
Subject: Re: Heat Exchanger Design mods

Posted by [Wayne Parham](#) on Tue, 06 Sep 2005 03:20:39 GMT

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That's good news, glad you've started on this. You will be pleased. I have a few suggestions. You must have a plate of some sort. That's the radiator, the plug is just the conductor. So make a flat plate, maybe an 8" disk or square plate, and bolt it to whatever is handy. Make a bracket to hold it or fasten it to one of the internal panels. You want as much surface area contact between your cooling plug and the center pole, so make it long enough to reach all the way down into the pole. The hottest point is the front of the pole piece, so you definitely want your cooling plug to make contact there. If you want, stick a probe down into the cooling vent and touch the cone. Measure the distance from cone to the end of the magnet and you'll know how far you have before touching the cone at rest. You can then subtract x_{mech} and give yourself some extra room for margin. You'll find that you have plenty of room to make the device longer without having mechanical interference problems. Below you'll see the CAD drawing of the 1.25" cooling plug used in the 12

I'll help anyone follow in my footsteps and make their own, but I'm not going to provide the exact dimensions on the drawings for the plugs. I've put a lot of work into this project, and the only way for me to recuperate it is for people to buy plugs from us. To tell the truth, if a person doesn't have a machine shop, they will want to order them from us anyway, because unless you order a large quantity, the price for machining makes the cost very high. The rest of the story Photos Test results
