

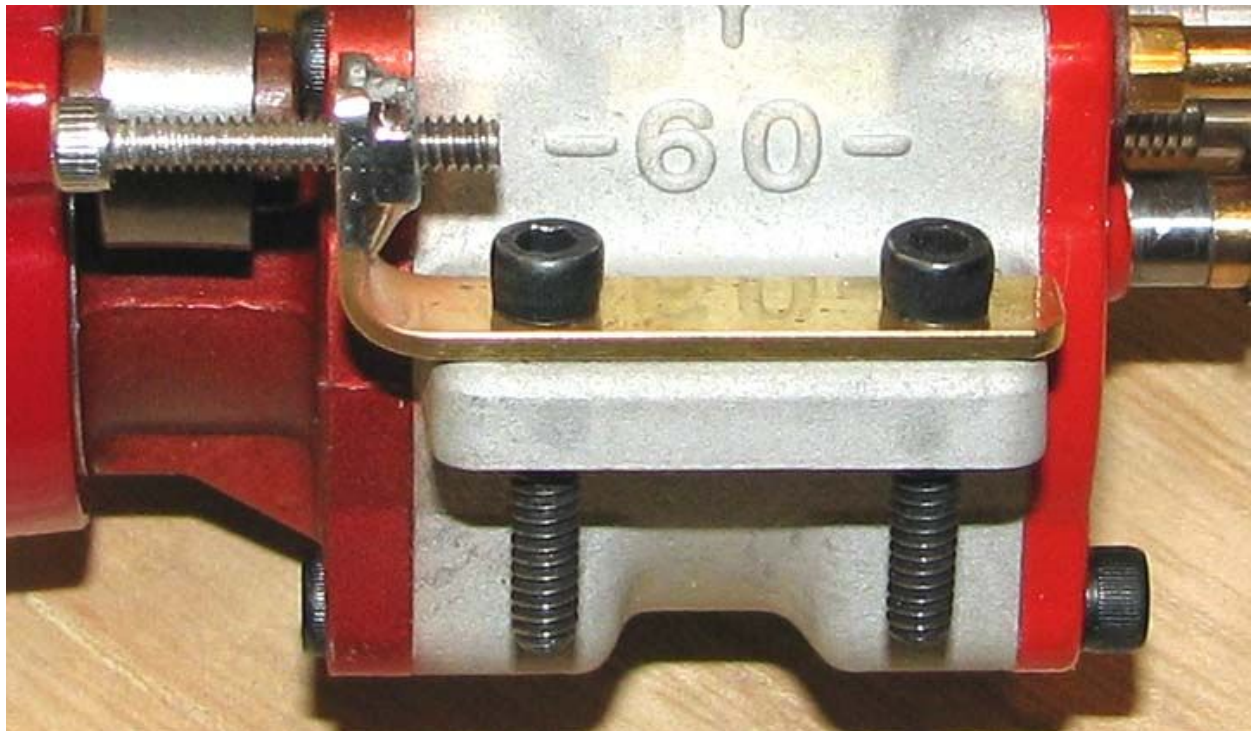
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Date: 3/21/2009 4:34:53 PM  
Subject: 60 Sailplane Cowl Retention Bracket Design

### *Comet Sailplane Project*

Today I built the first prototype cowl retention bracket as shown below.



In this close up, you can see that the bracket is made from .064" X 1/4" brass strap with a steel 4-40 nut soldered to the rear face of the bracket.



However, this prototype has two problems with it. (1) the top of engine's mounting lugs are sloped causing the bracket to be canted, which only a cosmetic issue. (2) The real problem is that the bracket must go in the bottom of the engine's mounting lug between the bottom face of the mounting lug and the top face of the

motor mount. In this way, I can mount the bracket on the jig fixture allowing me to build the cowls interface attachments. And oh by the way, this eliminates the cant in the bracket! :O)

The width of the machined bottom face of the engine's mounting lug is  $3/8$ ", but the bracket's brass strap is only  $1/4$ " wide. I found that the .064" brass strap only comes in  $1/4$ " and  $1/2$ " with no  $3/8$ " width. So I bought the  $1/2$ " wide brass strap and my friend Jerry Burk is going to cut the width down to  $3/8$ " on his band saw this evening. Tomorrow I will fabricate the second prototype cowl retention bracket.....Tandy