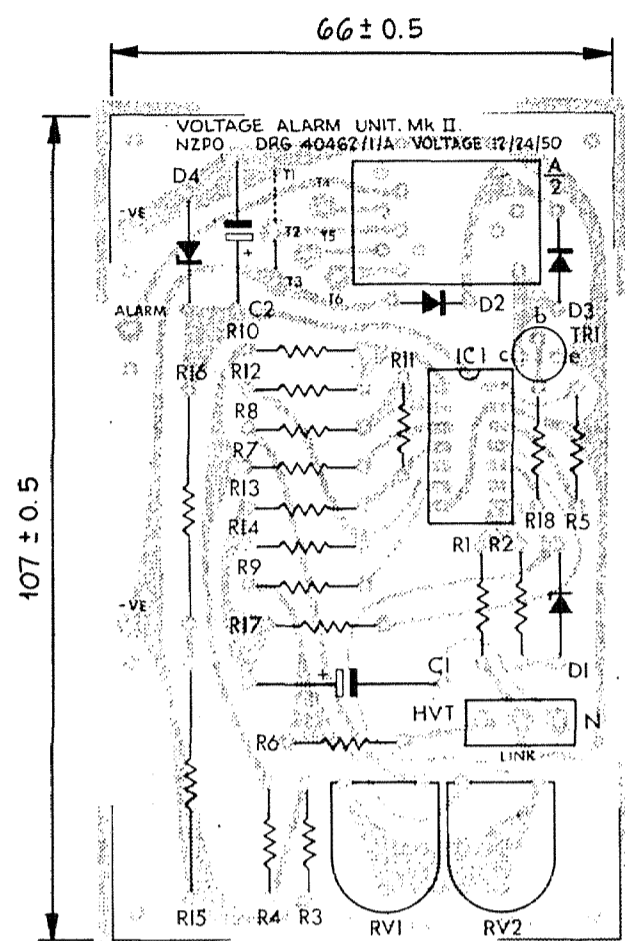
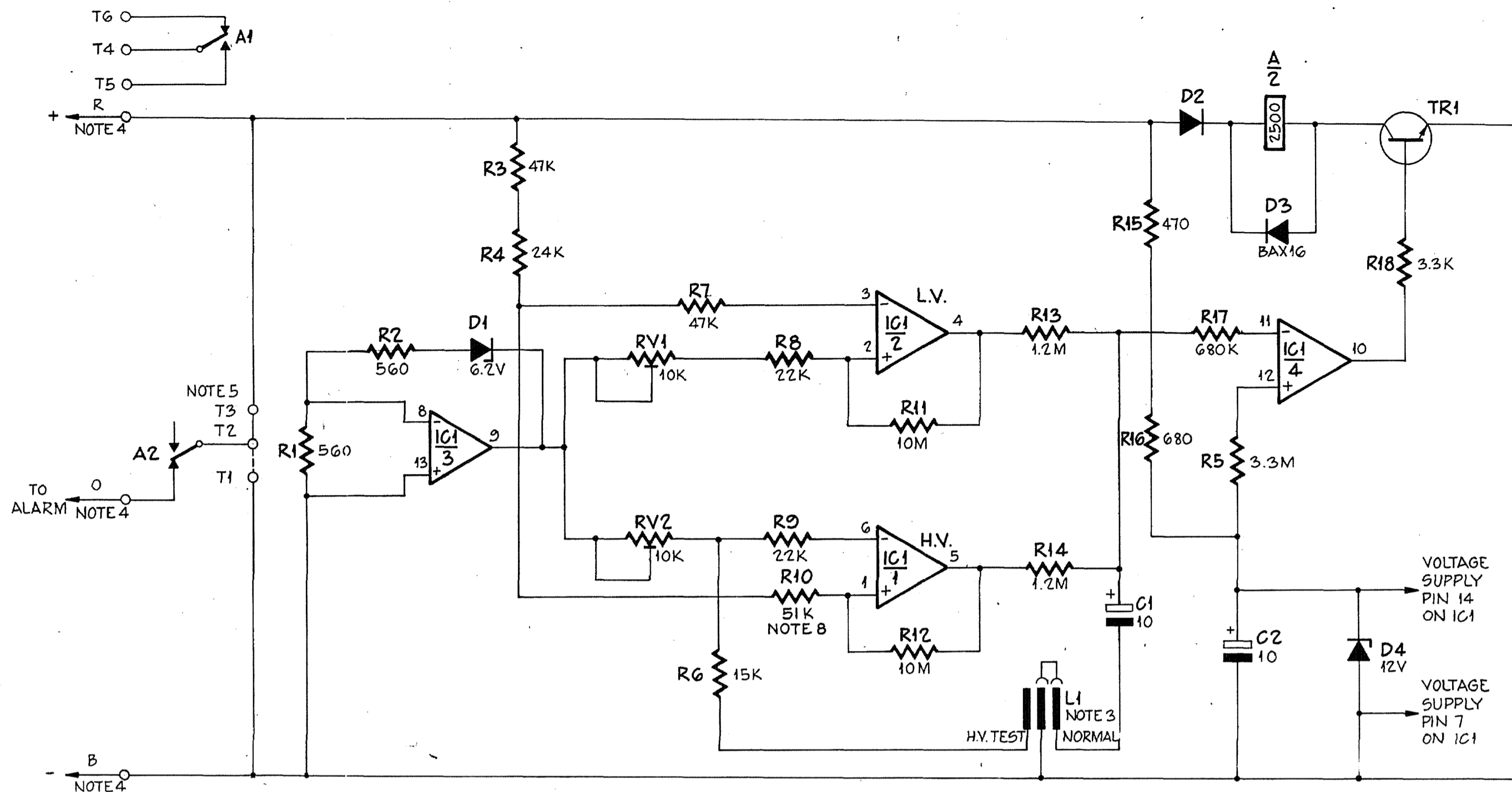


COPPER SIDE



COMPONENT SIDE



CIRCUIT DIAGRAM
NOTE 1

DRILLING INFORMATION

- A : 1.3mm DIA
- B : 4.0mm DIA
- C : 0.8mm DIA
- D : 3.0mm DIA
- ALL OTHER HOLES 1mm DIA

P.C. BOARD NOTES

1. P.C. BOARD TO BE 1.6mm THICK G10 FIBREGLASS. 70 MICRON COPPER, SINGLE SIDED.
2. P.C. BOARD NEGATIVE IS AVAILABLE FROM E-M SECTION, ENGINEER-IN-CHIEF, WELLINGTON.

TABLE 1: STANDARD MODIFICATIONS

TYPE	TELECOMMUNICATIONS	E.A. SET
50 VOLT	AS PER CIRCUIT DIAGRAM	NO APPLICATION
24 VOLT	SHORT OUT R3 AND R16	SHORT OUT R3 AND R16. REPLACE C1 WITH 47µF, 6.3V TANTALUM BEAD CAPACITOR REMOVE T2-T3 STRAP FOR ELECTRONIC AUTOSTART PANELS ONLY STRAP T1 TO T2
12 VOLT	SHORT OUT R3, R4, R15 AND R16. REMOVE D4. REPLACE RELAY A WITH 1000Ω RELAY.	NO APPLICATION

COMPONENTS LIST

DESIGNATION	DESCRIPTION	VALUE	RATING	TOLERANCE (%)	PART NO
R1, R2	RESISTOR	560	0.25W	5	
R3, R7	RESISTOR	47K	0.25W	2	
R4	RESISTOR	24K	0.25W	2	
R5	RESISTOR	3.3M	0.25W	10	
R6	RESISTOR	15K	0.25W	5	
R8, R9	RESISTOR	22K	0.25W	5	
R10	RESISTOR	56K	0.25W	2	
R11, R12	RESISTOR	10M	0.25W	10	
R13, R14	RESISTOR	1.2M	0.25W	10	
R15	RESISTOR	470	5W	10	
R16	RESISTOR	680	5W	10	
R17	RESISTOR	680K	0.25W	5	
R18	RESISTOR	3.3K	0.25W	5	
RV1, RV2	PRE-SET POT CERAMIC BASE	10K			
C1, C2	CAPACITOR ELECTROLYTIC	10µF	25V		
D1	DIODE, ZENER	400mW	6.2V		
D2, D3	DIODE				BAX 16 (OR EQUIV)
D4	DIODE, ZENER	1W	12V		
IC1	AMPLIFIER				LM3900 (OR EQUIV) 2N3568
TR1	TRANSISTOR				301/2C/48A(TMC) (OR EQUIV)
A	RELAY 2C/0	2500Ω			MOLEX TYPE M3003-3
L1	LINK PINS				MOLEX TYPE M30011-2 (NOTE 3)
	REMOVABLE LINK				

NOTES

1. UNIT IS SUPPLIED CONNECTED FOR TELECOMMUNICATIONS 50V POSITIVE EARTH WORKING. FOR CONVERSION TO 24V OR 12V OPERATION INCLUDING NEGATIVE EARTH E.A. SET APPLICATIONS SEE TABLE 1.
2. FOR INSTALLATION ADJUSTMENT AND EXPLANATORY DETAILS REFER TO NOTES PR 2094.
3. REMOVABLE LINK TO BE PROVIDED WITH TWO CRIMP TERMINALS SHORTED BY APPROX 40mm OF 0.5mm² FLEXIBLE INSULATED COPPER WIRE.
4. ONE METRE OF CORRECTLY COLOURED FLEXIBLE WIRE TO BE CONNECTED TO EARTH, ALARM AND NEGATIVE TERMINALS AND LOOPED THROUGH ADJACENT HOLES. (SIZE B.)
5. TERMINALS T2 AND T3 TO BE STRAPPED BY MANUFACTURER.
6. PHYSICAL SIZE OF COMPONENTS MUST BE COMPATIBLE WITH P.C. LAYOUT.
7. FOR MKI V.M.U. REFER TO DRG 39333.
8. TO INCREASE THE H.V. SETTING OF THE VAU, CHANGE R10 TO 56K 2%

VOLTAGE ALARM UNIT MK. II
12V, 24V OR 50V

CKD	APD	ORDER	DATE	ISS	CHANGE	N Z P O
WBO	GBC	155464	21.4.77	B	DRILLING 'D' ADDED, B AMENDED.	ENGINEER-IN-CHIEF, WELLINGTON
						COY NO
						1 OF 1
						DRAWN: E-M TRACED: R.T.
						A2 40462