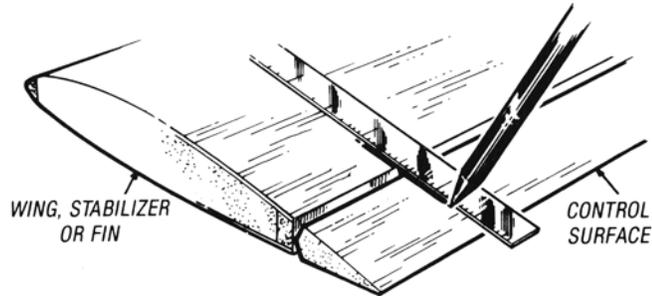


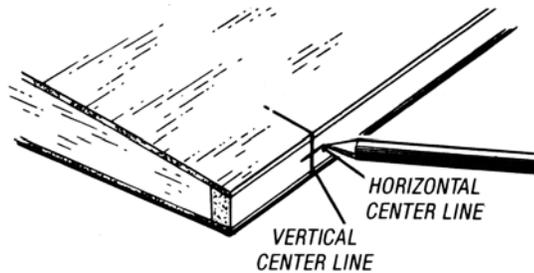
robart HOW-TO Series Hinge Point Hinges

1. Place the control surface (aileron, elevator or rudder) against the wing, stabilizer or fin as appropriate. Draw lines across the rear part of the surface.

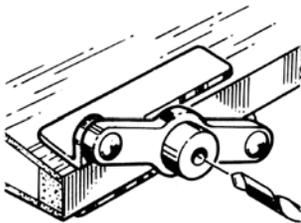
NOTE: For Hinge Points only a single center line is necessary.



2. Extend the lines down the trailing edge spar as illustrated. If a Hinge Point Drill Jig is not available it will be necessary to draw a horizontal center line also.



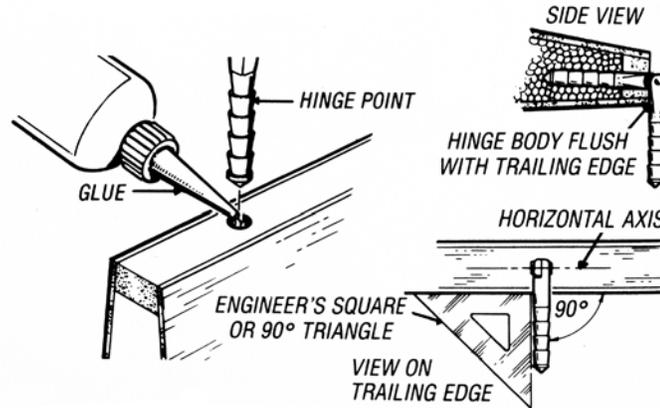
3. Center the drill jig over the vertical line and drill the appropriate size hole to suit the hinge point.



#305 & #306 1/2A Hinge Point 5/64" dia. hole
#307 & #308 Steel Pin Hinge Point 1/8" dia. hole
#309 & #310 Super Hinge Point 3/16" dia. hole
#319 Drill Jig

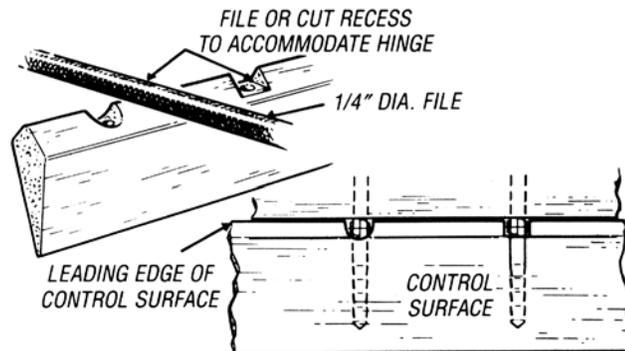
4. Inject glue into the hole before inserting the Hinge Point. Take care to insert the Hinge Point correctly. . . the axis of the pivot must lie along the horizontal center line of the wing etc. Refer to the illustration. Use 30 min. epoxy, white (aliphatic resin), or ZAP Hinge Glue and be sure to wipe away excess glue after inserting the hinge. **Warning do not use CA glue to when installing Robart Hinge Points this will make the hinge brittle.**

Tip: use a small drop of light oil or a small dab of Vaseline on the hinge line to prevent glue binding up the hinge.



5. Drill correct size hole in the leading edge of the control surface for the Hinge Point using the drill jig as in step 3. Using a file or knife, make a recess in the leading edge of the control surface to accommodate the hinge. Refer to illustration. Inject glue into holes, wipe off excess and attach the control surface to the fixed surface.

NOTE: If the Hinge Point is too long, snip off barbed end to fit. Congratulations! You have installed the perfect hinge.

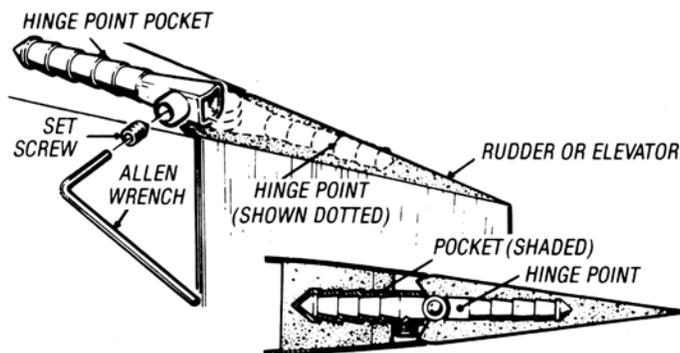


6. For removable control surfaces install Robart Hinge Point Pockets:

Hinge Point Pockets may be installed in the wing or aileron only for instance, or in both the wing and aileron according to preference. The latter allows broken hinges to be removed completely without further damage to the model.

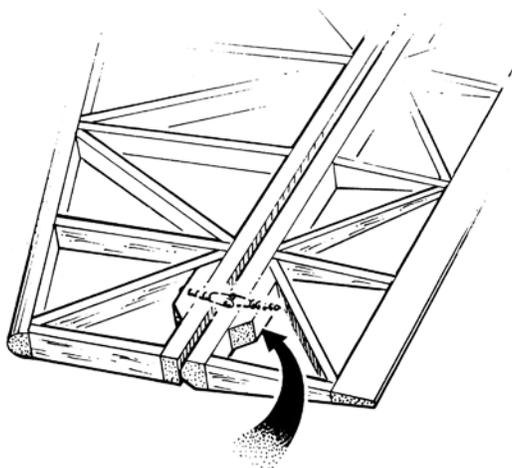
- a. Insert the Hinge Point into the pocket and tighten the set screw with the allen wrench provided.
- b. Mark and drill the surfaces as detailed earlier in steps 1 through 4.
- c. It is strongly advised that soap or modeling clay be squeezed into the recess on the top of the set screw to keep glue out of the threads.
- d. Inject glue into the drilled hole or slot then insert the hinge and pocket assembly, wiping away excess glue.
- e. Allow the glue to set then loosen the set screw and remove the control surface if required.

NOTE: It is permissible to shorten the pockets where there is insufficient room to accommodate the full length. Cut off the pointed end then plug the opening to prevent entry of glue.



#315 & #316 Hinge Point Pocket 5/32" dia. hole
#317 & #318 Super Hinge Point Pocket 1/4" dia. hole
#320 1/4" Drill Jig Bushing

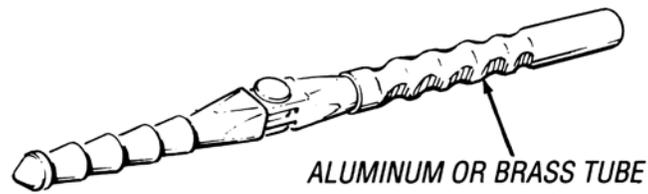
For built-up surfaces, support the Hinge Points with a backup block. Make block with scrap stock of the same size and glue to inside surfaces. Allow a minimum of 2 Hinge Point barbs to be glued into surfaces.



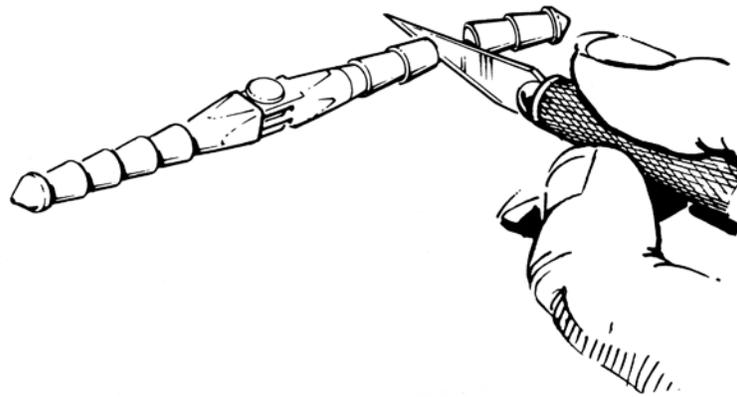
To extend the length of Hinge Points for larger control surfaces, slip a piece of aluminum or brass tubing over the Hinge Point end and carefully "crimp" tubing around the Hinge Point Barbs.

Roughen the tubing O.D. with coarse sand paper. Glue extension tube with the Hinge Point into the surfaces using 30 min. epoxy.

(For 1/8" Hinge Point use 5/32" O.D. tubing,
For 3/16" Super Hinge Point use 7/32" O.D. tubing)



Shorten Hinge Points to fit smaller control surfaces by cutting off Hinge Point barbs with an X-ACTO knife or side cutters. Leave a minimum of 2 barbs on each side of the Hinge Point.



Typical Installations

Hinge Points simplify the tricky hinging geometry of many scale type installations. Installations where the Hinge Point is visible - such as the Slotted Flap or Junkers Flap, the Hinge Points can be faired with balsa or plastic.

