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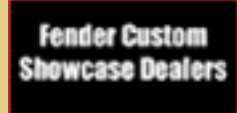
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brandobean

usa

Sep 1st, 2004 04:31 PM [Edit](#) [Profile](#) [Print Topic](#) [Search Topic](#)

What is Fender stock? I have my magnets out on my middle pickup so I know what a parallel sound is like. Would a series connection vary the tone?

(My Plan:)

**Use middle pickup as a dummy.
Put in 3 way switch wired like a tele.
Do 2 vol pots (probably 500K pots.
Do a master tone.**

I wired my guitar up similar to the above, but after thinking about what I'd actually use, I limited my design.

(Completed Plan:)

Used mid pickup as dummy wired in parallel (sounds fine) I can do high gain with the bridge only pickup now. Not 100% single coil, but very close. Missing some of the more piercing highs...easily fixed on amp face. (NOT as dark as a humbucker. Not dark at all).

I left the middle right where it was and saved the magnets and poles.

Put in 3 way switch wired like tele, but dummy is always activated in all positions. Middle position hums a bit but not as much as a single coil does.

Only 1 500k volume pot (since it is a "humbucker" now

Master Tone (almost omitted tone knob altogether, but since these ceramic singles are so bright I kept the tone knob.

I wonder what it would sound like with the dummy wired in series.

I tried to add a magnet to the bridge pickup, but it didn't work well (less volume) perhaps I made a mistake. I was going to add a metal plate, but could not find materials to do it fast enough.

I shielded it like guitarnuts.com said to (it helped...alot)

brando

brandobean
usa

Sep 3rd, 2004 05:07 PM [Edit](#) [Profile](#) [Print Topic](#) [Search Topic](#)

btt

BJB
Tulagi Street
*Filled With Chocolate
Pudding*

Sep 3rd, 2004 10:55 PM [Edit](#) [Profile](#) [Print Topic](#) [Search Topic](#)

I'm not sure what Fender does, but I would recommend trying the dummy coil in series. At audio frequencies, the impedance of a guitar pickup rises well above its DC resistance, but a dummy coil does not. Placing it in parallel with the pickup effectively shorts it out. According to internet myth, extra DC resistance will cause a loss of high frequencies, but in reality, the inductance of the pickup overwhelms the pickups own DC resistance. Your dummy coil doesn't add inductance to the pickup, only an extra few thousand ohms of resistance, which aren't going to affect the pickup too much. As such, there is no need to change the pots to 500K, unless you want to make up for the signal loss you get when you put the dummy coil in parallel with the pickup!

Your experiments sound very interesting and show some real inventiveness! Since you know how to disassemble a pickup, you could try reassembling it with the magnetic poles flipped around. Then you could make your own reverse wound/reverse polarity pickup by swapping the output leads on the pickup. There might even be a way to use the 3-way switch to bring the dummy coil in and out of the circuit so you'll get hum cancelling in all 3 positions. I'll have to think about it this weekend.

brandobean
usa

Sep 4th, 2004 05:27 PM [Edit](#) [Profile](#) [Print Topic](#) [Search Topic](#)

BJB. Not a bad idea, but doing pickups (traditional singles) in odd numbers is a formula for at least some hum.

Good idea about the 3 way switch, but the problem is that the bridge and neck together will hum like normal without the middle as a dummy (RWRP of course)

I think a good idea is to add another dummy so each pickup has a dummy assigned to it. That would solve the middle position problem (which isn't TOO bad by the way).

In that case I'd have reinvented either the noiseless, holy grail, or the humbucker...

PS... Do they make mega switches in 3 way type? It seems to defeat the "super strat" reason they were made.

If you know where I can get one. Let me know.

Thanks,

	<p>brando</p>
<p>BJB Tulagi Street <i>Filled With Chocolate Pudding</i></p>	<p>Sep 4th, 2004 10:27 PM Edit Profile Print Topic Search Topic</p> <hr/> <p>I thought more about it and I can't see a way around using one of those super switches. My idea was to put the coil in series with the output with the bridge pickup selected, but short out the dummy when both pickups were selected. This assumes the neck pickup is RW/RP. When the neck pickup is selected, the dummy pickup would be reconnected into the circuit, but backwards so it cancels the hum of the neck pickup. That way, all three positions would have full hum-cancelling. But using the dummy coil at all times cancels hum for the neck or bridge pickup selected, and partially cancels hum when both pickups are used. It's less than perfect, but I think it's a practical method of reducing hum. Of course, using a dummy coil for each pickup will also do the trick, but now you've got to find a place for another coil on your guitar.</p> <p>I don't know of a 3-position lever switch that would do the trick, but a 4-pole/3-position rotary switch would do the job. Two poles would handle the pickups while the other two poles would be able to connect the dummy coil in and out of the circuit. The drawback is you'd have to get used the rotary switch and most people don't like messing with one during a gig. If you really want to see one, I could make a drawing and post it during the week.</p>
<p>brandobean usa</p>	<p>Sep 5th, 2004 02:40 PM Edit Profile Print Topic Search Topic</p> <hr/> <p>Nah. That is ok. I think I chose the method that is the most simple and uses the least amount of switched and what not.</p> <p>I could have done some serious damage if I kept the 5 way and used a mega switch.</p> <p>I like the simplicity though...</p>
<p>BJB Tulagi Street <i>I'm a Goofy Goober...Yah!</i></p>	<p>Dec 8th, 2004 10:31 AM Edit Profile Print Topic Search Topic</p> <hr/> <p>brandobean, it turns out you have re-invented the hum-cancelling system used on the Gibson Blueshawk, which uses a dummy coil that is simply a pickup with the magnets removed. The guitar uses Blues 90 pickups which are actually more similar to a Stratocaster pickup than a Gibson P-90.</p> <p>Here is a link to the Blueshawk.info page that describes how the dummy coil works along with the pickups to reduce hum. When the bridge or neck pickups are selected alone, the dummy coil is in series with the pickup, but when the bridge/neck pickups are selected, the dummy coil is switched out of the circuit.</p> <p>There is also a schematic on this website and it shows that a 4-pole/three-position switch is used to control the pickups and dummy coil. Their wiring functions much as my idea with using the 4-pole rotary switch, but Gibson flips the phase of the bridge coil so it cancels hum with the dummy coil. I suppose they tried a number of options and in real life, this one worked best.</p> <p>The Gibson uses a three-position super-switch to control the pickups, so it looks like you could install the Gibson switch and use their wiring scheme to control your pickups. Once again, you would need a RW/RP neck pickup, but you've already got the dummy coil installed so the most difficult part is already done.</p> <p><u>Blueshawk.info: Pickups</u></p>
<p>customguitars USA</p>	<p>Dec 8th, 2004 01:53 PM Edit Profile Print Topic Search Topic</p> <hr/> <p>Here's the link from Mr GearHead:</p> <p><u>Dummy coil wiring</u></p> <p>(This message was last edited by customguitars at 04:52 PM, Dec 8th, 2004)</p>

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