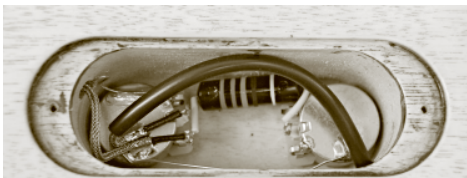




Lagniappe
Upgrade notes: We replaced the stock, linear taper CTS

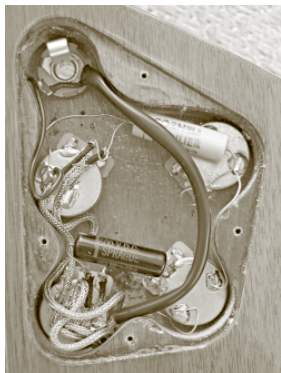
pots in our '06 Les Paul Junior with a 'Les Paul Jr./Melody Maker' pot kit from RS Guitarworks consisting of an audio taper 500K volume, 250K tone, and a .022 mf Jensen paper-in-oil tone cap. All of these upgrades were relatively easy, and a big step up from the stock parts. The 250K tone pot and Jensen cap added a rounder, deeper tone without rolling off or dulling treble. Recommended.



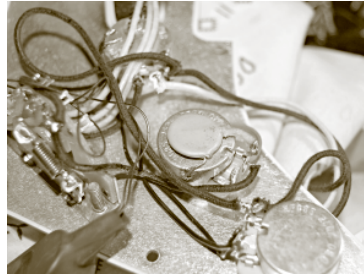
If you're working with a relatively new guitar made within the

past several years, be prepared to confront ROHS compliant solder on the pots. Unlike older rosin core solder containing lead, this stuff will not melt quickly by merely applying the tip of your soldering iron to it, and you can easily ruin a good pot by overheating the case. To avoid this, melt a small quantity of your own rosin core solder on the existing stuff and it will immediately soften, enabling you to get all the wires off the pots, or remove existing caps for replacement without burning anything up. We also use a strip of painter's tape to hold the large insulated wire from the input jack to the opposite side of the control cavity we're working on. Paying someone to swap pots and caps seems unnecessary, but we also understand that you don't want to leave the wiring harness in your guitar looking as if a 6 year-old had got ahold of it... That's embarrassing. But if you want to fully explore the benefits of upgrading your electronics – including pickups, we urge you to learn how to do your own work. Yes, you can.

If you're stumped on sourcing vintage tone caps, they can be found at places like eBay and Angela Instruments, but you need to become educated first... NOS vintage caps that have been measured are your best bet, and they will cost the



most. We recommend Cornell-Dublier 'greenies' over vintage Sprague Black Beauties and Bumble Bees, which sound colder and edgier to us, while the C-Ds possess a smoother, warmer tone. For Fender style guitars requiring a .047 mf cap, you might experiment with the large, tan ceramic disc caps that were widely used in Supro amps and some guitar brands



in the '60s. If you are tempted to buy cheaper 'pulls' – used caps originally installed in an old piece of vintage gear, do so only if the seller states the actual, measured value of the cap to spec, or invest

in a capacitance meter (around \$30). Buying old caps that have drifted way out of spec is just stupid. The Luxe caps are an excellent alternative to vintage caps. They typically produce a rounder tone with more depth than modern polypropylene caps, and secondarily, they are cosmetically true to the originals.



The RS Guitarworks nickel silver pickup covers we installed on the Wolfetone MarshallHead set are excellent – visibly thinner than typical covers, and like Tom Holmes' covers, we like the 'aged' look of unplated nickel silver.

These thinner, lighter covers can make a big difference in the sound of your humbucking pickups... Expect more presence and overall clarity. Tip: When removing old covers and installing new ones, carefully use a sharp box cutter or other type of thin blade with a sturdy handle to cut the existing solder sealing the baseplate to the cover. Place the pickup on a sturdy tabletop, and standing over it, apply pressure with the blade, rocking it back and forth, cutting the solder rather than trying to melt it and create a clean break between the baseplate and cover before the solder hardens again. When applying solder to the baseplate and new cover, simply place a short length of solder along the seam between the baseplate and inside edge of the cover and run the tip of your soldering iron along the solder. Over-heating the baseplate and internal coils is a no-no, and this method will enable you to create a quick and neat seal in seconds.**to**

www.rsguitarworks.net, 859-737-5300

ToneQuest Primal Scream

There are lots of ways to create burning, singing sustain and distortion with an electric guitar... but most of us are no longer in the position to do so merely by setting the volume on a big, powerful amp on '10.' It really wasn't so long ago that 50 watt Marshalls, Twins, Super Reverbs and AC30s could be

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found on club stages being righteously cranked, but even on big stages today, bands have become more intent on achieving a degree of separation essential to producing a live sound equal to the quality of a studio mix. The very idea of Jeff Beck playing an isolated 15 watt amp on '3' says it all...

We like to mentally categorize the different routes that can be taken to reach a specific destination in the Quest for tone, and in nearly every instance we begin with pickups. Yeah, the guitar itself is important, but the pickup is the sole electronic source from which everything in the signal chain is fed — the primary tone source in your rig. Thinking about classic Nuge got us thinking about classic rock tones, and when you've entered that realm, 'bashful' just won't cut it. The subtleties of tone we so often discuss in these pages are replaced by a different priority — the primal scream of a well-throttled guitar moving air by the grace of a great tube amp and speakers that can gracefully tote the note. Happily for us and for you, we just received pickups for review from Wolfe, founder and sole proprietor of Wolfetone pickups in Seattle, and he sent precisely what was required for this edition of the Quest — rockers!



By our count, Wolfe makes 19 models of essential Strat, Tele, Humbucking and P90 pickup models, and he will vary some of the stock winds to taste. He is best known for his Doctor Vintage

humbuckers (stay tuned for a future review), designed to reproduce a baseline PAF that remains within the original spec, rather than the stronger snarl of the higher-output PAF variants that occasionally (but not as often as most people think) came off the line in Kalamazoo in the late '50s. For the most part, vintage PAFs are fairly tame compared to most modern replicas wound today, and they invariably sound cleaner and clearer. There were exceptions, however, and for that sound, you typically need Alnico V wire and a few more turns to produce the smoke. Wolfe chose to send us his 'MarshallHead' set — the next step up from the Dr. Vintage replica PAFs — unpotted, wound with Alnico V and more turns on the bobbins for hotter resistance measurements of 8.2K/neck and 9.0K/bridge. Most of the Wolfetone humbuckers ship without covers, so this also gave us the opportunity to install a set of RS Guitarworks nickel silver covers in our latest tobacco burst '58 Les Paul, and a pair of Luxe replica Grey Tiger .022 tone caps.

As advertised, Wolfe's pickups hit the amp harder, pushing it into distortion faster than a cleaner, weaker set. Their output seems comparable to typical Gibson Burstbuckers found in Historic Les Pauls, but that is where any similarities end. The



Wolfetone bridge pickups displays a much smoother, musical brightness without the intense, grinding edginess on the top that you hear with the Burstbucker 2. The tone is focused in the

upper midrange frequencies with plenty of presence, and excellent definition and clarity on the wound strings. This pickup is 'hot' enough to produce singing sustain without necessarily relying on a boost pedal (depending on the amp, of course) and our results are based on tests with our '58 tweed Tremolux, '59 GA 40, Germino 55LV, '66 Pro Reverb, and the 2002 Pro Junior 'Blondie'. The MarshallHead neck pickup was also a nice surprise... Honestly, any time we solder in an unfamiliar neck humbucker we do so with an underlying feeling of dread. Why? Because most of them suck! Hey, we've heard plenty of original PAFs that lacked mojo in the neck position, too, but we want to do more than just fob off mellow jazz tones in our guitars, and for lack of a better reference point, we always think of Dickie Betts' stellar rhythm pickup tone on the early Allman Brothers records. Ideally, we want to hear presence



and definition on the treble strings in our rhythm pickup, and that reedy, scooped sax quality on the wound strings without the woofy mush, please. Once you've heard an exceptional neck humbucker,

typical vanilla versions sound utterly useless and uninspiring. Apparently, Wolfe knows this, too, because his neck pickup does not wallow in such mediocrity. While not as bright as the best low-output vintage rhythm PAFs we've heard, the treble strings do possess better definition and responsive dynamic snap than the average replica PAF set, and played alone or combined with the bridge pickup, you've got some very useful tones available to contrast with the bridge alone. For those about to rock in the hotter PAF zone... the Wolfetone MarshallHead set is *highly* recommended at \$260.00.

A Meaner P90

Wolfe also sent a single P90 at our request, destined for the luscious 2006 Historic Les Paul Junior. You'll recall that this was the last new Gibson to be sold at Midtown Music, where it had languished in the case in storage for nearly three years as other Historic stock was rotated. In other words, it got lost in the day-to-day shuffle. When we spied it on the wall in the nearly empty store that had been such a deep resource

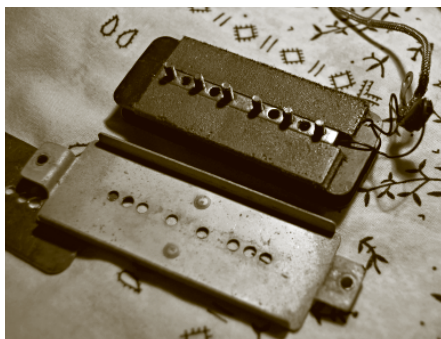
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for over ten years, the Junior proudly revealed itself to be a mystical mahogany gong that had also developed a huge swoop in the neck after sitting in the case so long under full string tension. Dave Tiller knocked another \$250 off the clearance price, and we have described how we gradually brought the neck back straight over several months of truss rod tweaking, initially removing and lubing the truss rod nut, and repeatedly making

adjustments under zero string tension with back pressure exerted on the neck. We have alternately installed Lollar and Lindy Fralin P90s in the Junior, as well as the original Gibson, and two different vintage Gibson P90s from the '50s and '60s. A word about vintage P90s – they are by no means all stunners, sometimes sounding super-bright, clean and weak, with none of the growl so many players expect, and the chances are good that if you plan to play them through a cranked amp, or God forbid – a boost pedal, they will scream bloody murder with shrieking, squealing feedback. As Jim Rolph said about vintage P90s, “If they don’t squeal, they ain’t real.”

Speaking of Rolph, we had installed both of our vintage Gibson P90s before with disappointing results. They sounded shrill, thin and weak, squealing at the least bit of prodding to perform as they were intended. Did the ‘P’ stand for ‘pig’? After sitting in a drawer for months, we sent them to Rolph with a request to verify their origins, since the leads on the '60s model hinted at a possible rewind coil. Jim confirmed our presumed timeline for each, agreed that the '60s P90 might have been re-wound, and we got them back a week later. It wasn't until we began the process of reviewing and comparing Wolfe's P90 that we broke out the vintage '50s pickup again, more or less just to re-confirm our initial perception of how lackluster it had been.



Imagine our shock when we soldered in the '50s P90 and WHAM – the Junior spewed a mighty gusher of gorgeously rude P90 gold through the Tremolux with

the first chord. Forty minutes later we came to our senses, put the Junior down and called Rolph... “Jim, I just installed that



'50s P90 I sent to you in a Les Paul Junior... *Did you like the way it sounds?* It sounds unbelievable – huge and powerful with tremendous low end, fat mids and sweet, biting treble tones. What did you do? *Well, those old magnets were just about gone – they only measured 6-7 gauss on my meter so I charged them back up to where they should be – 20 gauss, and I have a little trick I do to keep them from squealing...* Out of respect, we didn't ask what that trick might be, but we thanked Jim profusely for resurrecting those tired pickups, and he explained, “*The magnets in P90s are sitting right next to one another, and they weaken over time because of that. The design makes them doomed to weaken. That doesn't happen in a humbucking pickup because there is only one magnet.*”



P90s are one of our all-time favorites, and the sound of a great one played through a vintage Fender amplifier is mesmerizing,

so we felt a special twinge of anticipation when we read Wolfe's comments about P90s on his web site: “*I've always felt that a good P-90 should be mean, raunchy, and nasty, but still able to clean up and become sweet when needed. P90s have always been my favorite pickups to make as well as play, as they seem to offer the best of both worlds.*”

Indeed, they do. Wolfe's P90s come in three flavors – ‘Mean,’ ‘Meaner,’ and ‘Meanest’ with gradually increased output, mid-range and growl. We received the ‘Meaner’ variant measuring 9K, and constructed with Alnico II magnets. As Wolfe put it, “Well suited for the bridge position, it's meaner and raunchier than the ‘mean’ P90 with a thicker midrange and more low end grunt.”

Do you know how a truly exceptional vintage P90 sounds? If you do, let's compare notes, and if you don't, you will now... In preparation for this review, we installed a new set of Pyramid .010-.048s on the Junior and ran through all the P90s we have on hand – the original Gibson, a Fralin, Lollar,



our '50s P90 gifted by Riverhorse for another birthday we won't count, and Wolfe's Meanie. Sounds like a fun after-

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noon, dun't it? *Wait a minute...* Remember the smartest guy in the room from last month? He's baaaack. "So you listened to five different pickups in the same guitar, taking what – twenty minutes to swap the pickup out each time? That's not right. How can you remember what they each sound like compared to the others?" Of course we can – it's just hard to imagine for people that have never done it. And when in doubt, we'll always reload to verify our initial impressions.

One of the singular characteristics of a great vintage P90 is the massive low end that gushes from E and A strings. Playing an aggressive, hard-charging rhythm, you may actually have to lay off the wound strings a bit, and especially the big E to avoid overwhelming the treble strings on full, 6-string chords. For rock & roll, the vintage P90 is a beastly pickup with a huge low and midrange voice that is audibly rolled off on the very top. However, when you move into solos, the treble strings sing with a sweet, overdriven tone like no other pickup on earth. You simply need to learn to work with it, rather than indiscriminately bashing on the strings. At lower volume levels, the superior vintage P90 becomes jangly and clear as only a single coil can, with beautiful harmonic textures and chime, yet it remains direct and focused, responding to pick attack with a percussive clarity and power that you'll otherwise only find in a great Tele bridge – but still, the P90 is fatter. *Work with it*, and you'll be amazed by what a great P90 can deliver.



Unfortunately, for those who have not experienced the sound of a stel-

lar vintage P90 in hand, all of this might seem as useful as stepping outside, looking up and wishing on a star... unless you were to order a Wolfetone. Assuming that Wolfe has his act together to the extent that he can produce a consistent and repeatable outcome, you can expect to hear all the qualities we've just described in Wolfe's P90 with just a bit more sparkle, presence and snap than a typical 50 year-old P90. Indeed, if we were tasked with cutting the ultimate rock guitar track endowed with an unforgettable tone that would stop conversation among guitarists cold, we'd ram the Junior through our '58 Tremolux goosed with the Bob Burt Clean Boost and call it a day, confident in the knowledge that for this style of music, we had arrived at the end of the road in the Quest for tone. We were in fact so impressed with Wolfe's P90 that we switched it back and forth with our '50s Gibson again the following day to insure that we can say without qualification... *Quest forth.*^{to}

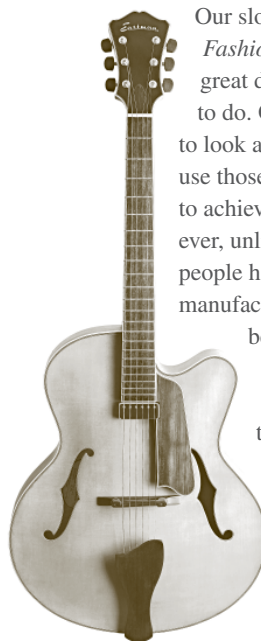
www.wolfetone.com, 206-417-3548

Eastman

T185 MX Ltd.

If you think you may be above owning and playing an instrument crafted in Beijing, think again. Of course we appreciate the lusty and seductive curves of instruments built in Fullerton and Kalamazoo, but in many important respects, Eastman Guitars seems to have nimbly caught up with American manufacturing in 2010, offering extraordinary value with features that are rarely seen in more affordable instruments built overseas. You can read the entire story on the Eastman web site, but the short version is that founder Qian Ni established a master violin workshop in China after traveling to the USA to study music in 1992. His vision of training skilled woodworkers to handcraft professional-quality, classic instruments has since grown to include an impressive variety of archtop and acoustic dreadnought guitars, mandolins and mandolas. We happened to meet Mark Herring, Eastman Product Specialist for fretted instruments in California and a ToneQuest subscriber, through an e-mail exchange earlier this year, and we asked him to provide some background on the company. Our review of the Eastman T185 MX model follows Mark's comments...

TQR: Can you elaborate on the company's philosophy in building stringed instruments and just how 'old world' your building practices are today as they apply to guitars?



Our slogan is *Modern Instruments – Old Fashioned Quality*, and I think that is a great description of what we are trying to do. Our philosophy has always been to look at the best instruments made and use those as a goal for what we are trying to achieve. We are from China, however, unlike many of the stereotypes that people have when they hear about Chinese manufacturing, our philosophy has always

been to use the strengths of China (for us it is our team of skilled luthiers) to allow us to take the time necessary to build instruments of very high quality. When we can use technology to improve the quality of our instruments we do, however, we try not to have to compromise in order to get an instrument finished in a set amount of time in order to meet a price point. This is an advantage that we have.

We look at the pre-war Martins that are coveted today and

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