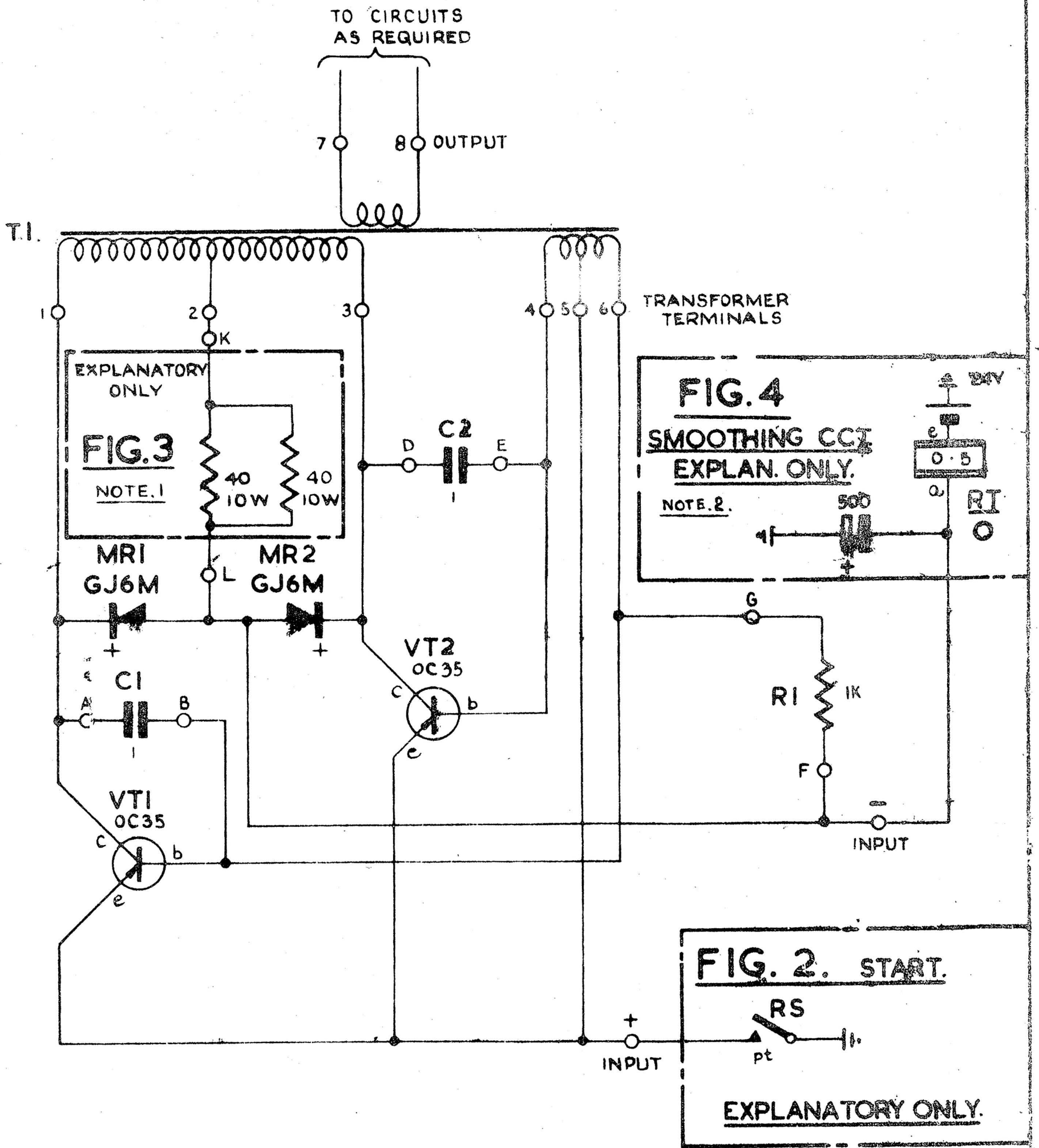


**FIG. 1**



**NOTES:**

- 1. RESISTORS MOUNTED SEPARATELY.
- 2 FIG 4 IS REQ'D ONLY WHEN SUPPLY IS COMMON TO SPEECH TRANSMISSION CCTS.

					25cps. RINGING GENERATOR N23221B TYPE	
FIG 3 AMENDED NOTE 2 ADDED			(70509APP)	2	13.5.63	<i>[Signature]</i>
				1	19.8.63	<i>[Signature]</i>
AMENDMENT PARTICULARS				ISSUE	DATE	APP
E.T. LTD BEESTON, NOTTINGHAM, ENGLAND.						24V
DRFT. DES.	DES. DES.	APPROVED	DRAWN	CHECKED	WIRED	ENGINEER
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
<b>200370/s</b>						

PLESSEY TELECOMMUNICATIONS, BEESTON.

207147/SW

A3  
A4

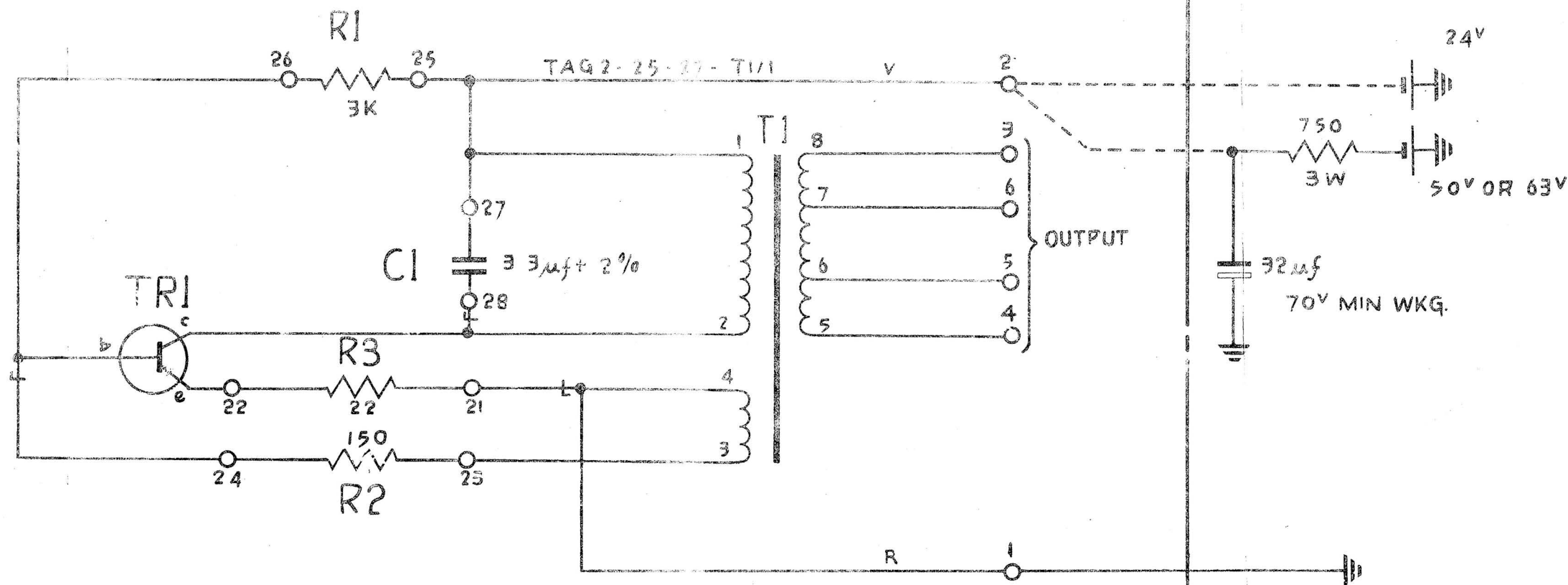
DRN J. N. WRG 408#  
CKD 408# CCT  
GPO CERTIFICATION 6-1-60.

400 HZ  
TONE GENERATOR

AMENDMENT

ISS. 1  
DATE 18/2/69  
APPD. *JG*

REFERENCES



NOTES.

1. THE CODE OF TRANSFORMER VARIES ACCORDING TO THE FREQUENCY REQUIRED, ALSO THE CODE OF TRANSFORMER VARIES WHEN TONES OF MIXED FREQUENCIES ARE REQUIRED. FOR CODES SEE NI22146
2. ALL WIRING TO BE 25 SWG UNLESS OTHERWISE SPECIFIED

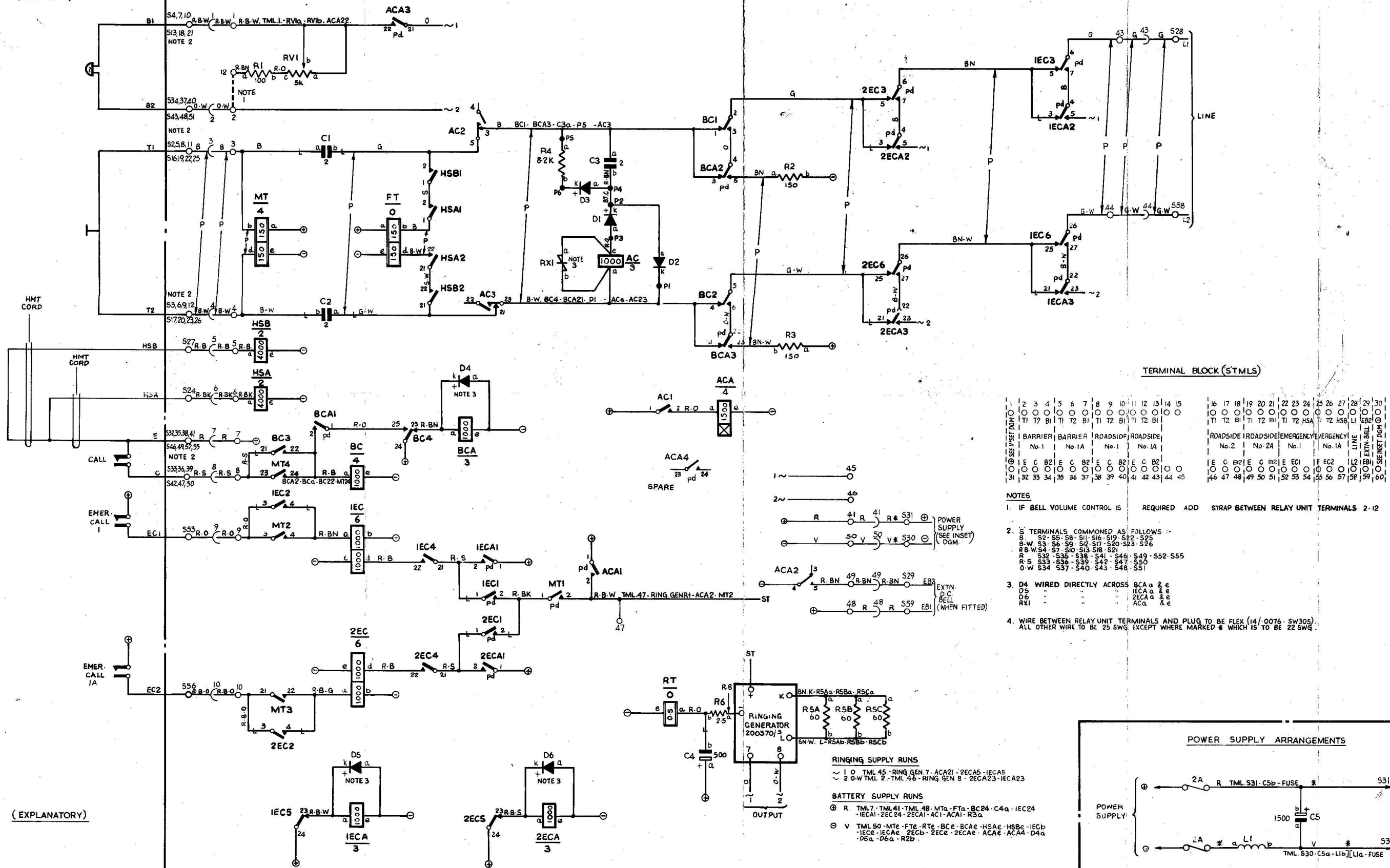
PART OF 200899/SW OR EQUIV.

EXPLANATORY ONLY

BARRIER/ EMERGENCY TELE

(207568/SW)

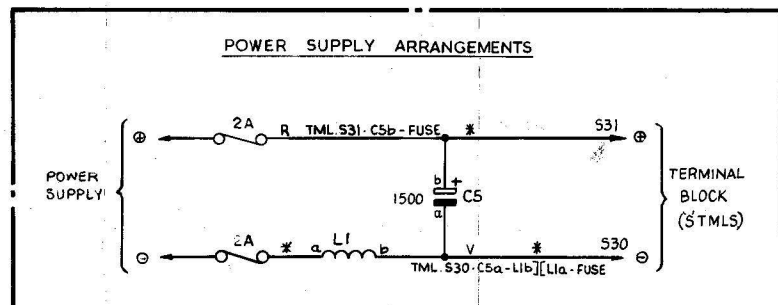
BARRIER CONTROL UNIT



TERMINAL BLOCK (STMLS)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

- NOTES**
- IF BELL VOLUME CONTROL IS REQUIRED ADD STRAP BETWEEN RELAY UNIT TERMINALS 2-12
  - TERMINALS COMMONED AS FOLLOWS -  
 B S2, S5, S8, S11, S16, S19, S22, S25  
 B-W S3, S6, S9, S12, S17, S20, S23, S26  
 R-B-W S4, S7, S10, S13, S18, S21  
 R S32, S35, S38, S41, S46, S49, S52, S55  
 R-S S33, S36, S39, S42, S47, S50  
 O-W S34, S37, S40, S43, S48, S51
  - D4 WIRED DIRECTLY ACROSS BCA a & e  
 D5 " " " " IEC a & e  
 D6 " " " " 2ECA a & e  
 RX1 " " " " ACA a & e
  - WIRE BETWEEN RELAY UNIT TERMINALS AND PLUG TO BE FLEX (14/0076-SW305). ALL OTHER WIRE TO BE 25 SWG EXCEPT WHERE MARKED \* WHICH IS TO BE 22 SWG.



(EXPLANATORY)

DRN 6-11-69 WRG  
 CKD CCT  
 GPO CERTIFICATION

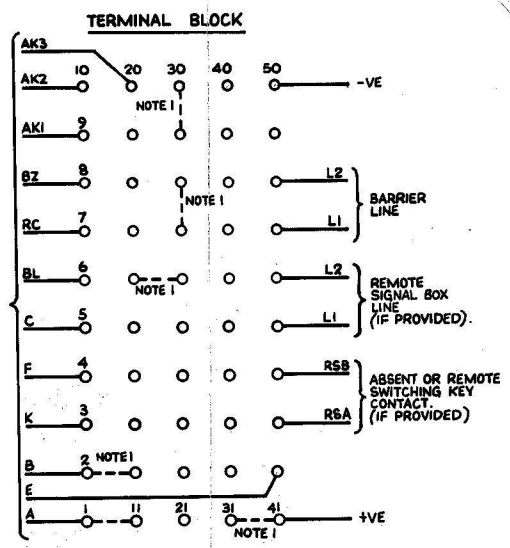
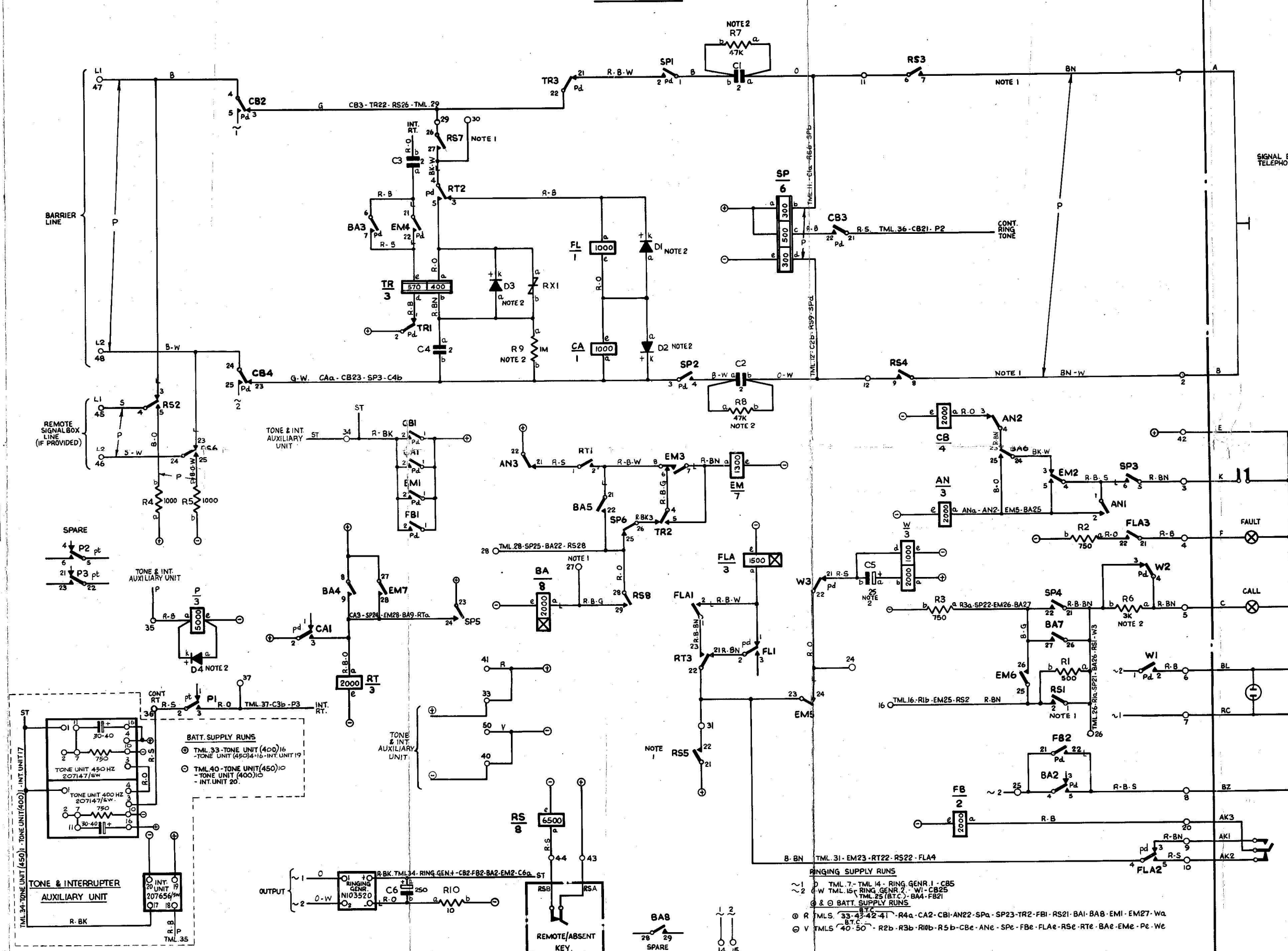
**A1**  
**A2**

FOR FIXING IN CASE, SIZE OF DIAGRAM TO BE REDUCED TO 16" X 11" (407 mm X 280 mm)

REFERENCES 24 V E

BARRIER COMMUNICATION SYSTEM  
 BARRIER CONTROL RELAY UNIT

SIGNAL BOX UNIT



- NOTES**
- IF 'ABSENT OR REMOTE SWITCHING' FACILITIES ARE NOT PROVIDED STRAP TMLS. 1-11, 2-12, 16-26, 27-28, 29-30 & 31-41. IF 'ABSENT' FACILITY IS PROVIDED STRAP TMLS 29-30 ONLY. IF 'REMOTE SWITCHING' FACILITY IS PROVIDED, NO STRAPS ARE REQUIRED.
  - D1 WIRED DIRECTLY ACROSS FLA & C. CA2 & C. TRG & D. D2 . . . . . PA & E. D3 . . . . . W4 & W3. D4 . . . . . C1a & b. D5 . . . . . C2a & b. D6 . . . . . C4a & b. D7 . . . . . TRG & D. D8 . . . . . W4 & W3.
  - ALL WIRE TO BE 25 S.W.G.

SIGNAL BOX TELE 207569/SW  
EXPLANATORY ONLY

A1  
A2

FOR FIXING IN CASE, SIZE OF DIAGRAM TO BE REDUCED TO 11 1/2" x 8" (292 mm x 203 mm)

REFERENCES 50V E  
BARRIER COMMUNICATION SYSTEM  
SIGNALBOX CONTROL RELAY UNIT

TONE UNITS (ORIGINALLY TO DGM. 2011480) SUPERSEDED. INTERNAL COMPONENT VALUES AMENDED '95-76.

2	29.6.76	W
1	2.6.77	W
ISS.	DATE	APPD.

DRG. 207488/SW



A3  
A4

DRN  
WRC  
GPO CERTIFICATION

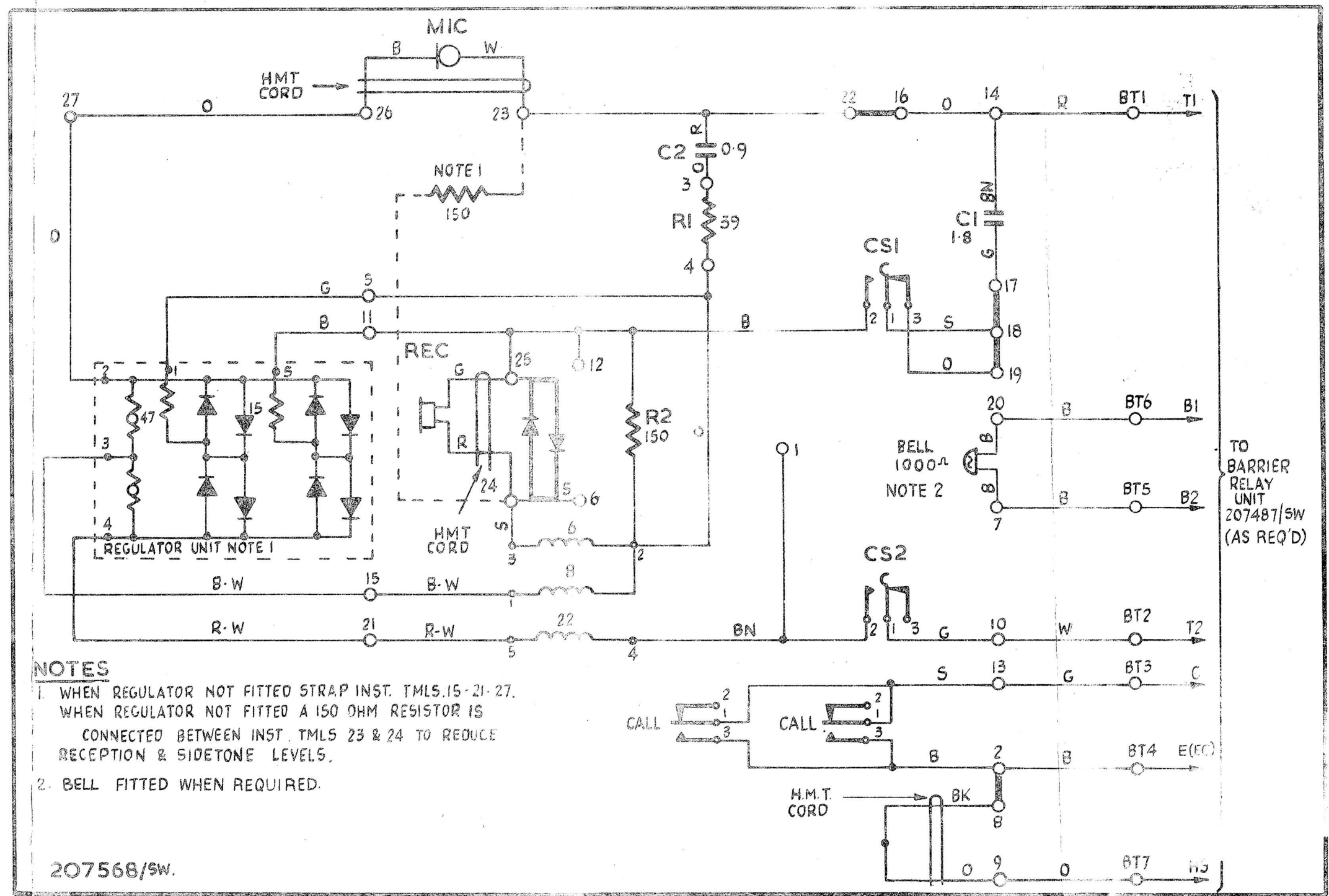
AMENDMENT

ISS. DATE APPD.  
1 29-5-70 M

WEATHERPROOF TELEPHONE  
(BARRIER COMMUNICATION SYSTEM)

REFERENCES

207568/SW

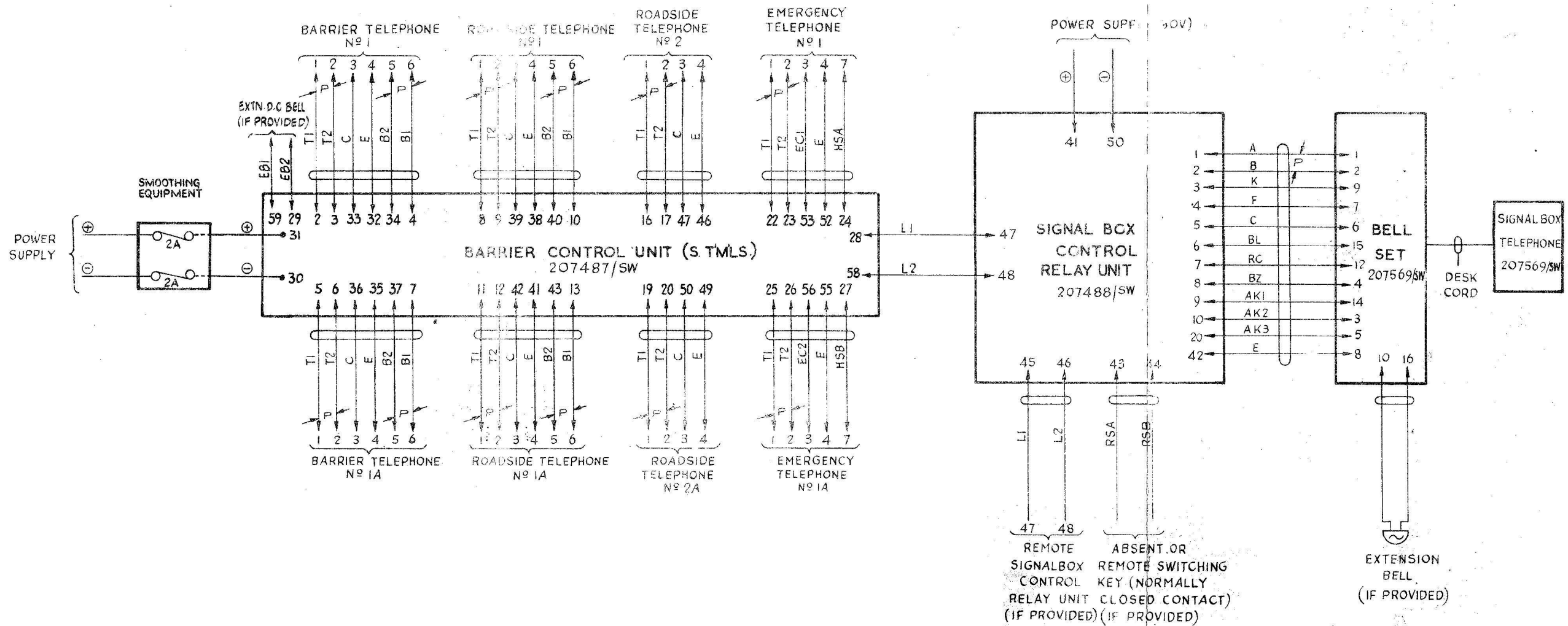


NOTES

- 1. WHEN REGULATOR NOT FITTED STRAP INST. TMS.15-21-27. WHEN REGULATOR NOT FITTED A 150 OHM RESISTOR IS CONNECTED BETWEEN INST. TMS 23 & 24 TO REDUCE RECEPTION & SIDETONE LEVELS.
- 2. BELL FITTED WHEN REQUIRED.

207568/SW.

SIZE OF CASE DIAGRAM :- 3" x 2"



A2  
A3

DRN  
CKD *Wen*  
WRG  
CCT *Wen*  
GPO CERTIFICATION

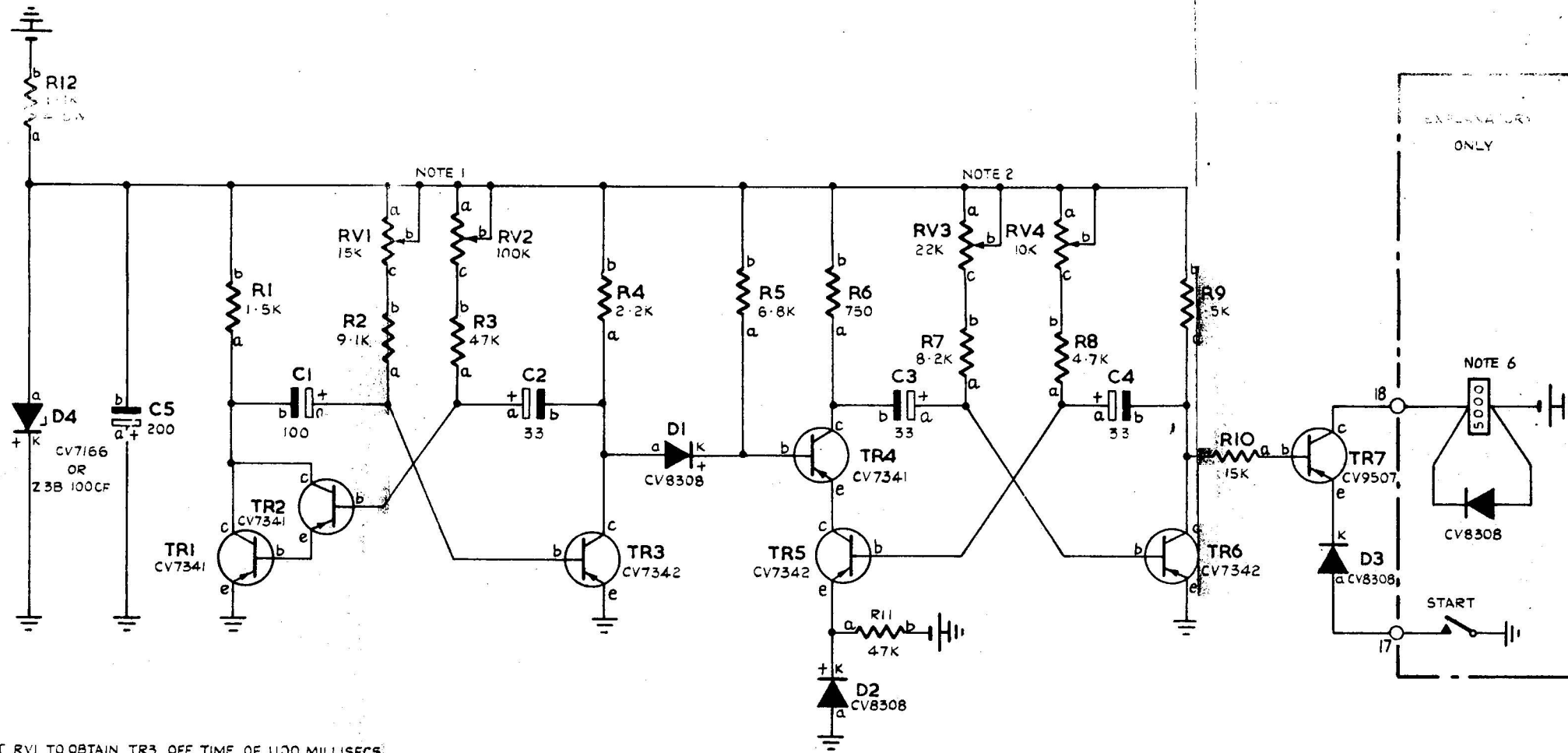
BARRIER COMMUNICATION SYSTEM  
CONNECTION DIAGRAM

REFERENCE E

AMENDMENT

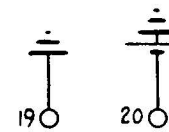
ISS. DATE APR 1 1967

207570/SW



**NOTES**

1. ADJUST RV1 TO OBTAIN TR3 OFF TIME OF 1100 MILLISECS  
RV2 " " TR3 ON TIME OF 1900 MILLISECS
2. " RV3 " " TR6 OFF TIME OF 400 MILLISECS  
RV4 " " TR6 ON TIME OF 200 MILLISECS
3. RESISTORS ARE 1/4 WATT, & ± 5% UNLESS OTHERWISE STATED.
4. POTENTIOMETERS ARE 1/4 WATT, & 20%.
5. ELECTROLYTIC CAPACITOR TOLERANCES AS FOLLOWS:  
C1 - C4 - 20% + 50% MAX.  
C5 - 20% + 100% MAX.
6. RELAY RESISTANCE TO BE NOT LESS THAN 5000 OHMS.



A2 A3	DRN	WRG
	CKD <i>lll</i>	CCT <i>lll</i>
GPO CERTIFICATION		

AMENDMENT

ISS. DATE APPD. 1 29-5-70 *lll*

RING TONE INTERRUPTER  
CIRCUIT  
400ms ON / 200ms OFF /  
400ms ON / 2secs OFF

REFERENCES 50V E

207656/SW



# DIAGRAM

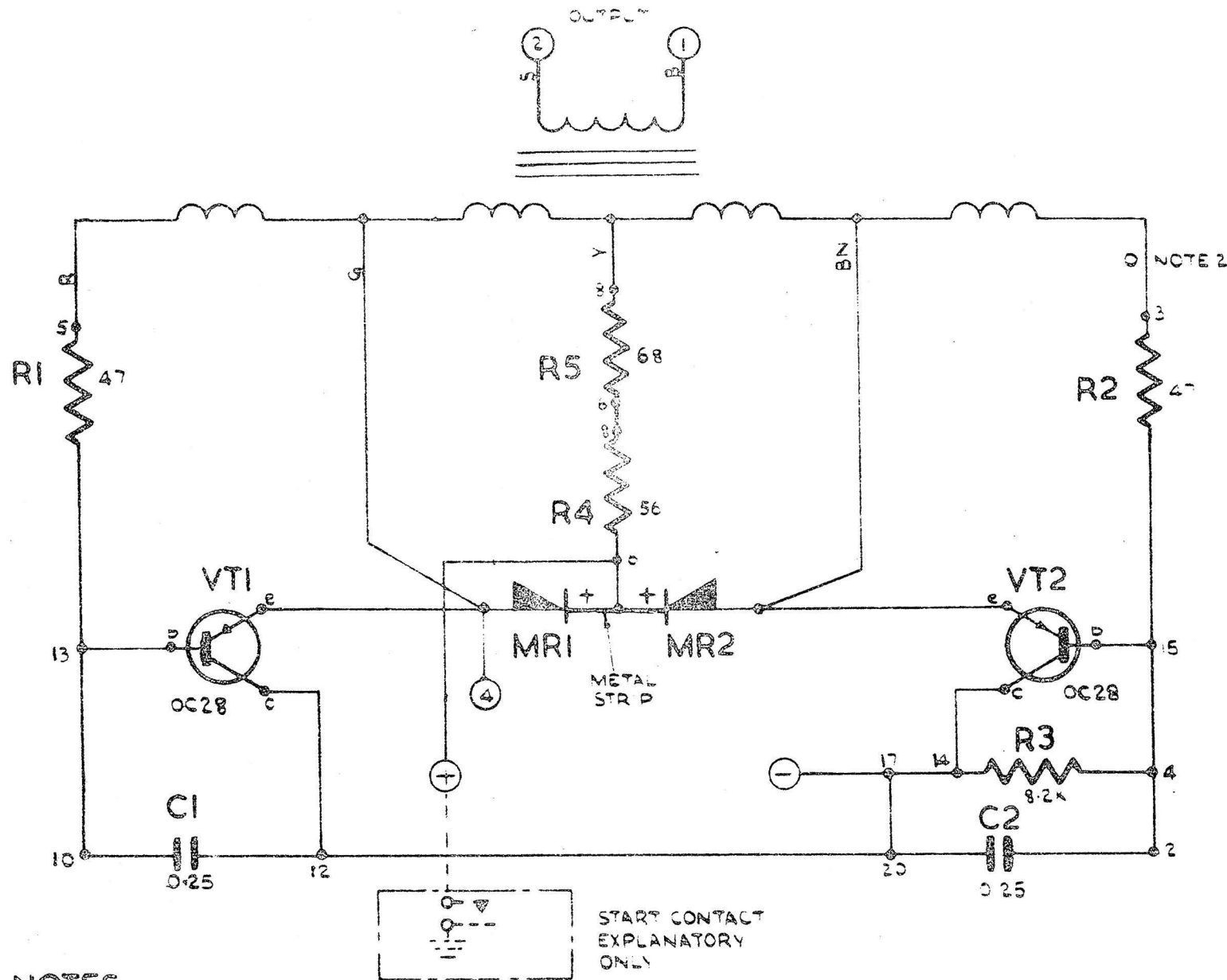
# NIO3520

## INFORMATION FOR SHOPS

TRANSFORMER LEADS COVERED WITH GREEN SLEEVING

REPLACES DGM 200906/SW

DIAGRAM FOR 32V-52V TRANSISTOR RANGING UNIT  
V23405 A2 TYPE FOR SMALL AUTO EXCHANGE OR SWITCHBOARD



### NOTES

- 1 MAIN TERMINALS SHOWN THUS ○ ARE LOCATED ON MOUNTING BRACKET
- 2 TRANSFORMER LEADS ARE COVERED WITH GREEN SLEEVING.

NIO3520

APPROVED	20-5-50	LHO	NIO3520
----------	---------	-----	---------