Subject: Screw on adapter
Posted by Wayne-o on Thu, 23 Apr 2009 18:03:38 GMT
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I am using a adapter plate to make my psd 2002 screw on work with the 290 horn with the bolt on pattern, Does this cause any problems ??? As always Thanks for your reply..

Subject: Re: Screw on adapter
Posted by Wayne Parham on Thu, 23 Apr 2009 19:34:23 GMT
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Those screw-on adapters usually modify the throat expansion. Look at it and see how thick the mounting plate is. If very thin, it might not be too bad. The cross-section area usually remains constant through the thickness of that plate, basically just a 1" hole.The compression driver has an 8° flare exit angle which matches the entrance angle of the horn. The horn gradually expands that flare rate, setting the wave shape and coverage pattern. When you install an adapter, this is changed. The 8° flare angle at the compression driver exit interfaces with a 0° section in the adapter, basically a short straight pipe, for some distance. It then goes back to 8° at the horn throat entrance and expansion continues from that point. This poor interface results in a discontinuity that causes internal reflections and it occurs at a very sensitive place in the horn.In some cases, I would expect severe spikes in the top end, in others, it may not be as noticeable. You could always bolt it on, measure it and see. Might knock down some of the breakup modes, but then again, it might make them worse. Hard to say without measurements. It will almost definitely have an impact, and I would not expect it to be a positive one.

Subject: Re: Screw on adapter
Posted by reguax on Thu, 23 Apr 2009 20:03:22 GMT
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Wayne, This 8° angle means that I should attach the driver to the horn in a specific position?Well, it's not that I have too many choices... but it seems that I have 2 ways to do it when using the 2 bolts that match driver/horn.What is the right way?Thanks!

Subject: Re: Screw on adapter
Posted by Wayne Parham on Fri, 24 Apr 2009 02:37:38 GMT
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The flare is axisymmetrical so the rotational position doesn't matter.