

Fender® Capacitor Replacement Set for Bassman AA864, Bandmaster AA763/AB763, Concert AA763/AB763, Pro Amp AB763, or Showman AA763/AB763

Please review these guidelines thoroughly prior to beginning installation. Becoming familiar with the complete procedure in advance ensures a safe, successful recapping process.

Safety Warning

Tube amplifiers contain high voltage stored within the filter capacitors, even after the unit is turned off and unplugged.

- Always disconnect the amplifier from commercial AC power before commencing work.
- Discharge all filter capacitors fully before touching internal circuitry.
- If you are unfamiliar with safe capacitor discharge techniques, leave your amplifier in the care of a professional service technician.

Capacitor Sizes & Values

- **Physical Size:** Due to manufacturing advancements, modern capacitors are 50%–75% smaller than original vintage components.
- **Standard Value Adjustments:** Changing industry standards mean some values have updated modern equivalents:
 - **Bias Filter Capacitors:** Supplied as **100µF/100V** (or **25µF/70V** for early 1960s circuits).
 - **Preamp & Main Capacitors:** 20µF/25µF units are replaced by **22µF**; 70µF by **80µF**; 5µF by **4.7µF**; and 8µF by **10µF**.

Polarity & Orientation

Electrolytic capacitors are polarized. Installing them backward will damage the components and amplifier.

- **Identifying Terminals:** Originals show positive (+) and negative (-) markings. Tube Amp Doctor replacement capacitors feature an arrow pointing toward the negative terminal.
- **Mark the Chassis:** Safely discharge capacitors, then mark polarity orientation inside the amplifier using a marker, tape, or reference photos before removing anything.
- **Opposing Orientations:** Filter capacitors inside the "dog house" housing do not always face the same way (e.g., dual 70µF/350V capacitors are often mounted in opposite directions).
- **Bias Circuits:** The positive (+) lead always connects to ground, and the negative (-) lead connects to the circuit.

Installation Procedure

1. **Work One at a Time:** Replace components strictly one at a time to prevent polarity or layout errors.
2. **Desoldering:** Snip original leads close to the eyelet, then clear the hole using solder wick or a solder sucker (leave any lead wire under the board intact).
3. **Clean Workmanship:** Trim new leads to leave roughly ½ inch of excess length for proper insertion. Never twist new leads around old cut leads—splicing reduces reliability, safety, and resale value.
4. **Complete Replacement:** Replace every capacitor in the kit before powering on the amplifier.

Mechanical Mounting Because modern capacitors are smaller and lighter, secure large filter capacitors in the "dog house" with a bead of silicone caulk (RTV) or hot melt adhesive underneath them. Relying solely on lead wires allows speaker vibrations to eventually crack the leads. Small preamp capacitors do not require adhesive.

Resistor Replacement If your kit includes balancing or dropping resistors for the capacitor housing:

- Replace them one at a time, matching the color code to the original components.
- Ignore the gold or silver tolerance band on new resistors when matching.
- Kits often include extra resistors for production variances; replace only like-for-like in your specific circuit.

Model-Specific Circuit Notes

- **Later Fender® Silverface Amps (Post-1970):** Locate the vibrato cathode bypass capacitor (changed from 25 μ F to 5 μ F / 4.7 μ F). Replace this first to avoid mix-ups. It spans a 100k Ω resistor, with one end tied to Pin 8 of the 5th 12AX7 tube. Note that some Silverface cathode bypass capacitors ground directly to the rear panel RCA jacks rather than the main board.
- **Early Fender® Blackface Amps:** Preamp sections using original 3-leg dual 25 μ F capacitors (one common ground, two positive leads) should be replaced using two individual 22 μ F or 25 μ F capacitors. Solder both negative leads into the single original ground eyelet, and route each positive lead to its respective circuit eyelet.

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