

The Evolution of a Custom Built Guitar

A year or so back I noticed my old workhorse strat was beginning to show its age. It had been my main guitar since I got it brand new in 1989 and needed some serious work to get it back into tip-top condition. It began as a Japanese 60's re-issue in sonic blue, then it got a set of EMG pickups, some jumbo frets, and over the years, lots and lots of stickers – not to mention the amount of scratches, dings and battle scars that any working instrument picks up in its lifetime. After fifteen years of use as my main gigging/teaching/recording instrument, more than anything else it seemed like it was time for a change.

With this in mind, I went guitar shopping. My list of requirements was fairly straightforward; I needed a strat & it had to be a Fender. I still remember the thrill I got on buying my first *real* Fender, so buying a mere “copy” - however good - was not an option. Call it snobbery if you like, or just put it down to the fact that all those years spent playing Kay's, Encores, Marlins & Hondo's meant that, to me, you either own the genuine article, or you don't. I owned a strat, and I wasn't about to switch to using a strat-copy. So there!

Anyway, as I said, my list of requirements was fairly simple. It had to be a Fender Stratocaster & I always disliked the lack of a 22nd fret on my 60s re-issue, so it had to have a 22 fret neck. Another thing I wasn't keen on with my old guitar was the skinny fret wire and 7 ½ inch fretboard radius, as these features tended to inhibit string bending. This led me to replace the original frets with jumbo gauge wire which made it much more bend-friendly.

As a guitar teacher, I get to play a lot of different instruments, from the cheapest eBay-bought planks through to Les Paul Customs & PRS's. This means that I have a pretty clear idea of what I like in a guitar, and to be honest I've never liked the look (or sound) of the modern Fender bridge design with the twin pivot posts. It may help tuning stability when using the tremolo, but I don't use one, so that isn't really relevant. Also it seems to me that if you only have two points of contact with the body (the twin pivots), then you aren't going to get the same amount of resonant sustain, than if you have a large part of the bridge plate in contact with the face of the guitar, as is the case with the vintage type design. I suppose I could go for a “hardtail” strat (no trem), but having played one of these, I was unimpressed with the lack of vibrancy in the sound. So the list of requirements was beginning to take shape... 22 jumbo frets; modern fingerboard radius; vintage style trem...

On to the pickups. I like the HSS type layout as this gives the best of both worlds in terms of a ballsy humbucker tone for those high-gain moments and all the “out-of-phase” in between sounds that us strat

players know and love. As for the brand of pickups, I wasn't that bothered as long as they delivered the goods in the tone stakes. So here is the shopping list that I went to my local Fender dealer with:

Fender Stratocaster with...

- A 22 fret modern radius neck & jumbo gauge fret wire.
- A vintage style trem.
- One humbucker (bridge position) and two single coils (middle & neck positions).

Hardly a long and exhaustive list of requirements is it? This may or may not be true, but the guy in the shop

(see post-script)
informed me that no such Fender guitar existed* – at least not within my budget. I could have the modern neck & jumbo frets, but this would come with a modern bridge – I wanted vintage. I could have the HSS pickup layout & vintage bridge, but I'd have to settle for 21 skinny frets. He actually recommended a Yamaha Pacifica, which is a very nice guitar, but remember what I said about not wanting a "copy"? No, it had to be... well you know the rest.

It seemed that the only way I was going to get the strat of my dreams was to buy something close to what I wanted, then tinker with it until it was "just right". With this in mind I bought a second hand Mexican Fat strat on eBay (where else?). I got the vintage style bridge & HSS pickup layout, but not the modern neck radius or frets. Acoustically the guitar sounded credible enough, but on plugging in I was initially unimpressed with the pickups. They had a very woolly indistinct tone, so obviously these were the first things to be replaced. I bought a set of Wilkinsons from Axesrus which came mounted in a black pearloid scratchplate, all pre-wired & ready to drop into the guitar. The price was frankly staggering – the whole assembly for under fifty quid, brand new! Then there's the sound of them: Brassy, in-your-face, SRV-esque neck pickup; in-between sounds that Mark Knopfler would be proud of, and a humbucker that barks like a scrap-yard dog. Let me say right now that if you're in the market for replacement pickups, give Trev Wilkinson's units a try. They sound absolutely fantastic and cost a fraction of certain other "name" brands.

So that's the electrics sorted, now let's deal with the issue of the unsatisfactory neck/frets. I took the guitar along to my local guitar repair guy, the excellent Jim Cairnes, who had re-fretted my previous strat. I asked him how much to install jumbo gauge wire and could he possibly find a way of extending the fingerboard to get a 22nd fret? The answer, "you'd be better off just getting a new neck". So I did. Once again, Axesrus came to the rescue with a 22 fret, modern radius, maple neck with jumbo gauge wire. Again, I was stunned

by how cheap it was – just a shade over sixty quid. It was going to cost nearly double that to have the old neck re-fretted!

By now, the guitar had become a bit of a “project” and I wanted everything “just so”. With this in mind, I ordered a Wilkinson replacement bridge, in gold, with a larger trem block as I’d heard all the anecdotes about what an effect this had on improving the sustain. Also ordered were gold tele-style control knobs and gold tuners with pearl buttons. Oh, and the final requirement, a set of Fender decals to go on the new neck. Well, we don’t want anyone thinking this is a copy do we...

All the bits turned up on the day after my 40th birthday, and I nervously began putting it all together. I am the most cack-handed person I know when it comes to DIY – the desk I’m sat typing at came flat-packed and was a nightmare to assemble – hours of stressed out head-scratching trying to work out which way up the diagram is supposed to go, and which way round does panel “C” fit onto panels “F” and “G” etc... etc... I guess what I’m trying to say is that I’m hardly a natural when it comes to wielding a screwdriver.

In the end, I needn’t have worried. Everything fitted perfectly together first time round. I even got the decals on without ripping them. The new neck is sleek and smooth with a high-gloss finish and an action that dreams are made of, with not a sign of fret buzz or rattle anywhere. The new bridge, with the bigger trem block, makes such a difference to the sound. Acoustically the guitar is so LOUD, and this translates via the Wilkinson pickups into a wonderful resonant, woody classic strat tone that has to be heard to be believed.

I managed to borrow a completely unmodified American Standard Stratocaster, and a 50th Anniversary Deluxe Strat. With these two guitars as benchmarks, I did a bit of a *Top Gear* test (does this qualify me as *The Stig*?). Shown below are the results; obviously the humbucker in my strat gives a darker sound than the bridge single coil in the American Standard & Anniversary models, but the guitar overall has a ballsier tone, which shines through even on the single coil settings. Also, notice the *volume* of the Wilkinson units – all three guitars were recorded identically using the “Tweed 4x10” amp model & “Vox AC30” cabinet model on a Vox Tonelab preamp. The only effect added, apart from the mild overdrive coming from the Tonelab, is the “unplugged” reverb setting in the Cakewalk software used to record the examples. Also, the 50th Anniversary Deluxe was recorded using just the “stock” sounds – the S1 boost was left switched off.

American Standard Stratocaster	Bridge Pickup	Bridge & Middle Pickups	Middle Pickup	Middle & Neck Pickups	Neck Pickup
Customised Home-built Stratocaster	Bridge Pickup	Bridge & Middle Pickups	Middle Pickup	Middle & Neck Pickups	Neck Pickup
50 th Anniversary Deluxe Stratocaster	Bridge Pickup	Bridge & Middle Pickups	Middle Pickup	Middle & Neck Pickups	Neck Pickup

What a sound! The Wilkinson pickups cost less for a complete set than you'd expect to pay for a single "SeyMarzio" unit, and the tone they give is truly world class.

The only original part left from the Mexican Fat Strat that I started out with is the body, so this begs the question "Is it still a real Fender?" Well, I like to think so. I recall watching a Fred Dibnah show on TV where he was rebuilding a 1930s steam engine. The only original part was the steam pressure gauge, but because it was an original part, the project was classed as a "restoration" rather than a "new build" so I guess I can apply that principle to this guitar.

In conclusion, I've got a guitar that looks, feels, plays and sounds like a custom built instrument costing well into four figures. But here's the best bit: I've got the satisfaction of knowing I put it together myself and the total cost (including the what I paid for the Mexican Strat I started out with) comes in at under £500 – and that's before I recoup any of my costs by putting the bits I took off, such as the old neck, on eBay. I never dreamed I'd be able to afford a custom built guitar, especially one with "Fender" on the headstock, but I've done it and so can you. Even if you've no experience of guitar maintenance, and are generally useless when it comes to DIY, you can get the instrument of your dreams, I have. Give it a go, you might just surprise yourself!

*As a post-script, it seems the youth working in the local Fender dealership was mis-informed. A HSS pickup-ed, 22 jumbo fretted, vintage trem type strat *is* available after all – the Highway One Strat. Does this mean I regret spending time & money on a self-build? Not a bit of it: there's a satisfaction to be had from knowing *I built this and no-one has another the same*. Plus I still paid less than the cost of a Highway One strat for something that looks like it cost more than double – how can I not be pleased – not to say a little smug – with the result?

Scroll Down for Before & After Photos...

Before



After

