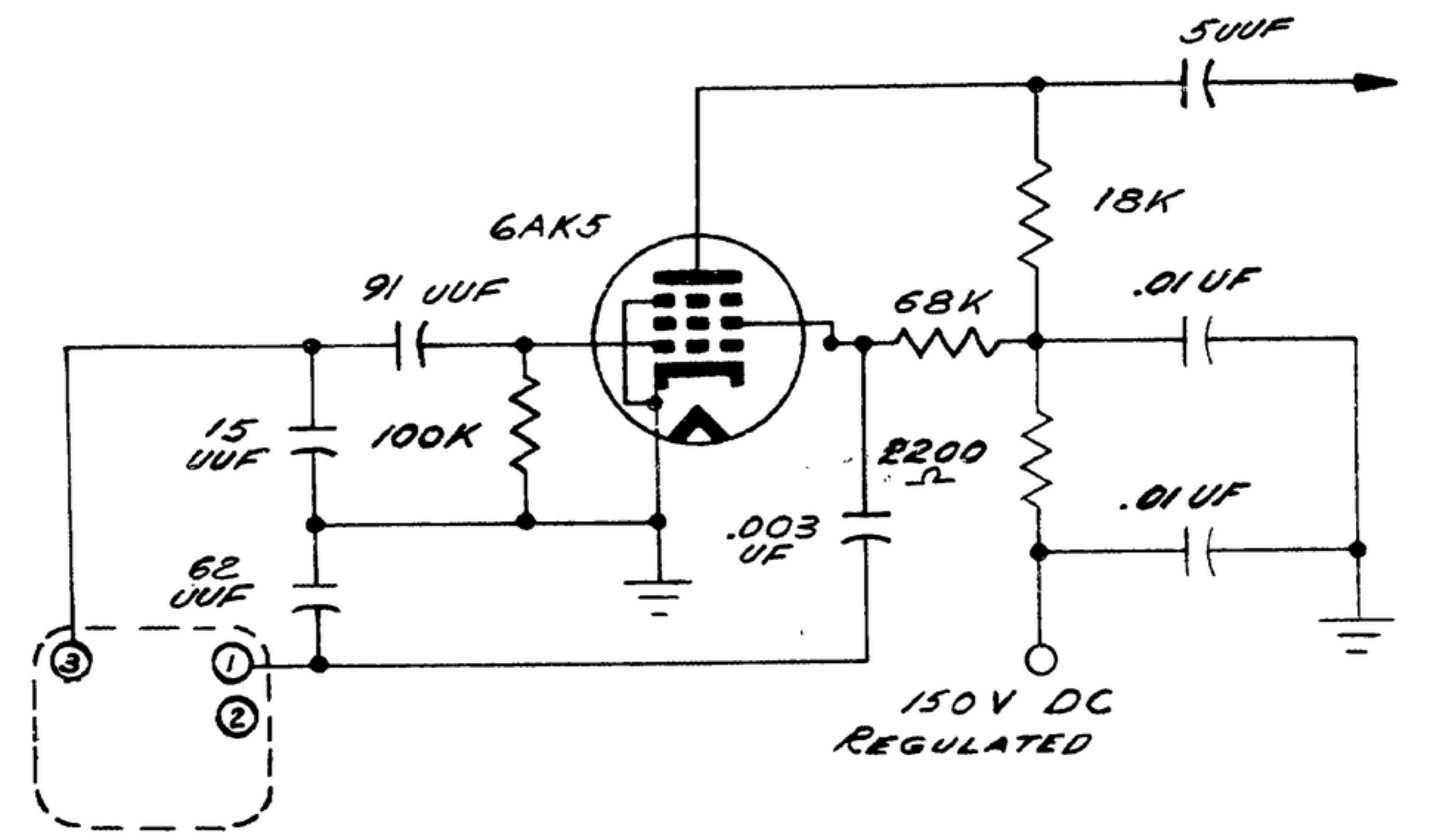


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* FOR INFORMATION ONLY. CONTRACTOR MAY AT HIS OPTION DEVIATE FROM THESE PROCESS DETAILS.

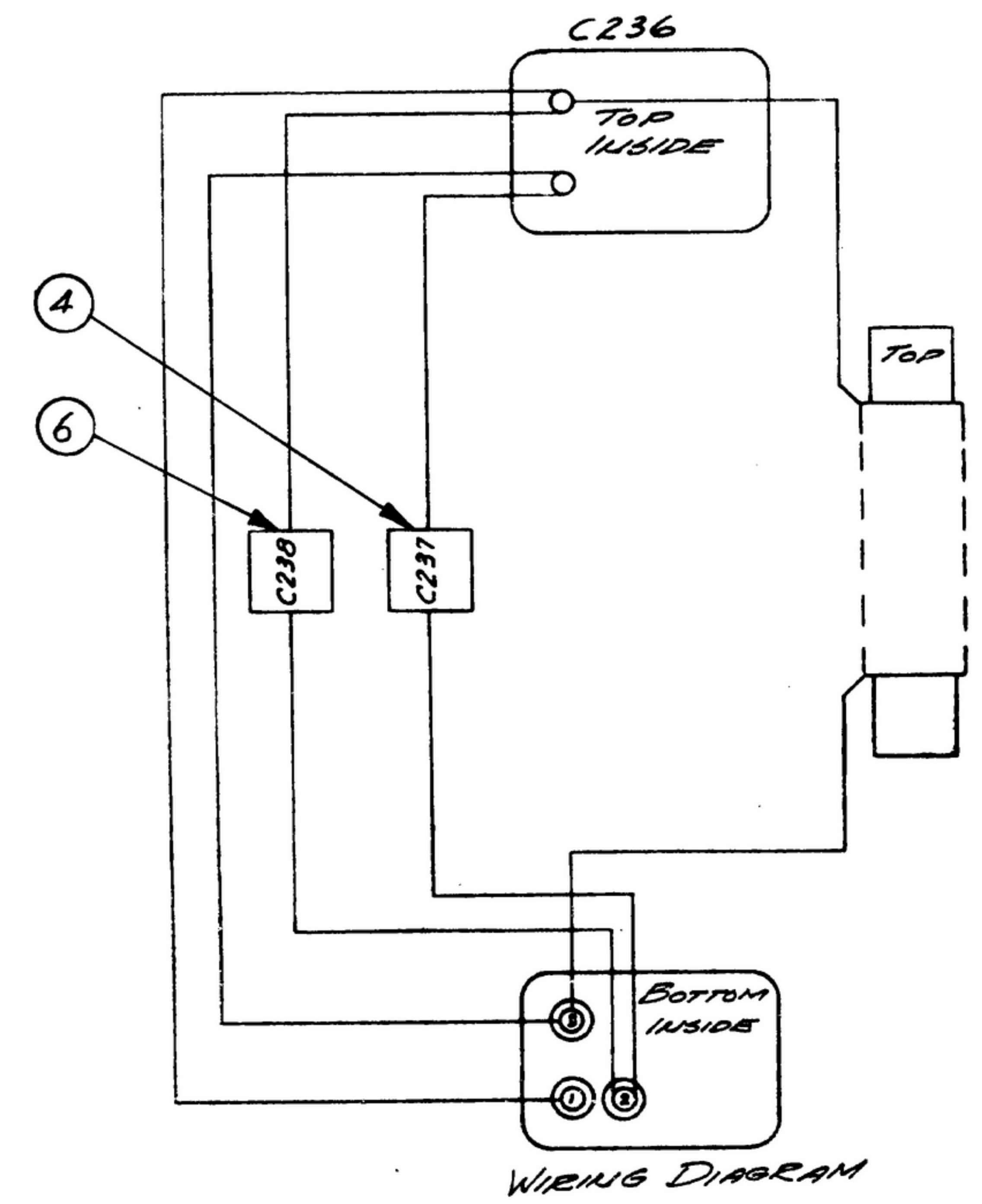
SWE APPROVAL		REVISIONS			
SYM	PR/DATE	BY	DESCRIPTION	DATE	APPROVAL
A	PR/042/13	A₂	A. ADDED ITEM 8 B. ADDED NEW APPL C. ADDED DESCRIPTION WAS "CAN"	NO NOV 60	PMF PME
B	CA84960	B ₁	B ₁ - ADDED NOTE 11.	16 NOV 60	PMF PME
		C ₁	(1) ±1% WAS ±.1%		



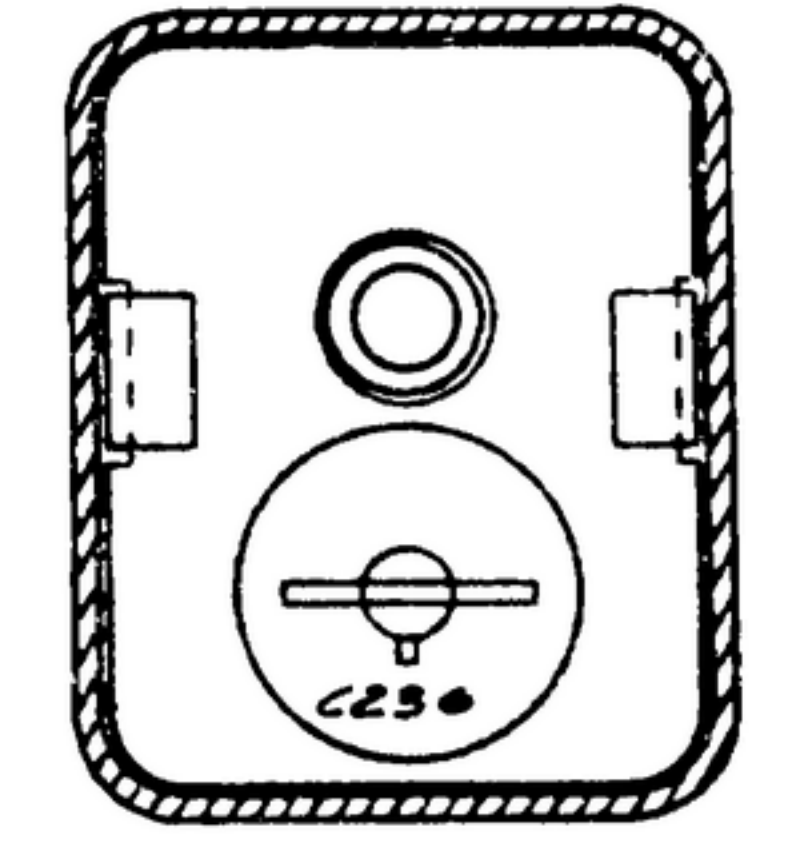
TEST OSCILLATOR

CORE POSITION INCHES ±.0002	TEST OSC FREQ MC	FREQ TOL KC	EFFECTIVE PARALLEL RESISTANCE (OHMS) ±25%
-0.0300	4.075	16	
0.0000	4.00	11	19000
± 0.0800	3.80	#	
0.1600	3.60	11	
0.2400	3.40	11	
0.3200	3.20	11	
0.4000	3.00	11	29000
0.4800	2.80	11	
0.5600	2.60	11	
0.6400	2.40	11	
± 0.7200	2.20	#	
0.8000	2.00	11	40000
0.8300	1.925	16	

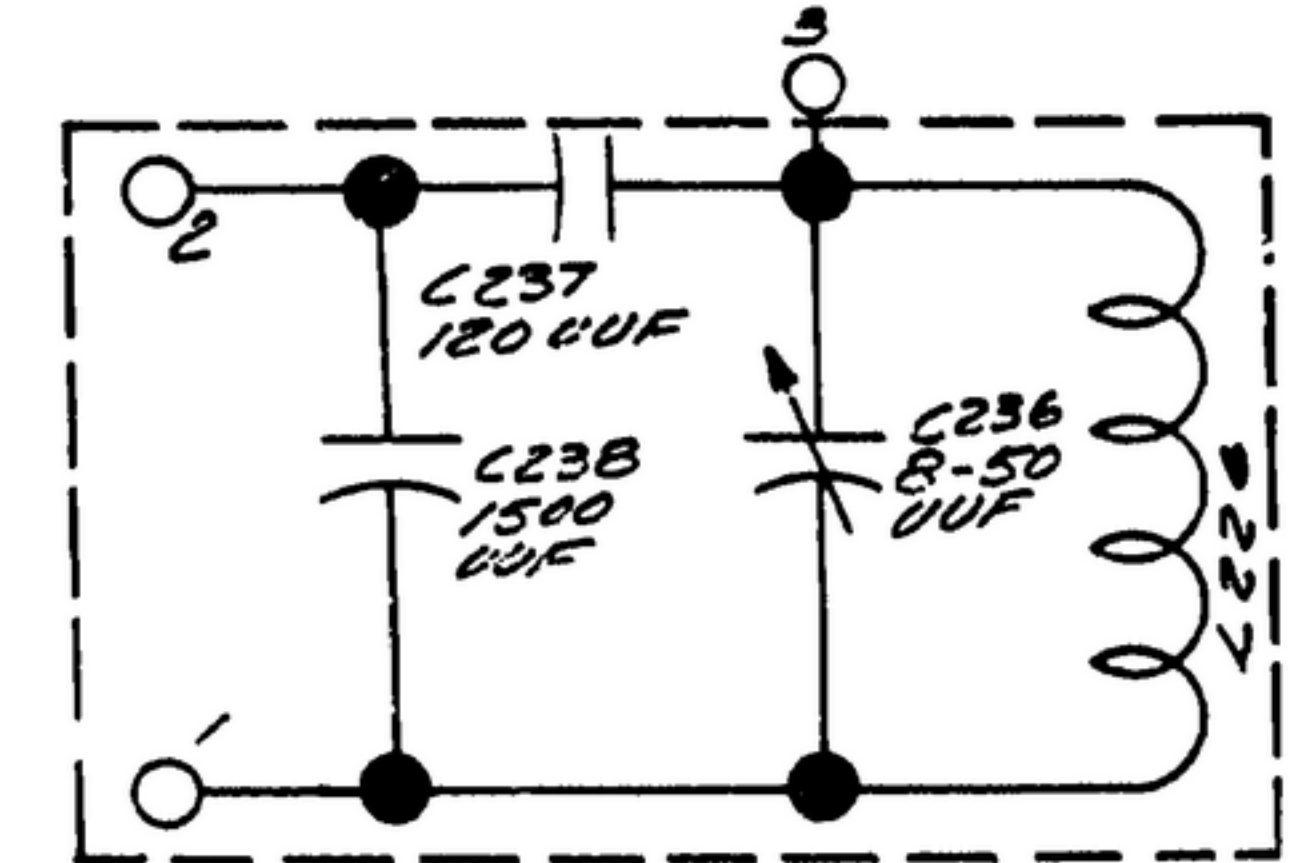
ALIGNMENT POINTS SEE NOTE 4



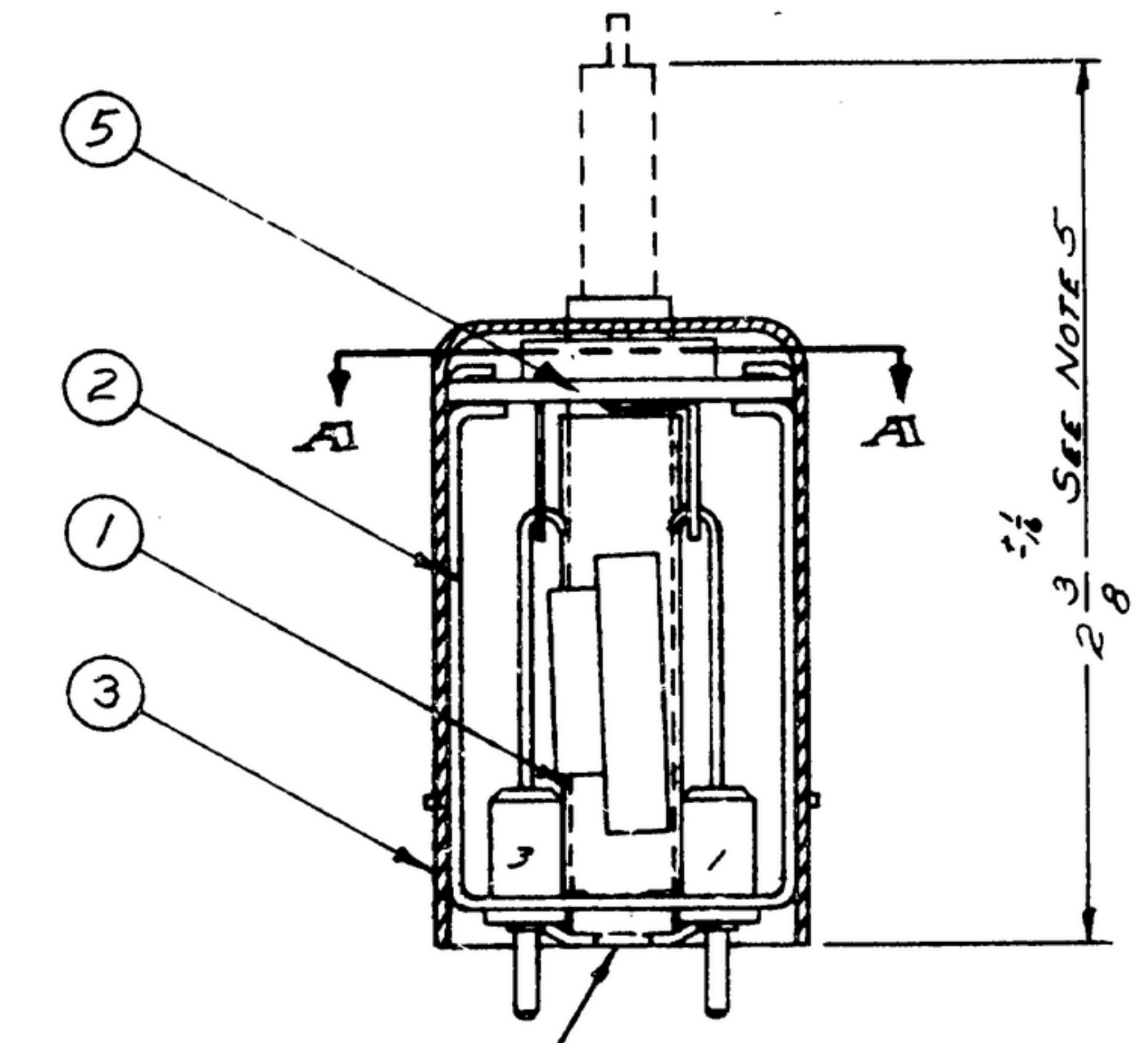
WIRING DIAGRAM



SECTION A-A



SCHEMATIC DIAGRAM OF COIL ASSY



SEE NOTE 2

- NOTES:
1. SOFT SOLDER PER SPEC MIL-S-687E USING ROSIN CORE SOLDER (8) COMP. SN60.
 2. COIL FORM OF COIL ASSY (1) TO BE CONCENTRIC WITH .140 DIA HOLE IN FRAME (2) WITHIN .020 T.I.R.
 3. MOUNTING POSITION OF CAPACITOR OPTIONAL, PROVIDING NO CAPACITOR COMES WITHIN 1/16 OF COIL WINDING.
 4. ALIGNMENT: WITH COIL ASSY IN TEST JIG, AND STANDARD POWDERED IRON TUNING CORE POSITIONED IN THE COIL, ADJUST VARIABLE CAPACITOR (5), UNTIL TEST OSCILLATOR FREQUENCY IS WITHIN 500 CPS OF THE VALUE SHOWN IN TABLE AT TWO ALIGNMENT POINTS. THE FINAL SETTINGS OF THE VARIABLE CAPACITOR (5) SHALL LEAVE A RESERVE ADJUSTMENT OF 4.44 uF.
 5. 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.
 6. TUNING: TEST OSCILLATOR FREQUENCY SHALL BE WITHIN THE TOLERANCE OF TABLE AT SPECIFIED CORE INSERTIONS AT 25°C.
 7. STABILITY: THE RESONANT FREQUENCY OF THE TUNING COIL SHALL VARY NO MORE THAN 40 PPM/°C FROM THE 25°C VALUE OVER THE SPECIFIED TEMPERATURE RANGE.
 8. TEMPERATURE RANGE -40°C TO +85°C OPERATING, -62°C TO +85°C STORAGE.
 9. THE COIL ASSY SHALL BE BONDED TO THE BASE PLATE AND TO THE VARIABLE CAPACITOR BOARD (5) WITH BONDING AGENT (7) *R-313 AS SUPPLIED BY CARL H. BIGGS CO., LOS ANGELES, CAL., OR EQUAL.
 10. 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.
 11. TUNING CORE REFERRED TO IN NOTE 5 SHOULD BE SM-C-249245 AND MUST BE WITHIN ±1% OF NOMINAL PERMEABILITY.

QTY	AS REQD	PART NO.	DESCRIPTION	MATL	MATL SPEC	NOTES
8	1	GR-S-571	SOLDER, SOFT BONDING AGENT			1
7	1		BONDING AGENT			2
6	1	SM-B-28223-3	CAPACITOR-FIXED			3
5	1	SM-C28220-3	CAPACITOR-VARIABLE			4
4	1	SM-C28226-18	CAPACITOR-FIXED			5
3	1	SM-B-282165	CAN-MARKED			6
2	1	SM-B-282022	FRAME ASSY-COIL			7
1	1	SM-B-282223	COIL ASSY			8

DRAWN HAMER	CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	COLLING BARRIS CO. 1424-PH-51-93 SIGNAL CORPS	DEPARTMENT OF THE ARMY SIGNAL CORPS ENGINEERING LABORATORIES FORT MONMOUTH NEW JERSEY
LIST OF MATERIAL COIL ASSY-R.F.			SM-D-249094	
APPLICATION NEXT ARMY USED ON		DATE 22 FEB 56 SCALE 2/1		