

Step 10. To prepare to mount the tail wire

To prepare to mount the tail wire strut for the tail wheel, match the wire strut to the plans and make a mark on the fuselage where the strut will exit the fuselage. It is best to position the wire strut so the bottom surface of the strut rests slightly above the floor of the fuselage. It is important to make this slot taller than necessary to allow the wire to flex or deflect when landing. A wooden block needs to be prepared to mount the wire, using 1/8" plywood (not included) cut a 1/2" wide strip 2" long. Measure 3/8" from one end and mark and drill a 1/8" hole straight through. Mark a line from the hole to the end furthest from the hole. Cut a 1/8" slot along this line to receive the wire strut, remember to test fit the strut to make sure the wire fits flush into the plywood block. Test fit the length of the block with the wire strut into the fuselage, some sanding or grinding may be necessary to get a good fit. Trim the length of the wooden block if necessary. Using a sanding block, sand the bottom of the block into a "V" to match the bottom surface of the fuselage. Once satisfied, permanently glue the wooden block in place using Epoxy capturing the wire tail strut.

Step 11.

Compare, measure and mark the final position of the F14 former, corresponding to (F8) on the full size plans, on the outside of the fuselage. Remember to do a final wipe down with acetone on the internal fiberglass section before gluing, to clean and get the best bonding possible. Following the chosen gluing method, permanently bond the F14 former in place.

Step 12.

Although not detailed on the full size plans, the rudder pushrod needs to be supported along the tail section of the fuselage. Mark 2-3 additional locations similar to the brass housing formers for the pushrod on the full size plan matching the height of the rudder pushrod. Using 1/8" plywood (not included) cut out these formers to a height of 1/4"-1/2" above the top of the pushrod from the plan. These need not be the full width of the inside of the fuselage but can be 1 1/4" wide using a triangular reinforcement to add stability when bonded in place. Mark and drill the hole for the rudder pushrod. Stop here and decide the location of the rudder servo. Once this is finalized, permanently bond the pushrod formers in place. Fillet one side of the former as they are glued into position.

Step 13.

Carefully feed the brass housing through the F14 former, up and out through the opening in the top of the elevated tail section. Do not bond the brass housing to F14 at this time. Similarly, feed the rudder pushrod through the support formers and out the top.

Step 14.

Before the end of the flexible cable can be used, the last 5/8-3/4" of the cable needs to be "tinned". Silver Solder is highly recommended but Rosin Core Solder can be substituted, heat the end of the cable with a soldering iron until the solder takes to the cable. Continue until an even silver coating has been applied. If the end will no longer fit into the coupler, gently file along the length of the end until it can be fully inserted into the coupler.

Step 15.

With both the brass housing and the pushrod extended through the top opening in the elevated tail, test fit the tail components one last time. Assemble the tail gearbox with the coupler and attach the prepared end of the cable. Slide the end of the brass housing into the modified F15 former and insert the pushrod housing. Make the connection for the end of the rudder pushrod to the ball on the tail pitch lever. Inspect and verify that the end of the brass housing has a gap of 3/16-1/4" before contacting the coupler, measure and write down the exact position, noting the amount if any, that the brass housing is protruding past the F15 former. Measure and write down the same information for the rudder pushrod housing, remember that the final position must allow complete end to end travel of the pitch plate assembly.

Step 16.

Depending on the type of tail gearbox used, one may have to modify the order of the following instructions before