

## To Mod or Not to Mod....

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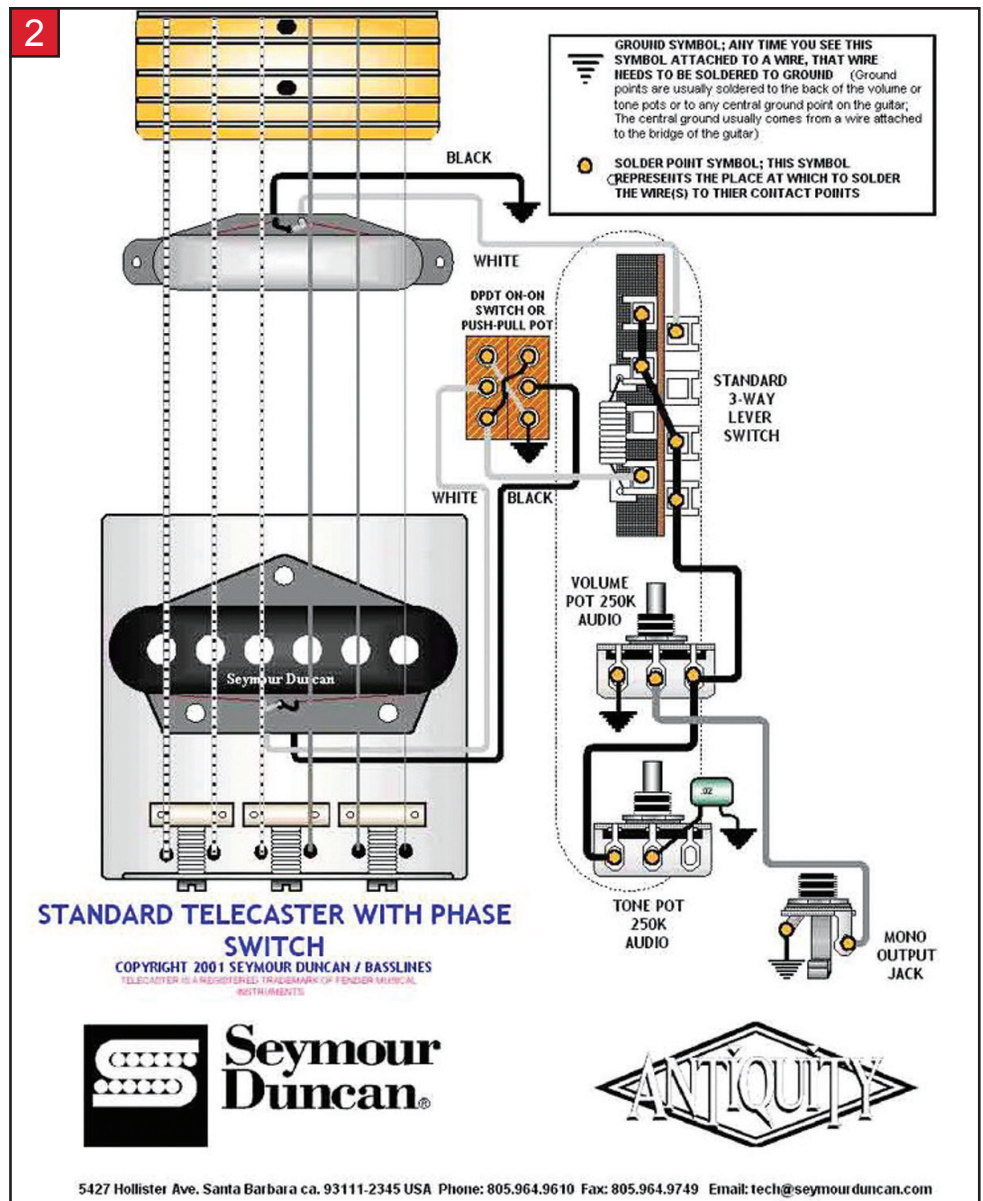
When I was a full time repair person in the 70’s, a change occurred in the industry that changed our ability to modify electric guitars and basses. It was the start of the independent pickup companies like DiMarzio and Seymour Duncan. It was the start of Fender styled

necks and bodies from companies like Schecter and Boogie Bodies (later to become Warmoth). It was also the era of replacement hardware from many companies. So let’s take a historical look over how these affected our work.

The earliest mod I remember was the DiMarzio Super Distortion pickup. This was a very high output bridge position humbucker that was designed to overdrive your amp and give you a nice creamy distortion without the need for pedals. This pickup led to the explosion in replacement pickups both “hot rodding” pickups and vintage reproductions. For the first time, players could install replacement pickups to help achieve the elusive sound they had in their heads. This resulted in a lot of trial and error, both on behalf of players and modders alike (Photo 1).

At about the same time as the Super Distortion pickup, the DPDT (Double Pole Double Throw) mini toggle switch made its appearance. This enabled repair people to give players either a phase switch or a series/parallel switch. The phase switch enabled one pickup to become out of phase with another pickup. Although people have always referred to the “in-between” setting on a strat (neck-middle combo or middle-bridge combo) as out of phase, this is a misnomer, as the pickups are indeed “in phase”. What they are hearing is a thinner sound due to the physical location and combination of the two pickups. However, two pickups that are truly out of phase tend to produce a very thin sound, and this mod did not stay popular for very long (Photo 2).

The second major mod facilitated by the DPDT switch was the



series parallel switch. In the case of a guitar with two pickups, when both pickups were on together, the switch enabled the pickups to work in series or parallel. In series, the output from one pickup feeds into the input of the second pickup, providing a “hot” output. In parallel, each pickup ran to the control



cavity independently and produced a thinner sound, which was intended to make the humbuckers sound more like a single coil. Later, the switch was used to enable a humbucker to be in series (the norm) or parallel by itself.....either one coil in series with the other (normal output) or parallel (thin sound) **(Photo 3)**.

At the same time as all of the above was taking place, companies like Boogie and Schecter began to sell replacement Fender style necks and bodies. In addition to normal wood replacements, they began making parts out of more exotic woods, many of them African or South American hardwoods. While the quality of these parts exceeded those of Fender, most of these heavy exotic woods lent themselves more to making coffee tables than guitars **(Photo 4)**.

The final component of the MOD years was brass hardware. The belief at the time was that heavier brass hardware would produce more sustain.....so replacement bridges and tailpieces made of brass began to appear on the market. Soon, every imaginable part was being made in brass.....jack plates, switch tips, mounting rings, etc. One of the problems was that raw brass tarnishes very easily so the appearance of the brass did not hold up. Next brass nuts appeared....again designed to increase sustain. What most people did not realize at the

time was that the nut could only affect the sound and sustain of an open string.....once you fretted a string, the nut became irrelevant. Another issue with brass nuts is that strings bind against the brass, resulting in years of tuning problems until people got smart that brass did not make a good nut material **(Photo 5)**.

So for a good decade or more, good repair people got caught up in the cycle of hardware upgrades, neck and body replacements, and a steady stream of pickup replacements. Much of the hot rodding came to an abrupt end in the mid 80's when the vintage market took off. At that point, people like myself realized that all of the mods we were doing to 50's and 60's electric guitars and basses would devalue them on the vintage market. So the smarter ones among us ceased to mod what we now consider vintage instruments, unless they were what we called "player" guitars that had already lost their vintage value.

So what did we learn from a decade of hot rodding guitars and basses?





Leave vintage instruments in original condition.

2. There is more to the tone of an electric instrument than “sustain”. Players began to choose to have their sound controlled more by pedals and amps, than the pickups themselves. Players began to return to their original or vintage reproductions of their original pickups.
3. People like myself, began advocating as early as 1980, that electric instruments were still acoustic instruments and the wood of the neck and the body influenced how the string vibrated and was a major influence on the sound of the instrument. In addition, lighter weight woods began to be appreciated for their tone and acoustic properties.
4. Distinctive guitar designs, like Rickenbackers and Gibsons, were best left alone. A Rick is meant to sound like a Rick and nothing else. It is very hard to make a Gibson sound like anything other than what it was intended to sound like.... Les Pauls, 335’s, etc.
5. The Fender platform seemed the most suitable to modifications. Adding a humbucker to the neck or bridge position of a Strat or Tele created a much greater tonal palette than trying to make a Les Paul sound like a Strat. Almost all of the studio players whom I worked for in the late seventies and 80’s had either a Tele or a Strat with a humbucker in the neck position to get a warmer, fuller sound. Rockers had humbuckers in the bridge position on Strats or Teles for lead work.
6. Drilling holes in guitars and basses for mini toggle switches became taboo, unless they had no vintage value. Besides, everyone got tired of the out of phase sound and series/parallel switches in a short period of time.

In conclusion, although we have more options than ever before in regards to modding instruments, we have learned a great deal of what works and what doesn’t. We have learned to respect the sound that an instrument was created for in the first place

and not try to make an apple into an orange. We have learned to respect the original condition of older instruments and not make changes that would affect their resale value. We have learned what types of instruments can benefit from mods and which ones do not.

This is not to discourage anyone from trying all of these mods for themselves. Just use good judgement on what guitar you select for drilling that hole for a switch or routing the body to install a different pickup or bridge. Have fun and learn at the same time! □

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