

5.7 The rotary video head is literally the heart of the Videotape Recording system. It is constructed to mechanical tolerances that are a tribute to the watchmaker's art and deserves the care and consideration that one would lavish upon an expensive watch. Its life and performance reflect the user's appreciation of this fact.

a. The Ampex video heads have evolved through several major design changes up to and including the present Mark Twenty version used on the AVR - 1 and ACR - 25 Ampex Videotape Recorders. It is interesting to note that interchangeability between tapes recorded on the earliest Mark I heads and the latest Mark Twenty types has not suffered to any great extent. In other words, a tape made on a VR-1000 A recorder in 1958 will play back today on an AVR-1.

1. The versions of Ampex Video Heads are as follows:

Mark I circa	1957	(obsolete, replaced by Mark III).
Mark II	1961	(obsolete, only a few made; replaced by Mark III).
Mark III	1962	(still in use on older machines, but directly replaceable by Mark X at user's option).
Mark IV	1965	(original head for VR-2000. Converted unilaterally to Mark X during rebuilding process).
Mark X	1967	(Currently in use and required on VR-1200, VR-2000, and useable in VR-1000 series and VR-1100).
Mark XI	1968	(A special head designed for use only in the VR-3000 quadruplex videotape recorder).
Mark XX	1970	(Head currently produced for use only in the AVR-1 and ACR-25 videotape recorders).

2. The essential differences between the Mark III, Mark X, and MK XX versions are tabulated on Table 5.1 of this section.