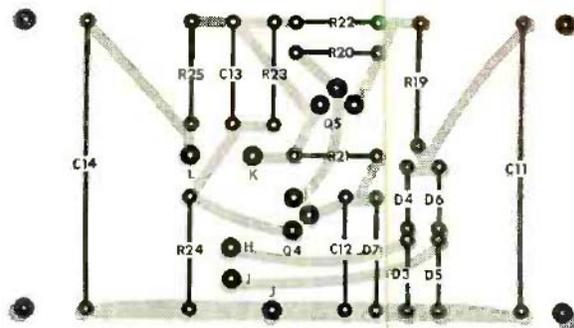
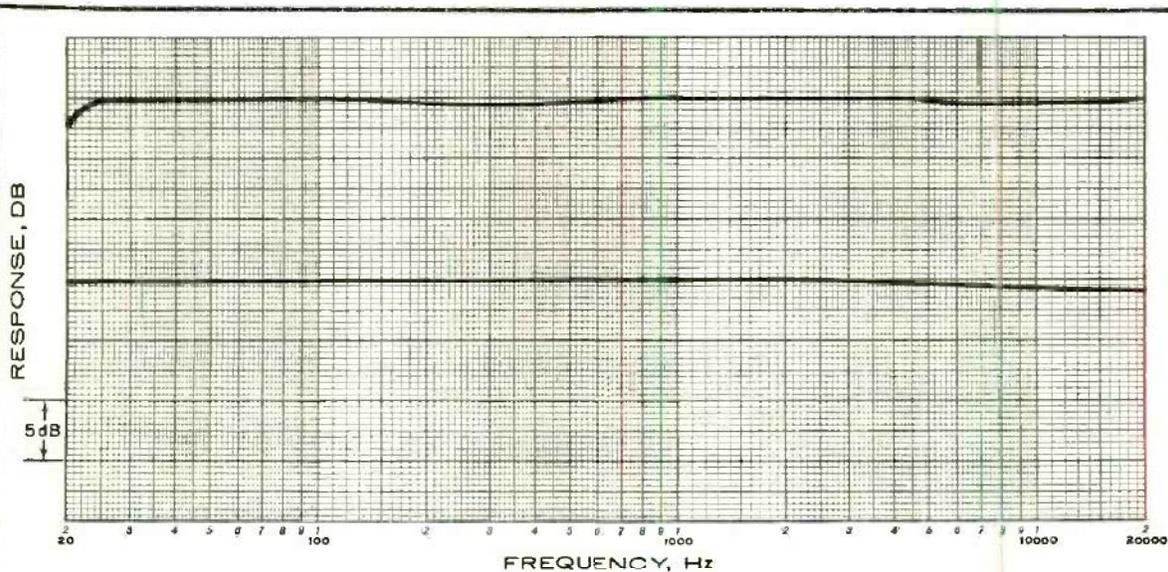


Fig. 4. Except for T1 and components in its primary, power supply is laid out (above right) on the board above.



Mount the shielded transformer on the chassis, and place the heat sink on transistor $Q5$ of the power supply. The physical arrangement of the other chassis components and connectors is not critical.

Operation. To use the preamplifier in your present stereo system, simply plug the turntable signal cables into the input jacks ($J1$) and run the output jacks ($J2$) to the AUX inputs of your amplifier. Don't forget to phase all the ac plugs to get the lowest hum. If you find that you need a ground on the turntable chassis, run a wire from it to the mounting screw closest to the preamplifier input jack that was selected as the common ground. ♦



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The preamplifier does just about what the designer claims for it. Gain measurements, in general, were within 0.5 dB of the author's claims and show a loss of only 1.4 dB at 20 Hz relative to the extrapolated RIAA curve. Phono overload occurs at a very safe 110 millivolts, and

the clipping level from the output is 14.7 volts, something of a record in our experience.

Distortion is really negligible, typically 0.013 to 0.03% over most of the useful range of the amplifier (even up to 10 volts output). The measurement of 0.31% at 125 millivolts output was partly hum and partly noise, but both were extremely low. The combined hum/noise output was about 100 microvolts.