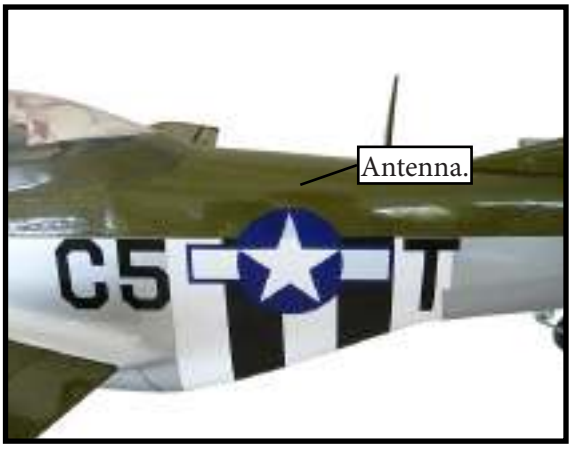
2) Wrap the receiver and battery pack in the protective foam rubber to protect them from vibration.



3) Route the antenna in the antenna tube inside the fuselage and secure it to the bottom of fuselage using a plastic tape.

4) The last detail is to install the antenna onto the fuselage. Use a hobby knife to cut a slot in the top of the fuselage for the antenna.

5) Tighten the antenna is removeable so you can install it at the flying field to prevent damage in transporting.



ATTACHMENT WING- FUSELAGE.

Insert canopy hatch on fuselage as pictures below.

BALANCING.

1) It is critical that your airplane be balanced correctly. Improper balance will cause your plane to lose control and crash. THE CENTER OF GRAVITY IS LOCATED **103-114MM** BACK FROM THE LEADING EDGE OF THE WING AT THE WING ROOT.

2) Mount the wing to the fuselage. Using a couple of pieces of masking tape, place them on the top of the wing **103-114mm** back from the leading edge of the wing at the wing root.

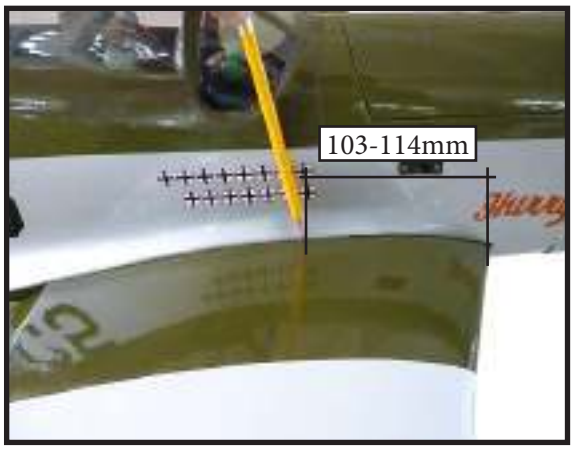
3) With the model inverted, place your fingers on the masking tape and carefully lift the plane.

Accurately mark the balance point on the top of the wing on both sides of the fuselage. The balance point is located **103-114mm** back from the leading edge of the wing at the wing root. This is the balance point at which your model should balance for your first flights. Later, you may wish to experiment by shifting the balance up to 10mm forward or back to change the flying characteristics. Moving the balance forward may improve the smoothness and arrow- like tracking, but it may then require more speed for take off and make it more difficult to slow down for landing. Moving the balance aft makes the model more agile with a lighter and snappier ”feel”. In any case,please start at the location we recommend .

With the wing attached to the fuselage, all parts of the model installed (ready to fly), and empty fuel tanks, hold the model at the marked balance point with the stabilizer level.

Lift the model. If the tail drops when you lift, the model is “tail heavy” and you must add weight* to the nose. If the nose drops, it is “nose heavy” and you must add weight* to the tail to balance.

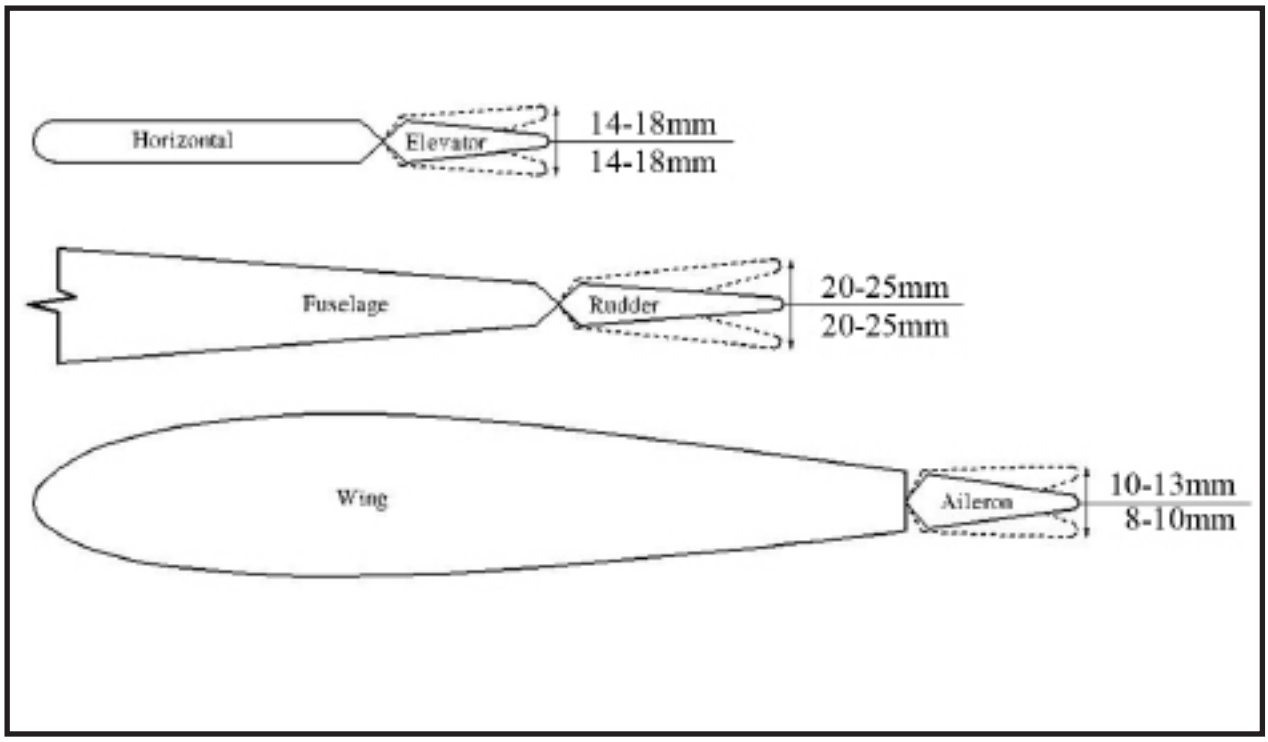
*If possible, first attempt to balance the model by changing the position of the receiver battery and receiver. If you are unable to obtain good balance by doing so, then it will be necessary to add weight to the nose or tail to achieve the proper balance point.



CONTROL THROWS.

HIGH RATE	
Ailerons:	
Up:	13mm
Down:	10mm
Elevator:	
Up:	18mm
Down:	18 mm
Rudder:	
Right:	25mm
Left:	25 mm
Flaps:	
Mid:	19mm
Landing:	38 mm

LOW RATE	
Ailerons:	
Up:	10mm
Down:	8mm
Elevator:	
Up:	14mm
Down:	14 mm
Rudder:	
Right:	20mm
Left:	20 mm


Horizontal
Elevator
14-18mm
14-18mm
Fuselage
Rudder
20-25mm
20-25mm
Wing
Aileron
10-13mm
8-10mm

FLIGHT PREPARATION.

Check the operation and direction of the elevator, rudder, ailerons and throttle.

☐ A) Plug in your radio system per the manufacturer's instructions and turn everything on.

☐ B) Check the elevator first. Pull back on the elevator stick. The elevator halves should move up. If it they do not, flip the servo reversing switch on your transmitter to change the direction.

☐ C) Check the rudder. Looking from behind the airplane, move the rudder stick to the right. The rudder should move to the right. If it does not, flip the servo reversing switch on your transmitter to change the direction.

☐ D) Check the throttle. Moving the throttle stick forward should open the carburetor barrel. If it does not, flip the servo reversing switch on your transmitter to change the direction.

☐ E) From behind the airplane, look at the aileron on the right wing half. Move the aileron stick to the right. The right aileron should move up and the other aileron should move down. If it does not, flip the servo reversing switch on your transmitter to change the direction.

PREFLIGHT CHECK.

☐ 1) Completely charge your transmitter and receiver batteries before your first day of flying.

☐ 2) Check every bolt and every glue joint in the **P-51D MUSTANG** to ensure that everything is tight and well bonded.

☐ 3) Double check the balance of the airplane. Do this with the fuel tank empty.

☐ 4) Check the control surfaces. All should move in the correct direction and not bind in any way.

☐ 5) If your radio transmitter is equipped with dual rate switches double check that they are on the low rate setting for your first few flights.

☐ 6) Check to ensure the control surfaces are moving the proper amount for both low and high rate settings.

☐ 7) Check the receiver antenna. It should be fully extended and not coiled up inside the fuselage.

☐ 8) Properly balance the propeller. An out of balance propeller will cause excessive vibration which could lead to engine and/or airframe failure.

We wish you many safe and enjoyable flights
***with your* Master Scale Kit Edition P-51 Mustang 56.3".**