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Subject: Re: 12Pi drawing clarifications

Posted by [Wayne Parham](#) on Wed, 29 Nov 2006 18:54:16 GMT

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I am having trouble visualizing what dimensions you are saying don't add up. Could you maybe mark up the drawing I sent you and mail it to me? If your comments are shown in red, that would be helpful to identify them. That would make it easier for me to see what you are talking about. The CAD drawing is the one that is most accurate. The trouble with it is that this version of the design has routed panels, and the slot depth makes each panel need to be longer than it would be if assembly was done using butt joints. The drawing that was done by hand may have some errors, although we were able to build a prototype with it successfully. My original design came from a Hornresp model having several segments. I tried different folding patterns from

because everything fit nicely and it allowed me to put the cooling plugs and plates on each side, making them compatible with the LABhorn. The whole package is similar. You are doing the right thing, to draw out a full scale version first. I made the original drawing in half-scale, which was easy to use because all dimensions could be easily doubled as opposed to having some weird conversion factor (like 5.7-to-1 if the drawing is done on an 8.5"x11" paper). But I tended to cut corners when calculating wood thickness, partly because it doesn't matter very much to a horn this size and partly out of indolence. When I made the original drawing, I knew that I would be doing an AutoCAD version soon afterward, which would have perfect dimensions. So there was little need to hand-calculate each dimension perfectly, except for those in the tight-fitting motor chambers. After I get a copy of the drawing with your comments, we can discuss this further. Perhaps some of the dimensions have typos or are just hard to read. They can be double-checked with the Hornresp model, but it is probably easier for me to just look over your notes and compare dimensions with the drawings I have here.

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