

One of the things that first drew me to musical instruments and has kept me interested ever since, is the way they're built. They're not like toasters or TV sets. They're not just disposable consumer items. Rather they're built to inspire magic and to last for a lifetime.

Whether you're building pianos, flutes, violins or amplifiers, there are time-tested methods of construction and a code to fine instrument building. We strictly adhere to this tradition, and yet there is no limit to the amount of additional finesse and quality that can be lavished upon even the smallest of details. This is in stark contrast to the cost-driven, high-volume approach most manufacturers use.

Shown here is an inside view of one of our most popular amplifiers, the Triple Rectifier®. But *all* com-

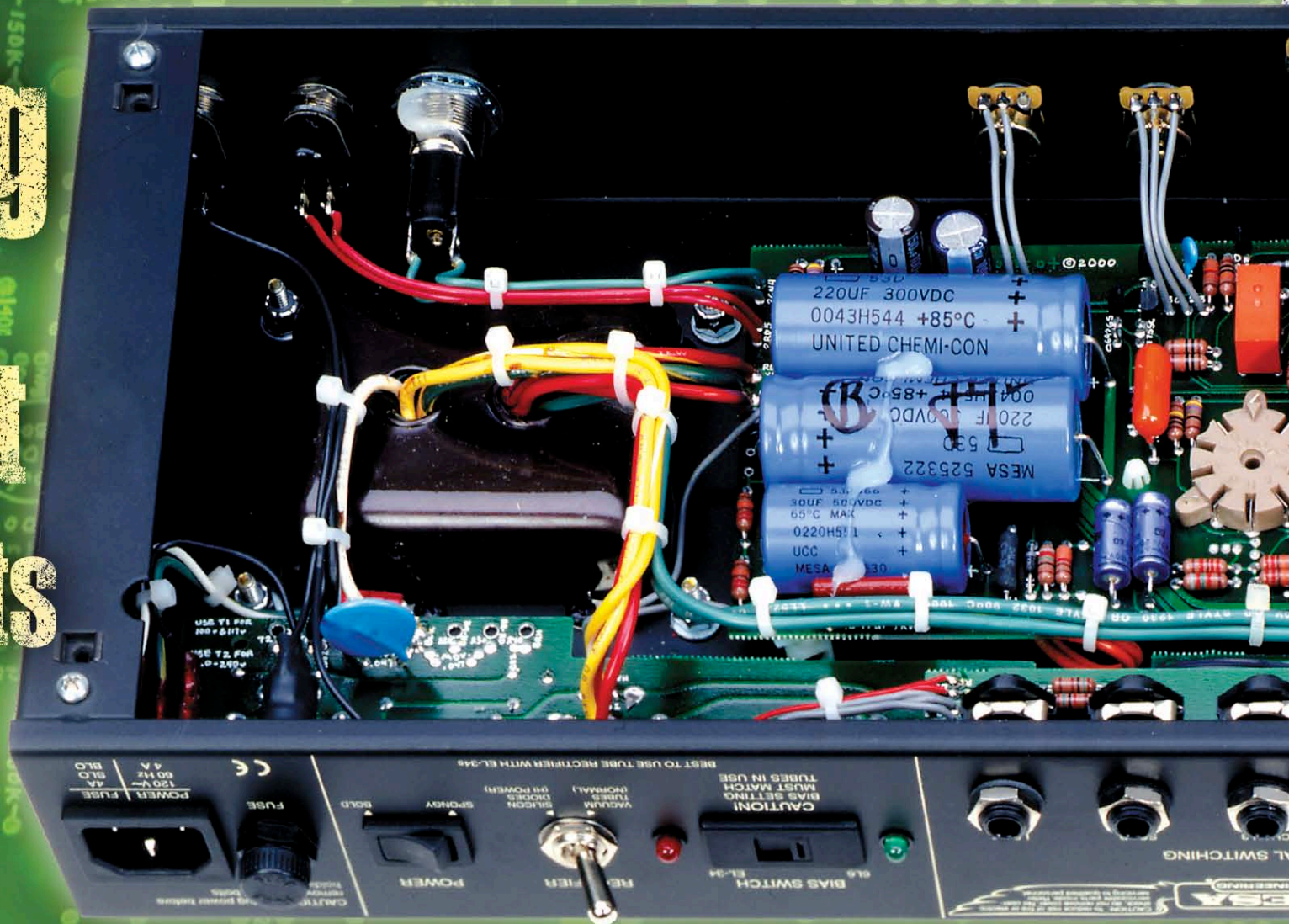
ponents and construction techniques are the same for every Mesa/Boogie® from the most expensive to the least. There are no "budget" models or off-shore imports. Everything is hand-crafted by the same builders who average more than ten years here.

Let's start with the chassis. Our rack-mount models are built on .080 and thicker aircraft aluminum. Combos and heads use 16 gauge, cold-rolled steel, fully formed into a flanged box, with welded seams and a heavy powder-coat finish. Most modern amplifiers are

built on a light piece of bent-up metal with no sides, no flanges, no welds, no paint and simple plastic nameplates front and back that only look heavy-duty.

From the very first, all Mesa/Boogies have been built using hand-drawn printed circuit boards for the electronics. With high-gain musical amplifiers, the location of parts and conductors is critical. Only a carefully designed p.c. board can duplicate the magic of the original prototype, which itself used a printed circuit board. This insures that every amp is an *exact* replica of

# Cooking with the Right Ingredients



the golden proto by eliminating the variations that often occur in "one-off" construction.

We don't rely on the single-sided phenolic boards commonly used, rather ours are epoxy-based, double-sided with plated-through holes. This means a conductive barrel has been formed *inside* each hole, with pads on *both* sides. In a conventional board, only the strength of the glued-on foil supports the parts. On our custom boards, each lead is soldered on the top, on the

bottom and throughout the barrel, creating a reinforced sandwich of solder.

Wherever point-to-point wiring is better, we use it. In most other amps the control pots are mounted on a p.c. board where damage to the pot breaks the board. Notice that our pots are bolted directly to the chassis and connected with flying leads. Thus, if one becomes damaged, replacement is easy and doesn't imperil the circuit board.

Component quality is as important as construction. That's why most of our parts –not just the major ones,

are custom designed and selected for their musical performance. Tolerances are tight, one percent for resistors where the industry standard is 5% to 10%. Tubes, pots, transformers, capacitors, connectors, sockets and switches are all custom made and benefit from our decades of experience. Many of our suppliers have come to trust us as a reference and a resource for themselves because we're so relentless.

Some instrument companies divide their manufacturing into "production" and "custom models". Some

even have special "artist series". Not us. At Mesa/Boogie, we only know one way to do things. We don't *have* a custom shop... *we are* a custom shop. Our artists don't use some specially chosen or modified amplifier, they play the exact same amp *you* can buy. We just want to build the very best amplifiers we can. And we want to treat each player as we ourselves would want to be treated. These are our founding principles. It's been working now for thirty years and we see no reason to change.

