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Subject: Re: Subwoofer project update

Posted by [Wayne Parham](#) on Wed, 31 Mar 2004 14:29:13 GMT

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Well, that's true. The vent is there to cool the motor, so making it smaller could potentially reduce power handling, increase compression and even increase non-linear distortion. The air that's trapped can be compressed further than it can be made a vacuum because you can't go less than zero atmospheres, but you can pressurize much more than two atmospheres. So vent restriction could cause distortion to rise at high output levels. On the other hand, Eminence makes several long-throw woofers with a smaller vent. It is possible that there isn't a problem with the smaller vent. Certainly it isn't an issue until power is high, so as a high-fidelity woofer, the flux-stabilized version would perform better at reduced power levels even if the vent were smaller. And, as hulkss has pointed out, the LABhorn has breathing issues anyway, due to the fact that the cooling vent is restricted. Still, since the woofer is designed to be an all-out performance improvement, I tend to not want to cut any corners. I'd rather not decrease the vent size. There is another option that is being considered, and the only thing is that we'll have to wait a few more months. It's a no-compromise solution, so I think I'm leaning in that direction.

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