12DQ6B TUBES IN 160

RCA, GE and PHILCO tubes date coded in '63 and '64 work the best. Hallicrafters bought from Philco and RCA. They would buy in bulk to tighter specs than normal for the 12DQ6B. One of the tighter specs was narrower range of grid to plate capacitance. Most of the tubes in the Hallicrafters gear were bought in bulk to tighter specs. This is the reason why with NOS or new tubes some work some don't. Also, 12DQ6 and 12DQ6A tube most often will not function. They require much testing to match idle current to bias voltage level.

Before you dump the old tubes check three things.

1, Readjust the idle current (bias adjustment). Set it exactly at 60mills with no drive. then measure the voltage on pin 5 of either final tube. If it is less than -55 volts the tube is weak. Normal for a good pair is between -60 and -65 volts. If it is above -70 volts it indicates gassy tubes.

2, Pull one of the tubes and check the idle current. Then check the idle current of the other tube in the same socket the other was in. They should be equal. *NOTE: You can check the dynamic balance of the two tubes by adjusting the idle current for the single tube at 10, 15, 20, 25, 30, 35, and 40 mills and recording the bias voltage at each current level. Then do the same for the other tube to see if they match.*

3, Check the drive on pin 5 of either tube. Tune up for max power out. With a scope check the drive on pin 5 of either tube. If you have a peak to peak signal of 600vpp or better the drive is ok. NOTE If you use a 10x probe it will detune the ckt so re-peak the drive and plate for the measurement. I use a 100x probe which does not load the ckt.