tester for 6146 tubes

Since many popular exciters and transceivers use 6146 tubes, and since it is not easy to find a tube tester to accommodate this tube, there is a need for a simple tester to evaluate the condition of 6146 transmitting tubes. This is particularly important when speech processors are used — they tend to raise the average power input, thus shortening tube life. The circuit shown in **fig. 1** uses junk box parts, but will provide a very acceptable 6146 tube tester.

In this tester an ac bias for the grid is provided from the filament winding. It must be polarized. It must be polarized properly, *i.e.*, the grid must be going positive as the plate is going positive. To check this, reverse the filament connections. Choose the one which yields the greatest plate current. The tester is then ready for use.

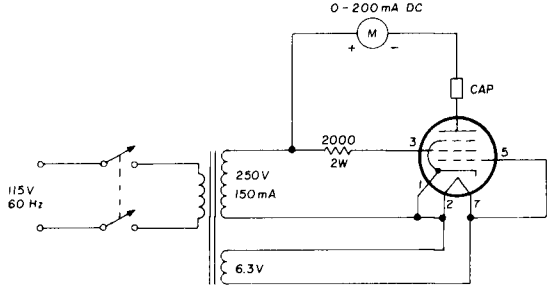

fig. 1. Simple tester for 6146 transmitting tubes is easily built from junk-box parts.

A good tube will draw 115 mA or more as indicated on the meter. Note that this meter indication is the average of half-wave rectified current. Tubes providing 90 mA or less should be discarded or, at most, kept for emergency spares. The tester is also useful for balancing pairs of tubes.

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