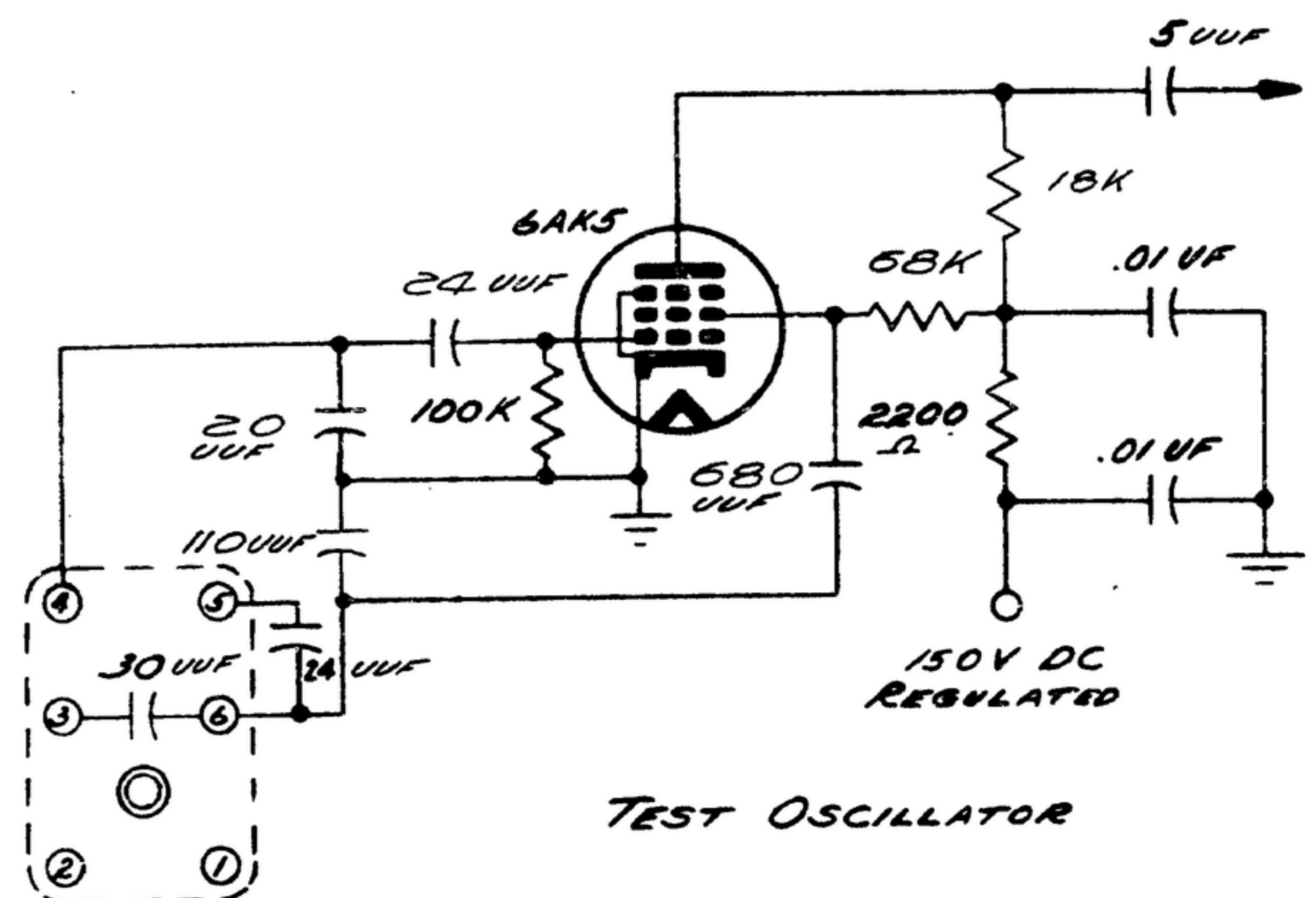


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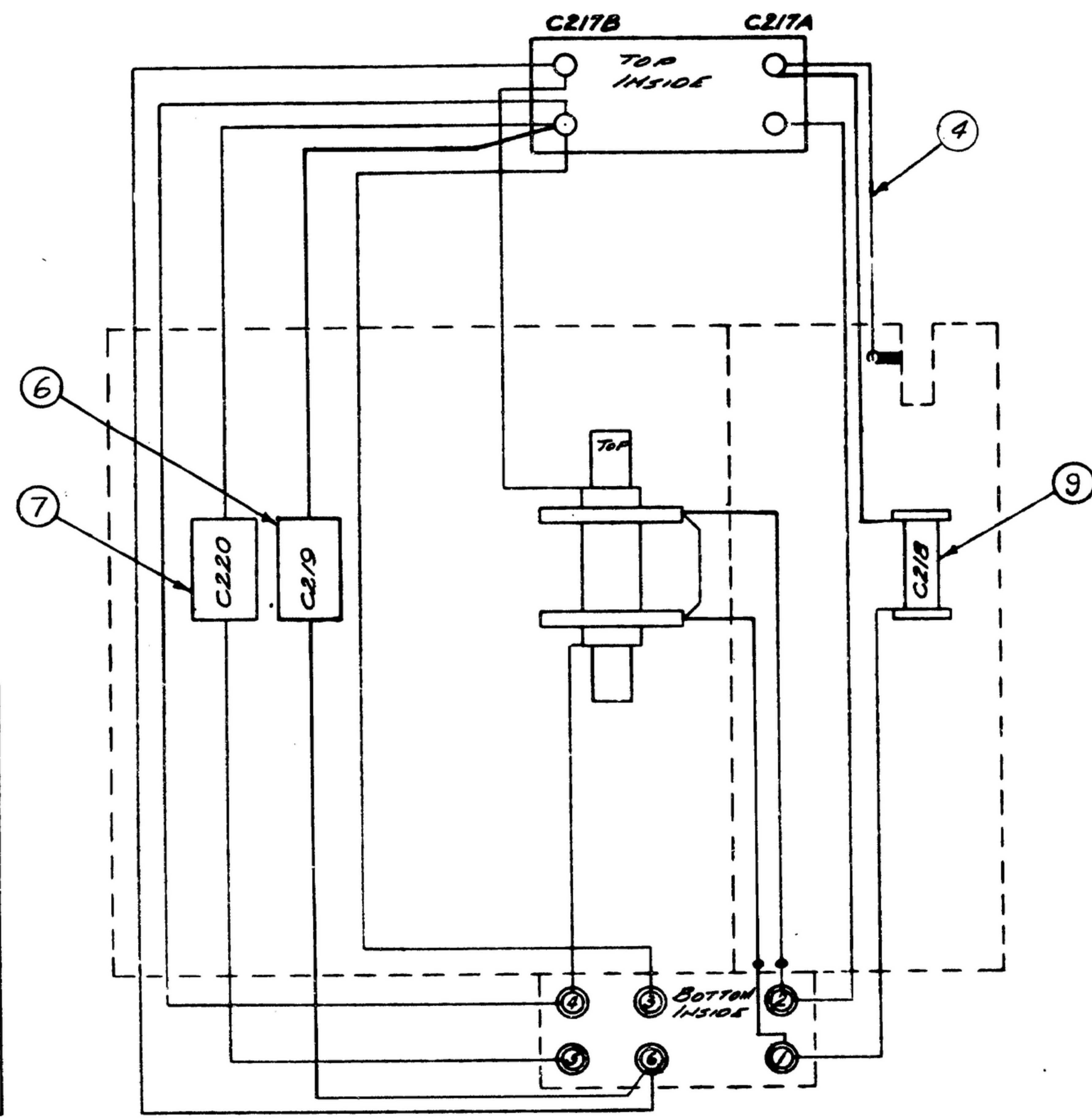
SWE APPROVAL		REVISIONS			
SYM	PR	BY	DESCRIPTION	DATE	APPROVAL
A	CA 84674	B2	A1-ADDED ITEM 11; A2-DELETED ITEM 5 & NOTE 4. A3-CAN-MARKED WAS CAN-ANT. A4-SWE PART NO. REPLACED COLLINS PART NO. COL. A5-MIL-C-20 WAS JAN-C-20 A6-ADDED NEW APPL.	20 MAR 59	4242B-PC-59 REV'D PME
			B1-NOTE 6, 2.5 MFS WAS 4 MFS; B2-ITEM 9 DESCRIPTION WAS CAPACITOR, VARIABLE.	20 APRIL 60	4242B-PC-59 REV'D PME
C	CA 84960	C	(1)-ADDED NOTE 13.	16 MAR 60	4242B-PC-59 REV'D PME
D3			(1) FREQ TOL 130 WAS 65; 100 WAS 50; (2) NOTE 6 2000 CPS WAS 1000 CPS; (3) ±1% WAS ±.1%	26 MAR 1965	21582-PC-51 REV'D PME



TEST OSCILLATOR

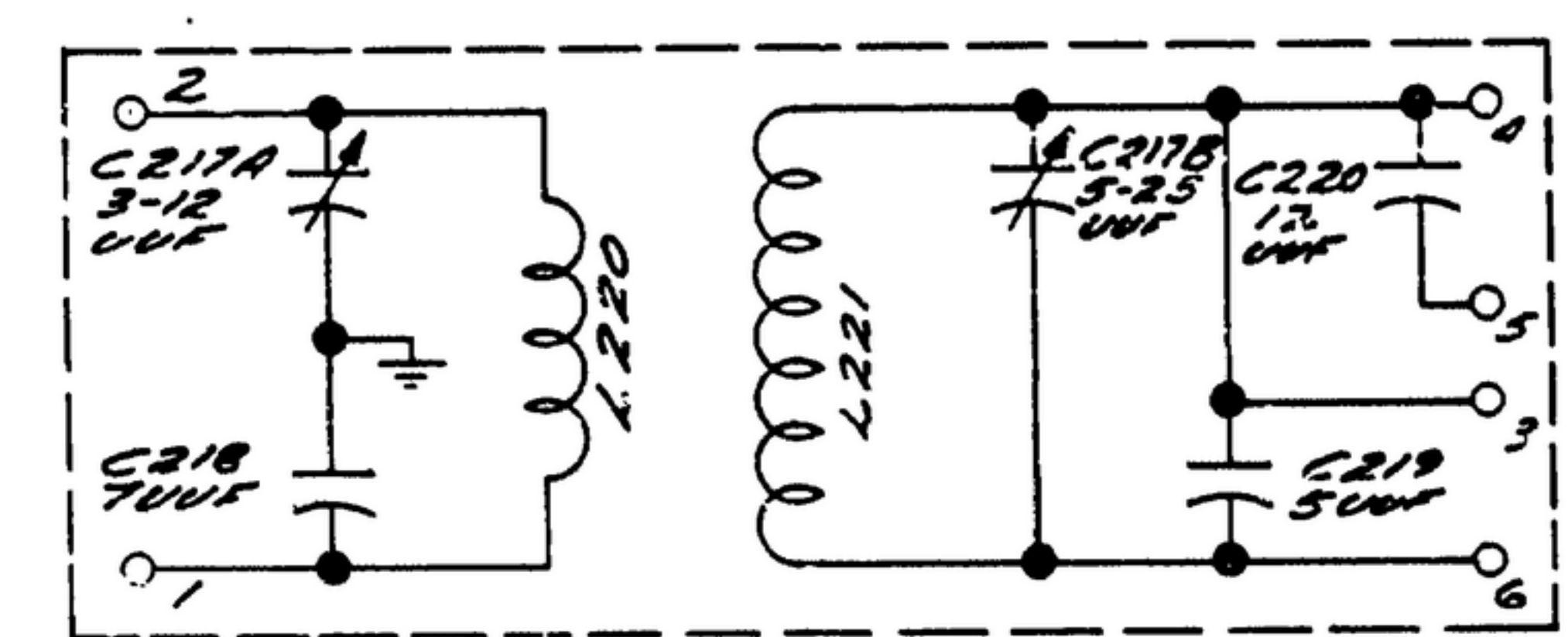
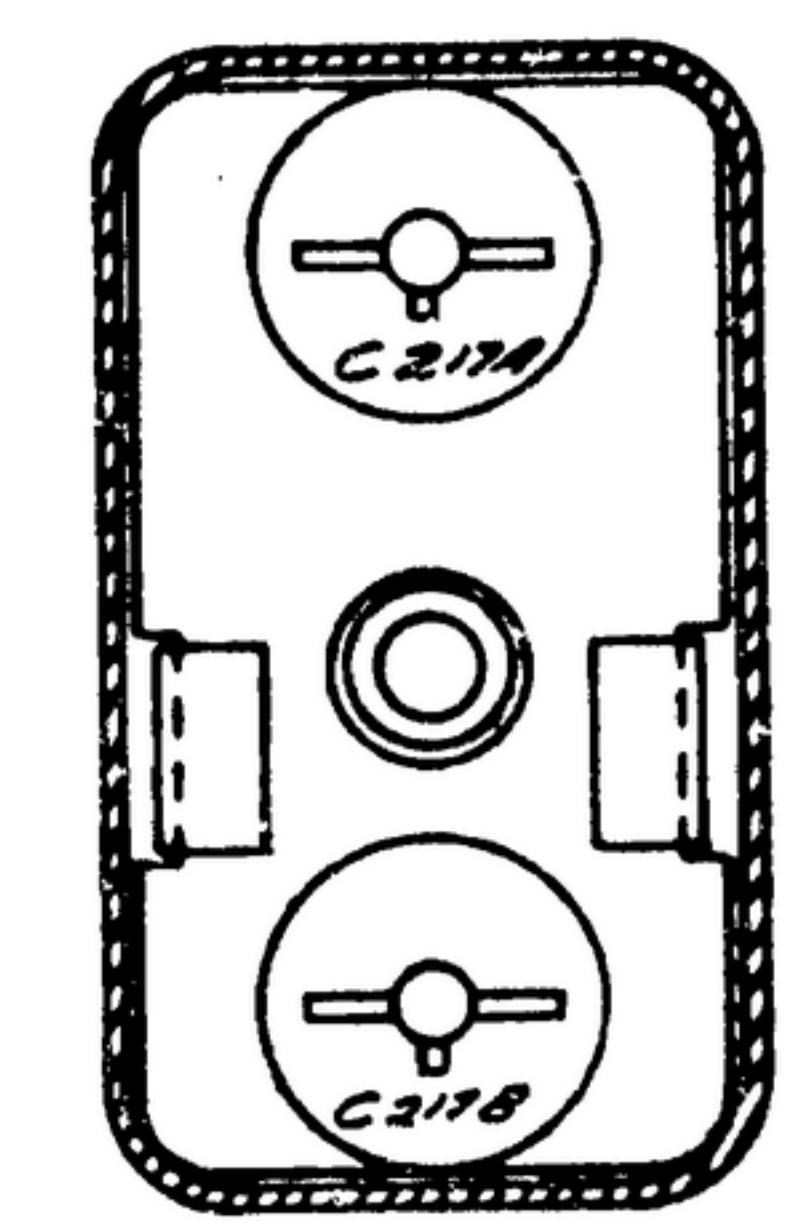
CORE POSITION INCHES ±.0002	TEST OSC FREQ MC	FREQ TOL KC	EFFECTIVE PARALLEL RESISTANCE (OHMS) ±2%
-0.0300	15.3	130	
0.0000	15.0	100	16000
±0.0300	15.2		
0.1600	14.4	100	
0.2400	13.5	100	
0.3200	12.5	100	
0.4000	12.0	100	16000
0.4800	11.2	100	
0.5600	10.4	100	
0.6400	9.5	100	
±0.7200	8.8		
0.8000	8.0	100	16000
0.8300	7.7	130	

± ALIGNMENT POINTS SEE NOTE 6

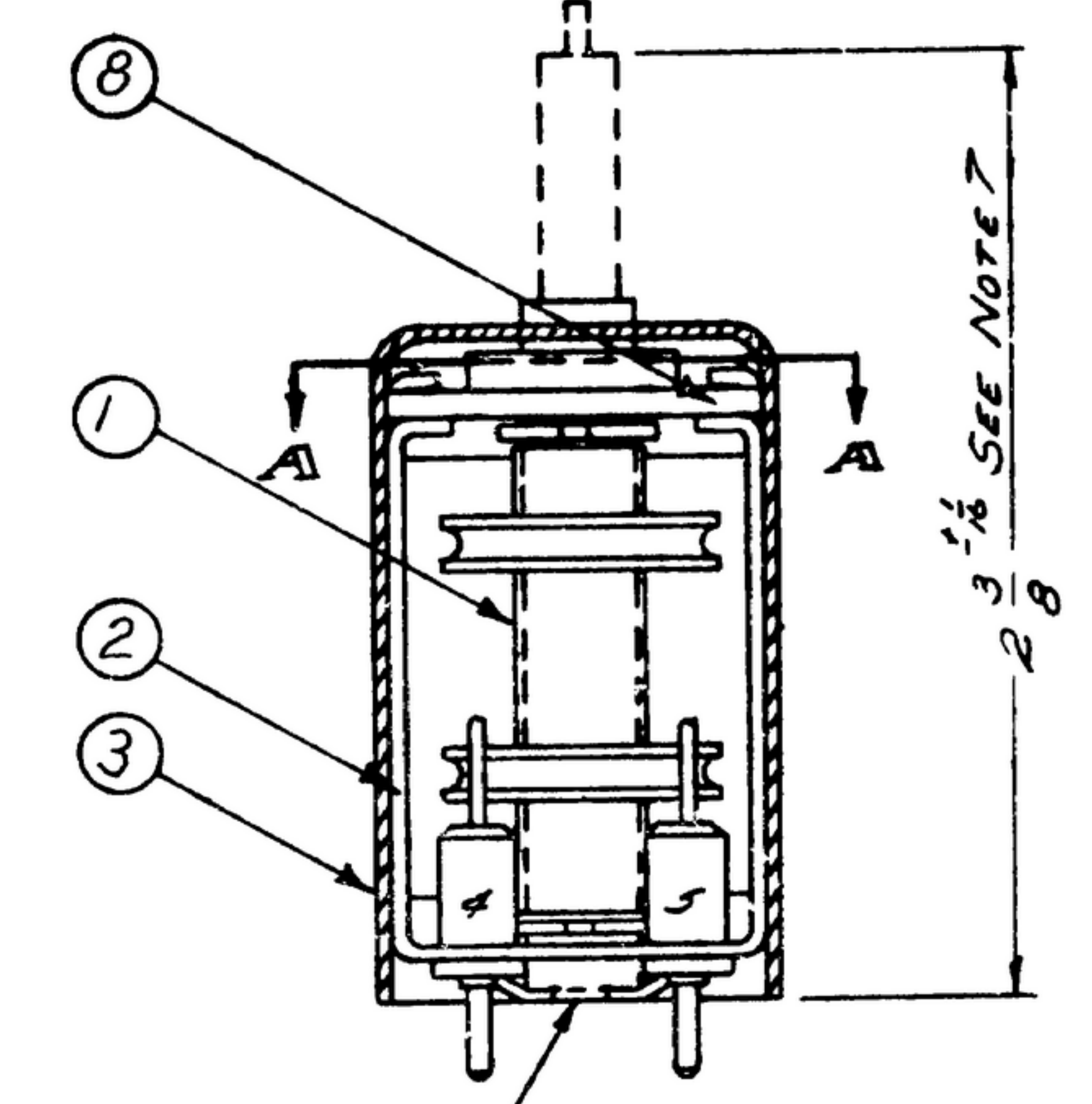


WIRING DIAGRAM

SECTION A-A



SCHEMATIC DIAGRAM FOR COIL ASSEMBLY



SEE NOTE 2

- NOTES:
- SOFT SOLDER PER SPEC MIL-S-6872 USING ROBIN CORE SOLDER (11) COMP. SNGO.
 - COIL FORM OF COIL ASSEMBLY (1) TO BE CONCENTRIC WITH 140 DIA HOLE IN FRAME (2) WITHIN .020 TIR.
 - Mounting Position Of Capacitors Optional, Providing No Capacitor Comes Within 1/16 Of Coil Winding.
 - Type 5 No. 22 Drawn & Annealed, Tin Coated.
 - Alignment: With Coil Assy In Test Jig, And Standard Powdered Iron Tuning Core Positioned In The Coil, Adjust Section "B" Of Variable Capacitor (B), Until Test Oscillator Frequency Is Within 2000 CPS Of The Value Shown In Table At The Two Alignment Points. The Final Setting Of The Variable Capacitor (B), Shall Leave A Reserve Adjustment Of 2.5 MUF.
 - 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 6.
 - TRACKING: 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 NO MORE THAN 90 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 ASSEMBLY SHALL BE BONDED TO THE BASE PLATE AND TO THE VARIABLE CAPACITOR BOARD (B) TOP WITH BONDING AGENT (10) *A-315 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 7 SHOULD BE SM-C-249245, AND MUST BE WITHIN ±1% OF NOMINAL PERMEABILITY.

QTY	DESCRIPTION	UNIT	REMARKS
11	SOLDER - SOFT	QO-S-571	
10	BONDING AGENT		
9	CC20CH070C CAPACITOR - FIXED	MIL-C-20	
8	SM-C-283225-1 CAPACITOR - VARIABLE		
7	SM-C-283226-2 CAPACITOR - FIXED		
6	SM-C-283226-1 CAPACITOR - FIXED		
5	SM-B-249245 TUNING CORE		
4	SM-B-249070 WIRE	MIL-W-3861	
3	SM-B-249161 CAN-MARKED		
2	SM-B-249070 FRAME ASSY		
1	SM-B-283285 COIL ASSY		

DRAWN Hammer	CHECKED K	APPROVED	DESIGN-RANGE-PO- "COIL-ASSEMBLY"	14214-PH-51-93	SIGNAL CORPS	DEPARTMENT OF THE ARMY SIGNAL CORPS ENGINEERING LABORATORIES
REVIEWED PME	APPROVED HLY	DATE 21 FEB 56	SCALE 2/1	COIL ASSY ANT.		FORT MONMOUTH N.J. NEW JERSEY
SM-D-249245	SM-D-249245	SM-D-249245	SM-D-249245	SM-D-249090		