



TECHNICAL BULLETIN

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CARE OF SPARE UHF-TV KLYSTRONS

STORING AND OPERATING SPARE UHF-TV KLYSTRONS

Most UHF-TV station engineers use their spare klystrons only in emergency situations. To realize optimum overall performance and life from these klystrons, it is recommended that the following steps be taken:

- When storing UHF-TV klystrons as spares, the water lines should be drained and blown dry. Water that is allowed to remain in the cooling passages for long periods, even distilled water, may cause corrosion or physical damage if exposed to freezing temperatures. (**NOTE:** When draining water from an internal-cavity tube, place the tube in a horizontal position with the tuners down.) Always keep the klystron covered to prevent an accumulation of dirt and moisture.
- The spare klystron should be tested for vacuum integrity (gas checked) approximately every 90 days. This procedure and a diagram of the circuit are provided in CPI/MPTP Publication 2665, "Gas Checking Klystrons." Commercial gas-check test sets are also available.
- If the gas check indicates an unacceptable level, the klystron should be put in service for a period of time to determine whether continued useful operation will be possible when required. Klystron operation will disperse any residual vacuum contaminants that have evolved during inoperative periods.
- New tubes should be operated for 200 to 300 hours as soon after receipt as possible. Thereafter, they can be rotated periodically to visual or aural positions, but handling should be kept to a minimum.

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