WESTINGHOUSE ELECTRONIC TUBES

SECURITY CLASSIFICATION Confidential

Types 4J70, 4J71, 4J72 and 4J73

Magnetrons

GENERAL CHARACTERISTICS

Electrical

Cathode	Unipotential, Coated
Heater Voltage	16.0 Volts
Heater Current	2.8 - 3.4 Amperes
Mechanical Tuning Range	
4J70	3710 - 3540 Megacycles
4J71	3560 - 3390 Megacycles
4J72	3410 - 3240 Megacycles
4J73	3260 - 3090 Megacycles
Magnetic Field Strength	2500 Gauss
Power Output at .0006 Duty Cycle and 70 Amperes	350 Watts

Mechanical

Dimensions	See Outline
Mounting Position	Any
Cooling	Forced Air

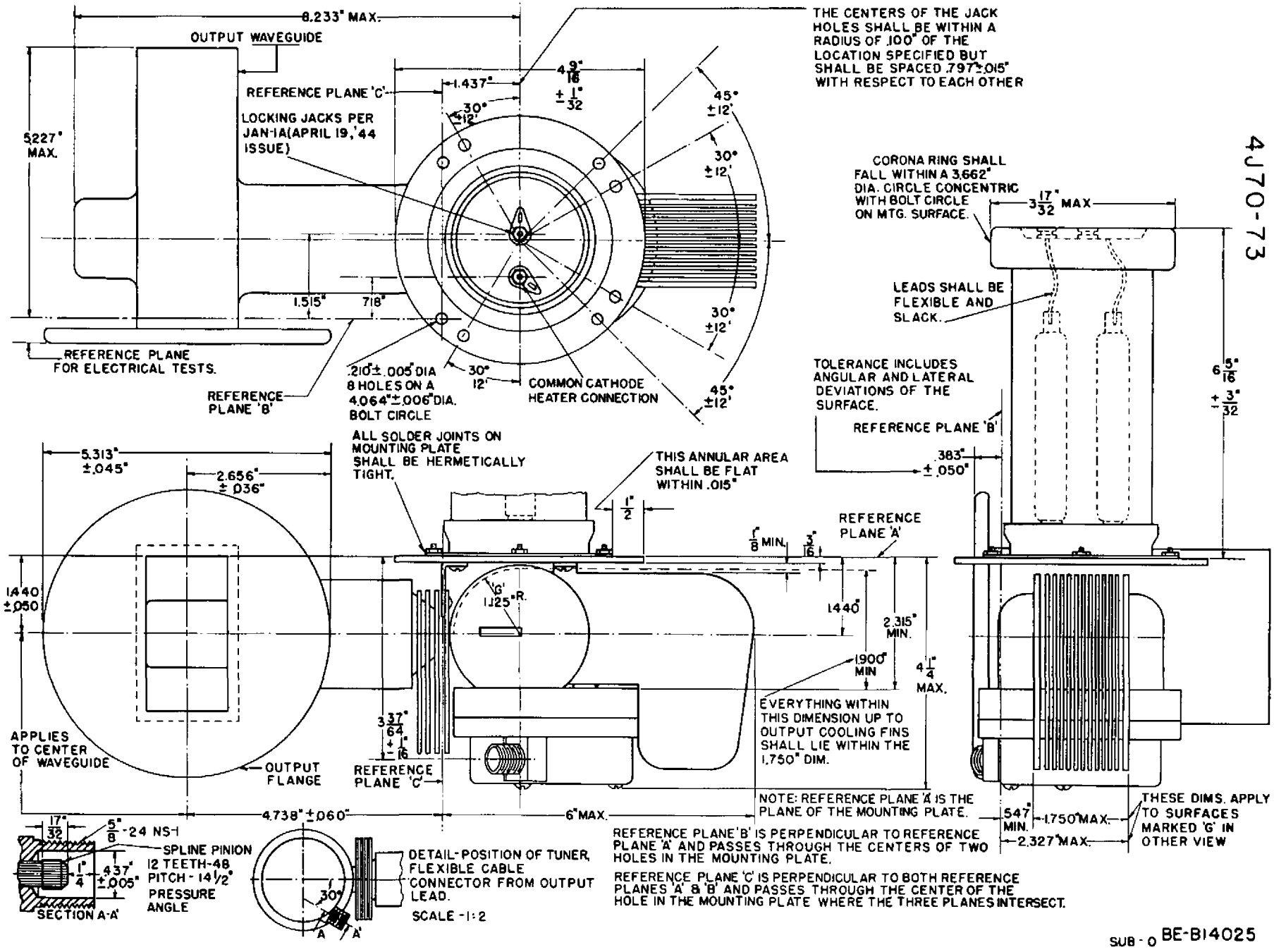
MAXIMUM RATINGS

Peak Anode Voltage	30 Kilovolts
Peak Anode Current	70 Amperes
Anode Dissipation	700 Watts
Duty Cycle *	.001
Anode Temperature	125° C
Pulse Duration	2.5 Microseconds

* The tube shall not be operated longer than 5 microseconds in any 100 microsecond interval.

Bloomfield, New Jersey December 5, 1945

from RMA release # 568, Feb. 27, 1947


8.233" MAX.
OUTPUT WAVEGUIDE
5.227" MAX.
REFERENCE PLANE 'C'
1.437"
4 9/16" ± 1/32"
30° ±12'
LOCKING JACKS PER JAN-1A (APRIL 19, '44 ISSUE)
THE CENTERS OF THE JACK HOLES SHALL BE WITHIN A RADIUS OF .100" OF THE LOCATION SPECIFIED BUT SHALL BE SPACED .797±.015" WITH RESPECT TO EACH OTHER
45° ±12'
30° ±12'
30° ±12'
45° ±12'
1.515"
7/8"
REFERENCE PLANE FOR ELECTRICAL TESTS.
REFERENCE PLANE 'B'
.210±.005 DIA 8 HOLES ON A 4.064"±.006" DIA. BOLT CIRCLE
30° 12'
COMMON CATHODE HEATER CONNECTION
CORONA RING SHALL FALL WITHIN A 3.662" DIA. CIRCLE CONCENTRIC WITH BOLT CIRCLE ON MTG. SURFACE.
3 17/32" MAX
LEADS SHALL BE FLEXIBLE AND SLACK.
TOLERANCE INCLUDES ANGULAR AND LATERAL DEVIATIONS OF THE SURFACE.
REFERENCE PLANE 'B'
.383" ± .050"
6 5/16" ± 3/32"
5.313" ±.045"
2.656" ±.036"
ALL SOLDER JOINTS ON MOUNTING PLATE SHALL BE HERMETICALLY TIGHT.
THIS ANNULAR AREA SHALL BE FLAT WITHIN .015"
1/2"
1/8" MIN.
3/16"
REFERENCE PLANE 'A'
1.440 ±.050
'G' 1.125" R.
1.440"
2.315" MIN.
1.900" MIN
4 1/4" MAX.
EVERYTHING WITHIN THIS DIMENSION UP TO OUTPUT COOLING FINS SHALL LIE WITHIN THE 1.750" DIM.
APPLIES TO CENTER OF WAVEGUIDE
OUTPUT FLANGE
3 37/64" ± 1/16"
REFERENCE PLANE 'C'
4.738" ±.060"
6" MAX.
NOTE: REFERENCE PLANE 'A' IS THE PLANE OF THE MOUNTING PLATE.
.547" MIN.
1.750" MAX.
2.327" MAX.
THESE DIMS. APPLY TO SURFACES MARKED 'G' IN OTHER VIEW
17/32"
5/8"-24 NS-1
SPLINE PINION 12 TEETH-48 PITCH-14 1/2° PRESSURE ANGLE
1/4"
.437" ±.005"
SECTION A-A'
30°
A
A'
DETAIL-POSITION OF TUNER, FLEXIBLE CABLE CONNECTOR FROM OUTPUT LEAD.
SCALE - 1:2
REFERENCE PLANE 'B' IS PERPENDICULAR TO REFERENCE PLANE 'A' AND PASSES THROUGH THE CENTERS OF TWO HOLES IN THE MOUNTING PLATE.
REFERENCE PLANE 'C' IS PERPENDICULAR TO BOTH REFERENCE PLANES 'A' & 'B' AND PASSES THROUGH THE CENTER OF THE HOLE IN THE MOUNTING PLATE WHERE THE THREE PLANES INTERSECT.
SUB - 0 BE-B14025

4J70-73