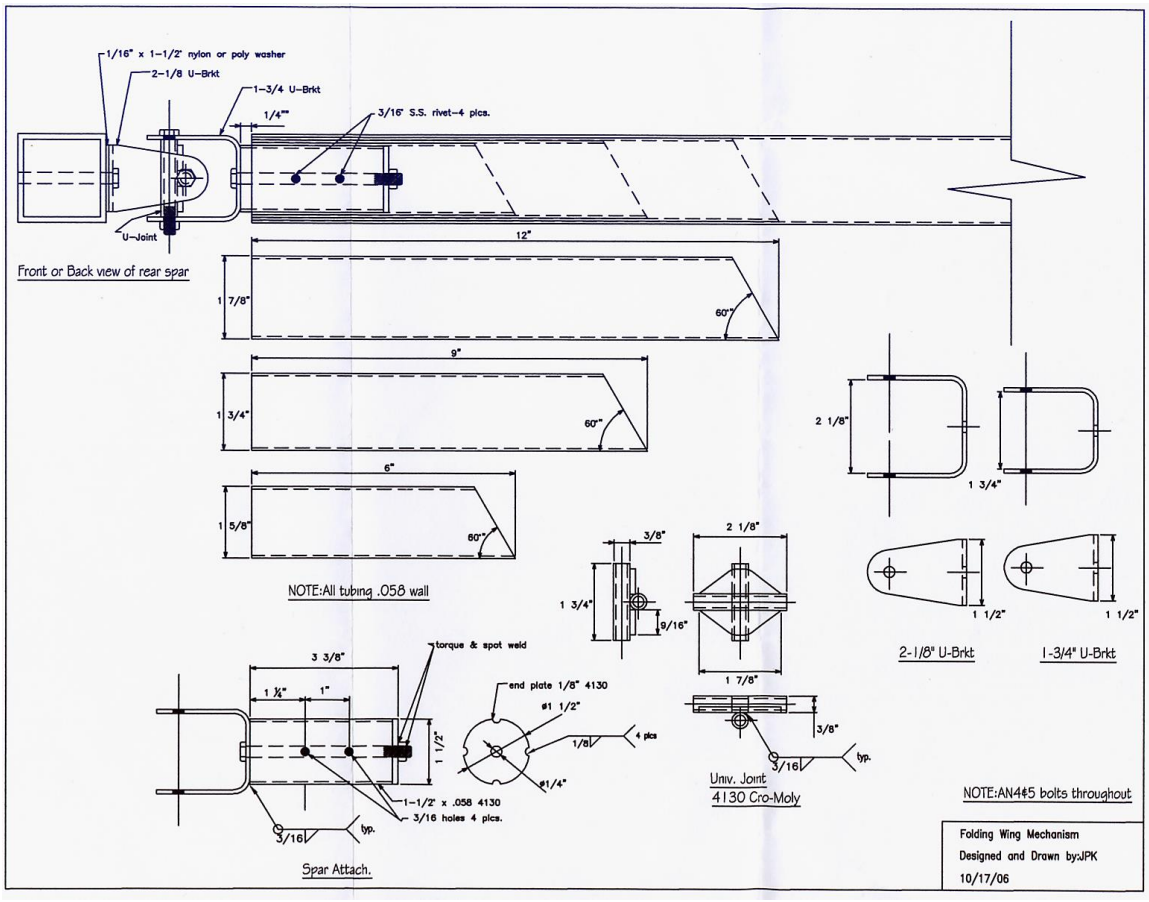
Wing fold Mechanism:

Here are some pictures of a possible wing fold bracket assembly. Here we have moved the upright and diagonal bracing on the hang cage in order to separate the root tube cluster, this simplifies the problem of having rotation and folding motions of the rear spar attachment.

See the attached drawing also (thanks to Jason K.), in the picture you see the 1 ¾" bracket on the root tube and the 2" bracket on the free fold side. You need to review the motion and installation orientation to be sure you get it right if the picture and description leaves any confusion. The wing needs to pivot down 90 degrees before it folds.

Notice that the cross tube bracket is oriented so that each bolt is on the inside of the opposite bracket, this is important because it keeps the bolt shaft trapped on the inside of each opposing bracket and in case of a bracket failure it can't come out of position more than an inch or so.

Figure out the engine interference possibilities by installing your engine mount system before you obligate to the fold mechanism. I haven't built this wing fold system an actually had it working on an airplane so my suggestions should be reviewed with that in mind. Looks like this should work out OK.

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