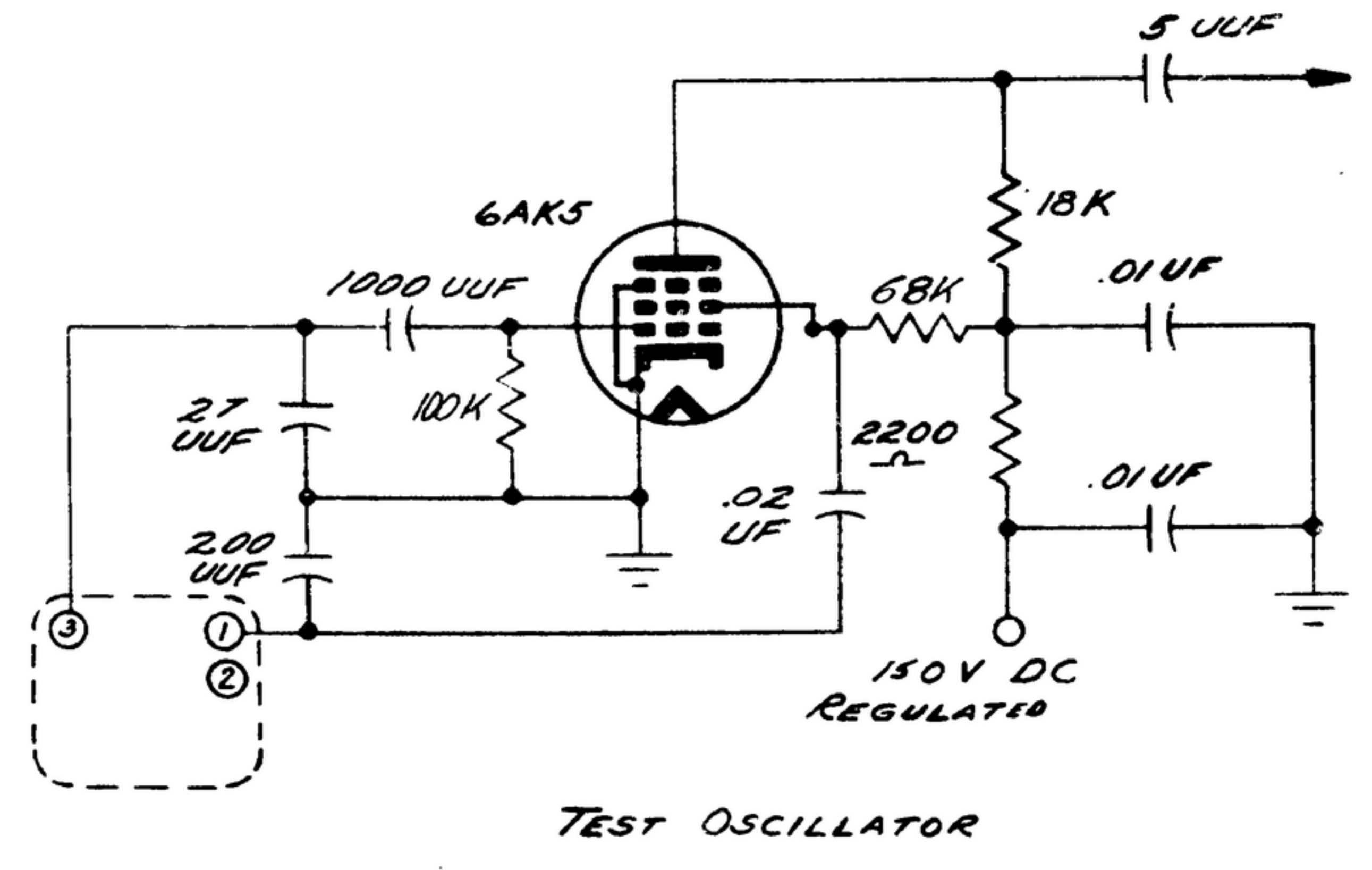


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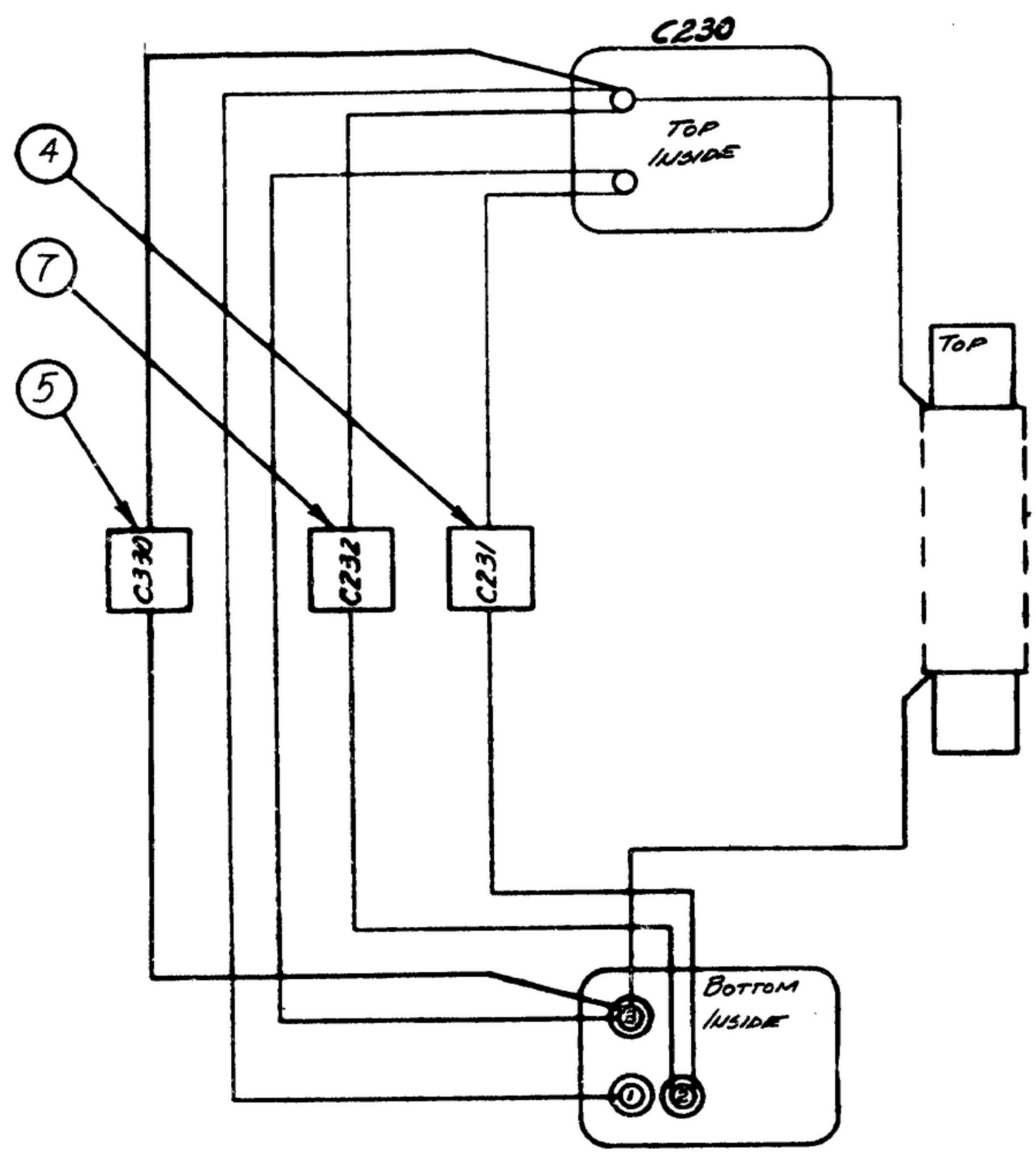
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SWE APPROVAL		REVISIONS		
SYN	REV	DESCRIPTION	DATE	APPROVAL
SM	12 10042-13			
A <sub>1</sub>		A <sub>1</sub> - Added Note 11, A <sub>2</sub> - Added Item 9, A <sub>3</sub> - Item 5 Part No. Was SM-C-283226-20, A <sub>4</sub> - Item 3 Description Was CAN-R.F.	20 Nov 59	REV'D P.M.F.
B	CA 84960	B (1) - ADDED NOTE 11	16 NOV 1965	REV'D P.M.F.
C <sub>1</sub>		(1) ± 1% WAS ± .7%	26 MAR 1965	REV'D P.M.F.



TEST OSCILLATOR

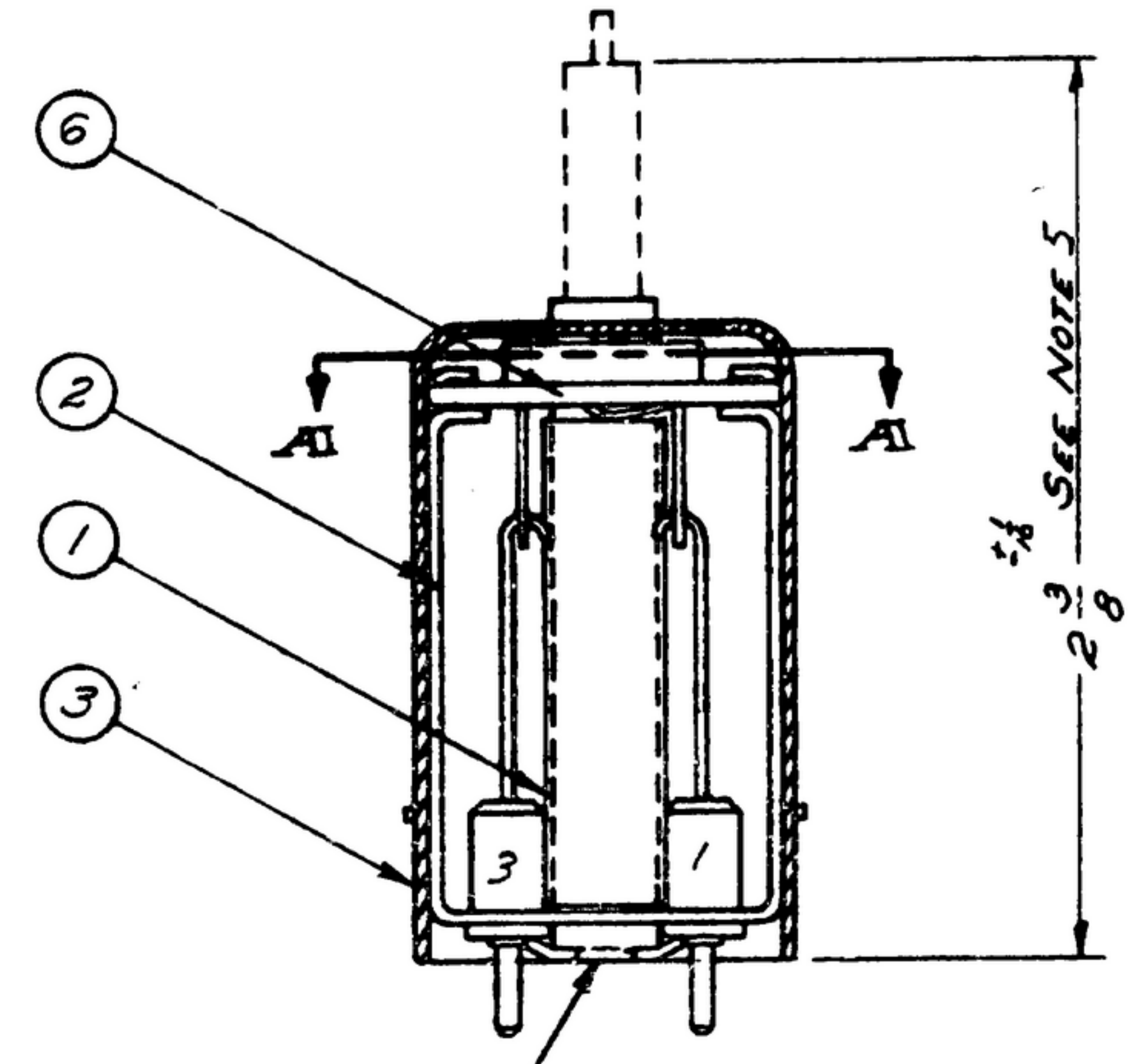
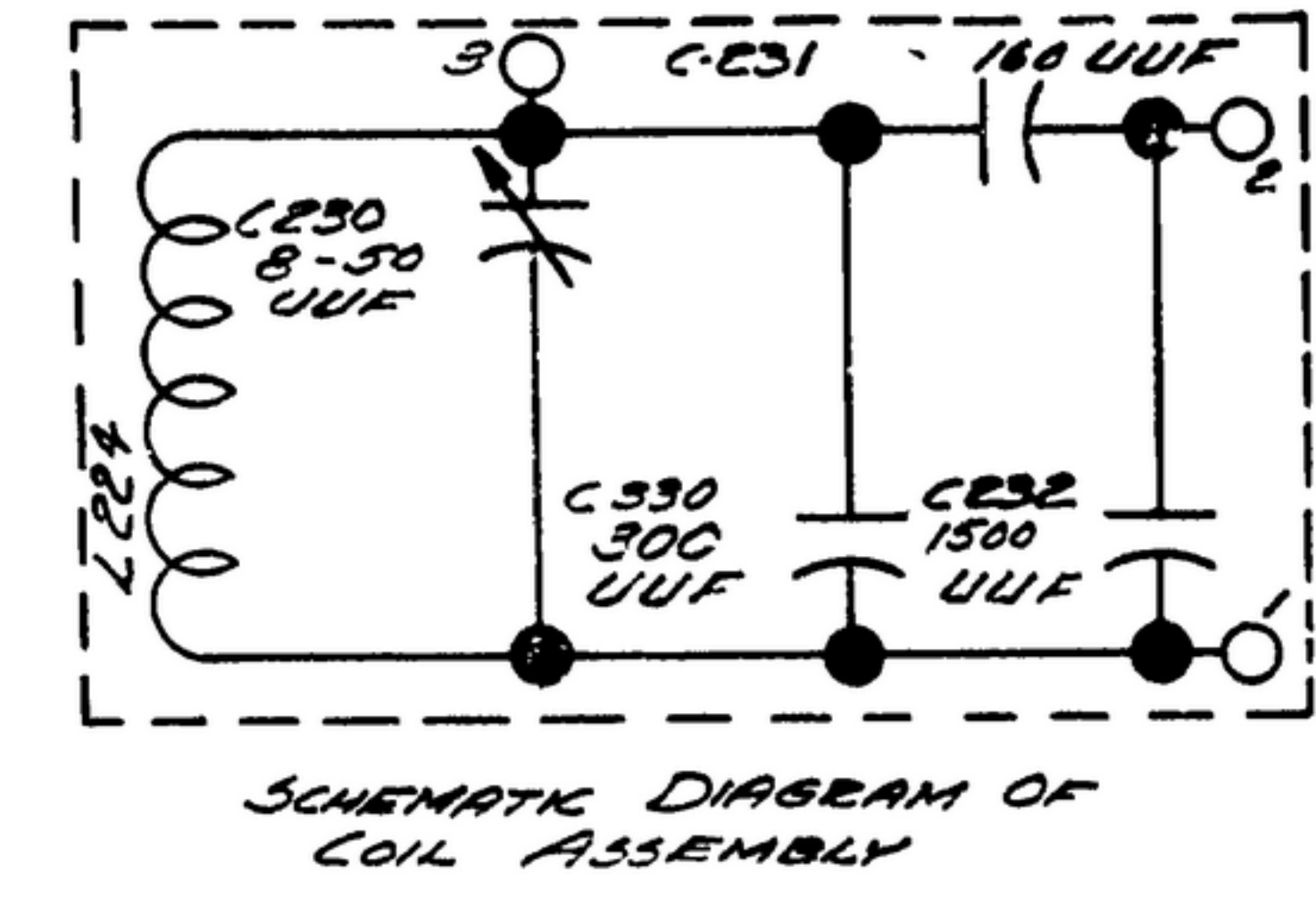
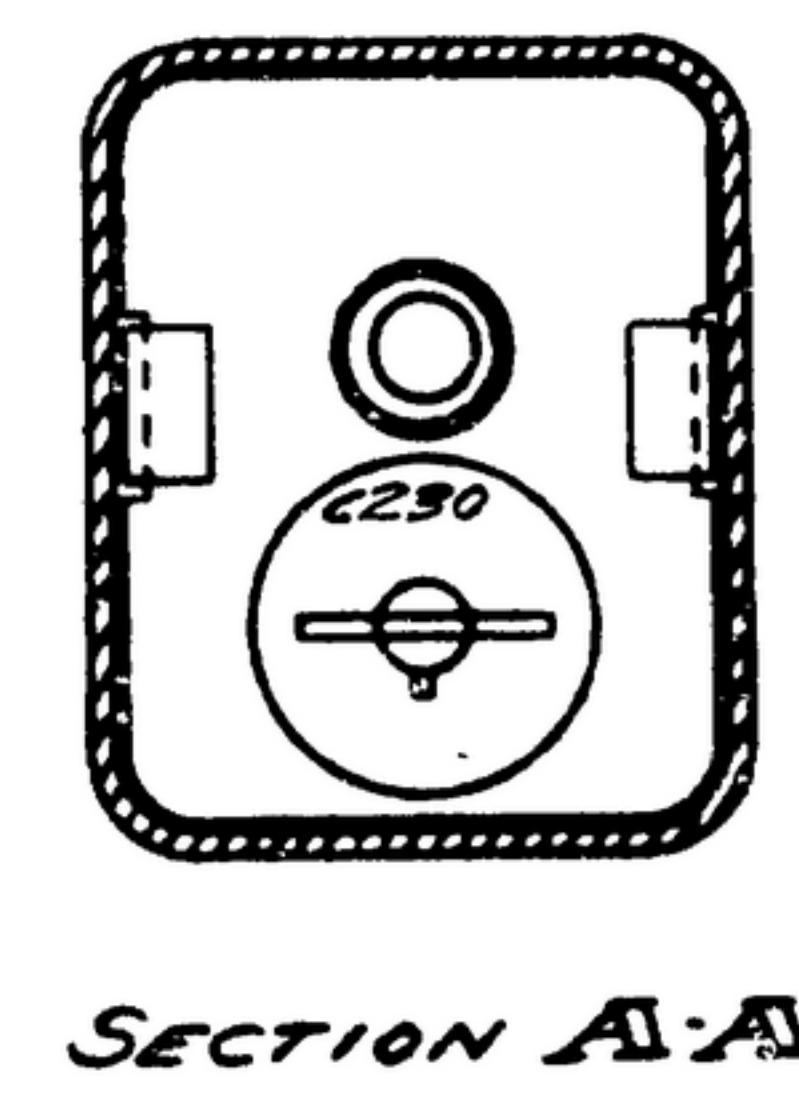


WIRING DIAGRAM

CORE POSITION INCHES ±.0002	TEST OSC FREQ MC	FREQ TOL KC	EFFECTIVE PARALLEL RESISTANCE (OHMS) ±25%
0.0300	1.01875	6	
0.0000	1.000	4	20000
± 0.0800	.950	±	
0.1600	.900	4	
0.2400	.850	4	
0.3200	.800	4	
0.4000	.750	4	25000
0.4800	.700	4	
0.5600	.650	4	
0.6400	.600	4	
± 0.7200	.550	±	
0.8000	.500	4	34000
0.8300	.48125	6	

\* ALIGNMENT POINTS SEE NOTE 4.

- NOTES:
- SOFT SOLDER PER SPEC. MIL-S-8823 USING ROSIN CORE SOLDER (9) COMP SNGD.
  - COIL FORM OF COIL ASSY (1) TO BE CONCENTRIC WITH 1.40 DIA. HOLE IN FRAME (2) WITHIN .020 T.I.R.
  - POSITIONING OF CAPACITOR OPTIONAL, PROVIDED NO CAPACITOR COMES WITHIN 1/16 OF COIL WINDING.
  - ALIGNMENT: WITH COIL ASSY IN TEST JIG, ADJUST STANDARD POWDERED IRON TUNING CORE POSITIONED IN THE COIL, ADJUST VARIABLE CAPACITOR (C6), UNTIL TEST OSCILLATOR FREQUENCY IS WITHIN 500 CPS OF THE VALUE SHOWN IN TABLE AT THE TWO ALIGNMENT POINTS. THE FINAL SETTINGS OF THE VARIABLE CAPACITOR (C6), SHALL LEAVE A RESERVE ADJUSTMENT OF 40 UUF.
  - BROKEN LINES INDICATE OUTLINE OF STANDARD POWDERED IRON TUNING CORE OF TEST JIG. DIMENSION APPLIES TO THE CORE IN 0.0800 ALIGNMENT POSITION AFTER ELECTRICAL ALIGNMENT PER NOTE 4.
  - TRACES: TEST OSCILLATOR FREQUENCY SHALL BE WITHIN THE TOLERANCE OF TABLE AT SPECIFIED CORE POSITIONS AT 25°C.
  - STABILITY: THE RESONANT FREQUENCY OF THE TUNING VARY NOT MORE THAN 40 PPM/°C FROM THE 25°C VALUE OVER THE SPECIFIED TEMPERATURE RANGE.
  - TEMPERATURE RANGE -40°C TO +85°C OPERATING, -62°C TO +85°C STORAGE.
  - THE COIL ASSY SHALL BE BONDED TO THE BASE PLATE AND TO THE VARIABLE CAPACITOR BOARD TOP (6) WITH BONDING AGENT (8) \* E-313 AS SUPPLIED BY CAEL H. BIGGS CO. LOS ANGELES, CALIFORNIA, OR EQUAL.
  - HUMIDITY: UNIT SHALL BE CAPABLE OF OPERATION AFTER EXPOSURE TO 5 HUMIDITY CYCLES CONDUCTED IN ACCORDANCE WITH LATEST VERSION OF SIGNAL CORPS DRAWING SC-D-16286. UPON COMPLETION OF THE HUMIDITY CYCLES THE UNIT SHALL BE ALLOWED TO DRY AT 25°C AMBIENT FOR A PERIOD OF 1 HOUR.
  - TUNING CORE REFERRED TO IN NOTE 4 SHOULD BE SM-C-249245 AN MUST BE WITHIN ± 1% OF NOMINAL PERMEABILITY.



SEE NOTE 2

QTY	DESCRIPTION	MATL	MATL SPEC	NOTES
9	SOLDER, SOFT		QQ-5-571	1
8	BONDING AGENT			9
7	SM-B-283226-3	CAPACITOR - FIXED		9
6	SM-C-283226-3	CAPACITOR - VARIABLE		9
5	CM15D301G	CAPACITOR - FIXED	MIL-C-5	9
4	SM-C-283226-20	CAPACITOR - FIXED		9
3	SM-B-249163	CAN - MARKED		9
2	SM-B-249062	FRAME ASSY - COIL		9
1	SM-B-283222	COIL ASSY		9

DRAWN R C HILL	CHECKED RA	APPROVED	COLLINS PART NO. 18214-PH-51-93	DEPARTMENT OF THE ARMY SIGNAL CORPS ENGINEERING LABORATORIES FORT MONMOUTH NEW JERSEY
UNLESS OTHERWISE SPECIFIED: DECIMAL DIMENSIONS INCLUDING HOLE SIZES MAY VARY ±.005 FRACTIONAL DIMENSIONS INCLUDING HOLE SIZES MAY VARY ±1/64 MACHINED ANGLES MAY VARY ±.1° BROKEN ANGLES MAY VARY ±.25° CONCENTRICITY BETWEEN ANY DIAMETERS OF THE SAME CENTERLINE SHALL NOT EXCEED 5/16 TOTAL INDICATOR READING. ALL DIMENSIONS ARE FINISH DIMENSIONS INCLUDING APPLIED FINISH AND ARE GIVEN IN INCHES.			REVIEWED P.M.F.	SM-D-249092
DATE 21 FEB 56	SCALE 2/1	APPLICATION	COIL ASSY - R.F.	

WHEN REFERRING TO THIS DRAWING STATE DRAWING NO., APPLICABLE ISSUE SYMBOL, IF ANY, AND DATE