

TOP NOTCH PRODUCTS

MINI

SUPREME

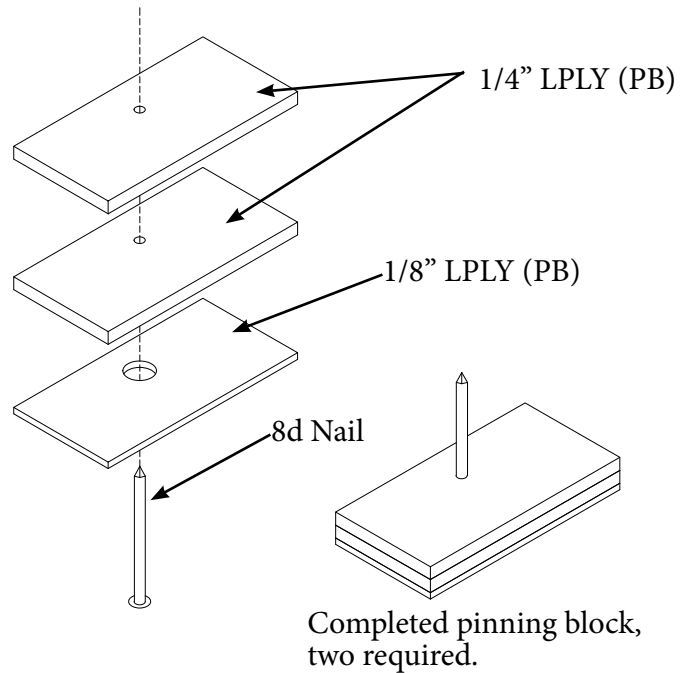


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BEFORE YOU BEGIN

Assemble the registration pinning blocks as shown at the right. These will be used throughout the assembly to insure proper alignment of parts.

The nail head must be seated below the surface of the bottom lamination so the block will sit flat on the bench. Use CA or Epoxy to secure the nail in the block.



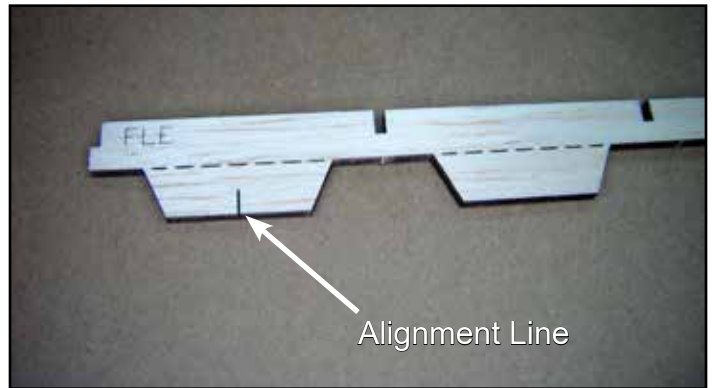
If you are new to building models, you will need a place to work that can be undisturbed until you complete the build for best results. I recommend using the back side of a drop in 2" x 4" ceiling tile on your work bench. This material is soft enough to receive the pins but firm enough to hold your parts securely. They are available at any home store.

I recommend three types of adhesives, Thin and medium cyan o acrylate known as CA or Super Glue, aliphatic resin also known as carpenters glue such as Elmer's or Titebond and Epoxy. Do not use thin CA on plywood parts.

We will begin by building the wing since it will be needed to get the correct lofting of the aft fuselage section. Place the plan on the building board and cover them with waxed paper or Parchment paper to protect them from the glue. When a part is called for, refer to the parts locator in the back of this manual for the sheet number it is on.

WING ASSEMBLY

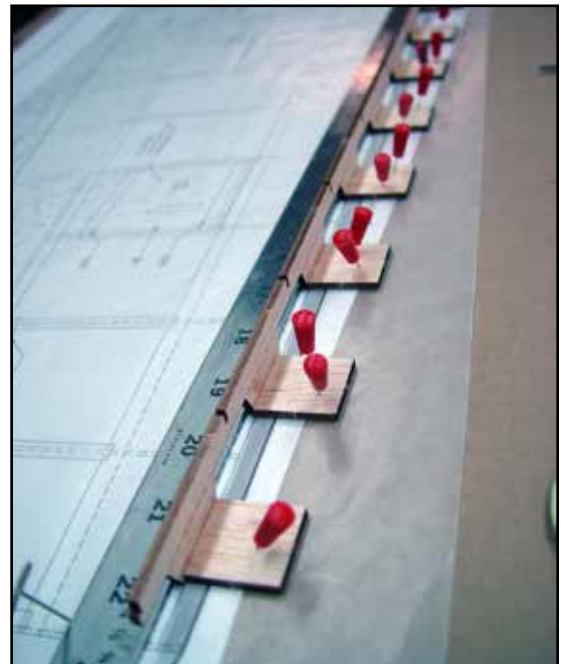
- 1 . With the wing plan on the building board and protected with waxed paper, lay a straight edge over the plans and align it with the aft edge of the False Leading Edge (FLE). Secure it there with pins to prevent it from moving.
- 2 Note the standoffs on FLE, the one with the line through it is the root end or inboard end. Align this line with the alignment line noted on the plans and secure it to the building board by tack gluing pinning tabs to each stand off and pinning it to the building board. Make sure each standoff is flat on the building board.
- 3 Locate and prepare the spar (SP) by removing it from the carrier sheet and make sure all slots are clear. Note the dash cut section at the root end. Leave that material in place until directed to remove it. Locate the short bottom spar doubler (SD BOT) and glue it to the BOTTOM of the spar at the root end in the recess provided.
- 4 Locate a stick of 3/32" x 1/4" x 36" spruce and cut a length to the exact length of the spar. Glue this to the bottom of the spar. Once again use a secure straight edge to insure the spar is perfectly straight by pinning it up against it while the glue cures.
- 5 Locate the trailing edge (TE) and remove it from the carrier sheet and once again make sure all slots are cleared of all material.
- 6 Locate and prepare ribs W1 through W10. Remove any nubs left by the retainer breaks with a light sanding. Make sure all slots are clear of material.



The alignment line cut into the first standoff on the root end must be aligned with the alignment line indicated on the planes to insure a straight assembly.

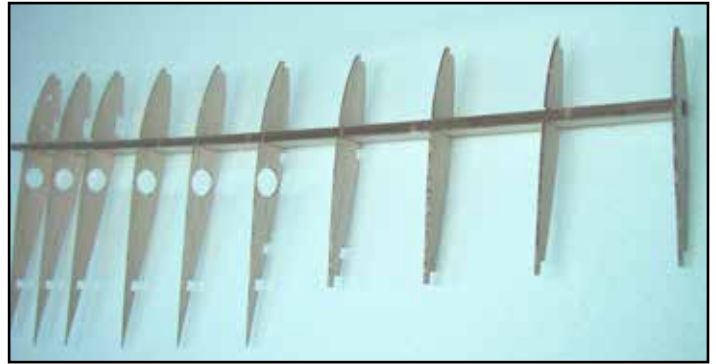


SD-BOT has been installed onto the spar, next the 3/32" x 1/4" spruce will be added.

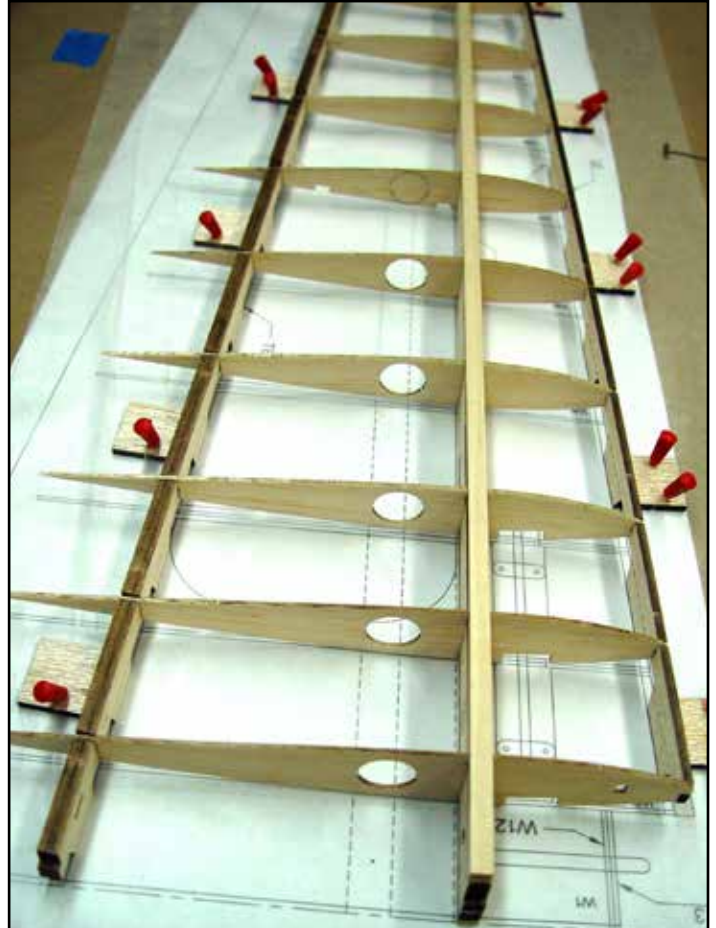


The false leading edge (FLE) is secured to the plans with pinning tabs tack glued to the standoffs

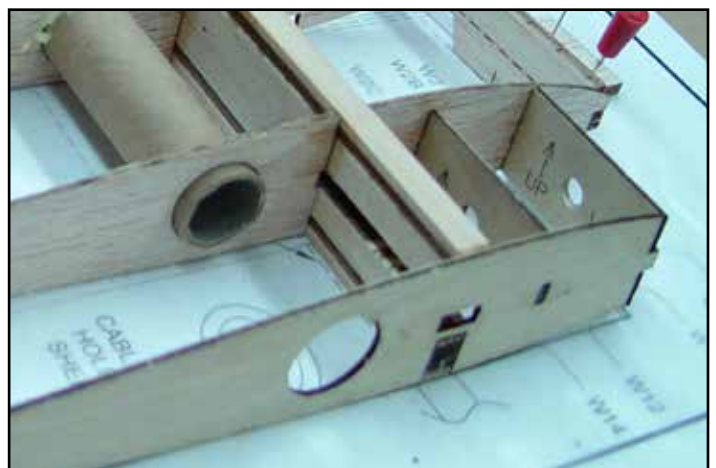
- 7 Slide ribs W2 through W10 into their appropriate slots in the spar. Make insure that the bottom of the top notch is flush with the top of the spar.
- 8 Install and glue the Top Spar Doubler (SD TOP) on the top of the spar at the root end.
- 9 Cut a piece of 3/32" x 1/4" x 36" spruce stick to the exact length of the spar. Glue this piece to the top of the spar. You should now have ribs W2 through W9 captive in the spar.
- 10 Remove the dash cut section of material at the root end of the spar assembly.
- 11 Place the leading edge tab of each rib into the appropriate slot in FLE. DO NOT GLUE.
- 12 Slide the trailing edge (TE) under the aft section of the ribs and insert each rib into the appropriate slot in TE, Do not force anything, when it is correctly lined up it will drop onto place.
- 13 Align the alignment line in the TE standoff with the alignment line on the plans and secure it to the building board with a pinning tab tack glued to the standoff. Like you did with FLE. Continue down TE and secure every other tab in the same manner. Insure that each standoff is flat on the building board.
- 14 You can now apply glue to all the joints. Start with the leading edge, then the trailing edge. As you apply glue insure each rib is bottomed in the slot.
- 15 Install and glue the root rib (W1) and the tip rib (W10).
- 16 Install and glue W14 between W1 and W2.
- 17 Install and glue W12 between W1 and W2. Note that the slot in W2 is oversize. Install W12 to the back of the slot. W13 will be installed in the front of that slot in a later step.
- 18 Cut a 11-7/8" length of cable tunnel tubing and install in between W2 and W7. Glue it at each rib.



After step #9 you will have ribs W2 through W9 captive in the spar assembly

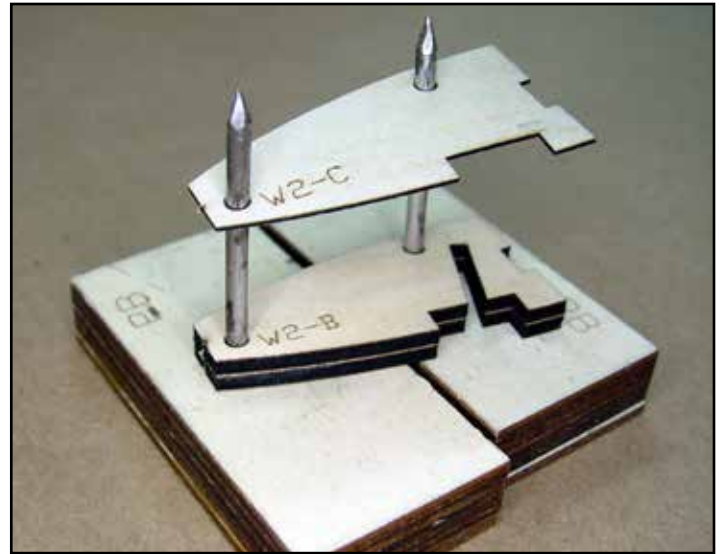


Before applying glue to each joint, insure that each rib is bottomed in the slot.



RIGHT: The photo illustrates all the work done in steps 15 through 18. Note the dash cut material in the spar has been removed (Step 10). The hole in W1 is only used to install the cable tunnel tube which terminates at W2 and W7.

- 19 Use the registration pins to assemble the landing gear slot, always assemble these parts with the labeled side UP. Since these parts are handed, it's a good idea to assemble both sets at the same time, then select the correct one for the wing panel you are working on. This will consist of two W2-B parts and one W2-C. Place one of the W2-B parts on the pins and glue another W2-B to it. Install and glue a W2-C to this and then install this assembly to the outboard side of W2. Note that the W2-B/C assembly is handed and a RIGHT handed version must be assembled for the right wing.



The landing gear block consisting of two W2-B and one W2-C being laminated together using the registration pins. Note that when laminating handed parts, always laminate them with the labeled side up. This will prevent you from laminating two of the same hand.

- 20 Install and glue W3-A to the outboard side of W3.
- 21 Install and glue W4-A to the outboard side of W4.

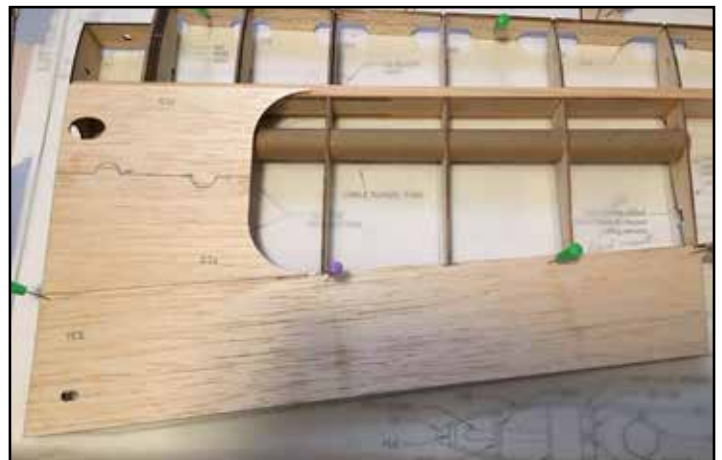
- 22 As cut, the trailing edge should be flush with the top of the ribs between the root and W7. However it will be slightly proud of the trailing edge at the back edge. Sand the top of the trailing edge until it is flush with the ribs completely. Then install and glue the Trailing Edge Sheeting (TES) to the trailing edge and ribs between the root and W7. Note that TES will be flush with the front side of the trailing edge only between ribs W4 through W7. It will be set back 1/16" between the root and W4.



Steps 19, 20 and 21, laminating the gear block assembly as well as W3-A and W4-A, clamps are used to insure good contact with the paring ribs.

- 23 Assemble one TCS TOP and one BCS to form the center section sheeting. Glue this assembly to ribs W1, W2 and W3 as well as the trailing edge and the top of the spar.

- 24 Plane or sand the leading FLE to contour with the leading edge of the ribs in preparation for sheeting the leading edge.



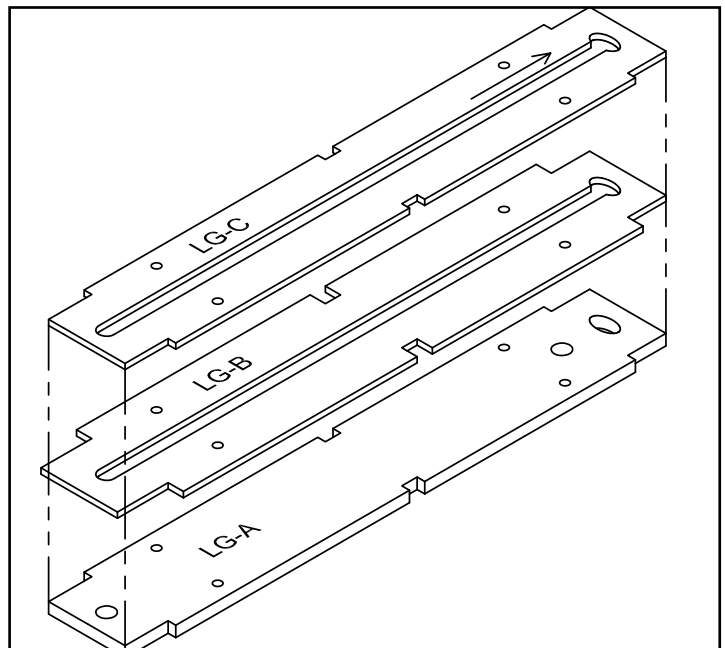
Top trailing edge (step 22) and top center section sheeting (step 23) install and glued to the wing assembly.

- 25 Locate and prepare the top leading edge sheeting (LES TOP). Best method to install the top leading edge sheeting is to first wet the top side of the sheeting to insure no splitting. I use a liberal application of Windex with ammonia and leave it soak for at least five minutes. Use medium or thick CA along the top of the spar only and install LES. Use a straight edge or other weight to insure the sheeting remains in contact with the spar until the glue cures. After this glue cures, remove the wing assembly from the building board and while holding the sheeting into contact with the ribs and FLE apply fast CA. Do a section at a time and let cure before moving on to the next section.



Except for the area along the spar, the top leading edge sheeting is glued from the open bottom with thin CA.

- 26 Snap off all the stand offs from FLE and TE but save them for use on the next wing panel.
- 27 The landing gear block is laminated from LG-A, LG-B and LG-C. Place LG-A on the registration pins and glue LG-B to it. Note that one end has an ellipse at the end of the slot. Make sure these ends match and pull LG-B snug against the opposite pin. Repeat this procedure for LG-C.



The landing gear block is assembled by laminating LG-A, LG-B and LG-C together. This will not only support the landing gear but will also provide a small shelf to support the sheeting.

- 28 Use Epoxy to install the gear block assembly into the slots provided in W2, W3 and W4. Note the end with the ellipse should be at the root end.



When the gear block is installed, LG-C should stand 1/16" proud of the ribs. This will bring it flush with the top of the leading edge sheeting when installed.

- 29 Install and glue the Wing Servo Rails (WSR) into the notches provided in W7 and W8. Note that the screw holes should be to the inside or towards each other. Use 1/4" pieces of 1/4" triangle stock to gusset these to the ribs.



Install the servo rails and use some 1/4" length pieces of 1/4" triangle stock as gussets between the ribs and the rails.

- 30 Sand the trailing edge to contour with the ribs between W7 and W10 in preparation for installing the trailing edge sheeting. Install and glue the trailing edge sheeting to ribs W1 through W7, the trailing edge and the top trailing edge sheeting. Use clamps, clothes pins or weights to maintain contact with the ribs, trailing edge and top sheeting until the glue cures.

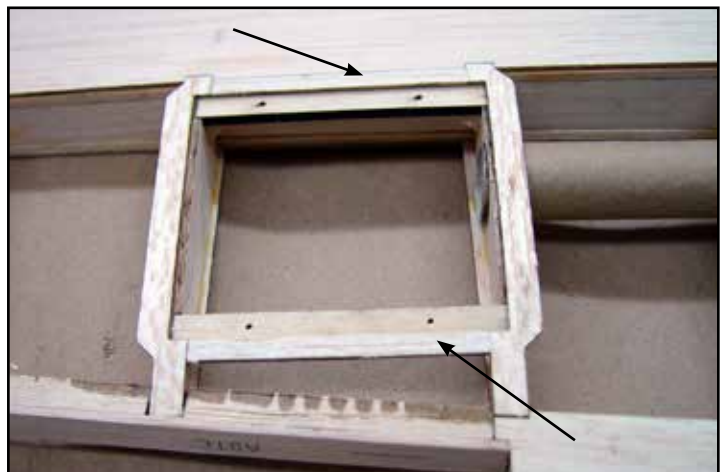
- 31 Assemble the center section sheeting from one TCS and one BCS section and glue it to ribs W1, W2 and W3 as well as the spar and TE.

- 32 Installing the bottom leading edge sheeting. The curve on the bottom leading edge should not require wetting the balsa, install it dry. Apply a bead of alphabetic resin (Elmer's or Titebond) to all ribs and the FLE. Use a bead of medium CA on the top of the spar and place the leading edge sheeting in place and into contact with the spar. Hold it in that position until the CA has cured. Place the assembly on the bench with the sheeting on the bottom and run a sharp blade along the edge of FLE and trim the sheeting flush with FLE. Then use strips of masking tape around the leading edge to pull the sheeting into contour and into contact with the ribs and FLE. Set aside to cure.



When installing the bottom trailing edge, use plenty of clamps along the trailing edge. A slight taper on both sheets will yield a nice crisp trailing edge.

- 33 The cap strips are laser cut and should require little or no trimming to install. Note that cap strips 7 and 8 on the bottom are notched for the servo opening, after installing 7 and 8 on the bottom, run a bead of glue along the interface of the rib and the cap strip on the outside of the servo bay for support. Install all cap strips, top and bottom, the numbers on the cap strips corresponds to the rib they will attach to.



The cap strips on the bottom of ribs 7 and 8 are shaped to accommodate the servo opening. The material indicated by the arrows is scrap fill. You can use the servo mount for positioning of the fill.

- 34 Sand the leading edge smooth. Install and glue the leading edge (LE). Use pins to stabilize it and tape to pull it snugly against FLE.
- 35 Plane and sand the leading edge shape to contour. Use the leading edge template to guide your work
- 36 Locate three Wing Tip (WT) parts and use the registration pins to laminate the three together to make the wing tip block. Glue this assembly to W11 and when cured, plane and sand to shape.
- 37 Sand the trailing edge in the aileron bay flat and install and glue the Aileron Bay Trailing Edge (ABTE). Sand ABTE to contour with the trailing edge and wing tip. Use a knife blade to open up the slot for the hinges and test fit the hinges for easy installation, they should fit slightly snug.
- 38 Use some scrap balsa to fill in at the front and back the servo plate (SP) opening. Use the Servo Plate as a guide.



In the circles above are two gussets made from 1/4" triangle stock, use on both sides. The arrow in the lower part is indication the glue fillet between the cap strip and the rib.

This concludes the assembly of one wing panel. Place the remaining wing panel plans on the building board and repeat all the above Wing Assembly Steps. Joining the wing halves will be done later after we assemble the belly pan.

Assembling the Ailerons

- 1 Each aileron is laminated up from two (AIL) parts using the registration pins to assemble them. After laminating two AIL,s sand the leading edge and both ends smooth.

NOTE: Although the ailerons will not be permanently attached until after the model is covered, cutting the hinge slots and temporarily fitting the assembly together will make the final assembly much easier.

- 2 Place the aileron next to the trailing edge and mark the location of the hinges on the aileron, then cut slots to accept the hinges.

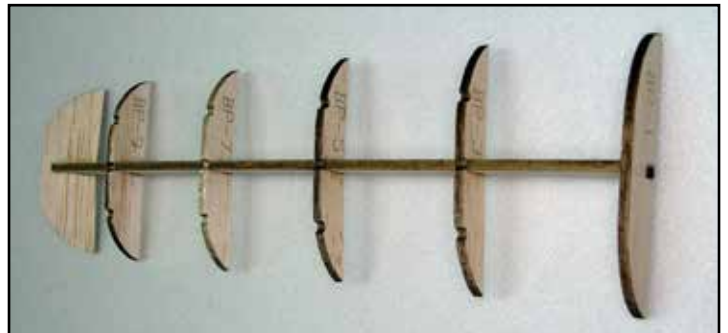
- 3 Temporarily secure the aileron assembly to the wing with pins carefully centering it in the trailing edge. Use a soft lead pencil to mark the aileron assembly at the root end and along the leading edge, top and bottom. Use these lines to guide you when you shape the ailerons. Plane and sand the ailerons to shape.
- 4 Plane a chamfer on both sides of the leading edge of about 20 degrees but leave about a 1/16" flat at the center for hinging.
- 5 Use a sharp X-Acto knife to open up the slots in the trailing edge for the aileron hinges. The slots should be open all the way through FLE.
- 6 Test fit the ailerons to the wing with the CA Hinges. The aileron control horns will be installed after covering.



Marking the aileron for shaping to the contour of the wing. Mark the leading edge top and bottom as well as both ends. The tip can be marked by laying a straight edge on the tip and projecting a line over the end of the aileron.

ASSEMBLING THE BELLY PAN

- 1 Locate all the belly pan components, BP-1, BP-3, BP-5, BP-7, BP-9, BP-10 and BP-11. Also the formed belly pan plastic parts. Note that BP-11 terminates in an angle at one end, this is the AFT end. Starting at the front or opposite end install and glue BP-1 to BP-11. Install BP-3, BP-5, BP-7 and BP-9 from the front to the back. Install and glue BP-10 at the angles end.
- 2 Locate the plastic formed belly pan. Note at the sides where it changes from a curved surface to a straight side. Use the side of a pencil lead along this edge to define it. Trim off the excess plastic from the sides. Leave a little excess for final fitting. Leave both ends for now.
- 3 Test fit the balsa frame work into the plastic pan. You will need to sand a bevel in the edge of BP-10 so all the formers will fit snugly to the plastic belly pan. To glue anything to a flexible plastic part such as this you need a glue that will remain flexible or it will break away from the part. Two adhesive that are excellent for this purpose are Pace Formula 560 (Also called canopy glue) and a glue called Grafter's Pick which is a fabric

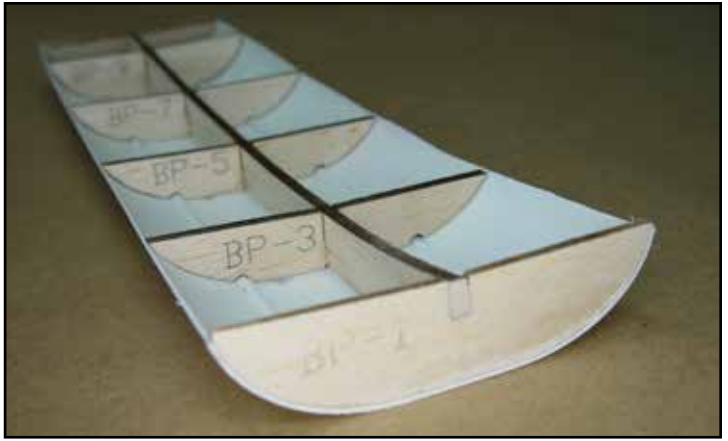


Belly pan formers attached to the belly pan keel. Use only Pacer 560 canopy glue to attach this structure to the plastic belly pan.



Rough trim the sides of the belly pan form using the line created by rubbing the side of a soft lead pencil against ridge on the sides.

glue available at craft stores. Apply a liberal bead to all surfaces that will contact the belly pan and install it. Set this aside to thoroughly cure.



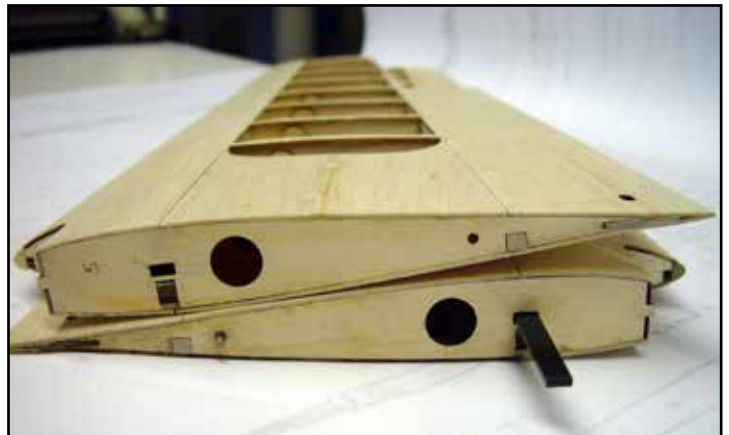
After installing the former assembly, sand both ends flush with the end formers.

- 4 After curing, trim the front and back to formers BP-1 in front and BP-10 at the back. When trimming the plastic at F10, trim it close and then sand it to exactly match the angle and face of F10.

The belly pan assembly will be installed onto the wing assembly while attached to the fuselage assembly this is as far as we can go for now. Put these assemblies aside and proceed with building the fuselage.

JOINING THE WING HALVES

- 1 Cut a 1/2" length of 1/8" dowel and round over one end. Install it in the hole provided in W1 just ahead of TE, let it protrude about 1/8". Do this in one wing half only, this will engage the hole in the opposite wing half to align the wing halves when joining them.
- 2 Use Epoxy to install the 1/8" x 5/16" x 4" carbon fiber joiner in one wing half and let this cure.
- 3 Apply Epoxy to one W1 on one of the wing panels. Apply a liberal amount in the slot for the carbon fiber joiner. You can access this through the hole in W1. Join the wing halves and install and glue W13. Put the assembly aside to cure.
- 4 Cut two lengths of 3/16" dowel to 1-1/4" long. Round over one end and smooth the other end. Use Epoxy to install these in the hole provided in W13. Make sure they are glued to W12 as well, leave about 1/4" protruding.



Both wing halves completed and ready for joining. Note the carbon fiber joiner and 1/8" dowel have been Epoxied into the bottom wing half.

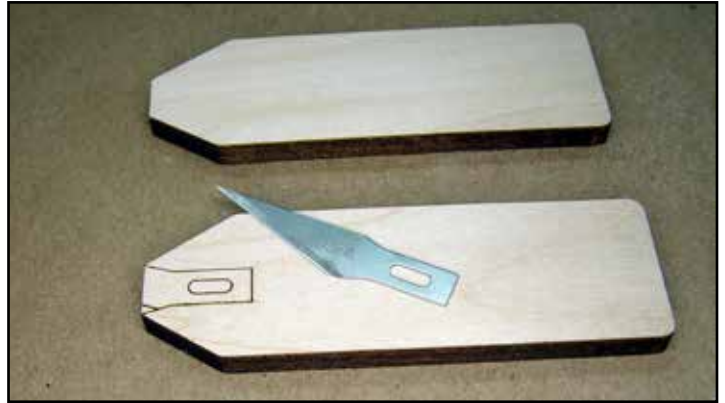


Completed wing assembly, the correct dihedral is set by W13. Note the Cable opening plate. NOTE: In this photo the belly pan has been installed. You will install that later in the build.

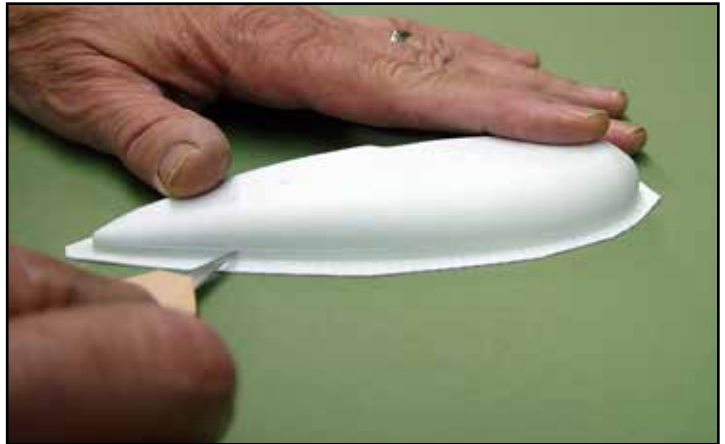
Landing Gear Assembly

The landing gear and wheel pants are assembled as a unit and then installed in the wing. To assemble the wheel pants they must first be trimmed to shape. This is easily accomplished using the plastic trimming tool but first we need to assemble the tool. Locate both parts of the trim tool. Note the tracing of the X-Acto blade on one part. Use thin CA to glue the X-Acto blade to the part. Then glue the second Trim Tool part to the first encapsulating the blade.

RIGHT: The trimming tool components, a new blade must be used when assembling the tool. The tool is used to only score the plastic. The scrap can then be removed by flexing at the score. This will give you a clean straight edge to work with.



- 1 Locate the four wheel pant halves. Note that two of them have dimples in them for the attachment system. Drill the four smaller dimples out with a 1/16" bit. Drill out the larger dimple with a 1/8" drill bit.
- 2 Trim the parts down to about 1/4" from the edge of the part in preparation for trimming out with the trim tool. You will need a smooth flat surface for the next operation.
- 3 While holding the part flat on a smooth surface make many very shallow cuts around the periphery of the part. Do not attempt to cut through but instead just try to score it. It may take ten or fifteen very light passes, if you put too much pressure it can deflect the blade. Some parts of the plastic are thinner than others and if you do happen to break through, no problem just back off on the pressure and continue. After you are satisfied with the scoring, fold the edge of the rim inward and it should break along the score. Continue all the way around the part. If there are any irregularities, a couple swipes on a flat piece of sand paper should clean up the edge.

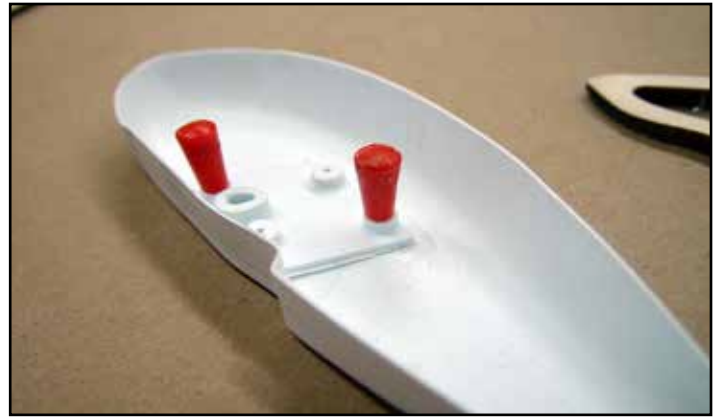


Scoring the plastic with the trimming tool will give you a clean straight edge to work with.

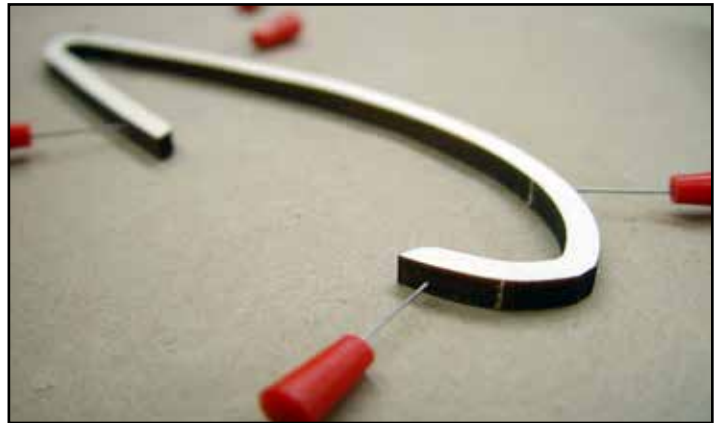


With a good score, the plastic will snap along the score line leaving a straight edge.

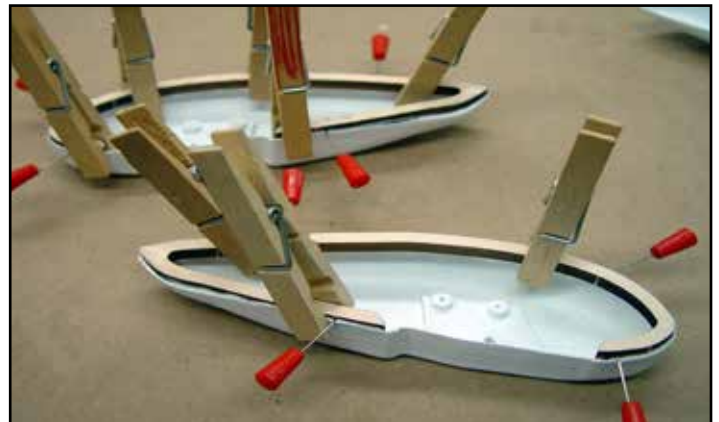
- 4 Remove any burrs from the inside of the part from the drilling operation. It must be smooth. Locate the screw plate for the half you are working on and use a couple pins through the screw holes to line it up. When satisfied with the lineup, glue it with thin CA.
- 5 Locate and prepare the Wheel Pant Joiner (WPJ). Sand a taper in the last half inch on both sides down to about 1/16" to allow for the taper at the aft end of the wheel pant.
- 6 Use several pins to locate the center of WPJ, this will allow the joiner to set only half way into the wheel pant side.
- 7 Apply a liberal bead of Formula 560 Canopy Glue along the entire periphery on the inside of the part and then install the joiner. Use clothes pins or clamps to insure good contact with the joiner. Remove any glue that squeezes out so as not to interfere with the installation of the second half. Let this cure thoroughly.
- 8 Leave the pins in place on WPJ and apply a liberal bead of Formula 560 Canopy glue to the inner edge of the mating wheel pant half and install it. Use rubber bands or tape to pull the halves together.
- 9 When cured, remove the pins and apply some Elmer's wood filler to the center line joint where necessary. When cured, sand the joint smooth.
- 10 Open up the wheel opening and test fit that the wheel has plenty of clearance.



The holes in the screw plate must be aligned with the holes in the wheel pant side. The screw plate must seat snugly to the wheel pant.



After taper sanding the trailing edge, pins are used to limit the depth that WPJ can seat into the wheel pant half, it must be half way.



WPJ has been glued to the inboard wheel pant shells with Pacer 560 Canopy glue.



Glue the outboard half of the wheel well shell to the inboard assembly.

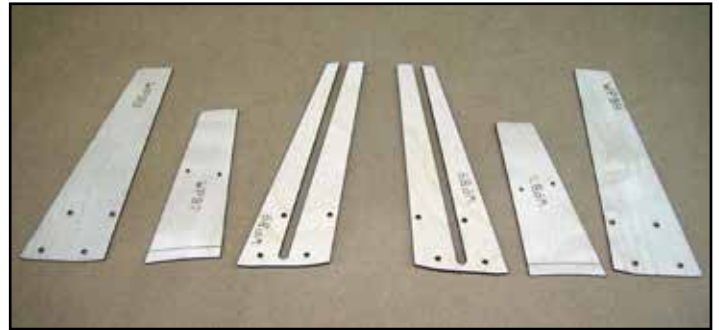
11 Locate the formed landing gear wire. I recommend about 2° of toe in on the main gear to improve ground handling. When you place the formed gear in the landing gear slots in the wing and project a line along the axles, it should cross the wing tip about 1" back from the leading edge. Twist the gear if necessary until you accomplish this.

12 Locate the landing gear leg components WPB7, WPB8 and WPB9. Sand a bevel on WPB7 from the line indicated at the bottom of the part to the edge for clearance with the wheel pant.

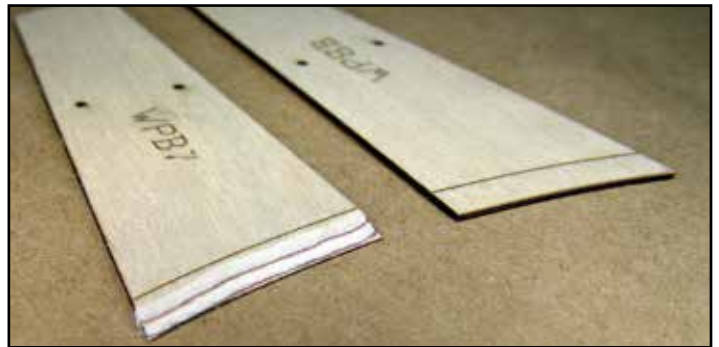
13 Note that all these parts are mirrored so assemble all components with the labeled side up and you will have a left and a right assembly. Use the wire landing gear temporarily placed in the slot of WPB9 to insure the proper gap, then glue on WPB7.

14 Sand a taper on the bottom of WPB8 from the bottom up to the line indicator line.

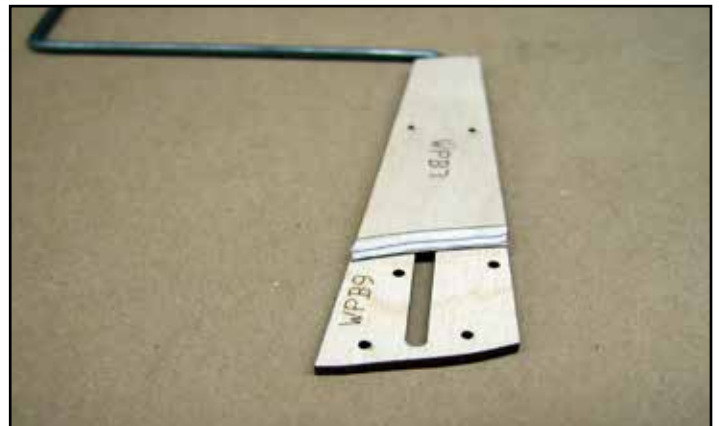
15 Install the landing gear wire into the WPB7 WPB9 assembly and then glue on WPB8.



The landing gear strut cover components. Assemble these parts with the labeled side up for a left and right hand set.



Taper WPB7 from the bottom up to the line for clearance with the top of the wheel pant.



Place part of the wire gear into the slot when installing WPB7 to WPB9 to insure that the gap remains large enough for the wire leg.

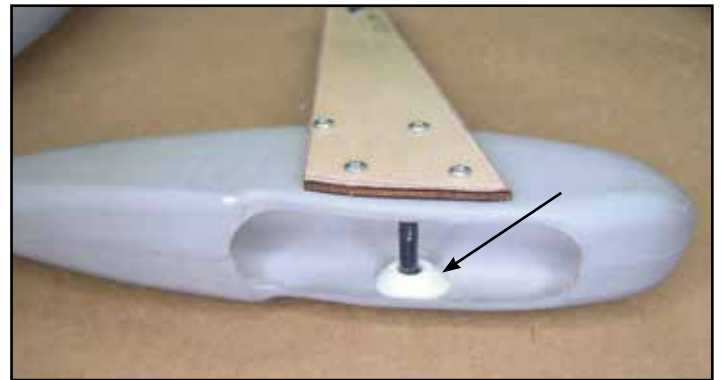
16 Glue WPB8 to WPB9



Install and glue WPB-8 to WPB-9.

17 Trim the axle so when installed to the wheel pant, it almost touches the opposite (outboard) side of the wheel pant.

18 Assemble the gear assembly to the wheel pant with four #1 x 3/8" sheet metal screws. When doing this side the axle support button onto the axle on the inside of the wheel pant and glue it to the outboard side of the wheel pant.



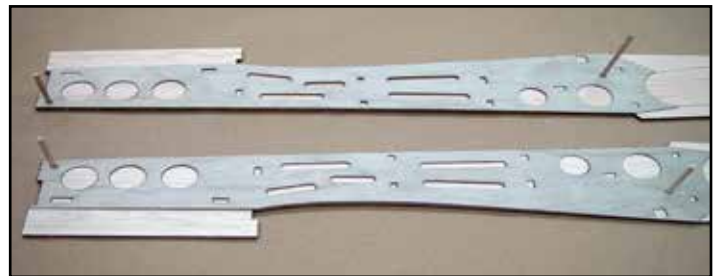
The gear leg assembly is attached to the wheel pant with four #1 x 3/8" sheet metal screws. Trim the axle just shy of touching the opposite side and then install the axle support button.

19 Remove the four screws and install the wheel, then reinstall the four screws.

Final installation of the mains gear will be done after covering the wing

FUSELAGE ASSEMBLY

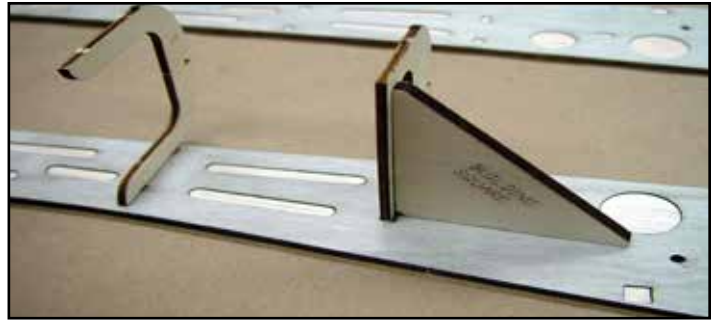
1 Locate and prepare the two fuselage sides (FS) and the two 1/64" ply fuselage doublers (FD). Do not use a water based glue such as carpenters glue to glue these two components together. The moisture will warp them and render them useless.



Plywood doublers are glued to the fuselage sides using the 1/8" dowels for registration.

2 Use Epoxy or slow setting CA and glue the doublers (FD) to the fuselage sides (FS). Be sure to make a left and a right. Use a piece of 1/8" dowel in the registration holes to get perfect alignment.

- 3 Glue formers C and D into their appropriate location, refer to the plans for orientation.
- 4 Glue the other fuselage side assembly to this assembly.



Use the square as shown here to insure that formers C and D are at 90° to the fuselage side.

- 5 Locate the firewall (former A), former B and the Battery Deck (BD). Glue BD to A and then glue this assembly to B. Use the square to insure they are at 90 degrees to each other.

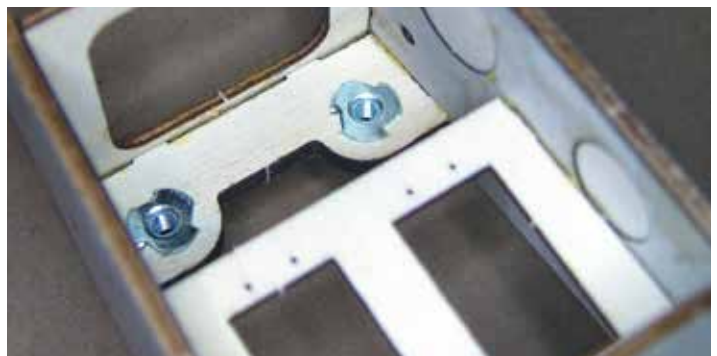


Former A (firewall) and former B assembled with the battery deck (BD). Use the square to keep all these components square to each other.

- 6 Glue the battery deck assembly to the fuselage assembly.
- 7 Install and glue the fuselage servo tray (ST) to former D and the fuselage sides.
- 8 Press two #8-32 blind nuts into the Wing Bolt Plate (WPB) and glue it to former E and the fuselage sides. The flanges of the nuts must be facing up.

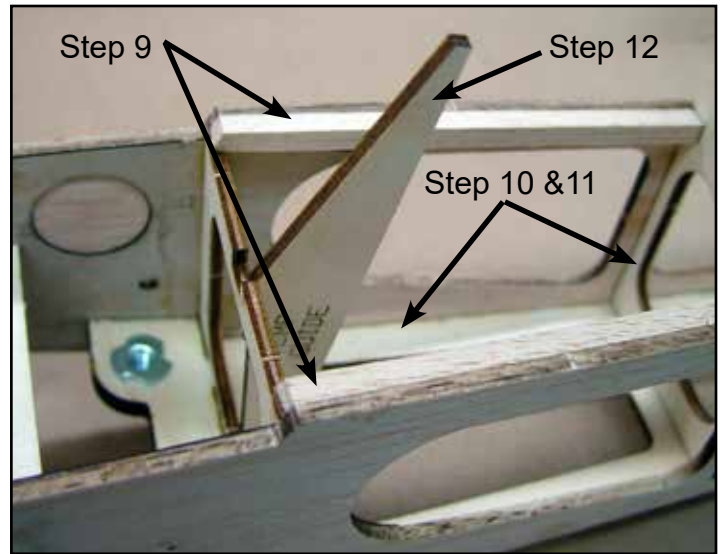


Use Epoxy to install the battery deck assembly

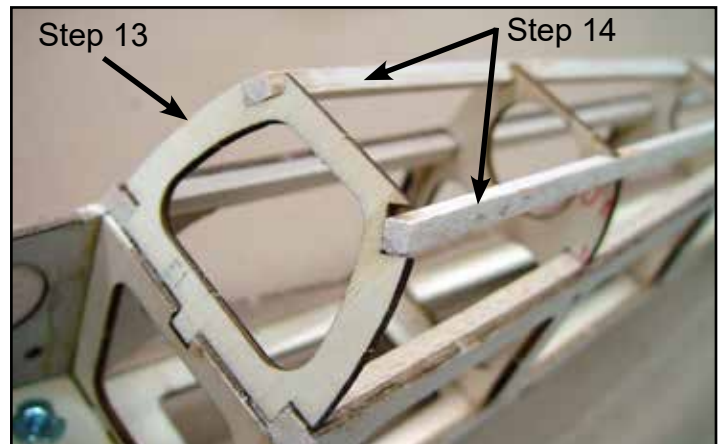


The servo tray (step 7) and the wing bolt plate (step 8). Insure that both are engaged in there notches in the doubler.

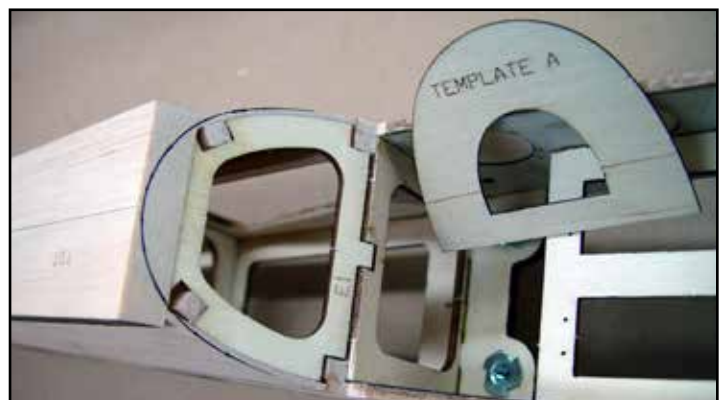
- 9 Cut two 11-5/8" pieces of 3/16" square balsa stick and glue them to the top inside edge from former D back to the stabilizer area.
- 10 Locate formers F, G and H as well as the Aft Fuselage Bottom (AFB). Install but do not glue formers F, G and H into the fuselage.
- 11 Install AFB, when all formers are bottomed in their respective slots and AFB is flush with the bottom of the fuselage, apply glue to all formers and AFB.
- 12 Locate the Temporary Guide (Temp Guide) and tack glue it to the back of former E. This will support E1 At the correct angle until the stringers are installed and then it will be removed.
- 13 Install and glue E1 to the top of former E.
- 14 Cut two pieces of 3/16" square balsa to 11" long and install and glue them into the notches provided in formers E1, F, G and H. When the glue has set, remove the TEMP GUIDE.
- 15 Locate the Turtle Deck Sheeting (TDS). Install and glue it to the aft top fuselage. The sheeting will sit on top of the fuselage sides.
- 16 Trim and sand the excess material of TDS down just until you come in contact with the top of the formers. It must be flat, use a sanding bar.
- 17 Install and glue the Turtle Deck Top (TDT).
- 18 Sand the TDT and TDS until they are flush with E1 at the front.
- 19 Sand TDT and TDS until they are flush with former H at the back.
- 20 Next you will plane and sand TDT to shape to form the turtle deck. Use Template A at the front and Template B at the aft end to mark the guide lines for shaping TDT.



The photo above illustrates several steps



Illustrated above are installation of split former E1(step 13) and the 3/16" stringers (step 14). Note that the TEMP GUIDE has been removed.



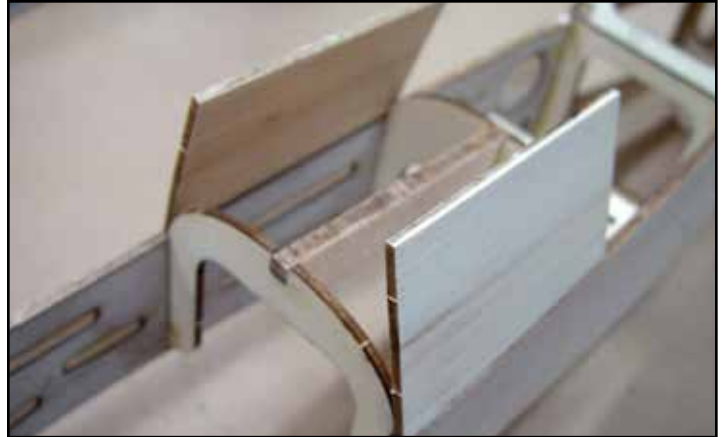
Template A is used at E1 and template B is used at former H. These are guide lines for shaping the turtle deck.

- 21 Install and glue the Cockpit Bulkhead (CBH) to E1.



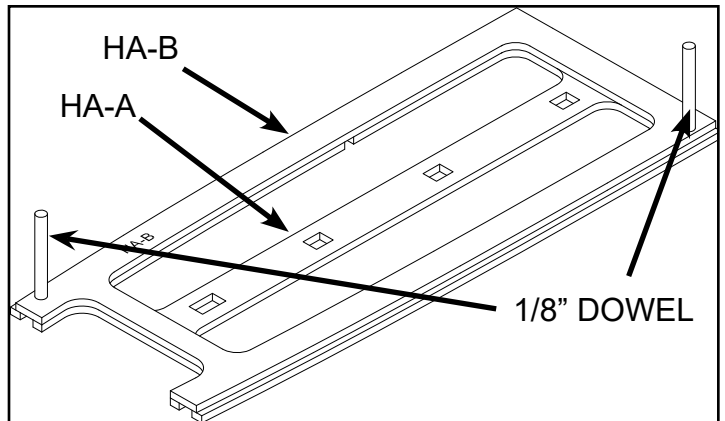
Install cockpit bulkhead CBH to E1

- 22 Locate the two For Deck Sheets (FDS) and test fit them to formers C and D. Wet the outside of these sheets and then install them between formers C and D. Glue them first to the fuselage sides and force them over and into contact with the formers and BCK and glue them. When cured, sand them flush with formers C and D.



Glue FDS flush to the top of the fuselage and then shape and glue it to the formers and BCK.

- 23 Locate and prepare the hatch components HA-A, HA-B, HA-C, A1, B1 and C1. Lightly sand the outer edges of HA-B to remove any nubs and smooth the sides. When the hatch is completed, HA-B will slide down between the fuselage sides. Use the 1/8" dowel pins and assemble HA-A and HA-B. This is the forward hatch base.



The hatch base stack is laminated upside down using 1/8" dowels for registration.

- 24 Install and glue HA-C to HA-A.
- 25 Install and glue formers A1, B1 and C1.
- 26 Use thick canopy glue or thick CA and install and glue a 1/8" x 1/4" magnet in the hole provided in A1.



Glue a 1/8" x 1/4" magnet into A1. No need to worry about polarity at this point.

- 27 Locate and prepare the Hatch sheeting (HS). Note that the front corner is indicated by the arrow. Wet the outside of HS. Place the Hatch assembly flat on the building board, orient HS so the corner marked FC is located at the front corner of the assembly and the bench. With the edge of HS flat on the building board and snug up against the hatch assembly, glue HS to HA-A.

- 28 Pick the assembly up and pull the sheeting tightly against B1 and HA-C and apply thin CA. Do the same at A1 and HA-A.

- 29 With a sharp blade, carefully trim the sheeting (HS) flush with the bottom of HA.

- 30 Place the hatch onto the fuselage and sand the sides to contour with the fuselage.

- 31 Place a 1.8" x 1/4" magnet into the hole provided in former A (firewall), let it snap into place with the magnet in the hatch. Mark the front of the magnet with a Sharpie. Remove the hatch from the fuselage and remove the magnet. Glue the magnet into former A with the marked side facing forward. Also install and glue a magnet in the hole provided at the bottom of Former A.

- 32 Locate the plastic hatch pull. Cut a two inch length of 1/32" wire and bend it into a U shape so the legs will fit through the two holes in the hatch pull freely.

- 33 Place the plastic hatch pull on the front of the hatch, centered and about 5/16" back from the front. Mark the hatch sheeting for the opening. Cut the opening and test fit the hatch pull.

- 34 Place the U shaped wire into the holes in the hatch pull, it should drop down into the depression on top of the pull. About 1/8" from each end of the wire, put a 90 degree bend in the wire to prevent it from being able to exit the plastic pull. Glue this assembly into the hatch flush with the top of the sheeting.



The whetted hatch sheeting is first glued to HA-A and then rolled over onto the formers and HA-HA-C and glued with thin CA.

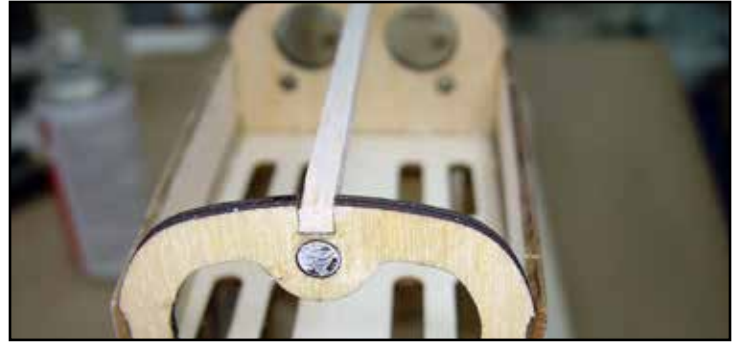


The hatch pull assembly ready to be installed into the hatch. The pull wire will retract into the hatch when not in use.



The hatch pull in the extended position. It will retract into the recess when not in use. You can access it with a fingernail or a magnet.

- 35 Install and glue a length of 3/16" square balsa in the notches provided at the bottom of former A and B.
- 36 Locate and prepare the Forward Chin Sheeting (FCS) and test fit to the chin section between former A and B. Wet the outside of the sheet and then glue it edge to edge to the fuselage. When this has cured, pull the sheeting into contact with Formers A and B and the 3/16" square balsa and glue it.
- 37 Turn the fuselage over and install the wing. Some sanding of the fuselage may be required until the wing seats correctly in the wing saddle. W13 should butt firmly against former B.



A piece of 3/16" square balsa provides the bottom keel between formers A and B.

NOTE: Before proceeding with step 38, check the alignment of the wing. With the wing in position on the fuselage, measuring from the wing tip trailing edge to the aft end of the fuselage. Adjust the wing until both sides are exactly the same. Mark the wing and the fuselage so you can keep the wing in this position while performing step #38.



Sand the sheeting flush with former B and the fuselage sides.

- 38 Install the #8-32 Nylon bolts through the bolt wells and then through the wing into the blind nuts in the fuselage. Turn the wing bolt wells so the low side is facing outward away from the center of the fuselage. When satisfied with the fit, glue the wing bolt wells to the wing.



The wing secured to the fuselage with the wing bolt and the two bolt wells.

- 39 Cut a piece of scrap paper about 4" wide and 11" long. Tape one end of it to the fuselage just ahead of former B so it cannot move. It should extend back and cover the wing bolt wells. Mark the location of the wing bolt wells on the paper. Slide the belly pan assembly into place under the paper and mark the belly pan through the bolt locations indicated on the paper.



A piece of paper temporarily taped to the fuselage with the bolt holes marked on will transfer the location of the bolt holes to the belly pan.

- 40 Loosen the wing and place a small piece of parchment paper between the wing and former B. Then reinstall the wing with the wing bolts.

- 41 Install and glue the belly pan assembly to the wing. Align it carefully with the fuselage for and aft.



The marks transferred from the paper taped to the fuselage are carefully opened up to the diameter of the bolt wells.

- 42 Carefully open up the holes over the bolt wells until they match the diameter of the wells.

- 43 Remove the wing from the fuselage and sand the trailing edge flat and to contour with BP10.

- 44 Place the wing back on the fuselage, place a piece of parchment paper under the trailing edge at BP-10.



F15 is placed snugly against the wing and belly pan and glued to the fuselage. A piece of scrap 3/16" square is used to insure it retains that exact angle for a match to the belly pan.

- 45 Place F15 up against the belly pan, matching the angle and glue it. Cut a 1" length of 3/16" square balsa and snug it up against F15 and glue it.

- 46 Install and glue FG and GB into AFB.

- 47 Locate three SF parts and laminate them together to form the tail skid block. Glue this to the aft bottom end of the fuselage sides and then plane to contour with the fuselage sides. Temporarily place a piece of 1" scrap balsa between the fuselage sides at the tail end to insure that gap will allow the vertical fin tail post when installed later.



The tail skid laminated from three SF parts.

- 48 Install and glue F16 to F15, FB, FG, H and the tail skid block.
- 49 Plane and sand flat the corner of the fuselage and F16 in preparation for adding the two F17 corner pieces.



F16 has been glued to the bottom formers and the tail skid block.

- 50 Glue on the two fuselage corner pieces (F17). Use masking tape or rubber bands to pull it into contact with the fuselage sides and F16.
- 51 Trim and sand the front of F17 and F16 flush with F15.



Two F17 corner pieces are held in contact with the fuselage sides and F16 with rubber bands.

- 52 Place the wing on the fuselage and secure it with the wing bolts. Trace around the aft end of the belly pan to mark guide lines for shaping the aft bottom of the fuselage.



The wing is attached and the belly pan is used to draw the matching contour onto the aft fuselage parts after they have been sanded flat to F15.

- 53 Plane and sand the aft fuselage bottom to shape.

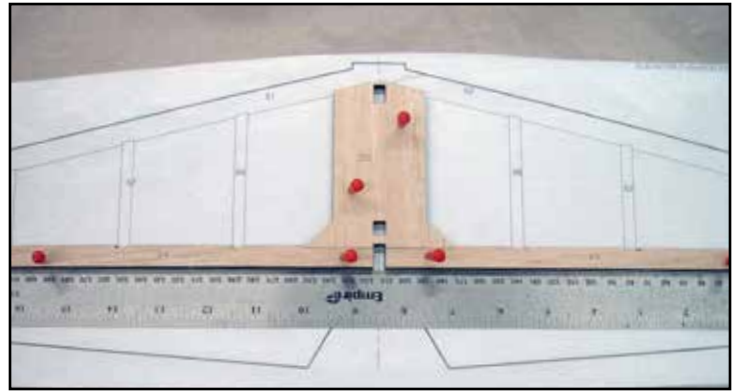


The aft fuselage bottom has been shaped to contour with the belly pan.

This concludes the basic fuselage construction. We'll come back to the fuselage after constructing the empennage components.

STABILIZER ASSEMBLY

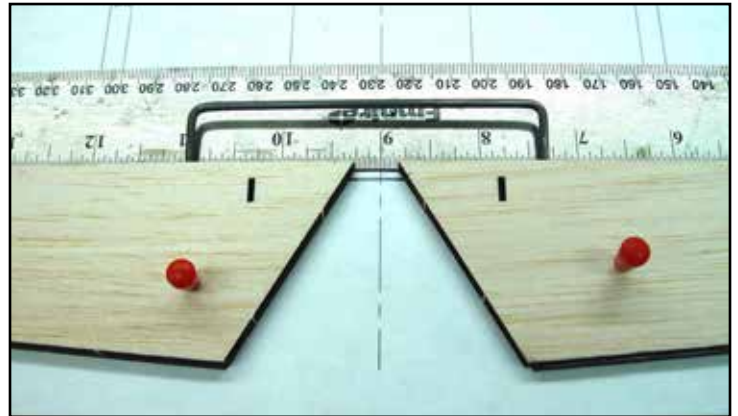
- 1 Place the stabilize plans on the work bench and cover them with waxed paper. Locate S5 and carefully align it with the plans and pin it in place.
- 2 Locate the two S4 pieces and glue them to S5, use a straight edge to insure they are straight.
- 3 Glue the stabilizer tips S3 to S4.
- 4 Glue S2 to S3 and S5.
- 5 Glue S1 to S4, S3 and S2.
- 6 Install and glue ribs S6 and S7 in the notches provided.
- 7 Sand the stabilizer flat and round over the leading edge and the stabilizer tip. Leave the trailing edge square as well as the center section at the leading edge where it will engage the fuselage.



Stabilizer assembly under way. The straight edge (ruler) is used to insure that the S4 trailing edge pieces are perfectly parallel.

ELEVATOR ASSEMBLY

- 1 Place the elevator halves over the plans. Use a straight edge secured them to the building board to insure they are straight. Pin the elevator halves in position.
- 2 Locate the 3/32" wire elevator joiner, center it at the leading edge and apply pressure to dimple the leading edge.
- 3 Remove the elevator halves and drill a 7/64" hole in the center of the stabilizer half at the location of the dimple.
- 4 Carve a groove in the center of the stabilizer half from the hole to the inboard end to receive the wire joiner. Note this can be done nicely by dragging the drill nit back and forth along the leading edge. Make it just deep enough so the joiner is flush with the surface.



Marking the leading edge of the elevators for drilling holes for the wire joiner. Note the straight edge to keep the halves perfectly parallel.

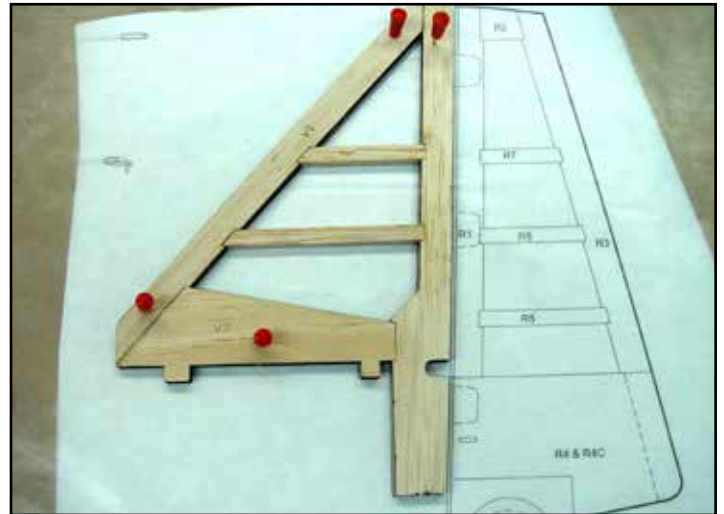


Dragging a drill bit on it's side makes a great tool for digging the groove in the leading edge.

- 5 Use Epoxy to join the elevator halves. Use a tooth pick to get Epoxy into the hole and along the bottom of the trough.
- 6 When cured, plane a 20 degree chamfer into the leading edge top and bottom. Round over all remaining edges.
- 7 Temporarily tape the elevator to the stabilizer and mark the hinge locations on both. Then cut the hinge slots and preassemble the stabilizer with the elevator. Final assembly will be done after covering and installing onto the fuselage.

VERTICAL FIN ASSEMBLY

- 1 Place the vertical Fin plan on the bench and cover with waxed paper. Position V3 over the plans and secure with pins.
- 2 Glue V2 to V3.
- 3 Glue V1 to V2 and V3.
- 4 Install and glue V4 and V5.
- 5 Mark the location of the hinges and cut the hinge slots.



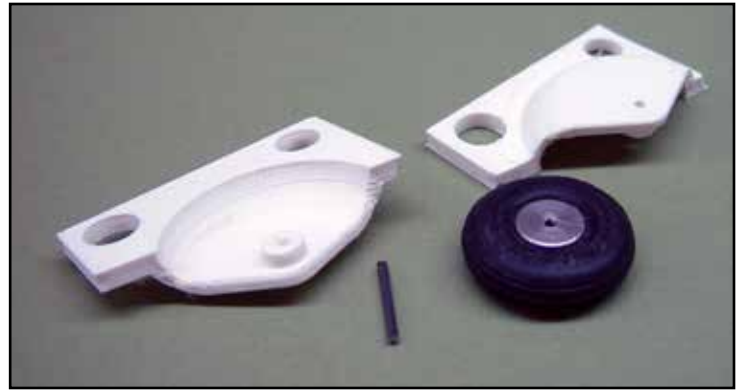
All laser cut parts makes for quick assembly of the empennage components.

RUDDER ASSEMBLY

- 1 Place the rudder plans on the bench and cover with waxed paper. Place R1 over the plans and secure with pins.
- 2 Glue R4 to R1.
- 3 Glue R2 to R1.
- 4 Install and glue R5, R6 and R7.
- 5 Mark the hinge location and cut the hinge slots.

The tail wheel is an integral part of the rudder. Before we can complete the rudder we will need to assemble the tail wheel and hub.

6 Locate the plastic tail wheel housing halves, and the 1" tail wheel. The axle will be a piece of 1/16" wire. The axle holes are slightly undersized and will have to be drilled out with a 1/16" drill, drill open the axle holes in the tail wheel housing halves.



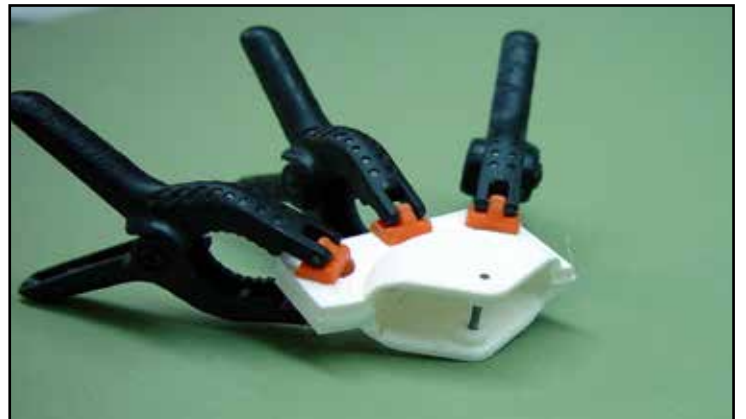
The integral tail wheel is assembled from then two printed plastic shells, the wire axle and the 1" tail wheel.

7 Cut a piece of 1/16" wire 3/4" long, carefully align the two halves and clamp them.

8 Place the axle in both parts to insure alignment of the axle holes and then glue the two halves together.

9 Install the wheel and axle and secure the axle with a dab of medium CA at both ends.

10 Sand the top and back edges of the assembly flat



With the axle temporarily installed to insure alignment, the assembly is clamped and glued with thin CA.

11 Use a liberal application of thick CA to glue the tail wheel assembly to the rudder assembly.

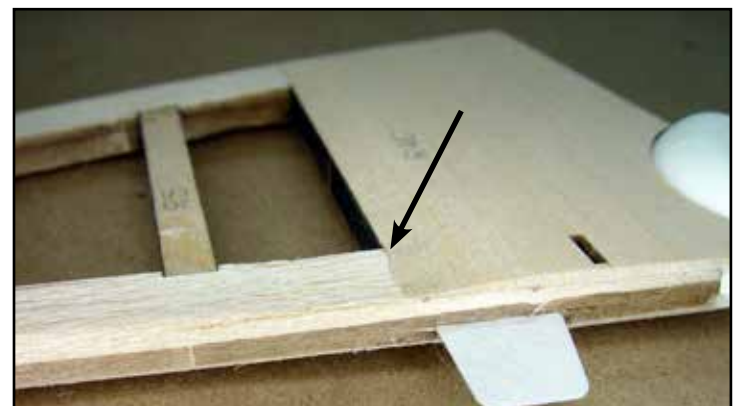
12 Install and glue one R4C to each side of the rudder. Line up the slot for the control horn.

13 Taper sand the top of R4C to fair in with R1, R3 and R4.

14 Sand a 20 degree chamfer on each side of the leading edge. Round over all remaining edges.



The assembled tail wheel is glued to the rudder with thick CA.



Sand the top of R4C to fare in with the rudder frame.

EMPENNAGE INSTALLATION

- 1 Place the vertical fin in the notches provided in the stabilizer center section. You will need to place this assembly with the cortical fin post protruding over the edge of the bench or somehow elevate the assembly as shown in the photo.
- 2 Use the square to insure that the vertical fin is at exactly 90 degrees to the stabilizer and glue it
- 3 Test fit this assembly to the fuselage. When satisfied with the fit, glue the assembly to the fuselage.
- 4 Locate the four tail block parts (TB). Glue two of them together to make two sets of two each.
- 5 The tail blocks will be glued to either side of the vertical fin and fuselage but must be shaped first. Cut a piece of typing paper to 5-1/4" x 4" and fold it in half the long way. Place it up against the corner of the vertical fin and the stabilizer and hold it in place with clamps. Use a straight edge along the turtle deck to extend the angle of the deck and mark the paper. Do this at the side of the vertical fin and on top of the elevator. Cut this paper along the projected lines and use it to transfer the turtle deck angles to the tail blocks. Trim the blocks along these lines to save a lot of sanding. Put the blocks in place and mark the leading edge along the turtle deck. Shape them close to the desired shape before gluing them into position. Then final sand them to a smooth transition.



The stabilizer is raised by placing it on a box and the vertical fin is installed and glued at 90° to the stabilizer.



A paper template is made to mark the angles on the tail block. The top angle has been marked and then the clamps were moved from the stabilizer to the fin and now the side angle is being marked.



Much of the rounding over and shaping can be done before the blocks are glued in place.



LEFT: The finished tail blocks should fair in seamlessly with the turtle deck. A little wood filler to fill the seam should be all that is required.

COWL ASSEMBLY

- 1 The length of cowl should be 3" from the very front to the very back. Place a sheet of 180 grit sandpaper on a flat surface and sand the back edge of the scowl until it is flat, when placed on a flat surface it should be in contact all the way around the cowl.
- 2 To open up the air intake, drill a series of 1/8" holes around the perimeter of the opening as close together as you can. Then clip out the bridges between the holes and remove the center section.
- 3 Locate the cowl ring (CR) and test fit it to the cowl. It will be installed at the very back of the cowl with Epoxy. When satisfied with the fit, place a piece of parchment paper on the bench and place the cowl ring on it. Butter the inside edge of the cowl with a liberal bead of Epoxy and install it onto the cowl ring. Place this assembly flat on the bench and use a pencil to make sure the cowl ring is pushed down flat against the building board and let it cure. Use some scrap wood pressed against the sides to make sure the cowl is in contact with the cowl ring. The sides should be flat.
- 4 Place a 1/8" x 1/4" magnet on each of the two magnets in the firewall. Let them snap into place on the existing magnets and then mark the front of each magnet with a Sharpie pen or piece of tape.
- 5 Remove the TOP magnet and glue it into the TOP hole in the cowl ring. The inked side must face forward.
- 6 Remove the bottom magnet and install and glue it into the bottom hole in the cowl ring.
- 7 Round over both ends of a 1/8" dowel and then cut them off 1/4" long. Glue these into the holes in the firewall (F1) with the rounded and facing forward.



A series of 1/8" holes is drilled along the perimeter of the opening and the bridges between the holes severed with a knife or side cutters. Then the opening is trimmed and sanded to the contour of the opening.

This concludes the assembly of the cowl. Before painting the cowl, use some 120 grit sandpaper to give it a scuff coat for better paint adhesion. The cowl should snap into position on the front of the model with no gap and stay securely until pulled off.

CONTROL LINKAGE

Although the control linkage will not be permanently installed until after the model is covered it's best to temporarily set up everything while you have access to the internals of the fuselage.

- 1 Locate the two 1/8" x 14" carbon Fiber rods and the .047" x 36" piece of music wire.
- 2 Round over and make smooth both ends of the .047" x 36" wire. Use a pliers to bend the ends into the shapes indicated on the plans. Measure in three inches from the last bend and cut them off.
- 3 Use Epoxy or thick CA to glue the wire push rods into the carbon fiber tube. Insert only two inches into the tube as shown on the plans.
- 4 Cut two more pieces of .047" with to 5-1/2" long and glue them into the opposite ends of the push rod assembly.



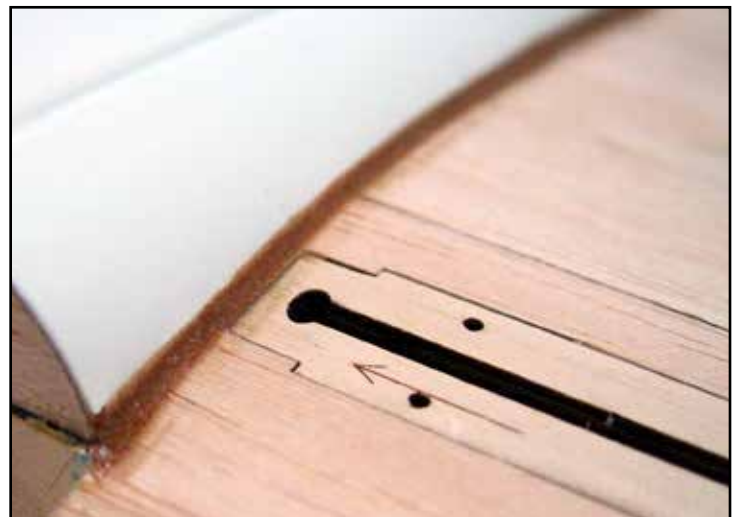
The elevator horn and linkage is temporarily installed before the model is covered. Note that the fuselage exit guide will also be installed after the model is covered.

Routing the ridged control linkage through the fuselage can be challenging but here are a few tips that can make it easy. If you have a piece of scrap Nyrod or other tubing about 20 inches long, thread it through the fuselage. Since it is flexible it can be turned to clear any obstacles. When it is through, just insert the servo end into the tube and push it through the fuselage from the aft end. If you don't have such a tube, drop a string weighted with a washer tied to the end down through the fuselage through the exit slot, then attach that to the servo end of the pushrod and pull it through the fuselage.

FILLETS

BELLY PAN FILLET

Use your favorite fillet material to form a small fillet between the wing bottom and the plastic belly pan. If you use microbaloons and Epoxy, choose an Epoxy with a working time of at least 30 minutes to allow time to form the fillet and clean up excess material before it sets. Use the supplied Fillet Tool to get a smooth fillet.



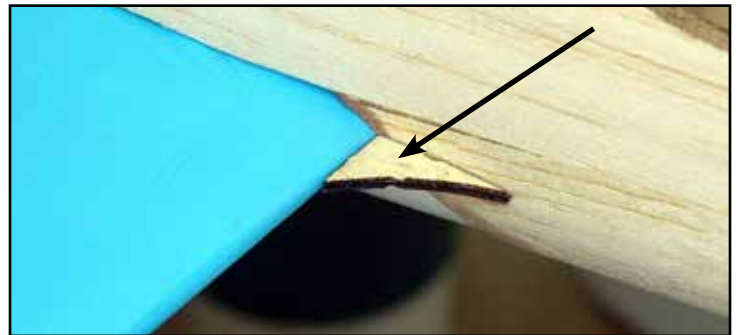
The radius (size) of your fillet will be determined by the size of the gap between the belly pan and the wing.

FUSELAGE / WING FILLET

- 1 While this fillet is not required it will improve the appearance of the model significantly. Start by applying two strips of covering material to the wing where it interfaces with the fuselage. This material will prevent the fillet material from permanently boning the wing to the fuselage. Apply a thick coat of wax or silicone grease to the covering to act as a release agent. Bring this material all the way around the leading edge and back to the belly pan in front and about 1/2" around the trailing edge. Give it a heavy coat of wax and don't buff it out.
- 2 Place the wing onto the fuselage and secure it with the wing bolts.
- 3 Glue the two fillet supports to the fuselage at the trailing edge of the wing.
- 4 Mix up your fillet material and apply it, use the supplied FILLET TOOL to shape the fillet and then carefully remove all excess material. Let this cure completely.
- 5 Remove the wing bolts and carefully remove the wing. If necessary you can delaminate the covering material by sliding a thin blade between it and the wing.
- 6 The edge of the fillet will be sharp and vulnerable to chipping, sand this edge down lightly to prevent this.



A temporary strip of MonoKote is applied to the wing in the area of the fuselage. Be sure to wrap it over the edges as shown here.



The fillet supports butt against the wing but glue to the fuselage. Note that they are slightly oversized and will be sanded down with the fillet after it has been applied.



After removing the temporary MonoKote the fillet will give it a great finished look to your model.



The feathered edge will be sanded smooth, note the fillet has been trimmed flush with the fuselage opening

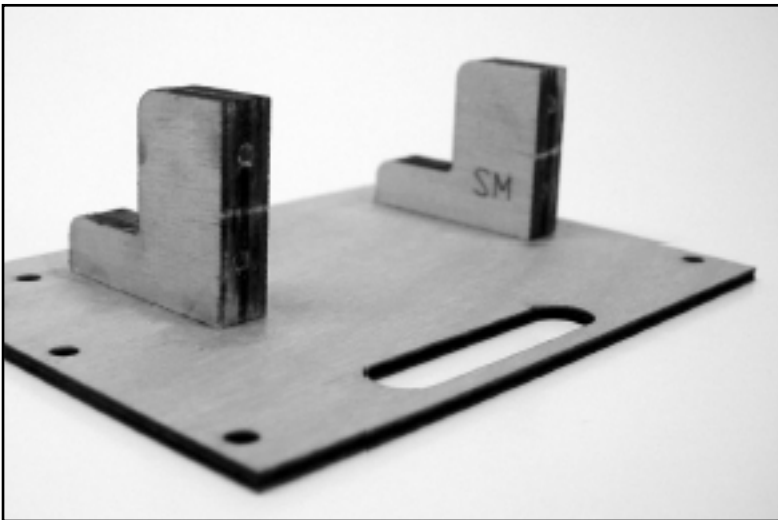
FINAL ASSEMBLY

Using Top Notch Servo Mounts

Top Notch servo mounts provide a simple and effective means of side mounting your servos securely to a servo plate, fuselage side or any where you have a flat surface on which to locate a servo. Top Notch servo mounts come in two sizes to cover all types of servos.

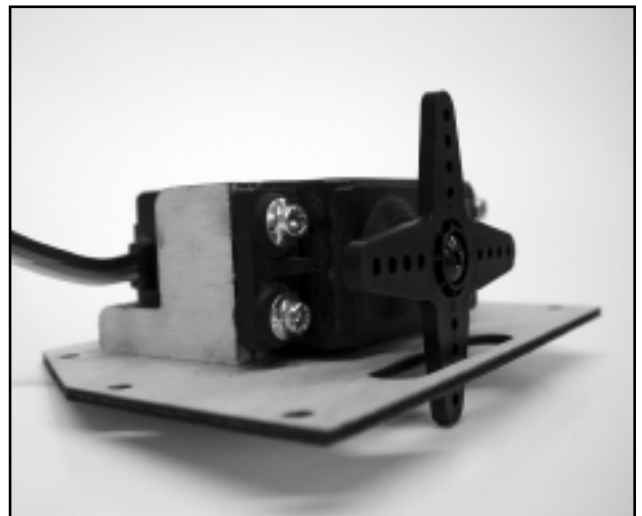
WING SERVO MOUNT ASSEMBLY

- 1 Use some 1/32" balsa or other material as a spacer under and on both sides of your servo. You do not want the servo to make mechanical contact with the mounting surfaces. All support of the servo should be provided through the rubber vibration absorbing grommets supplied with the servo.
- 2 Place the servo on the surface it will be mounted to with a 1/32" spacer underneath. Place a Top Notch servo mount at each end of the servo again with a 1/32" spacer between the servo and the servo mount. When the servo is correctly positioned, tack glue the servo mounts in position. Remove the servo and all spacer materials and permanently glue the mounts in place. Now place the servo and spacers back in position and mark and drill the screw holes for your servo
- 3 Remove the servo and spacer materials and wick thin CA into the servo mount until it will no longer accept it. Let this cure before final installation of the servo.
- 4 After wicking CA into the mount you should re-drill the screw holes to clean them out.



Example of mounted servo in Top Notch servo mount.

Example of a wing servo mount using the Top Notch servo mounts.



FUSELAGE SERVO MOUNT

The servo tray will accommodate the rudder and elevator servos. In this case they have been raised 1/8" with a piece of 1/8" x 1/4" basswood to allow a recessed cockpit floor. Builders preference.



The screw pattern supplied is for the HS255MG servos. If other servos are used you will need to drill new holes. The push-rods are secured with EZ-Connectors.

Part#	Qty.	Sheet#	Material	Size
4	2	21	BALSA	1/16 X 4 X 36
4	2	22	BALSA	1/16 X 4 X 36
5	2	21	BALSA	1/16 X 4 X 36
5	2	22	BALSA	1/16 X 4 X 36
6	2	21	BALSA	1/16 X 4 X 36
6	2	22	BALSA	1/16 X 4 X 36
7	2	21	BALSA	1/16 X 4 X 36
7	2	22	BALSA	1/16 X 4 X 36
8	2	21	BALSA	1/16 X 4 X 36
8	2	22	BALSA	1/16 X 4 X 36
9	2	21	BALSA	1/16 X 4 X 36
9	2	22	BALSA	1/16 X 4 X 36
11	2	21	BALSA	1/16 X 4 X 36
11	2	22	BALSA	1/16 X 4 X 36
A	1	11	AC PLY	1/8 X 4 X 16
A1	1	10	LPLY	1/8 X 6 X 29
ABTE	2	23	BALSA	1/16 X 4 X 36
AFB	1	10	LPLY	1/8 X 6 X 29
AIL	4	1	BALSA	1/4 X 4 X 36
B	1	11	AC PLY	1/8 X 4 X 16
B1	1	10	LPLY	1/8 X 6 X 29
BCK	1	29	BALSA	3/16 X 3 X 8
BCS	1	16	BALSA	1/16 X 4 X 36
BCS	2	18	BALSA	1/16 X 4 X 36
BD	1	10	LPLY	1/8 X 6 X 29
BP-10	1	9	BALSA	1/8 X 4 X 36
BP-11	1	9	BALSA	1/8 X 4 X 36
BP-3	1	8	BALSA	1/8 X 4 X 36
BP-5	1	8	BALSA	1/8 X 4 X 36
BP-7	1	9	BALSA	1/8 X 4 X 36
BP-9	1	9	BALSA	1/8 X 4 X 36
BP-I	1	8	BALSA	1/8 X 4 X 36
BPS	1	23	BALSA	1/16 X 4 X 36
BW	1	6	BALSA	1/4 X 4 X 36
C	1	10	LPLY	1/8 X 6 X 29
C1	1	10	LPLY	1/8 X 6 X 29

Part#	Qty.	Sheet#	Material	Size
CABLE OPENING	1	13	AC PLY	1/32 X 3 X 8
CBH	1	18	BALSA	1/16 X 4 X 36
CH	4	6	POLY CARB	1/16 X 2 X 3
CR	1	11	AC PLY	1/8 X 4 X 16
D	1	10	LPLY	1/8 X 6 X 29
E	1	10	LPLY	1/8 X 6 X 29
E1	1	10	LPLY	1/8 X 6 X 29
EV	2	1	BALSA	1/4 X 4 X 36
EW	1	14	AC PLY	1/16 X 6 X 19
F	1	10	LPLY	1/8 X 6 X 29
F15	1	7	BALSA	1/8 X 4 X 36
F17	2	24	BALSA	3/8 X 3 X 36
FB	1	10	LPLY	1/8 X 6 X 29
FCF	2	28	BALSA	3/32 X 3 X 36
FCS	2	28	BALSA	3/32 X 3 X 36
FCS	2	28	BALSA	3/32 X 3 X 36
FLE	2	7	BALSA	1/8 X 4 X 36
FS	1	8	BALSA	1/8 X 4 X 36
FS	1	9	BALSA	1/8 X 4 X 36
FSD	2	15	AC PLY	1/64 X 6 X 15
FST	1	10	LPLY	1/8 X 6 X 29
G	1	10	LPLY	1/8 X 6 X 29
GB	1	10	LPLY	1/8 X 6 X 29
GLOW FIREWALL	1	2	3-PLY	1/8 X 5 X 5
H	1	10	LPLY	1/8 X 6 X 29
HA-A	1	10	LPLY	1/8 X 6 X 29
HA-B	1	10	LPLY	1/8 X 6 X 29
HA-C	1	7	BALSA	1/8 X 4 X 36
HA-C	1	29	BALSA	3/16 X 3 X 8
HA-D	1	7	BALSA	1/8 X 4 X 36
HA-E	1	7	BALSA	1/8 X 4 X 36
HA-F	1	7	BALSA	1/8 X 4 X 36
HA-G	1	7	BALSA	1/8 X 4 X 36
HA-H	1	7	BALSA	1/8 X 4 X 36
HS	2	28	BALSA	3/32 X 3 X 36
LE	2	3	BALSA	1/4 X 4 X 36
LE TEMPLATE	1	8	BALSA	1/8 X 4 X 36
LES	1	17	BALSA	1/16 X 4 X 36

Part#	Qty.	Sheet#	Material	Size
LES TOP	1	16	BALSA	1/16 X 4 X 36
LG-A	2	11	AC PLY	1/8 X 4 X 16
LG-B	2	14	AC PLY	1/16 X 6 X 19
LG-C	2	14	AC PLY	1/16 X 6 X 19
MNP	1	11	AC PLY	1/8 X 4 X 16
PB	1	10	LPLY	1/8 X 6 X 29
PB	1	10	LPLY	1/8 X 6 X 29
PB	4	12	LPLY	1/4 X 4 X 8
PINNING TABS	25	7	BALSA	1/8 X 4 X 36
R1	1	3	BALSA	1/4 X 3 X 23
R2	1	4	BALSA	1/4 X 4 X 36
R3	1	3	BALSA	1/4 X 4 X 36
R4	1	4	BALSA	1/4 X 4 X 36
R4C	2	5	BALSA	1/32 X 3 X 8
R5	1	4	BALSA	1/4 X 4 X 36
R6	1	4	BALSA	1/4 X 4 X 36
R7	1	4	BALSA	1/4 X 4 X 36
S1	1	4	BALSA	1/4 X 4 X 36
S2	1	4	BALSA	1/4 X 4 X 36
S3	2	4	BALSA	1/4 X 4 X 36
S4	1	4	BALSA	1/4 X 4 X 36
S4	1	4	BALSA	1/4 X 4 X 36
S6	2	4	BALSA	1/4 X 4 X 36
S7	2	4	BALSA	1/4 X 4 X 36
SF	3	4	BALSA	1/4 X 4 X 36
SP	2	6	BALSA	1/4 X 4 X 36
SP	2	14	AC PLY	1/16 X 6 X 19
TB	4	4	BALSA	1/4 X 4 X 36
TCS	2	17	BALSA	1/16 X 4 X 36
TCS TOP	1	16	BALSA	1/16 X 4 X 36
TDT	2	24	BALSA	3/8 X 3 X 36
TE	2	6	BALSA	1/4 X 4 X 36
TEMP GUIDE	1	10	LPLY	1/8 X 6 X 29
TEMPLATE A	1	14	AC PLY	1/16 X 6 X 19
TEMPLATE B	1	14	AC PLY	1/16 X 6 X 19
TES	2	21	BALSA	1/16 X 4 X 36
TES	2	22	BALSA	1/16 X 4 X 36
TPS	2	23	BALSA	1/16 X 4 X 36

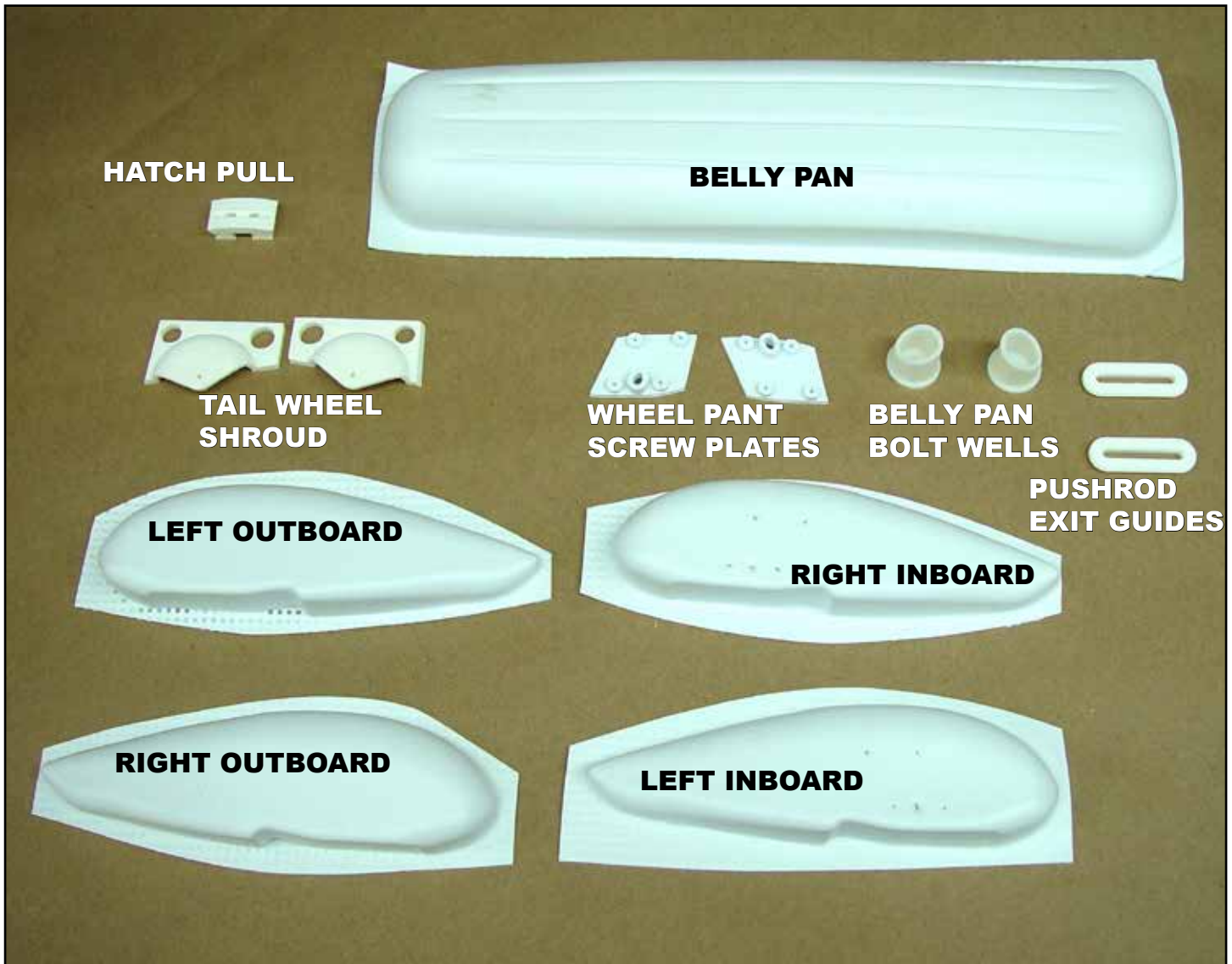
Part#	Qty.	Sheet#	Material	Size
TRIM TOOL	2	25	BASSWOOD	3/16 X 4 X 7
V1	1	4	BALSA	1/4 X 4 X 36
V2	1	4	BALSA	1/4 X 4 X 36
V3	1	4	BALSA	1/4 X 4 X 36
V4	1	4	BALSA	1/4 X 4 X 36
V5	1	4	BALSA	1/4 X 4 X 36
W1	2	14	AC PLY	1/16 X 6 X 19
W10	2	20	BALSA	1/16 X 4 X 36
W11	2	20	BALSA	1/16 X 4 X 36
W12	2	14	AC PLY	1/16 X 6 X 19
W13	1	14	AC PLY	1/16 X 6 X 19
W2	2	20	BALSA	1/16 X 4 X 36
W2-B	4	11	AC PLY	1/8 X 4 X 16
W2-C	2	13	AC PLY	1/32 X 3 X 8
W3	2	20	BALSA	1/16 X 4 X 36
W3-A	2	14	AC PLY	1/16 X 6 X 19
W4	2	20	BALSA	1/16 X 4 X 36
W4-A	2	14	AC PLY	1/16 X 6 X 19
W5	2	20	BALSA	1/16 X 4 X 36
W6	2	20	BALSA	1/16 X 4 X 36
W7	2	20	BALSA	1/16 X 4 X 36
W8	2	20	BALSA	1/16 X 4 X 36
W9	2	20	BALSA	1/16 X 4 X 36
WACP	1	14	AC PLY	1/16 X 6 X 19
WBB	2	14	AC PLY	1/16 X 6 X 19
WBP	1	12	LPLY	1/4 X 4 X 8
WF	2	14	AC PLY	1/16 X 6 X 19
WPB7	2	14	AC PLY	1/16 X 6 X 19
WPB8	2	13	AC PLY	1/32 X 3 X 8
WPB9	2	2	3-PLY	1/8 X 5 X 5
WPJ	2	25	BASSWOOD	3/16 X 4 X 7
WT	6	6	BALSA	1/4 X 4 X 36

Mini Supreme Inventory Sheet

✓	Qty	Material	Size	Nomenclature	Usage
	2	Plated	#8-32	Blind Nut	Wing Bolts
	4	Plated	#4-40	Blind Nut	Firewall
	2	Nylon	#8-32 x 1"	Bolt	Wing Hold Doen
	13	Plastic	Small	CA Hinges	All movable surfaces
	2	Cardboard	5/8" x 11-3/4"	Cable Tunnel	Wing
	1	Styrene		Canopy	Canopy
	1	CF	1/8" x 1/4" x 4"	Carbon Fiber Bar	Wing Joiner
	4	PolyC		Control Horns	All movable surfaces
	1	Fiberglass		Cowl	Cowl
	2	HD. Wood	3/16" x 1.625"	Dowel	Wing Spar
	2	Birch	1/8" x 2"	Dowel	Multipurpose
	2	Printed	Plastic	Exit Guides	Rudder & Stab Linkage
	2	Nylon		EZ Connector	Rudder & Stab Linkage
	2	N/A		EZ Link	Rudder & Stab Linkage
	4	Bolt	#4-40 x 1-1/4"	Hex Head Bolt	Motor Mount
	7	Plated	1/8" x 1/4	Magnets	Multipurpose
	2	MW	1/8" x 10"	Music Wire	Formen landing gear
	2	Nails	8d	Nails	Pinning Blocks
	2	CF	1/8" x 14"	Pushrods	Controle Linkage
	8	Screw	#2 x 1/4"	Screw Sheet Metal	Landing Gear Attach
	16	Plated	#2 x 3/8"	Screws	Servo Covers
	8	Plated	#1 x 3/8"	SM Screw	Wheel pant attach
	3	Balsa	3/16" x 3/16" x 36"	Stick Wood	AFT Fuselage Sides
	4	Spruce	3/32" x 1/4" x 36"	Stick Wood	Wing Spar
	2	Wheel	2"	Wheel	Mains
	1	Wheel	1"	Wheel	Tailwheel
	1	Music Wire	1/32" x 6"	Wire	Battery Hatch Pull
	1	Music Wire	3/32" Formed	Wire	Elevator Joiner
	1	Wire	.047" x 36"	Wire	Push Rods

Plastic Parts

✓	Qty	Material	Size	Item	Usage
	2	ABS	Printed	Axle Support	Mains Wheel Pant
	1	Styrene	Formed	Belly Pan	Formed Belly Pan
	2	PLA	Printed	Bolt Wells	Wing Mount
	1	PLA	Printed	Hatch Pull	Battery Hatch
	1	Styrene	Formed	Left Inboard Wheel Pant Half	Mains Gear
	1	ABS	Printed	Left Inboard wheel pant screw plate	Mains Gear
	1	Styrene	Formed	Left Outboard Wheel Pant Half	Mains Gear
	1	Styrene	Formed	Right Inboard Wheel Pant Half	Mains Gear
	1	ABS	Printed	Right Inboard wheel pant screw plate	Mains Gear
	1	Styrene	Formed	Right Outboard Wheel Pant Half	Mains Gear
	1	ABS	Printed	Right tail wheel housing shell	Tail Wheel
	1	ABS	Printed	Left tail wheel housing shell	Tail Wheel
	1	MW	1/16" x 3"	Tail Wheel Axle	Tail Wheel
	4	PolyC	1/32" PC	Gear Straps	Landing Gear



Plastic component identification

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