

# Fender FCK-25A Capacitor Kit Installation Guidelines Custom Vibrasonic

**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, removing the chassis from the cabinet, Disconnect the main board from the potentiometer board by unplugging the three ribbon cables. Remove the bias pot from the chassis. Remove the screws from the main board, and lift up carefully, folding the board back toward the rear of the amp. It may be necessary to cut some tie-wraps on the bundled wire around the power transformer. Be very careful to avoid breaking any wires. The board is not to be removed completely from the amplifier ... just work to allow it to be raised up far

enough so that the necessary capacitors can be desoldered and resoldered on the printed side of the board. We recommend removing and then replacing each capacitor one at a time. Do not remove all of the capacitors in the beginning! Use rosin flux and solder wick to remove the old solder and free the old capacitor lead. If you use a solder sucker, be aware that the printed traces on most Fender boards are quite fragile and lift off the board very easily, so proceed with caution. If a trace does lift up, or a pad breaks its connection with a trace, you will need to use wire to patch that connection.

**Mounting:** A bead of silicone caulk (RTV) or hot glue under each large capacitor in the “dog house” to secure them to the PC board is highly recommended. If the capacitors are mounted using only their leads, vibration will eventually crack the leads and dislodge the capacitor.

**Capacitor Inventory:** The kit contains two 220uF/300V filter capacitors, three 22uF/500V filter capacitors, one 100uF/100V radial bias filter capacitor, one 22uF/63V radial bias filter capacitor, five 22uF/25V radial cathode bypass capacitors, and one 10uF/100V footswitch filter capacitor.

Capacitor	Board location
220uF/300V	C30, C31 (replaces 220uF/285V)
22uF/500V	C32, C33, C34
100uF/100V Radial	C35
22uF/63V Radial	C36
10uF/100V Radial	C37
22uF/25V Radial	C6, C11, C14, C27, C28

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