

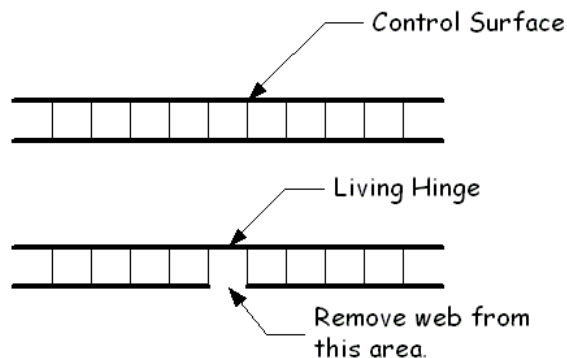
Control Cable Routing

Gather:

- Fuselage
- Coroplast tail pieces
- Push rods and connector hardware
- X-Acto Knife with No. 11 Blade and No. 26 long straight knife.
- Goop Glue
- Ball point pen
- Solder gun (optional)

Procedure:

- Locate the pushrod cables and the solder link clevises. Solder a clevis to one end of each pushrod.
- You now need to hinge your fin/rudder and stabilizer/elevator. With Coroplast tail pieces, hinging is very simple. You slit a cell the length of the control surface on one side only, bend it back and trim the flash off, and you have a living hinge! Hinge points are identified on the plan sheet on the back of the instructions.



- After you have hinged the control surfaces, dry assemble the tail again and insert it in the slots at the end of the tail boom.

- Gather the control horns, threaded adapters and threaded clevises. Assemble the clevis to the threaded adapter and control horn. Thread the clevis down the adapter about half way. Put the clevis into the hole furthest away from the base of the control horn.



- Lay the control cable on one side of the fuselage. Line the solder link up with servo arm. Notch the foam deep enough to hook the solder link to the servo arm using either an X-acto knife or soldering gun. Insert the cable into the slice, making sure that the cable housing does not prevent the servo arm through its full range of motion.
- Align the opposite end of the cable with a control surface (your choice) so that it makes the least bend possible. Mark this routing by tracing it with a ball point pen.
- Slot the fuselage along the line, and press the pushrod down in the slot. You may need to gouge out some foam to prevent distorting the fuselage if you use a knife. A soldering gun generally makes a slot just about the right size.
- Get the control horn/clevis/threaded rod assembly. Line the holes in the control horn up with the center of the hinge line and line the threaded adapter up with the control cable. Mark the holes in the control horn onto the control surface. Drill through the control surface and mount the control horn. Be careful not to over tighten the screws and crush the Coroplast.
- Align the threaded adapter and the cable again. Mark the cable even with the thread/barrel junction on the adapter. Pull the cable free of the fuselage. Cut the cable and housing at the marked point. Remove the housing from the cable and trim it back $\frac{1}{2}$ " to $\frac{3}{4}$ ".
- Replace the housing on the cable. Remove the threaded adapter from the clevis and solder it to the cable.
- Reseat the cable in the fuselage. Make sure the servo arm can swing through its entire range of motion clear of the cable housing and the sides of the servo cavity. Seal the cable slice/slot with a thin, top layer of Goop or Pro-Bond.
- Repeat the above steps for the opposite control surface.
- Secure the tail end of the pushrods with Goop or fiber tape to prevent flexure. Depending on your accuracy, you may have to fabricate a support from the scrap EPP block to support overly long cable runs.
- You can now seal up the tops of the servo wells. Cut a piece of the corresponding plug just thick enough to close up the hole without touching the servo arm or clevis. Goop or Pro-Bond in place. Repeat for the opposite side.

Continue on to shaping and taping the fuselage.