

BUILD YOUR OWN ANTIQUE-RADIO TUBE-FILAMENT CHECKER

This month, I am going to show you how to build a simple but useful piece of test equipment. That is a tube-filament tester. I've always found such a device very valuable in troubleshooting old radios.

While the much-altered filament tester shown in Fig. 1 is about 40 years old, I didn't invent it. Commercial versions were available for years before I built mine. Besides testing tube filaments you can also use it to test light bulbs, home and auto fuses, etc.

Even if you already own an emission-type tube tester, there is an advantage to having a simple filament checker: it's

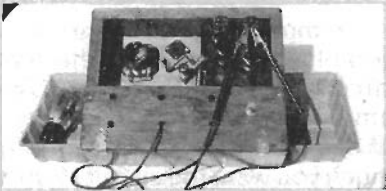


FIG. 1

much easier to use because you don't have to set nine switches, three dials, and several pushbuttons, not to mention tube warm-up time. Besides, many late-model tube testers don't have sockets for the antique tubes we are interested in.

As shown in Fig. 2, the filament checker has sockets that are pre-wired to accept the most popular types of tubes, and a pair of test leads that allow you to check any tube with non-standard filament connections or a non-standard base. The box has special clamps to hold that type of tube in place while you connect the test leads.

The circuit works like this. The battery, lamp and the tube under test are all connected in series through the on/off switch. When you close the switch, the lamp will light if the filament is good. Otherwise it's bad.

The box shown in the photo measures 9" x 12" x 4". The two plastic boxes affixed to the sides of the checker can serve as "in" and "out" boxes when you're testing a batch of tubes. Place tested-good tubes in the out box, and simply discard any bad tubes.

You can use any low-voltage low-current lightbulb for LMP1, such as a number 48 or 49, or even a number 14, which is rated at 2.47 volts at 300 mA. The toggle switch isn't really necessary. I just like to have a switch on all electrical equipment to make sure that it is off when I'm not using it.

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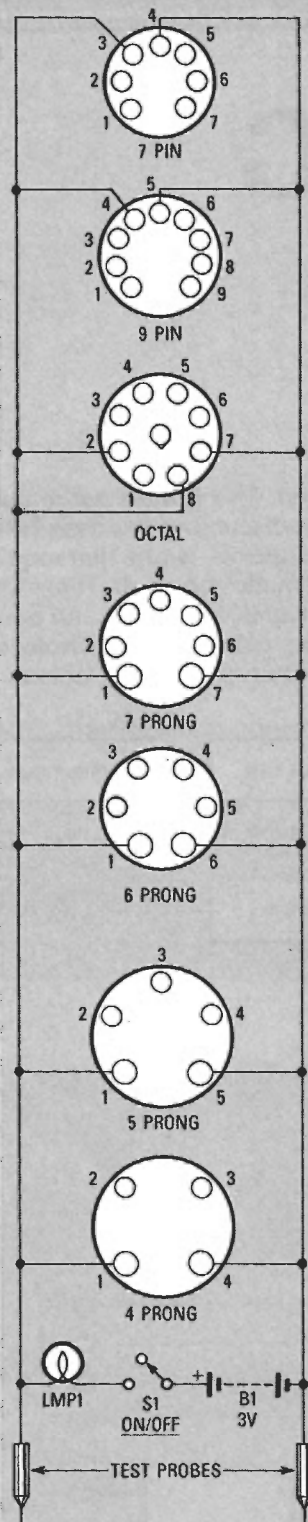


FIG. 2

seums failed to give me enough material for a complete column. But if I can obtain enough information, I will include it in a column.

Haves and needs

A. B. Nancy (1421 Retallack Street, Regina, Canada S4T 2J3) has an an-

tique Arvin for sale. James Lindsay (85 Circuit Avenue, Weymouth, MA 02188) needs a complete speaker for a RCA Victor Model 87 T. And David Fentem (704 Emerald Forrest Circle, Lawrence, GA 30245) needs all major parts for an old Silvertone console.

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