

INSIDE

Mambo Son's guitarist Tom Guerra takes a journey to the center of the mind of the Byrdland blaster, Ted Nugent

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the ToneQuest Report™

The Player's Guide to Ultimate Tone
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Ted

"I am Classic Rock Revisited. I revisit it every waking moment of my life because it has the spirit and the attitude and the fire and the middle finger. I am Rosa Parks with a Gibson guitar."
— Ted Nugent



Who among us has played more than six thousand shows, sold 30 million records, arrived at the peak of their career bankrupt, rebounded with a vengeance and is still throwing down loud and proud thirty years hence? Uh-huh. Ted. In case you hadn't noticed, the state of Michigan, and the city of Detroit in particular, have turned out some very interesting human beings... Bill Haley, Del Shannon, Jim McCarty, Bob Seger, Alice Cooper, Iggy Pop, Marshall Crenshaw, Wilson Pickett, Little Willie John, Smokey Robinson, Aretha Franklin, Madonna, Don Was, Jack White, and Stevie Wonder, among others.

Then there are the bands... MC5, Mitch Ryder and the Detroit Wheels, Iggy Pop and the Stooges, Cactus, George Clinton and Funkadelic, Grand Funk Railroad, Brownsville Station, ? Mark and the Mysterians, Rare

Earth, the mighty, mighty Motown stable, and The White Stripes. And let us not forget Clarksdale, Mississippi native, John Lee Hooker, who found his voice playing in the east side clubs of Detroit while working a day job at the Ford Motor Company. But when it comes to '70s arena rock, Ted Nugent held a stranglehold on the blistering brand of gonzo mayhem that is and has always been

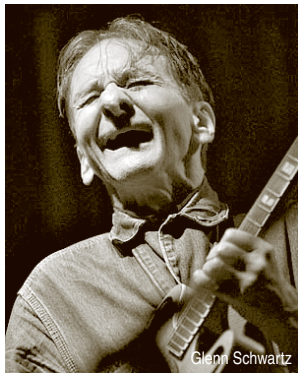
unique to Detroit. Why Detroit? Who knows? It's simply the place where the spark burned hottest long enough to create an attitude of complete, uninhibited abandon. Call it a free for all...

"One chord is fine. Two chords is pushing it. Three chords and you're into jazz." – Lou Reed



In 1965, The Fifth Dimension in Ann Arbor and The Hideout were the places to be seen and hear popular Detroit bands

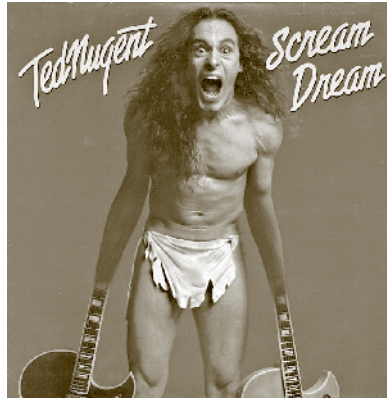
like The Underdogs, The Mushrooms, The Fugitives, The Lords, and The Rationals. Downtown, Mitch Ryder and the Detroit Wheels blistered the charts with two back-to-back hit singles featuring one of the most influential and utterly rippin' guitarists in the history of rock & roll, Jim McCarty. If you're wondering why McCarty seems to be popping up so often in the TQR, we're trying to give you a not-so-subtle hint... Most of the major cities in the midwest could boast at least one local guitar hero in the '60s – Herb Crawford,



guitarist in Sir Winston & the Commons in Indianapolis, in Cleveland (the original guitarist in the James Gang), and in Detroit, McCarty was the shit. Naturally, this did not go unnoticed by a young Ted Nugent, who also happened to note McCarty's brief flirtation with a comparatively rare and unusual tool for rockers – the Gibson

Byrdland, which Nugent cleverly chose as his signature guitar. Destined to transform Gibson's comely jazz box into an acetylene jizz rocket, Ted shrewdly figured that a vibey, semi-hollow axe like the PAF-loaded Byrdland would be uniquely capable of spewing molten torrents of thick, persistent distortion when plugged into a blackface Twin (or six) on '10' that would sustain for days.

"We were the first wave raised on Les Paul, Link Wray, Dick Dale and Scottie Moore... We were the first wave to say, 'More amps is better.' We were using the same amps as Chuck (Berry) and (Duane) Eddy. We just turned them up and discovered distortion is not an enemy."



Indeed, distortion was Nugent's friend, and he cashed a lot of checks drawn on a towering bank of Fender Twins pounding massive Showman cabinets and the world's largest collection of vintage Byrdlands. It is also essential to note how Nugent's

feral leaping about and prowling the stage in nothing but a loin cloth or trailing a furry cat tail effectively ignited the latent tribal instincts of his white, working class fans — a generation centuries removed from the frenzied ecstasy of tribal rituals celebrating the hunt, the kill, and the feast, vanquished enemies, life's beginning and end, and the collective faith in a higher power. You can knock the act all you want — swinging on a rope or riding in on a buffalo — but Nugent's game was all about putting people back in touch with the essence of their primitive DNA — the very same reason why the appearance of rock & roll scared the living shit out of so many people when The Pelvis showed up. Ted was the leanest, craziest, hardest rocking mofo in the tribe wielding a lethal thunder stick that operated in just one mode... 140 dB.

Nugent's first taste of success came early in the Amboy Dukes, whose hit single, "Journey to the Center of the Mind" was released in 1968 and charted at number 16. He eventually changed the name of the band to Ted Nugent and the Amboy Dukes and recorded Survival of the Fittest, Call of the Wild and Tooth, Fang and Claw in rapid succession during the '70s, while becoming famous for arranging cage match



guitar duels on tour with opponents like the MC5's Wayne Kramer and Frank Marino of Mahogany Rush. Nugent then tossed the Amboy Dukes name completely aside and became

simply Ted, teaming with Derek St. Holmes on guitar and vocals, Rob Grange on bass and drummer Cliff Davies. The band signed with Columbia and proceeded to scorch the earth with the release of Cat Scratch Fever. Yeowww. Well, that one was pretty good, but he trumped himself with the release of Double Live GONZO in 1978, arguably his best

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work ever. (Riverhorse claims to have been deeply inspired by and strongly recommends “Great White Buffalo.”) Now Ted was at the top of the rock & roll dung heap for half a minute in the relative scheme of life, until Captain Even Up made an appearance in 1980, and he was forced to file for bankruptcy. Did he slither back into a dark hole and drown his troubles in drugs and drink? Nooo... He hit the road like a man possessed, worked his way back into solvency, and he hasn’t let up since.



Yes, Nugent has more recently become a highly visible and controversial political animal as well, but the Quest for tone has nothing to do with animal rights, the Second Amendment, children’s charities, or politics, so you’ll get none of that here (nor did we edit any out). For this edition of the Quest, Ted simply shared his passion for the music that has super-charged his life. Enjoy...

TQR: As a rocker entering his fifth decade on the world stage, how are you holding up?

Considering all the animal flight time off the towers of amps and 5 foot drum risers for more than 6,000 brutally energized rockouts, plus 40 years of mountain climbing, swamp running and killing dangerous beasts with sharp sticks, I’d say I am doing miraculously grand! Sixty-one years clean and sober does a healthy wildman make.

TQR: Are you surprised that straight ahead heavy rock and roll has survived over the years?

Not at all. All us so called “classic rock” bands were raised, inspired and spiritually driven by the Godz of black American soul, masters like Chuck, Bo, James, Wilson, BB, Howling, Muddy, Lightning, and the mighty Motown FunkBrothers magical music et al. Such emotional, uppity, soulful music motivated us to put our hearts and souls into being the absolute best musicians that we could possibly be, and such American Dream excellence has a life of its own and cannot be ignored nor deterred. I crave it more today than I did as a snotty little Detroit sassafra in my garage with a loud amp in 1958. It is raw, pure, primal-scream uprising music for the defiant ones, and there are plenty of us still out here.

TQR: What can you tell us about your current tour, and band lineup?



God clearly loves me more than other guitar players, since He has surrounded me with the most gifted, ferocious rhythm combos forever. Again, this “Trample The Weak Hurdle The Dead NugeTour 2010” is propelled by the Godz of Thunder – Mick Brown on drums and Greg Smith on bass. These guys ain’t right. They deserve me. Defying gravity with the highest energy rock of my life is such fun. It defies all logic, but our rockouts this year are tighter, higher energy, and ridiculously more fun than ever before. We ain’t right.

TQR: Going way back to the beginning, in your early teens, who were your early musical heroes, and what type of music really moved you?

Chuck Berry, Bo Diddley, James Brown, Mitch Ryder and the Detroit Wheels, the Beach Boys, The Ventures, Lonnie Mack, Little Richard, Jerry Lee Lewis, all things Motown, the pure, raw interpretation by the Stones, Beatles, and Yardbirds of American black music drove me wild and still does to this day.

TQR: Do you remember your first decent guitar and amp setup? What were you playing back then?



As early as 1958 I had a beat up but gorgeous blonde no-cut-away Epiphone big fat hollow-

body and a small single 12” speaker Magnatone amp from Joe Podorsek at the Capitol School of Music on Grand River Avenue in Detroit. I experienced with much delight my first attack of feedback and it was glorious even before I could control it at all.

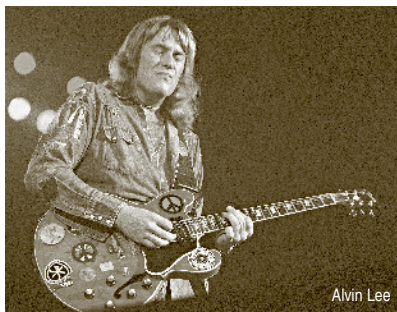
TQR: You became known as a guitar slinger around the time of the Amboy Dukes, and during the early ‘70s, you’d have “showdowns” with other guitarists, people like Mike Pinera, Frank Marino and

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Wayne Kramer. A good friend of mine saw you and Mike at the Allen Park Auditorium and said it was amazing – what can you tell us about those days?

My love for music has always been pure and intensely adventurous, so the opportunity to jam with anybody anytime anywhere was and will never be turned down. Our clever booking agents at Diversified Management came up with a ticket selling marketing plan to create a challenge between hot guitarists that we could book together on the same shows. We had a ton of fun with it each night but we never looked at it as a real contest, just a chance to play together. Mike, Frank and Wayne were incredible and very inspiring genius guitarists.

TQR: Who are your top 3 all-time favorite guitarists, and why?



Lonnie Mack for tone and overall lyricism so early on, Jimmy McCarty of Mitch Ryder's band for sheer fire and Jr. Walker saxophone type solos, and a toss-up between

Chuck Berry, Jimi Hendrix, Stevie, Eddie Van Halen and Joe Bonamassa for all things insane guitar statements. There are so many phenomenal virtuosos out there that it is impossible to limit it to only three. I think of Mike Bloomfield, Johnny Winter, Ronnie Montrose, Buddy Guy, BB, Albert and Freddie King, Gatmouth Brown, Keith Richards, Jeff Beck, Eric Clapton, Jimmy Page, Alvin Lee, and so many more. Guitars and guitarists bring me monster quality of life.

TQR: You took the Byrdland in a new direction, as you were the first to do stuff like dive-bombing and managed feedback on a hollowbody, as well as some really tasty, beautifully melodic instrumentals like "Hibernation," "FreeFlight" and "Homebound." What made you bond with that particular guitar?



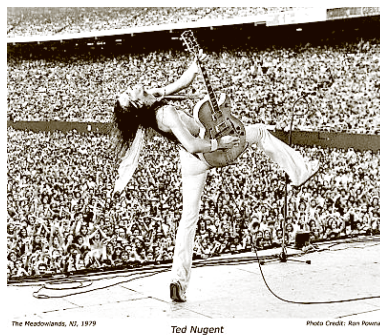
I first witnessed Jimmy McCarty with Billy Lee and the Rivieras at the Walled Lake Casino outside Detroit as early as 1962 before they were Mitch Ryder and the Detroit Wheels. He played a Byrdland through a Fender Twin Reverb

with the most amazing dynamic array of tones I had ever heard or imagined. I was hooked at that very moment, and to this day 50+ years later. Amazing huh! I also toured with the Young Rascals around 1967 and '68 when Gene Cornish used a Byrdland with incredible tone. There simply isn't any other guitar with such a rich timbre.

TQR: With the trifecta of "Ted Nugent," "Free for All" and "Cat Scratch Fever," you began selling out stadiums and got huge. I first saw you in the '70s, right after the release of "Cat Scratch Fever." At the time you were using something like 6 Super Twins and 6 Dual Showman cabs live...and it was LOUD AS HELL! Were they all actually plugged in and if so, how did you control the feedback, given that you were playing the Byrdland exclusively at that point?

Truly a moment in time, that's for damn sure. Yes, they were all plugged in, all tone and volume knobs set on 10, and it was insanely, dangerously, brutally loud and painful, but oh so glorious and FUN! Though it looked like I was a very talented, extremely athletic dancer on stage each night, and while I in fact was, what I was really doing was scrambling hither and yon to find spots on stage where the desirable notes and chords would feedback and not allow the mighty Byrdland to eat my face with uncontrollable feedback. It was really, really intense.

TQR: A lot of people know you as a screaming lead player, but you have a great sense of rhythm and almost singlehandedly invented the heavy muted palm fast picking, on songs like "Great White Buffalo" that later became a standard technique for many metal players. Where did you pick that up?



The Meadowlands, NJ, 1979 Ted Nugent Photo Credit: Alan Posner

I got that from Jimmy McCarty originally. If you listen to "Jenny Take A Ride" his variable muting touch in conjunction with just the right let 'er rip unmuted ringing is dynamic music personified. I took

it to the ultimate level if I do say so myself, partly because in the absence of string muting, the Byrdland would simply ring beyond control and make my chords sound painfully Caucasian. I love the percussiveness.

TQR: Obviously, most people associate you with the Byrdland, yet you've played a lot of other guitars... during the '80s, you began to use solidbodies live,

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I remember you playing a Les Paul, a PRS, and I think a Hamer with Zebra finish. Why the change?



I crave musical adventure, so I allow no limits whatsoever on what I play

or where I go. My prime arsenal today is a gaggle of amazing Byrlands, numerous PRS hollowbody monsters and a squad of killer Les Pauls. I am also thoroughly enjoying some new Taylor electric hollowbodies that are amazing.

TQR: In the 70's, you were always known as an "guitar straight into the amp" guy...although there is some flanging on studio tracks like "Stranglehold". Are you using any effects these days, and if no, can you tell us why you prefer the clean sound and do you feel you can get as many sounds out of this setup as you need?

My Byrlands have such a wonderful, rich and unique sound to them that I rarely mess with it by adding effects. That being said, I also like to experiment and find that flange, chorus, echo, wah and a few other ditties make for some sonic bombastic crescendos when applied appropriately. I have them all on standby. I especially like to step on cats.

TQR: How bout pedals?

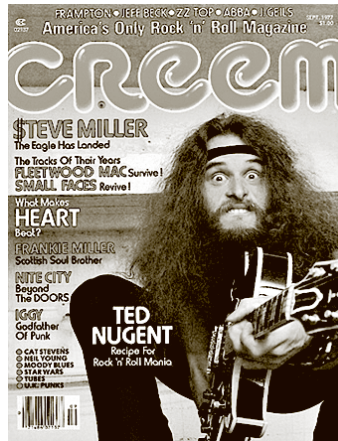
All the above from Dunlop & BOSS.

TQR: When you are not on tour, what kind of stuff do you play around the house? This may be sacrilegious, but do you own an acoustic guitar?

I jam every day and love it. I always have Byrlands, PRS, Gibsons, Taylors and an occasionally various other guitars on hand, like a killer custom beast by Ed Roman. And yes I do own numerous acoustics; Gibsons and Taylors. I love them all and play them all the time at hunting camps each fall and winter religiously.

TQR: The tone on your records, especially those first three solo records, was just incredible, very distinct, crunchy and very tasty. In those days, the word

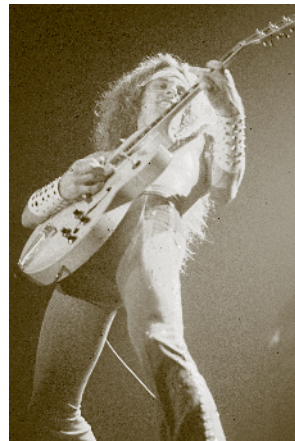
was that your fave studio amp was a brown Fender Deluxe. How did you go about getting that sound?



I owe so much of the recording of that sacred tone to Tom Werman and Tony Reale as they loved my natural tone as much as I did and went to great lengths to make sure it was captured in the studio with the use of the correct microphones, placement and recording process. Thank God huh! Most of those recordings were performed with my stage

Twins and Showman cabs, but the extra thick grease on "Cat Scratch Fever" was a rare Gibson Bell amp with a strange 12" speaker. Its all about the ears, hands, fingers and recording process and most importantly, the people who are your team listening closely and caring about the details. Intense stuff.

TQR: In the seventies, were you ever playing other guitars live or in the studio? I remember seeing a pic of you in Creem or Circus of you playing a sunburst Strat.



I have an amazing 1954 Strat that Al Nalli Music in Ann Arbor gave to me around 1979. I used it on the song "Workin Hard Playin Hard" rhythm track and it kills. I also used some Gibson Howard Roberts here and there too. And it must be noted, that my earth moving masterpiece "Fred Bear" song was a spontaneously emotional recording of that special song shortly after Fred's death with a then-experimental PRS in 1989. Anyone who hasn't heard/experienced this incredible song does not know Ted Nugent music at its finest.

TQR: What are your all-time favorite instruments that you've owned over the years, and do you still have them?

I love all my Byrlands, but wish to hell I still had the 4 or 5 early ones I somehow lost touch with dammit! I did not set out to collect guitars, but in my inexhaustible quest for the mystical guitar tone, I've amassed quite a collection of Byrd-

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lands over the years worth a damn fortune, and I got a pair of 1959 Les Pauls that I have been offered \$250K each for and a whole bunch more. Wild.

TQR: As with a lot of guitarists who grew up during the sixties, you were influenced by Chuck Berry...

Mankind owes Mr. Chuck Berry an indefinable debt of gratitude for his invention of rock-n-roll. This great American truly perfected Les Paul's creation. There is no meaningful music that doesn't have a Chuck element to it somewhere, somehow.

TQR: One of your trademarks is your speed, your fluidity and your vibrato...where did you get that from and did you consciously develop your technique or did it just come from playing 300 nights a year?

I have always played my guitar to a berserk level of intensity with relentless passion. Some would call it practice, but I just play and play and play and play. I never practice scales or patterns, I just play grinding, primal, driving, intense sensual rhythmical passages that would all make killer song themelines. I make music, not just lifeless guitar patterns. Everything I play beckons bass and drums and animal noises, and by playing like a madman all my life, a style and touch develops in an unstoppable way. I still do it everyday. I love music, especially my music.

TQR: What are a couple of your all-time favorite guitar sounds which you've recorded (and if you remember, what setup was used to get those sounds)?



Good Lord, there are so many, I really love them all. "Stranglehold" is a monster classic as I recorded it with my Byrdland and a pair of stage Twins live in the studio with Cliff Davies on drums and Rob DeLaGrange on bass. I had planned on playing the rhythm guitar track with them, then overdubbing a lead, but we were so locked in that magical zone that I went into an improvisational lead section

live, and as they say, the rest is history. That phenomenal classic guitar solo was live, take one.

TQR: What were some of the personal favorite high points in your career? I'd imagine the mega concerts like the Cal Jam II have gotta be right up there...

It has been a flurry on nonstop highest of highs, one career blitzkrieg after another, concert after concert, year after year. The animal enthusiasm of my bands and audiences are indescribably inspiring and have a life of their own every night, every song, every concert. Certainly my 6000th rock in Detroit July 4, 2008 (MotorCity Mayhem DVD) was nearly uncontrollable for me it was so intense. You have to witness the performance of "Fred Bear" in Michigan or Wisconsin to know what I am talking about. It is not of this earth.


TQR: Something that I know is important to you is your charity work...what can you tell us about it?



That I have been so very blessed to be an American and to be invited into the lives of US military heroes and their families' lives, is precious beyond compare. I do a lot of charity work with terminally ill children whose last wish in life is to go hunting or fishing with Ted Nugent. Words fail me to adequately describe such an emotional blessing. How I deserve this no one will ever know, but their spirit and strength make me a better man. I owe them much.

TQR: Are there any milestones that you haven't accomplished?

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I never think in terms of milestones, but rather quality of life prioritization in my daily pursuit of excellence in all I do. My life revolves around my wife Shemane and amazing family and friends, and dogs, too. The music is insanely powerful, gratifying and compelling, but not in the same ballpark as the people in my life. My music is so intense because my life is so wonderfully intense on all levels. 

ABOUT THE INTERVIEWER: East Coast guitarist/songwriter Tom Guerra recently released a double album with East

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Coast Mambo Sons entitled "Heavy Days" which is being met with critical acclaim. For more info, see www.MamboSons.com

The Next Step Up...

RS Guitarworks



'Upgrading' and improving guitars — new or old, has never been easier, but like everything related to the guitar — pickups, effects, amps and speakers, an argument could be made that we are faced with too many options to be certain that the red-hot gizmo we buy today won't be trumped tomorrow. Naturally, you want to know what's 'the best' and buy accordingly the first time. Short of winging it on a hope and a prayer based on an ad or a compelling chat room recommendation, what are you gonna do? May we suggest you become informed? Well, that's why you're here, and that is why we invited Roy Bowen (the 'R' in RS Guitarworks) to share his knowledge and experience in working with guitarists to make things that are not quite right as good as they can get — everything from stripping your sweet baby nekkid and sooting nitro, to repairing accidental or intended molestations, replacing pots, tone caps, hardware, pickups, or even pickup covers. Here's a depressing thought... did you know that many commonly available 'nickel silver' humbucking covers could be killing yer tone? Uh, huh... You'll never know until you know, but when you do, there will be no going back. The wrong pot values can also screw up your tone, while superior tone caps can improve it, but if you simply settle for whatever may have been indiscriminately installed in your guitar, you may never realize its full potential. Look, times are tough, money is tight, and successfully tweaking a guitar you already own — making it sound and play better — may be the best move you can make as we approach the autumnal equinox. So let's get down to it... The Quest for tone needn't always be a \$2,000 proposition.

Well, that's why you're here, and that is why we invited Roy Bowen (the 'R' in RS Guitarworks) to share his knowledge and experience in working with guitarists to make things that are not quite right as good as they can get — everything from stripping your sweet baby nekkid and sooting nitro, to repairing accidental or intended molestations, replacing pots, tone caps, hardware, pickups, or even pickup covers. Here's a depressing thought... did you know that many commonly available 'nickel silver' humbucking covers could be killing yer tone? Uh, huh... You'll never know until you know, but when you do, there will be no going back. The wrong pot values can also screw up your tone, while superior tone caps can improve it, but if you simply settle for whatever may have been indiscriminately installed in your guitar, you may never realize its full potential. Look, times are tough, money is tight, and successfully tweaking a guitar you already own — making it sound and play better — may be the best move you can make as we approach the autumnal equinox. So let's get down to it... The Quest for tone needn't always be a \$2,000 proposition.

TQR: Roy, how do you advise people that think they want or need to replace pots or tone caps in a guitar?



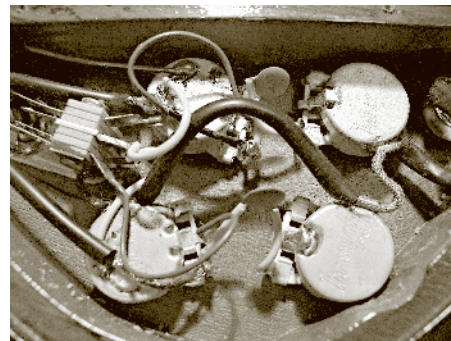
Most of the time it's not that hard because the first thing I ask are

things like what are you not hearing in your guitar? What do you like? What don't you like? What kind of amp do you use, and what style of music do you play? etc. I also urge people not to listen to everybody else, because there is no single magic bullet. We describe on our site what a specific kit will do — add clarity or brighten up the tone, for example. We spend a lot of time talking to customers on the phone asking these questions — what's missing in your sound? If a guitar sounds too thin, the Modern kit isn't the best choice, while if it sounds muddy, the Modern kit might be the best choice.

TQR: How are the pots and caps in your kits fundamentally different than stock, factory parts?

Well, the quality of a pot doesn't necessarily have anything to do with the sound. It *does* have something to do with longevity, feel and taper...

TQR: Or what happens when you put a soldering iron on it...



There ya go. That was the problem with the CGE pots that Gibson used for so long. They were silk-screened carbon path and instead

of being phenolic or anything else that is heat-resistant, they were plastic. Good enough to put a soldering iron on them once at the factory, but try to change a pickup later and they were done.

TQR: And when were those pots used?

From '95 or '96 up to 2003. They are easy to identify because they have a big Gibson script on the back. They were made in Mexico and were the lowest common denominator at that time.

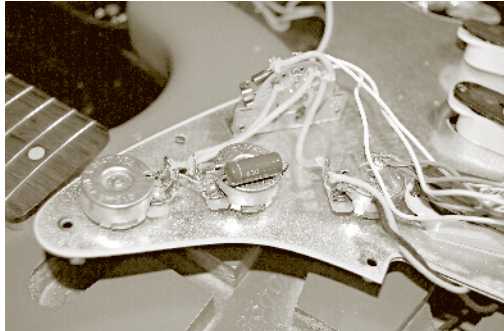
TQR: And they were linear taper...

Yeah for the volumes, which isn't what you want unless you play clean all the time. There are people who love linear pots, but for me they never work. The other thing about our kits is that the value of the pots is within 1% of the value we set for each position and kit because we measure and match all of them. Big companies are never going to pay someone to sit there and screen every pot. As far as I know we are the only company that has pushed CTS enough to get our tolerances at 5%, and it took us four years to get their engineer to do it.

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20% is standard, 10% is considered premium, and we got them down to 8% for a long time before we narrowed it down to 5%.

TQR: And what's the spec at Fender?



They have always used CTS and there is nothing wrong with the pots

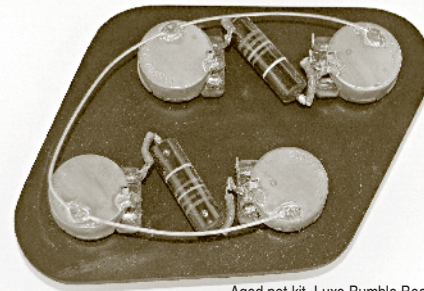
they use, except that the tolerance is 20%. Below or above spec isn't necessarily good or bad... below or above is good in the context of what you *need*. If you've got a guitar that is knocking the fillings out of your teeth, high is bad. You have to view pot values in the context of the complete circuit and the guitar. For example, if you go lower in the value of the tone pot, you can take some of the presence out of a guitar that sounds harsh without actually losing highs. On Les Paul Juniors, Gibson would often use a 500K pot for the volume and a 250K for the tone pot, because they didn't want to choke the pickup, but they also didn't want it to sound too sharp. When a customer tells us that they have a guitar that sounds too bright and harsh, we will often recommend a 250K tone pot for the bridge pickup, but you don't want to do that with the neck pickup, which often suffers from sounding muddy, and a 250K pot would make that worse. A lot of people buy the Gibson USA guitars like the Les Paul Standards and Classics that have 300K volume and 500K tone pots, which produces a guitar with no high-end, just a lot of high mids. If they had gone the other way it would make a much better sounding guitar. I have told people in the past to just reverse them in those guitars.

TQR: Tone caps are another misunderstood subject. Can you describe the evolution of the tone caps you have made for you at RS?



When we first started we were using the Hovland Musicap, and I came up with some changes working with them and we introduced the Hovland Guitar Cap, which we were really happy with. Our modern

black guitar cap that we make now is the same as the original Guitar Cap. However, we had a lot of supply problems with Hovland and at one time we went for three months with no inventory. We later found out that Hovland didn't really make anything — they were just a middleman. So we found a company here in the U.S. that is known for making audio-



Aged pot kit, Luxe Bumble Bees'

phile caps, gave them the specs for the original Guitar Cap and they reproduced it for us. Later we asked them to decrease the voltage and

physical size of the cap, because larger caps can be problematic in some guitars. We have three brands of caps that we sell now — the paper-in-oil Luxe caps, which are either NOS Vitamin Qs in a vintage package, or Russian NOS military caps that are made to look like old Cornell-Dublier, Grey Tigers or Bumble Bees. When we found Donovan at Luxe he was selling them on eBay and I thought his caps were so perfect for us, because they are paper in oil, they look like the old caps, and so much of our work is based on restorations. We also have the paper in oil Jensen caps made for us, and then the modern Guitar Caps. When we found Luxe, our initial thought was we would stop offering the Jensens, but the truth is that they both have very unique sounds. The Jensen caps have a very round bottom end, very full in the low mids and kind of rolled off a little on the top, which is good if you have a really bright guitar. I think that's been key to our growth — people can get on our forum and talk about what they are hearing in their guitar and find a solution that works. If someone gets on the forum and says they installed a kit in a guitar they were thinking of selling and they love the sound of it now, then we've done our job. On the other hand, guys will read something like that, buy the exact same kit with the



Super pots with Jensen caps

thought that having read that post, it must be 'the one,' and it isn't right for their guitar. Again, it is much better to ask questions, read the information we make

available and choose the right kit for the sound you want in the guitar you are playing. It's not a matter of 'one size fits all.'

TQR: You also offer a .015uf tone cap for neck humbuckers, which can make a big difference in presence and clarity.

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We do. The neck pickup typically needs the clarity. One thing we found that seems to be really common is when someone puts new pots in their guitar, they'll install the hottest resistance pot in the bridge... That's not what you want to do. The lowest resistance pot should be the bridge tone pot, then the bridge volume, and the highest resistance should be the neck tone and volume. I had a customer that got a little upset with me because I wouldn't sell him four pots for his Les Paul that were all exactly matched at 512K. I could do that, but what's the point? It's just wrong.

TQR: Let's move to the fascinating subject of pickup covers... The term 'nickel silver' can be interpreted many different ways. What have you learned about pickups covers?



Anyone can misinterpret metal formulations and many do, because terms like 'brass,' 'steel' and 'nickel silver' are subject to broad interpretations... If you read 'solid nickel' covers, well, what grade of nickel is it? This is an 'aluminum tailpiece.' OK, is it

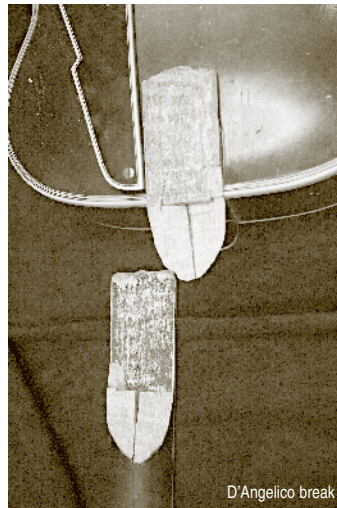
made from old Toyota bumpers, or is it 70/75 aluminum? The biggest thing that we learned is that it's just impossible to control what purity you are getting, and it varies. Bigger yet, the material thickness varies in pickup covers. There is a fine line between a cover that is too thick and sounds horrible, and a cover that is too thin that will create feedback problems because it isn't rigid. Most sheet materials like nickel silver have a tolerance of within 1/10,000th of an inch, but when you are working with a cover that is only 20,000th of an inch to begin with, that's all over the place. We also don't use plated covers at all – they are just pure nickel and if you want them to look shiny and new they are buffed out.

TQR: So you simply try to monitor the consistency as much as you can...

And you wind up sending some back. We received an order and the tops were bowed up and the sides were flared out, and you could take your hand and deform them with hardly any effort. They were horrible. So we called the company and told them this wasn't going to work. The orders we had received from them previously had been perfect — beautiful. You have to let your suppliers know that you are a stickler for details and you won't accept anything that doesn't meet your standards. Otherwise, you get what you get. Things will sneak

by no matter how diligent you are — the goal is to minimize that as much as you possibly can. You have to do that on several different levels — when the shipment comes in, at later stages when you might be aging something — all along the path from the time you receive a shipment until you ship to a customer. We originally started out building and repairing guitars and finishing, and that created the market for the parts we were using and it organically grew from there. We've learned a lot.

TQR: Let's talk about finishing. How much of your finishing work involves repair and restoration versus total refin and perhaps aging of newer guitars?



D'Angelico break



D'Angelico break fixed

I have a guitar here right now that is a '57 Les Paul TV Junior with a headstock break. The customer doesn't really want the guitar refinished, he just wants what is a really ugly 3-piece break repaired and the finish touched up to match the rest of the guitar without any visual evidence of the repair. Or sometimes we'll get a vintage P90 guitar that has been routed for humbuckers and they want the original P90 routs put back... I have a '41 D'Angelico in the shop right now with a broken neck – a beautiful guitar, and we have repaired the neck, matched the color and where there are areas the finish is checked on the neck we will match that. You also have to pay attention with vintage restorations. We had a cherry

'61 SG with the neck out of it – a really ugly break that we repaired, touched up the finish and drew in the grain where it was needed, and the customer sold it to a very well-known dealer on the West Coast. I watched him point out to the dealer at a guitar show where the repair had been made, and that's the right thing to do. Anybody that is in the refinishing business has to think the best of people. You are trying your best to make something go away and not look like a repair was never done, and you want to believe that the guitar won't be misrepresented.

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We had a guy call for a quote on refinishing a guitar, and he asked if he would save any money if he stripped it first before sending it to us. We said 'sure,' the guitar comes in and on our work order we have the customer sign it, stating that all the information they have provided is accurate, including the serial number he submitted, which was no longer there since he had already stripped the guitar. So the guitar comes in, we refinish it, stamp the serial number he provided and he gets the guitar back and everyone is happy. Now, I

don't really keep up with what might be considered a 'rare' Historic Les Paul, but apparently there were something like five limited edition Historics in this special color with Brazilian rosewood fingerboards that are valued by Les Paul collectors. Well, the guy sells the guitar we refinned on eBay for \$10,000 and references the serial number as being one of these five rare Historics. Then the guy that bought the guitar on eBay puts some pictures up on the Les Paul Forum and



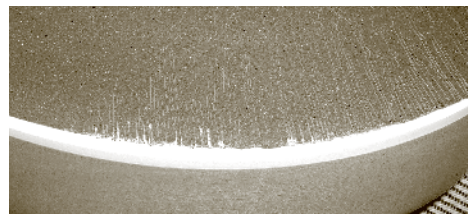
says, "Hey, look at my rare Historic Les Paul!" and another guy chimes in that he owns one of those rare Historic models and his guitar has the same serial number as the guitar we refinned... What can you do? I contacted the guy that bought the guitar we refinished, faxed him a copy of the work order and told him to contact PayPal and get his money back because here's proof that you were defrauded. After that experience, if a guitar comes in without a serial number it goes out the same way, no exceptions.

TQR: Speaking of refinishing and aging, can you age or 'relic' just about any custom shop Fender or Gibson guitar built within the past twenty years or so, or are there some models that have to be refinshed before you can age them?

Fenders can, and Gibsons can up to 2005. Around the time the VOS guitars came out, Gibson switched to some kind of finish

that... you could put it in lacquer thinner and it won't melt. I have no idea what it is. It's rubber. You can tie it up in a knot and watch it unravel on a workbench, and that's no joke. I've never seen or heard of nitro that wouldn't melt when you hit it with thinner. If you try to touch it up or spray lacquer over it, nothing will stick to it. I haven't had it analyzed, but I'd have to guess that it is some kind of catalyzed finish. In general, I don't like it, and it's a shame, because I think that the Gibson Custom Shop is building some of the best solidbody guitars Gibson has ever made. The irony is that on another level they may be using the worst finishing material ever.

TQR: That comment might get a lot of Gibson owners thinking about a refin. If they have what they consider to be a dead nuts killer guitar with the original, post-2005 finish on it, just imagine how much more killin' it could be with thin nitro...



Maybe... maybe not. Sometimes it just doesn't work. If you've got

a guitar that was made in 2005 and it's had all that time to dry out, it may not sound better than it does today after we strip it and shoot it with real nitro. Lacquer doesn't chemically harden – it dries out through an evaporative process. The solvents have to bleed out of it, and that's why the finish sinks into the grain of the wood. That's why lacquer becomes more brittle as it ages, and the older it gets, the less solvents that are left in it. Truthfully, a brand new nitro lacquer finish is just as gummy as any kind of urethane finish or something like that. It's what it does six months from now... two, five or ten years from now as it continually dries and becomes more a part of the structure of the wood. Something like a polyester or water-based urethane finish is chemically hardened, and after it's applied it's as hard as it's going to get. I believe they used to use a different lacquer formulation for Murphy-aged guitars, but I think that has changed as well. Believe it or not, when you are aging a guitar or doing a repair with aging using a blade, if the finish is too brittle it chips when you try to cut the checking in, and if it's too soft, it doesn't look right, either. You can't get that fine look of real finish checking.

TQR: How about aging Fender guitars?

You can age the Custom Shop guitars, and the recent Eric Johnson model. The USA American production reissues have a polyester sealer with a polyurethane color and four coats of lacquer on top of it, so short of stripping those guitars, no, you can't age them. The Fender Thinskins age real well.

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TQR: I suppose you don't have too many people sending in Mexican Strats or Teles...

Well, they do send those in to be refinished...

TQR: And when you strip them are you finding 2 and 3-piece bodies or something else?

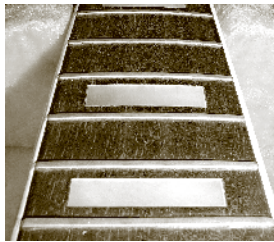
We just did a Tele for a guy and it was a 3-piece, and it wasn't a bad body

at all. Now, we had a Mexican Strat in here a couple of weeks ago to be painted fiesta red and it was a 6-piece body with veneers on the top and back to cover up the seams.

TQR: That seems like an awful lot of work to make a guitar body...

It does. We actually had a blonde custom shop guitar here that was a 3-piece veneered body with veneers on the top and back to cover the seams. I don't know what the incentive would have been to use that body instead of a 2-piece...

TQR: What kinds of structural things do you deal with most often?



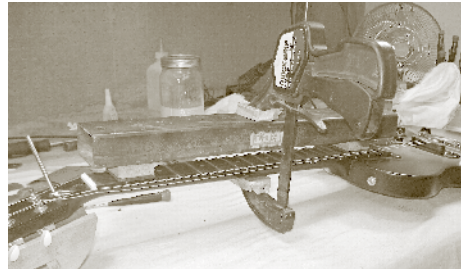
There are still a lot of Les Pauls that come in for a re-fret that have to have the fingerboards planed because of a hump at the body, and a lot of Fender basses come in that have a big S curve in the neck and we have to plane the neck.

TQR: Do you ever use heat to straighten a neck with a bow or back bow that the truss rod can't fully remove?

We do have a jig to heat straighten, and I have a limit to what I will expect to accomplish with heat straightening. It's pretty unrealistic to expect that a really drastic bow can be completely removed with heat.

TQR: Doesn't it depend on how long the neck has remained in that bowed state?

It does. We had a gentleman send in a newer Custom Shop Jazz bass, and apparently the previous owner had taken the strings off of it and left it that way with the truss rod tight for



a year, so of course, the neck was back-bowed. After all that time the neck had developed a 'memory' in

that back-bowed state. In that case you back the truss rod off, put a clamp on it and heat the neck, leave it there for a day or two and you probably won't have a problem with it again. The same thing can be done with a new guitar that for whatever reason wasn't sold for a year or two and just sat in the case under full string tension. Heat straightening can work on those, but if you have a '66 Precision bass that has been under string tension all those years and the neck has busted a move to the left, heat isn't necessarily going to cure that. To some extent, wood does what it wants to do dictated by the grain. When we build guitars, we'll take neck blanks and shape them up and then set them side for a few months to see where the wood wants to go. You can deal with a dip because the truss rod can take that out, but what you don't want to see is a hump. We built a perfectly good neck once that looked like a roller coaster after a few months. Why did it do that? Who knows, but we couldn't use it. Back in the early '90s I was working at a store that was a Fender dealer, and the number one salesman for the year could buy a Masterbuilt Custom Shop guitar for something like 20% below dealer cost. The guy who won didn't want it, so having been second, I did. I called Fender and Gene Baker was the masterbuilder who was going to build it, so I told him what I wanted – a really, really flamed maple neck and Brazilian rosewood fingerboard. When it arrived it was just amazing (looking), but it was the biggest piece of trash I have ever owned in my life as a guitar. You couldn't leave it for two weeks without having to adjust the neck. One day it would be bowed and the next day it was back-bowed, and it had no tone whatsoever. The workmanship was great, and it was beautiful to look at, but that guitar wasn't a guitar – it was nothing but a wall hanging.



TQR: Tommy Rosamond at USA Custom will sell you a flamey maple neck, but he won't back it up with a warranty that it will stay straight...

It won't sound as good, and it is not going to stay straight. You can put a guarantee on it – I'll guarantee that it won't stay straight (laughing).

TQR: We have also been told before that a quarter-sawn neck doesn't sound as good either...

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I think Bill Nash said that they sound too stiff to him. That's another thing Tommy and I have discussed, and neither one of us like

quarter-sawn necks. I think it's the quickest way to make a good guitar sound bad. They don't resonate. They are lifeless because they are too stiff. There are very few things we won't do for our customers, but we won't build a 4A flamed anything. The most we'll do is a very, very lightly figured neck, and we won't build a guitar with a quarter-sawn neck. We've had customers send them in, I've fought with them, and I just don't like them.

I know of a very well-respected builder who charges a lot of money for Strat/Tele guitars and his whole gig is quarter-sawn, flamed maple necks. If either one of them isn't bad enough, let's put both on the same guitar (laughing). Then I see people talking about how great his guitars are, so maybe he has figured out something I haven't. Everybody who builds guitars figures out how they want to do things, but I just don't want to put my name on something with a lifetime warranty using materials I can't trust, no matter how pretty they are. I have to feel that what we're building is going to remain useful. Our Japanese distributor came over several weeks ago and



they seemed to be really blown away by how we build guitars. A customer will call in and maybe they'll start telling us what features they

want, and we'll build it that way, but I'd rather you tell me what you want it to do as an instrument. Our distributor was really blown away by how we'll put a guitar together, strum it for awhile and decide that 'as is' it doesn't work. Then I might go to the parts bin and change the saddles or tone caps until it seems to really be working as an instrument. Our build sheet will tell you what components are in the guitar, but it's not a generic thing. Just because it is a certain style of guitar doesn't mean we will build it the exact same way with the same components every time. We play them, then decide.

TQR: How do you feel about weight?

When Scott and I go to pick wood, and we have some really good sources for lumber here, we are looking for wood that



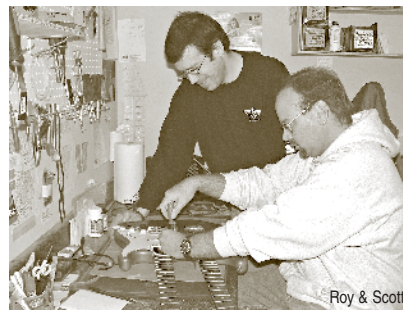
looks good, and we listen for tap tones, but we don't want something that will make a tank, either. If I had my choice between making a 6 pound Tele that sounded bad and a 7 pounder

that sounded good, that's what I'm going to do. 'Lighter' isn't better and neither is 'heavier.' A lot of people do want a guitar that is ridiculously light, but with a swamp ash guitar, the lighter you get, the less midrange you have. I don't think Les Pauls sound good when they are really light. I've had a lot of Les Pauls, including a Historic '57 that was 7 pounds 12 ounces and it was just a horrible sounding guitar... No complexity to it at all. No depth to the sound. But then you can take Greg Martin's vintage '58... I don't think that guitar weighs 8 pounds, and it sounds incredibly good. But not all of the classic vintage guitars are great... I've played real '59s and blackguard Teles that were really not very good guitars, anymore than all PAF pickups sound good.

TQR: What's your feeling about the size of a neck as it relates to tone and resonance?

I think a neck that's too big can have the same effect as what we were talking about with a quarter-sawn neck, and by the same token, really thin necks don't sound good either. It's a balancing act, and the guitar is a recipe, but the neck is where the sound is, and I'd rather have a great neck with a so-so body than the other way around.

TQR: It's always interesting to note how every neck has slightly (or significantly) different points along the fingerboard where you can hear and feel the resonant frequencies where the entire guitar comes alive. Fascinating, and always variable.



That's a funny thing. When we were building the most recent round of Old Friend guitars there was one that for whatever reason just really went off the hook in anything in G.

I mean, it just wanted to jump out of your hands. Then again, we cut up a neck that had a horrible dead spot right around the 5th fret. I was checking some neck blanks on Saturday, just tapping on them, and one end of the board was completely

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alive, but the other end was absolutely dead, so we didn't use it. When you're a big manufacturer, of course, you can't do that, but we're not trying to build even three hundred guitars a year. We don't want to be a big company in that sense. Being the 'R' & 'S' in the company, the final adjustment on every guitar that comes out of here is done by either Scott or myself.

TQR: You've also done a lot of work with people like Lindy Fralin and Greg Martin on pickups, and as you know, the 'custom' pickup business has exploded in the past ten years, largely because the parts and equipment that are required have become easily available in small enough quantities that virtually anyone can become a pickup maker. After all the prototyping and study of vintage pickups you've done, have you figured out where the magic is?

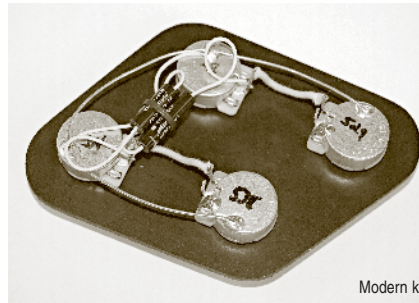


That is a challenging question, and I wish I could put my finger on one thing. Here comes the bad answer... I think a lot of it is in the talent of the winder and whatever formula they have hit on that produces a sound that works for

people, because you're right – nine out of ten guys are calling All Parts or Stew-Mac and ordering the same parts, so where is the variable? Well, the only variable is how they are winding. There are people like Jim (Rolph) and Lindy that do their own thing, and I know for a fact that Lindy has never stopped experimenting with new twists and designs, and I admire that. There are people that just by nature can't leave things alone, and while I wouldn't lump myself in with someone like Lindy, that's my problem, too. The thing I admire about Lindy is that he has never worked with the mindset that, "people already buy these pickups and I don't have to try to make them any better." He's never done that, in fact, I just got two prototypes in last week from Lindy after I had asked him if something I thought of might work. He said, "I don't know – let's try it." I've also had him build some amazing failures (LOL). You just don't know unless you try. But as far as your questions about the 'magic,' I think it is a thing that hasn't been found yet. Just like a guitar, it's the sum of all the parts to some extent.

TQR: And that applies as well to all of the kits you've developed.

Yeah. Sometimes the kits work as is, and if you have a guitar that is a little quirky, you can call or write and we'll figure something out. We just realized this year that we've sold



Modern kit

100,000 kits, but still, blindly following one thing is usually not the way to go. And that applies as well to pickups. If you're trying to get an 'old'

sound, you have to do some work and give some thought to how that can be done – it's not necessarily a matter of just going by one set of specs.

TQR: The problem is, some players have a tendency to blindly believe whatever most people are saying, or saying the loudest. It happens with pickups, pedals, amps... And the intensity of it is so bizarre, because this 'buzz' often seems to disappear as quickly as it appears.

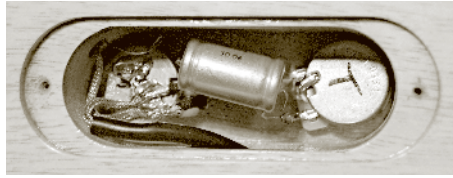
It happens with everything. There was a time when Jim Rolph's pickups were getting all the attention, then that died down and it was Timbuckers, and then the WolfTone Doctor Vintage... After we came out with our kits, this company called Black Rose bought one of them, copied it and started making their own. Then all of a sudden everybody was talking about Black Rose upgrade kits. People would ask him



questions online about why the kit sounded a certain way, and he couldn't answer their questions because he

didn't even understand how the kit worked. Quirks wear off, and quality lasts. We advertised early on in VG and Premier Guitar and I couldn't count on one hand the number of people that came to us from those ads. There was a weird point in our history where everything turned, and I could read a post where someone slammed us and twenty people responded saying he was wrong. I guess that's when you know you have arrived. If we are a flavor of the month, it's been a 6-year flavor. Do Scott and I want to bring out more products? Sure, and we want the next generation of anything we build to constantly improve and perform better. But we're not trying to be Fender or Seymour Duncan, because then we wouldn't be able to be so hands-on. Scott's favorite thing that he likes to tell people is we're just termites... just two guys that really like messing with wood. We still enjoy doing that every day, and we always will.

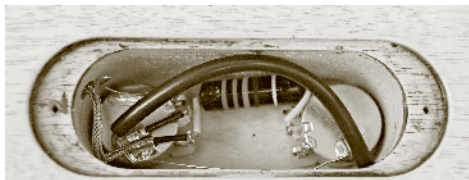
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Lagniappe LPJ2

Upgrade notes: We replaced the stock, linear

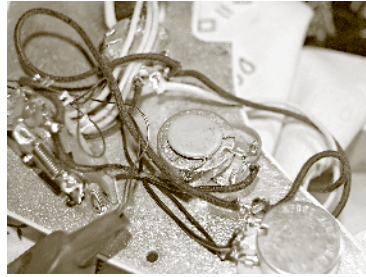
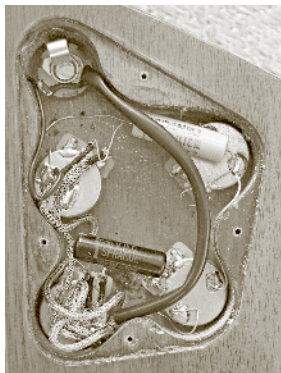
taper CTS pots in our '06 Les Paul Junior with a 'Les Paul Jr./Melody Maker' pot kit from RS Guitarworks consisting of an audio taper 500K volume, 250K tone, and a .022 mf Jensen paper-in-oil tone cap. All of these upgrades were relatively easy, and a big step up from the stock parts. The 250K tone pot 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. 

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

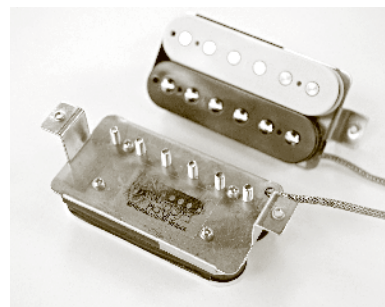
humbuckers (stay tuned for a future review), designed to reproduce a baseline PAF that remains within the original spec, rather than the stronger snarl of the higher-output PAF variants that occasionally (but not as often as most people think) came off the line in Kalamazoo in the late '50s. For the 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

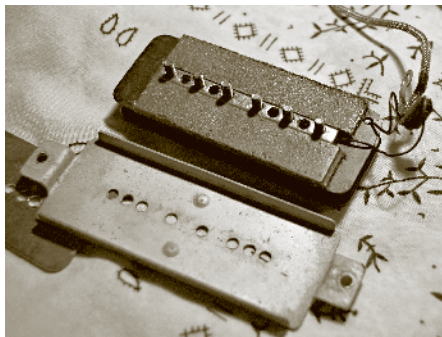
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for over ten years, the Junior proudly revealed itself to be a mystical mahogany gong that had also developed a huge swoop in the neck after sitting in the case so long under full string tension. Dave Tiller knocked another \$250 off the clearance 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.

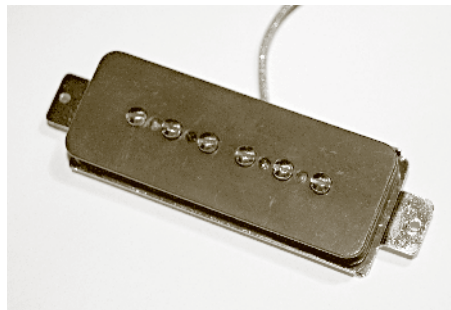


Imagine our shock when we soldered in the '50s P90 and WHAM – the Junior spewed a mighty gusher of gorgeously rude P90 gold through the Tremolux with the first chord. Forty minutes later we came to our senses, put the Junior down and called Rolph... “Jim, I just installed that

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

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afternoon, 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 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

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Martins that are coveted today and ask ourselves what is it about those guitars that makes them so special, and then we try to build instruments that we feel aim toward that quality of a guitar. Qian and his father started our workshop and it is still run as a family business. We stand behind each of our instruments for its lifetime, and I think that says a lot about what we do. The hand-built philosophy extends beyond the Chinese factory as well. For example, due to the hand-carved nature of our arch-tops and mandolins, the top radii vary from one instrument to another, therefore the bridge assemblies are hand-fit to each unique top here in our California workshop where the final quality control and set-up takes place.

TQR: What other specific construction features and methods should we be aware of and appreciate (neck joint, truss rod, bracing patterns and thickness, binding, fretwork, etc.)

This is a great question. Due to our background we excel at traditional dove tail neckjoints. Our truss rods are dual action and our bracing is not routed out on a CNC machine. The bracing for every top is custom cut for that particular piece of wood. Furthermore, we acknowledge that we are still relatively new at this game in the grand scheme of things. We pride ourselves in actively listening to the feedback from our dealers and players in order to constantly improve our products. We have incredible respect for the independent music store owners and musicians that “get it” and choose to buy our instruments. We have made and continue to make adjustments in areas such as bracing thickness (or thinness), bracing patterns and neck angles based on their input.

TQR: In regard to materials (wood), describe the selection criteria for the wood used in your guitars – bodies, necks, internal bracing, fingerboards, etc.



We have been building violins for quite some time, and when people come to visit our workshop they are stunned at the sheer volume of tonewood that we have on hand at any one time. Over the years we have been very fortunate to form relationships with some great wood suppliers in the U.S., China, Europe, and Canada. With the amount of wood that we purchase, we are able to get a great selection to work with. There has been a huge buzz in the blogosphere lately about the quality of mahogany that we have been sourcing. Not only is it incredibly toneful, but it is some of the most visually striking mahogany many have ever seen. At first glance, some have mistaken it for stained maple – some



back and sides are just that figured. I was just working with jazz icon John Pisano the other day about building a mahogany/rosewood board version of his signature model (Pisano is the only signature model Eastman we have in regular production – we do a mahogany version of his model already but with an ebony board). He just went on and on about the “soulfulness” of mahogany, and I absolutely agree.

TQR: What type of finishing materials are used?

Nitrocellulose lacquer, and we have recently introduced our “entry level” 100 & 200 series flat-tops that have polyurethane/matte finishes. We also offer oil varnish finishes on our top line mandolins.

TQR: And for the electric models, what type of pickups do you use?

Kent Armstrong for our archtop guitars and Fishman for our acoustics.

TQR: Are your guitars completely built by individuals at their bench, or are they passed along during different phases of the building process to workers with specialized skills?



Each worker specializes in a specific aspect of the instrument. Many of our luthiers are cross-trained, but they focus on one aspect at a time. We use routers for the pieces where consistency is crucial (neck joints, binding, etc.) Everything else is done by hand. We believe that each piece of wood is different and the results achieved by treating it that way can be heard in the tone of our instruments. Technology is great, and we try to use it wherever we believe it will improve the quality and consistency of our instruments, but we are fortunate that we are able to put the necessary time into doing some of the things that we believe make an instrument sound and play great. Custom cutting each piece of brace wood to fit the top, hand carving the tops for our

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archtop guitars and mandolins...we truly believe this is what makes an Eastman special. We believe that we are making instruments

in the spirit of the Golden Age of American guitar making and Lloyd Loar, Orville Gibson and Christian Martin. With the exception of the wonderful, small one-off boutique builders working in the US today, this is simply not being done in America. The traditional methods used in our orchestral string factory in China make us perfectly suited to carry on this legacy.

TQR: What are your largest selling models?

v



Our AR805CE and AR810CE 15" and 16" archtop guitars, and the MD515 F-style mandolin. Our new Traditional Series of acoustics have also been selling like crazy. We can't build enough. The AR805CE is a 16" lower bout and the 810 is a 17". The traditional series is truly an amazing value. I will proudly put our E10D that streets for \$800 (Adi topped/solid mahogany back and sides with a nitro finish, diamond volute and open geared "Waverly" styled tuners) up

against a D18 confident that it can hold its own. We are also seeing an up-tick in sales in our double cut thinline series – especially the T184 and T185. Slightly smaller than a 335, the carved solid top (as opposed to the 335's pressed laminate) is very appealing to our breed of tone freaks. It's also much less expensive than a Gibson. We are really going to focus on making our acoustic line one of the best in the world, and we are working on a new addition to our Dawg collection of mandolins with David Grisman. The DGM3 mandola will also be coming out soon, and look for a 12 fret slotted headstock OOO by the fall. The DGM3 is based on a Lyon & Healy scroll headstock mandola and is absolutely beautiful. We've also decided to only use flamed maple binding on all of our double cut thinline from this point forward just because it looks so cool and prevents any chance of shrinkage down the road.

Review

We received Eastman's version of a double cutaway, semi-hollowbody thinline, model T185 MX with humbuckers for evaluation, finished in transparent cherry. Now consider this...



the Eastman version of Gibson's classic ES-335 features a *solid mahogany* carved back and sides, a *solid flamed maple* carved top, figured maple binding, ebony fingerboard and headstock veneer, 3-piece mahogany neck, a solid maple tone block beneath the bridge and tailpiece, Gotoh hardware, a side-mounted input jack (Gibson should have done that from day one) a beautiful nitro finish, and Kent Armstrong pickups, case included for a street price of \$1596.00.

We love this guitar – the player-friendly 25" scale, outstanding build quality, the weight and feel (6.3 pounds), and especially the tone, which captures both the depth and airy character of a hollow body, and the robust sustain of a solidbody. Unlike a typical semi-hollow design, the pickups are mounted directly to the carved maple top with a lower maple block joining the body and top beneath the bridge and tailpiece. Granted, the Kent Armstrong licensed pickups are a budget set, but we'll still give them an enthusiastic B- for being far better sounding than many of the pickups you'll find in guitars made overseas – powerful and very well balanced in both positions with a strong upper



midrange presence. **T3** The pots also display an even taper, turning smoothly with a feather-light touch. The slim-taper, early '60s style neck shape and smaller-than-jumbo nickel silver frets won't appeal to everyone, but the fret work and attention to detail are excellent, with a well-cut nut and smooth Gotoh tuners. Even the headstock design seems right, when so many others just seem wrong... The Eastman simply impressed us as having

been built and designed by people who truly understand and appreciate the craft of musical instrument building. Managing costs in the area of electronics – pickups, pots, switches and jacks comes with the territory, but the Eastman T185 succeeds in re-defining what we can expect from an 'affordable' guitar in the future. If you are contemplating the acquisition of a new instrument — electric, acoustic, archtop, mandolin or mandola, we urge you to check out the Eastman web site. [to](http://www.eastmanguitars.com)

www.eastmanguitars.com, 800-624-0270

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