

Alpha 89 Tuneup:

Please limit the transceiver drive to about 50w for tuning up and operating the amp.

Set Multimeter to Ip (Plate Current). Set TUNE and LOAD controls to numbers indicated in the tuneup sheet originally included with the amplifier.

Key radio with 20w drive and adjust TUNE control for a peak in RF out which should be at the same point as a dip in Ip.

Increase drive to get 1000w output, going back and forth between the TUNE and LOAD to peak the RF output. If more output is desired, increase drive from radio slightly, increase LOAD for a peak in RF out, then peak RF out with TUNE control.

When the amplifier is tuned correctly on 160m thru 40m, the Ip should not need to be more than 0.9A (read on the 0-to-1.5A scale) for 1500w output, and drive should not need to be more than about 60w. On 20m the Ip will usually be about 1.0A for 1500w output.

The grid current should not need to be above 50ma, it will be higher as tubes age with more use.

Plate current (Ip) is the most useful parameter to monitor with the Multimeter during normal operation of the amplifier.

CAUTION ! Disable VOX function of radio BEFORE changing bands on the amplifier. The bandswitch detent makes a noise that can activate the VOX and key the amp while the bandswitch is still moving. This will burn the bandswitch contacts!

NOTE!!! Do NOT use the radio internal antenna tuner when the amplifier is connected to the output of the radio, even if the amp is off or in bypass, because the relays and wiring in the amp become part of the feedline that the tuner is matching to the antenna. Depending on the antenna impedance, there can be very high voltages at points along the feedline even when

running only 100w from the radio alone. This can damage the bypass relays in the amplifier.