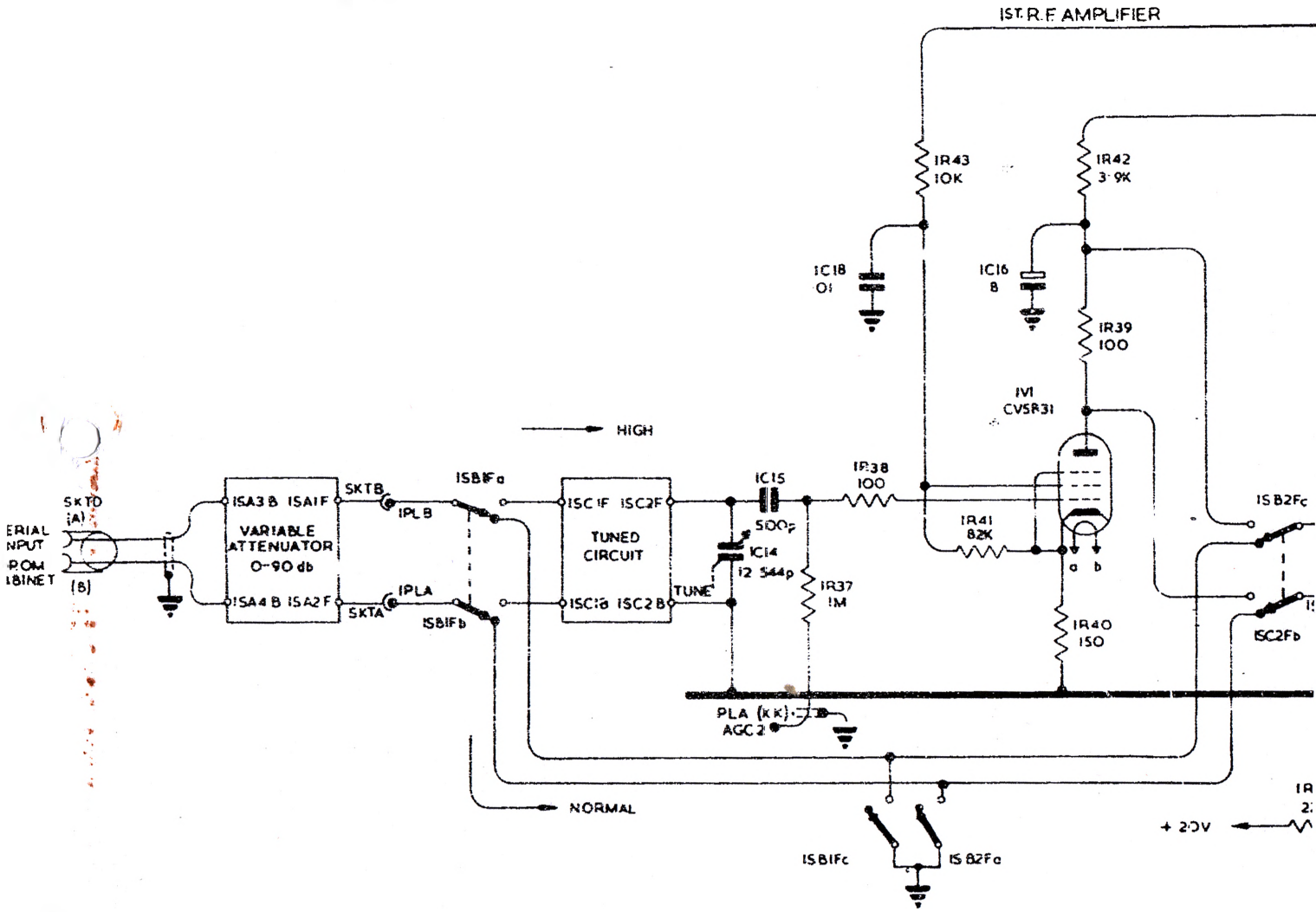
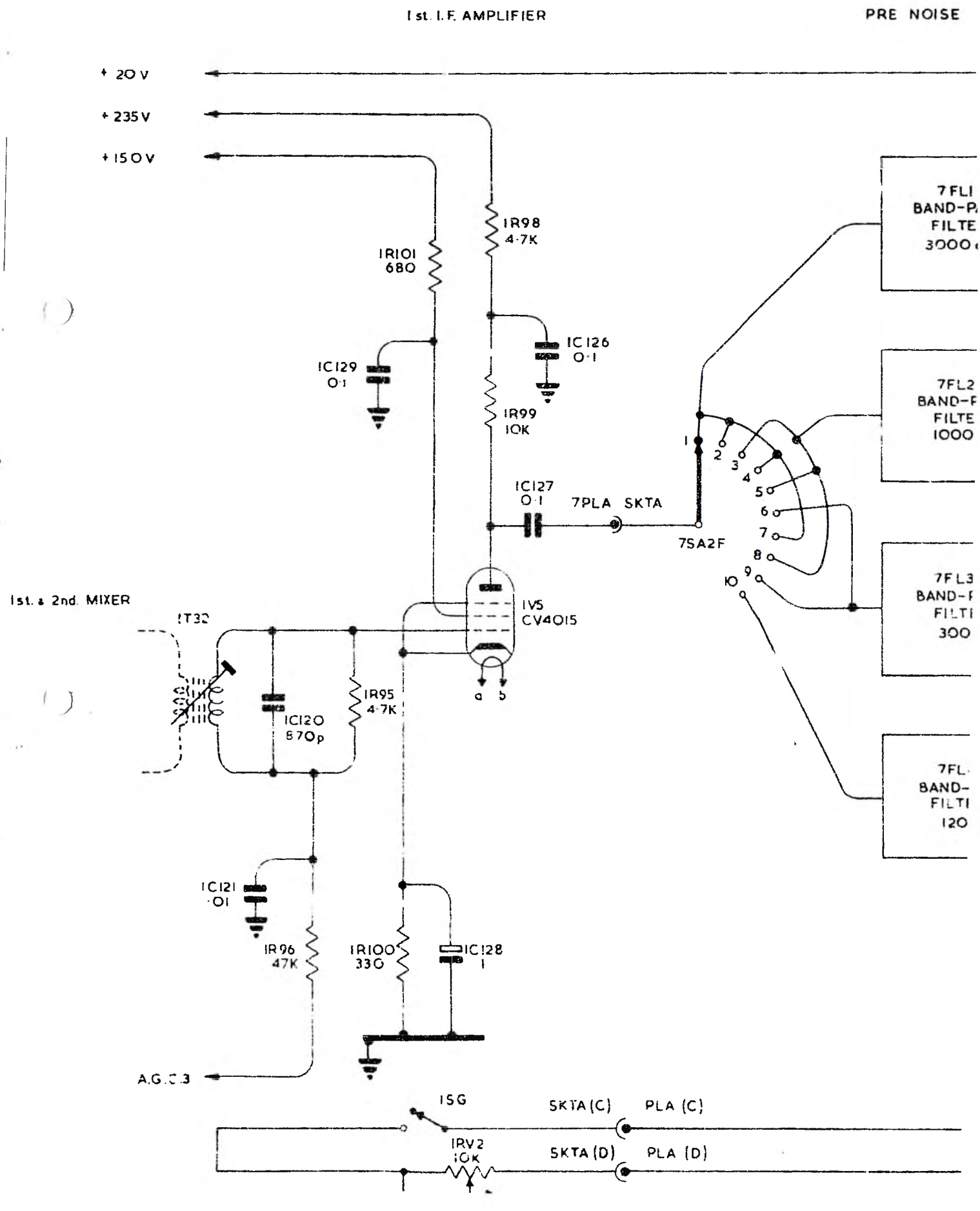
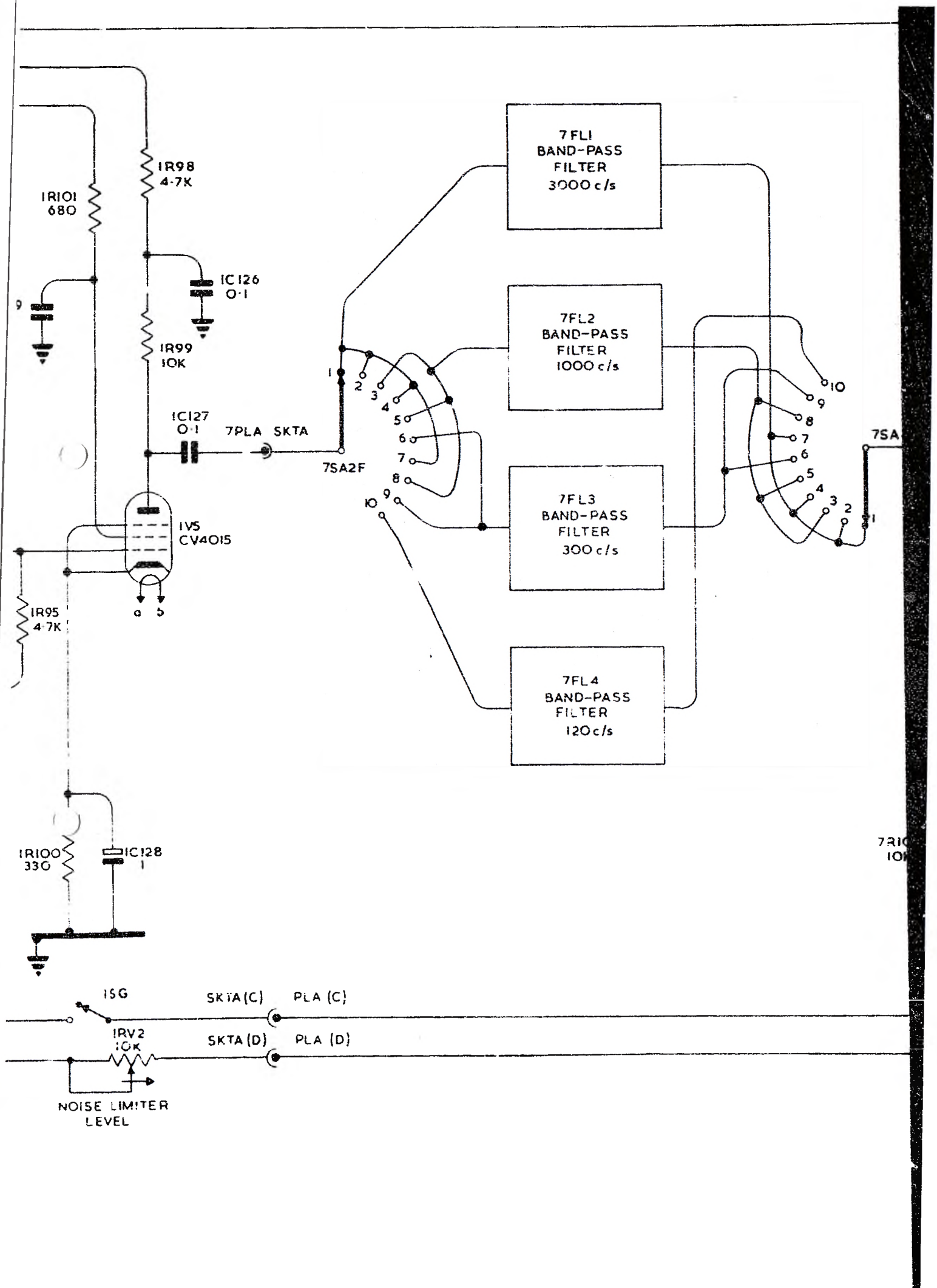


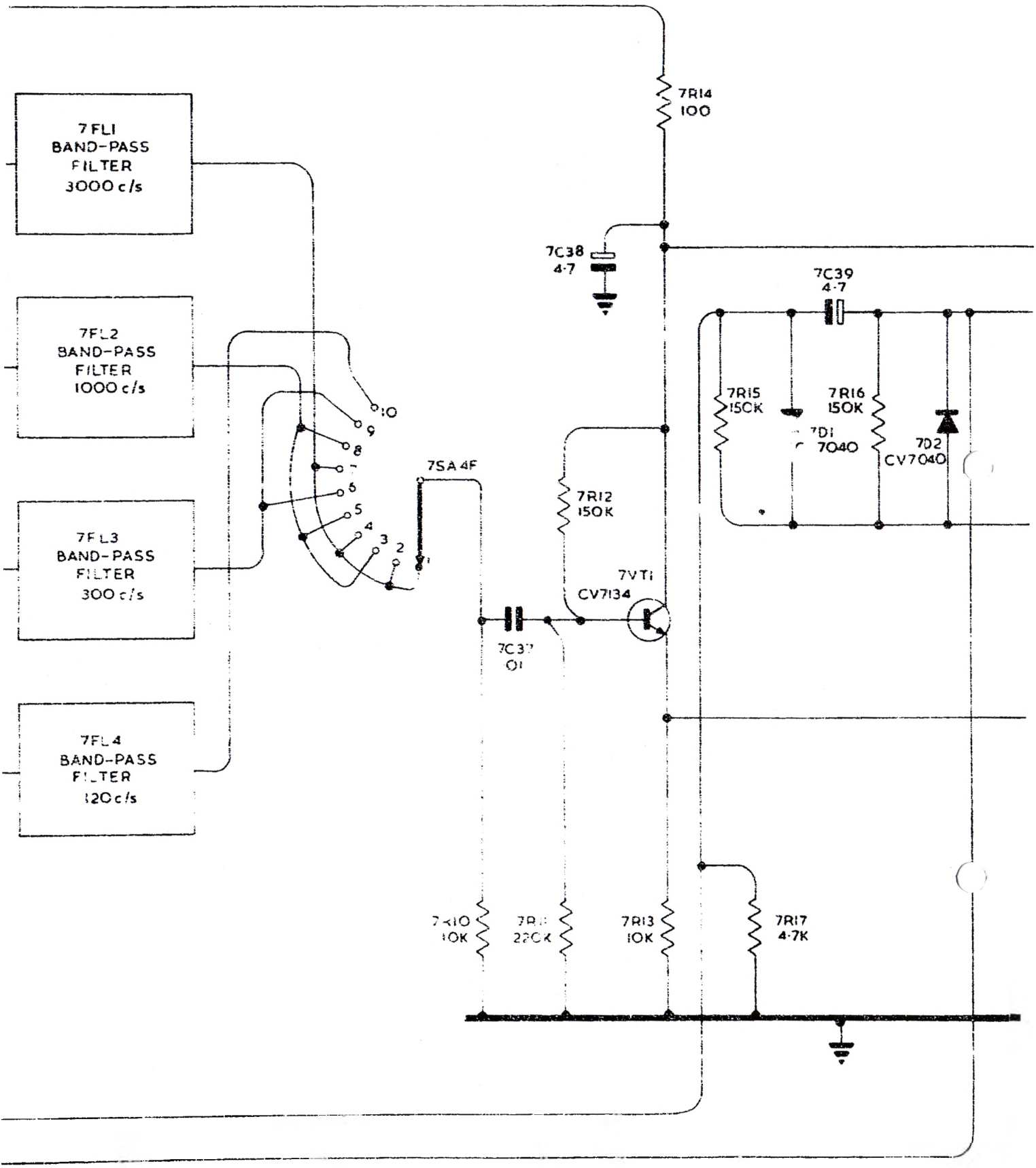
* CAPACITORS IC14, 29, 43, 58, 73 AND 130 ARE GANGED


1st. I.F. AMPLIFIER
PRE NOISE
+ 20 V
+ 235 V
+ 150 V
1R98 4·7K
1R101 680
IC126 0·1
IC129 0·1
1R99 10K
IC127 0·1
7PLA SKTA
7SA2F
1st. & 2nd. MIXER
1T32
1V5 CV4015
a
b
IR95 4·7K
IC120 870p
IC121 ·01
IR96 47K
1R100 330
IC128 1
A.G.C.3
7FL1 BAND-P FILTE 3000
7FL2 BAND-P FILTE 1000
7FL3 BAND-P FILTI 300
7FL BAND- FILTI 120
1SG
SKTA (C)
PLA (C)
1RV2 10K
SKTA (D)
PLA (D)


7FL1
BAND-PASS
FILTER
3000 c/s
7FL2
BAND-PASS
FILTER
1000 c/s
7FL3
BAND-PASS
FILTER
300 c/s
7FL4
BAND-PASS
FILTER
120 c/s
1R98
4·7K
1R101
680
1C126
0·1
1R99
10K
1C127
0·1
7PLA SKTA
7SA2F
7SA
1V5
CV4015
1R95
4·7K
1R100
330
1C128
1
1SG
SKTA (C)
PLA (C)
1RV2
10K
SKTA (D)
PLA (D)
NOISE LIMITER
LEVEL

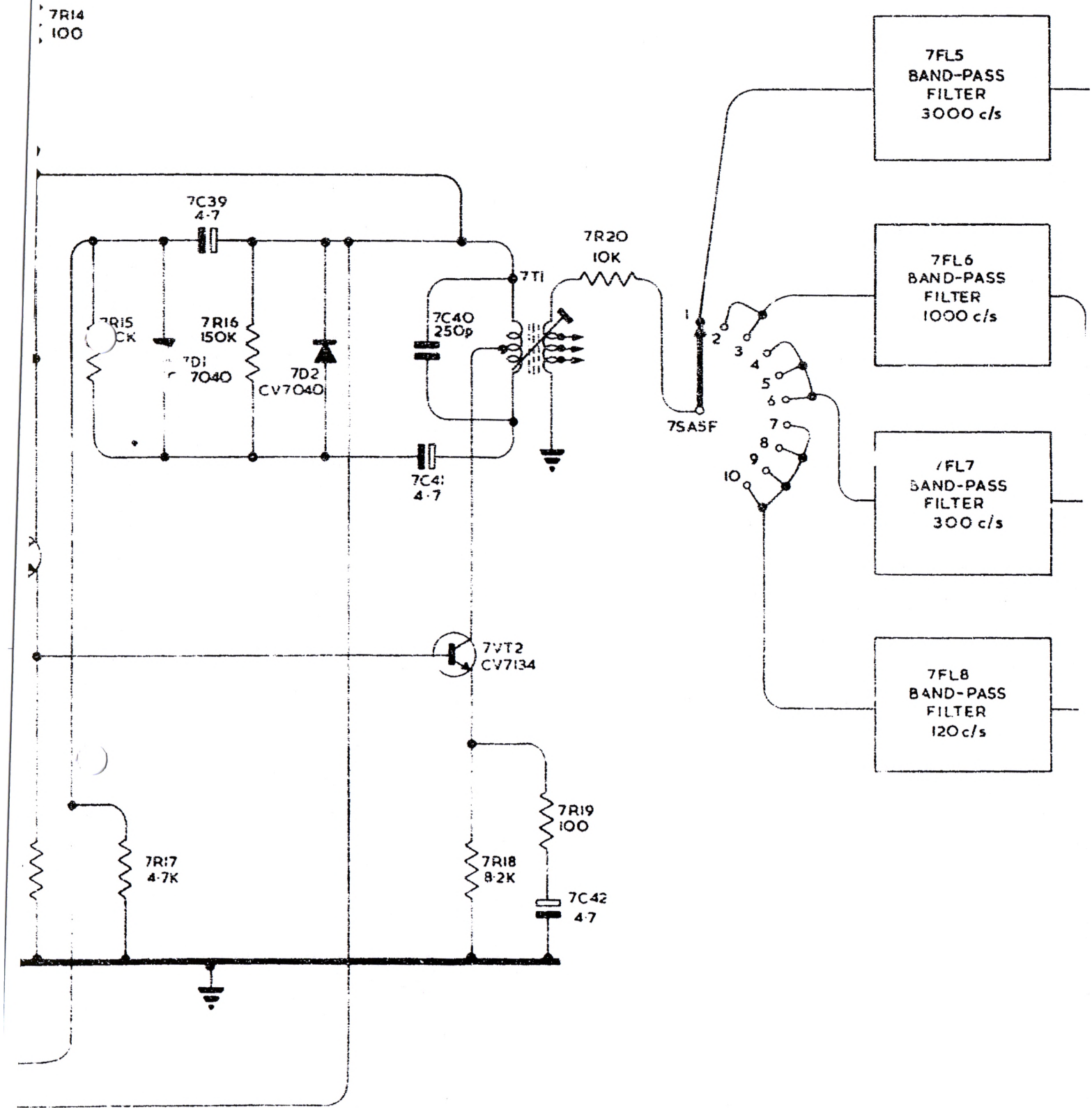
RE NOISE FILTERS

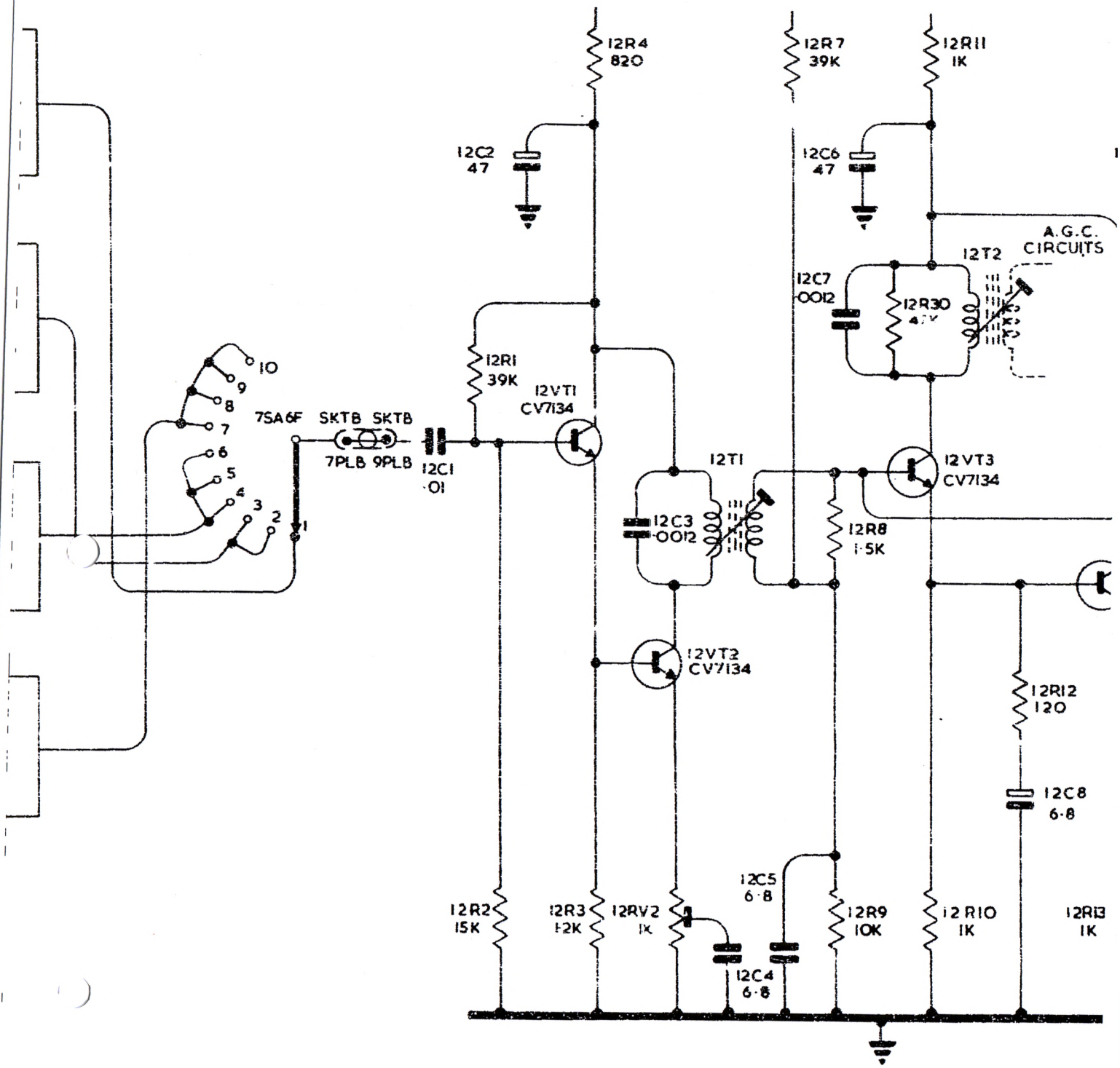
EMITTER FOLLOWER



NOISE LIMITER

POST NOISE FILTERS

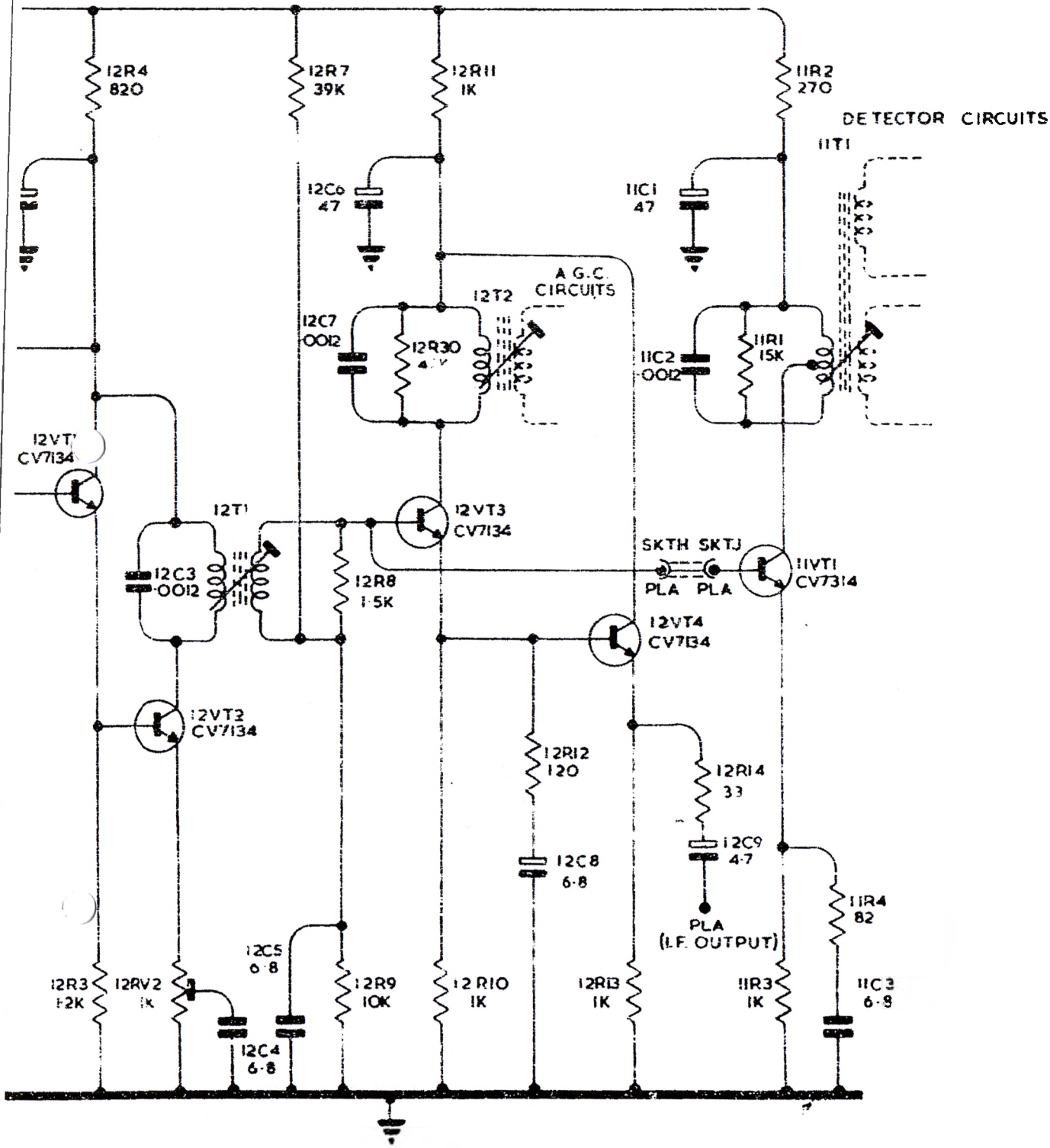


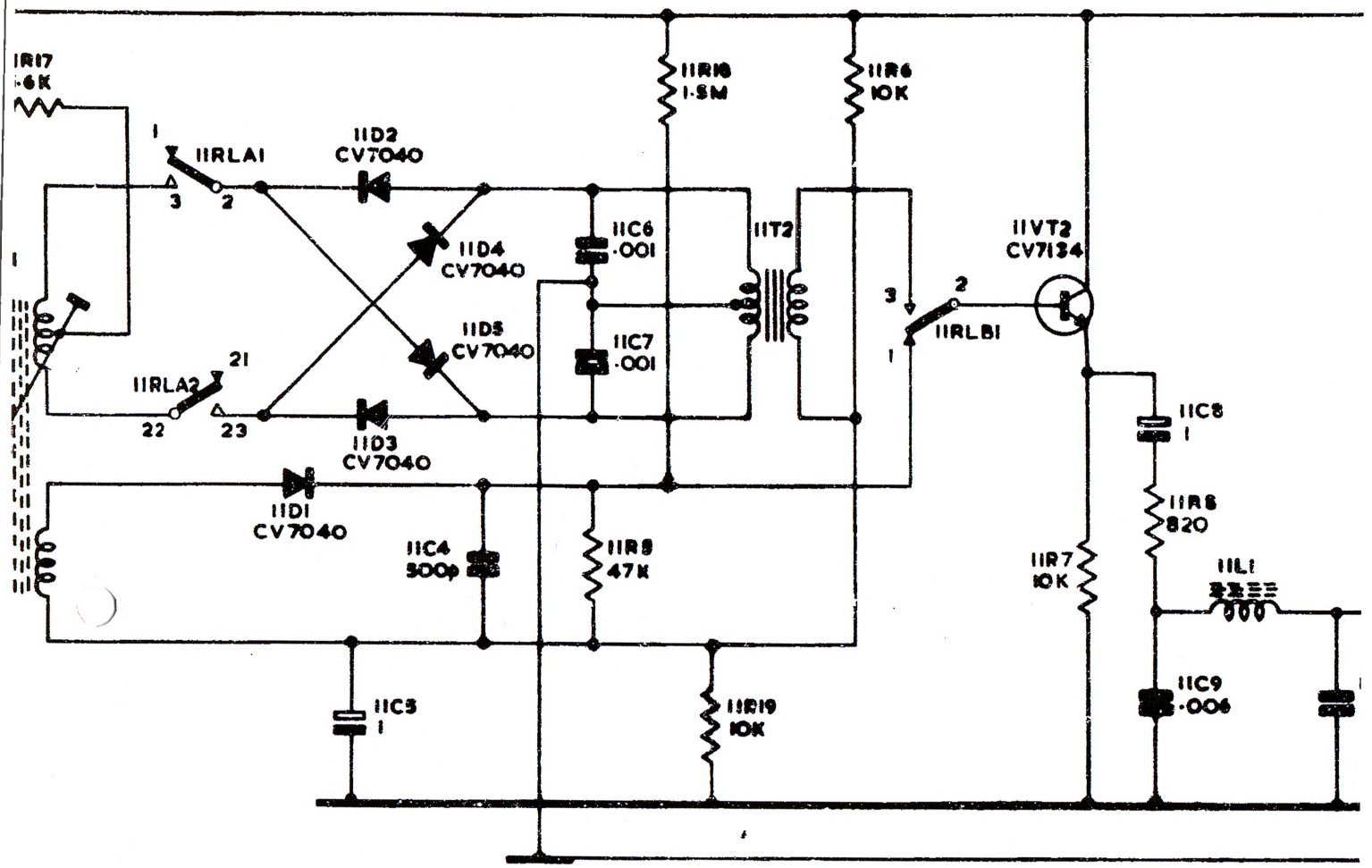


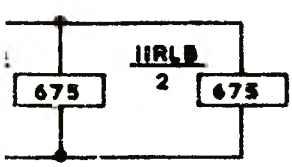
I.F. AMPLIFIER

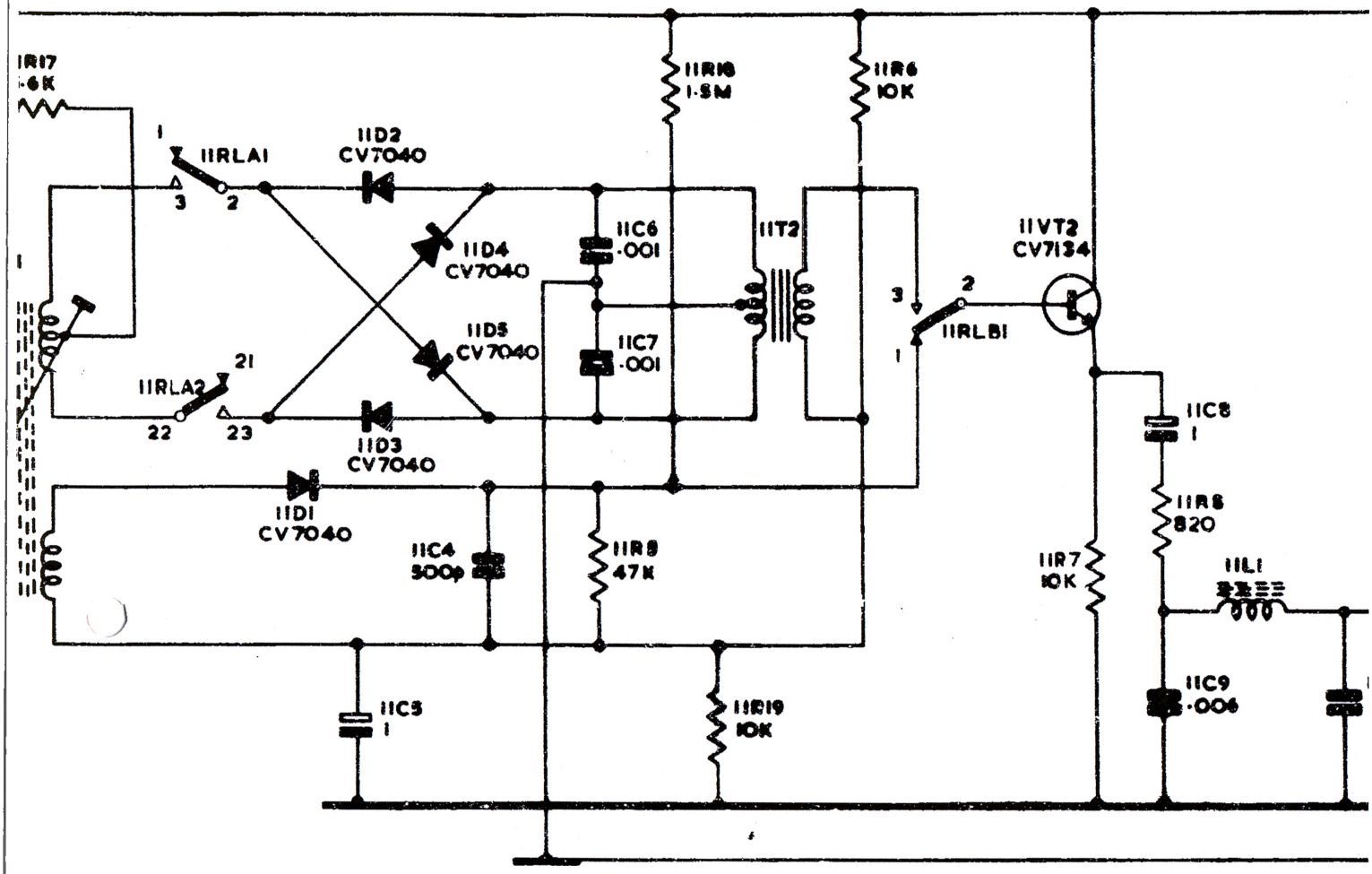
SIMPLIFIED FUNCTIONAL DIAG

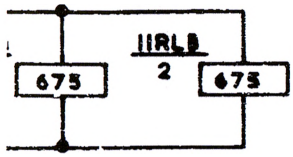
FOLLOWER 2nd. I.F. AMPLIFIER A.G.C./I.F. AMPLIFIER 3rd. I.F. AMPLIFIER

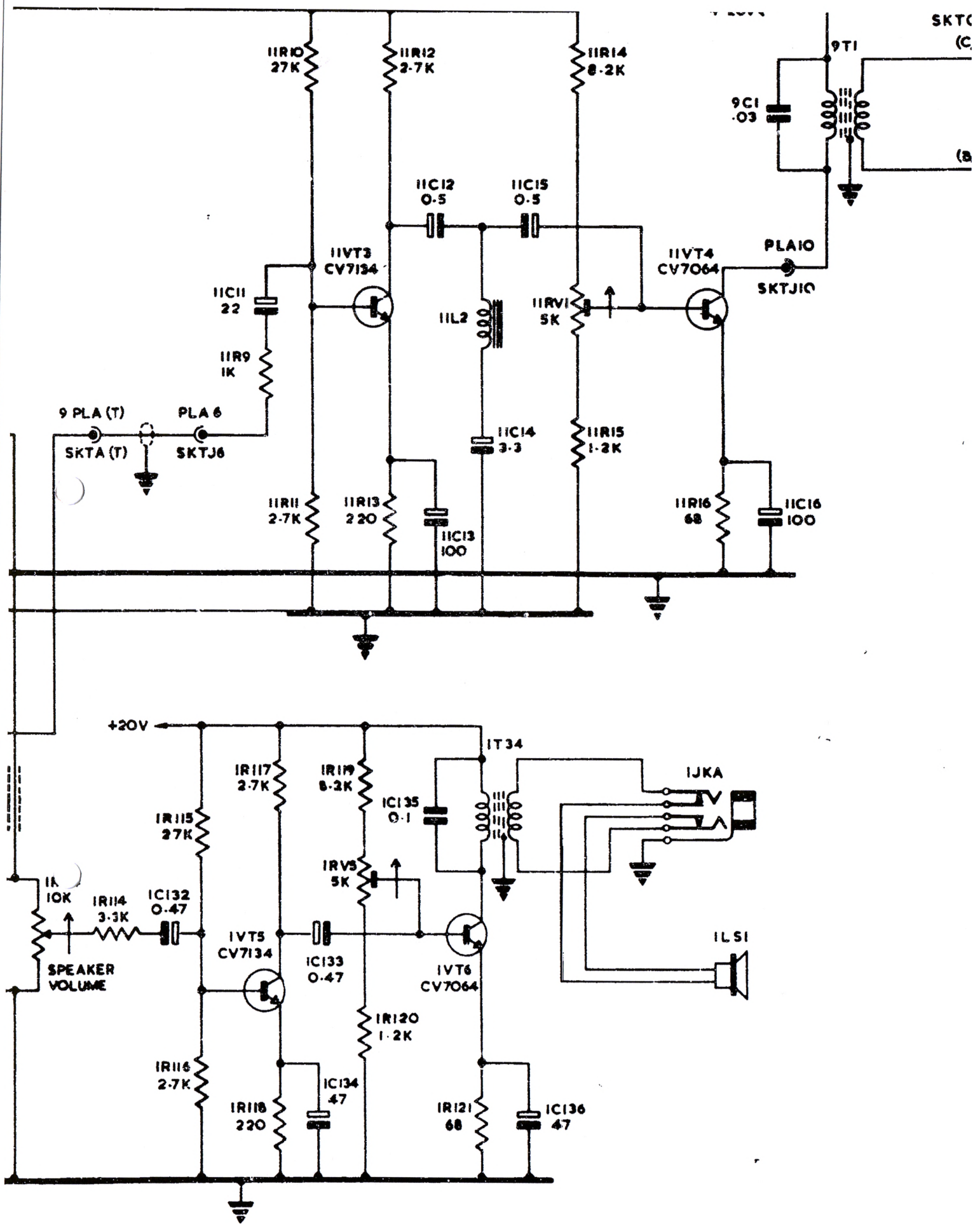


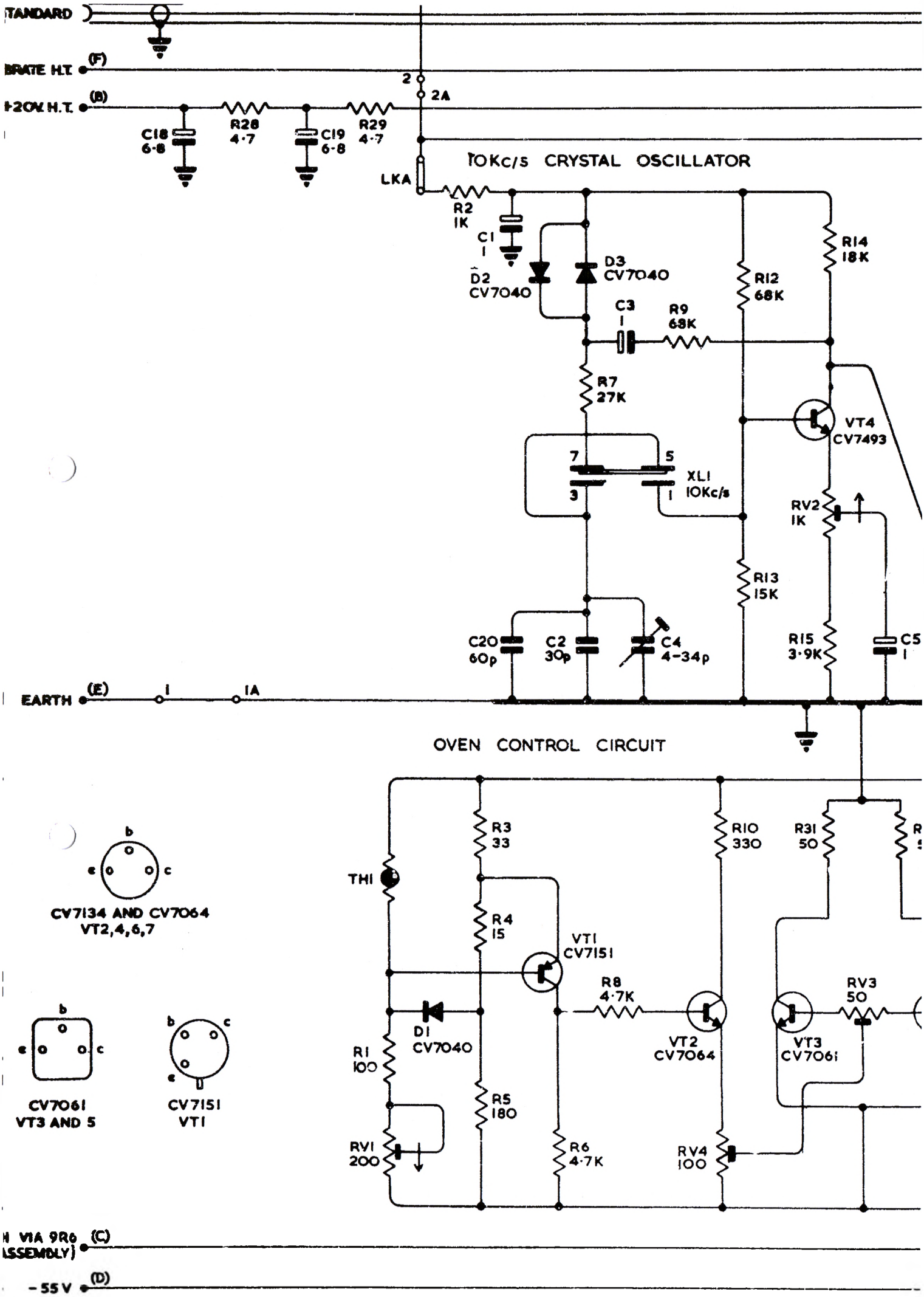

IR17
6K
1
IIRLA1
3
2
IID2
CV7040
IID4
CV7040
IID5
CV7040
IIRLA2
21
22
23
IID3
CV7040
IID1
CV7040
IIC6
.001
IIC7
.001
IIC4
500p
IIR8
47K
IIC3
1
IIR19
10K
IIR18
1.5M
IIR6
10K
IIT2
IIVT2
CV7134
3
2
1
IIRLB1
IIC8
1
IIR5
820
IIR7
10K
IIL1
IIC9
.006

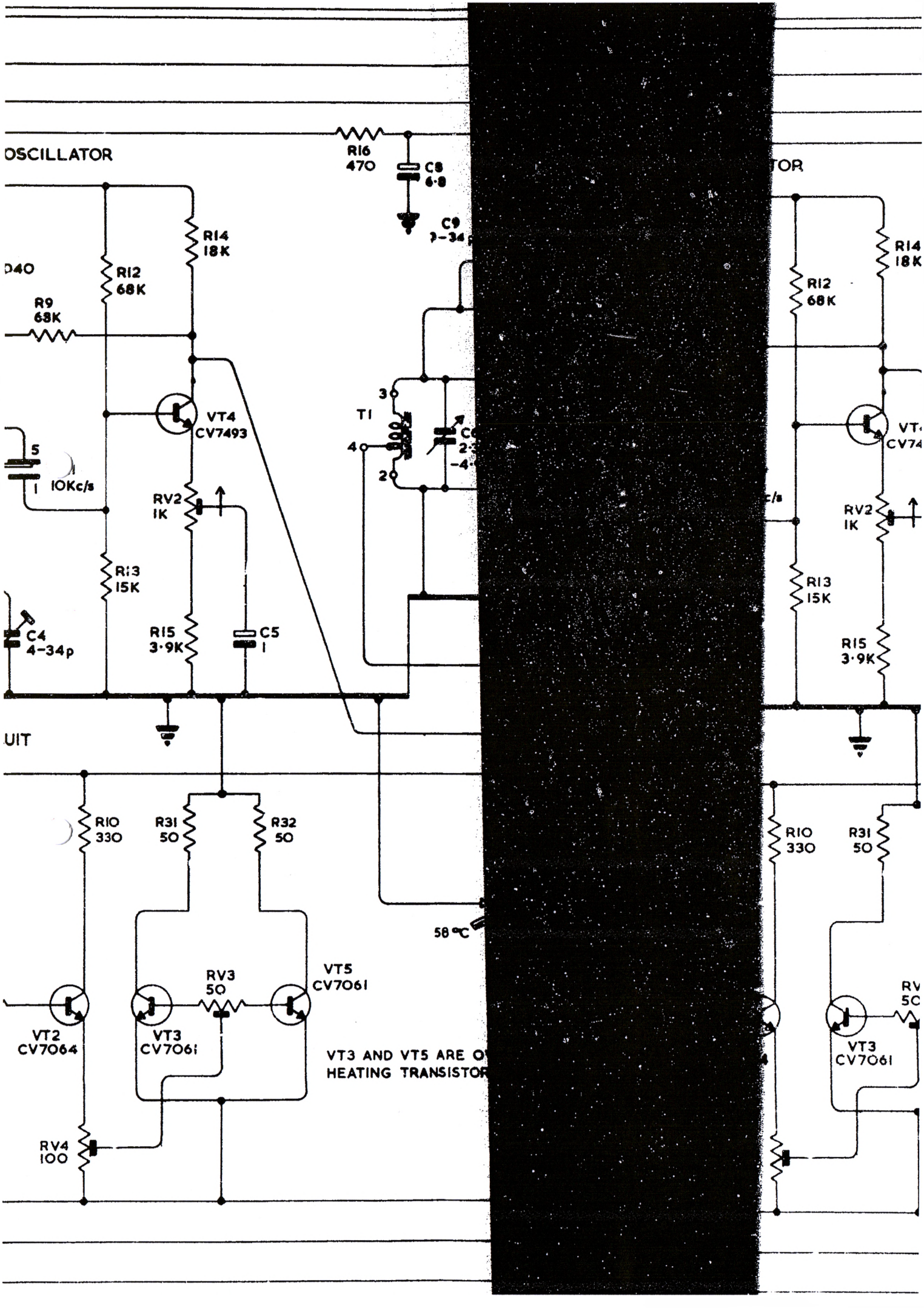

IIRLB
2
675
675

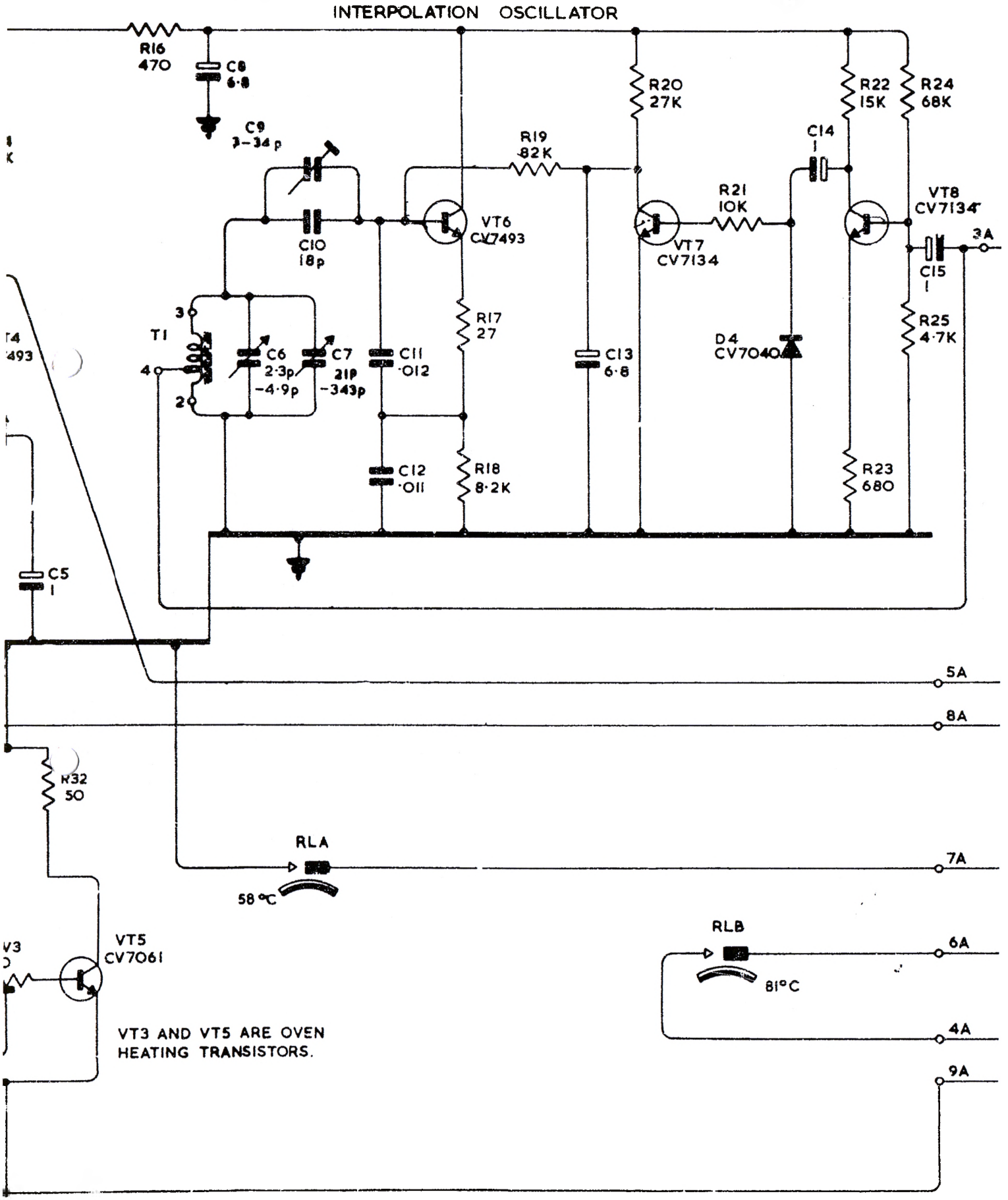

11R17
.6K
11RLA1
11D2
CV7040
11D4
CV7040
11D5
CV7040
11D3
CV7040
11D1
CV7040
11RLA2
11C6
.001
11C7
.001
11T2
11R16
1.5M
11R6
10K
11VT2
CV7134
11RLB1
11C8
1
11R8
820
11L1
11R7
10K
11C4
500p
11R9
47K
11C5
1
11R19
10K
11C9
.006


11RLB
675
675

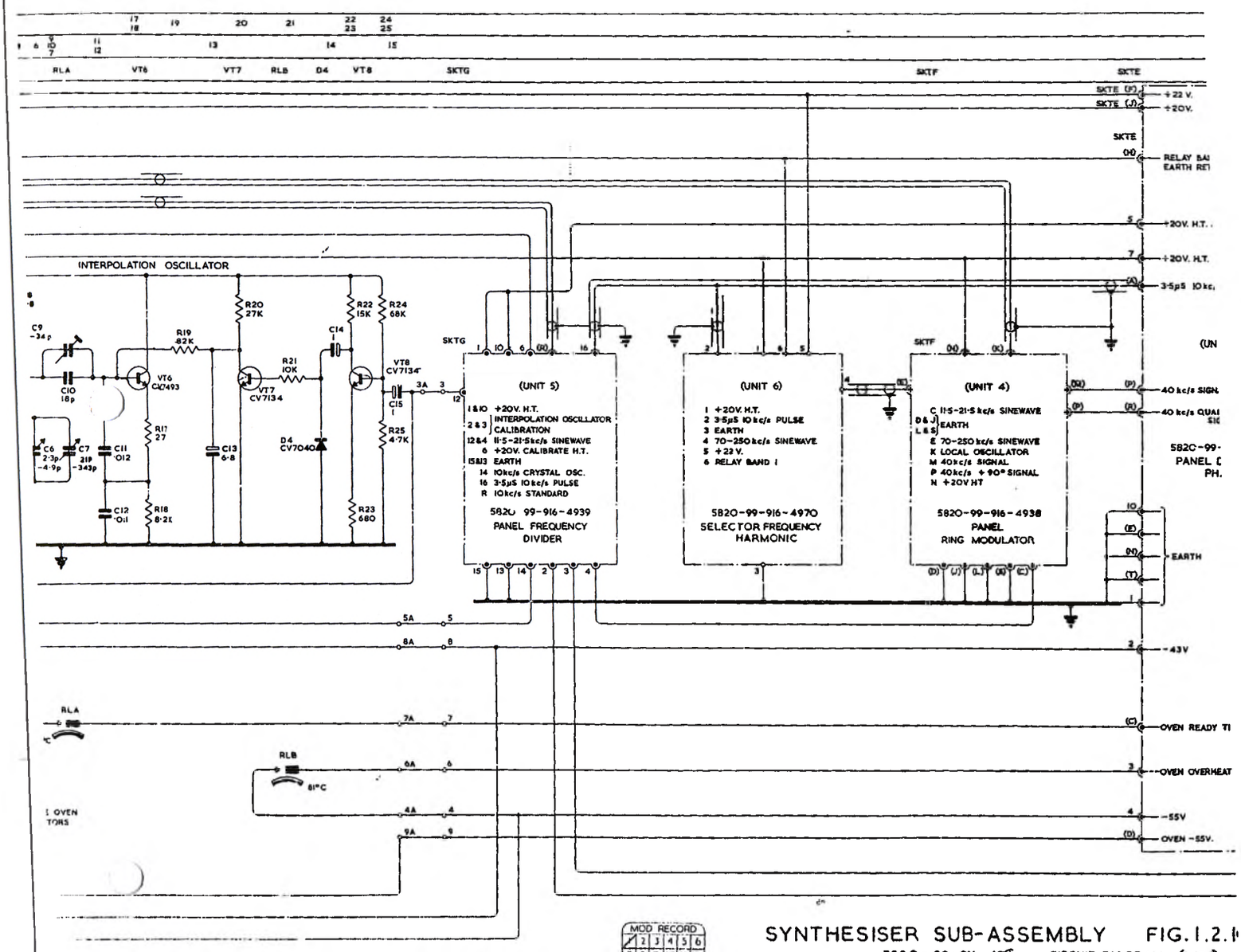

SKTC
(C
9T1
9C1
·03
(a
11R10
27K
11R12
2·7K
11R14
8·2K
11C12
0·5
11C15
0·5
11VT3
CV7134
11VT4
CV7064
PLA10
SKTJ10
11C11
22
11L2
11RV1
5K
11R9
1K
9 PLA (T)
PLA 6
SKTA (T)
SKTJ6
11C14
3·3
11R15
1·2K
11R11
2·7K
11R13
220
11C13
100
11R16
68
11C16
100
+20V
1T34
1JKA
1R117
2·7K
1R119
8·2K
1C135
0·1
1R115
27K
1RV5
5K
1K
10K
1R114
3·3K
1C132
0·47
1VT5
CV7134
1C133
0·47
1VT6
CV7064
1LS1
SPEAKER
VOLUME
1R120
1·2K
1R116
2·7K
1R118
220
1C134
·47
1R121
68
1C136
·47


TANDARD
(F)
2
2A
(B)
C18
6·8
R28
4·7
C19
6·8
R29
4·7
10Kc/s CRYSTAL OSCILLATOR
LKA
R2
1K
C1
1
D2
CV7040
D3
CV7040
C3
1
R9
68K
R12
68K
R14
18K
R7
27K
VT4
CV7493
7
5
3
1
XL1
10Kc/s
RV2
1K
R13
15K
C20
60p
C2
30p
C4
4-34p
R15
3·9K
C5
1
(E)
1
1A
EARTH
OVEN CONTROL CIRCUIT
b
e
c
CV7134 AND CV7064
VT2,4,6,7
TH1
R3
33
R4
15
VT1
CV7151
R8
4·7K
R10
330
R31
50
RV3
50
D1
CV7040
VT2
CV7064
VT3
CV7061
R1
100
R5
180
RV1
200
R6
4·7K
RV4
100
CV7061
VT3 AND 5
CV7151
VT1
VIA 9R6
(C)
ASSEMBLY)
-55 V
(D)


OSCILLATOR
R16
470
C8
6·8
C9
R14
18K
R12
68K
R9
68K
VT4
CV7493
T1
3
4
2
5
1
10Kc/s
RV2
1K
R13
15K
R15
3·9K
C5
1
C4
4-34p
R10
330
R31
50
R32
50
RV3
50
VT5
CV7061
VT2
CV7064
VT3
CV7061
RV4
100
58°C
VT3 AND VT5 ARE O
HEATING TRANSISTOR


INTERPOLATION OSCILLATOR
R16
470
C8
6·8
C9
3-34p
R19
82K
R20
27K
R22
15K
R24
68K
C14
1
R21
10K
VT8
CV7134
VT6
CV7493
VT7
CV7134
3A
C15
1
C10
18p
T1
3
4
2
C6
2·3p
-4·9p
C7
21P
-343p
C11
·012
R17
27
C13
6·8
D4
CV7040
R25
4·7K
C12
·011
R18
8·2K
R23
680
C5
1
5A
8A
R32
50
RLA
58°C
7A
VT5
CV7061
RLB
81°C
6A
4A
9A
VT3 AND VT5 ARE OVEN
HEATING TRANSISTORS.

RESTRICTED



MOD RECORD

SYNTHESISER SUB-ASSEMBLY FIG. 1.2.

5820-99-916-4911 CIRCUIT DIAGRAM (CJD 3)

5134

RESTRICTED

B8 B9

BR. 2407(1)

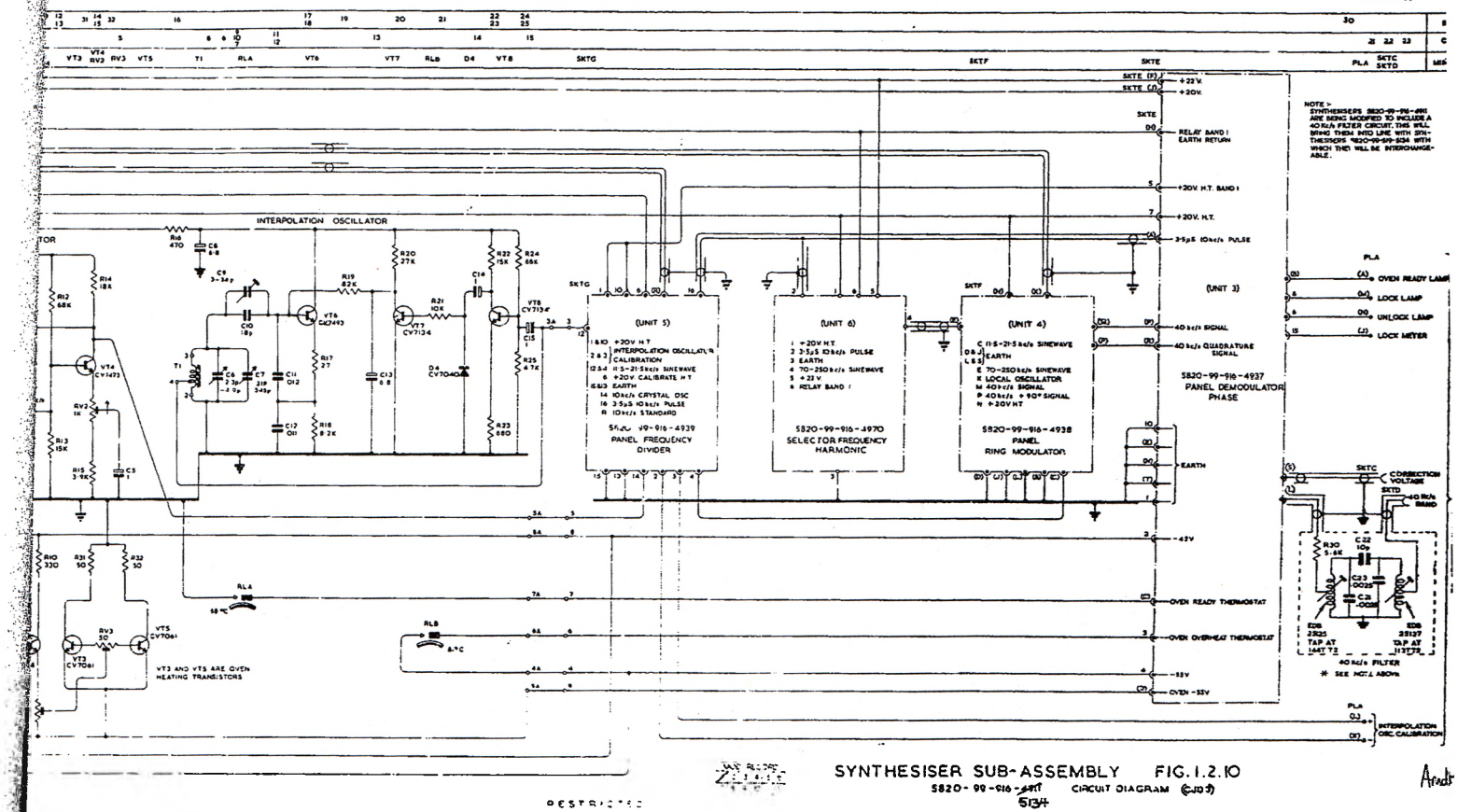
RELAY AMPLIFIER

Original Sept. 1963

RESTRICTED

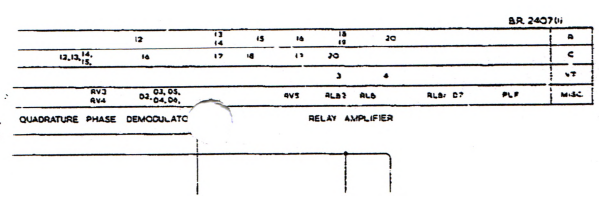
Oscillator and the Interpolation Oscillator.

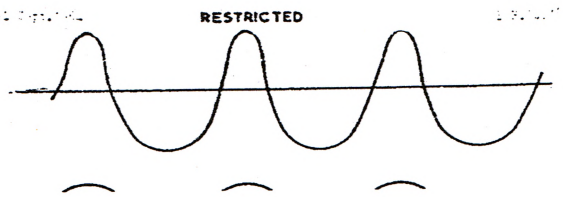
(b) From pin (B) of PLA to:-



SYNTHESISER SUB-ASSEMBLY FIG. 1.2.10

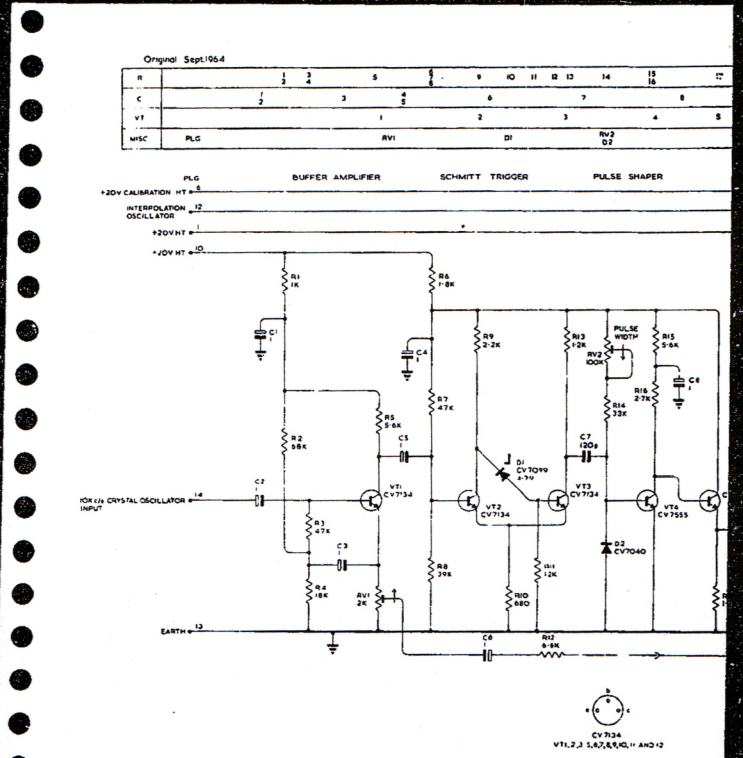
5820-99-916-4911 CIRCUIT DIAGRAM (5134)

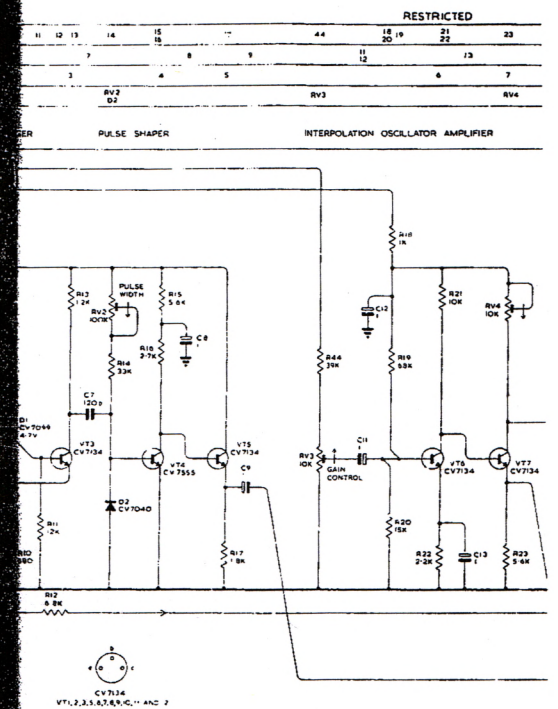




A10

A11





B10

RESTRICTED

B11

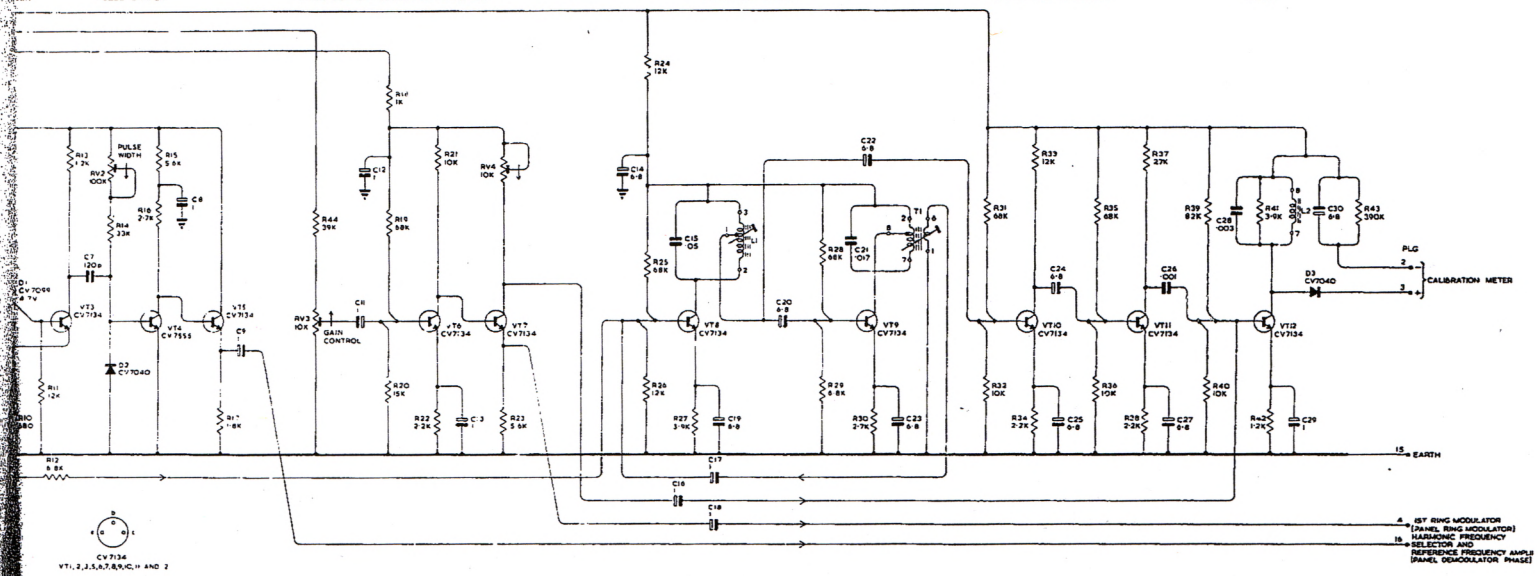
Change No. 4 October 1971

CABINET

RESTRICTED

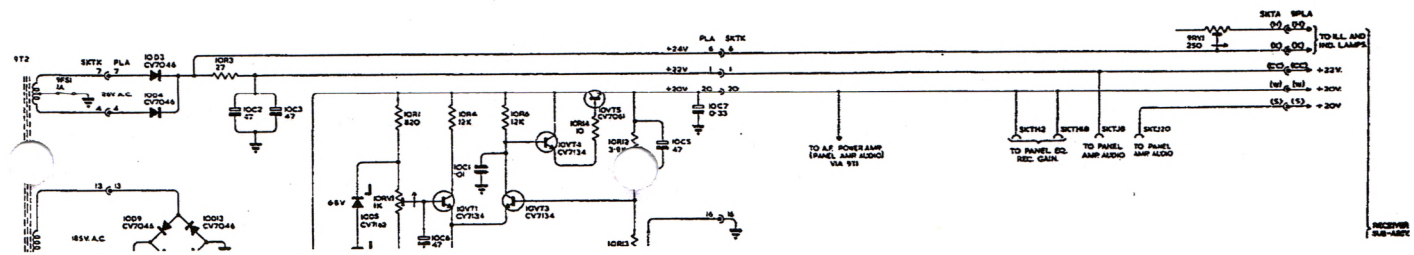
B.R.2407 (1)

PULSE SHAPER | INTERPOLATION OSCILLATOR AMPLIFIER | FREQUENCY DIVIDER | OVERDRIVEN AMPLIFIER | MIXER

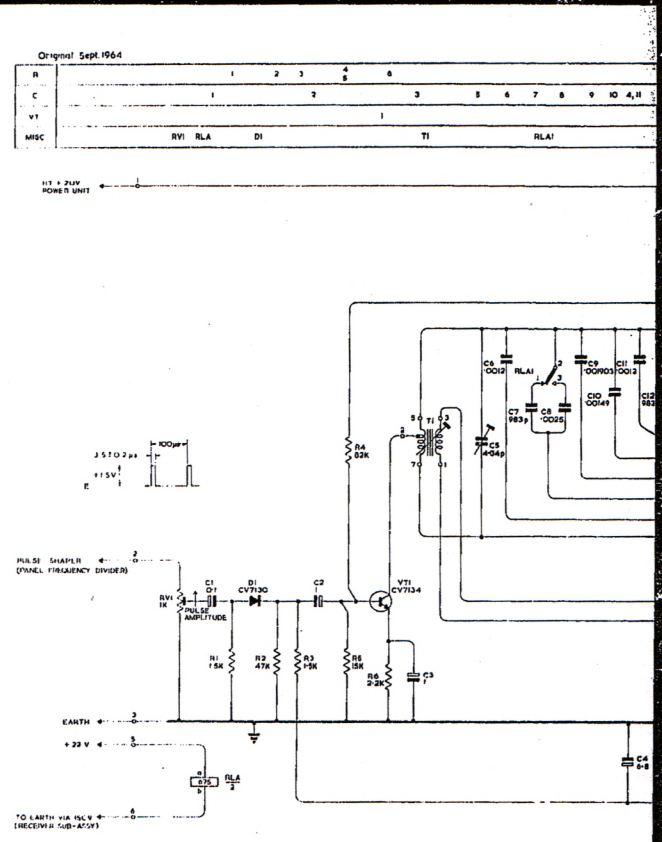


PANEL FREQUENCY DIVIDER FIG.1.2.11.
CIRCUIT DIAGRAM 5820-99-916-4939

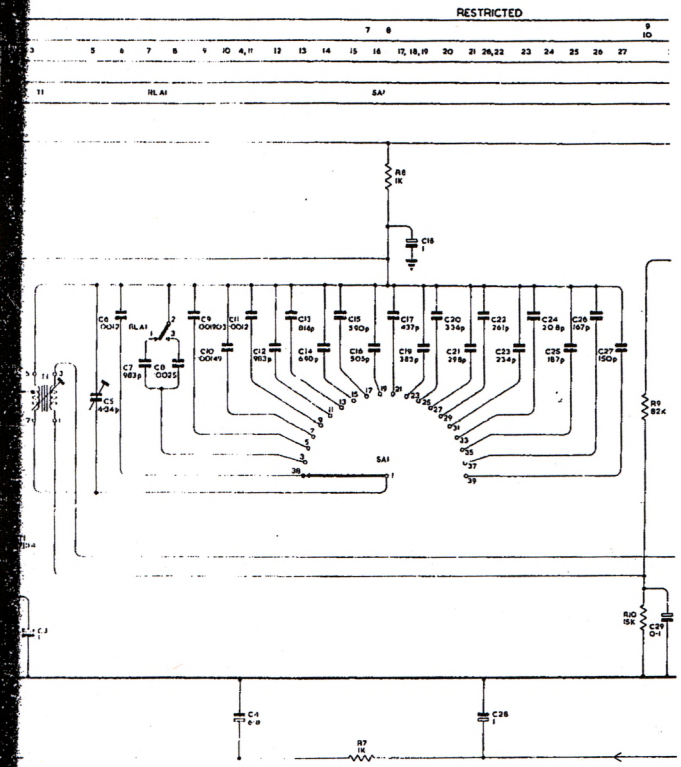
B.R.2407 (1)



B1 B2



C1



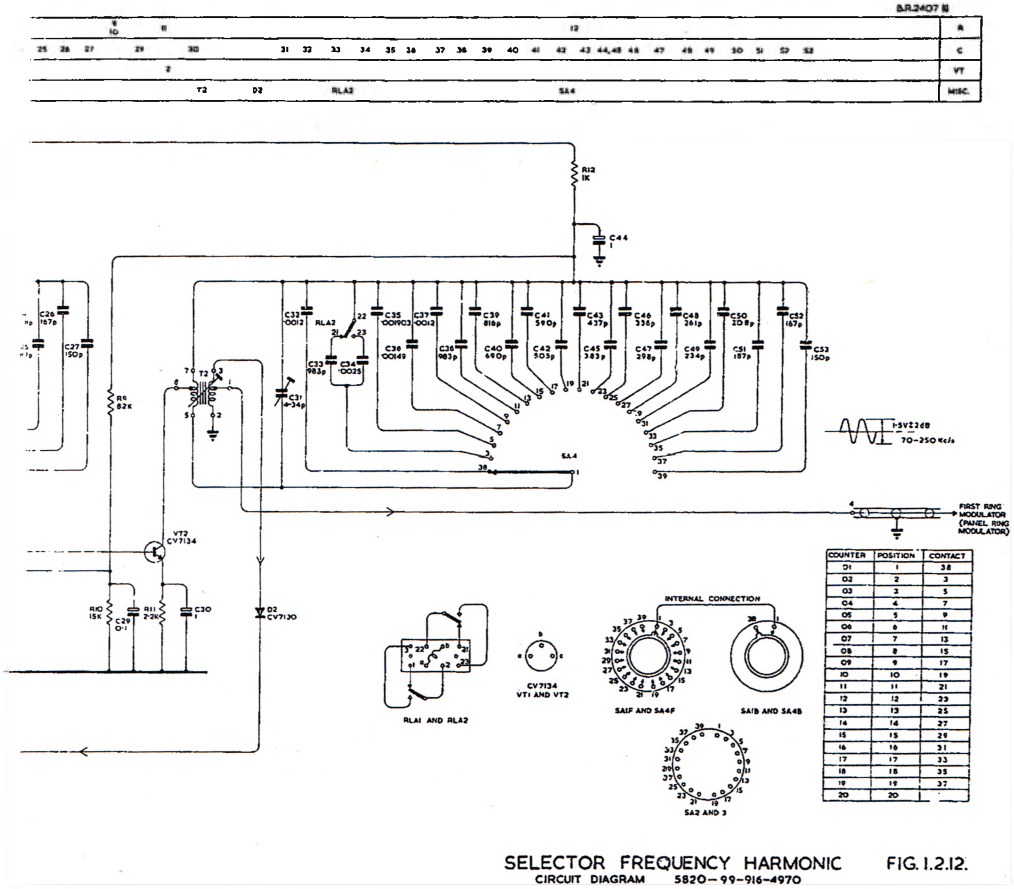
RESTRICTED

C1 C2

CHAPTER 3

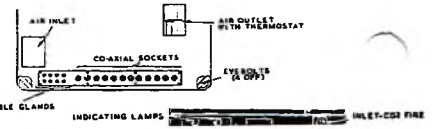
FIVE-RECEIVER CABINET

CABINET, ELECTRICAL EQUIPMENT N.S.N.5 8 2

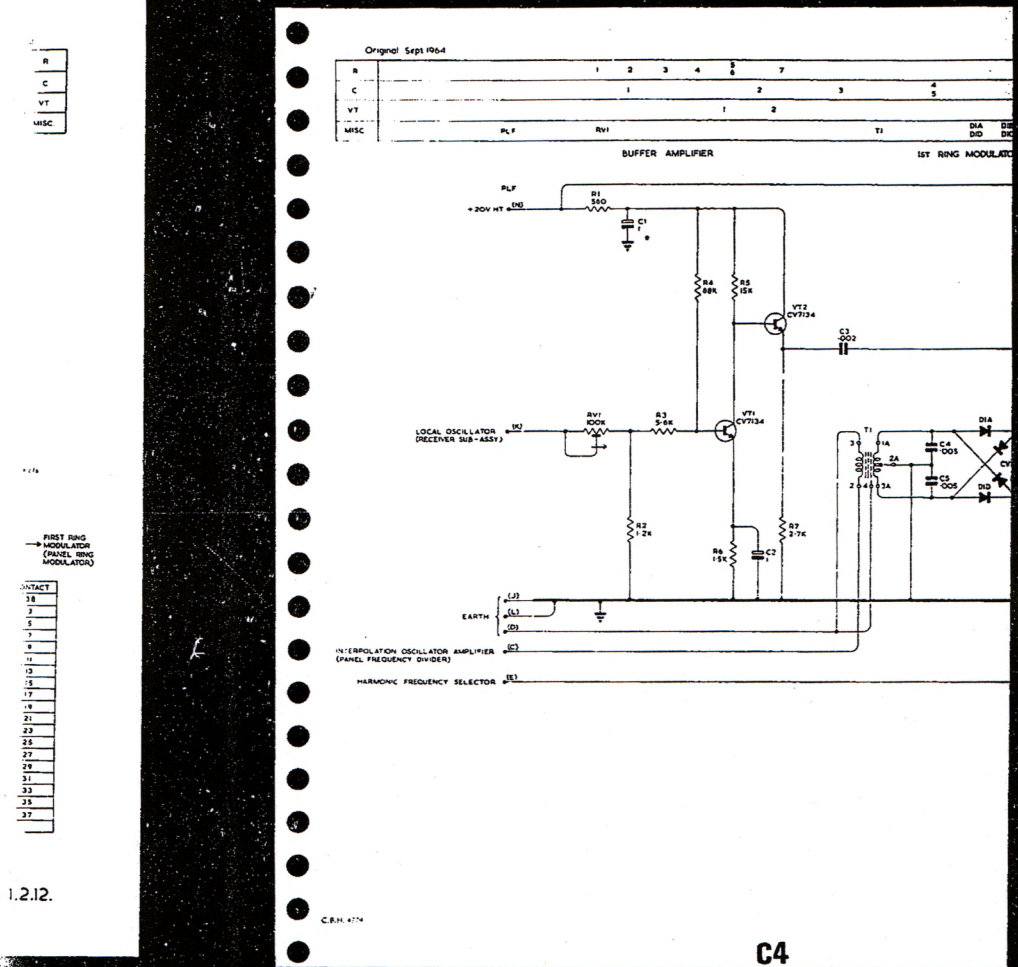


SELECTOR FREQUENCY HARMONIC FIG. 1.2.12.
CIRCUIT DIAGRAM 5820-99-916-4970

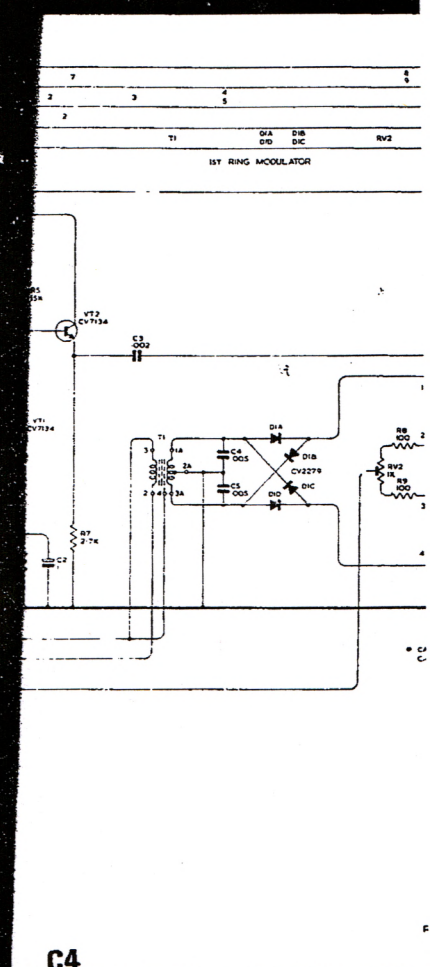
C3



B3 B4



C4



C4

FIRST RING MODULATOR (PANEL RING MODULATOR)

CONTACT
38
3
5
7
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1.2.12.

CHAPTER 3

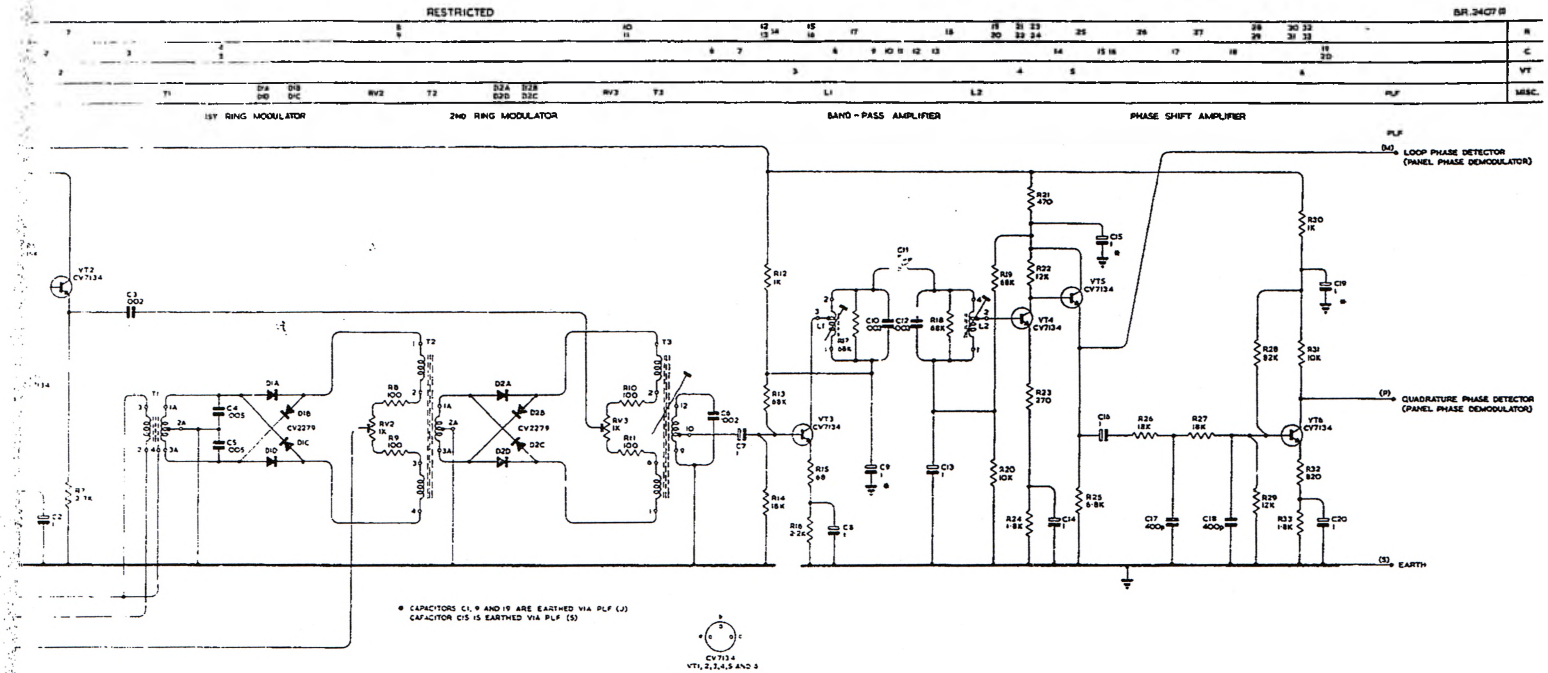
FIVE-RECEIVER CABINET

CABINET, ELECTRICAL EQUIPMENT N.S.N. 5820-99-916-4905

General

Plates screwed to steel angle strip which is bolted
provide baffle trays between adjacent receivers (Fi

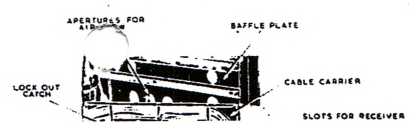
CABLE CARR



PANEL RING MODULATOR FIG. 1.2.13.
5820-99-916-4938 CIRCUIT DIAGRAM

RESTRICTED

Plates screwed to steel angle strip which is bolted to the sides of the cabinet provide baffle trays between adjacent receivers (Fig.1.3.2).



RESTRICTED

(a) ILP1 - in series with the resistor R1 across the supply to the receivers.

(b) ILP2 - in series with the resistor R2 across the supply to the anti-condensation heaters.

INTERLOCK

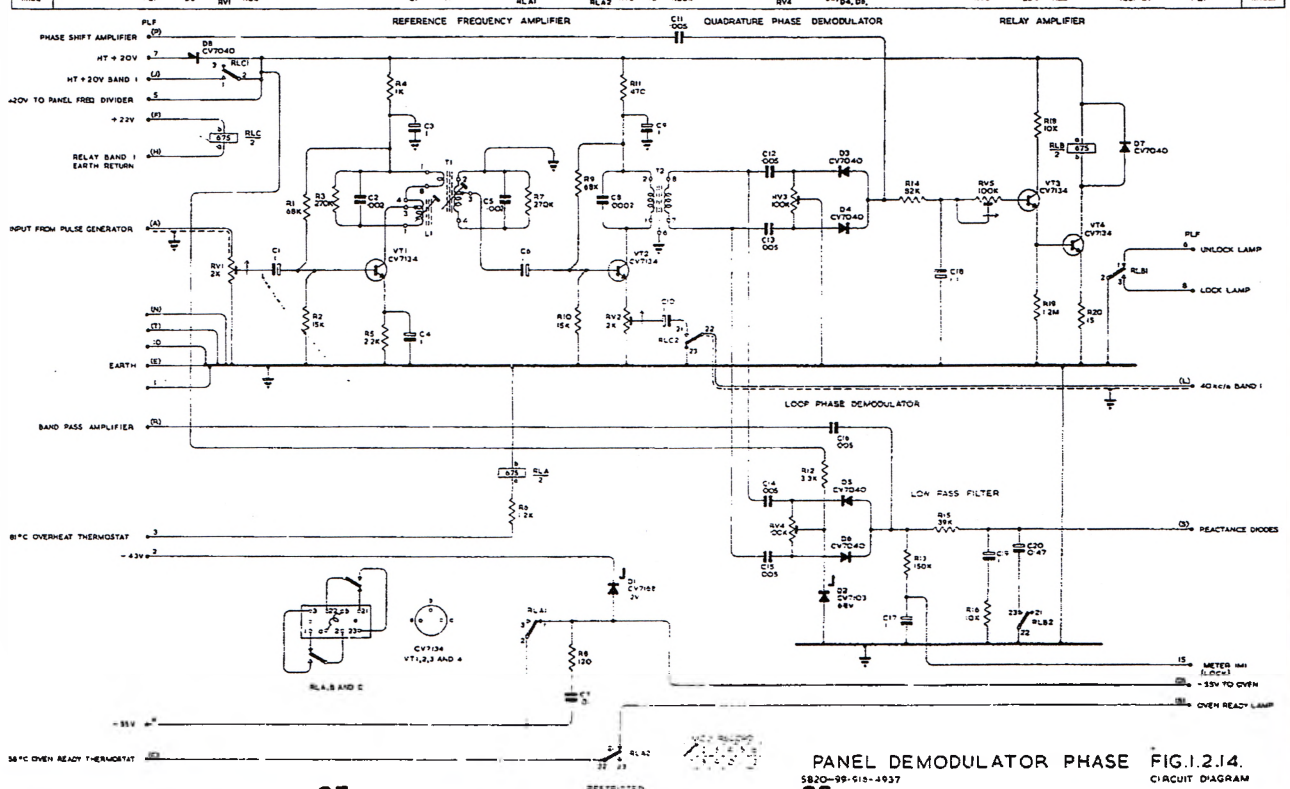
ANTI-CONDENSATION PREPARATION

10

Change No.4 October 1971

RESTRICTED

BR 2407(1)



PANEL DEMODULATOR PHASE FIG.1.2.14.
5820-99-916-4037 CIRCUIT DIAGRAM

C7 C8

RESTRICTED

lock-in catches engage with spigots on the fixed members and the receiver is now locked into the cabinet. The lock-in catches also serve to secure the mountings when the cabinet is in transit.

Interlock Switches

8. Each of the five receivers is provided with two three-position interlock switches, SA/SB, SD/SE, SG/SH, SK/SL and SN/SP for receivers A to E respectively. The switches are mounted on the left-hand side of the cabinet immediately above the telescopic mounting of the receiver with which they are associated (Fig. 3). One switch is connected in each line of the power supply to the receiver. They operate as follows:-

(a) Position 1: Receiver in the closed position in the cabinet

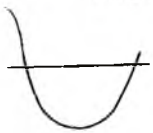
53 Original Sept. 1964.

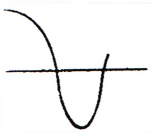
RESTRICTED

(c) I.F. output from each receiver:-

(i) Socket SKTH from Receiver A.
(ii) " SKTJ " " B.
(iii) " SKTK " " C.
(iv) " SKTL " " D.
(v) " SKTM " " Z.

11. The seven cable glands are utilised as follows:-





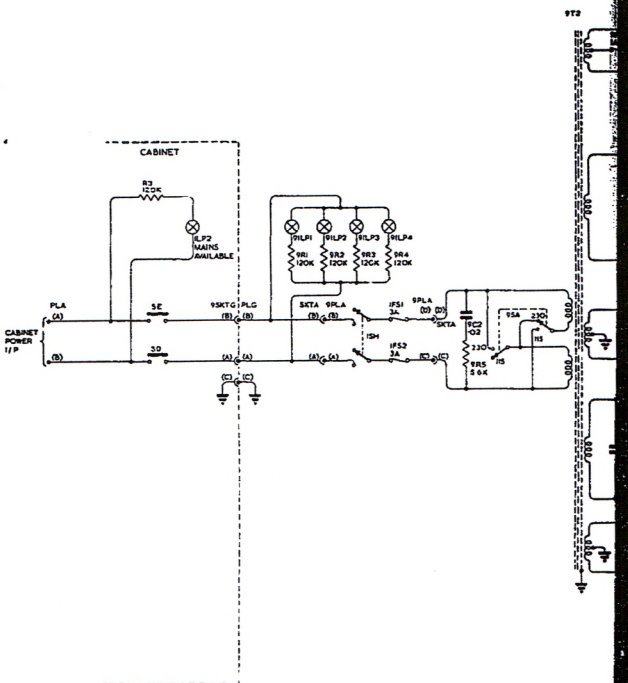
OF LAG OF ERROR SIGNAL
FERENCE SIGNAL

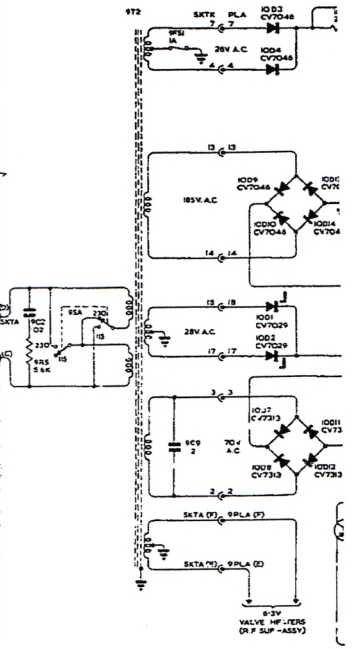
/AVEFORMS FIG. 1.2.15

SKTE)

-)

...et which enter and





C10

(ii) Receiver B (Socket 3KTC Power Supply) via plug B9PLC to T.S.4.

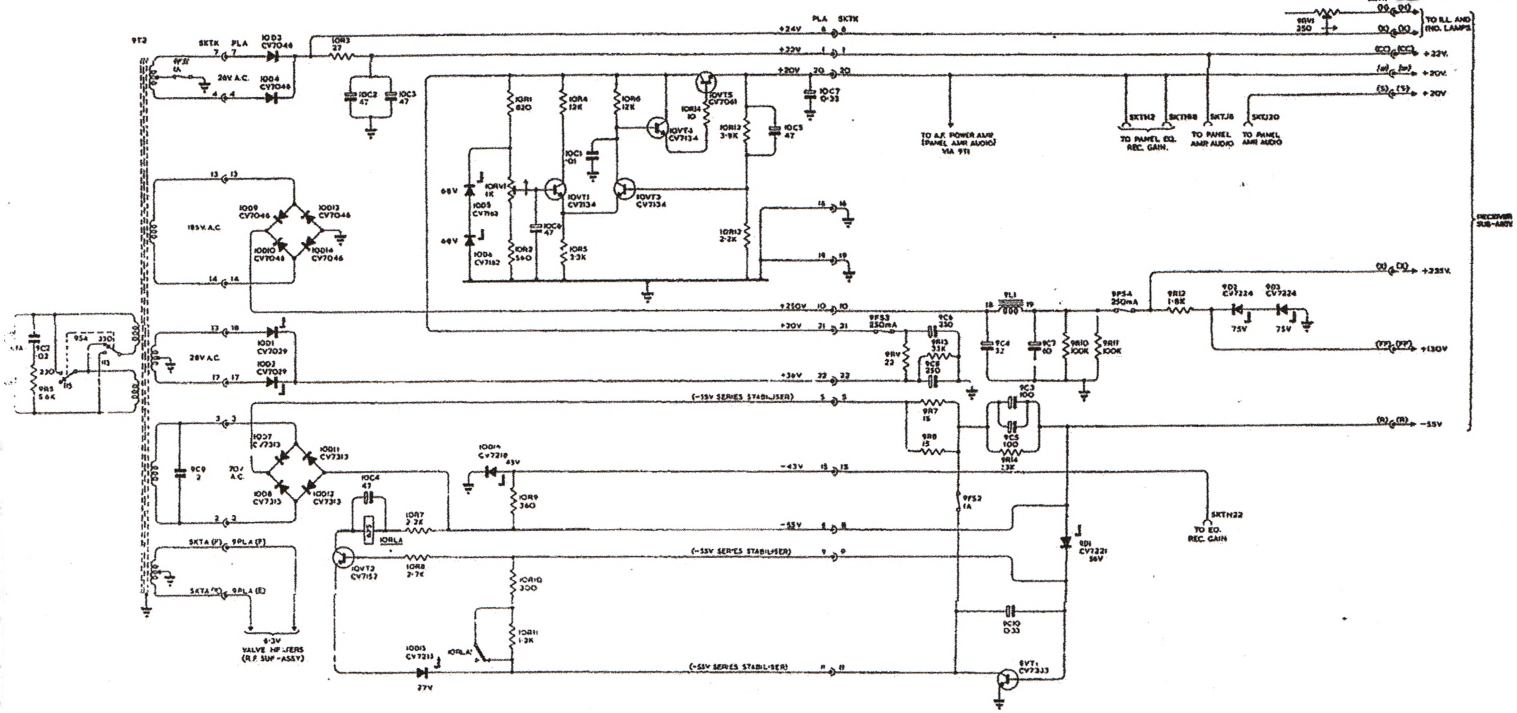
(iii) " C (" " " ") " " C9PLC " T.S.5.

(iv) " D (" " " ") " " D9PLC " T.S.6.

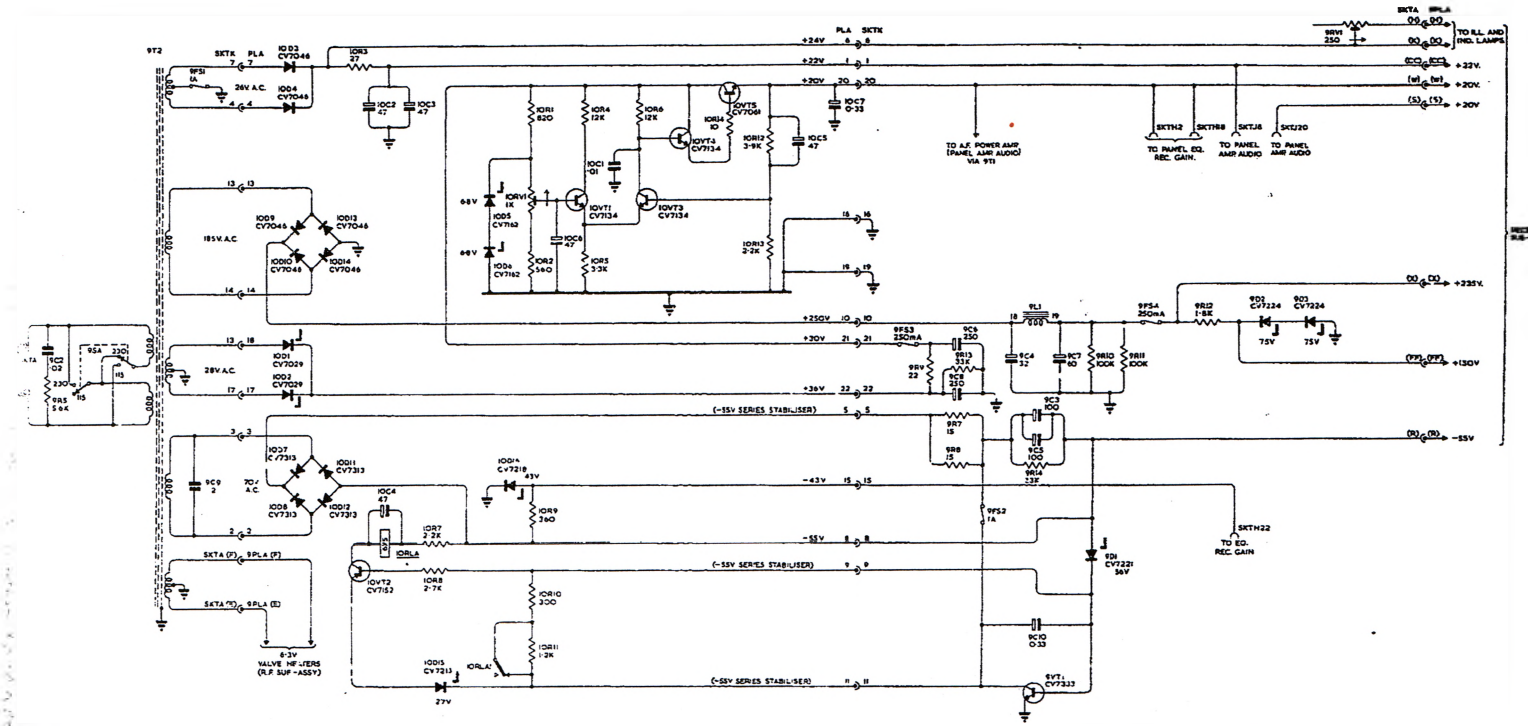
(v) " E (" " " ") " " E9PLC " T.S.7.

14. The final output of the receivers from the cabinet via the cable glands are taken from two multiple D.E.E.terminal blocks T.S.8 (receivers C,D and E) and T.S.9 (receivers A,B and C) to which the terminal blocks T.S.2,4,5,6 and 7 are connected (Para.13(c)).

15. The connections to the anti-condensation heaters HP1 and HR2 and the connections to the thermal relay RLA in the fire warning circuit both terminate in soldered ends.



POWER SUPPLY FIG. 1.2.16.
SIMPLIFIED FUNCTIONAL DIAGRAM



POWER SUPPLY FIG.1.2.16.
SIMPLIFIED FUNCTIONAL DIAGRAM

C11 C12