

# Fender Capacitor Kit FCK-45 Installation Guidelines Princeton Amp 6G2 (1963- 1964)

**Warning:** Tube amplifiers contain high voltage which is stored in the filter capacitors even after the amplifier has been turned off. Always unplug the amplifier from commercial power, and discharge all filter capacitors before working on the amplifier circuitry. If you are unsure about this procedure, we strongly recommend that you leave your amplifier in the care of a professional service person.

**Polarity:** Electrolytic capacitors are polarized. The old capacitors will be marked with + indicators at the positive end, and – indicators at the negative end. It is extremely important that the new capacitors be installed in the same orientation. Look for polarity markers on the PC board. You can also take photos of the old capacitors in place in case there are any questions about placement after they are removed.

**Size:** Due to improvements in technology, many new axial capacitors are 50%-75% smaller than original capacitors.

**Procedure:** After unplugging the amplifier from commercial power, remove the chassis from the cabinet and safely discharge all 4 terminals of the main can filter capacitor which is mounted to the chassis. Do not remove all of the capacitors in the beginning!

**Important:** All of the sections of the can capacitor are the same value, so it does not matter which wire attaches to which terminal.

**Other Capacitors and Resistors** In addition to the the capacitors, the kit includes two resistors which are installed on the tag board. Refer to the shaded areas on the wiring diagram on the opposite side of this sheet for location of these resistors. The Brown-Black-Red-Gold is the 1K resistor. The Brown-Black-Orange-Gold is the 10K resistor.

*Very important:* Make sure each resistor is installed as shown on the diagram. There are two 25uF/25V capacitors and one 25uF/50V capacitors which are also installed on the tag boards, in the locations shown by shading on the diagram on the reverse side of this page.

Note the polarity as marked on the wiring diagram; the + terminal is marked. On the capacitors, an arrow on the side of the capacitor points to the **NEGATIVE** terminal. Remove and replace each capacitor one at a time, and make certain that the + terminal on the new capacitor is pointing in the correct direction. In the case of the two 25uF/25V capacitors on the larger tag board, the **NEGATIVE** terminal goes closest to the side of the board where the pots are located (front side of the amplifier). For the bias capacitor (25uF/50V), it is installed on the small tag board behind the pilot light. The **NEGATIVE** side on this capacitor is on the side closest to the large can capacitor on the base of the chassis.

**Questions?** If you have any questions whatsoever about the installation process, please contact us through our website before you proceed with the installation.

Studio Sound Electronics  
[www.amprepairparts.com](http://www.amprepairparts.com)  
Clearwater, Florida USA