

CESSNA 195

V2

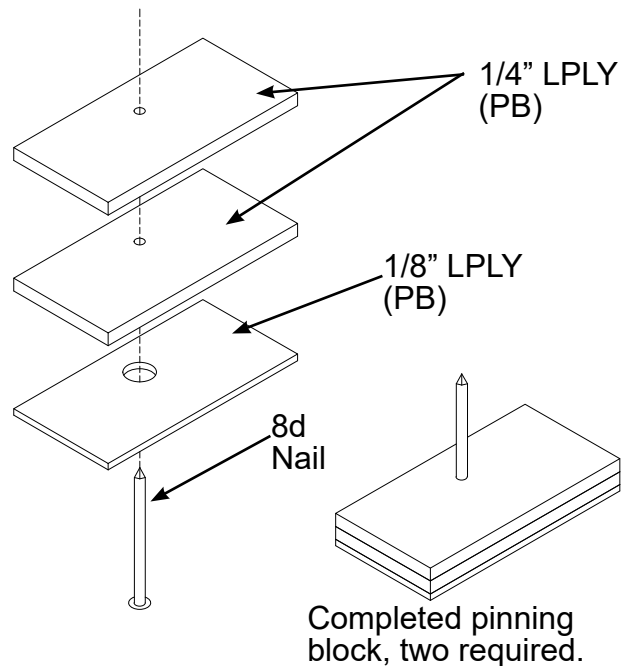


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BEFORE YOU BEGIN

At the back of this manual is a parts locator, a list of all the parts included in this kit in alphabetical order and the carrier sheet number you will find them on. Do not remove the parts from their carrier sheets until they are called for or all location reference will be lost. Paged 28 & 29 contain an inventory list of all kit contents.

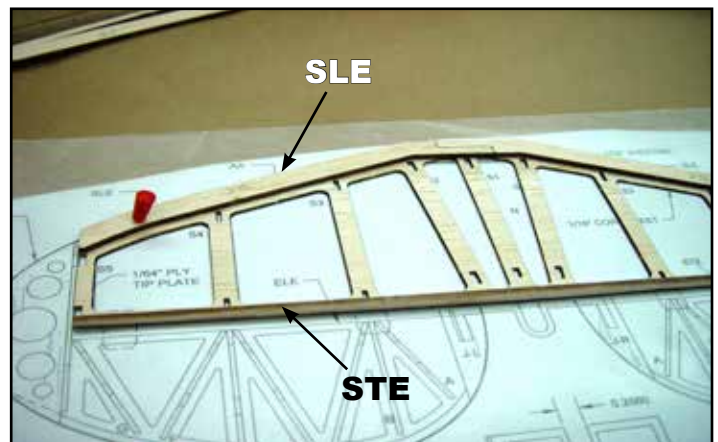
Assemble the registration pinning blocks as shown at the right. These will be used throughout the assembly to insure proper alignment of parts. The nail head must be seated below the surface of the bottom lamination so the block will sit flat on the bench. Use CA or Epoxy to secure the nail in the block.



Stabilizer Assembly

Place the stabilizer plans on the building board and cover them with waxed paper. The stabilizer, elevator, vertical fin and rudder are built on a core sheet of 1/16" balsa.

- 1 Locate and prepare the stabilizer core (SC). Trim the retainer tabs and remove it from the sheet, remove all the material in the lightening holes. Pin it over the plan with waxed paper over them to protect them.
- 2 Install and glue SLE to the leading edge. Note that there are two versions of SLE so they will interleave at the leading-edge center. Carefully align this with the leading edge and the stabilizer tip.
- 3 Install and glue the trailing edge (STE) to the core sheet, carefully align this to the trailing edge.



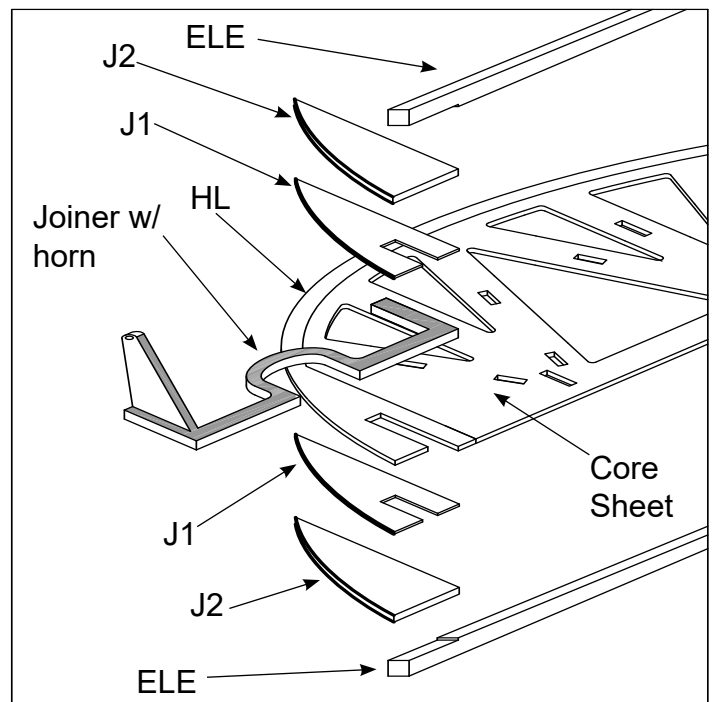
Stabilizer assembly underway with the leading edge and trailing edge installed on the top side. Next the ribs will be installed. Then turn the assembly over and repeat these procedures.

- 4 Install and glue ribs S1 through S5. Note that the thicker end of S3, S4 and S5 should be against the trailing edge. Also note that there should be a small amount of the core sheet protruding beyond rib S5.
- 5 Remove the stabilizer assembly from the plans, turn it over and repeat steps 2 through 4 to complete the assembly.
- 6 Install and glue the 1/32" balsa center section sheeting (STS) on both sides of the stabilizer.
- 7 Round over the leading aged and sand to contour with the ribs.

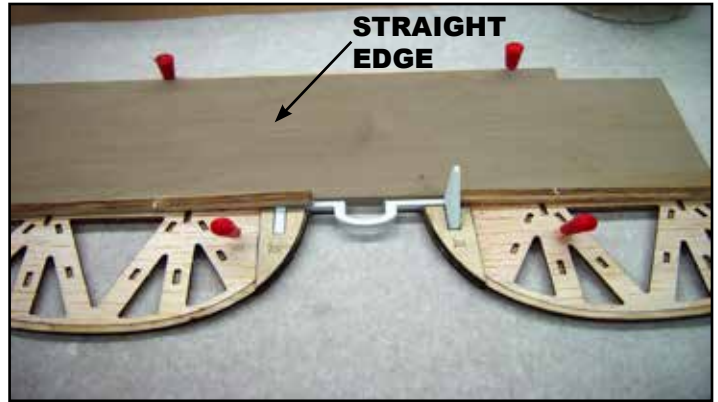
This concludes the assembly of the stabilizer section.

Elevator Assembly

- 1 Place a piece of parchment paper over the elevator plans and the position the elevator cores over the plans and pin in place.
- 2 Locate the 1/16" plywood trailing edge sections (HL) for the left side and (HR) for the right side. Sand off and nubs left by the retainer tabs that would interfere with a snug fit with the elevator cores. Then glue the trailing edges (HL) and (HR) to the elevator cores (EC).
- 3 Install and glue rib (H).
- 4 Install and glue the elevator tips (ST).
- 5 Install and glue the 1/32" ply J1 onto H.
- 6 Install and glue J2 on top of J1.
- 7 Install and glue a leading edge (ELE) on each elevator half.
- 8 Install and glue all remaining ribs A through G. When installing the ribs, insure that they are fully engaged on their respective slots and the core is flat on the building board.



- 9 Flip both assemblies over and use the elevator joiner in the slots provided for spacing. Use a straight edge along the leading edge to insure it is straight and secure it at the tips with pins.
- 10 Insure that the joiner is seated firmly in the slot and butted up against the straight edge and glue it in that position.
- 11 Install and glue J1.
- 12 Install and glue J2.
- 13 Plane and sand the tips and JR and JL to contour with the ribs.
- 14 Sand about a 22° bevel on the leading edge of each elevator half.

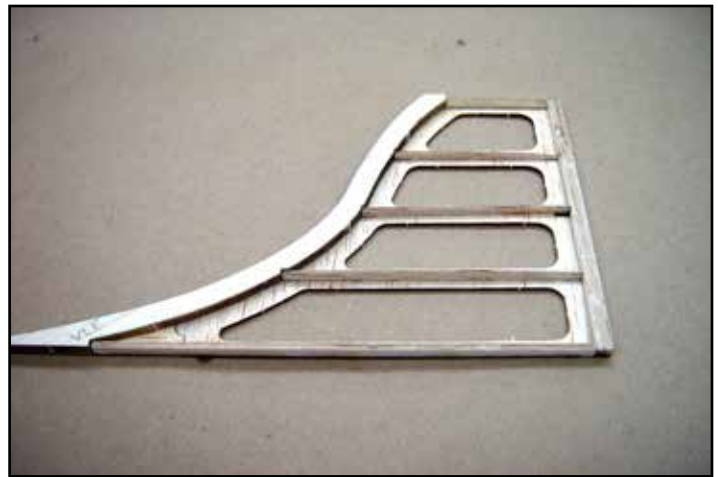


Elevator halves being joined. The board is being used as a straight edge to insure the hinge line is straight. The printed plastic joiner determines the proper spacing of the assemblies. The remaining components will now be added. Note that J2 on the horn side has a slot in it for the horn.

This concludes the elevator assembly.

Vertical Fin Assembly

- 1 Note that the vertical fin core sheet is in two pieces. Locate both pieces, remove the lightening material and glue the two VC parts together.
- 2 Glue on the 3/16" balsa leading edge.
- 3 Glue on the 3/16" balsa trailing edge.
- 4 Install and glue ribs V1 through V5, note that widest end of the ribs should face forward.
- 5 Flip this assembly over and repeat steps 2 through 4.

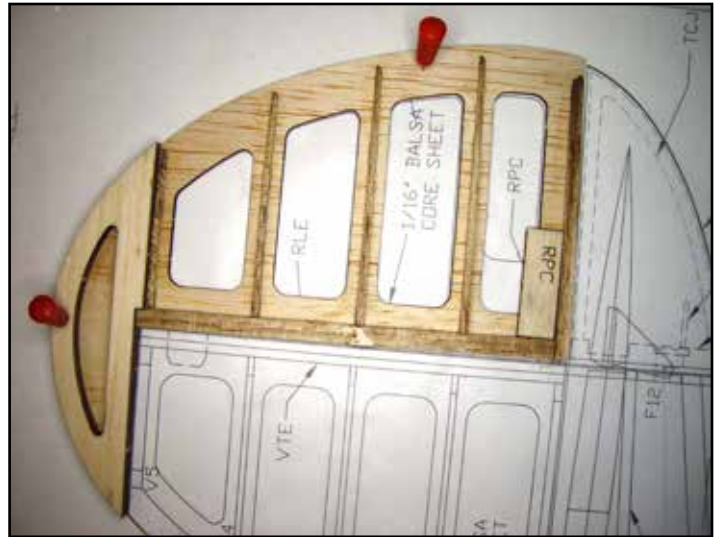


The assembled vertical fin top side. Sand the leading edge down to contour with the ribs. This will require some considerable material removal at the top.

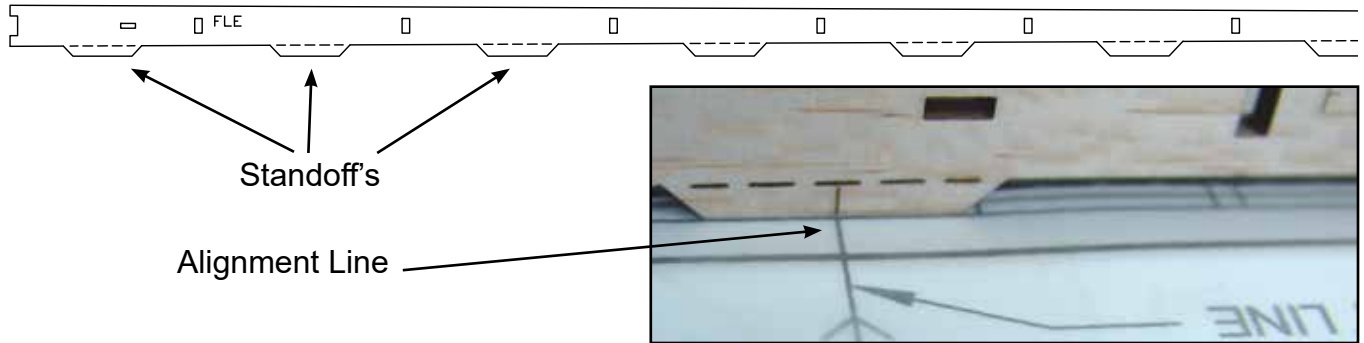
Rudder Assembly

- 1 Prepare the rudder core sheet and pin it in place over the plans.

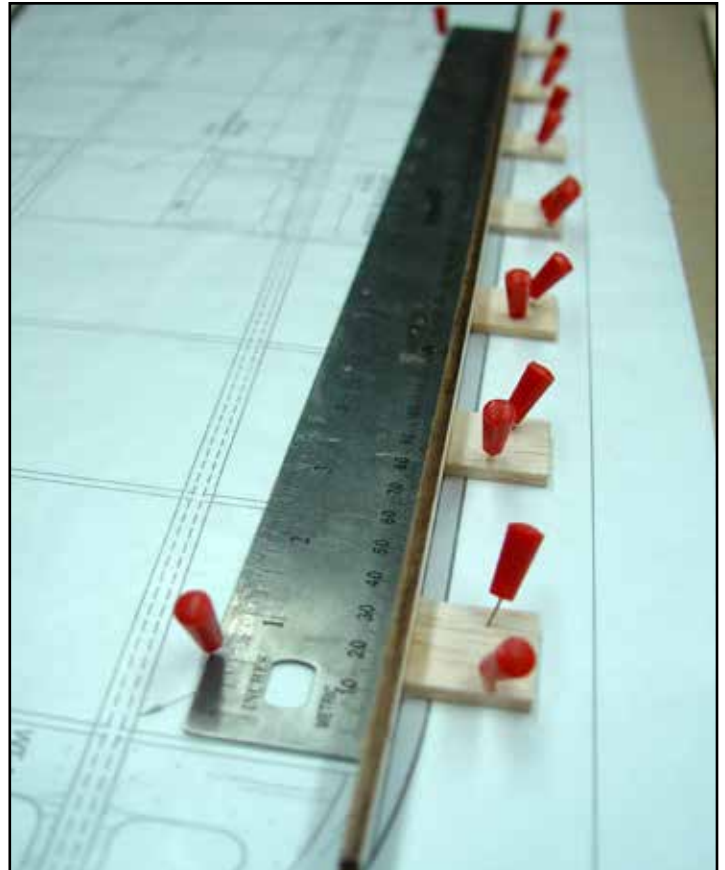
- 2 Install and glue R1.
 - 3 Install and glue the rudder leading edge (RLE).
 - 4 Install and glue the rudder tip section RT1.
 - 5 Install and glue the RPC.
 - 6 Install and glue rib sections R2 through R5.
 - 7 Flip the rudder assembly over and install and glue R1.
 - 8 Install and glue the tip section RT1.
 - 9 Install and glue RPC.
 - 10 Install and glue ribs R2 through R5.
-



WING ASSEMBLY

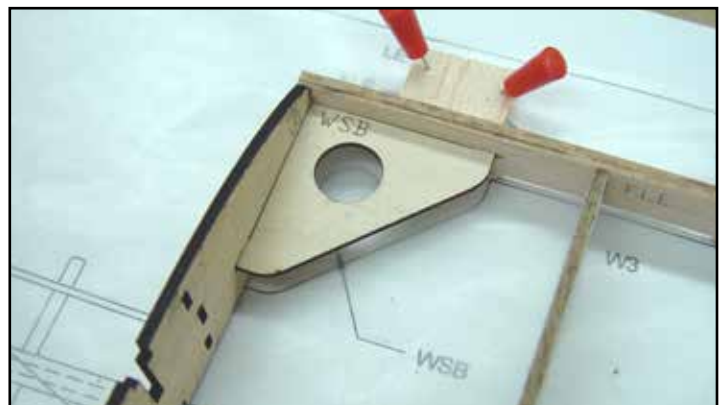


- 1 Place the plans on the building board and cover them with waxed paper. You will build one half of the wing at a time.
- 2 Locate the False Leading Edge (FLE). Note the alignment line on the standoff at the root end. Place straight edge on the plan, aligned with the aft edge of FLE and pin it to secure it in place. Place the standoffs on FLE against the straight edge and secure FLE with a pinning tab tack glued to each standoff. Align the alignment line on the plans with the line on the root end standoff. Insure that all standoffs are flat on the building board.



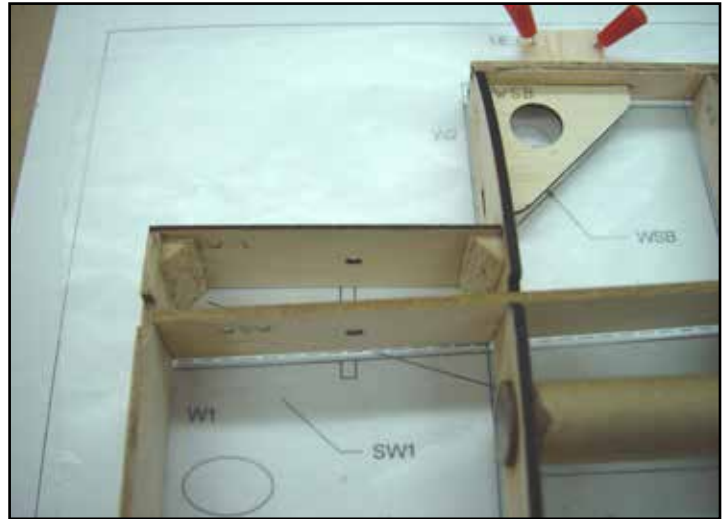
The False Leading Edge is secured in position to the building board with pinning tabs glued to the stand-off's. All remaining components will key off of FLE so it is important to get it positioned accurately.

- 3 Place ribs W2 through W9 in the notches provided in FLE and slide TES into the notches provided in the ribs. Carefully align W2 with the plans and use a pinning tab tack glued to the standoff between F2 and F3 on TES and again between F8 and F9 to secure TES in place.
- 4 Install and glue WSB to W2 and FLE, note the WSB will insure the correct angle for W2.

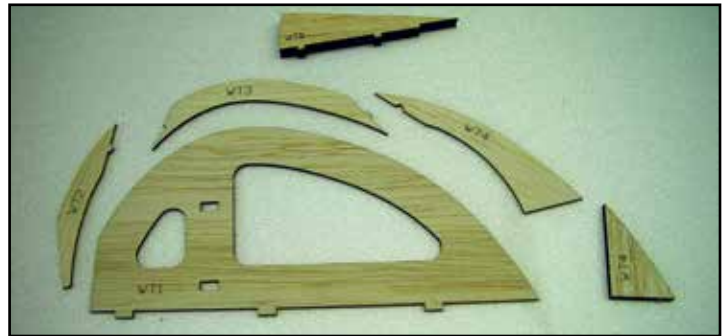


WSB will set the correct angle between FLE and W2.

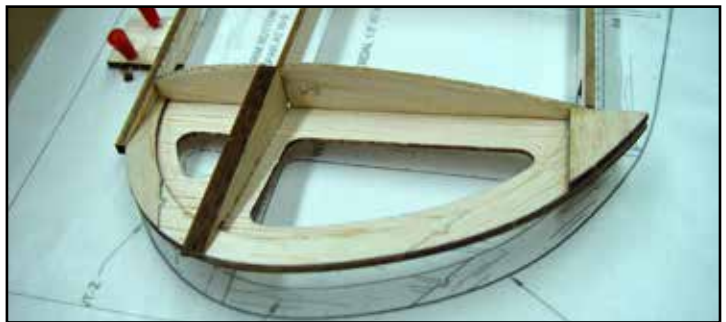
- 5 Glue all ribs at the leading edge to FLE. Insure that each rib is fully engaged in the notch and snug against FLE.
- 6 Glue each rib to TES, insure that each rib is bottomed in its slot.
- 7 Install the spar sheer web (WSW) in the slots at the bottom of the notches for the spar. IMPORTANT: When installed correctly, the top of the sheer web will be flush with the bottom of the notch.
- 8 Glue each rib to the sheer web.
- 9 Cut an 8" length of cable tunnel tubing and insert in into the holes provided in ribs W3 through W5. Glue it to each rib.
- 10 Install and glue W1 to TES and SWS.
- 11 Install and glue SW-1 to W1 and W2. Cut two 1" pieces of 1/4" triangle stock and install and glue in the corners of FW-1 and W1 and FW-1 and F2 for extra strength.
- 12 Build the wing tip assembly. Locate WT-1, WT-2, WT-3, WT-4 and WT-B. You will build a LEFT and a RIGHT wing tip. Glue W2, W3 and W4 to W1. Glue WTB to the W1 assembly and the glue the assembly to W9 using the notches provided at the bottom of W9.



SW-1 is installed at the front of W1 and strengthened with two 1" pieces of 1/4" triangle stock at the corners of W1 and W2.



ABOVE: The wing tip components. BELOW: The assembled and installed wing tip.

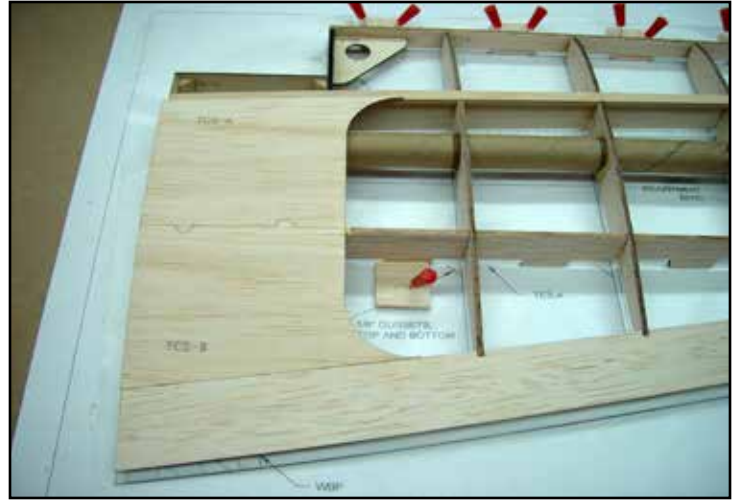


- 13 Cut a length of 1/8" x 1/4" spruce to fit the top spar location. Glue this spar to all ribs and SWS. Insure there is a good glue joint between the spar and SWS.
- 14 Install and glue the 1/16" top trailing edge sheeting (TTES).



The top trailing edge sheeting (TTES) is secured with cloths pin until the aliphatic resin glue cures.

- 15 Assemble the top center section sheeting (TCS-A and TCS-B) and install on ribs W1 and W2.

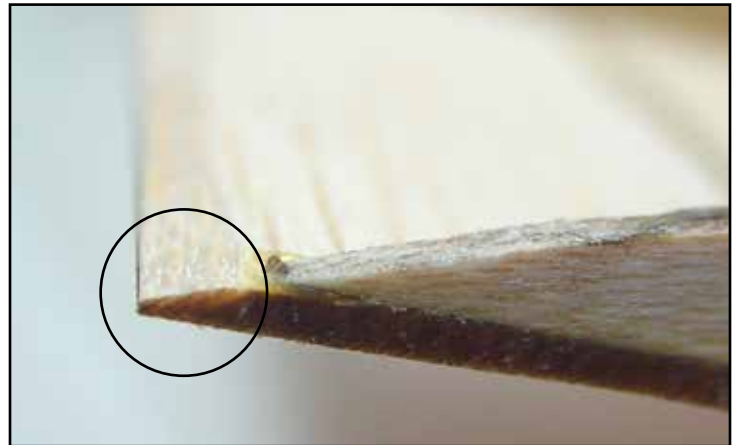


The top center section sheeting assembly (TCS-A & TCS-B) is installed and glued to W1, W2 and the trailing edge sheeting (TTES).

- 16 Carefully remove all the pins (do not remove the standoffs) and flip the wing assembly over. Cut a length of 1/8" x 1/4" spruce to fit the bottom spar opening and glue it in place. Once again, insure that it is in good contact with the sheer web WSW.

- 17 Install and glue the servo mount (SM) between Ribs W5 and W6.

- 18 A small amount of material at the bottom of the trailing sheeting must be removed to bring the bottom of the top sheeting into contour with the bottom of the ribs. Plane or sand the trailing edge to contour with the ribs in preparation for installing the bottom trailing edge sheeting.



The top trailing edge sheeting is tapered in preparation for installing the bottom trailing edge sheeting.

- 19 Install and glue the 1/32" bottom trailing edge sheeting (BTES).

- 20 Flip the assembly over and plane the false leading edge (FLE) to contour with the leading edge of the ribs.

- 21 Install and glue the top leading edge sheeting.

Here's a method that works well for installing the top sheeting. Use medium CA along the top of the spar, carefully align the top sheeting and let it cure thoroughly. Next flip the wing over and while applying finger pressure to the sheeting apply thin CA. Start this procedure at the center and work toward the tips.

- 22 Snap off all the standoff's from FLE and TES and sand out any nubs left by them to leave a smooth surface.

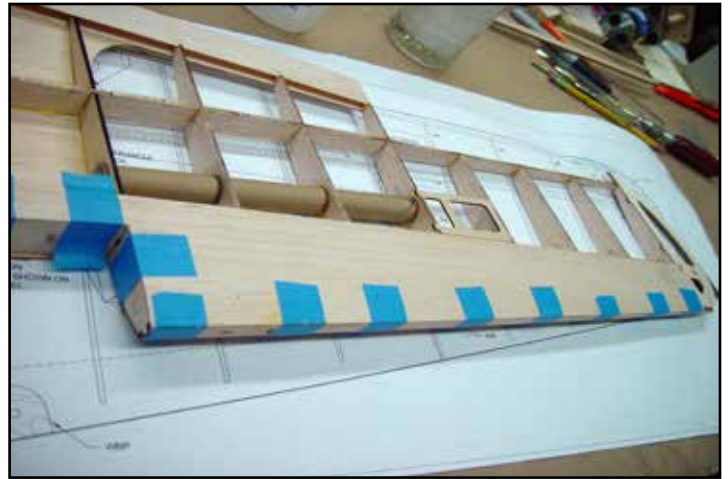


In preparation for installing the leading edge sheeting, FLE is tapered to contour with the ribs.

- 23 Cut a 1" length of 1/8" dowel and round over one end. Insert it into the holes provided in SW-1 and WSW. Glue it only to WSW with the rounded end protruding from SW-1 by 1/4".

- 24 Install and glue the bottom leading edge sheeting.

Apply aliphatic resin glue to all ribs from the spar forward to the false leading edge. Apply aliphatic resin glue to the false leading edge. Apply medium CA to the spar. Install the sheeting and allow the CA to cure thoroughly. Use masking tape at each rib to pull the sheeting into contour with the ribs and false leading edge.



Installation of the bottom leading edge sheeting is retained with masking tape until the aliphatic resin glue cures.

- 25 Assemble the bottom center section sheeting BCS-A and BCS-B and install and glue to ribs W1, W2.

- 26 Sand the false leading edge smooth and the install and glue the leading edge (LE). Plane and sand to contour.

This concludes the basic assembly of the wing panel. Repeat these procedures to assemble the remaining wing half. Remember to make a LEFT and a RIGHT.

ASSEMBLING THE WING HALVES

- 1 Sand both wing roots smooth and flat in preparation for joining.

- 2 Round over the end of a 1/8" dowel and cut off a 1/2" piece. Install and glue it to W1 at the aft end on one wing panel only.

- 3 Test fit the assembly by placing WJ on both wing panels, engaging the alignment dowel in W1. Sand as necessary to get a good fit. Then apply glue to W1 on one side only and to SW-1 on both sides. Reassemble the sections and use tape to hold the trailing edge together until the glue cures.

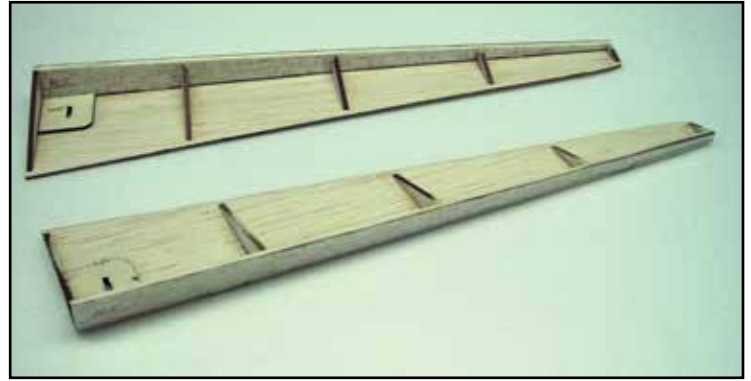


A 1/8" alignment dowel is installed in W1 on one side only.



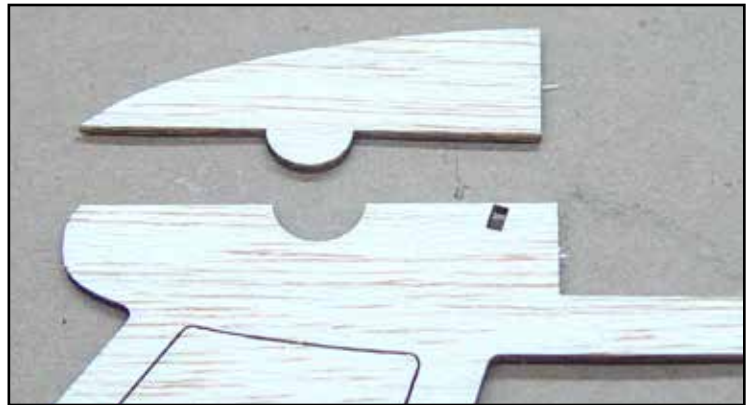
AILERON ASSEMBLY

- 1 REMEMBER TO BUILD A LEFT AND A RIGHT AILERON.
Locate the aileron base (AB).
- 2 Install and glue ribs A1 through A5. Insure that the ribs are square to AB.
- 3 Install and glue the aileron leading edge (ALE).
- 4 Install and glue AHP to AB, make sure the slots line up accurately.
- 5 Plane the top of ALE to contour with the ribs. Sand AB to contour with ALE. The ailerons will be attached to the wing with aileron tape after both are covered.



Fuselage Assembly

- 1 Locate the small section of fuselage side that was cut in the window opening and glue it to the fuselage side just above the forward cabin section
- 2 Install the two registration Pins into the holes provided in former F1. Note the labeled side should be up. Using the pins, glue F1-A to F1.
- 3 Install and glue a 1/4" x 1/8" magnet into the holes provided in F1-A. Note the magnets should be flush with the front of F1-A.
- 4 Round over one end of a piece of 1/8" hardwood dowel and insert it into the F1 assembly from the back and let it protrude about 1/8" proud of F1-A. Glue it in this position and the cut it off flush with F1. Repeat this for the opposite hole in F1/F1-A.
- 5 Install four #4-40 blind nuts into the Motor Mount Nut plate (MNP) and set this assembly aside until ready to attach the motor mount.

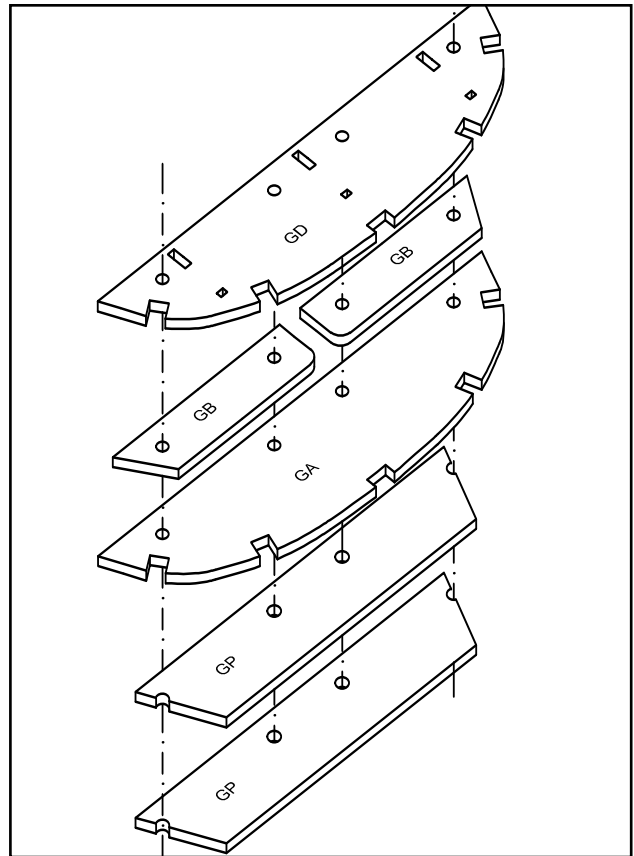


Assemble the fuselage sides as shown.



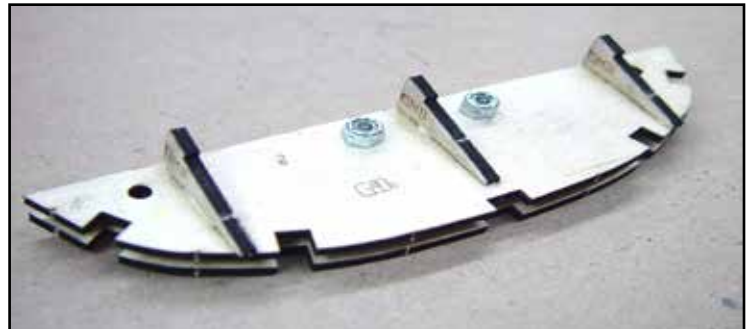
The firewall (F1) sub-assembly showing the F1-A in place and two magnets installed. The dowels will center the cowl and the magnets will retain it. The slotted holes will allow for vertical adjustment of the motor mount for centering in the cowl.

- 6 Place part GA on the Registration Pins, use one of the outer most and one of the inner holes to install a part GB. Use thick CA or Epoxy for this. Repeat this for the remaining part GB.
- 7 Use the outer two pinning holes and install and glue part GD. Then Install and glue two GP parts to GA as shown in the exploded view at the right.
- 8 Install and glue three GMB parts into the slots provided in GD. Use Epoxy for this.
- 9 Install two #4-40 x 3/4" bolts, washers and Ny-Lock nuts in the inner most holes of this assembly. Use a washer under the bolt head only. Snug these bolts up.
- 10 Use Epoxy to install and glue this assembly to the front (Labeled Side) of F3.



Assembled on the Registration Pins, the gear assembly stack order is shown above. Use Epoxy sparingly here as the 1/8" slot will later receive the 1/8" gear legs and must be clear.

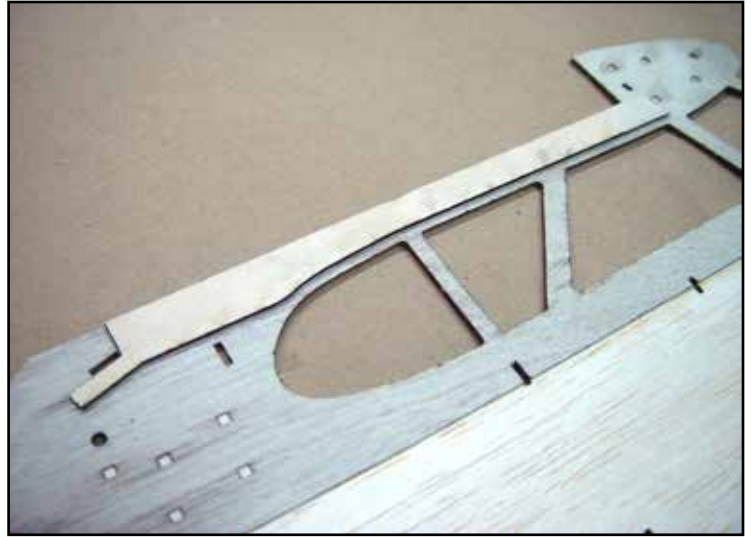
- 11 Install and glue four F3-C parts into the back side (opposite the labeled side) of the F3 assembly.
- 12 Install and glue parts F3-B to this assembly.



The gear mount assembly ready to be installed to the front of former F3.

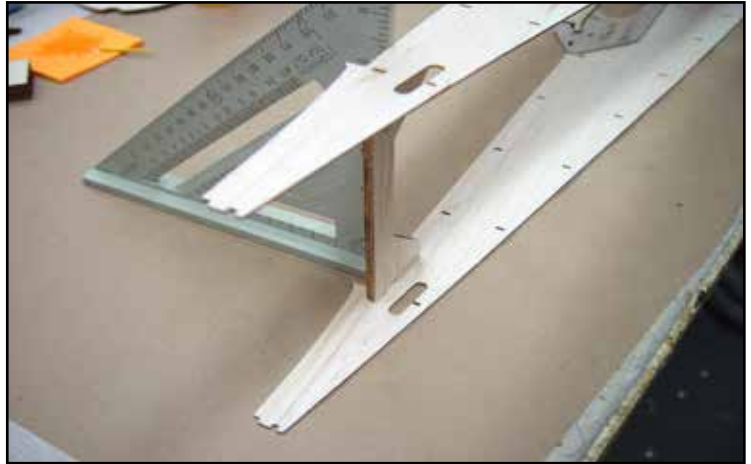
IMPORTANT failure to follow the gluing sequence may render the fuselage sides unusable. Observe the glue line on the plans and avoid getting any glue forward or below this line. The assembly must be free to form around the formers when installed and this area will be glued at that time. Remove this assembly from the pins and place it ply side down on a piece of waxed paper. Use a straight edge to hold the assembly flat and wick CA into the assembly along all window areas and along the wing saddle area. Assemble the other side in the same manner. Former F-4, the widest former is installed first but is glued only at the top (above the glue mark provided or the flattest part of the former) at 90° to the side. Place the tail spreader bar into one of the slots for former F-10 or F-11. Tack glue this to the side and then install the second side to former F-4 in the same manner. The spreader bar will keep the sides parallel during this process. Before the glue sets, verify with a 90° triangle that the tops of the sides are aligned at the tail. Do not attempt to bend the wood at the bottom of the fuselage yet. verify with a 90° triangle that the tops of the sides are aligned at the tail. Do not attempt to bend the wood at the bottom of the fuselage yet.

- 13 Note that the 1/64" ply fuselage doublers are labeled sheets 22 and 23. Use the Registration Pins to install these to the fuselage sides. Note the areas that should NOT be glued. Be sure to assemble a LEFT and a RIGHT fuselage side.
- 14 Temporarily place part (WMP) into the slots provided. Butt the 1/16" wing saddle (WS) up against it for position and tack glue it at the aft end. Use one of the pinning blocks to insure it is flush with the top of the fuselage and glue it along the full length of WS. Hold this assembly flat with a straight edge until it has cured.



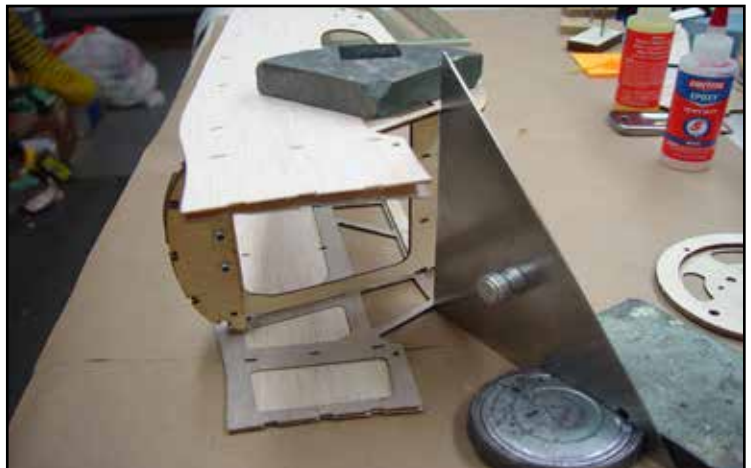
The 1/64" ply doubler has been installed and then the 1/16" ply wing saddle on top of that. Note the alignment with the notch at the rear of the wing saddle and the top edge of the fuselage side.

- 15 Lay one side of the fuselage on the bench and tack glue the Fuselage Spreader Bar (FSB) into the top slot for F11, that's the one where the exit guide holes are.



A square is used at the spreader bar to insure the tops of the fuselage sides are parallel.

- 16 Apply Epoxy to F3 from the center tab to the top including F3-B and F3-C. Install it into the fuselage side and insure that it is exactly at 90° to the fuselage side. Let this cure.
- 17 Install the remaining fuselage side onto the F3 assembly and engage the tab in the spreader bar. Use a square or triangles to ensure that F3 is at 90° to both sides and the top of the fuselage sides are flush at F11.



A square is used to insure both fuselage sides are parallel and square to each other. A lead weight on top holds the structure flat while the Epoxy cures. Make sure all tabs are bottomed in their appropriate slots to insure correct alignment of parts.

Builders Note:

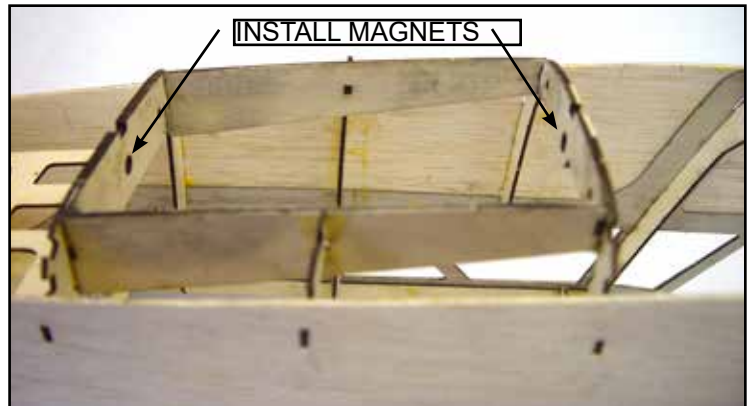
Installing the remaining formers is a two-stage process. The formers will support the 3/16" stringers and the sides will overlap these stringers. When installing the next group of formers, leave enough material at the top and bottom unglued to allow bending the sides back far enough to insert the stringers. Usually about 1/2" is sufficient.

- 18 Install and glue F5, note that F5 has several dash cut areas that will be removed at a later time. Stop the glue about 1/2" above the bottom 3/16" notch to allow for installation of the stringer.
- 19 Using the Registration Pins, Install and glue F4-H to the back side (opposite the labeled side) of F4.
- 20 Using the Registration Pins, Install and glue F6-H to the front of F6.
- 21 Install and glue F4, note that F4-H should be facing AFT.
- 22 Carefully remove the spreader bar (FSB).
- 23 Install and glue F6, note that F6-H should be facing forward.
- 24 Remove the dash cut section at the bottom of F5.
- 25 Install and glue the two H10 parts to formers F4, F5 and F6.
- 26 Install and glue F8, F9 and F10.

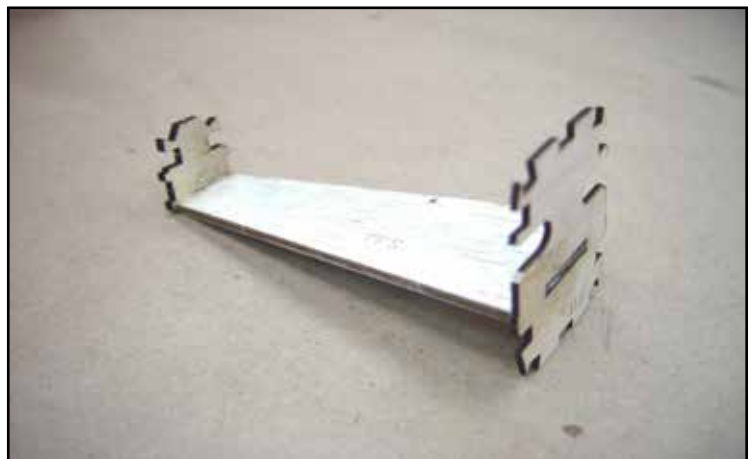


Clamps secure F5 firmly to the fuselage sides as the Epoxy cures. A square is used to insure the sides are square to each other.

- 27 Glue TFS to F11 and F12 and install as a unit.

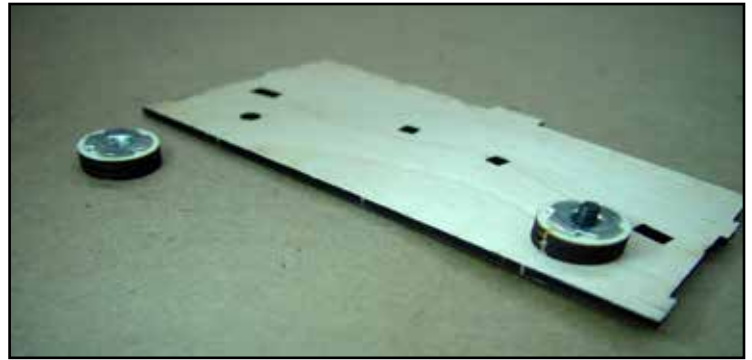


Completed installation of the hatch frame. Install two 1/8" x 1/4" magnets in the holes provided in F4-H and F6-H.



Install the TFS, F11 and F12 as a unit. Insure all tabs are seated in the appropriate notches and the fuselage will be straight.

- 28 Install two #6-32 Blind Nuts into the 1/4" Lite Ply rings (WNP) and use a #6-32 bolt to center these on the wing bolt holes in WMP glue in position.



- 29 Install and glue the Wing Mounting Plate (WMP) to the fuselage sides and F7 in the slots provided. Note the flanges of the blind nuts should be on the bottom.

Two #6-32 blind nuts installed on the wing mounting plate will retain the wing when installed on the aircraft with two nylon safety bolts.

- 30 Install and glue two WF parts to WMP in the slots provided.

- 31 Install parts FCB in the corners behind WF.



WMP installed with WF and ready to install FCB parts in the corners. The FCB parts will allow carving these corners smoothly into contour with the aft fuselage top.

- 32 Install two 1/4" x 1/8" x 2" basswood sticks at the front and back edge of the servo openings on the servo grip.

- 33 Install and glue the Servo Tray between F6 and F7.



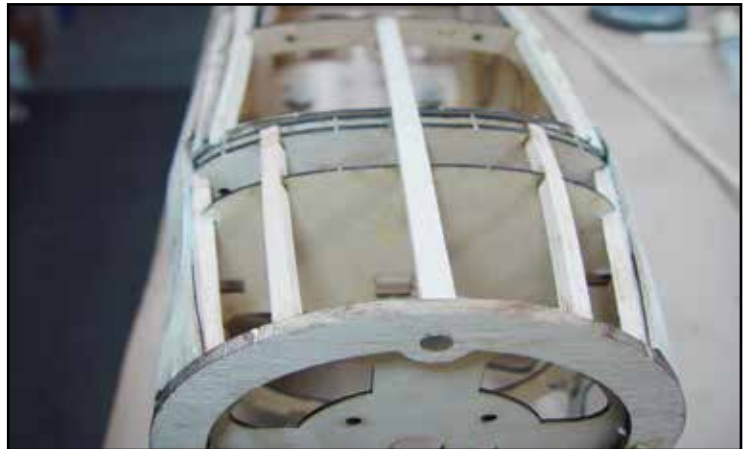
To supply thread grip, two 1/4" x 1/8" basswood sticks are added as screw rails to the servo tray.

- 34 At the bottom of F3, use a rubber band (a #32 works great) to pull the sides into contact with the former and glue them there. Also apply thin CA to the 1/64" ply doublers aft of F3 only.



The fuselage sides are pulled into contour with the F3 assembly with a #32 rubber band. A piece of masking tape will do as well.

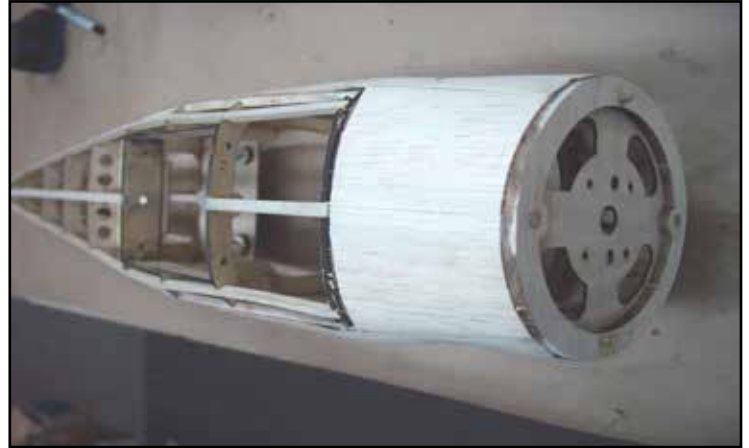
- 35 Select four 3/16" square balsa sticks for stringers. Soak about the first ten inches of one end in water or Windex for about ten minutes to soften them and allow them to bend without breaking. Install two of these in the bottom outside corner notches from F3 to F12. Make sure stringers are seated in these notches and when the glue has cured, pull the sides into contact with the stringers and glue it. Install the remaining two stringers in the inner notches from F3 to F12.



The side stringer can usually be pushed up from the rear of the model. Insure that they are seated in their slots. This photo also shows the stringer that will be installed in step 38.

- 36 Wet the forward section of the balsa fuselage sides from F-3 forward. Install F1 and wrap the sides around it making sure the notches and tabs engage and glue it in place. Slide former F-2 into place and glue the sides at the center only. Install the short stringer sections into the side notches at the top and bottom. Finish forming and gluing F-1 and F2 completely. At the same time use thin CA to finish gluing the 1/64" ply fuselage doubler to the fuselage side. Insure good contact between them.

- 37 Install and glue the 1/8" x 1/4" balsa keel between F1 and F4.
- 38 Install the four 3/16" square stringers between F1 and F3. When installing the two outermost stringers insure they are bottomed in their notches and that the fuselage sides are pulled tightly against them and glued.
- 39 Install and glue the bottom forward sheeting (BS) between F1 and F3. Note that the sheeting must terminate at GA, there will be a 1/8" gap between GA and GB that will be used for the gear installation later.



Installation of the bottom forward sheeting. Note that the sheeting terminates at GC. The slot aft of GS must remain clear for gear installation.

- 40 Install and glue F2. Note that F2 should be centered on the forward most windshield brace and run all the way to the top of the fuselage.



Installation of F2, use enough pressure to insure good contact with the fuselage sides. F2 should be flush with the top of the fuselage.

- 41 Install and glue all four 3/16" square stringers in the top forward section between F1 and F3.

- 42 Install and glue the top 1/8" x 1/4" keel section between F1 and F3.
- 43 Install and glue the top forward sheeting (TS) between F1 and F3.
- 44 Sand a bevel into the fuselage sides between F1 and F12 to match the angle of the formers in preparation for installing the bottom fuselage corners (BFC).
- 45 Install and glue BFC to the fuselage corners. Use tape, clamps and or rubber bands to insure it is in good contact with the fuselage side and the inboard stringer. Note, keep the gap between GA and GB open.
- 46 Plane BFC along the bottom in preparation for installing the fuselage Bottom Sheeting (ABS). Plane it to be in contour with the bottom of the formers.
- 47 Install and glue the aft bottom sheeting (ABS). This is easiest if first you apply aliphatic resin glue to all contact points on one side except the center keel piece. Then install that side and secure in place with pins. Apply thin CA along the keel and let cure. Next apply aliphatic resin glue to all remaining contact points including the center keel and install the remaining half of the sheeting. Secure all this with long strips of masking tape until cured. Then plane and sand to shape.
- 48 Trim open the hatch area flush with H10 on the sides and F4-H in front and F6-H at the rear.
- 49 Install and glue the two stabilizer saddle pieces (SSD).
- 50 Sand a bevel into the fuselage side and the top corner stringer between F7 and F12 at the top of the fuselage.
- 51 Install and glue the Fuselage Top Corner (FTC) parts from F7 to F12. Insure that they are in good contact with the fuselage side and the top corner stringer.
- 52 Install and glue the top fuselage sheeting (FTS). Install it flush with F12 and trim the forward edge later to match the wing trailing edge.



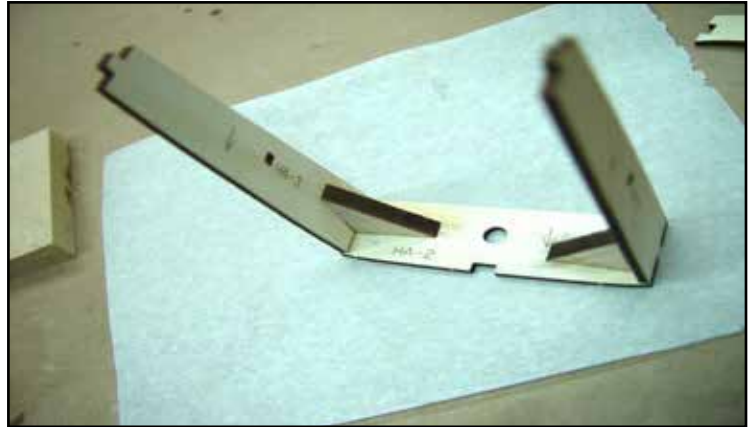
Sand a bevel into the corners in preparation for installing the corner sheeting.



Bottom sheeting secured with masking tape until all the glue has cured.

Hatch Assembly

- 1 Locate and prepare the hatch components HA-1 through HA-4 as well as the 1/4" balsa gussets HG. Note the arrows indication down on all the parts. Glue HA-3 to HA-2, use the gussets to insure they are at 90° to each other.
- 2 Install and glue HA-4.
- 3 Install and glue HA-1, include the gussets.
- 4 Install and glue a piece of 1/8" x 1/4" basswood in the keel slots.
- 5 Run a liberal bead of Pacer 56 glue around the inside corner of the plastic hatch cover and then install the hatch frame, insure good contact on all four edges and let cure. Then trim the plastic down to match the hatch frame. This is easily done by placing the assembly on a flat surface and sliding a long blade down between the plastic and the frame.
- 6 Check the polarity of the magnets in F4-H and F6-H and install and glue magnets into HA-1 and HA-2 observing the appropriate polarity. Best way to do this is to snap a magnet onto the ones already installed in F4-H and F6-H and then with a felt tip pen mark the back side of each magnet. Then install them with that side to the inside of the hatch frame.
- 7 Cut a 2-1/2" length of 1/16" music wire and install it into the HF Antenna. Let about 1/4" protrude through the bottom. Drill a 1/16" hole into the hatch assembly at HA-4 on center. Install the antenna CA and use Epoxy on the inside to glue the antenna wire to the frame. This will serve as a simulated VHF Antenna and a hatch handle.



Assembly of the hatch frame, use the gussets to insure the frame is constructed square.



Trimming the hatch cover to the exact contour of the frame. If any plastic extends past the frame it can be sanded off.



The completed battery hatch with the simulated VHF antenna as the hatch handle. The hatch is retained by the magnets fore and aft in the frame.

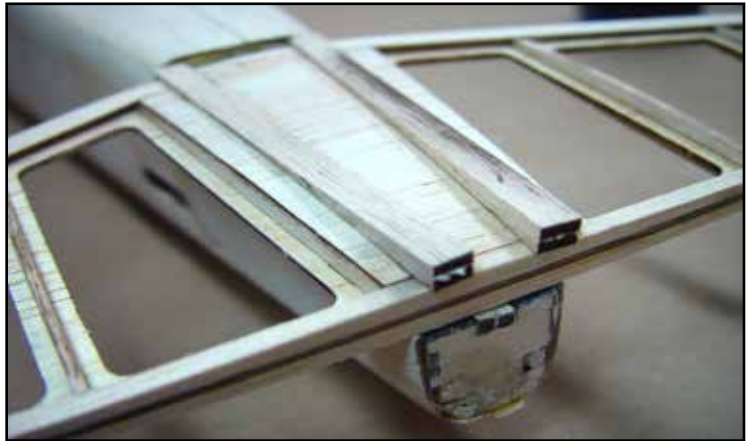
Stabilizer Installation

- 1 Place the fuselage upside down on the bench and weight it down to secure it.
- 2 Place the stabilizer in position at the rear and support it with the two pinning blocks at the leading edge and directly in line with S4 rib.
- 3 Use a tape measure to measure the distance from the firewall (right next to the dowel) back to the outer tip of the stabilizer trailing edge. In this case it was 29-15-16" but yours may vary some. Adjust the stabilizer until both tips are exactly the same distance and then tack glue the stabilizer to the fuselage.



This method of installing the stabilizer will insure it is square to the fuselage. Make sure that the stabilizer is fully seated in the saddle for correct incidence.

- 4 Install and glue (FOS) on top of the stabilizer aligned with the fuselage sides.



Install FOS aligned with the fuselage sides.

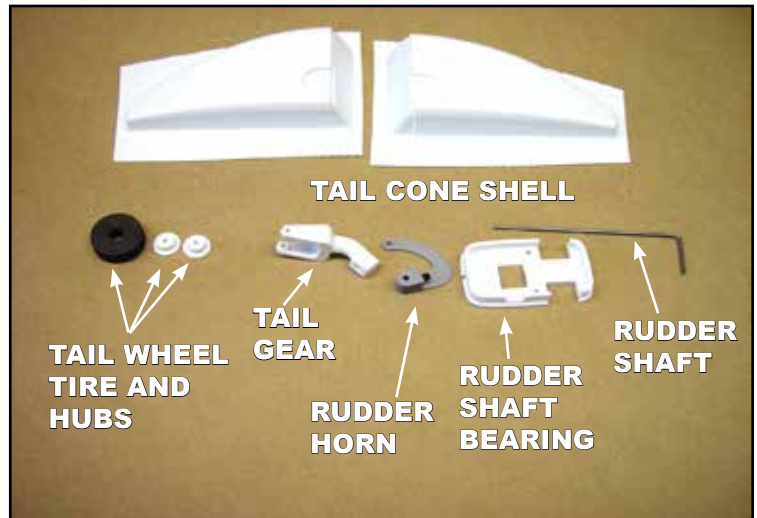
- 5 Then install and glue (FOSS). Trim and sand to contour with the fuselage sides.

RIGHT:

Some wood filler and sanding will true up FOSS to be level with the top of the fuselage. A plug for Elmer's Wood Filler, it's the best I have found. But note, they make two types. As you can see this has a smooth consistent appearance and this is what you want. The other product has a speckled appearance and is not suitable for this work.



- 1 Locate all the tail cone components as shown in the photo at the right.
- 2 Fabricate and prepare the rudder shaft as indicated on the plans.
- 3 Assemble the tail wheel. Use a dab of CA to hold the hubs in the tire. Drill out as necessary to allow free turning on a 1/16" axle.
- 4 Cut a length of 1/16" music wire for the axle and install the wheel assembly into the tail wheel gear.
- 5 Slide the rudder shaft into the rudder shaft bearing from the top and install the rudder horn at the same time.
- 6 Install the tail wheel assembly onto the rudder shaft. Align the tail wheel with the bend at the top of the shaft and secure it in that position. Align the rudder horn so the control rod opening is a 90° to the bend at the top.
- 7 Install this assembly to F12 using two #2 x 3/8" screws. If you use glue make sure not to get any into the shaft bearing area.



Rudder bearing assembly ready for installation onto F12.



ABOVE:
Refer to the section on Wheel Pant assembly for tips on trimming and assembling the tail cone shell parts out. Page XX

LEFT:
The rudder shaft bearing assembly installed onto F12 with two #1x3/8" screws. The tail cone is installed after the rudder and elevator have been installed and the linkages have been adjusted.

- 8 Install the rudder hinge and attach to with the vertical fin. Install the rudder onto the rudder shaft and center the vertical fin on the top of the fuselage. Measure from the tip of the vertical fin to the tip of the stabilizer on both sides. When it is an equal distance from both stabilizer tips, glue it in place.

WHEEL PANT ASSEMBLY

- 1 Assemble the trim tool. Glue a new #11 Xacto blade (not supplied) to the trim tool body using the outline on the trim tool body for position. You can use thin CA for this.
- 2 Rough trim the flange portion of all four wheel pant shells to about $\frac{1}{4}$ " of the shell.
- 3 Place the shell on a flat surface and use the trim tool to make a score in the plastic. You don't want to go through the plastic you just want to score it. Make eight or ten light passes to accomplish this



This simple trimming tool will make preparing the plastic parts simple. Don't attempt to trim them out with a scissors, you'll just end up hating yourself.



Make several low pressure passes with the trimming tool to produce a good score in the material. Note that because these parts are vacuum formed they will be thicker in some areas. The idea here is not to go through the material but to just score it.

- 4 Fold the plastic in along the score. Flexing it a couple times should make it either separate or tear easily along the score. You should get a nice straight and clean edge. If not touch it up by rubbing lightly on a flat sheet of 220 grit sandpaper.
- 5 With scissors, trim out most of the wheel opening. Leave a small upturned edge that can be sanded on a flat sheet to create neat a nice clean opening.
- 6 Drill out the three screw holes on the in-board shell with a $\frac{1}{16}$ " bit.



The plastic should separate neatly along the score. Flex it a few times if necessary. Any imperfections can usually be removed by rubbing it a few times on a flat sheet of 220 grit sandpaper.

- 7 Use three #1 x 1/4" sheet metal screws to install the wheel pant bracket. Use the screw plate on the inside of the shell. This can be done after assembly but it is easier to do it now.



The wheel pant mounting bracket is attached with three #2 x 1/4" sheet metal screws and glue. Use the screw plate on the inside of the part.

- 8 For the next step, use only a flexible adhesive such as Pacer Formula 560. Another acceptable option is a fabric/craft glue that will remain flexible. Run a generous bead of glue around the inside edge of one of the wheel pant shells. Insert the wheel Pant Joiner (WPJ) about half way into the shell. Let this cure for a few minutes.

- 9 Apply a liberal bead of glue to the part of WPJ that is protruding from the wheel pant shell and then install the remaining shell. Use masking tape to hold the two halves together and clamps to insure the shells are in good contact with WPJ at the wheel opening. Don't pull to tightly on the tape, you want a butt joint, not an overlap.



WPJ is installed half way into one of the wheel pant shells with Pacer Formula 560 Canopy Glue.

- 10 After the glue has cured, open up the wheel opening for access to the inside. Now apply a liberal bead of glue along the entire interface between the plastic shell and WPJ. This is easily accomplished by dipping a thin wire into the glue and dragging along the joint to deposit the glue. Put these assembly's aside for several hours to cure.

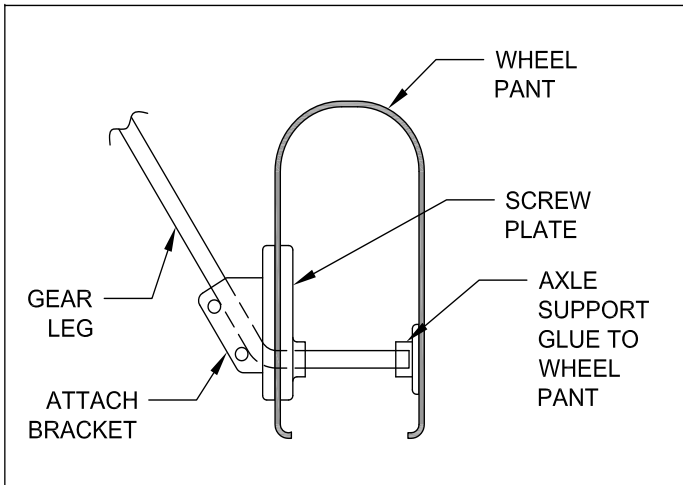
- 11 With most of the plastic removed from the wheel opening, a couple strokes of the wheel pant on a flat sheet of sandpaper should clean it up. Sand until you get down to the lip, the lip should remain.

- 12 Use a 1/8" drill bit to drill out the landing gear hole.



The wheel pant halves are secured with masking tape and two clamps are used to insure that WPJ is in good contact with both halves at the opening. A liberal bead of glue is added to the entire length of WPJ to complete the assembly.

- 13 Install the gear wire and then the two #2-56 x 1/2" bolts and Ny-Lock nuts. Do not over-tighten these.



The completed wheel pants with the 1/8" wire gear installed. Trim the axle just shy of touching the opposite side of the wheel pant and install the axle support as shown. Two #2-56 x 1/2" bolts and NyLock nuts secure the mounting bracket to the gear leg.

After attaching the attach bracket with screws and the screw plate, trim the axle just shy of the width of the pant. Insert the gear leg into the attach bracket and use it to locate the correct position for the axle support and glue it in this position. Make sure the axle is bottomed in the attach bracket.

This concludes the wheel pant assembly. If any filler is required, Elmer's Wood Filler is a good choice.

TAIL CONE ASSEMBLY

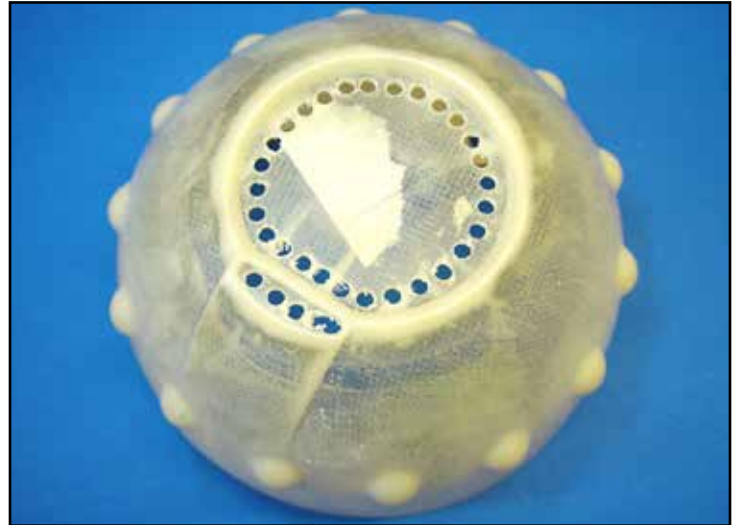
- 1 The tail cone halves are prepared in the same manner as the wheel pant shells. Use the trimming tool to remove extra material.
- 2 Install the Tail Cone Joiner (TCJ) with a liberal bead of glue along the inside edge of one of the tail cone shells.
- 3 Install the Tail Cone Joiner half way into this shell and then let it cure.
- 4 Apply a liberal bead of glue along the entire exposed part of TCJ and install the remaining tail cone shell. Once again use masking tape to secure it until it cures.
- 5 Remove the material from the front by trimming and then sanding on a flat piece of sandpaper.
- 6 With a small flat sanding pad, sand the inside openings for the rudder control horn and the elevator connector until the inset becomes thin and then tear or trim out the material.



Tail cone halves have been trimmed and assembled with TCJ. Rudder horn opening and elevator joiner openings have been cleared of material.

Cowl Assembly

- 1 The cowl is already trimmed to the correct length but needs to be trued up. Place the cowl on a sheet of 220 grit sandpaper on a flat surface and sand it until the aft edge is even all the way around.
- 2 Before proceeding, wipe the cowl down with denatured alcohol to remove any contaminants from the lay up.
- 3 Use a 1/8" drill bit to drill a ring of holes closely spaced around the areas to be opened. Then nip out the bridges between holes.
- 4 Use a Dremel tool with a 1/2" sanding drum to smooth out the opening. If you don't have a Dremel a short length of 1-1/2" PVC pipe with sandpaper wrapped around it works great.
- 5 Prepare the cowl ring by installing the balsa rings at the 1/4" holes.
- 6 Install magnets into the cowl ring to complement (attract) the magnets installed in the firewall. Test fit this on the firewall and mark the cowl ring top for reference.
- 7 Place the cowl temporarily on the cowl ring and then place this assembly on the model. Adjust the cowl so the oil cooler scoop is at the exact bottom and then mark an alignment line on the cowl and the cowl ring with a felt tip pen.
- 8 Butter the entire inside edge of the cowl with a liberal bead of Epoxy. Place the cowl ring into the cowl using the alignment lines for positioning it. Place the assembly on a piece of waxed paper flat on the bench and use a dowel or pencil to push the cowl ring flat against the bench to insure it is at the exact back edge of the cowl and let it cure.



A side cutter pliers can sever the bridges between the holes for removal of the center section. For the oil cooler opening a 1/8" drill but in a Dremel on high speed was used to nibble away the excess using the side of the bit. Care should be taken as this can easily get away from you.



The completed cowl should have the cowl ring flush with the aft edge of the cowl. The balsa ring on front of the firewall should be radiused so as to appear to have a small gap between the cowl and the fuselage.

Motor Mount Assembly

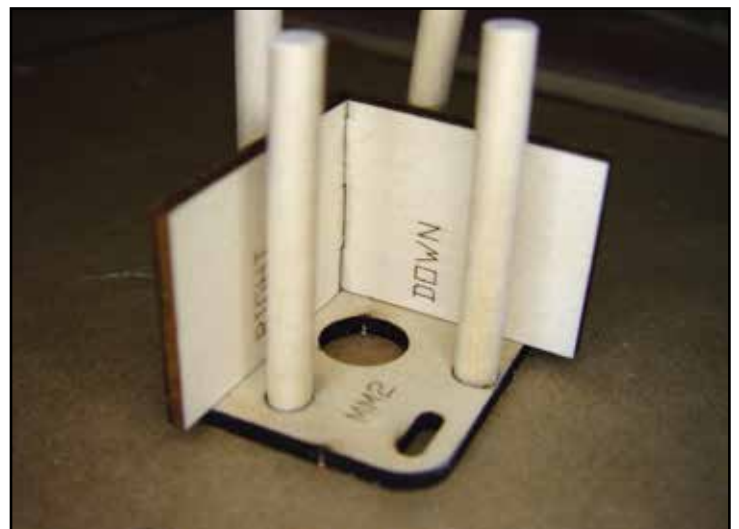
The Top Notch motor mount is fully adjustable and is supplied with an offset jig to set the thrust offsets correctly. The motor mount backplate has horizontal sliding holes in it and the firewall has vertical sliding holes to allow for adjustment to center the prop in the cowl opening.

- 1 Assemble the motor Mount offset jig from two MM-Offset parts.
- 2 Install four ¼" dowels into the motor mount backplate MM2, do not glue the.
- 3 Place the offset gauge in position on top of MM2. Make sure to orient it correctly for DOWN and RIGHT thrust.
- 4 Slide the motor mount plate (MM1) down the dowels until it is resting on the offset jig. Tack glue the four dowels to MM1 with thin CA.
- 5 Remove MM2 from the assembly and remove the offset jig.
- 6 Determine the distance that you need for the motor mount to stand off from the firewall and adjust MM2. Make sure all four dowels protrude the same distance through MM2 and glue the dowels to MM2.
- 7 Trim off and excess dowel from MM1 and MM2 and sand these surfaces flat before mounting the motor.
- 8 Locate the motor mount nut plate (MNP) and install four #4040 blind nuts.
- 9 Place MNP behind the firewall and install the mount with four #4-40 x 3/8" socket head bolts and washers.
- 10 Install the motor onto the motor mount with four #4-40 x ½" socket head bolts and Ny-Lock nuts.
- 11 Adjust the position of the motor and then tighten the four screws in the firewall.

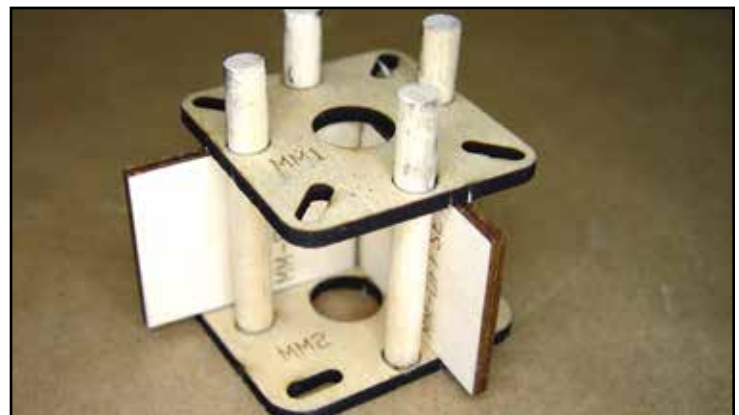
RIGHT: The motor mount (MM1) has been pushed into contact with the offset jig setting the correct thrust offset. After gluing the dowels to MM1, determine the distance between MM1 and MM2 for the motor you are using and then glue the dowels to MM2. Trim all dowels and sand the surfaces smooth.



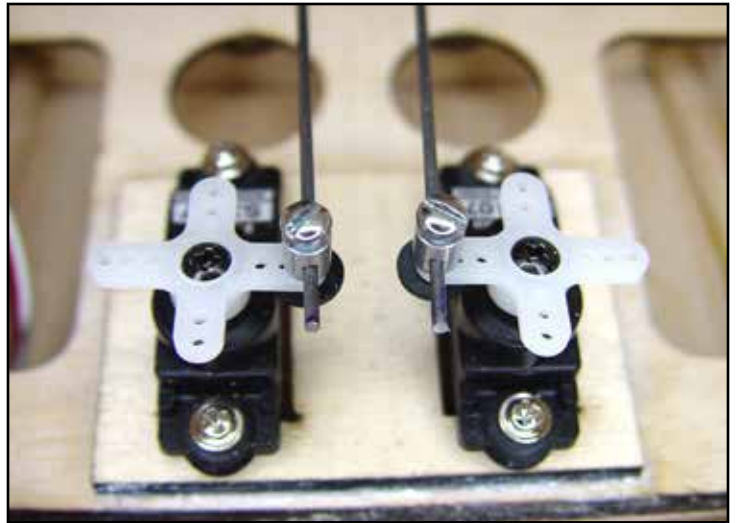
The assembled motor mount offset jig. Be sure to orient it correctly when assembling your motor mount.



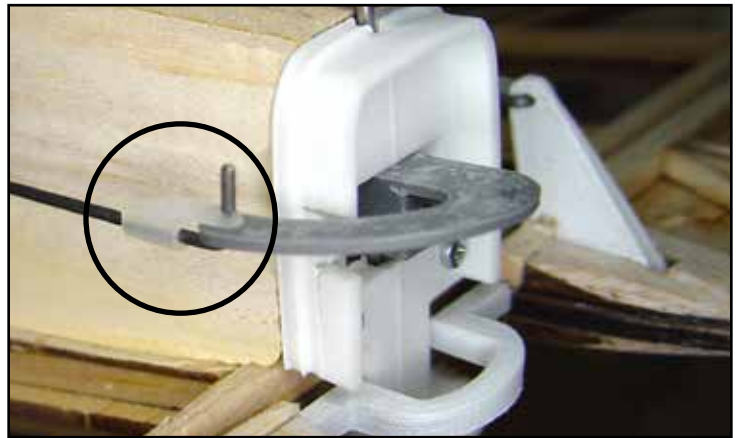
Install the jig as shown in the photo to get the correct offset thrust setting into the motor mount.



Linkage installation is as simple as it gets. The rudder pushrod is a single piece of straight 3/64" music wire with a 1/8" 90° bend at the control surface end. The servo end is a straight cut off. The rudder pushrod can be straight through while the elevator pushrod will need a dogleg bend at the exit hole. Install the exit guides after covering.



Servo installation using Du-Bro EZ Connectors at the servo end.



Above, circled is the Du-Bro EZ Link retainer installed. This photo also shows many of the 3D printed parts that make this end of the kit much easier to build.

C195 V2 Parts Locator

Part #	Qty.	Sheet #	Material	Size
A	4	12	BALSA	1/16 X 6 X 36
A1	2	30	BASSWOOD	3/32 X 2 X 24
A2	2	30	BASSWOOD	3/32 X 2 X 24
A3	2	30	BASSWOOD	3/32 X 2 X 24
A4	2	30	BASSWOOD	3/32 X 2 X 24
A5	2	30	BASSWOOD	3/32 X 2 X 24
AB	2	14	BALSA	1/16 X 6 X 36
ACP	1	4	AC PLY	1/32 X 2 X 10
ALE	2	10	BALSA	1/8 X 3 X 36
BCS-A	2	15	BALSA	1/16 X 4 X 36
BCS-B	2	15	BALSA	1/16 X 4 X 36
BD	1	11	LPLY	1/8 X 5 X 15
BFC	2	24	BALSA	3/16 X 3 X 36
BM	1	2	AC PLY	1/16 X 6 X 10
BS	2	13	BALSA	1/16 X 4 X 36
BTES	1	19	BALSA	1/32 X 4 X 36
BTES	1	20	BALSA	1/32 X 4 X 36
C	4	12	BALSA	1/16 X 6 X 36
CM	1	2	AC PLY	1/16 X 6 X 10
CR	1	2	AC PLY	1/16 X 6 X 10
CR-A	2	8	BALSA	1/8 X 3 X 36
D	4	12	BALSA	1/16 X 6 X 36
E	4	12	BALSA	1/16 X 6 X 36
EC	2	12	BALSA	1/16 X 6 X 36
ELE	4	9	BALSA	1/8 X 3 X 36
ELE	4	8	BALSA	1/8 X 3 X 36
ET	4	10	BALSA	1/8 X 3 X 36
F	4	12	BALSA	1/16 X 6 X 36
F1	1	7	AC PLY	1/8 X 6 X 7
F10	1	1	AC PLY	1/16 X 6 X 18
F12	1	27	AC PLY	3/32 X 5 X 21
F13	1	9	BALSA	1/8 X 3 X 36
F13	4	25	BALSA	3/16 X 3 X 36
F1-A	1	24	BALSA	3/16 X 6 X 6
F20	1	28	BALSA	3/32 X 3 X 36
F2-A	1	27	AC PLY	3/32 X 5 X 21

Part #	Qty.	Sheet #	Material	Size
F3	1	1	AC PLY	1/16 X 6 X 18
F3-C	4	1	AC PLY	1/16 X 6 X 18
F5	1	1	AC PLY	1/16 X 6 X 18
F6	1	1	AC PLY	1/16 X 6 X 18
F7	1	1	AC PLY	1/16 X 6 X 18
F8	1	1	AC PLY	1/16 X 6 X 18
F9	1	1	AC PLY	1/16 X 6 X 18
FB	2	9	BALSA	1/8 X 3 X 36
FB	1	9	BALSA	1/8 X 3 X 36
FBS	2	26	BALSA	1/16 X 6 X 36
FCB	2	3	BALSA	1/4 X 3 X 7
FD	1	22	AC PLY	LOOSE
FD	1	23	AC PLY	LOOSE
FOS	2	3	BALSA	1/4 X 3 X 7
FOSS	1	12	BALSA	1/16 X 6 X 36
FS	2	16	BALSA	1/16 X 6 X 36
FS	2	21	BALSA	1/16 X 6 X 36
FSB	1	25	BALSA	3/16 X 3 X 36
FTC	2	9	BALSA	1/8 X 3 X 36
FTS	2	26	BALSA	1/16 X 6 X 36
FTS	2	13	BALSA	1/16 X 4 X 36
FW	1	6	3-PLY	1/8 X 6 X 6
G	4	12	BALSA	1/16 X 6 X 36
GA	1	27	AC PLY	3/32 X 5 X 21
GB	2	6	3-PLY	1/8 X 6 X 6
GC	1	9	BALSA	1/8 X 3 X 36
GD	1	27	AC PLY	3/32 X 5 X 21
GF	4	3	BALSA	1/4 X 3 X 7
GMB	3	27	AC PLY	3/32 X 5 X 21
GP	2	7	AC PLY	1/8 X 6 X 7
H	4	12	BALSA	1/16 X 6 X 36
H10	2	27	AC PLY	3/32 X 5 X 21
HA-2	2	11	LPLY	1/8 X 5 X 15
HA-3	2	11	LPLY	1/8 X 5 X 15
HG	4	3	BALSA	1/4 X 3 X 7
HUB	1	5	LPLY	1/4 X 3 X 13
J	4	25	BALSA	3/16 X 3 X 36
J1	4	4	AC PLY	1/32 X 2 X 10

Part #	Qty.	Sheet #	Material	Size
J2	4	29	BALSA	3/32 X 3 X 36
LE	2	25	BALSA	3/16 X 3 X 36
MM1	1	7	AC PLY	1/8 X 6 X 7
MM2	1	7	AC PLY	1/8 X 6 X 7
MM-OFFSET	2	11	LPLY	1/8 X 5 X 15
MNP	1	11	LPLY	1/8 X 5 X 15
PB	4	5	LPLY	1/4 X 3 X 13
PIN TABS	24	8	BALSA	1/8 X 3 X 36
R1	2	10	BALSA	1/8 X 3 X 36
R1	2	28	BALSA	3/32 X 3 X 36
R2	2	12	BALSA	1/16 X 6 X 36
R3	2	12	BALSA	1/16 X 6 X 36
R4	2	12	BALSA	1/16 X 6 X 36
R5	2	12	BALSA	1/16 X 6 X 36
RC	1	12	BALSA	1/16 X 6 X 36
RIM	2	22	AC PLY	LOOSE
RLE	2	10	BALSA	1/8 X 3 X 36
RLE	2	25	BALSA	3/16 X 3 X 36
RPC	2	4	AC PLY	1/32 X 2 X 10
RRWS	2	14	BALSA	1/16 X 6 X 36
RT1	4	25	BALSA	3/16 X 3 X 36
RT1	2	25	BALSA	3/16 X 3 X 36
RT2	2	25	BALSA	3/16 X 3 X 36
S1	4	29	BALSA	3/32 X 3 X 36
S2	4	29	BALSA	3/32 X 3 X 36
S3	4	12	BALSA	1/16 X 6 X 36
S4	4	12	BALSA	1/16 X 6 X 36
S5	4	29	BALSA	3/32 X 3 X 36
SC	1	12	BALSA	1/16 X 6 X 36
SERVO TRAY	1	2	AC PLY	1/16 X 6 X 10
SLE	4	9	BALSA	1/8 X 3 X 36
SM	2	11	LPLY	1/8 X 5 X 15
SSD	2	8	BALSA	1/8 X 3 X 36
STS	2	18	BALSA	1/32 X 4 X 36
TCJ	1	30	BASSWOOD	3/16 X 3 X 2
TCS-A	2	15	BALSA	1/16 X 4 X 36
TCS-B	2	15	BALSA	1/16 X 4 X 36
TES	2	10	BALSA	1/8 X 3 X 36

Part #	Qty.	Sheet #	Material	Size
TES	2	8	BALSA	1/8 X 3 X 36
TFS	1	9	BALSA	1/8 X 3 X 36
TS	1	13	BALSA	1/16 X 4 X 36
TS	1	21	BALSA	1/16 X 6 X 36
V1	2	3	BALSA	1/4 X 3 X 7
V2	2	12	BALSA	1/16 X 6 X 36
V3	2	12	BALSA	1/16 X 6 X 36
V4	2	12	BALSA	1/16 X 6 X 36
V5	2	10	BALSA	1/8 X 3 X 36
VC	2	12	BALSA	1/16 X 6 X 36
VLE	2	25	BALSA	3/16 X 3 X 36
VTE	2	25	BALSA	3/16 X 3 X 36
W1	1	28	BALSA	3/32 X 3 X 36
W1	1	29	BALSA	3/32 X 3 X 36
W2	2	27	AC PLY	3/32 X 5 X 21
W3	1	28	BALSA	3/32 X 3 X 36
W3	1	29	BALSA	3/32 X 3 X 36
W4	1	28	BALSA	3/32 X 3 X 36
W4	1	29	BALSA	3/32 X 3 X 36
W5	1	28	BALSA	3/32 X 3 X 36
W5	1	29	BALSA	3/32 X 3 X 36
W6	1	28	BALSA	3/32 X 3 X 36
W6	1	29	BALSA	3/32 X 3 X 36
W7	1	28	BALSA	3/32 X 3 X 36
W7	1	29	BALSA	3/32 X 3 X 36
W8	1	28	BALSA	3/32 X 3 X 36
W8	1	29	BALSA	3/32 X 3 X 36
W9	1	28	BALSA	3/32 X 3 X 36
W9	1	29	BALSA	3/32 X 3 X 36
WF	2	9	BALSA	1/8 X 3 X 36
WF	2	8	BALSA	1/8 X 3 X 36
WMP	1	27	AC PLY	3/32 X 5 X 21
WNP	2	5	LPLY	1/4 X 3 X 13
WPJ	2	5	LPLY	1/4 X 3 X 13
WSB	1	19	BALSA	1/32 X 4 X 36
WSB	1	20	BALSA	1/32 X 4 X 36
WST	1	17	BALSA	1/32 X 4 X 36
WST	1	18	BALSA	1/32 X 4 X 36

Part #	Qty.	Sheet #	Material	Size
WSW	2	30	BASSWOOD	3/32 X 2 X 24
WT1	2	14	BALSA	1/16 X 6 X 36
WT2	2	14	BALSA	1/16 X 6 X 36
WT2	2	14	BALSA	1/16 X 6 X 36
WT3	2	14	BALSA	1/16 X 6 X 36
WT4	2	8	BALSA	1/8 X 3 X 36
WTB	2	3	BALSA	1/4 X 3 X 7
WTE	2	13	BALSA	1/16 X 4 X 36

Cut Sheet Inventory

Sheet #	Material	Size
1	AC PLY	1/16 X 6 X 18
2	AC PLY	1/16 X 6 X 10
3	BALSA	1/4 X 3 X 7
4	AC PLY	1/32 X 2 X 10
5	LPLY	1/4 X 3 X 13
6	3-PLY	1/8 X 6 X 6
7	AC PLY	1/8 X 6 X 7
8	BALSA	1/8 X 3 X 36
9	BALSA	1/8 X 3 X 36
10	BALSA	1/8 X 3 X 36
11	LPLY	1/8 X 5 X 15
12	BALSA	1/16 X 6 X 36
13	BALSA	1/16 X 4 X 36
14	BALSA	1/16 X 6 X 36
15	BALSA	1/16 X 4 X 36
16	BALSA	1/16 X 6 X 36
17	BALSA	1/32 X 4 X 36
18	BALSA	1/32 X 4 X 36
19	BALSA	1/32 X 4 X 36
20	BALSA	1/32 X 4 X 36
21	BALSA	1/16 X 6 X 36
22	AC PLY	LOOSE
23	AC PLY	LOOSE
24	BALSA	3/16 X 3 X 36
25	BALSA	3/16 X 3 X 36
26	BALSA	1/16 X 6 X 36
27	AC PLY	3/32 X 5 X 21
28	BALSA	3/32 X 3 X 36
29	BALSA	3/32 X 3 X 36
30	BASSWOOD	3/32 X 2 X 24
31	BASSWOOD	3/16 X 3 X 2

Hardware Inventory

Chk	Item	Qty.	Size	Description	Usage
	1/16" x 12" M.W.	1			
	1/8 x 1/4 STICKS	2			
	3/16 x 3/16 x 36 STICKS	6			
	Antenna mast	1	Printed		Hatch antenna/handle
	Assembly Manual	1			
	Bearing	1	Printed	ABS	Tail Group
	Blind Nut	2	#6-32	Plated	Wing Mounting Plate
	Bolt	4	#2-56 x 1/2"	Plated	Wheel Pant Bracket
	Bolt	2	#4-40 x 1/2"	Plated	F3 Assembly
	Bolt	4	#4-40 x 3/8"	Plated	Motor mount
	Bolt	4	#4-40 x 1/2"	Plated	Motor Mount
	Bolt	2	#6-32 x 2"	Nylon	Wing Mount
	Bracket	2		Printed	Wheel Pant Attachment
	CA Hinges	5	Small		
	Cable Tube	2	8"	Cardboard	Wing
	Dowel	4	1/4" x 2"	Hardwood	Motor Mount
	Dowel	1	1/8" x 6"	Hardwood	Wing Dowels
	Exit Guides	2	Printed	ABS	Control Openings
	EZ Connectors	4			
	EZ Links	4			
	Fiberglass Cowl	1			
	Gauge	1			
	Hatch Cover	1		Styrene	Hatch
	Horn, Aileron	2	1/16"	Polycarbonate	Aileron
	Horn, Rudder	1	Printed	ABS	Tail Group
	Joiner	1		Printed	Elevator
	M Wire	2	.047" x 36"		
	M. Wire	1	1/16" x 2.5"		Hatch antenna,handle
	M. Wire	1	3.25" x 1/16"		Rudder post
	Magnets	8	1/8" x 1/4"	Plated	Hatch retention & Cowl Mount
	Nail	2	8d		Pinning System
	Nut, Nylock	4	#2-56	Plated	Wheel Pant Bracket
	Nut, Nylock	2	Ny-Lock	Plated	F3 Assembly
	Nut, Nylock	4	#4	Plated	Motor Mount
	Rolled Plans	1			
	Screw	6	#1 x 1/4"	Sheet Metal	Wheel Pant Bracket
	Screw	2	#1 x 3/16"	Plated	Spinner
	Screw Plate	2		Printed	Wheel Pant Attachment
	Screws	2	#1 x 3/8"	Sheet Metal	Rudder Bearing Blocck
	Set Formed Mains	1	1/8" x 10"	Music Wire	Landing Gear
	Set Formed Windows	1	Formed	PETG	
	Spinner	1	Scale	Printed	
	Stick	4	1/8" x 1/4" x 36"	Spruce	Wing Spar
	TC Shells	2		VacFormed	Tail Cone
	TCJ	1	3/16" Basswood	Lasered	Tail Cone Joiner
	Trim Tool	1	3/16" Basswood	Lasered	Assembly Tol
	TW	1	3/4"	Lasered	Tail Wheel
	TWH	2		Printed	Tail Wheel Hubs
	TWS	1		Printed	Tail Wheel Strut
	Washer	2	#4	Plated	F3 Assembly
	Washer	4	#4	Plated	Motor Mount
	Wheel	2	2.5"	Suoer Kite	Du-Bro 250SL
	Wheel Pant	1	Styrene	Plastic	Right Inboard
	Wheel Pant	1	Styrene	Plastic	Right Outboard
	Wheel Pant	1	Styrene	Plastic	Left Inboard
	Wheel Pant	1	Styrene	Plastic	Left Outboard
	Wheel Pant Joiner	2	1/4"	Lply	Wheel Pants
	Windshield	1	Cut	Mylar	

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