

# Fender Capacitor Kit FCK-15

## Installation Guidelines

### Princeton (1964-1979)

**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.

**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! On the can capacitor, note that the four terminals are marked with symbols to identify them. The symbols are , , D, and (none). See below:



**Important:** Mark each wire going to the old can capacitor with a piece of tape labeled with the symbol for the terminal to which it attaches. Also make a note of the orientation of the old capacitor (which side the symbol is facing, for example). Install the new capacitor in the same orientation, so that the wires will have sufficient length to reach the proper terminals. Solder the wires to the terminals as per their tape labels.

**Other Capacitors** In addition to the can capacitor, the kit includes a 18K/2 Watt resistor which is installed between the terminal and the (none) terminal, along with the appropriate wires. There is a second 18K resistor which is installed on the tag board near the can capacitor, and a 1K/2 Watt resistor is also installed on the tag board. See the wiring diagram on the reverse side of this sheet for more information. For the main tag board, there are three 25uF/25V capacitors. In addition, there is a 50uF/100V capacitor installed on the small tag board located behind the pilot light. This value replaces a smaller capacitor used in the early versions. Refer to the shaded areas on the wiring diagram on the opposite side of this sheet for location of these capacitors. Very important: Note the polarity as marked on the wiring diagram – the + terminal is marked. 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.

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

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