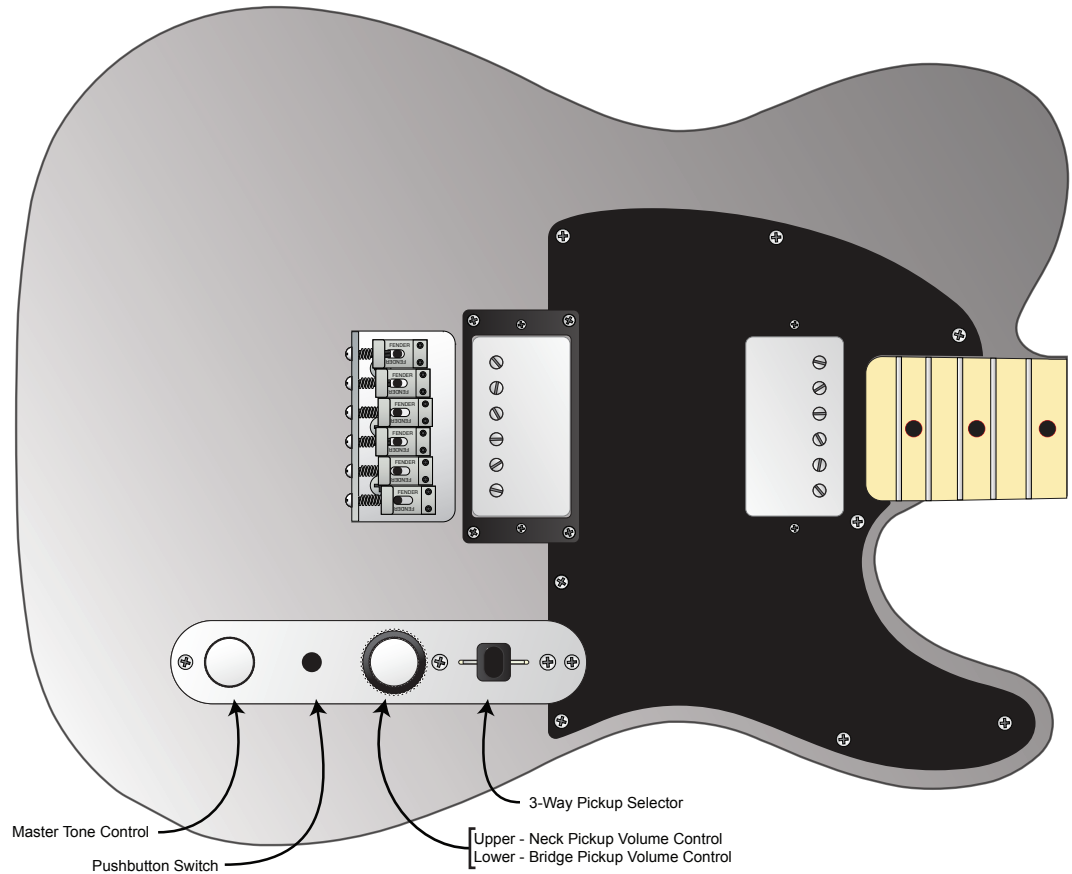
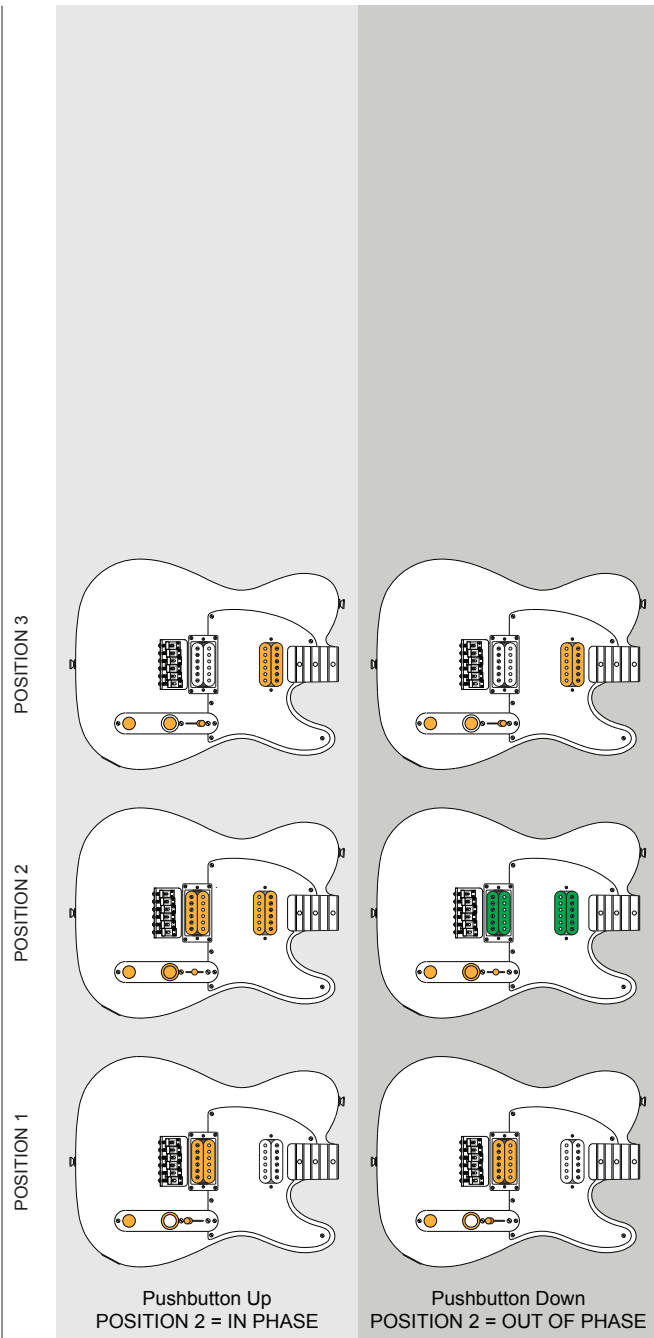


ACTIVE PICKUPS AND CONTROLS INDICATED IN ORANGE



Peter Green, co-founder and seminal lead guitar player for Fleetwood Mac, had a problem: Legend has it that while having some work performed on his Les Paul, one of the pickups had its phase reversed. While this really would have been a problem for many players, Green went on to play the guitar as it was, and the resulting tone became iconic. Talk about turning lemons into lemonade!

You can reverse the phase of a pickup by reversing its hot/ground connections, or by reversing its magnets. It's generally assumed that the pickup in Green's guitar was reversed by having its magnet flipped, and that this may have been inadvertent. Reversing the phase of a pickup doesn't change its tone when used singly, but it does change the tone when it's combined with another pickup.

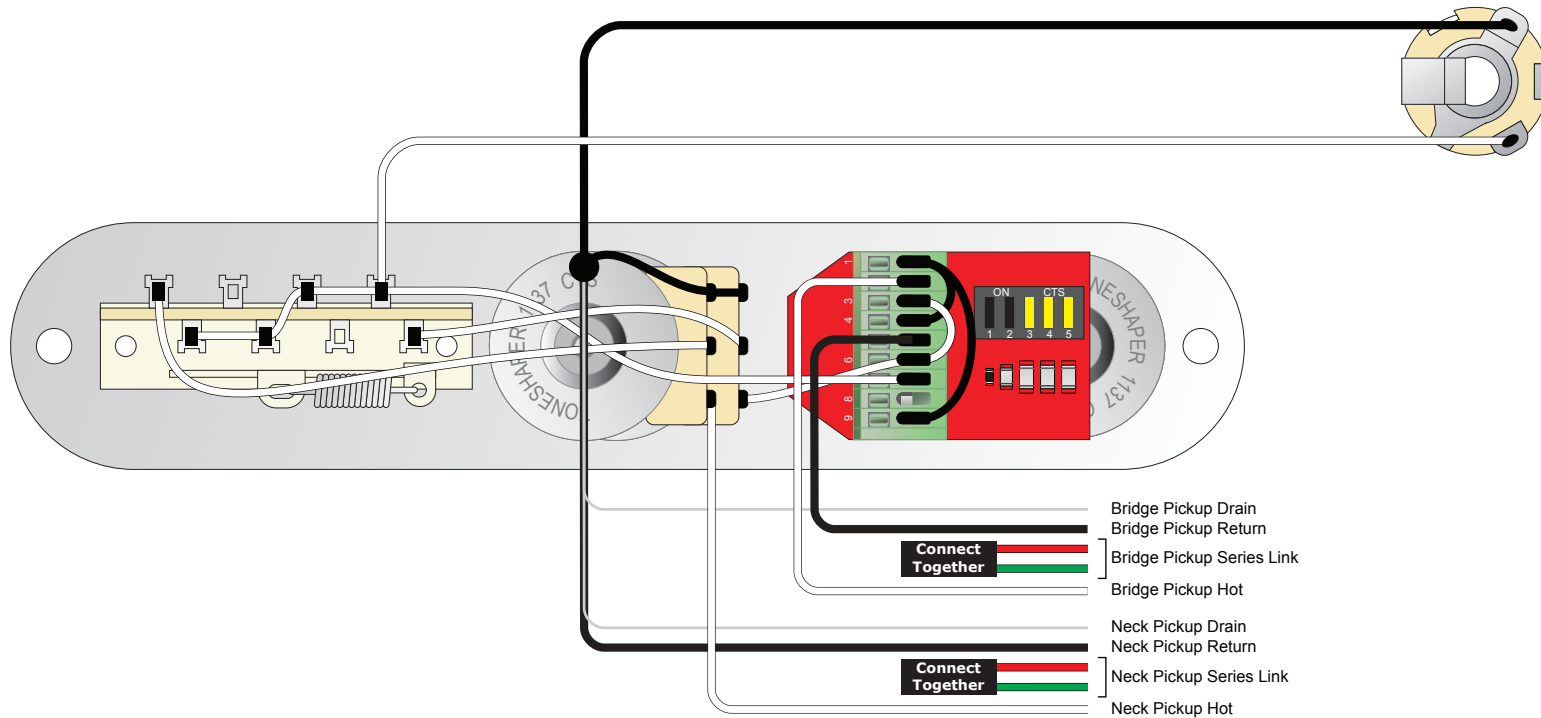
Green's guitar was subsequently bought by Gary Moore, and it's one of the more famous of the sunburst Les Pauls out there.

And now ToneShapers brings this tonal anomaly to your Tele, but in an expanded way so that you can have the two pickups combined in-phase in the normal way, or out-of-phase for that Green tone (again, this only affects the middle switch position, where the two pickups are combined).

We use our ToneShaper pushbutton switch to toggle between the two modes. This low-profile switch is unobtrusive, but right where you need it for quick changes in the heat of battle. The switch is mounted to the tone pot with a nifty circuit board, which incorporates three capacitors that may be selected in various combinations, allowing you to tailor the tone control's treble roll-off to your liking. Very cool, and all passive - no batteries.

Of course, to make the most of this wiring, you need to have individual volume controls for each pickup, so we've incorporated a concentric volume control. This has a set of stacked knobs, with the upper one controlling the neck pickup and the lower one controlling the bridge pickup. In the out-of-phase position, subtle changes to either volume control yield substantial tonal changes, so there's a lot of flexibility lurking in this setup. All pots are 500k, since most humbuckers are voiced with 500k pots in mind (this is the value traditionally used by Gibson).

So get your Green groove on, on your Tele! ToneShapers - Providing tone du jour for discriminating players like you!



PUSHBUTTON USED IN TONE POSITION



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DIP SWITCH SETTINGS
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DRAWN George Ellison	DATE 6/26/12	TITLE Telecaster® Total Green Machine (Button Down = Out Of Phase)
ASSY PN TE-HH5	ADOC 345	PAGE 1 of 1

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NOTES

The color codes shown are Lindy Fralin's. For both pickups, the red and green wires will be tied together and then taped off. The junction of these wires shouldn't touch anything else.

The two bare wires from the pickups must be connected to ground. They can be connected to the solder point as the neck pickup return. Be sure that none of the excess bare wire touches anything in the control cavity. The easiest way to do this is to cover it with heat-shrink tubing.