

Figure 10-16

This schematic diagram illustrates the internal wiring of a guitar amplifier, showing the flow of signal from the input jacks through various vacuum tubes and passive components to the output speaker.

- Channels:** The amplifier has two channels, Channel I and Channel II, each with its own set of input jacks and control knobs.
- Vacuum Tubes:** The circuit utilizes several vacuum tubes: 6AR5 (rectifier), 6X4 (full-wave rectifier), 6AV6 (phase inverter/output driver), 6BE6 (tuner/detector), 6BD6 (detector/AF amplifier), 6BM8 (audio amplifier), 6BN6 (audio amplifier), 6BU7 (audio amplifier), 6CA7 (audio amplifier), 6CB7 (audio amplifier), 6CD7 (audio amplifier), 6CE7 (audio amplifier), 6CF7 (audio amplifier), 6CG7 (audio amplifier), 6CH7 (audio amplifier), 6CL7 (audio amplifier), 6CM7 (audio amplifier), 6CN7 (audio amplifier), 6CP7 (audio amplifier), 6CQ7 (audio amplifier), 6CR7 (audio amplifier), 6CS7 (audio amplifier), 6CT7 (audio amplifier), 6CU7 (audio amplifier), 6CV7 (audio amplifier), 6CW7 (audio amplifier), 6CX7 (audio amplifier), 6CY7 (audio amplifier), 6CZ7 (audio amplifier).
- Components:** The circuit includes numerous resistors (R1-R40), capacitors (C1-C31), and a variable capacitor (VC).
- Power Section:** A power transformer (T1) provides the main power supply. The primary is connected to 117V AC. The secondary has multiple taps for different voltage requirements.
- Controls:** The amplifier features a volume knob, a tone knob, and a foot pedal for additional effects like tremolo and reverb.
- Output:** The final output is connected to a 12-inch 8 ohm speaker (P6).

The diagram is a comprehensive technical drawing for building or repairing the amplifier, providing precise values for all components and clear connections between them.

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| T1 | Power Transformer | TF-104P | D1A,B Diode - 1200 PIV DI-57 |
| T2 | Output Transformer | TF-P677 | D2 Diode - 600 PIV DI-71B |
| T3 | PP Driver Transformer | TF-1001D-I | |
| T4 | Reverb Transformer | TF-E640Q | CN-78CS-5 Foot Pedal Socket |
| L1 | Filter Choke | TF-302IH | CN-303 AC Convenience Outlet |
| S1A,B,C,D | Switch - off,standby-on-on | SW-78A-I | |
| S2,S3 | Switches - SPST | SW-82403 | |
| I1 | PL-37R Pilot Light (Red) | | |
| I2 | PL-38A Pilot Light (Amber) | | |
| R9,R30,R54 | Control - 250K Audio | CBA-4008 | |
| R8,R29 | Control - 2 meg, audio | CBA-811-3702-I | |
| R44 | Control - 500K Audio | CBA-4007 | |
| R55 | Control - 1.5 meg, RA | CBA-811-3711-I | |
| R7,R28 | Control - 1 meg, audio | CBA-811-3709-I | |