Many forms of ballast tubes have been introduced during the past year for use in connection with AC-DC sets in an effort to eliminate series resistors and heater cords which represent somewhat of a fire hazard. A ballast tube is a much better way to dissipate this heat than to use a resistor underneath the radio chassis. In addition, a ballast tube is less subject to failure than a resistor or delicate heater cord and in case of failure may be replaced much easier. The Triad 40X, 50X and 60X300 are typical examples of satisfactory ballast tubes.

A reduction of cost may be secured by using the new Triad ballast tubes since they are provided with a tap for pilot light voltages and thereby eliminate shunt resistors for the pilot lights. As a further improvement, the new ballast tubes have a much lower temperature-resistance coefficient than previous types. This feature reduces the initial current surge through the tube heaters when the set is turned on and also provides a higher heater current during the period when the tubes are warming up, thereby reducing the heating time of the set considerably.

These new series of ballast tubes are designed to work with the #40 pilot lamps which have a rating of 6.3 volts at 150 ma. The new series have been carefully designed to insure that current surges will not reduce the life of the #40 pilot lamps. Continuous life tests for several weeks in radio sets with the set being turned on and off periodically, have not produced any ballast tube failures, tube heater failures, or pilot lamp failures.

The two new ballast tubes have a standard 4 pin tube base. The total resistance is connected between the filament prongs no. 1 and no. 4. The pilot light tap is connected to pin no. 3, the usual grid pin. The pilot light, or two pilot lights in series, should be connected to the grid pin and adjacent filament pin, No. 3 and no. 4.

Both the 50A2 and 50B2 tubes have an overall voltage drop of 50 volts at 300 ma. between the filament pins with the proper pilot light connections. The type 50A2 has a tap for two pilot lamps while the type 50B2 has a tap for only one pilot lamp as illustrated in the diagram above.