



FIGURE 5b: Component layout.

After you have cleaned and restored/replaced the hardware, you may reinstall it on the prepared chassis (Fig. 6). Also install the eight 1-inch spacers (four on top and bottom). The front spacers (nearest the input connectors) share a common mounting hole. Use male/female 4-40 threaded spacers at these locations. The other two driver board spacers occupy the remaining mounting holes of the original driver board. Mount a below-chassis spacer at the position of the original rectifier tube's socket-mounting hole nearest the chassis center. Mount the remaining below-chassis spacer at the position of the ground lug adjacent to the quad capacitor filter. Retain the ground lug and tighten securely.

You should connect a solid bare wire between this lug and the nearest case terminal of the quad cap. This is the star ground point for the amplifier: all chassis ground connections will be made to this short ($\frac{3}{4}$ -inch) wire except the

15.6 Ω (R125/R225) current-sense resistors. If previously removed, reinstall the filter choke (located under the right channel output transformer). Connect it to section A and B of the quad filter cap (C1). Attach a 5-inch wire to each of the four sections of the quad filter capacitor (I prefer four different colors for easy identification later) dressed toward the rear of the amplifier. Reinstall the 7-pin terminal strip at its original location. Finally, connect an 8-inch black wire to the $\frac{3}{4}$ -inch ground wire and route it along the chassis' left side.

The output tube sockets should have the locating tab (between pins 1 and 8) "pointing" toward the outer chassis edge. On each side (channel) connect the following to the output tubes:

1. Connect pins 1 and 8 together on each of the four output tubes. Connect the 1/8 pin junction of the front tube to 1/8 junction of the rear tube.
2. Attach the 15.6 Ω bias resistor

(R125/R225) to the rear tube 1/8 junction with the remaining end terminating at the tube ground lug.

3. Attach a 5-inch wire to the front tube 1/8 junction, dressed toward the front of the amplifier.

4. Connect pin 4 of the front tube to pin 4 of the rear tube. Connect pin 4 of the rear tubes together. Connect a 5-inch wire to the right channel rear tube, dressed toward the rear of the chassis.

5. Connect pin 2 of the front tube to pin 2 of the rear tube. Connect an 8-inch wire to pin 2 of the front tube, dressed toward the front of the chassis.

6. Connect pin 7 of the front tube to pin 7 of the rear tube. Connect an 8-inch wire to pin 7 of the front tube dressed toward the front of the chassis.

7. Lightly twist together the two 8-inch wires from Steps 3 and 4 and direct them along the chassis front (near the top) toward the center.

8. Output tube pins 3 and 5 remain unterminated for now, as well as pin 6.

Preparation and Installation

Prior to installing the replacement driver stage circuit board, attach the following:

1. Connect a 5-inch wire to each of the four (two per channel) output terminals (outer corner of circuit board).
2. Connect a 7-inch wire to each of the two (one per channel) bias terminals (center outer edge).

3. Connect a 3-inch wire to each of the four (two per channel) input terminals (center front of circuit board).

4. Connect a 5-inch red wire to the B+ in terminal and a 6-inch black wire to the ground terminal of the circuit board (near center rear). Connect a 12-inch white wire to the driver regulator output. Lightly twist these three wires together.

5. Connect an 18-inch shielded coax cable center lead to the FB terminal of the circuit board. Connect the shield to the input ground point.

Install your new circuit board on the four 1-inch spacers previously installed. Orient the board so the regulator section is nearest to the power transformer. Now feed the wires that originate at the driver circuit board through the rectangular cutout in the chassis. In some cases this opening may have a sharp burr which should be removed (light emery paper will do). Make the following connections:

1. Trim to length and connect the 5-inch wires from Step 1, to pin 5 of the nearest output tube. Dress these wires