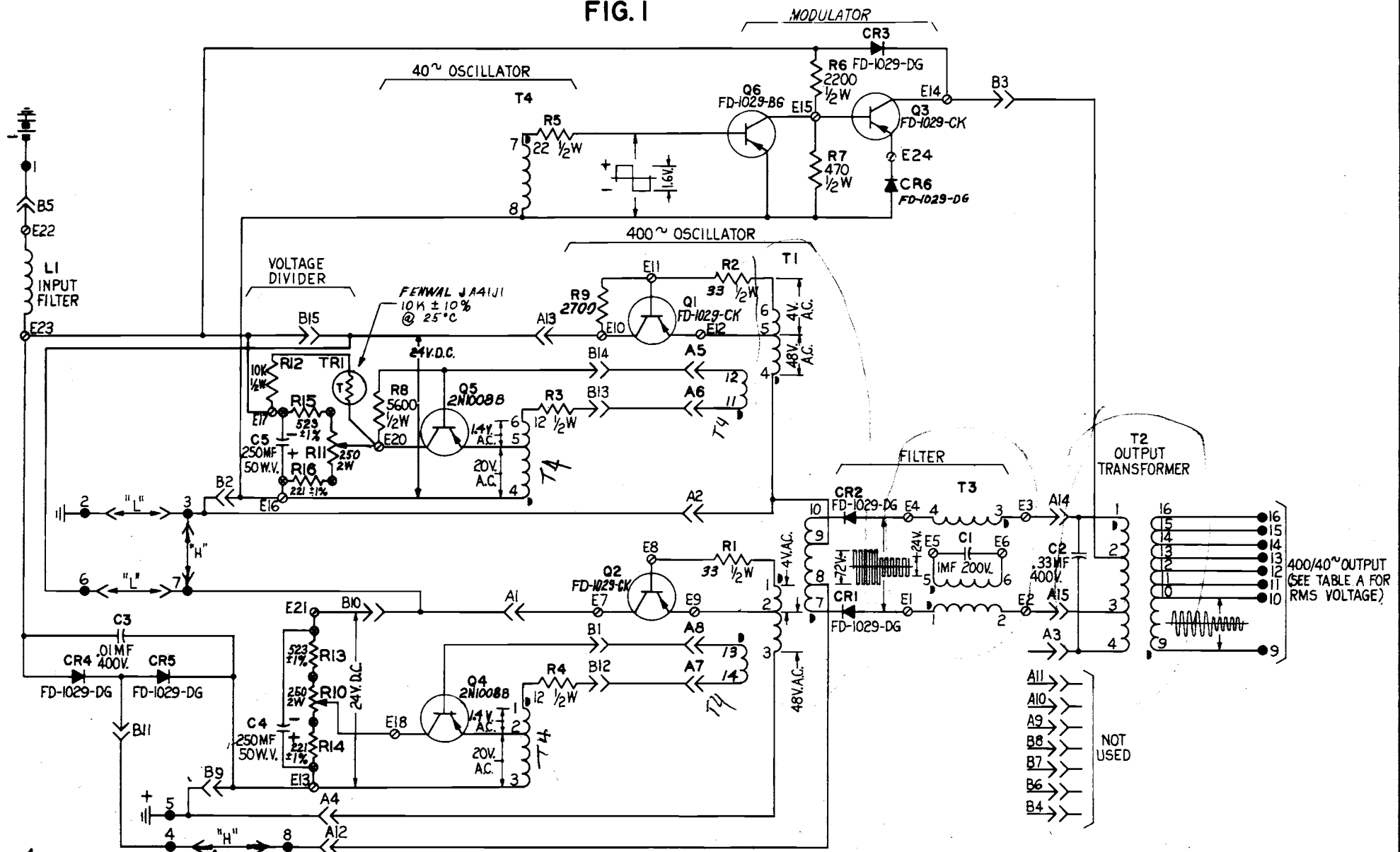
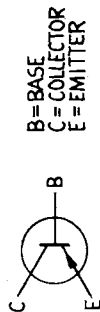


FIG. 1



1700515H



TRANSISTORS Q1-Q6

● TERMINALS ON MAIN TERMINAL BOARD.

➤ PRINTED BOARD PLUG & RECEPT. TERMINALS
(A = BOARD A TERMINALS)
(B = BOARD B TERMINALS)

○ SOLDER TERMINALS ON BOARDS A & B
○ SOLDER TERMINALS ON TOP PLATE.
▶ DENOTES START OF WINDING

MANUFACTURING NOTES:

1- INTERNAL CIRCUIT AC VOLTAGES ARE SQUARE WAVE WITH PEAK TO PEAK VALUES SHOWN.
USE ONLY VACUUM TUBE VOLTMETER OR OSCILLOSCOPE FOR MEASUREMENT.

2- USE "H" WIRING FOR 48 VOLT INPUT.
USE "L" WIRING FOR 24 VOLT INPUT.

3- ADJUST POTENTIOMETERS R10 & R11 FOR WAVE SHAPE SHOWN AT E1-E4.

4- AC VOLTAGES SHOWN FOR THE 40 CYCLE OSCILLATOR ARE NOMINAL AND MAY VARY AS MUCH AS ±50% DEPENDING ON THE SETTING OF POTENTIOMETERS R10 AND R11.

5- POTENTIOMETERS R10 & R11 ARE FACTORY SET & SHOULD BE READJUSTED ONLY WITH AN OSCILLOSCOPE.

6- PRIOR TO ISSUE 4, R10 & R11 WERE 1000 OHMS. R13, R14, R15 & R16 WERE NOT SHOWN. Q6 WAS 2N1004B.



TABLE A

TERMINALS	OUTPUT VOLTAGE VOLTS (RMS)
9-10	1/2
9-11	1
9-12	2
9-13	4
9-14	10
9-15	16
9-16	32

DESIGNED AUTO. ELEC. LABS., INC. J.A. HAEFNER APP'D. M.E. GRIFFINS 12-12-61		DR. J.J. 11-2-61 CK. A.N. INDEX 1-2-62 DATE: 10-31-61	400/40 CYCLE TYPE TG-1 TONE GENERATOR CIRCUIT (RING-BACK TONE)	SIZE H-8500061 SHEET / OF / C1
190058-H		H-8500061		
SHEET / OF /		CHANGES		
ISSUE NO. 1		APP'D.		
2-H-8500061 (EMG). ADDED NOTE 4, DIODE CR6. RES. R12 & THERMISTOR TR1. RES. R14 & R15 WERE 12-4. RES. R9 WAS 3900-4. TRANSF. T4 WDS. BETWEEN TERMS. 162 AND 546 VALUE READ 14V. TRANSISTORS Q1, Q2 & Q3 WERE 2N261, Q4 & Q5 WERE 2N524 & Q6 WAS 2N1004 REVERSED CONN. ON RECEPT. TERMS. A5 & A6 AND A7 & A8 C.H. 9-25-62		J.A.H. L.L.S. 9-20-62		
ISSUE: 2		3-H-8500061 (EMG). ADDED TERM. E24. W.P.S. 8-7-63 A.F.		
ISSUE: 3		4-H-8500061 (EMG). T1 & R2 & R3 WERE 2N457A. ADDED NOTES 5 & 6. G.F. 11-19-64		
ISSUE: 4		L.L.S. J.A.N. 11-13-64		

AUTOMATIC ELECTRIC COMPANY
NORTHLAKE, ILL., U.S.A.