



7112

7112

# MAGNETRON

TUNABLE TYPE

FORCED-AIR COOLED

INTEGRAL MAGNET

*For use as a pulsed oscillator  
at frequencies between 8500 and 9600 Mc*

*The 7112 differs from the 7110 and the 7111 only mechanically in the location of the tuning control and the micrometer-type indicator provided to facilitate frequency calibration of each tube. The 7112 features a tuning shaft which permits the use of a remote control for adjustment. The 7112 is the same as the 7110 except for the following items:*

**Mechanical:**

Tuning Shaft with Associated Calibrated Indicator:  
Revolutions (Approx.) to cover full  
range of 8500 to 9600 Mc . . . . . 25

### OPERATING CONSIDERATIONS

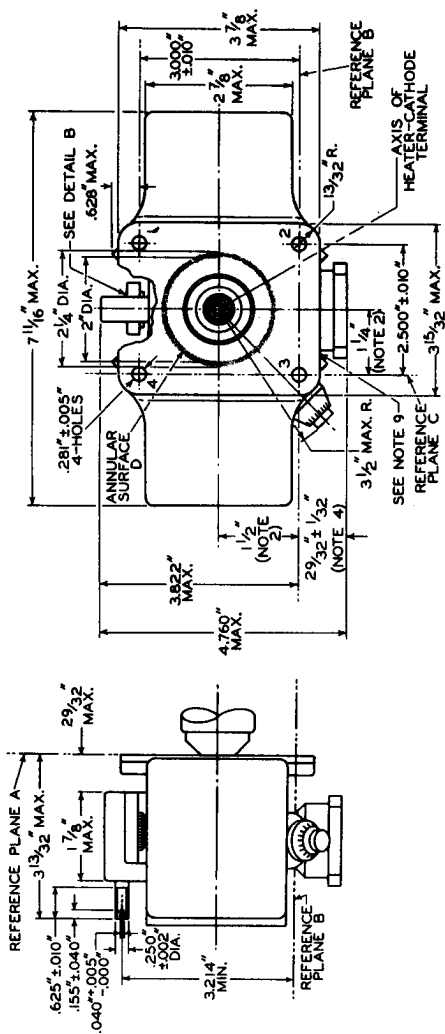
The 7112 can be tuned in the same manner as the 7110 except that a screw-driver slot is provided in the tuning shaft. If desired, a flexible coupling may be attached to this shaft and the tube tuned remotely. The design of the 7112 provides an essentially constant operating frequency without requiring a positive mechanical lock even though the tube is subjected to vibration.

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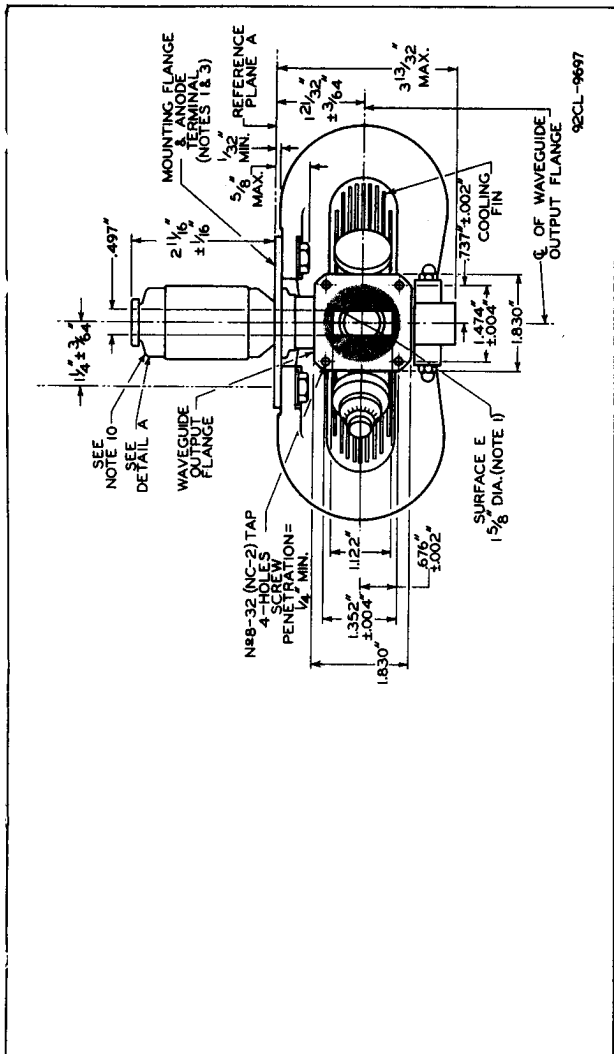




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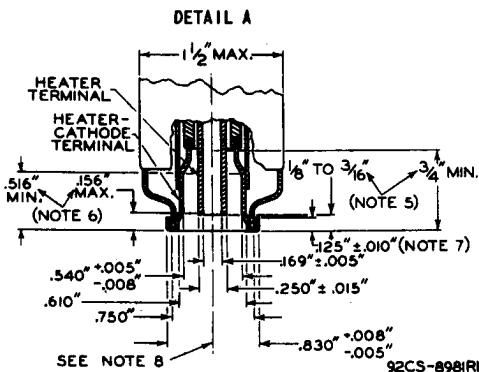
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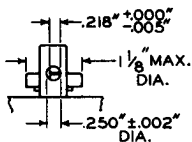


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DETAIL B  
Bottom View





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REFERENCE PLANE A IS DEFINED AS THE PLANE THROUGH THAT PORTION OF THE MOUNTING FLANGE DESIGNATED AS ANNULAR SURFACE D.

REFERENCE PLANE B IS DEFINED AS THE PLANE WHICH IS PERPENDICULAR TO PLANE A AND PASSES THROUGH THE EXACT CENTERS OF MOUNTING-FLANGE HOLES 2 AND 3.

REFERENCE PLANE C IS DEFINED AS THE PLANE WHICH IS PERPENDICULAR TO PLANE A AND PLANE B AND PASSES THROUGH THE EXACT CENTERS OF MOUNTING-FLANGE HOLES 3 AND 4.

**NOTE 1:** SURFACE E OF THE WAVEGUIDE OUTPUT FLANGE AND THE ENTIRE SURFACE OF THE MOUNTING FLANGE ARE MADE SO THAT THEY MAY BE USED TO PROVIDE A HERMETIC SEAL.

**NOTE 2:** THE AXIS OF THE HEATER-CATHODE TERMINAL WILL BE WITHIN THE CONFINES OF A CYLINDER WHOSE RADIUS IS  $3/64$ " AND WHOSE AXIS IS PERPENDICULAR TO REFERENCE PLANE A AT THE SPECIFIED LOCATION.

**NOTE 3:** ALL POINTS ON THE MOUNTING FLANGE WILL LIE WITHIN 0.015" ABOVE OR BELOW REFERENCE PLANE A.

**NOTE 4:** THE LIMITS INCLUDE ANGULAR AS WELL AS LATERAL DEVIATIONS.

**NOTE 5:** THESE DIMENSIONS DEFINE EXTREMITIES OF THE 0.169" INTERNAL DIAMETER OF THE CYLINDRICAL HEATER TERMINAL.

**NOTE 6:** THESE DIMENSIONS DEFINE EXTREMITIES OF THE 0.540" INTERNAL DIAMETER OF THE CYLINDRICAL HEATER-CATHODE TERMINAL.

**NOTE 7:** NO PART OF THE CONNECTOR DEVICE FOR THE HEATER AND HEATER-CATHODE TERMINALS SHOULD BEAR AGAINST THE UNDERSIDE OF THIS LIP.

**NOTE 8:** THE HEATER TERMINAL AND THE HEATER-CATHODE TERMINAL ARE CONCENTRIC WITHIN 0.010".

**NOTE 9:** ANODE TEMPERATURE MEASURED AT JUNCTION OF WAVEGUIDE AND ANODE BLOCK.

**NOTE 10:** CATHODE TEMPERATURE MEASURED HERE.