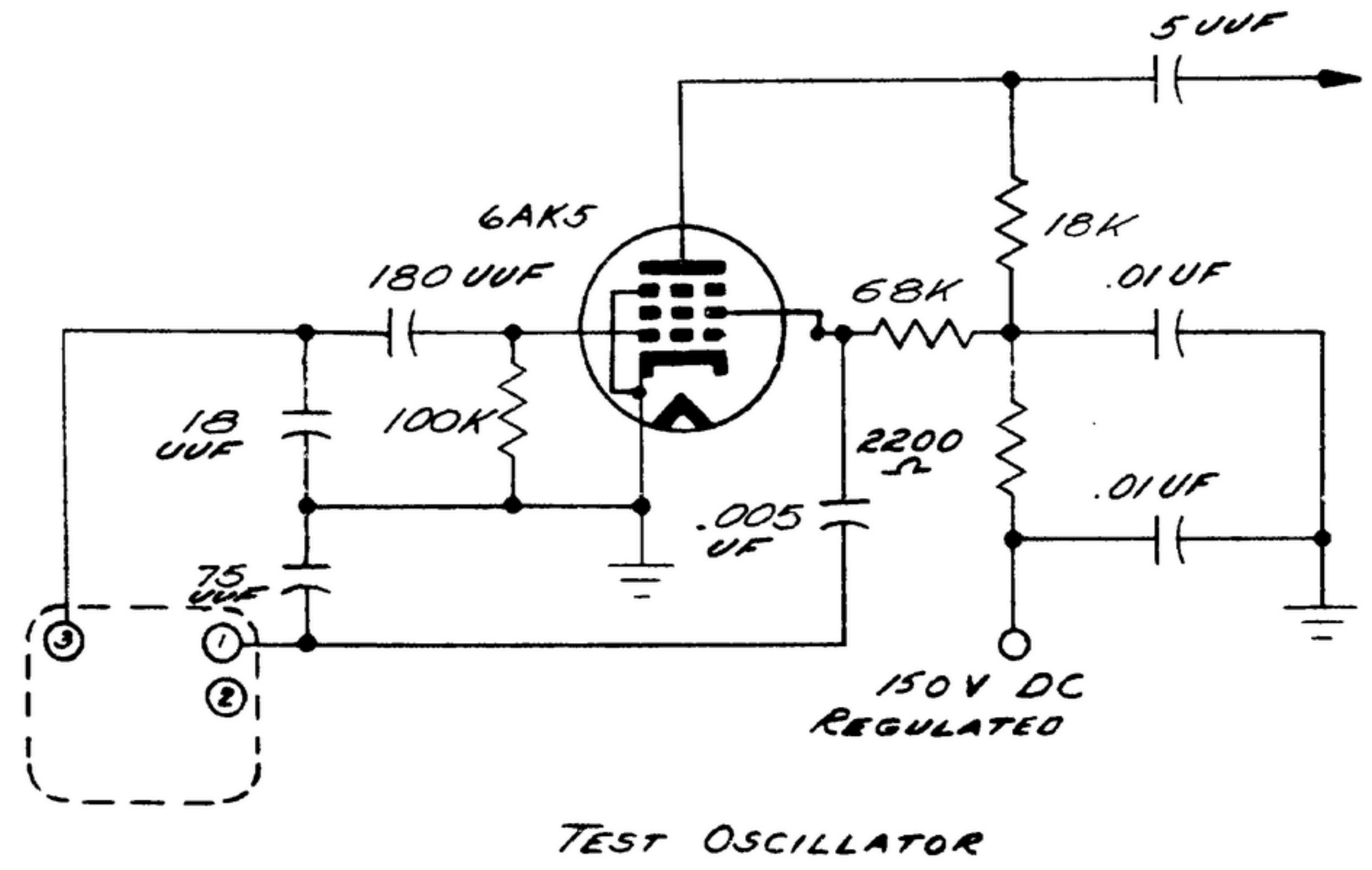


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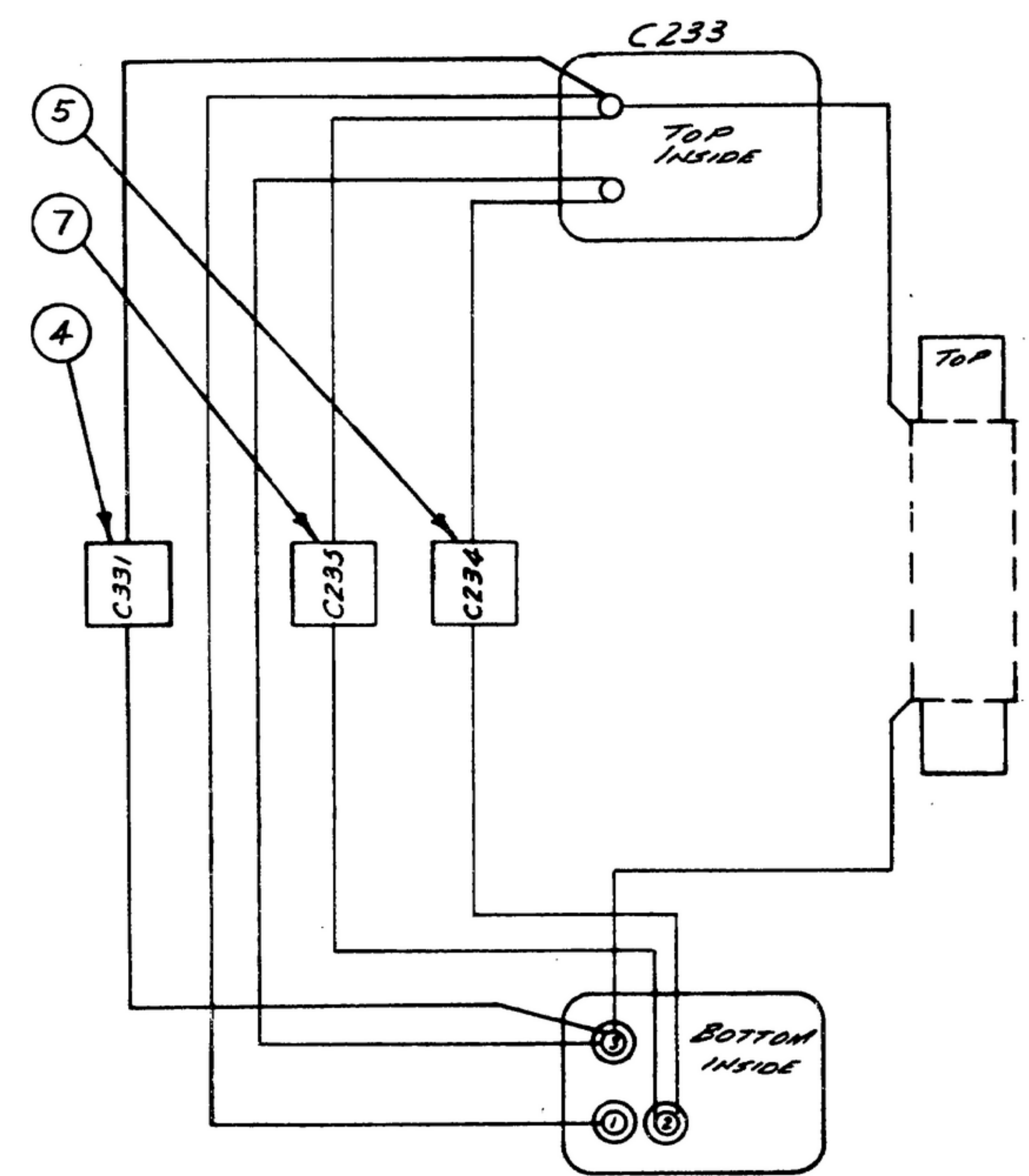
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SHE APPROVAL		REVISIONS			
SYM	PR/DATE	SYM	DESCRIPTION	DATE	APPROVAL
	PR10042-19	A ₃	A ₁ ADDED NEW APPLICATION; A ₂ ADDED ITEM 3; A ₃ ITEM 3 DESCRIPTION WAS CAN-RF	20 NOV 57	41228-PC-57 PME
B	CAB4960	B ₁	B ₁ ADDED NOTE II	10 NOV 60	41218-PC-50 REV'D PME
		C ₁	(1) ± 1% WAS ± .1%	26 MAR 1965	41228-PC-57 REV'D PME



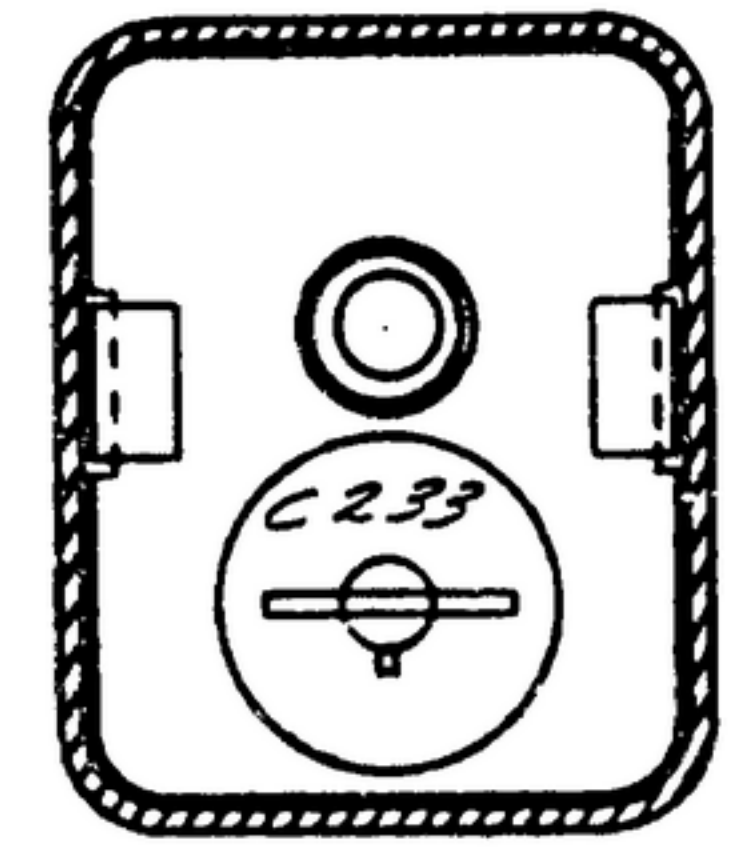
TEST OSCILLATOR



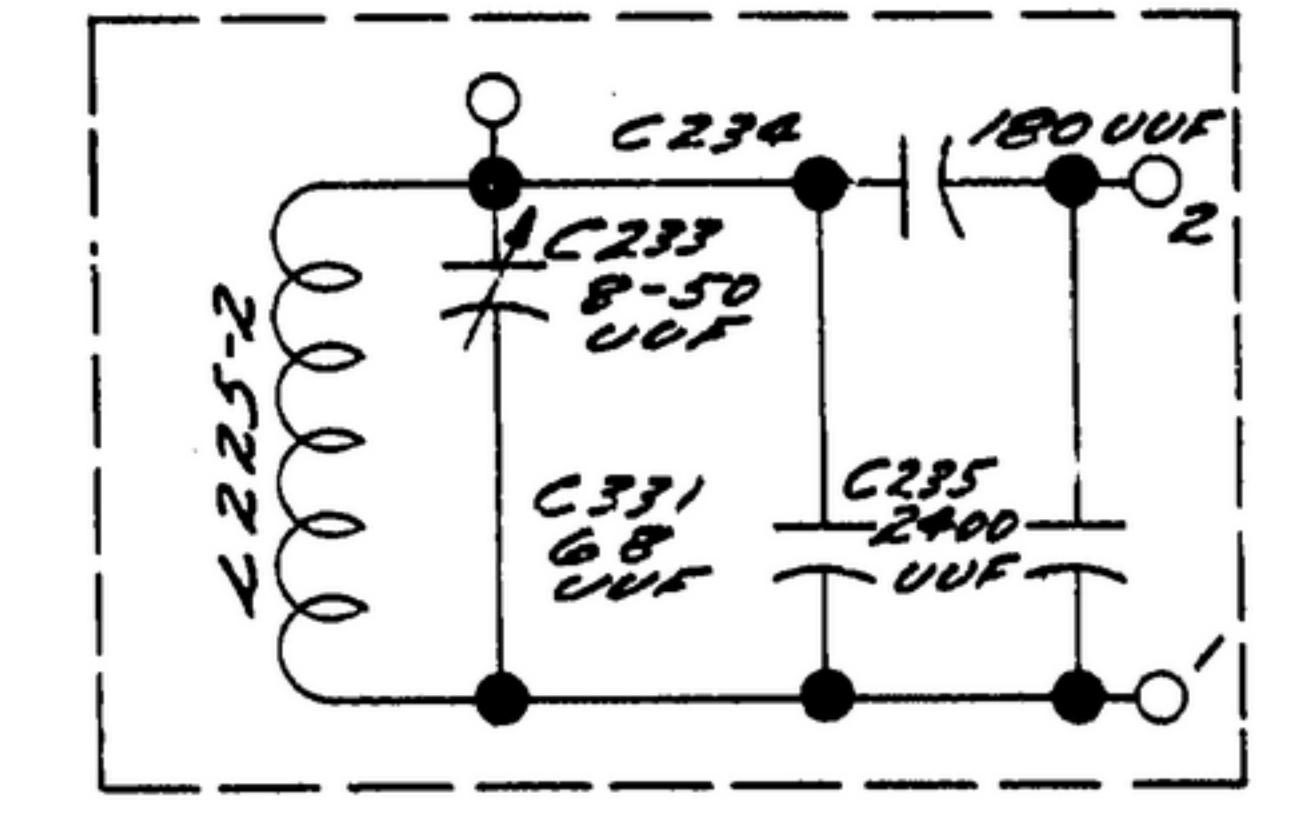
WIRING DIAGRAM

CORE POSITION INCHES ±.0002	TEST OSC FREQ MC	FREQ TOL KC	EFFECTIVE PARALLEL RESISTANCE (OHMS) ±.25%
0.0300	2.0375	10	
0.0000	2.00	7	21000
≠ 0.0800	1.90	≠	
0.1600	1.80	7	
0.2400	1.70	7	
0.3200	1.60	7	
0.4000	1.50	7	29000
0.4800	1.40	7	
0.5600	1.30	7	
0.640	1.20	7	
≠ 0.720	1.10	≠	
0.800	1.00	7	39000
0.830	.9625	10	

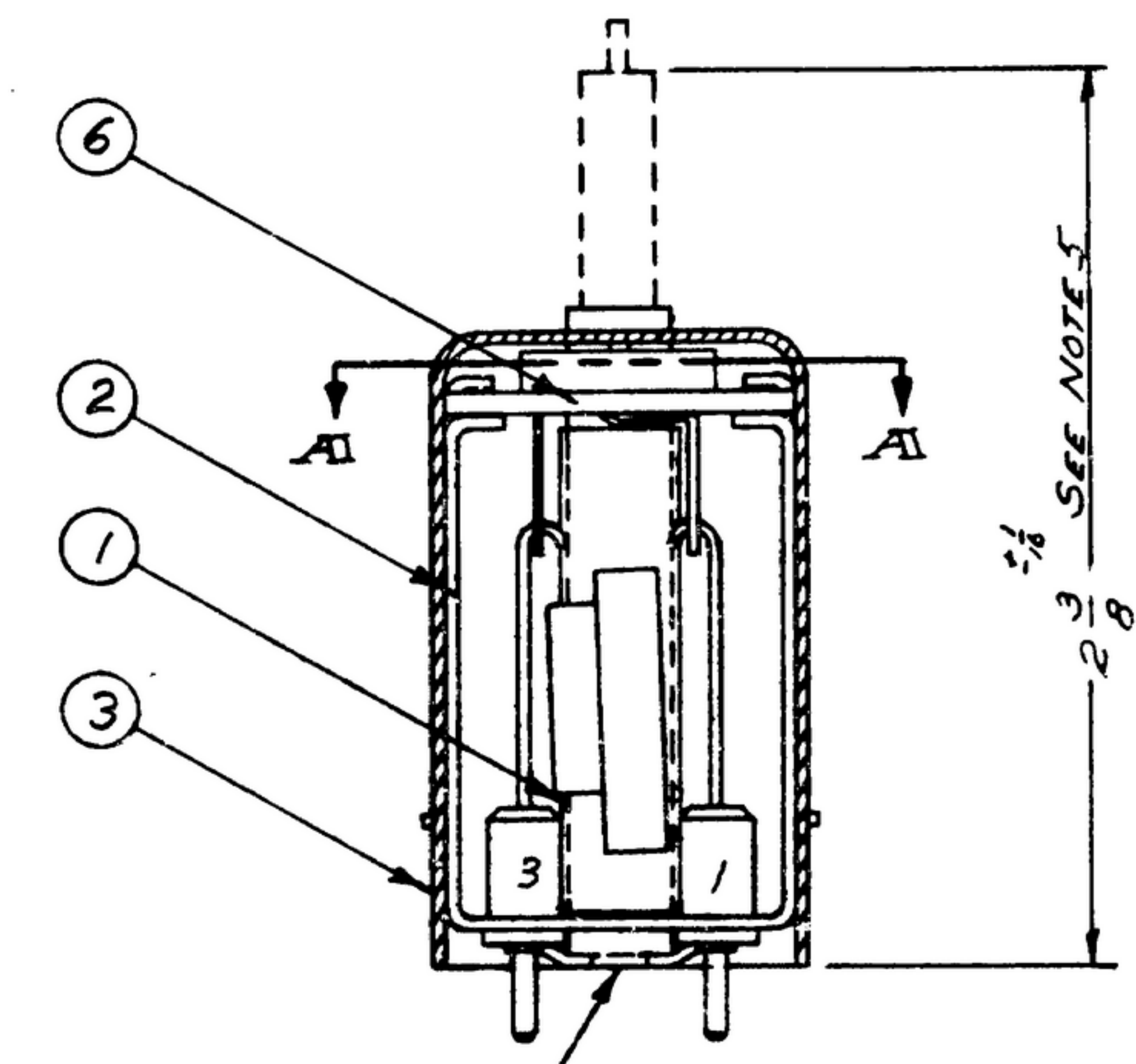
≠ ALIGNMENT POINTS SEE NOTE 4



SECTION A-A



SCHEMATIC DIAGRAM OF COIL ASSY



SEE NOTE 2

- NOTES:
- SOFT SOLDER PER SPEC MIL-S-6872 USING ROSIN CORE SOLDER (9) COMP. SNGO.
 - COIL FORM OF COIL ASSY (1) TO BE CONCENTRIC WITH .180 DIA HOLE IN FRAME (2) WITHIN .020 TIR.
 - Mounting position of capacitors optional, providing no capacitor comes within 1/16 of coil winding.
 - ALIGNMENT: WITH COIL ASSY IN TEST JIG, AND STANDARD POWDERED IRON TUNING CORE POSITIONED IN THE COIL, ADJUST VARIABLE CAPACITOR (6), UNTIL TEST OSCILLATOR FREQUENCY IS WITHIN 500 CPS OF THE VALUE SHOWN IN TABLE AT THE TWO ALIGNMENT POINTS. THE FINAL SETTING OF THE VARIABLE CAPACITOR (6), SHALL LEAVE A RESERVE ADJUSTMENT OF 4 uMFT.
 - 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.
 - TRACING: TEST OSCILLATOR FREQUENCY SHALL BE WITHIN THE TOLERANCE OF TABLE AT SPECIFIED CORE INSERTIONS AT 25°C.
 - STABILITY: THE RESONANT FREQUENCY OF THE TUNING COIL SHALL VARY NOT MORE THAN 40 PPM/°C FROM THE 25°C VALUE OVER THE SPECIFIED TEMPERATURE RANGE.
 - TEMPERATURE RANGE - 90°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 (6) TO WITH BONDING AGENT (B) 8P313 AS SUPPLIED BY CARL H. BIGGS CO., LOS ANGELES, CALIF. OR EQUAL.
 - HUMIDITY: UNIT SHALL BE CAPABLE OF OPERATION AFTER EXPOSURE TO 5 HUMIDITY CYCLES CONDUCTED IN ACCORDANCE WITH THE 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 5 SHOULD BE SM-C-249245 AND MUST BE WITHIN ± 1% OF NOMINAL PERMEABILITY

ITEM	QTY	PART NO.	DESCRIPTION	MATL	MATL SPEC	NOTES
9	AS REQD.		SOLDER, SOFT		20-5-571	1
8	AS REQD.		BONDING AGENT			9
7	1	SM-B-28226-2	CAPACITOR - FIXED			
6	1	SM-C-28226-3	CAPACITOR - VARIABLE			9
5	1	SM-C-28226-21	CAPACITOR - FIXED			
4	1	SM-C-28226-13	CAPACITOR - FIXED			
3	1	SM-B-249062	CAN - MARKED			9
2	1	SM-B-249062	FRAME ASSY - COIL			
1	1	SM-B-28226	COIL ASSY			9

LIST OF MATERIAL

DRAWN HAMER	CHECKED RH	APPROVED	COLLINS-RADIO-90 14214-PH-51-95	SIGNAL CORPS	REVIEWED PME	APPROVED H.I.Y PME	DATE 21 FEB 56	SCALE 2/1	DEPARTMENT OF THE ARMY SIGNAL CORPS ENGINEERING LABORATORIES FORT MONMOUTH, NEW JERSEY SM-D-249093
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 ±.5° BROKEN ANGLES MAY VARY ±.1° ECCENTRICITY BETWEEN ANY DIAMETERS ON THE SAME CENTERLINE SHALL NOT EXCEED .010 TOTAL INDICATOR READING. ALL DIMENSIONS ARE FINISH DIMENSIONS INCLUDING APPLIED FINISH AND ARE GIVEN IN INCHES.			APPLICATION		NEXT ASSY SC-D-248773		USED ON		