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magnetizers

Dave Stephens

Sat Dec 6 11:32:41 2003

Is there an affordable magnetizer that could be used to magnetize alnico rods in a pickup so every pickup would have the same strength? Haven't been able to find one on the net. .Dave

SK ()

Sat Dec 6 15:31:26 2003

I made one from 2 4" long Neo bar magnets (bought on E-bay) I made an adjustable bracket thing that holds them at a set distance apart (they will draw blood if you get pinched by them) I can magnetize, remagnetize and even reorient the polarity on any alnico magnet with it. Cheap and effective. Testing with my gaussmeter shows the strength is at least as strong as original after polarity reversal. Actually, you can accomplish the same thing with just one neo bar magnet. There are a couple tricks to using it. (not allowing the magnets to slide against the neo etc)

anonymous

Sat Dec 6 17:51:14 2003

How long does it take to charge them up to full strength?

What's the gap between the rods and the two bars?

Very interesting.

Dave Stephens

Sun Dec 7 00:26:01 2003

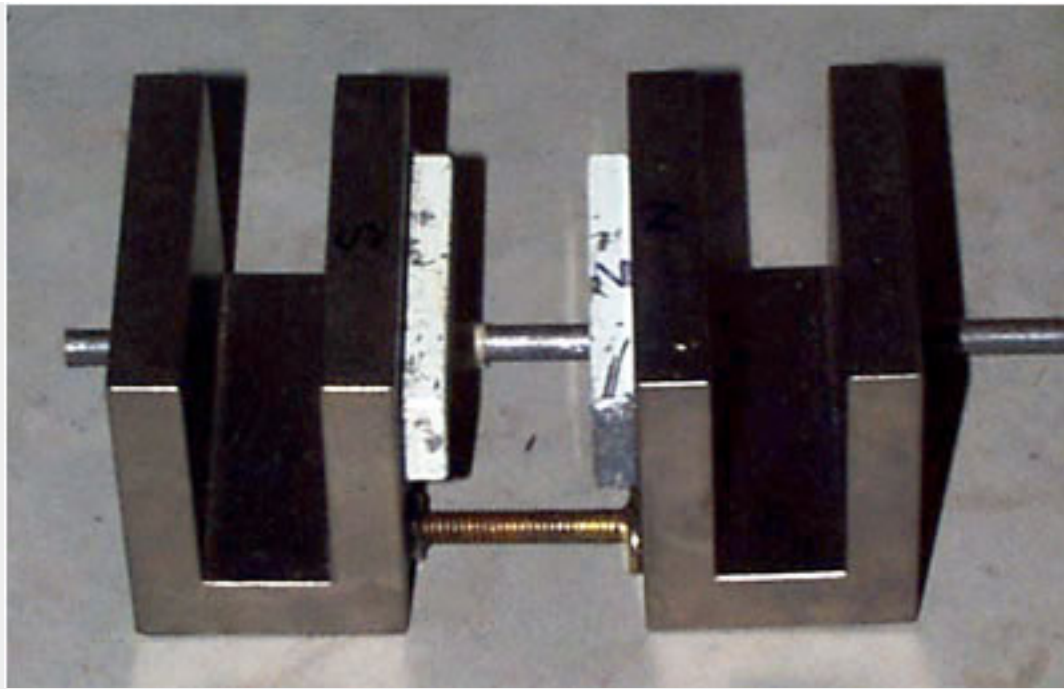
Do you have a picture of your magnetizer etup, and do you have the guy's contact info on Ebay? I can't find any neo bar magets that size onEbay so far.....


Also does anyone know what company made those old magnetizers that Fender and G&L used?

SK ()

Sun Dec 7 00:56:03 2003

Here's a pic of it with the original shorter magnets. The brackets are some steel things I had laying around. The rod allows that one side to slide for seperation, and stay aligned. The other side adjusts the width of the opening.



SK ()

Sun Dec 7 00:51:41 2003

Takes less than a second. The gap is probably 3/16" both sides. If you use only one, just touch the alnico to it and pull it directly away (do not allow it to slide)

Dave Stephens

Sun Dec 7 11:31:01 2003

Will this charge an alnico rod to its maximum capability do you think? As I mentioned in another thread, the magnet shipment I got is all over the place. My cheapo gaussmeter isn't calibrated and I had to put a piece of plexiglass spacer over the Hall device to keep it from overloading, but my measurements go from like 3.32 to 3.82. These are just relative measurements but if you put the weakest magnet on a piece of steel and do the same with the strongest you can tell easily which is the weakest. Some Fender pickups have magnets more on the stronger side that what I received so I know my magnets could use some help.

Are you putting the full pickup in this this thing or just individual magnets one at a time? Thanks for the info this is pretty cool if one of the neo mags will fully charge an alnico slug.....Dave

SK ()

Sun Dec 7 19:44:52 2003

Well, yes it will charge to full potential, but that doesn't mean every pole will read the same. I haven't tried it with unmagnetized alnico, but I have reversed the polarity of pickups/magnets and they test as strong or stronger with the "new" orientation.

A smaller Neo can do individual polepieces (I have one stuck to the side of my bench) I usually use this on assemblies. Really handy when I screw up and forget to make one pickup with opposite polarity. I also use it when repairing old weak pickups, but I have found minimal benefit of "recharging" old magnets in most cases. There have also been a few dozen times where a customer wanted a pickup rewind and it's polarity reversed, no problem. I don't put magnets/pickups thru it as a regular assembly practice.

I have a rather expensive Bell Gaussmeter (I got it to verify calibration of the meters I was making) which I have used to verify all of this.

RobB

Sun Dec 7 11:35:07 2003

Steven,

I've seen this photo before and was a little confused so I'll ask for some clarification.

The U shaped things are just scrap steel and don't need to be U shaped?

The rod at the back is attached to one of the pieces of steel while the other piece is drilled out and free to slide back and forth?


The brass coloured thing is a spacer which stops the two halves coming together?

The white/grey things stuck to the steel pieces are the magnets?

Why leave a gap of 3/16 inch each side when magnetising a pole piece?

Will this set up do humbucker bar magnets?

Rob.

SK ()

Sun Dec 7 19:36:07 2003

yes,yes,yes, and yes. The gap is so that I can insert and remove the magnet/assembly without sliding it across the face of the NEO magnets. If you do allow them to slide, very weird things can happen (i.e. polarity reversal along one side of a bar) I can do Bars and full assemblies.

Jason Lollar ()

Sun Dec 7 22:23:50 2003

I was told for along time that you had to have a comercial capacitance discharge machine to charge alnico by various magnet companies but I found out later its not true and that alot of them charge small pieces of alnico with a large magnet similar to what SK is doing.

I have a coil magnetiser I bought off the internet from someone that probably makes them as a hobby, complete unit for \$70. I wouldnt use it in prefrnce over the magnets for general use, its way more expensive and takes a large battery to use it but I do some stuff that wouldnt work too well with the charger SK has set up.

dont ask me where i found the coil charger, i wouldnt be able to find out easily

Dave Stephens

Mon Dec 8 01:32:23 2003

SK: ok, bear with me here, not trying to beat this to death but almost done with questions. When you insert the magnet to be charged you are NOT contacting either neo magnet? You say don't slide it across the face, do you mean physically contacting the neo and dragging across its surface? How do you keep the neos from grabbing the alnicos and sticking them tight to themselves? What kind of glue did you use to mount the neos?

Do you know the strength rating of your neo bars? A guy on Ebay has neo's at N48 <http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3259163539> and I wonder if I plopped an alnico rod on the face of this thing if I'd ever be able to pry it back off!!!

Magnetic Dave

SK ()

Thu Dec 11 19:30:48 2003

As for dragging, I do mean physically contacting and dragging across the neo. Sometimes they do grab and as long as I separate it and then do not allow to drag on the way out it's fine. If you use only one neo you can allow them to contact as long as it is pulled directly away. Surprisingly, the alnico separates from the Neo more easily than a piece of steel will; hadn't thought about that before, but it does.

I don't know what grade it is...I have heard of alnico magnetizing being done with large ceramics so I think most any grade Neo will do. If you ever allow these sizes of Neo to get together, it's a *BITCH*. If you managed to keep from getting between them and drawing blood or worse(I thought I broke a bone in my finger tip once), they'll probably shatter (they are very brittle) Even if they don't it will be quite difficult getting them apart. That's part of why the spread adjustment is variable by a threaded rod. So I can slowly bring them closer together....Glue? standard superglue LOL. I think the bracket being metal may help here since there is some attraction to the brackets as well as to each other. If I were doing this from scratch and making the "brackets". I think I would simply inset them into wood leaving a solid wood face about 1/4" or so thick on the inside to help protect the magnets and provide a buffer against the contact/dragging. I'd use allthread rods and "thumb wheels" on both sides for spread adjustments. I think that would probably work better.... It would certainly look better. Maybe if I ever catch up and get the motivation I will do that. I think it will look better and be more professional as well.

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