Subject: Phase plug mod
Posted by hurdy_gurdyman on Tue, 27 Jul 2004 17:24:11 GMT
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I went and removed the dust caps from my EV LS-8's and installed the wooden phase plugs I built a couple of years ago for my 10" Zenith Allegro speakers (both have 2" voice coils.) I have been noticing a slight hardness in the mid treble that could be irritating on some music. The phase plugs made an immediately noticable difference. At first I thought that it cut the treble level, but measurements show it didn't. What it did was clean the treble up, taking out the hash and hardness that was there. After listening since yesterday I'm convinced that this was a total improvement of sound with no drawbacks. No hardness anymore at all! I'm starting to think that maybe all fullrange drivers would be improved with a phase plug. It's helped on all the different ones I've used them in so far.Dave :^)

Subject: Re: Phase plug mod
Posted by wunhuanglo on Tue, 27 Jul 2004 21:22:11 GMT
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Hi Dave!How do you go about attaching the phase plug - do you glue it to the pole piece?Do you anticipate any problems with an open VC gap?Charlie

Subject: Re: Phase plug mod
Posted by hurdy_gurdyman on Tue, 27 Jul 2004 22:36:30 GMT
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Hi Charlie,I just contact cemented the phase plugs on. I used a pair of 10" woofers with a phase plug and no dust cap for several months with no problems. I do have a grill cloth, also. I believe that Lowthers with phase plugs don't normally have any problems because of the voice coil gap being open. Time will tell.Dave

Subject: What does the phase plug do?
Posted by akhilesh on Wed, 28 Jul 2004 01:11:07 GMT
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Hi Dave,Thanx for sharing your experience. How does one put a phase plug? Remove the dust cap, ad then cement it to the cone? If that is the case then it loads the cone right? I mean what do we cement the phase plug to?thanx-akhilesh

Subject: Re: What does the phase plug do?
Posted by robertG on Wed, 28 Jul 2004 12:34:29 GMT
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The phase plug is not attached to the cone in any way. When you remove the dust cap, you see a hole, that's the inside of the voice coil former. At the end of the hole, you see the back plate. The phase plug is glued to the back plate and should be clear of the voice coil. Some speakers do have a bullet shaped dust cap acting as a phase plug. This kind of phase plug is glued to the cone and its weight is figured in the driver design. But the wooden "light bulb" phase plug of tweaked lowther drivers is not glued to the cone.Hope this help a little

Subject: Re: Phase plug mod
Posted by robertG on Wed, 28 Jul 2004 12:39:04 GMT
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Thing is, you need to keep these drivers (Lowthers and others) out of the shop! any metal particles can (and will) make it's way to the magnet or in between the magnet and voice coil with very bad (and expensive) consequences.

Subject: Phase plug info
Posted by hurdy_gurdyman on Wed, 28 Jul 2004 12:42:02 GMT
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Here's some nice phase plug info.Dave
Lowther phase plug experiments

Subject: Re: What does the phase plug do?
Posted by akhilesh on Wed, 28 Jul 2004 18:17:22 GMT
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This does help! Thanx Robert! -akhilesh

Subject: Re: Phase plug info
Posted by akhilesh on Wed, 28 Jul 2004 18:19:22 GMT

Informative link, Dave. thanx-akhilesh