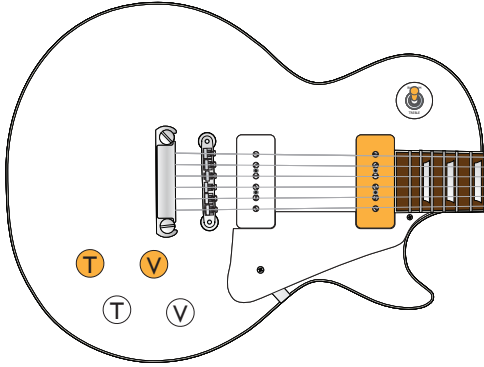
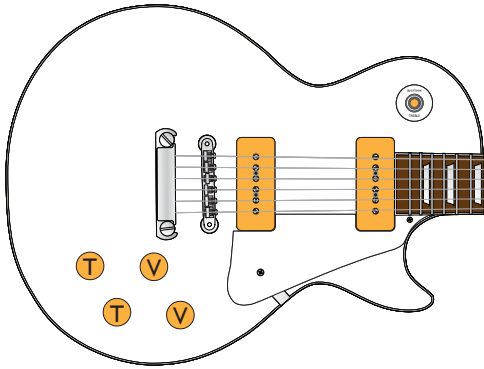


ACTIVE PICKUPS AND CONTROLS INDICATED IN ORANGE

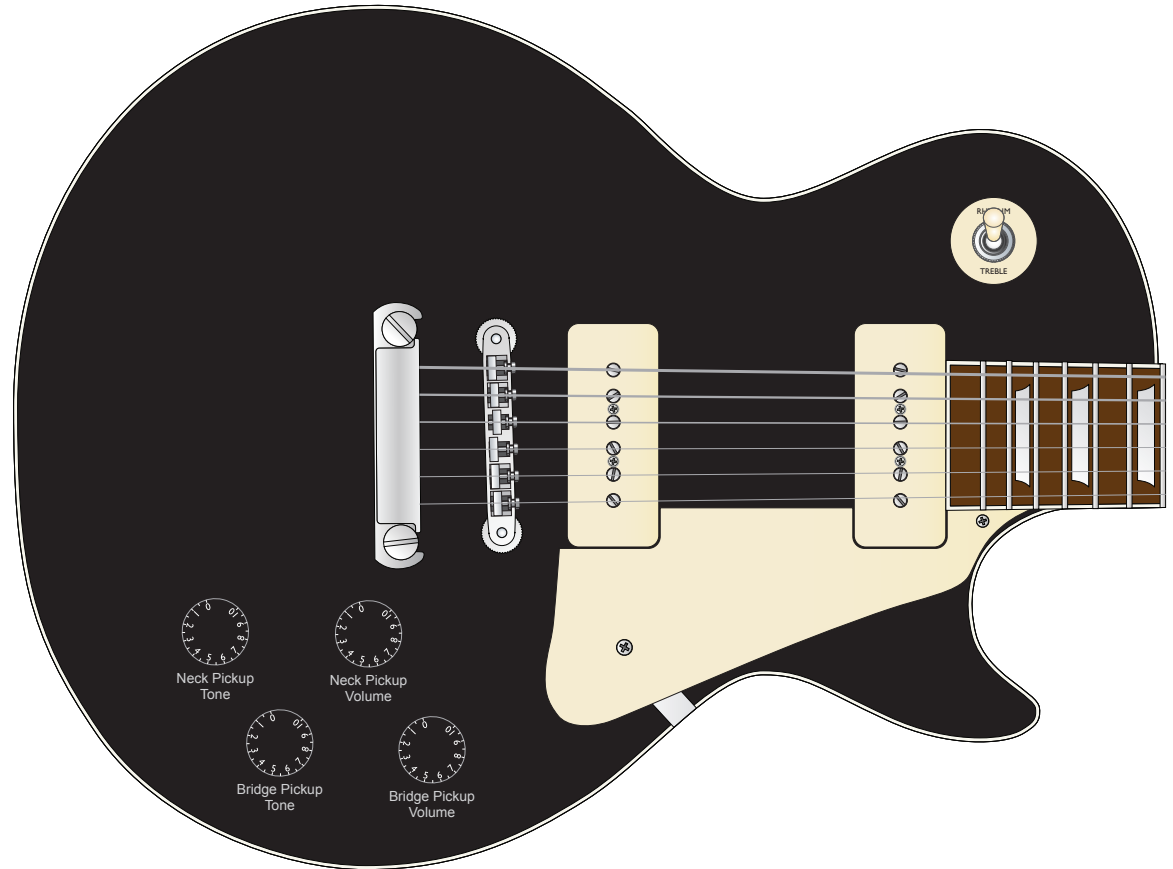
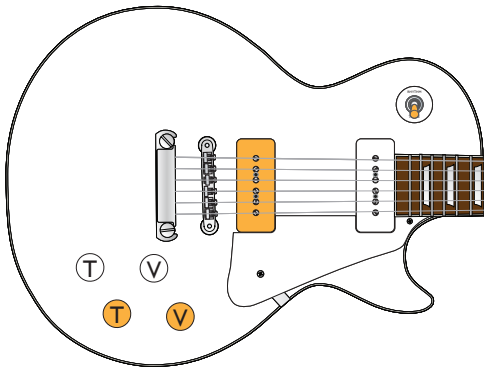
POSITION 3



POSITION 2



POSITION 1



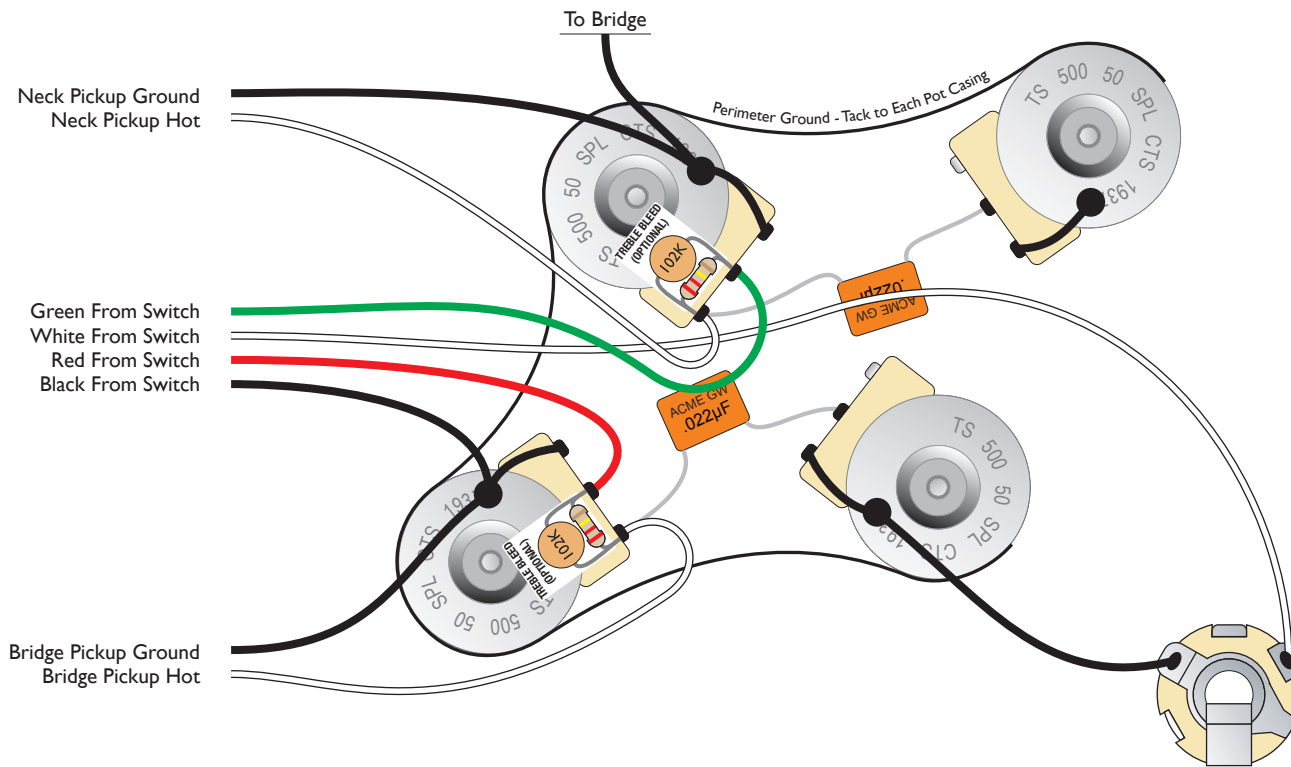
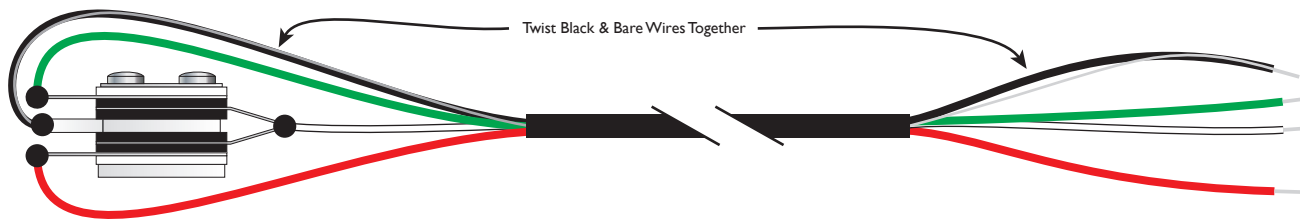
Ah, the Les Paul. That bastion of coolness, wielded by Skydog, by Page, by Lifeson, by Rossington. There was NO guitar more desired in this camp (when we was fab) than a Gibson Les Paul. How many hours were spent fondling the covers of Frampton Comes Alive, Sonic Temple, and Wired? (the back, dude)

It is - perhaps - the coolest looking guitar of all time.

The wiring is simple. Two pickups, each with a volume and tone control. A three-way selector that gives you either pickup alone, or both pickups in parallel. But there are a couple of options, one that is typically referred to as *modern wiring*, and another that is typically referred to as *vintage wiring*. This document details modern wiring, but we have a similar document that details vintage wiring, which you can find on our website.

The difference between the two is in how the tone controls are wired. The modern wiring exhibits a trait that some people feel to be a flaw, namely that the guitar loses treble as the volume controls are rolled down. Some people don't mind the treble roll-off; others address it with volume kits as shown on the other side of this document.

There's no real consensus on this issue, and no wrong or right. In fact, calling the vintage wiring "vintage" may be a bit of a misnomer, because there seem to be Les Pauls from the '50s that came wired one way, and Les Pauls from the '50s that came wired the other, so perhaps Gibson wasn't consistent. If you want to read more about this, then have a look at some of the Internet forum sites and you can get in on the debate.



## WIRE TYPES

There are different types of wire that are commonly used to wire Gibson guitars. Gibson originally used single-conductor wire with an external braid. The braid provides shielding against EMI/RFI, so that you don't get extraneous noise in your signal from radio transmissions, transformer hum, etc.

Shielding is a good thing, but there are other ways to get it, and using braided wire is a pain. So we typically use 4-conductor wire as shown at left to connect the switch to the other components. It's much easier to use than braided wire (we think), it's also fully shielded, and there is absolutely no tonal downside (don't let anyone fool you on this point).

The signal chain in most Gibson guitars follows the path **pickups > volume pots > switch > jack**. The wire from the pickups to the volume pots will obviously be determined by the manufacturer of your pickups, and may be different than our diagram. You'll need to adjust accordingly. But the rest of the path (**volume pots > switch > jack**) can be completed with a single length of 4-conductor wire. The signal from the **volume pots > switch** is carried on the green/red wires, while the signal from the **switch > jack** is carried on the white wire. The black/bare wires carry ground.

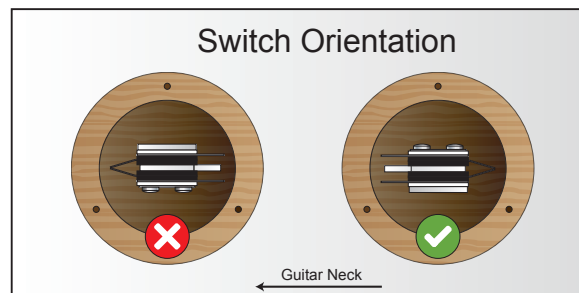
Our wiring kits typically include both single-conductor braided wire and 4-conductor wire, so you can use whatever wire you want. If you're trying to cop that vintage vibe, then braided wire is the order of the day. Otherwise, we like 4-conductor wire. We only use 4-conductor wire in our prewired assemblies.

## SOLDERLESS OPTION

Our prewired assemblies are available with a solderless option. If you select this, then you'll receive a switch that has wires terminating in gold pins, and these pins simply plug into corresponding gold sockets that are attached to the main harness. Just match the colors, and plug them together.

## SWITCH ORIENTATION

Please note that it's important that the pickup selector switch be oriented as shown below, otherwise your guitar's rhythm/treble orientation will be backward. See now, ain'tcha glad we told you? Save you some head scratchin'.



**ToneShaper**®

Build A Better Guitar  
Tone Shapers, Inc.  
772-217-8662  
www.toneshapers.com

DRAWN	DATE	TITLE
George Ellison	11/3/19	Les Paul® Short Switch
ASSY PN	ADOC	PAGE
LPSTD-M	-	1 of 1

© Tone Shapers, Inc. - All Rights Reserved