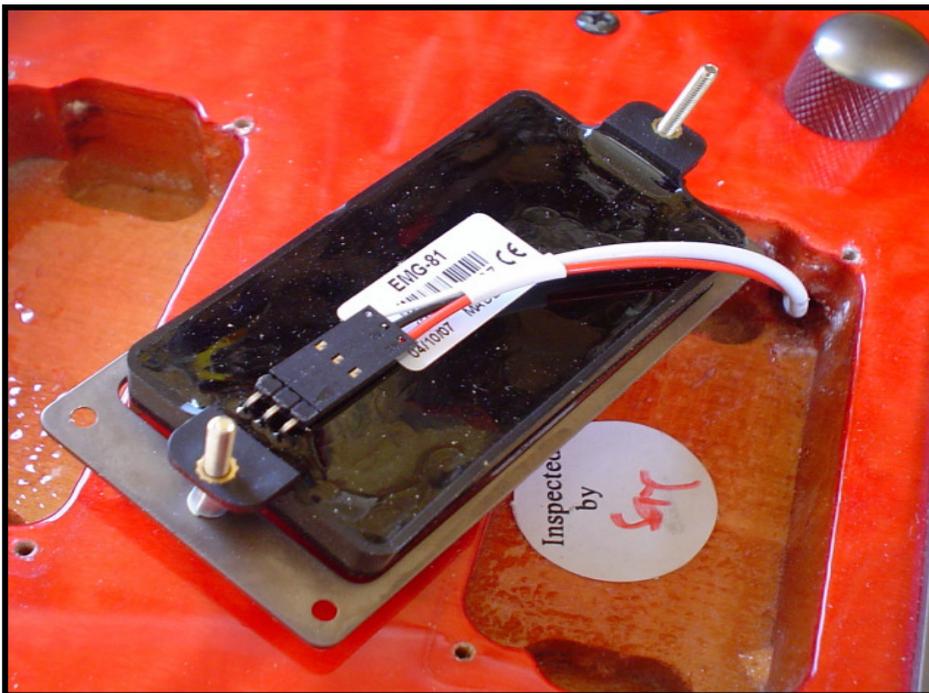


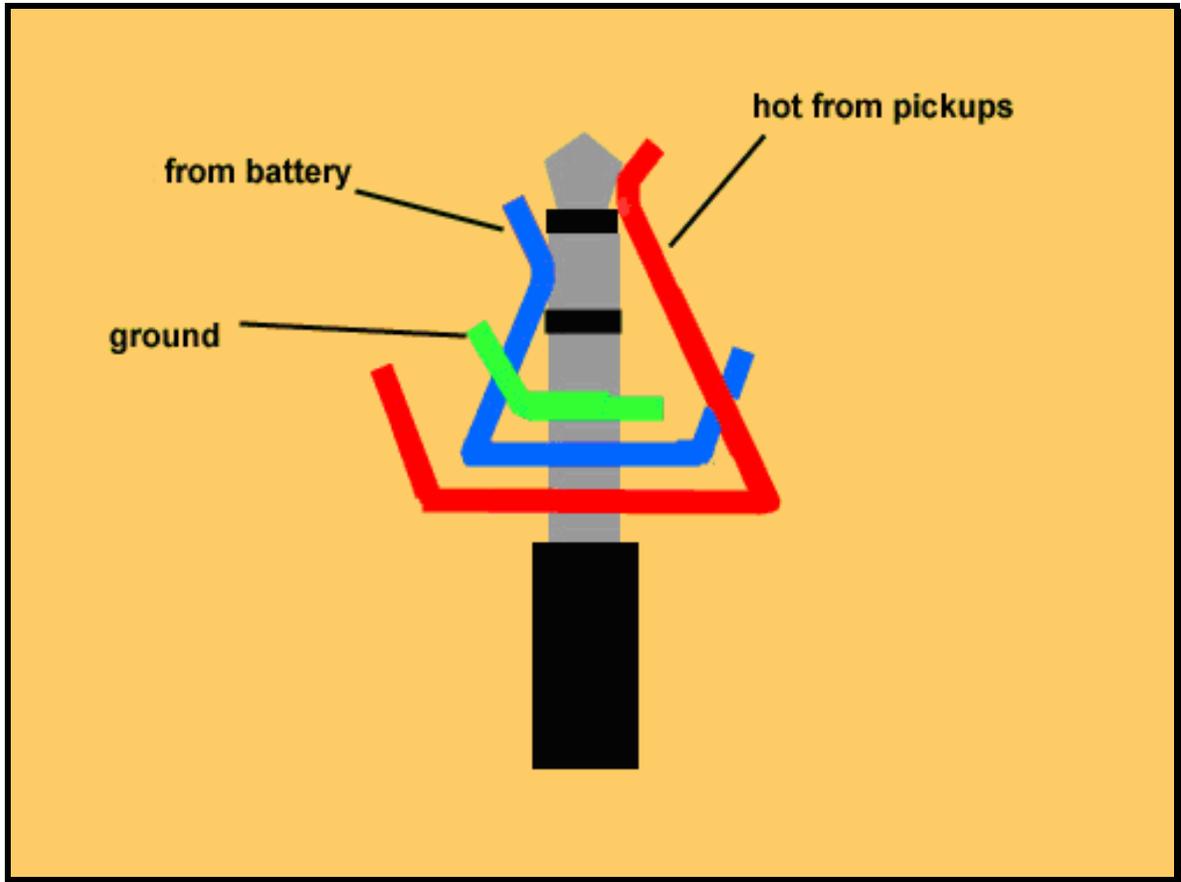
BONUS SECTION - ADDING AN ACTIVE PICKUP TO YOUR GUITAR

You are probably used to passive pickups by now, but have you ever played through active pickups, like EMG's? Active pickups are a special type of preamp and pickup combination that uses an external power source, like a 9 volt battery (passive pickups only need 1-2 volts of electricity to work). You can get vintage clean tones and even crunchy distorted tones with an active pickup. For example, when you play with active pickups and your guitar's volume is set at 10, you will often notice some distortion added to the mix, giving you some extra punch for your solos. Turn back the knob to 8, and you have a super clean tone that is well balanced, making all strings sound equally good. If you wanted to play with an overdrive pedal, but wanted to keep the sound free from unwanted noise, just turn on the overdrive pedal and cut back on the guitar's volume. The distortion will stay crunchy, but will get cleaner as the volume decreases, not weaker. With passive pickups, when you cut the volume, you lose most of the distortion as well.

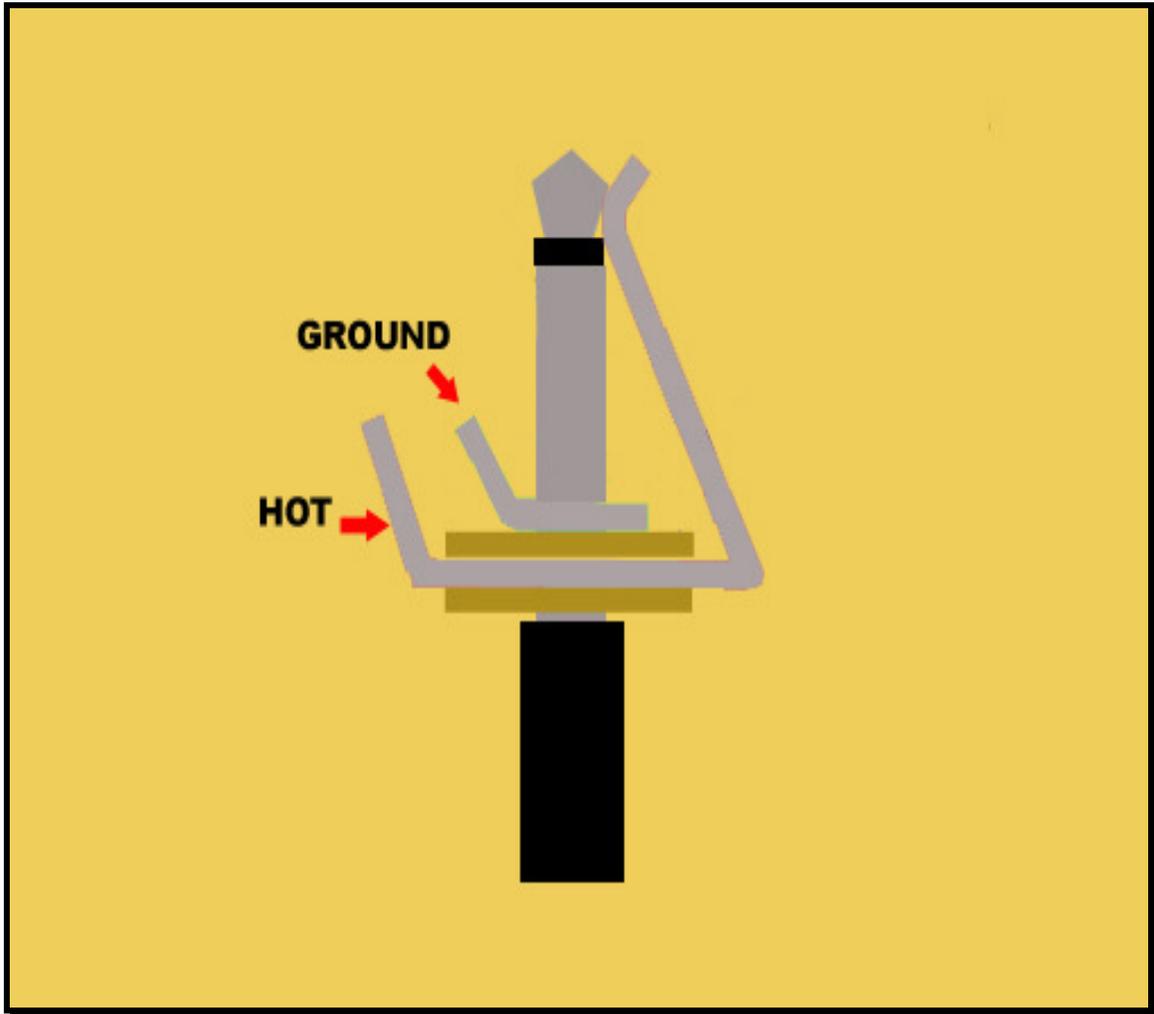


THE STEREO OUTPUT JACK

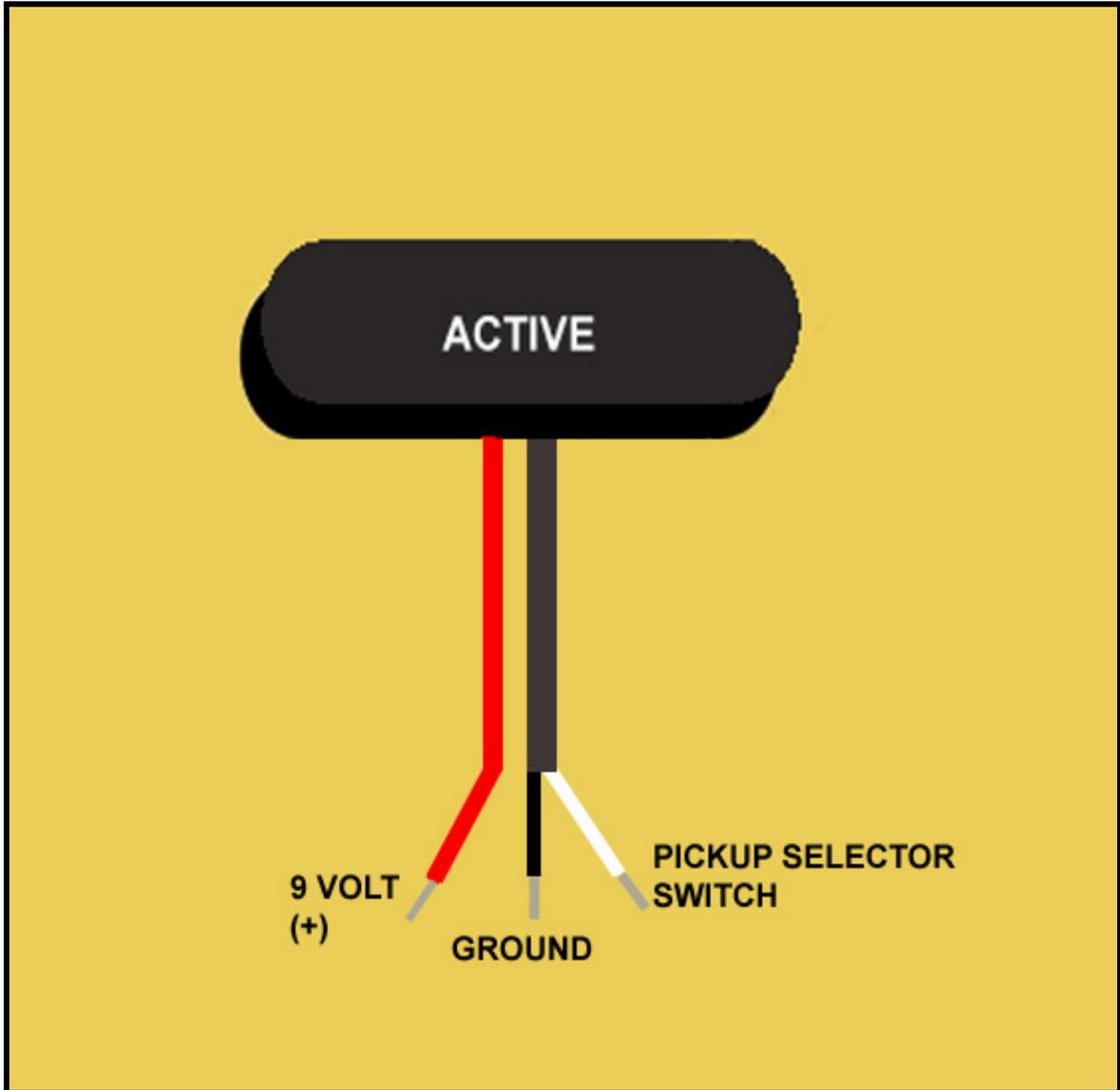
You might not be too familiar with a stereo output jack unless you have used active pickups before. The stereo output jack has one extra prong that gets connected to the 9 volt battery. The longest prong gets power from the pickups. The shorter prong gets connected to the 9 volt battery. The smallest prong always goes to ground.

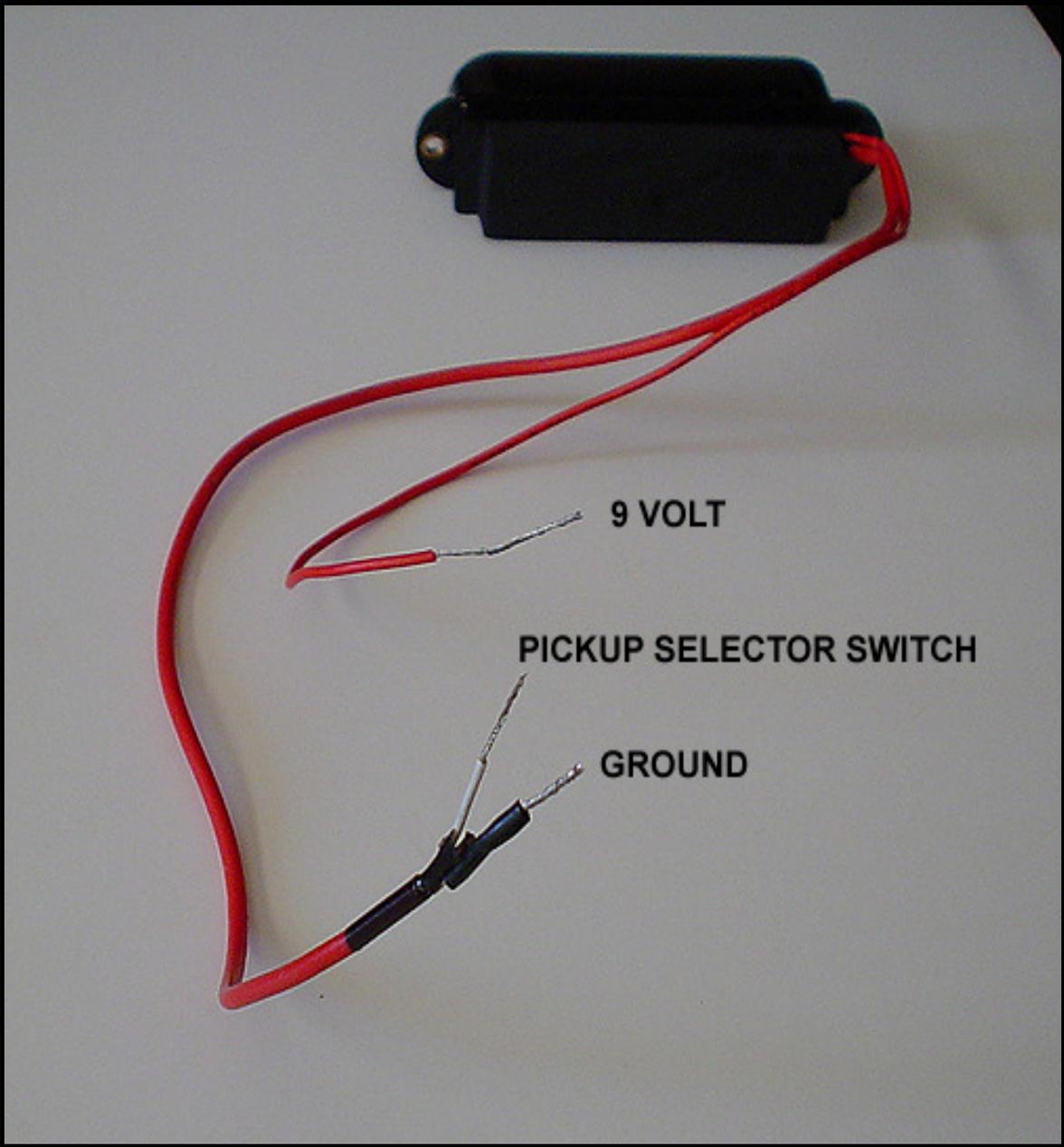


Below is a picture of a mono output jack. Notice the difference?



Active pickups will get added to your setup just like passive pickups with two exceptions. First, they have an extra wire that goes to a 9 Volt battery terminal, and second, a three prong stereo output jack will be added to receive the negative wire from the battery (in addition to receiving the ground and hot wires that always get connected there).





9 VOLT

PICKUP SELECTOR SWITCH

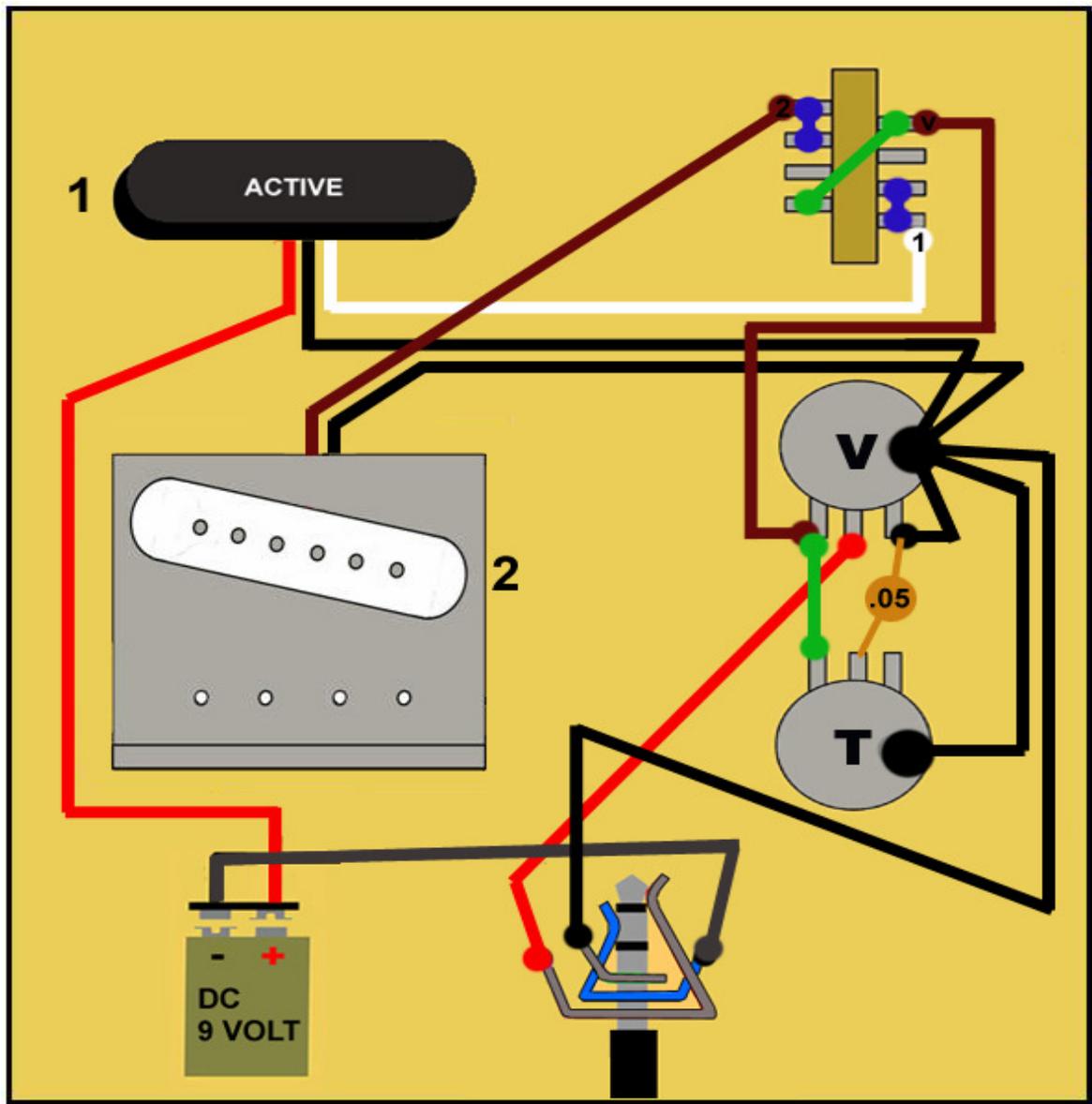
GROUND

Here is the 9 Volt battery terminal.



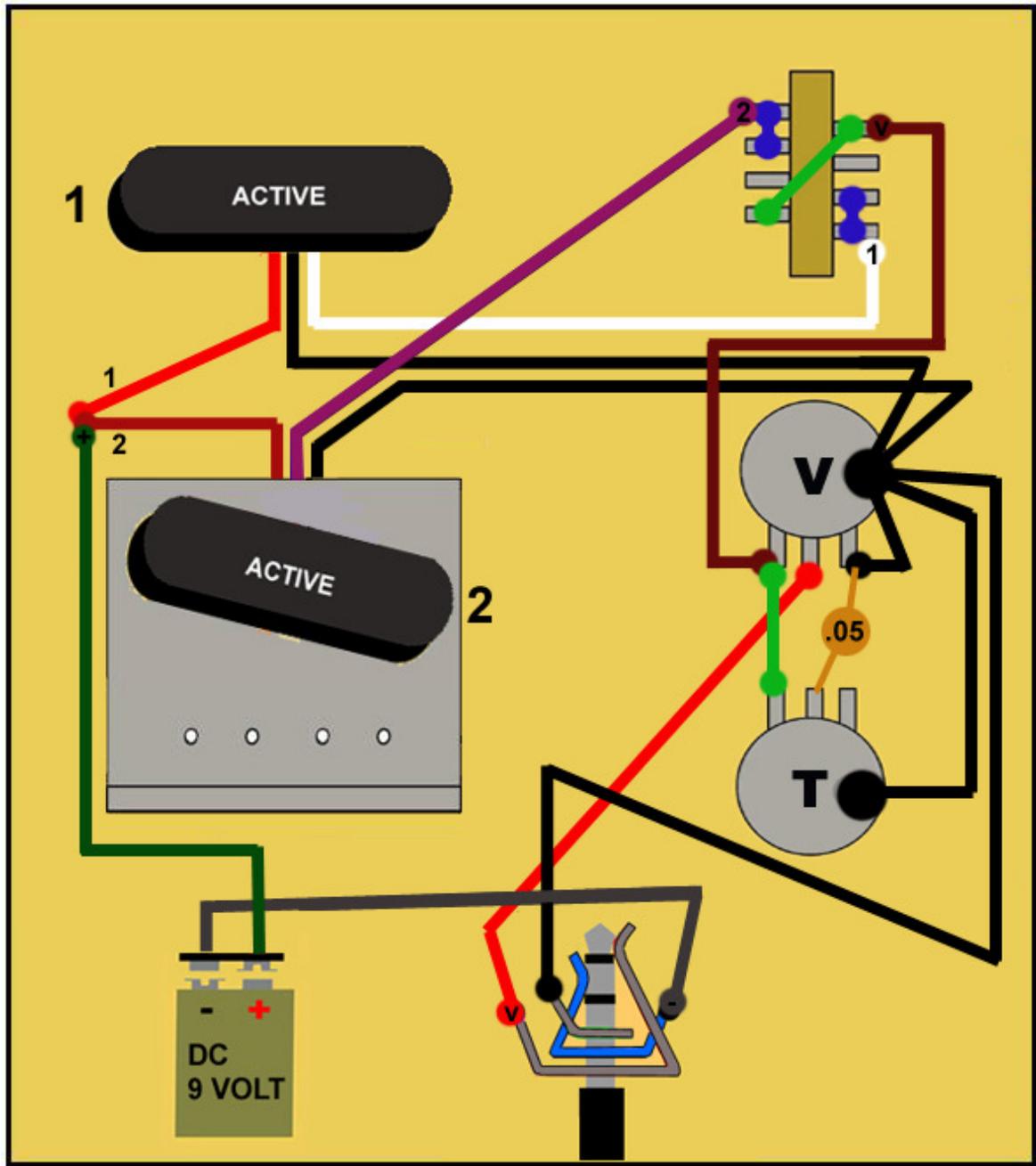
Active pickups have three wires. One goes to the positive 9 volt battery terminal, one goes to ground, and the last one goes to the pickup selector switch, just like a normal pickup. Usually the ground and pickup selector switch wires are placed together inside some tubing. The 9 volt wire is usually red or yellow in color. Also switch out you two prong output jack for a three prong output jack. Active pickups require weaker potentiometers (only 25K – 100K Ohms), but if you plan on combining an active and passive pickup in your setup, you can stick with the 250K pots. **To prevent electrical shock, do not use a bridge ground wire with active pickups since most of these pickups are already internally grounded.**

The diagram below uses a Fender 3-way switch.



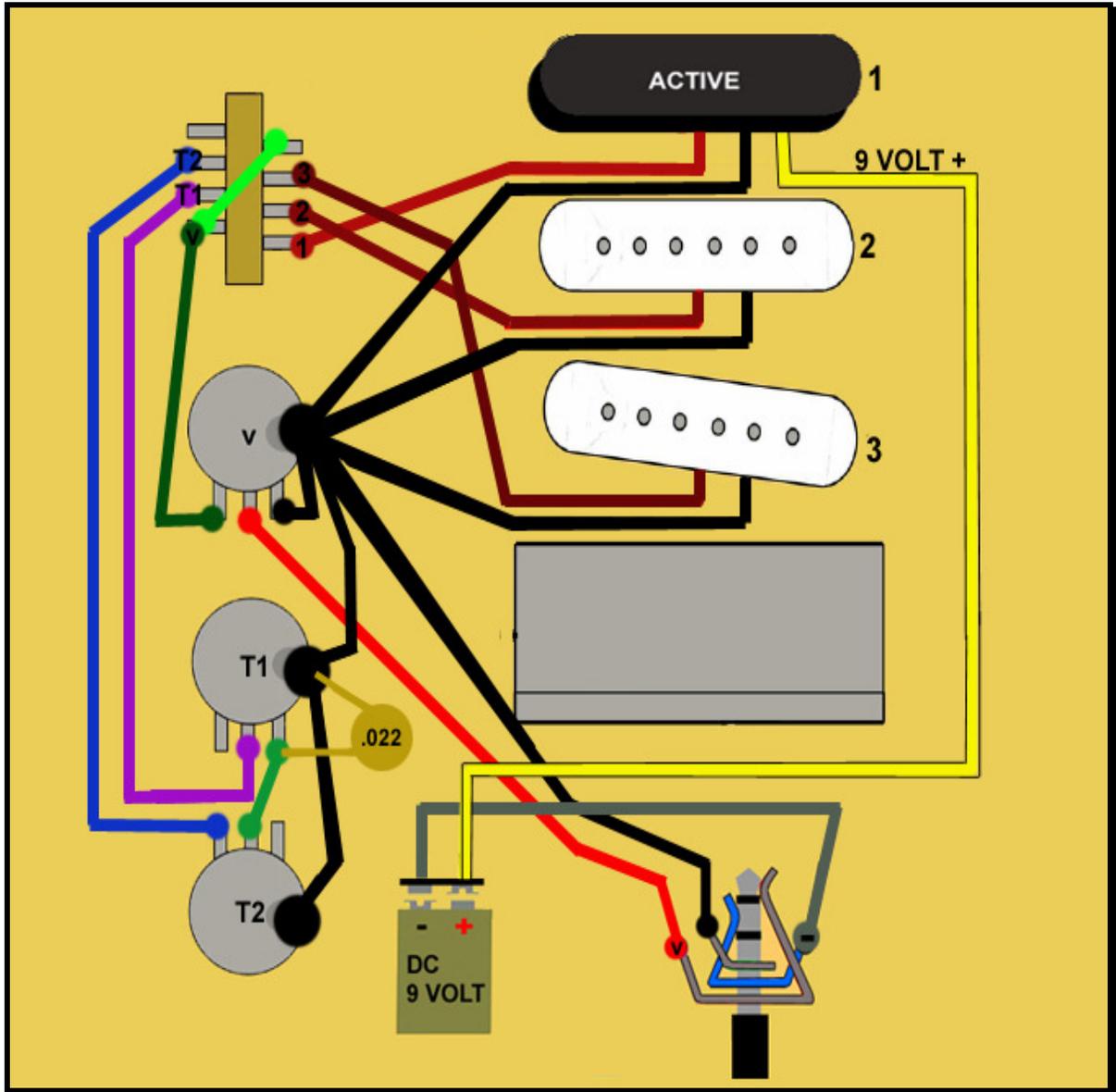
If you have two active pickups, both of the pickup 9 volt wires will go to the same place on the battery terminal. Notice that the three prong output jack has three levels. The top prong always goes to ground. The middle goes to the negative terminal on the 9 volt, and the bottom prong goes to the volume potentiometer. The diagram below uses a Fender 3-way switch.

To prevent electrical shock, do not use a bridge ground wire with active pickups since most of these pickups are already internally grounded.



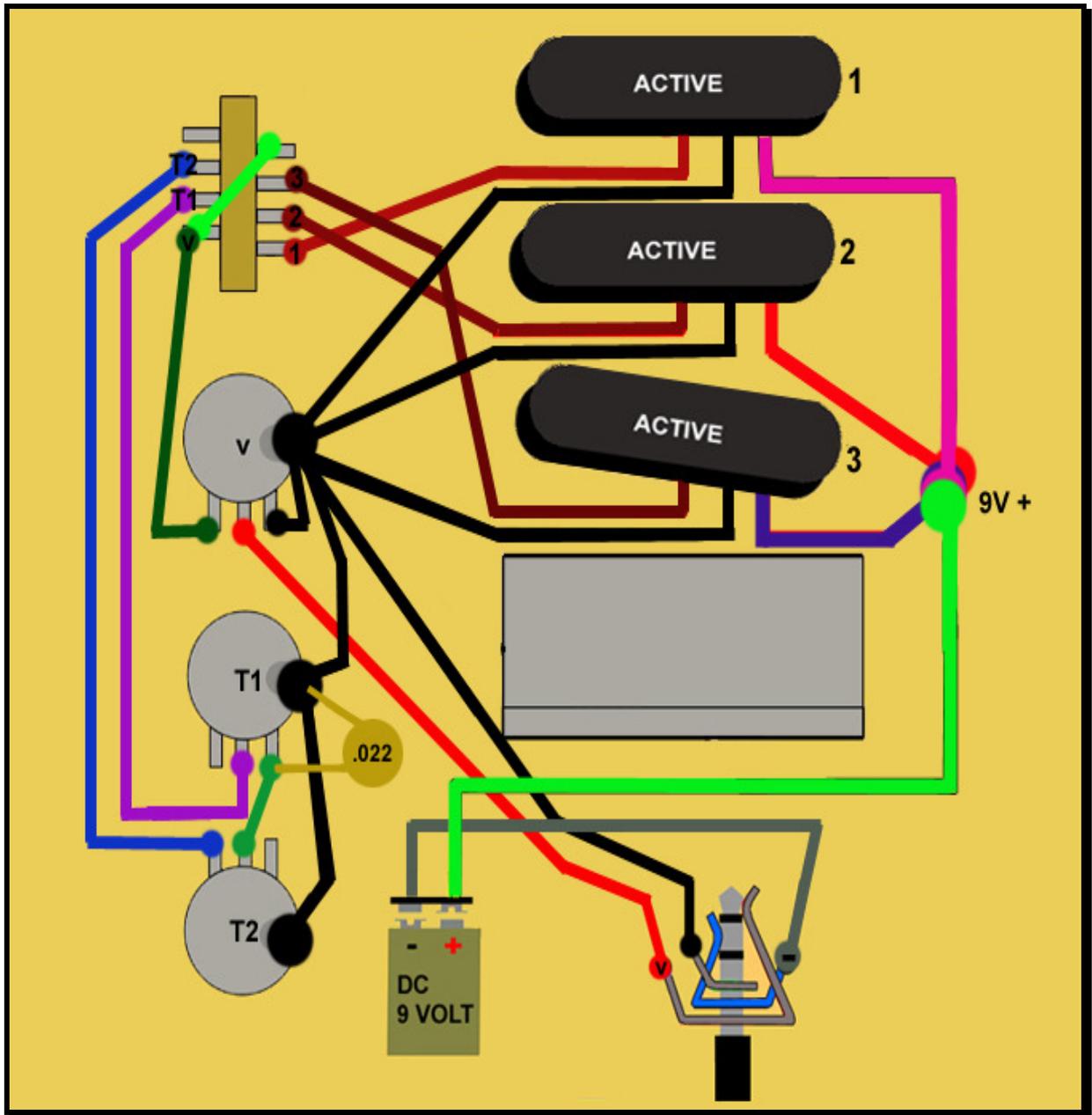
Here is an example of an active pickup being added to strat.

To prevent electrical shock, do not use a bridge ground wire with active pickups since most of these pickups are already internally grounded.



If you have more than one active pickup in your strat, just solder all of the 9V pickup wires together and send them to the 9 Volt battery terminal.

To prevent electrical shock, do not use a bridge ground wire with active pickups since most of these pickups are already internally grounded.



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