

PS-220 PARASITIC SUPPRESSOR KIT INSTALLATION INSTRUCTIONS

PARTS SUPPLIED WITH THIS KIT:

(2) Plate/Resistor Choke Assemblies	(4) #6 Lock Washers (1 Extra)
(1) Tuning Capacitor Feed Suppressor	(4) 820pF 500V Ceramic Disc Capacitors
(2) 10 Ω 2-Watt Metal Film Resistors	(2) 27 Ω ½-Watt Resistors
(2) 0.01 μ F 1KV Ceramic Disc Capacitors	

To start the installation, read these instructions very carefully. Now unplug the amplifier and remove any input, output and control cables that may be connected to the back of the amplifier. Place the amplifier on a book, front panel up, and remove the bottom screws holding the feet and case in place. Lift the case up and remove it from the amplifier. Place the amplifier on the bench with the front panel facing you. You are now ready to proceed with the installation.

- () Remove the 15 sheet metal screws that hold the perforated cover in place and remove this along with the top rear plate cover.
- () Remove the tubes and remove the plate caps from the tubes.
- () Remove and save the screw that connects the flexible braid from the HV terminal of the plate choke to the doorknob capacitor mounted on the end plate of the tuning capacitor.
- () Carefully unsolder and discard the braid from the HV terminal on the plate choke, as well as the 2 stock parasitic suppressors. Clean out the outer hole in the solder lug of the HV terminal.
- () Put the plate caps back on the tubes. Tighten securely and reinstall the tubes.
- () Locate the peculiar wire, the one with a straight wire paralleling a coil, in the PS-220 kit. Straighten the long free end that is bent back through the coil. Slip the loop of this wire over the screw removed from the doorknob capacitor and then put on a #6 lock washer. Screw this assembly into the doorknob capacitor. Make sure the suppressor wire is approximately lined up with the HV terminal of the plate choke.
- () Fish the free end of this assembly through the outermost hole in the HV terminal of the plate choke. Trim the lead to about 1/8" protruding.
- () Slip the loop end of one of the parasitic choke/resistor assemblies over one of the plate cap screws **with the coil up**, followed by a #6 lock washer. Install this assembly on one of the plate caps with the assembly pointing toward the HV lug.
- () Fish the free end of this assembly through the outer hole in the HV lug and trim the end to about 1/8".
- () In a like manner, install the other parasitic choke/resistor assembly onto the other plate cap, trimming the end to 1/8".
- () Now solder the 3 wires going through the HV terminal of the plate choke.
- () Turn the amplifier upside down with the front panel facing you.

- () Locate the (2) 1mH chokes going from the rear-most tube socket pins (pin #4 of tube V1 and pin #2 of tube V2). Remove each of these chokes. Clean out the holes through which the chokes were removed.
- () In place of each of these chokes, install a 27Ω ½-watt resistor paralleled with one 820pF disc capacitor (1 resistor/capacitor pair in place of each choke).
- () On the right hand tube socket (tube V2), parallel the existing 200pF capacitor closest to the front panel (pin #4) with (1) 820pF disc capacitor. Leave all other 200pF capacitors in place.
- () On the left hand tube socket (tube V1), parallel the existing 200pF capacitor on the extreme left (pin #3) with the remaining 820pF disc capacitor. Leave all other 200pF capacitors in place.
- () Locate the 2-lug terminal strip just behind the filament choke (the input drive coax is connected here). Remove the capacitor going from this strip to the filament wires. Clean solder from the terminal strip where you just removed the capacitor.
- () Install 1 lead of each of the 0.01 μ F 1KV disc capacitors through the terminal you just cleaned. Have the body of the capacitors about 3/8" from the terminal with the capacitors lying flat and pointing to the left.
- () Take one (1) of the 10Ω 2-watt resistors and wrap a lead around the closest filament jumper connection (the one going between the tube sockets). Place the body of the resistor about 3/8" from the filament jumper lead. Solder and trim any excess lead.
- () Connect the free end of this resistor to the undermost 0.01 μ F 1KV capacitor lead. Twist these leads together and solder. Trim any excess leads.
- () In a like manner, install the second 10Ω 2-watt resistor onto the other filament jumper lead, spacing the body about 3/8" from the jumper.
- () Connect the free lead of this resistor to the uppermost 0.01 μ F 1KV disc capacitor lead. Twist these leads together and solder. Trim any excess leads.
- () Space all components so that there is at least 1/8" between any 2 wires or components. Sight across the bottom of the amplifier to be sure that there is plenty of clearance between the components you just installed and where the case will soon fit. Adjust as needed.
- () Replace the perforated cover and top rear plate cover. Reinstall the 15 sheet metal screws holding these pieces in place. **DO NOT** over tighten these screws, as it is fairly easy to strip the screw threads in the aluminum underneath.
- () Use the book to hold the amplifier while you reinstall the case and feet.

This completes the installation of the PS-220 Parasitic Suppressor kit. You will find that your amplifier tunes much more smoothly than before and there will be no more arcing or spitting on voice peaks.

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