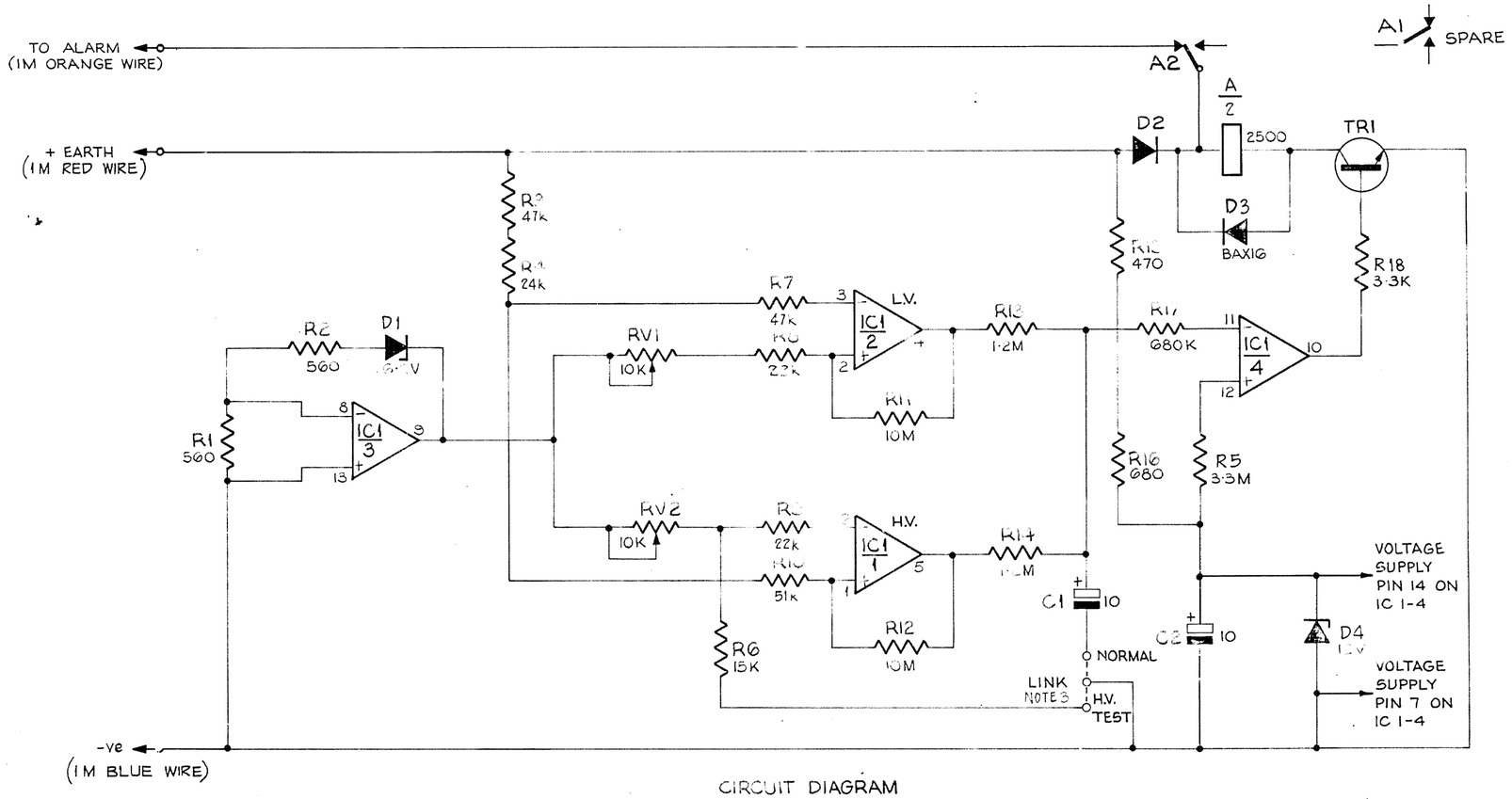
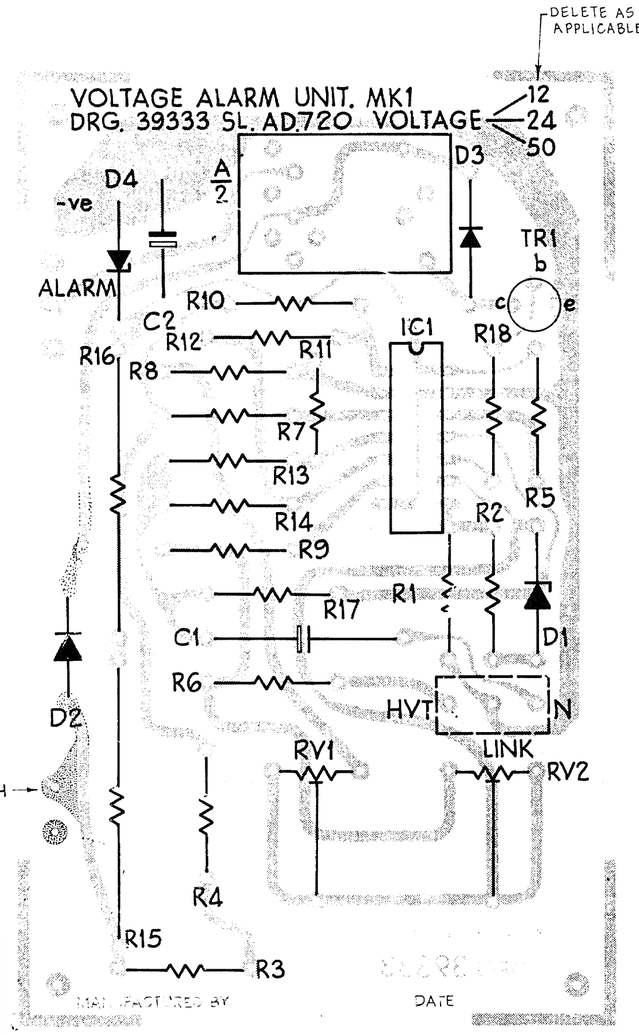
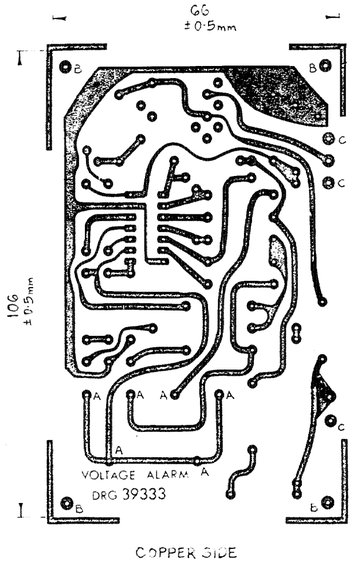


CIRCUIT DIAGRAM



COMPONENT LAYOUT
COMPONENT SIDE (NOT TO SCALE)



COPPER SIDE

DRILLINGS

A. 1·1mm DIA.
B. 4BA CLEAR.
C. 4mm DIA.
IC HOLES TO BE 0·8m DIA.
ALL OTHER HOLES 1·00mm DIA.

P.C BOARD DETAILS

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.

MATERIAL SCHEDULE

SYMBOL	FUNCTION	SPECIFICATION	SYMBOL	FUNCTION	SPECIFICATION
C1-C2	CAPACITOR	10μF 25V ELECTROLYTIC	R10	RESISTOR	51k ¼W. 2%
IC1	AMPLIFIER	LM 3900 (NATIONAL)	R11-R12	RESISTOR	10M ¼W. 10%
D1	ZENER DIODE	400mW 6·2V	R13-R14	RESISTOR	1·2M ¼W. 10%
D2-D3	DIODE	BAX 16 (PHILIPS)	R15	RESISTOR	470 5W. 10%
D4	ZENER DIODE	1W 12V	R16	RESISTOR	680 5W. 10%
TR1	TRANSISTOR	2N 3568	R17	RESISTOR	680k ¼W. 5%
R1-R2	RESISTOR	560 ¼W. 5%	R18	RESISTOR	3·3k ¼W. 5%
R3-R7	RESISTOR	47k ¼W. 2%	RV1-RV2	VARIABLE RESISTOR	10k 9T8A CERAMIC
R4	RESISTOR	24k ¼W. 2%	A/2	RELAY 2C/O	240 AAD 2500Ω * (I.T.T.)
R5	RESISTOR	3·3M ¼W 10%	LINK	LINK	MOLEX TYPE [illegible]
R6	RESISTOR	15k ¼W 5%			
R8-R9	RESISTOR	22k ¼W 5%			

* SEE NOTE 1

NO NEW UNITS TO BE MANUFACTURED TO THIS DRG
REFER NOTE 6 & DRG 40462

NOTES

1. CIRCUIT SHOWS ARRANGEMENT FOR 50 VOLT WORKING. FOR 24VOLT WORKING SHORT OUT R3 AND R16. FOR 12 VOLT WORKING SHORT OUT R3, R4 AND R15, R16 REMOVE D4 AND REPLACE RELAY WITH ONE HAVING A COIL RESISTANCE OF 1000 OHMS.
2. FOR ADJUSTMENT AND EXPLANATORY DETAILS REFER TO NOTES PR 2094.
3. A REMOVABLE MOLEX PLUG-IN SHORTING LINK IS TO BE PROVIDED WITH EACH UNIT.
4. NOTES PR 2094 GIVE OPERATION AND INSTALLATION DETAILS.
5. ONE METRE OF CORRECTLY COLOURED FLEXIBLE WIRES TO BE CONNECTED TO EARTH, ALARM & NEGATIVE TERMINALS & LOOPED THROUGH ADJACENT HOLES (SIZE C)
6. MK I IS DESIGNED FOR +VE EARTH SYSTEMS AND USES A COMMON EARTH FOR THE ALARM SIGNAL. IT IS NOT SUITABLE FOR -VE EARTH SYSTEMS WHERE TWO ALARM SIGNALS ARE REQUIRED OR WHERE ISOLATED ALARMS ARE REQUIRED, IN SUCH CASES USE V.A.U MK II DRG 40462

VOLTAGE ALARM UNIT. MK 1
12 V / 24 V OR 50 V

DEL	CKD	APD	ORDER	DATE	ISS	CHANGE
GSB	[illegible]	DR	9GIAS	10·7·74	A	
MJW	RSF	FSP	7785/1	16·12·74	B	NOTE 6 ADDED
KG	ERP	DR	[illegible]	13·5·75	C	IC2, D4 REVISED, CONTACT &2 REPOSITION ETC
[illegible]	LRB	[illegible]	[illegible]	24·5·76	D	NOTE 6 ADDED

N.Z.P.O.
ENGINEER-IN-CHIEF WELLINGTON

ORIGIN: E.M.
DRAWN: E-M
TRACED:
1 OF 1
A2
39333