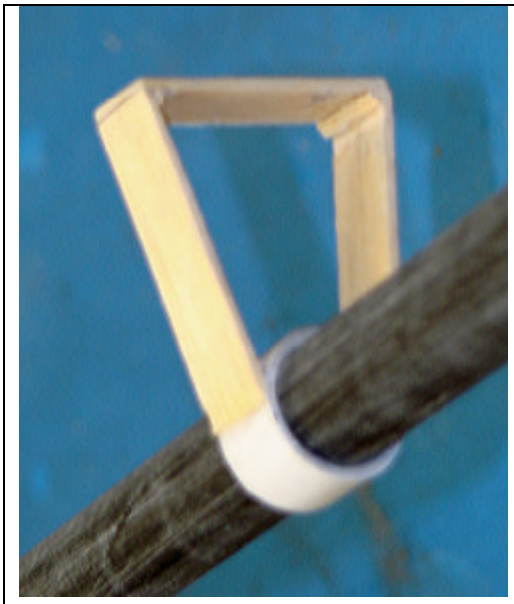
The Composites Store

Build a V-Mount for your Horizontal Stabilizer



V-Mounts are used on many high performance gliders. They also can be easily broken in a crash or hard landing.

You can build a replacement mount quickly and easily.

Start by building a pattern from balsa and paper. Make the pattern wider than the final part. The edges will be rough so plan on sanding off the edges as you take the part down to the final shape.

The tube around the tail boom is made of paper and contact cement wrapped around to a 1/16" thickness. The struts are 1/2X1/16 balsa with a gussets added in the corners.

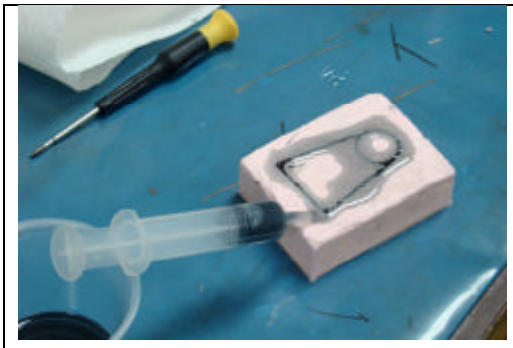
I used a rubber mold on this part because it is quick and easy.

Spray the pattern with primer and fine sand to fill the wood grain.

Build a balsa box ½" bigger than the pattern on all sides.

Glue the pattern in the bottom so it will not move as the liquid rubber is poured over it.

Fill the box with the liquid rubber at least ¼" higher than the pattern, following the directions provided with the kit.



The next day remove the box and the pattern from the cured rubber mold.

Cut 12 1" lengths of 12k carbon tow and start by packing 4 of them into the mold across the center of the figure"8".

Pack 12k tow in a continuous length around the outside slot in the mold. Continue going around until the mold is about 1/3 full of carbon tow. Then make one figure "8" with the tow crossing the center of the mold. Then pack another 4 short length across the center part of the mold. Now continue packing carbon tow around the perimeter. Repeat the figure"8" and short lengths when you get 2/3 full continue till the mold is packed full of carbon tow.

Inject low viscosity epoxy like Pro Set into the bottom of the mold around the carbon tow. Use an Exacto knife to probe the carbon tow in the mold until all the air in the tow has bubbled to the top and out of the mold.

The next day remove the mount from the rubber mold and sand the edges to the final shape.

Add the Stabilizer platform and the new mount is almost ready to go fly.