Installing the Lollar Horseshoe Bass Pickup. This pickup is as close as anyone can get to an exact reproduction of the old Rickenbacker horseshoe bass pickup that Rickenbacker no longer has any interest in making. This pickup should fit in the metal pickup surround used on the 4000, 4001 and 4003 series basses. The shoes are a special steel alloy that has been heat treated in a special way where both the alloy and heat treating combine to make the shoes hold as much magnetism as it can – the shoes are the magnets in this pickup. The shoes are bent by hand in a jig to make each part uniform but when they get heat treated the shoes will warp slightly so many times the shoes do not line up exactly on the top surface. This was the same case for all shoes made like this going back to the 1930's. Often people will try to bend one of the shoes to try to make them align in perfect parallel surface but what happens is after heat treating the steel becomes so brittle any attempt to bend them will snap the shoe in half at the elbow. DO NOT try to bend the shoes! I use a two conductor shielded wire in this new Lollar made pickup so you can match the phasing to an original Rickenbacker neck pickup because Rickenbacker changed their phasing orientation from time to time. If you are matching the new horseshoe to our broiler pickup or any other pickup we make the insulated black wire will go to ground and white will go to hot. The braided bare wire will go to ground which shields the two inner insulated wires. If your new Lollar horseshoe is out of phase with your existing neck pickup then just reverse the white wire to ground and black to hot.. If you are unsure about your ability to solder or adjust the pickup take it to a skilled repair shop or call Lollar Guitars for further advice 206 463 9838. Do not pull on the black and white plastic leads coming out of the coil or you could short out the pickup.

The direction the pickup faces does not matter but convention is that the side the lead wires coming out of the bottom of the aluminum mounting bracket points toward the fingerboard.

According to my sources all 4001 series basses have a .0047 capacitor wired in series in line with the bridge pickup as do 4003 series basses from about 1979 to 1985. This capacitor eliminates bass frequencies from the signal which is not useful in any way and will ruin the tone of the bridge pickup- well that's arguable actually as some people might want that! I highly recommend to locate this capacitor and remove it. The capacitor will be in line with the lead coming from your old bridge pickup. According to Rickenbacker schematics the bridge pickup is wired to the selector switch and the capacitor to remove is between the selector switch and the volume control for the bridge pickup. <u>http://www.rickenbacker.com/pdfs/19507.pdf</u>

Note- I have tapped the bottom plate of the pickup to accept the modern 10-32 screws that Rickenbacker now uses for height adjustment of the pickup. Vintage basses use 10-24 threaded screws. I have provided 10-32 stainless steel screws and springs for the new made Lollar Horseshoe. The shape of color of the screws may not match the original screws in your bass so if you want to use your original screws check to make sure they are 10-32 thread by gently threading them into the baseplate of the pickup- if they bind at all do not force them or you will strip out the soft aluminum bottom plate. If you have a vintage bass you may have to use the screws I provide.

The Lollar Horseshoe Bass pickup has adjustable pole pieces but they are not particularly easy to access for adjustment due to the overall design of the pickup. You will need a custom made screw driver to adjust the poles with the pickup installed or you will need to pull the pickup out of the bass and remove the bobbin to access the adjustable poles. You can make a bent screw driver by heating the shaft near the tip of the driver with a torch until it is cherry red- easier said than done by most people so most will have to pull the bobbin. I have made an attempt to pre adjust the poles by adjusting every new pickup like the one I have in my 4001 bass but many will still need further adjustment. To remove the bobbin from the pickup assembly pull the pickup assembly out of the bass and look at the bottom of the pickup. You will see 4 screws near the middle of the pickup, the two outside screws hold the bobbin in place, the two inside screws hold the shoes to the baseplate. Unscrew the two outside screws and you will be able to pull the bobbin out of the shoes- go slowly and gently so you do not tear a lead wire out where they attach to the bobbin or coil- this will short out the pickup and it would need re-wound. Once the pickup is out you can adjust the pole or poles and replace the bobbin back into the assembly. Fine tuning is accomplished via trial and error and may take a couple tries to get it right- yes its time consuming and fussy!

You will find that the pickup is more sensitive than many newer designs particularly about how you strike the string. Some string motions will make a distorted signal quicker than expected and of course because of the limited distance between the bottom of the shoe magnet and the pole piece it may take more control than you are use to not to have the strings hit the pole pieces. The other thing that takes getting use to is having the horseshoe magnets over the strings in the location where many people are use to dampening but with some practice you will get use to it.