

high voltage lead between the RF section and the power supply. If the short disappears the problem is in the RF chassis or B- return. If the problem persists, the problem is in the power supply. If the short is in the RF chassis or in the B- line, remove the top cover and search for any visible sign of a short. Then use an ohmmeter to trace the circuit from the high voltage connector to the blocking capacitors, including the tube(s). If the problem is in the power supply you will again have to check for visible signs of a short, or use an ohmmeter to locate the short. Often however a high voltage short will only show when the high voltage is applied. To locate such a short it may be necessary to unsolder leads to remove components from the circuit until the short disappears. Start with the filter capacitor, move back to the filter choke, and then the rectifiers. Finally remove the power transformer from the circuit. Keep in mind that a high voltage short may blow the cathode fuse in the RF chassis.

LOW PLATE VOLTAGE - This problem is usually an indication of low AC line voltage. It can only be solved by retapping the power transformer as described in Section 3.4.

HIGH PLATE VOLTAGE - This problem can be caused by high AC line voltage and should be brought into specification by retapping the power transformer as described in Section 3.4.

The problem can also be caused when the filter choke is out of resonance. A resonated filter choke is used in the design because of its superb linearity and voltage regulation. However, the choke must be resonated to a specific AC frequency (50 Hz or 60 Hz) using capacitors. If the capacitor fails, or if the amplifier was set up at the factory for a different AC frequency, the voltage regulation becomes poor. The result will be excessive high voltage when the amplifier is not transmitting and excessive voltage drop during transmit. Three .01 mf capacitors are used to resonate the filter choke for 50 Hz and two are used for 60 Hz.

NO HIGH VOLTAGE METER READING - The most likely cause is a blown cathode fuse in the RF chassis. After that, other likely causes are a failure or value change of the high voltage multiplier resistor in the power supply, or a failure in the meter circuit.

SECTION 6.6 BLOWER PROBLEMS

These amplifiers have an airflow switch in the blower which turns the amplifier off to protect the tube in case of blower failure. So if you find that the amplifier is intermittently turning off or if the pilot lights will not come on be sure to check the airflow switch on the blower.

The blower is one of the most susceptible parts to transportation damage. Henry amplifiers use squirrel cage blowers because of their exceptional air blowing capability in a small size. But the blower assembly can be easily damaged if the amplifier is dropped during shipment. When the amplifier is installed make certain that a strong flow of air is coming out the top of the amplifier when it is turned on. Other indications of blower damage can be a resonance in the amplifier cabinet caused by an unbalanced fan, an unequal flow of air between the two tubes in the 5K Classic, or mechanical noise from the blower.