

the ToneQuest Report

The Player's Guide to Ultimate Tone



ROUTE '66

Ten years after our first published amp review (the blackface *Vibrolux Reverb*), we still find ourselves answering readers' questions about which amp to buy. We're not complaining... your subscription to *TQR* has always included phone or email access for those contemplating a new gear purchase, but it seems that published reviews can still sometimes prompt more questions than answers. We understand, and like you, we are routinely faced with these same buying decisions just about every month as we look ahead to future issues. "Power" and "headroom" (or lack of it) seem to remain among the most daunting considerations for prospective amp buyers. This may not keep you up at night if you're looking for a toneful box to play solely at home, but the range of clean and overdriven tones available from a single amplifier that can hang with a band is absolutely



critical – the tipping point for guitarists who wish to have both clean and grittier tones available on the fly. And even the casual "bedroom" player (does anyone really play their guitars in the bedroom?) will quickly discover that big, lush guitar tones – clean or jacked into rich distortion – are often best obtained through a "bigger" amp. We're not suggesting that we don't love our '58 tweed *Tremolux* or '64 *Deluxe* – they both uniquely, timelessly epitomize great guitar tones – but an entirely different realm exists within the range of vintage *Fender* amps, and try as we might, we have never found another amplifier quite as versatile, user-friendly or uniquely toneful as the blackface (1965–7) 40 watt *Pro Reverb* – still the most under-valued and overlooked reverb amp from the entire blackface era, although aside from its 2x12 speaker configuration, the *Pro* is nearly identical to the *Vibrolux* and the *Super Reverb* amps.

Yes, the 2x12 *Pro Reverb* can move some air, just as an *AC30* or *Matchless DC30*, both highly coveted amps for good reason, do the same. Experienced in a room, 2x12 amps produce an ambient presence and a spatial quality that single 12s can't match. That extra speaker isn't adding volume as much as it simply disperse sound effectively by filling more space. And although the *Pro Reverb* is rated at 40 watts, the small-



er output transformer Leo Fender chose to use delivers only 28 watts, probably in an effort to minimize speaker failure, yet the original *Oxford* and *Jensen 12s* shipped in the *Pro* still blew when pushed by enthusiastic rockers. A well-maintained *Pro Reverb* will typically produce classically clean *Fender* tones with strong bass and treble and slightly diminished mids from "2" on the volume control to "5," gradually spilling into lush *Fendery* distortion at higher settings. If you



choose to use an overdrive device to achieve distortion at lower volume levels, the *Pro* will sound significantly better than most 20 watt amps because your pedal is affecting a cleaner signal, rather than adding distortion to an amp already spilling over into distortion. And as we have reported so often in

the past, non-invasive and completely reversible modifications can be made, such as the addition of a 25K midrange pot utilizing the existing back panel hole for the extension speaker jack. This single mod enables the *Pro* to develop a very ballsy British voice as midrange is increased, while completely preserving the integrity of the original Fullerton tone with the midrange pot set at zero, rendering two outstanding amps in one. Intrigued? You should be, because we have never heard a contemporary boutique 2x12 combo amp that can approach the sound of a *Pro Reverb* equipped with a solid set of tubes and speakers. And with the range of speaker options available today, you can effectively custom design and shape the sound of your *Pro* for more of a traditional, bright "American" sound, a heavier or chimier British tone, or the two combined.



Ah, but buying old amps is risky business says you... what if I get a "dog" or it needs a lot of work? I'd rather buy something new and not deal with the unknown. Fine, do that. But for those willing to reap the rewards that only a certain degree of risk can offer, it's not that difficult to minimize your chances for disappointment. Here's how:

In many respects, buying a vintage amp is not unlike buying a used car – there are certain issues that can be overlooked, and others that should absolutely be avoided.

Confirm, Clarify and Verify – Know your seller. Unless you happen to find an amp locally that you can play and thoroughly inspect, we are often required to buy vintage gear today from distant sellers on *eBay* or *Craig's List*, depending



on pictures and the seller's verbal description of an amp's condition. If the seller is experienced, knowledgeable and ethical, you should be able to visually and verbally

verify the following information. And even if you are dealing with a neophyte, a little patient hand-holding can unearth the facts you need to verify:

Year of manufacture – Verified by the date code on the tube chart and the transformer *EIA* codes, in the case, "606" for Schumacher, followed by the year ("6" for 1966) and week in that year ("52" for the last week in December, for example).

Originality – The blackface AA165 *Pro Reverb* circuit will be stamped on the tube chart if it has survived intact. If not, refer to the transformer *EIA* codes. It is not uncommon for later silverface *Pros* to have had the original faceplate replaced with a blackface reproduction. The 1968 silverface *Pro Reverb* shares the identical AA165 circuit, but in 1969 some undesirable changes were made to the bias section (model AB668, followed by model AA1069), identifiable by the presence of capacitors off the grids of the power tubes. In 1970, a 3-way ground switch was added, and in 1972 the cabinet was enlarged to 10.5" deep and narrowed to 26". Casters also became standard, and the 5AR4 rectifier was changed to a 5U4. When in doubt, original transformer codes will serve as your key to verify the year of manufacture.

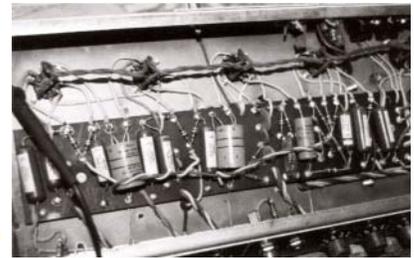
Cosmetics – This is a largely personal consideration. Scuffed *Tolex* and a minor grill cloth snag or tear doesn't bother us much, but some people just can't get past minor flaws, so know which type you are. You'll pay more for a pristine 50-year-old amp and it may not sound as good as a "player," but if you

take extra pride in acquiring immaculate timepieces, go for it – they are out there. On the other hand, real bargains can be had when buying cosmetic "beaters," *Tolex*, knobs, grill cloth, baffleboards and back panels can be replaced, and your "new" amp can even be aged by talented fellows like Gregg Hopkins at *Vintage Amp Restoration*. Want a blonde *Pro Reverb* with oxblood grill cloth? You can have it, while sav-



ing hundreds on a trashy lookin' beater in decent working condition.

Under the Hood – What's acceptable and what's not? There was a time when replaced transformers were a red flag, but no more. We have replaced enough dead or incorrect replacement trannies pulled from *Fender*, *Vox* and *Marshall* amps with *ToneClones* from *Mercury Magnetics* to become convinced that you lose nothing, and may even improve the tone of your amp with a *Mercury*. Long-time readers will recall that as an experiment, we actually replaced a working output transformer in our old '68 *Pro Reverb* (now Tommy



Malone's) and the amp sounded better with the *Mercury* – stronger and more robust with a smoother and more responsive dynamic touch. What we don't like to see in amps are sloppy chassis modifications made to accommodate an incorrect replacement power transformer, major mods and holes tapped for things like master volume circuits, or a circuit board that has been swept clean of an inordinate number of original blue molded *Mallory* caps or *Allen-Bradley* resistors. Replaced filter caps under the can are fine, but we prefer to buy amps with original circuit boards and make our own replacement decisions if needed. An amp that has been indiscriminately "restored" with all the original caps replaced can sound quite different from a well-preserved original, depending on the replacement caps used and the technician's skill and knowledge. It's always preferable to start out with a virgin board as much as possible.



Jeff Bakos

Finding a Tech – If you don't already know a reliable and experienced technician, you'll need one if you're going to buy vintage amps. However, it isn't that difficult or expensive to ship an amp for service if needed. Most maintenance and restoration work can be done on the chassis alone, eliminating the need to box up the entire cabinet with speakers. Simply remove the chassis from the cabinet and pack it in a heavy duty box with ample room for multiple layers of heavy duty bubblewrap on all sides. Shipped weight will be nominal, keeping shipping costs low. You should be capable of making your own speaker swaps, and with a simple device like a Bias Probe, you can even re-bias your *Fender* amp for different power tubes easily and safely with no technical expertise.

Speakers – The first thing we would do with an original pair of blue-label *Fender Oxford* speakers (*EIA* code 465XXX) is park them in the closet. Original *Jensen C12Ns* would be a bit more seductive, but by now most of these speakers have blown and been reconed with generic parts,



usually with less than spectacular results. Potential replacements are nearly endless, from a new pair of 50W *Eminence Screamin' Eagles*, to *Warehouse Black &*

Blues for a British flavor, *Celestion G12H 30s*, or for the men among men, a pair of *EVM-12L* hawks (for that you may need to retrofit casters). The point is, through speaker selection you can take the basic *Pro Reverb* platform well beyond the meager capabilities available to *Fender* in 1966.

Tubes – The default, over-the-top move would be *RCA*, *GE* or *Sylvania* NOS 6L6s and 12AX7s, coupled with dual 12AT7s for the reverb driver and phase inverter, and a 5AR4 rectifier. Recommended current production tubes include *TAD* or *JJ* 6L6s, *Tung-Sol* or *JJ* 12AX7s, and *Sovtek*, *JJ* or *EH* 5AR4s.

Reverb and Tremolo – These effects can decay over time, but we would not be discourage from buying an amp because of non-working reverb or tremolo – just drive a hard bargain and insure the price you pay reflects these “defects.” Non-working tremolo circuits can be easily restored (or left disconnected for more gain), and more often than not, missing or weak reverb can be traced to a bad reverb pan. For more information on the arcane variances among old and new replacement reverb pans, we’ll hand you over to *Riverhorse*, who was recently confronted with a squirrely pan in his blackface *Princeton*....

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