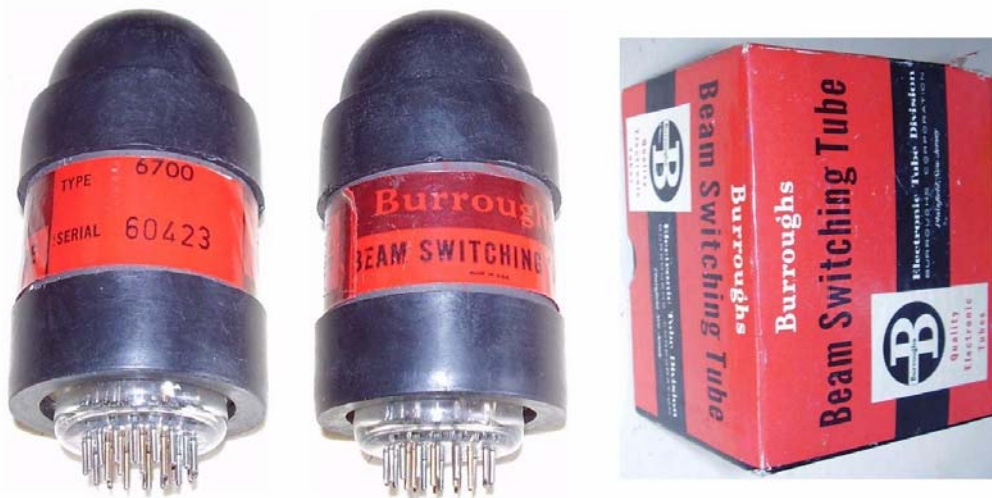


6700 – Beam Switching Decade Counter



The 6700, also known as HB-100 or MO-10, was the first beam switching tube series built by Haydu Brothers which soon became the Burroughs Tube Division. It was a high speed nixie-compatible decade counter. It was named ‘Trochotron’ because of the operating principle, based upon an electron beam following trochoidal trajectories in a combined electric and magnetic field. The counting speed is 2 MHz. Magnetic beam switching tubes were used in high speed applications through the 1950's and the early 1960's. They were attractive for military because of their intrinsic reliability, since a single component could replace many and many components and the associated assembly and test operations.

The magnetic beam switching tubes as well as the Nixie tubes were first designed by the Burroughs research group and produced by Haydu Brothers through 1955, probably even with the proprietary code HB-100 from the design reference number, until this small company fully merged into Burroughs as ‘Electronic Tube Division’.

Registered to Haydu Brothers, Plainfield, New Jersey, in June 1955. Data available in the RMA record [1485](#).

[The story and the operation of the ‘trochotron’ beam switching tube can be found in this article.](#)



Some different samples of 6700 from the early Haydu badged production to the late Burroughs badged versions. Haydu samples were made before 1957.