

Hello everybody,

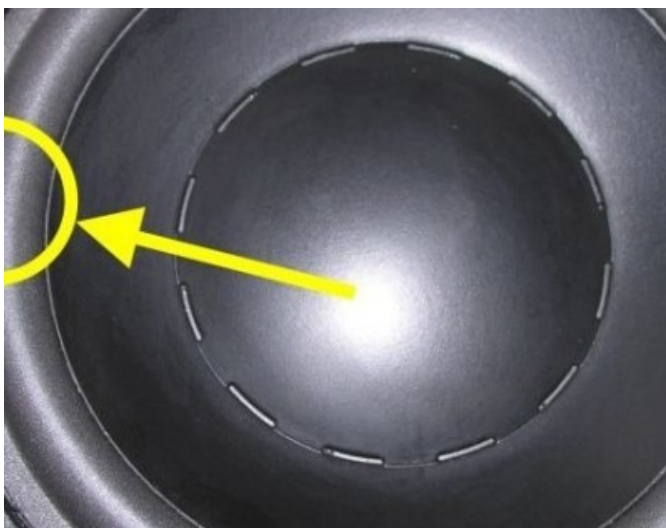
Well, globally there are about 5 methods of centering speakers with refoaming:

1. Shimming (see: <http://www.youtube.com/watch?v=lp1kjymypQc&feature=related>)
 2. Cloth pegs (see <http://www.audiofriends.nl/pdf/refoaming.pdf>)
 3. With low testsounds (see <http://www.youtube.com/watch?v=g6F6hudplAg>)
 4. Don't really center, let the spider center the cone (see: <http://www.audiofriends.nl/123-EN/Centre%20midrange.pdf>)
 5. Not really centering, just pust the cone a few times downwards to see it is free.
1. The shimming on this 10? inch Cerwin Vega is okay but:

The shims has to be equally and the middle of one shim has to come right on the middle of the narrow split of the ring that holds the voicecoil (don't know the word in EN). The split is a weak point, so the shim may not bend this a little outwards. Especially with 'strong' visitcards / film.

Further, there are very much look-alike dustcaps for Cerwin Vega on the market (I have them to, never sell them), but not for every speaker(!). So you might have to put a larger dustcap from other material on the cone. Well that's not good, because the higher frequenties of the woofer (just take a two-way speaker and cover the tweeter, and play a sweap (carefully!)(<http://www.audiofriends.nl/archief/testsignalen>), takes a lot of 'high' frequencies with the dustcap (if it's not a textile like with Tannoy dualconcentric). So with an other dustcap this changes to. With a small woofer the cone also gets heavier by the first partly cut dustcap remains, extra glue and larger dustcap. Efficiency gets lower.

Also, but no very often, the middlepool isn't a straight cilinder, but for instance a kind of mushroom ('T') to make a egal magnetic field between the middle pole and the upper poleplate. Shims than can't be used. Also the shims must actually fit perfect (thickness), because otherwise the magnetic field will be different on different sites (the voicecoil then be a little tilt). If there's no other way: just use the old dustcap. Make a little mark with a pencil were you cut. than place it back with using a little glue.



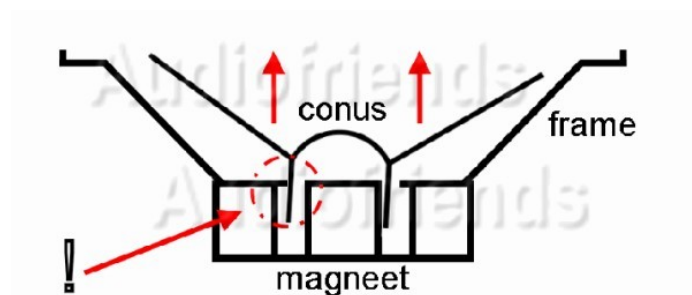
2. Cloth pegs. See manual. For most woofers >5 inch very good.

3. Well, I don't know. I don't know if anyone has experienced some with speakers, but often, if you make the woofer rather work like on Youtube, the wires to the cone drags the cone a little with high amplitude. That's not what I want. Also often the force to drag the surround over the glued frame may be tough. The frequently drags the foam in a direction, but also deforms the foam because of the force. The amplifier goes off and the deformed foam comes again in its old direction and pushes the voicecoil in another way.

I have to say I haven't used this way, it may work fine in practice. But what if the surround is mounted on the back of the cone and the outer lip comes somewhat up? My clothpeg method doesn't have a problem then.

4. Most times for midranges. You have to be sure the spider holds the cone right in the middle.

5. Well, I don't like this. Can give underbenieth:



There may be some faults in spelling etc. Opinions etc. are welcome.

So, for a 4 inch Beovox CX50 etc. I would prefer type 4.

Best regards, Fred