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*Despite the above, we will be making copies of essential technical information (circuit diagram, parts list, layout) freely available to all via our website as time and effort permit. This will be done to try and encourage and enable the maintenance of our remaining stock of vintage electronic equipment*

## ***Guidance on using this electronic document***

### **Opening the file**

You need to view this document with Acrobat Reader **version 5.0** or later (current version at time of writing is v8). This software is available free of charge from Adobe. It is also widely distributed with many other software and hardware products. You can upgrade your Acrobat Reader by direct download from the internet at <http://www.adobe.com/products/reader/> - or going to <http://www.adobe.com/> and navigating from there.

It is possible that the document may open with a version of the Acrobat Reader earlier than 5.0 (thus allowing you to get this far!), but is also likely that some pages will not be shown correctly.

### **Reading the file on-screen**

When you open the file, you will see the first page displayed, and also a list of headings down the left hand side. These are “bookmarks”, which provide you with an “on-screen index”. By (left) clicking on any of these headings, you will be taken immediately to the page it refers to. This enables quick navigation around the document.

### ***Large diagrams***

The large diagrams (larger than A4) are given in two formats – in A4 size “sub-sheets” to allow easy printing, and also as A3 complete sheets. When you click on a bookmark for a large diagram, you are taken to the A3 version, so you can see the whole diagram on-screen. When you print the document, the A4 versions of these pages are used. (You can of course print the A3 size sheets, if you are lucky enough to have an A3 format printer).

### **Printing the document**

The document started life on paper, and one aim of these archive copies is to provide a good record of the original. If you want to, you can make a pretty accurate copy of the original from our file.

The vast majority of our users have access only to an A4 format printer (this is the common paper size available in UK and Europe, which measures 29.7cm by 21.0cm), and special steps have been taken to provide accurate reproduction of large pages (typically A3 size or large).

To keep close to the original, our file is intended for double-sided printing – that is printing on both sides of one sheet of paper. Nearly all original documents are printed in this way to keep their size to a minimum and save paper. This also means that you will occasionally get a blank sheet – because the original had exactly that. It also means that properly bound copies will remain readable – no text disappearing into the binding if the copy is properly paginated.

Large sheets are a problem if you have only an A4 format printer. Shrinking such sheets to half size (or smaller) is not generally an answer because they often become unreadable without a magnifying glass. The solution used here is for you to print A3 sheets as two overlapping A4 sheets (overlap size is 1.5cm), and then cut and paste them together.

### ***A4 double-sided printing***

Double-sided printers (automatic) are becoming increasingly common, however double-siding can often be achieved manually by first printing the odd sides only, then turning the sheets over, feeding them through again and printing the even sides. Your printer manual will explain how to do this for your specific printer (don't assume its dead straightforward – read the manual!).

The following instructions are based on Adobe Reader v8, and other versions may differ in detail:

1. Work out the page numbers you want to print. If you want to print the whole document, then within “Bookmarks” (see “*Reading the file on-screen*” above), first click on “**Front....**”, and note the page number given at the bottom of the Acrobat window – this will give you the page number of the first page to be printed. Similarly click on “**End of A4 printable copy**”, to determine the last page to be printed. (If you are only printing part of the document, then just note the page range you want.)
2. Select “File – Print” or click on the printer icon. This will bring up the print dialog box.
3. Select the correct printer if necessary.
4. In the area marked “Print Range” click on the radio button marked “Pages from..”, then enter the first and last page numbers worked out in step 1 into the “from” and “to” boxes.

5. If your printer has automatic double-siding, you may still need to select “double-sided printing” if this not an option you use by default.
6. If you are using manual double-siding, then change the “subset” setting from “All pages in range” to “Odd pages only”.
7. In the “Page Handling” area, next to “Page Scaling”, select “Fit to paper”. The press “OK”

If you are doing manual double-siding, then you will need to repeat steps 2 to 7, but in step 6, substitute “Even pages only” for “Odd pages only”. You will need to refer to your printer manual to understand exactly how to feed the sheets back through the printer (which way round to place them) – or find out how to do this by trial and error.

### ***A4 single-sided printing***

Single-sided printing is straightforward. You will just use more paper! And you will get the occasional blank sheet, which you can remove from the stack of printed pages, and re-use in your printer. Just follow the instructions under double-sided printing but ignore all references to double-siding.

### ***Printing the document on an US Letter format printer***

Since A4 and US Letter sizes are similar, it is expected that this document should print satisfactorily on the latter format paper. This has not been tested however, and is not guaranteed. Follow the steps as for A4 printing, and make doubly sure that “Fit to paper” is selected (step 7).

### **Any other problems?**

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*Richard Hankins, January 2008*



RECEIVER, RADIO, R234

TECHNICAL HANDBOOK - FAULT FINDING AND REPAIR DATA

Errata

Note: This Page 0, Issue 2, supersedes Page 0, Issue 1, dated 3 Jul 67, and must be filed immediately in front of page 1, Issue 1, dated 16 May 66. Items 3 and 4 are additional.

1. The following amendments must be made to the regulation.
2. Page 1010, Fig 2504d, grid ref R8.  
Amend the diagram to show C210 connected between PLA-L L40 and LT EARTH (PLA-K)
3. Page 1015, Table 2501, detail for R49 and R55 amend to read:-  

'1/4 10 022-1109

In the rating, type and limit, and part number columns.
4. Page 1056, Table 2503, R75  
Delete all amendment detail as required by Tels E 619 Misc Instr No 3

T/8c/2193  
T/60932/11 (TELS)



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RECEIVER, RADIO, R234

TECHNICAL HANDBOOK - FAULT-FINDING AND REPAIR DATA

This Part 2 contains fault finding and repair data in tabular and diagrammatic form. Part 1 of this EMER contains a general description of the equipment. Tels E 613 and E 614 deal with repairs.

INDEX TO FIGURES

<u>Fig</u>		<u>Page</u>
2501	View of receiver with s.s.b. unit withdrawn ... ..	1004
2502	Receiver block diagram ... ..	1005
<u>S.F. and I.F.1 UNIT</u>		
2503	View of front panel ... ..	1006
2504a	Circuit diagram, s.f. amplifier and calibrator ... ..	1007
2504b	Circuit diagram, first oscillator and buffer/multiplier ... ..	1008
2504c	Circuit diagram, reactance valve and second oscillator ... ..	1009
2504d	Circuit diagram, first mixer, i.f.1 amplifier, second mixer and valve heaters ... ..	1010
2505	Component layout, front panel ... ..	1011
2506	Component, layout, first oscillator and buffer/multiplier compartments ... ..	1012
2507	Component layout, chassis ... ..	1013

S.S.B. UNIT

<u>Fig</u>		<u>Page</u>
2503	View of front panel ... ..	1027
2509a	Circuit diagram, sideband amplifiers and demodulator ... ..	1028
2509b	Circuit diagram, reconditioned and local carrier amplifiers ... ..	1029
2509c	Circuit diagram, a.f.c. limiter and discriminator, a.g.c. rectifier, tuning indicator stage and valve heaters ... ..	1030
2510	Circuit diagram, sideband crystal filters ... ..	1031
2511	Component layout, chassis and panel ... ..	1032
2512	Response curve, carrier filter ... ..	1033
2513	Response curve, sideband filters ... ..	1034
2514	Response curve, a.f.c. discriminator ... ..	1035

TELEGRAPH UNIT

2515	View of front panel ... ..	1046
2516a	Circuit diagram, i.f.2 amplifiers, third mixer, third oscillator, a.g.c. rectifier and sideband line amplifiers ... ..	1047
2516b	Circuit diagram, 3kc/s amplifier, f.s.k. discriminator and tuning indicator stage, a.f.c. comparator and a.f. and monitoring amplifiers ... ..	1048
2516c	Circuit diagram, level indicator, comparator, signal combiner, a.g.c. cathode follower and d.c. output stage ... ..	1049
2516d	Circuit diagram, plugs, sockets, switching and valve heaters ..	1050
2517	Component layout, chassis and panel ... ..	1051
2518	Response curves, telegraph filters ... ..	1052
2519	Response curve, f.s.k. discriminator ... ..	1053
2520	Waveforms, f.s.k. circuits ... ..	1054

POWER SUPPLY UNIT

2521	View of front panel ... ..	1066
2522	Circuit diagram, h.t. supplies and output sockets ... ..	1067
2523	Circuit diagram, l.t. transformer and stabilized l.t. supply ..	1068
2524	Tag identification and primary winding connection diagram, T1 and T2 ... ..	1069
2525	Component layout, main chassis ... ..	1070
2526	Component layout, sub-chassis of stabilized supply ... ..	1071

DISTRIBUTION UNIT

2527	Circuit diagram ... ..	1077
2528	Component layout ... ..	1078
2529	75Ω terminating pad ... ..	1079

CABINET

2530	Inter-unit cable connections ... ..	1080
2531	Cable harness with termination identification ... ..	1081



INDEX TO TABLES

<u>Table</u>		<u>Page</u>
2501	S.F. and i.f.1 unit, component schedule ... ..	1014
2502	S.S.B. unit, component schedule ... ..	1036
2503	Telegraph unit, component schedule ... ..	1055
2504	Power supply unit (excluding 12.6V d.c. stabilized supply) component schedule ... ..	1072
2505	Power supply unit, 12.6V d.c. stabilized supply, component schedule	1075
2506	Distribution unit, component schedule ... ..	1079
2507	Cable harness, component schedule ... ..	1082
2508	Plugs and sockets, pin connection detail ... ..	1084

Notes:

1. Ref Tables 2501 to 2507. These tables are current at the time of issue only. Use the I.S.P.L., when published to demand stores.
2. The prefix of any grid reference, when given in the form A-B5, refers to the main section of the relevant figure. Thus, A-B5 under column heading Fig 2516 refers to Fig 2516a grid reference B5.
3. The following abbreviations have been used in the 'Type and limit' columns:-

comp.	=	composition	var.	=	variable
ins.	=	insulated	mic.	=	mica
w.w.	=	wire wound	pap.	=	paper
vit.	=	vitreous	met.	=	metal
enam.	=	enamel	cer.	=	ceramic
gd.	=	grade	tub.	=	tubular
rect.	=	rectangular	elect.	=	electrolytic
tor.	=	toroidal	mlded	=	moulded
thru.	=	through	al.	=	aluminium

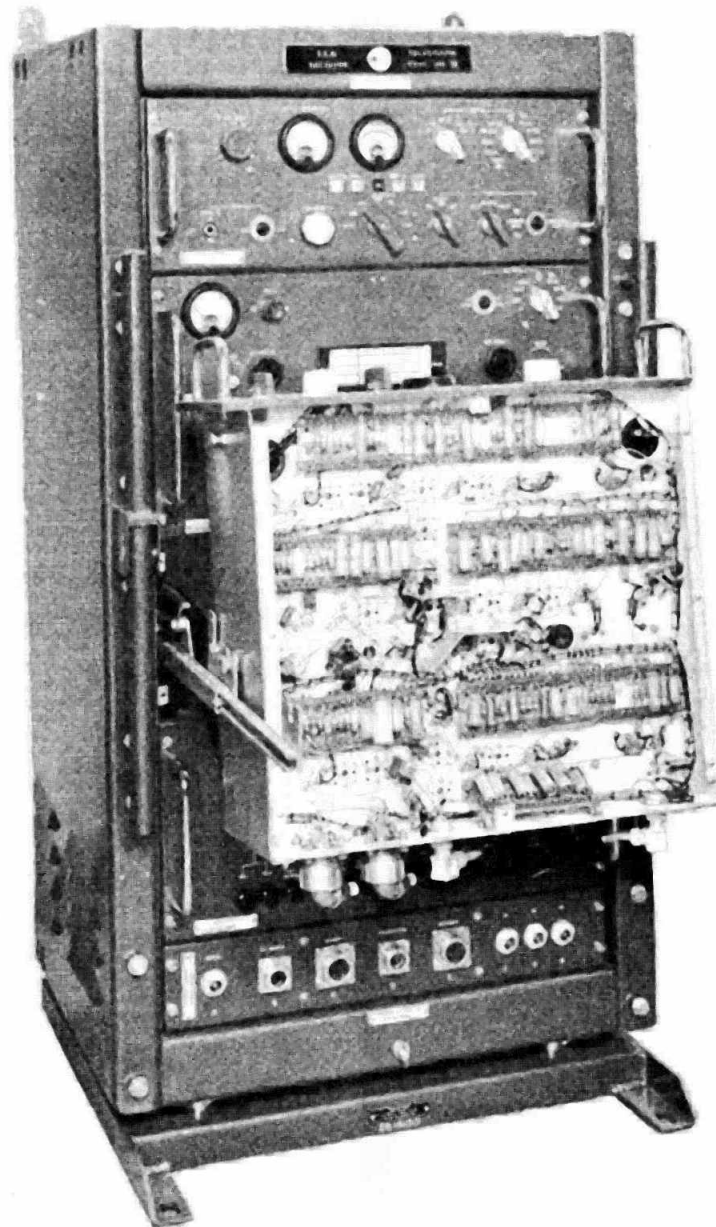
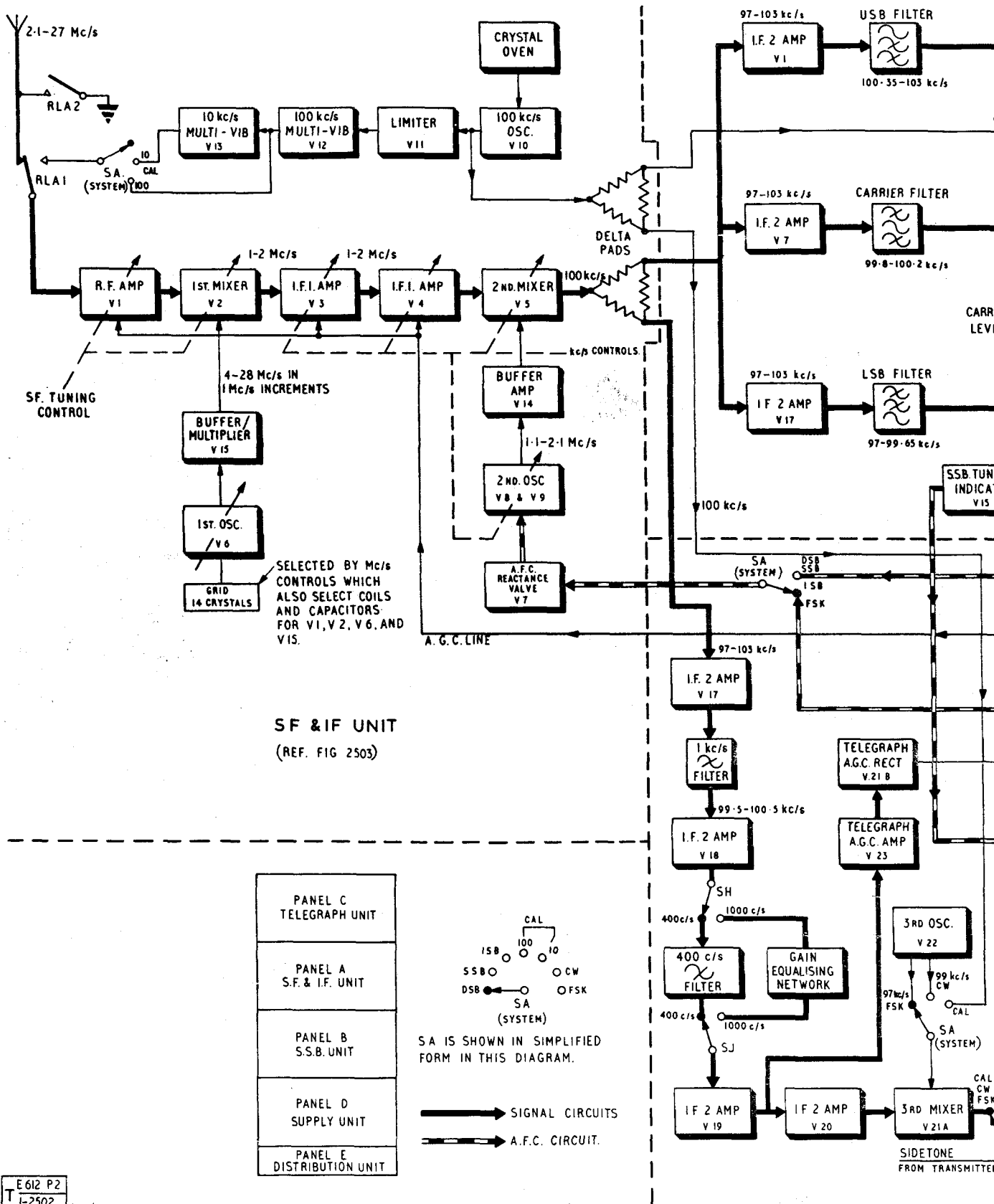


Fig 2501 - View of receiver with s.s.b. unit withdrawn



E 612 P2  
T 1-2502 2193/17

Fig 2502 - Receiver

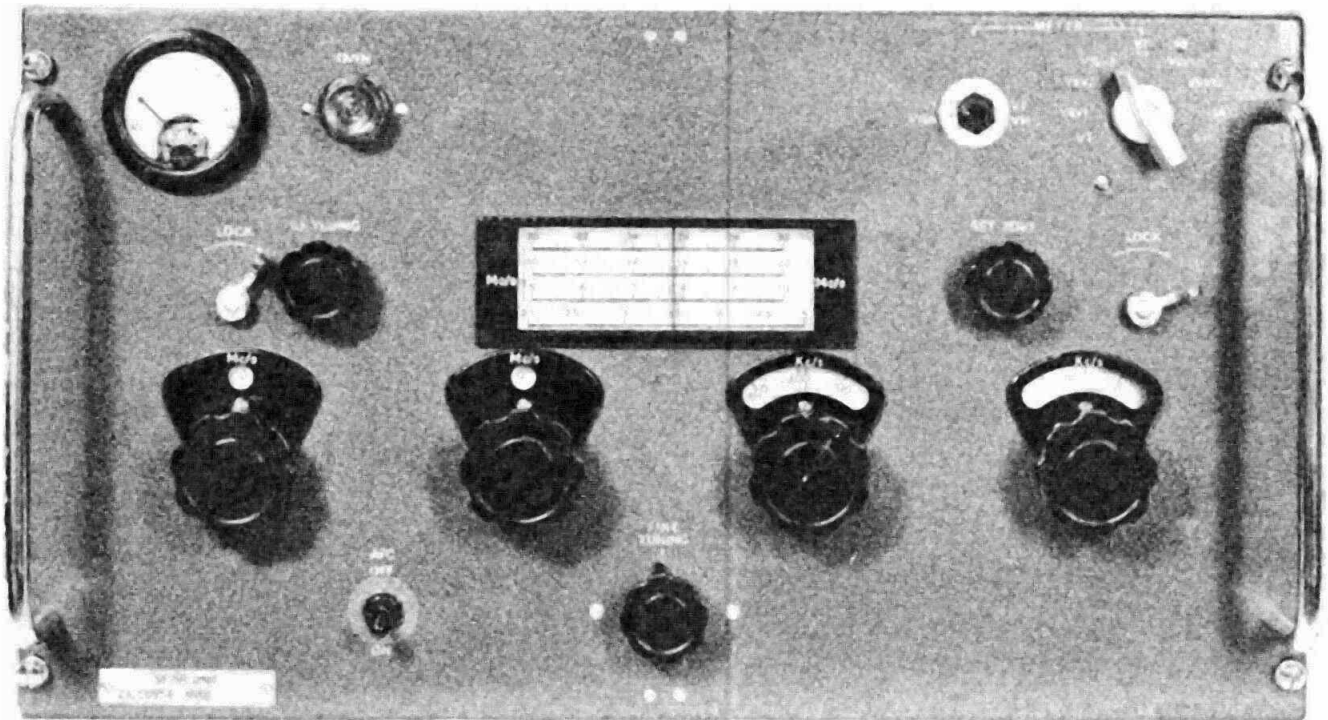
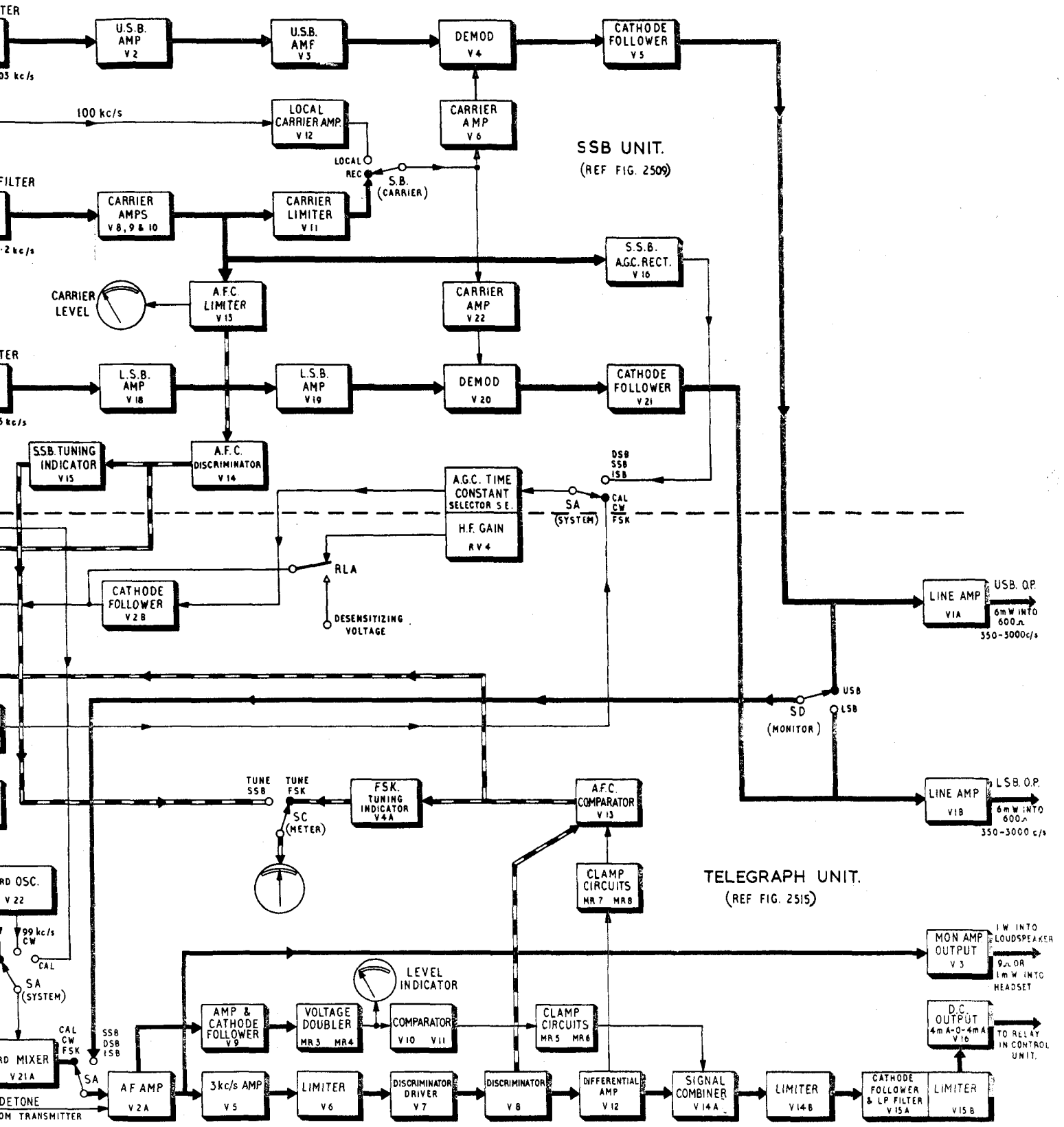


Fig 2503 - S.F. and i.f.1 unit, view of front panel



Receiver block diagram



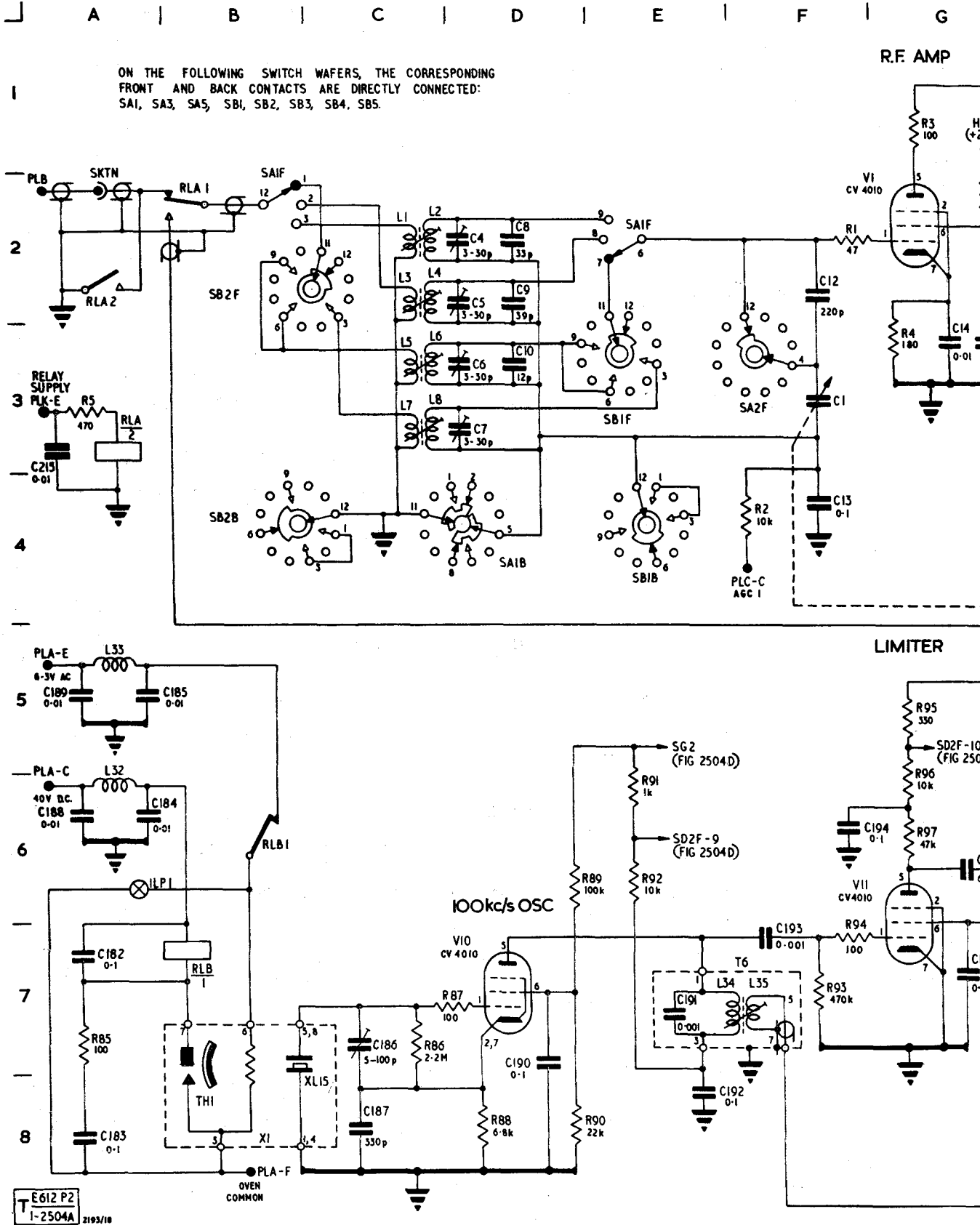
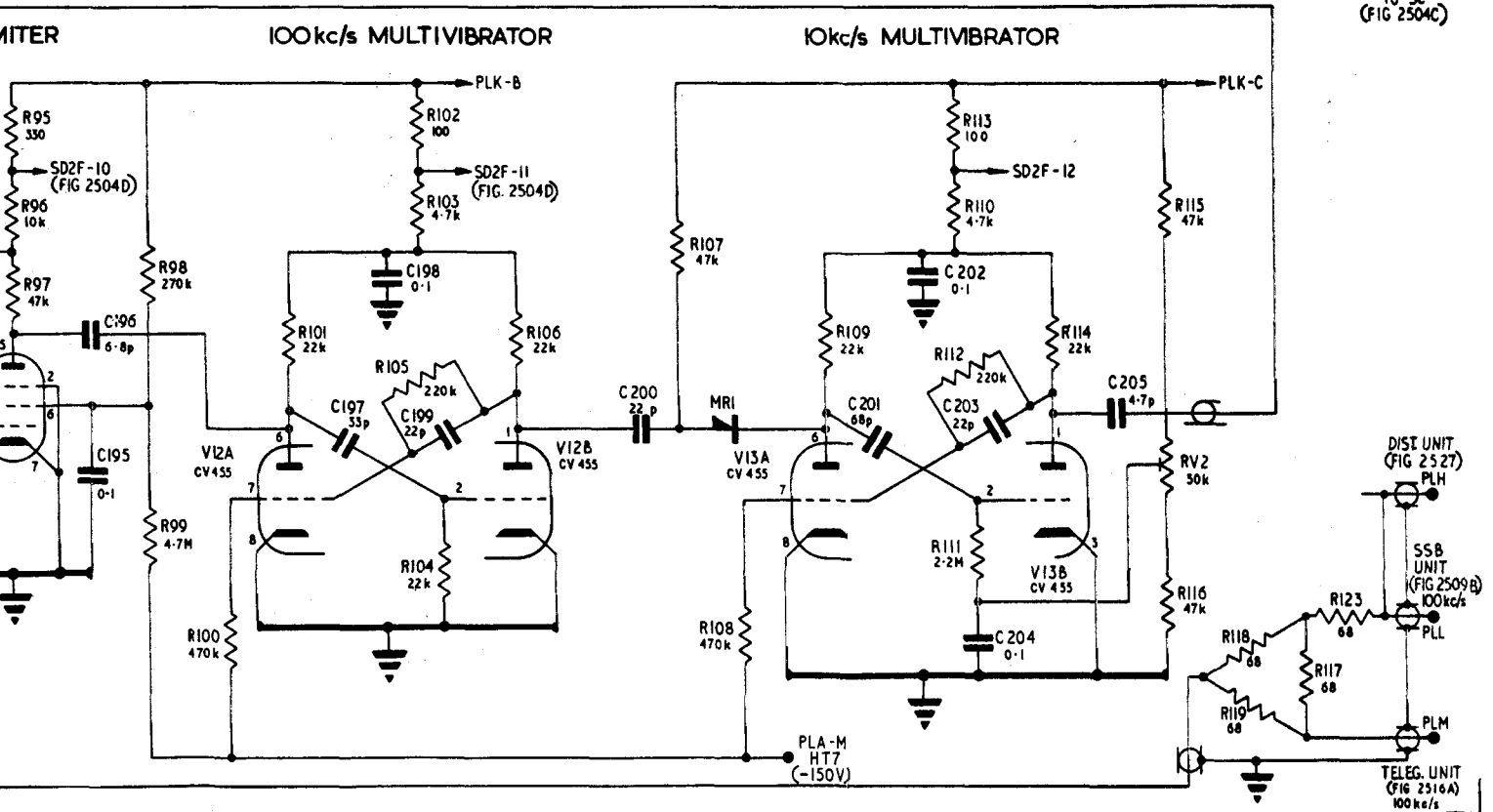
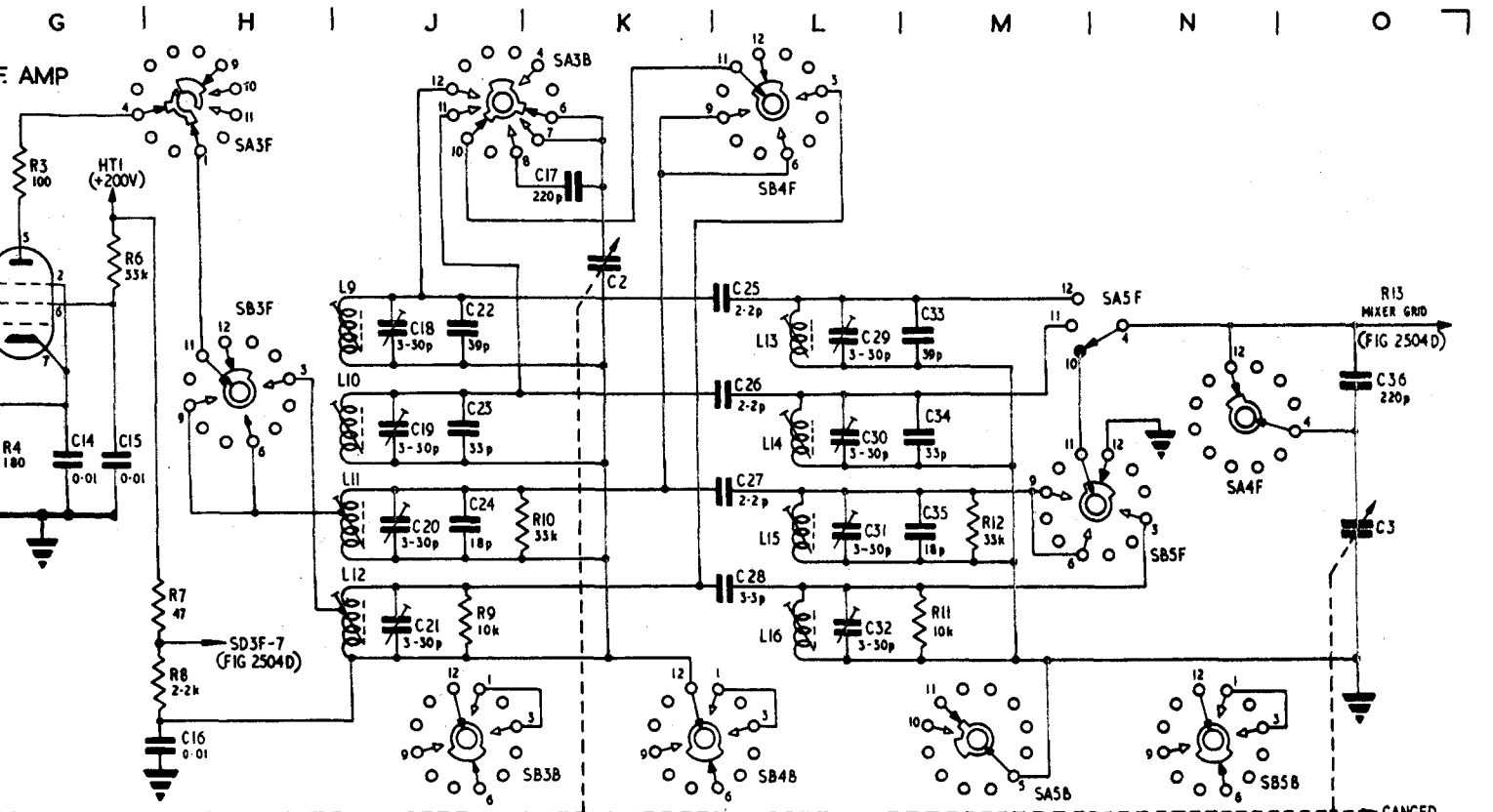


Fig 2504a - S.F. and i.f.1 unit, cir







unit, circuit diagram, s.f. amplifier and calibrator

copies of this figure, for use as bench  
may be obtained on supplementary demand.

Fig 2504a





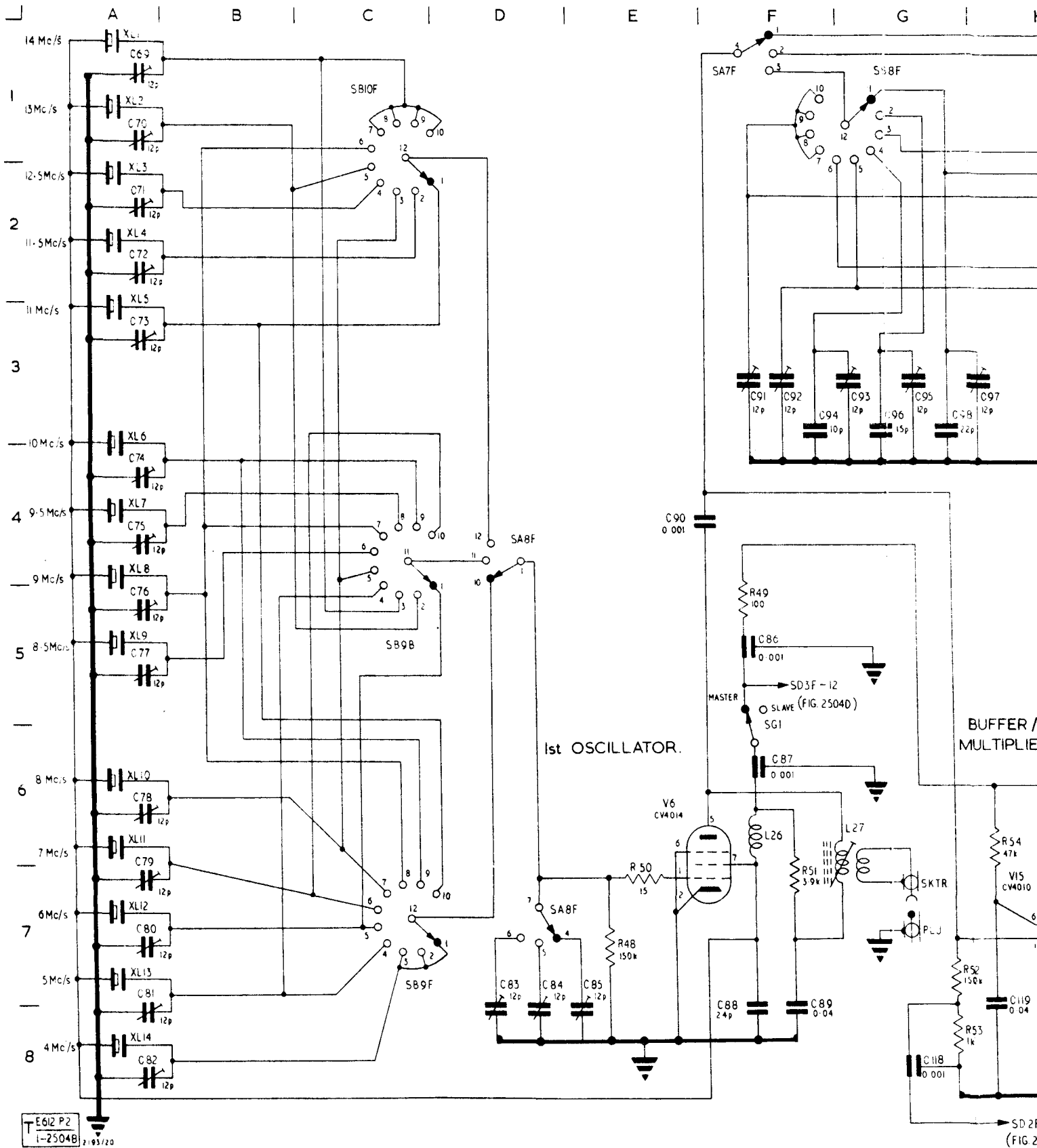
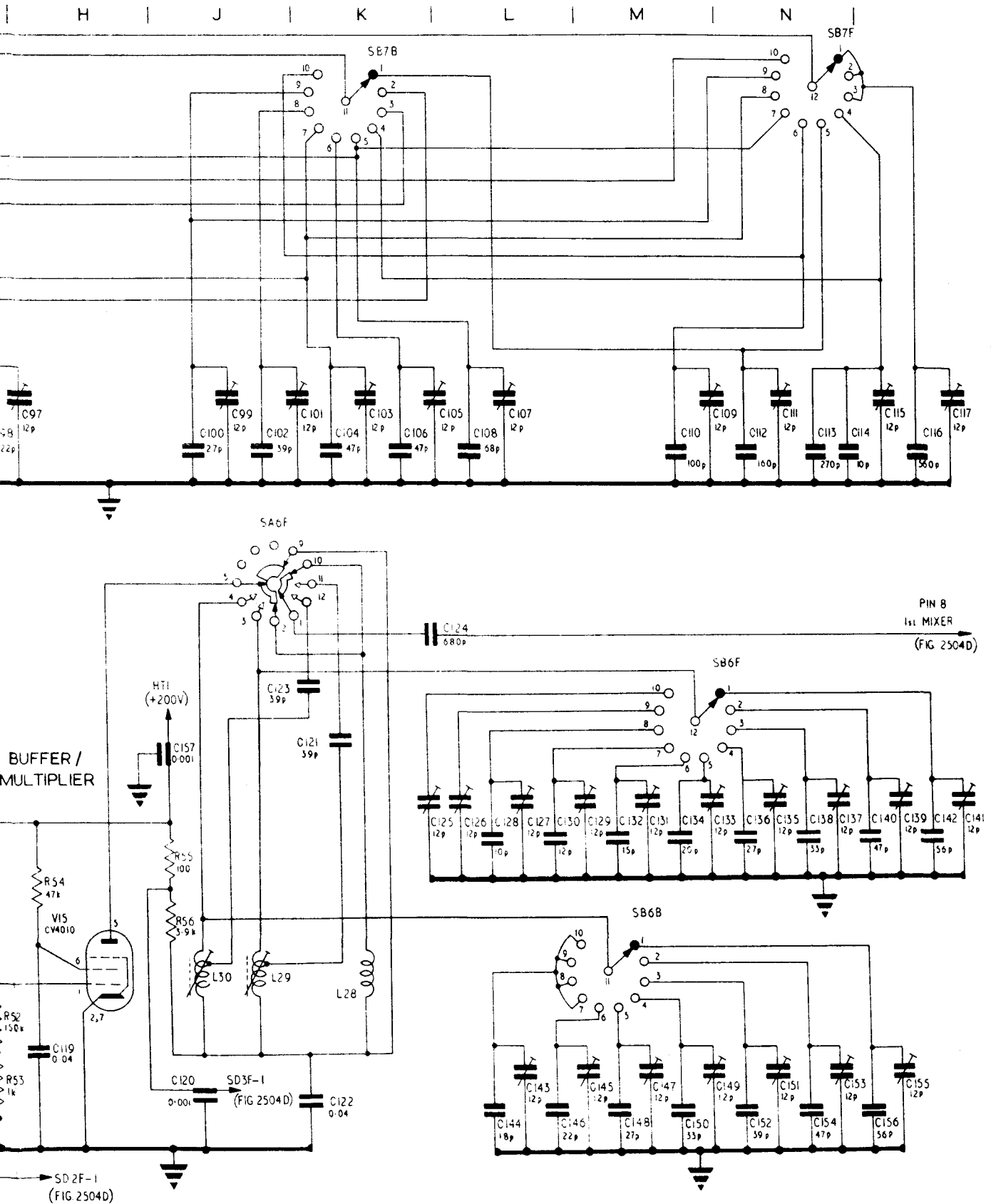


Fig 2504b - S.F. and i.f.1 unit, circuit diagram, fi

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Diagram, first oscillator and buffer/multiplier

Use this figure, for use as bench  
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I P I Q I R I S I T I U I

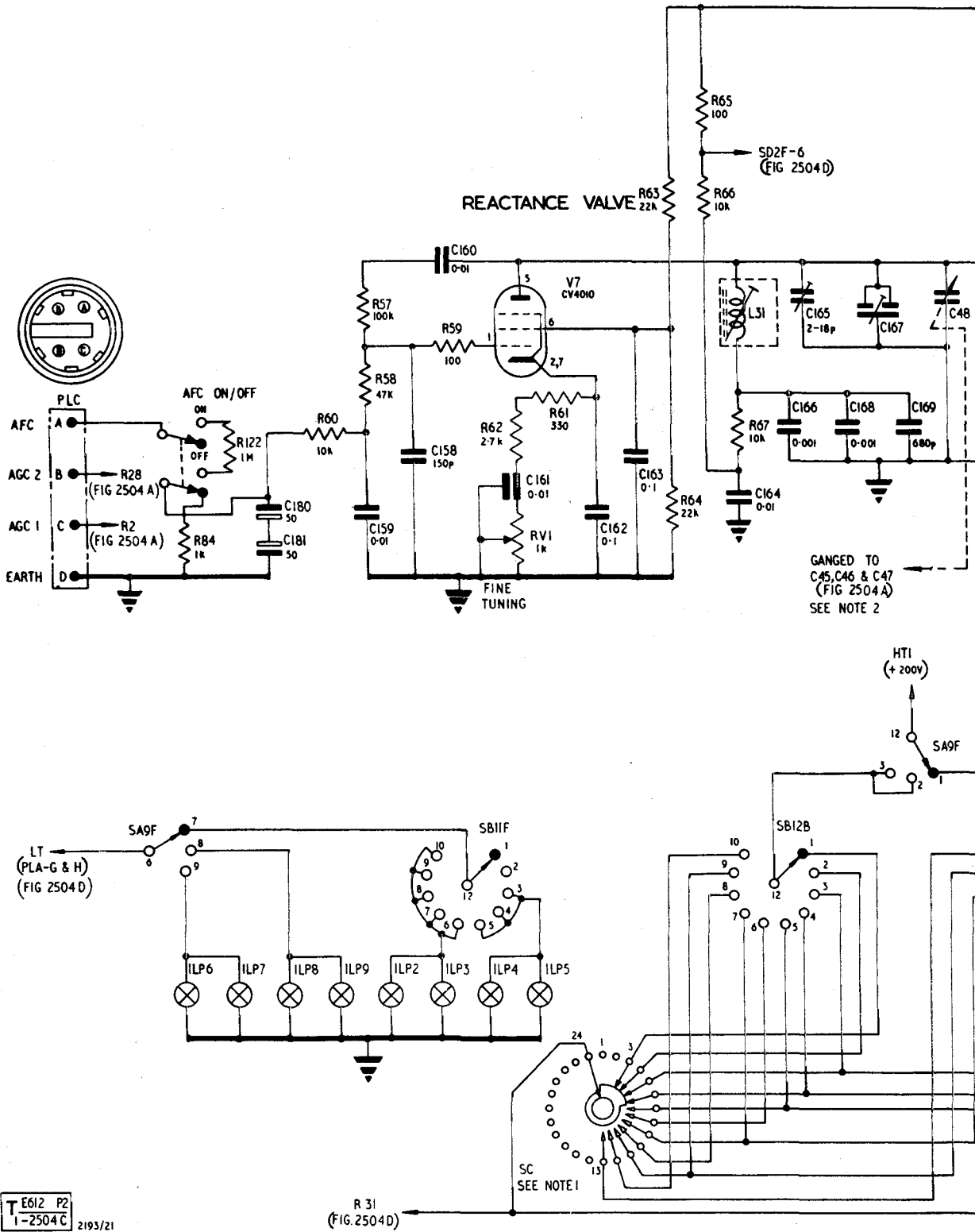
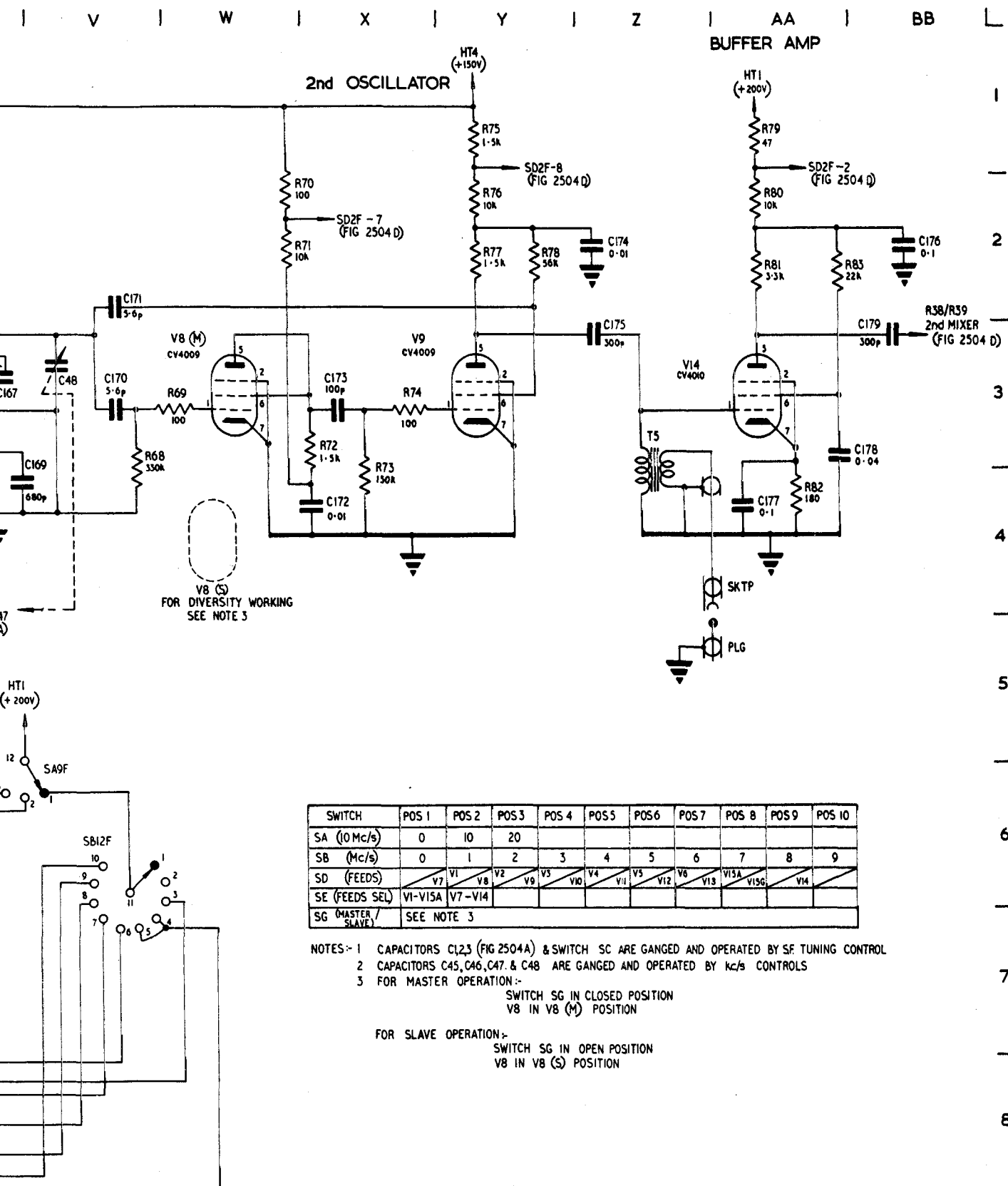


Fig 2504c - S.F. and i.f. 1 unit, circuit

T E612 P2  
1-2504C 2193/21







SWITCH	POS 1	POS 2	POS 3	POS 4	POS 5	POS 6	POS 7	POS 8	POS 9	POS 10
SA (10 Mc/s)	0	10	20							
SB (Mc/s)	0	1	2	3	4	5	6	7	8	9
SD (FEEDS)	V7	V1	V2	V3	V4	V5	V6	V13	V15A	V14
SE (FEEDS SEL)	V1-V15A	V7-V14								
SG (MASTER / SLAVE)	SEE NOTE 3									

- NOTES:-
- CAPACITORS C1,2,3 (FIG 2504A) & SWITCH SC ARE GANGED AND OPERATED BY SE TUNING CONTROL
  - CAPACITORS C45, C46, C47 & C48 ARE GANGED AND OPERATED BY kc/s CONTROLS
  - FOR MASTER OPERATION:-  
SWITCH SG IN CLOSED POSITION  
V8 IN V8 (M) POSITION
  - FOR SLAVE OPERATION:-  
SWITCH SG IN OPEN POSITION  
V8 IN V8 (S) POSITION

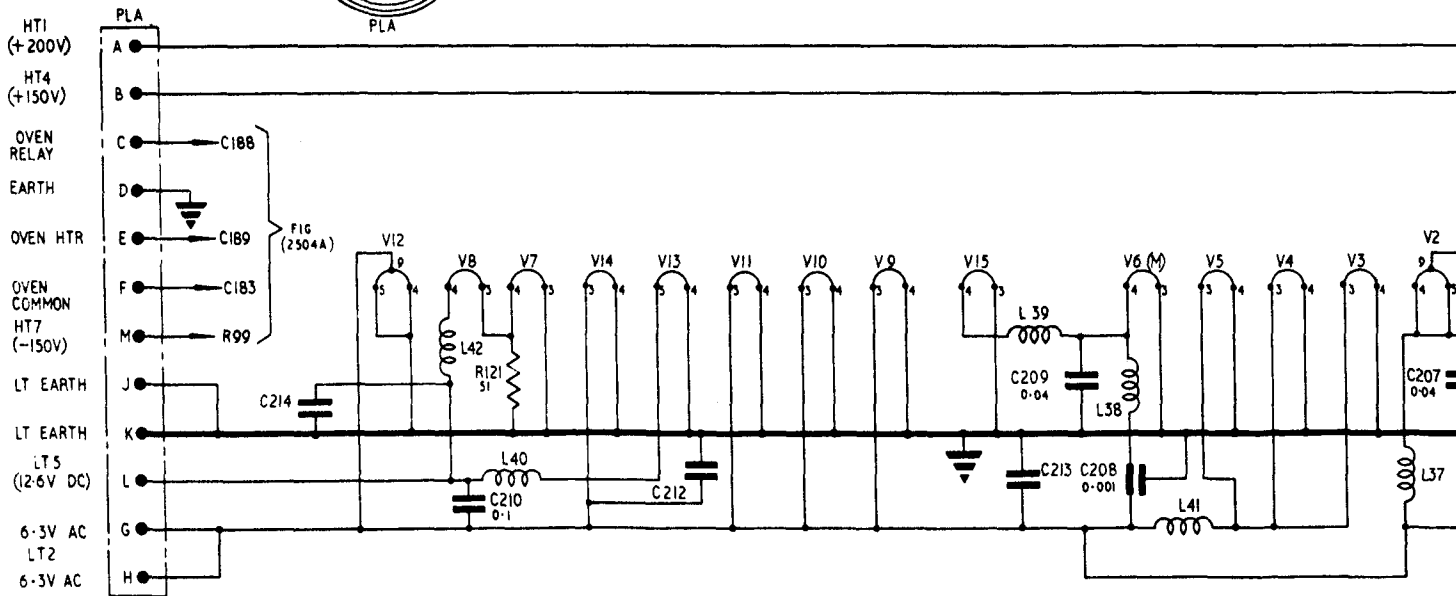
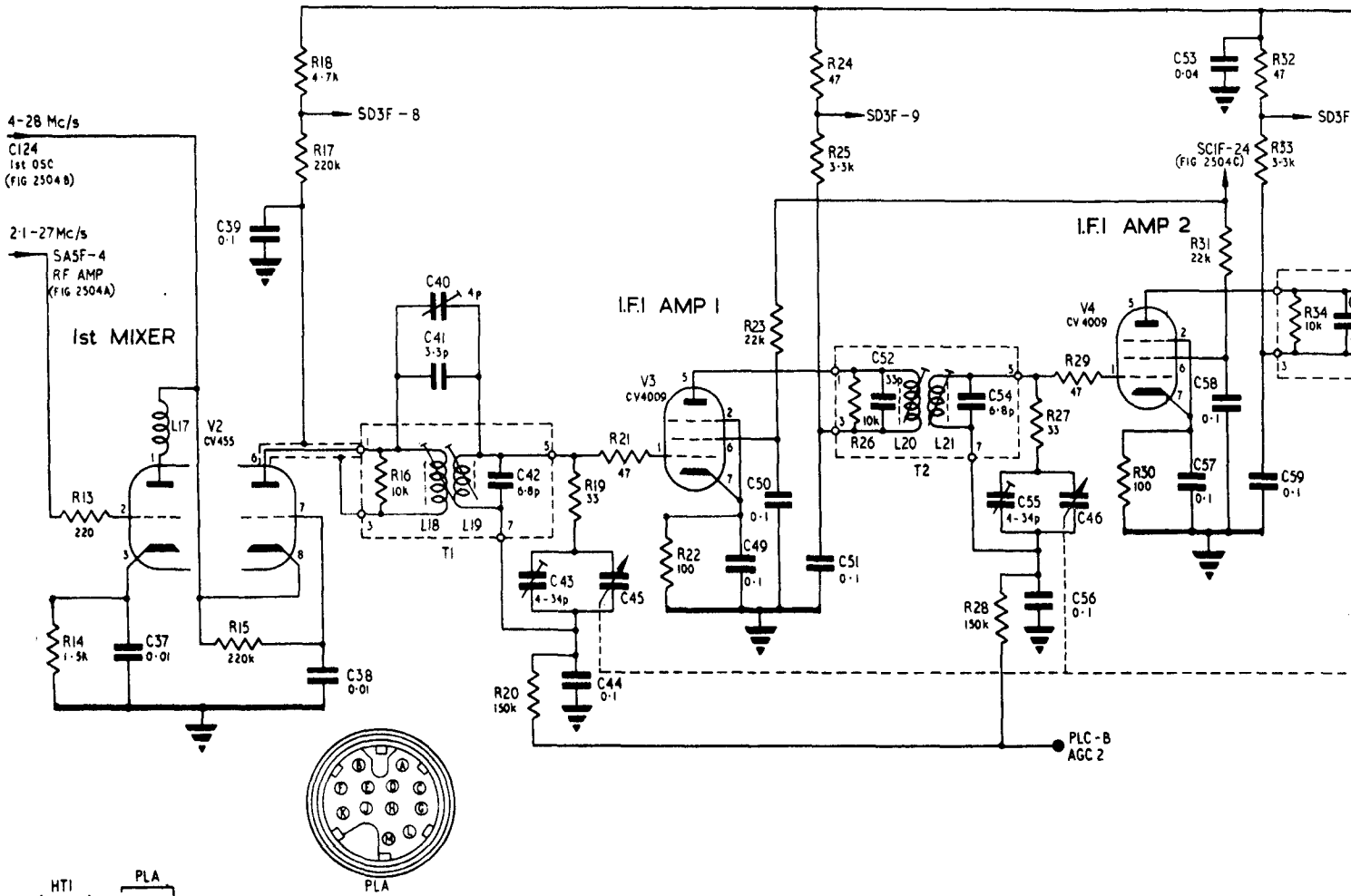
circuit diagram, reactance valve and second oscillator

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P | Q | R | S | T | U | V | W

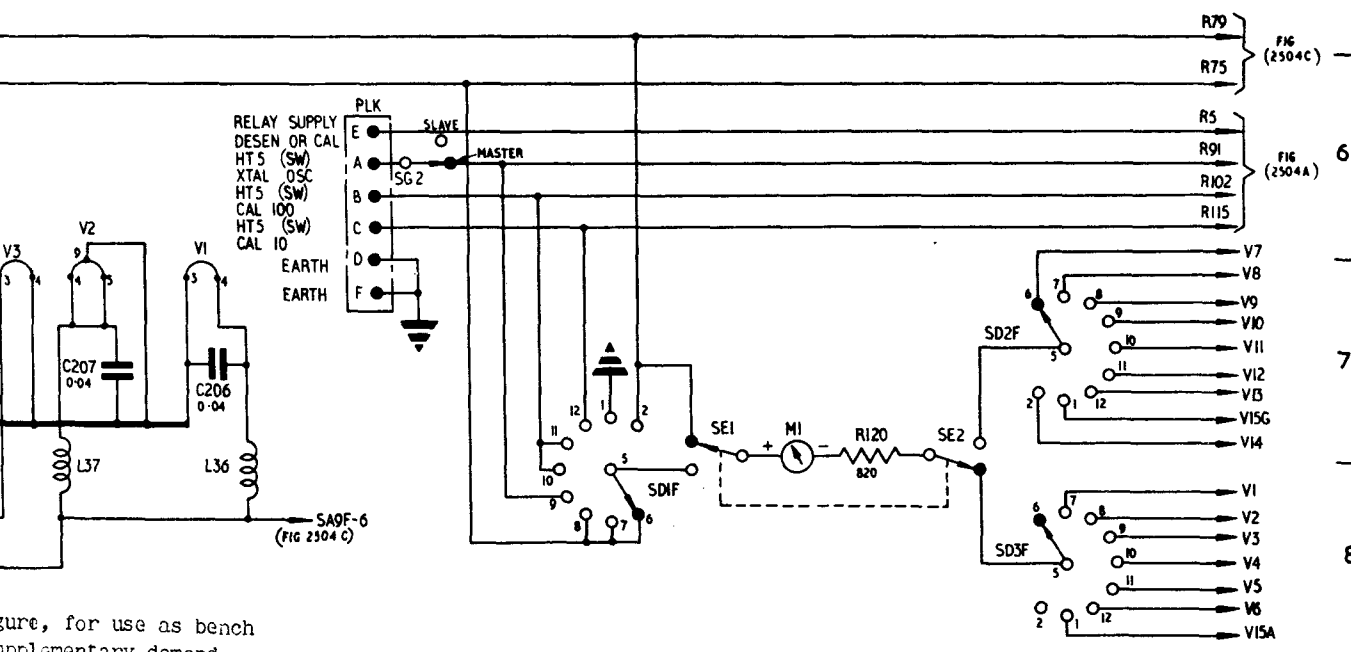
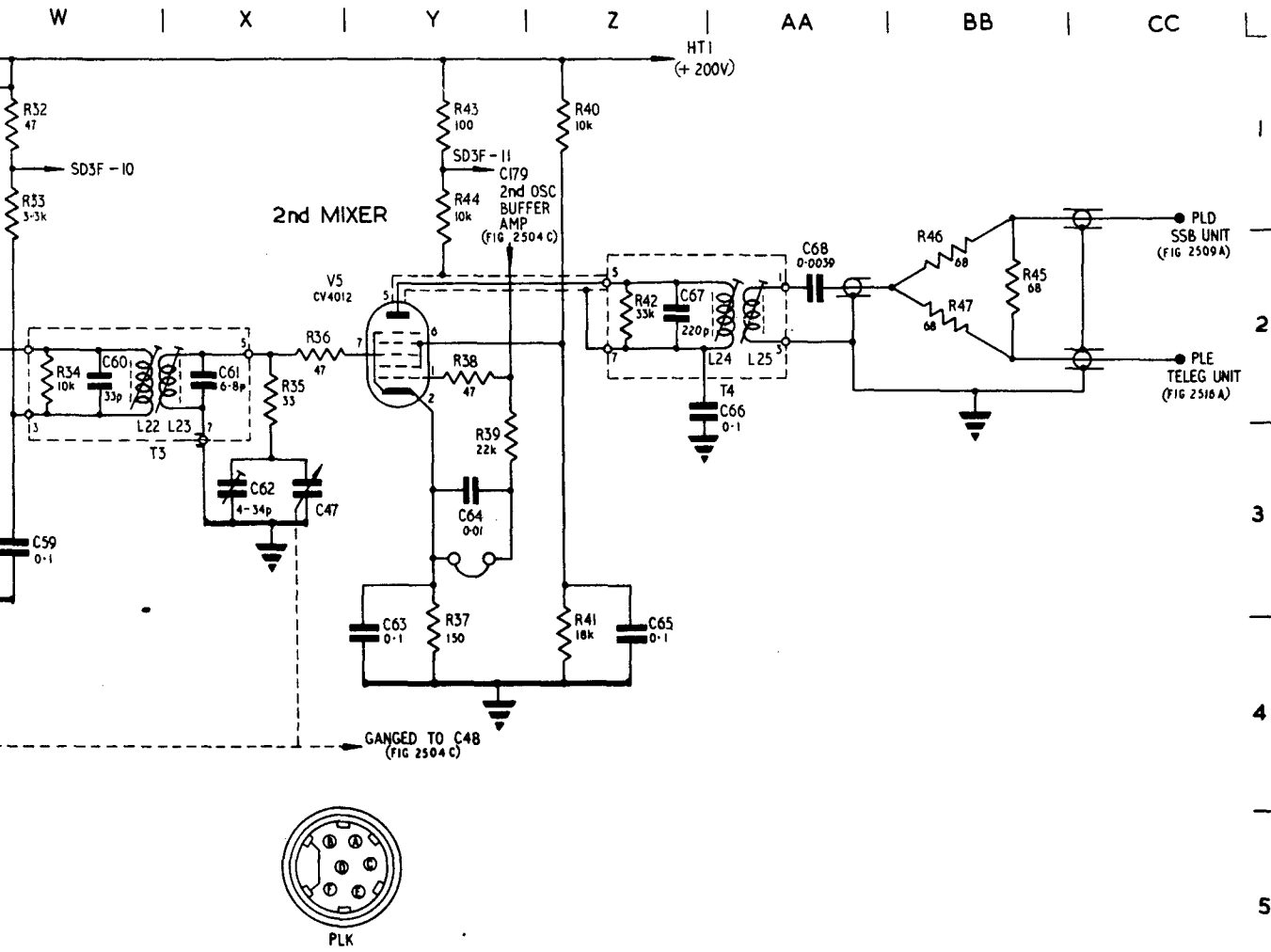


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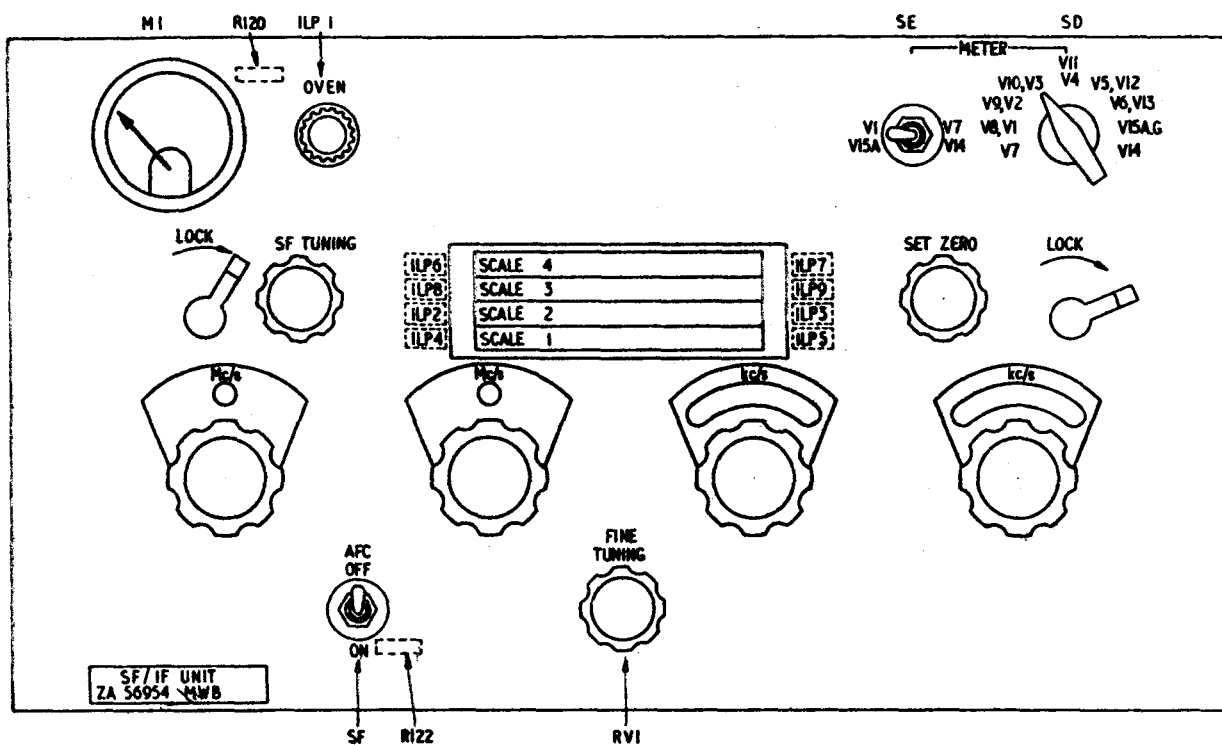
Fig 2504d - S.F. and i.f.1 unit, circuit diagram, first mixer, i.f.1





Figure, for use as bench  
complementary demand.

er, i.f.1 amplifier, second mixer and valve heaters



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1-2505

Fig 2505 - S.F. and i.f.1 unit, component layout, front panel

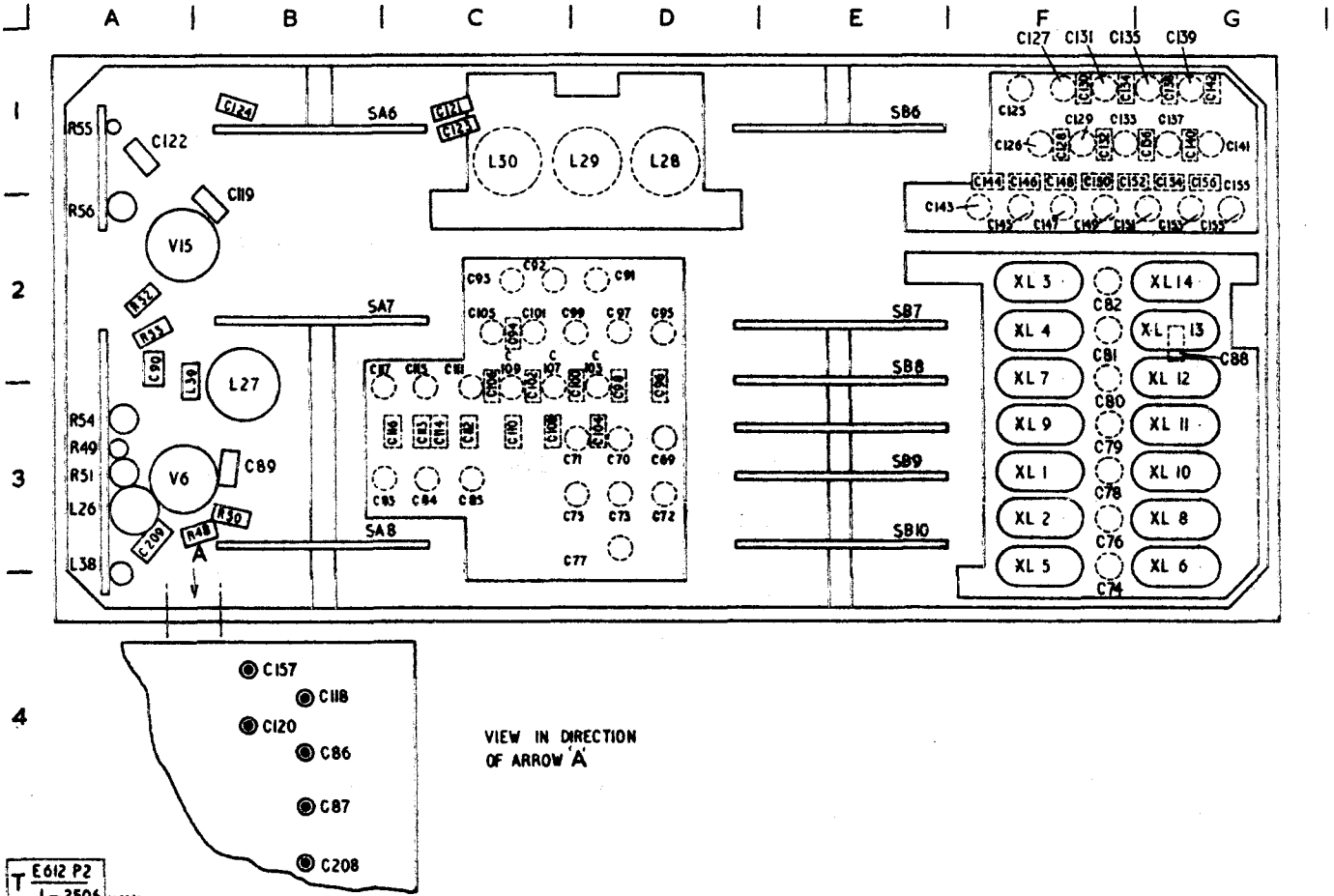
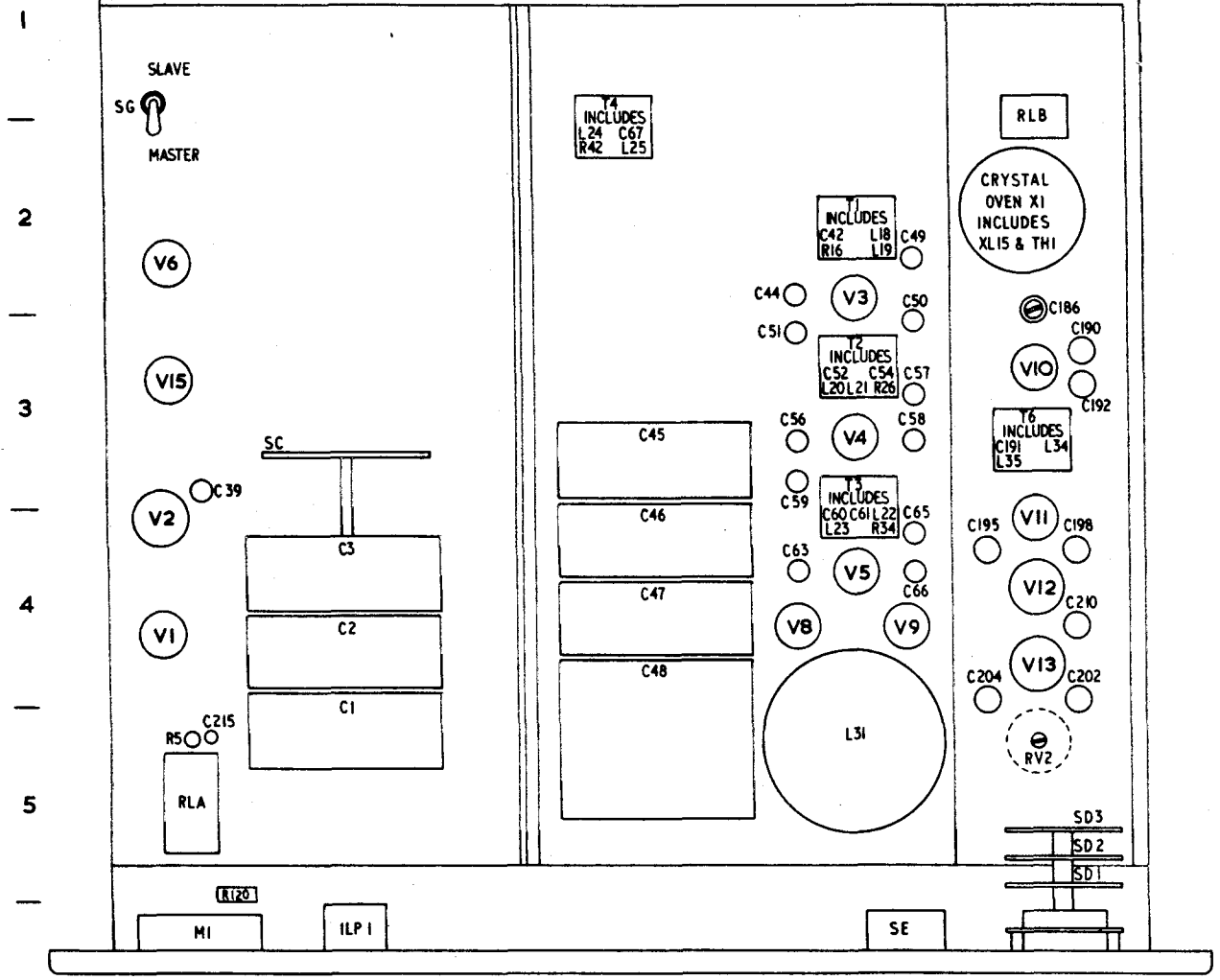


Fig 2506 - S.F. and i.f.1 unit, component layout,  
 first oscillator and buffer/multiplier  
 compartments



A | B | C | D | E | F | G



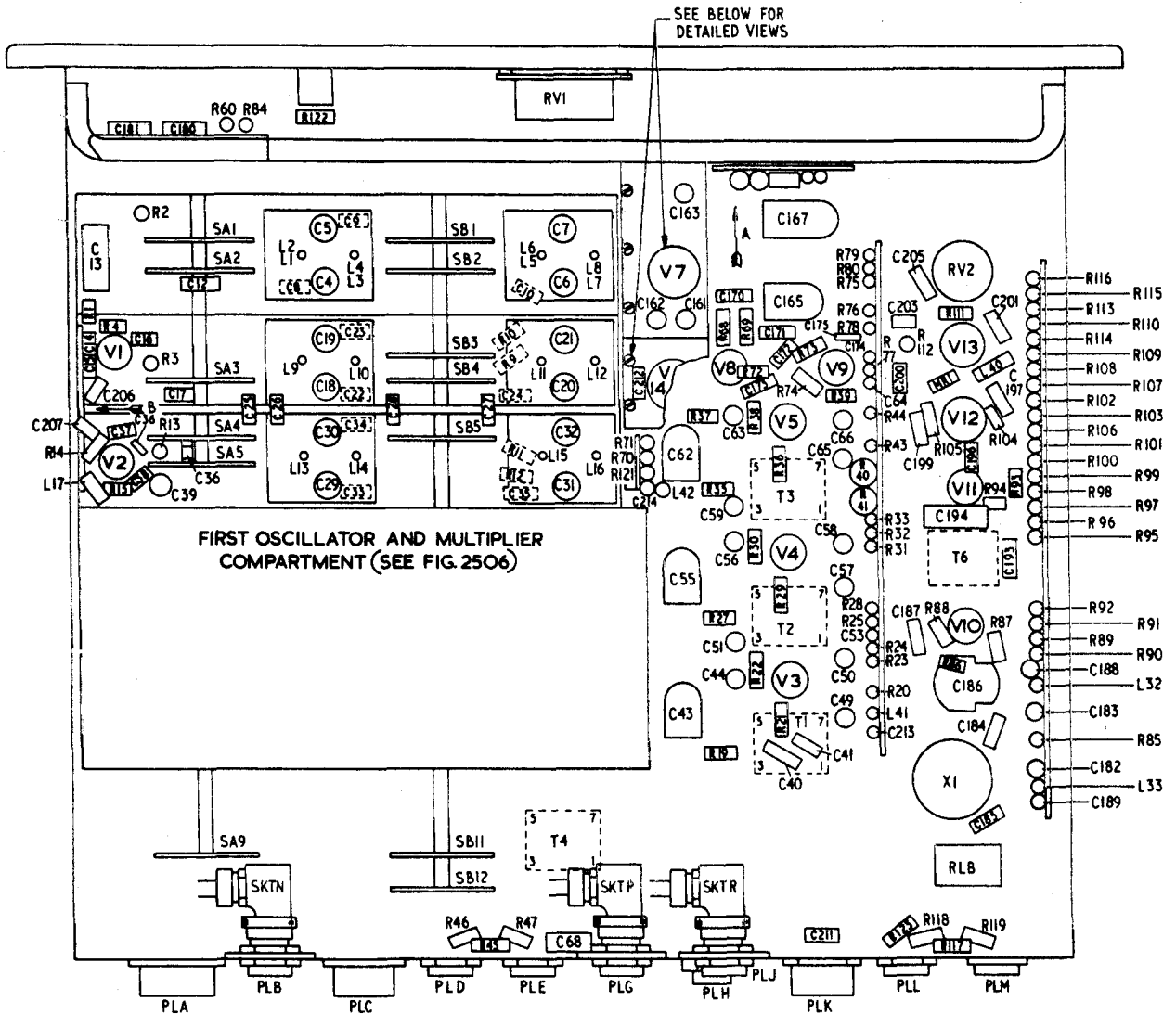
PLAN VIEW  
TOP COVER REMOVED

T E 612 P2  
I-2507 2193/3

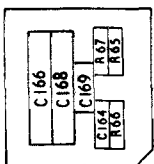
Fig 2507 - S.F. and i.f.1 u



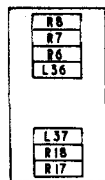
G | H | J | K | L | M | N | O



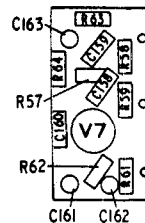
UNDERSIDE VIEW  
ALL COVERS REMOVED



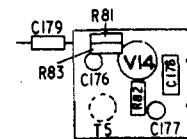
VIEW IN DIRECTION  
OF ARROW A



VIEW IN DIRECTION  
OF ARROW B.



VIEW ON UNDERSIDE OF V7



VIEW ON UNDERSIDE OF V14



Table 2501 - S.F. and i.f.1 unit, component schedule

Note: This Table is current at the time of issue only. Use I.S.P.L., when published, to demand stores.

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm\%$ )	Part No (Z/5905-99-)
	Circuit Fig 2504	Layout Fig 2507				
<b>RESISTORS, FIXED</b>						
R1	A-F2	H2	47	1/4	comp, ins 10	022-1067
R2	A-F4	H2	10k	1/4	comp, ins 10	022-2130
R3	A-G1	H3	100	1/4	comp, ins 10	022-1110
R4	A-G3	H2	180	1/4	comp, ins 10	022-1143
R5	A-A3	A5	470	1/4	comp, ins 10	022-1195
R6	A-G2	J7	33k	1/2	comp, ins 10	022-2195
R7	A-H3	J7	47	1/8	film, ins 5	011-9714
R8	A-H4	J7	2.2k	1/2	comp, ins 10	022-2048
R9	A-J3	L3	10k	1/4	comp, ins 10	022-2130
R10	A-K3	L3	33k	1/4	comp, ins 10	022-2193
R11	A-M3	L3	10k	1/4	comp, ins 10	022-2130
R12	A-M3	L3	33k	1/4	comp, ins 10	022-2193
R13	D-P3	J3	220	1/4	comp, ins 10	022-1152
R14	D-P4	H3	1.5k	1/4	comp, ins 10	022-2025
R15	D-Q4	H3	220k	1/4	comp, ins 10	022-3079
R16	D-R3	E2	10k	1/4	comp, ins 10	022-2130
R17	D-Q2	J8	220k	1/4	comp, ins 10	022-3081
R18	D-Q1	J8	4.7k	1/8	film, ins 5	021-9160
R19	D-S3	M5	33	1/4	comp, ins 10	022-1047
R20	D-R4	N4	150k	1/4	comp, ins 10	022-3059
R21	D-S3	M5	47	1/4	comp, ins 10	022-1068
R22	D-S4	M4	100	1/4	comp, ins 10	022-1110
R23	D-T2	N4	22k	3/4	comp, ins 10	022-2245
R24	D-T1	N4	47	1/8	film, ins 5	011-9714
R25	D-T1	N4	3.3k	3/4	comp, ins 10	022-2235
R26	D-T3	E3	10k	1/4	comp, ins 10	022-2130
R27	D-U3	M4	33	1/4	comp, ins 10	022-1047
R28	D-U4	N4	150k	1/4	comp, ins 10	022-3059
R29	D-V3	M4	47	1/4	comp, ins 10	022-1068
R30	D-V3	M4	100	1/4	comp, ins 10	022-1110
R31	D-V2	N4	22k	3/4	comp, ins 10	022-2245
R32	D-W1	N4	47	1/8	film, ins 5	011-9714
R33	D-W1	N4	33k	3/4	comp, ins 10	022-2235
R34	D-W2	E4	10k	1/4	comp, ins 10	022-2130
R35	D-X2	M3	33	1/4	comp, ins 10	022-1047
R36	D-X2	M3	47	1/4	comp, ins 10	022-1068
R37	D-Y4	M3	150	1/4	comp, ins 10	022-1131
R38	D-Y2	M3	47	1/4	comp, ins 10	022-1068
R39	D-Y3	M3	22k	1/4	comp, ins 10	022-2173
R40	D-Z1	M3	10k	2	comp, non-ins 10	021-2131
R41	D-Z4	M3	18k	1	comp, ins 10	011-1486

Table 2501 - (cont)

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm\%$ )	Part No (Z/5905-99-)	
	Circuit Fig 2504	Layout Fig 2507					
RESISTORS, FIXED - (cont)							
R42	D-Z2	D2	33k	1/4	comp, ins	10	022-2193
R43	D-Y1	N3	100	1/8	film, ins	5	021-9040
R44	D-Y1	N3	10k	3/4	comp, ins	10	022-2241
R45	D-BB2	K6	68	1/4	comp, ins	10	022-1089
R46	D-BB2	K6	68	1/4	comp, ins	10	022-1089
R47	D-BB2	K6	68	1/4	comp, ins	10	022-1089
R48	B-E7	2506	150k	1/4	comp, ins	10	022-3058
R49	B-F5	2506	100	1/8	film, ins	5	021-9040
R50	B-E7	2506	15	1/4	comp, ins	10	022-1010
R51	B-F7	2506	3.9k	1/2	comp, ins	10	022-2081
R52	B-G7	1506	150k	1/4	comp, ins	10	022-3058
R53	B-G8	2506	1k	1/4	comp, ins	10	022-2004
R54	B-H6	2506	47k	1/2	comp, ins	10	022-2216
R55	B-H7	2506	100	1/8	film, ins	5	021-9040
R56	B-H7	2506	3.9k	1/2	comp, ins	10	022-2081
R57	C-R3	L7	100k	1/4	comp, ins	10	022-3037
R58	C-R4	L7	47k	1/4	comp, ins	10	022-2214
R59	C-R3	L7	100	1/4	comp, ins	10	022-1109
R60	C-R4	J1	10k	1/4	comp, ins	10	022-2130
R61	C-S4	L8	330	1/4	comp, ins	10	022-1173
R62	C-S4	L8	2.7k	1/4	comp, ins	10	022-2059
R63	C-T2	L7	22k	1/2	comp, ins	10	022-2174
R64	C-T4	L7	22k	1/2	comp, ins	10	022-2174
R65	C-T2	H7	100	1/8	film, ins	5	021-9040
R66	C-T2	H8	10k	1/2	comp, ins	10	022-2132
R67	C-T4	H7	10k	1/2	comp, ins	10	022-2132
R68	C-V4	M2	330k	1/8	film, ins	5	021-9185
R69	C-W3	M2	100	1/4	comp, ins	10	022-1110
R70	C-W2	L3	100	1/8	film, ins	5	021-9040
R71	C-W2	L3	10k	1/4	film, ins	5	021-9185
R72	C-X4	M3	1.5k	1/4	film, ins	5	021-9125
R73	C-X4	M3	150k	1/8	film, ins	5	021-9268
R74	C-X4	M3	100	1/4	comp, ins	10	022-1110
R75	C-Y1	N2	1.5k	1/4	film, ins	5	021-9125
R76	C-Y2	N2	10k	3/4	comp, ins	10	022-2241
R77	C-Y2	N3	1.5k	1/4	comp, ins	10	022-2026
R78	C-Y2	N2	56k	1/4	film, ins	5	021-9239
R79	C-AA1	N2	47	1/8	film, ins	5	011-9714
R80	C-AA2	N2	10k	3/4	comp, ins	10	022-2241
R81	C-AA2	N7	3.3k	1/4	comp, ins	10	022-2067
R82	C-AA4	N3	180	1/4	comp, ins	10	022-1142
R83	C-AA2	N7	22k	1/4	comp, ins	10	022-2172

Table 2501 - (cont.)

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm$ %)	Part No (Z/5905-99-)
	Circuit Fig 2504	Layout Fig 2507				
RESISTORS, FIXED - (cont)						
R84	C-Q5	J1	1k	1/4	film, ins	10 022-2004
R85	A-A7	N5	100	1/2		10
R86	A-C7	N4	2.2M	1/4	comp, ins	10 022-3205
R87	A-C7	N4	100	1/4		10
R88	A-D8	N4	6.8k	1/4	comp, ins	10 022-2109
R89	A-D6	N4	100k	1/4	comp, ins	10 022-3037
R90	A-D8	N4	22k	1/4	comp, ins	10 022-2172
R91	A-E6	N4	1k	1/8	film, ins	5 021-9112
R92	A-E6	N4	10k	1/4	comp, ins	10 022-2130
R93	A-F7	N3	470k	1/4	comp, ins	10 022-3121
R94	A-F7	N3	100	1/8	film, ins	5 021-9040
R95	A-G5	N4	330	1/8	film, ins	5 021-9076
R96	A-G6	N4	10k	1/4	comp, ins	10 022-2130
R97	A-G6	N3	47k	1/4	film, ins	5 021-9233
R98	A-G6	N3	270k	1/4	comp, ins	10 022-3091
R99	A-H7	N3	4.7M	1/4	comp, ins	10 022-3247
R100	A-H7	N3	470k	1/4	comp, ins	10 022-3121
R101	A-H6	N3	22k	1/4	film, ins	5 021-9209
R102	A-J5	N3	100	1/4	comp, ins	10 022-1109
R103	A-J6	N3	4.7k	1/4	comp, ins	10 022-2088
R104	A-J7	N3	22k	1/4	film, ins	5 021-9209
R105	A-J6	N3	220k	1/8	film, ins	5 021-9280
R106	A-K6	N3	22k	1/4	film, ins	5 021-9209
R107	A-K6	N3	47k	1/4	comp, ins	10 022-2214
R108	A-L8	N3	470k	1/4	comp, ins	10 022-3121
R109	A-L6	N3	22k	1/4	film, ins	5 021-9209
R110	A-M6	N2	4.7k	1/4	comp, ins	10 022-2088
R111	A-M7	N2	2.2M	1/4	comp, ins	10 022-3205
R112	A-M6	N3	220k	1/8	film, ins	5 021-9280
R113	A-M5	N2	100	1/4	comp, ins	10 022-1109
R114	A-M6	N3	22k	1/4	film, ins	5 021-9209
R115	A-N6	N2	47k	3/4	comp, ins	10 022-2222
R116	A-N7	N2	47k	3/4	comp, ins	10 022-2222
R117	A-O8	N6	68	1/4	comp, ins	10 022-1089
R118	A-N8	N6	68	1/4	comp, ins	10 022-1089
R119	A-N8	N6	68	1/4	comp, ins	10 022-1089
R120	D-AA7	2505	820	1/8	film, ins	5 021-9106
R121	D-R7	L3	51	1.1/2	w.w.vit.enam	5 011-7880
R122	C-Q4	2505	1M	1/4	comp, ins	10 022-3163
R123	A-O8	N6	68	1/4	comp, ins	10 022-1089

Table 2501 - (cont)

Cct ref	Component Location		Value (Ω)	Rating (W)	Type and limit (± <sup>o</sup> /o)	Part No
	Circuit Fig 2504	Layout Fig 2507				
RESISTORS VARIABLE						
RV1	C-S5	2505	1k	3	w.w. linear	Z1/ZA 56399
RV2	A-N7	F5	50k	1/4	comp, linear 20	Z/5905-99-026-2004
Cct Ref	Component Location		Value (μF)	Rating (V)	Type and limit (± <sup>o</sup> /o)	Part No
	Circuit Fig 2504	Layout Fig 2507				
CAPACITORS						
C1)	A-F3	B5	284p max		variable, air	} Z1/ZA 56621
C2)	A-K2	B4	284p max		dielectric, 3	
C3)	A-03	B4	284p max		section	
C4	A-D2	J2	30p max		var, air	Z/5910-99-016-7006
C5	A-D2	J2	30p max		var, air	Z/5910-99-016-7006
C6	A-D3	L2	30p max		var, air	Z/5910-99-016-7006
C7	A-D3	L2	30p max		var, air	Z/5910-99-016-7006
C8	A-D2	J2	33p	350	fixed mic, met 1p	Z1/5910-99-911-8412
C9	A-D2	K2	39p	350	fixed mic 1p	Z1/5910-99-972-7241
C10	A-D3	L2	12p	350	fixed met, pap 1p	Z1/5910-99-110-2278
C12	A-F2	J2	220p	350	fixed mic, met 1	Z1/5910-99-911-6839
C13	A-F4	H2	0.1	150	fixed met, pap 25	Z/5910-99-011-9827
C14	A-G3	H3	0.01	350	fixed pap, foil 25	Z/5910-99-011-5625
C15	A-G3	H3	0.01	350	fixed pap, foil 25	Z/5910-99-011-5625
C16	A-H4	H3	0.01	350	fixed pap, foil 25	Z/5910-99-011-5625
C17	A-K1	J3	220p	350	fixed mic, met 2	Z1/5910-99-911-6839
C18	A-J2	J3	30p max		var, air	Z/5910-99-016-7006
C19	A-J2	J2	30p max		var, air	Z/5910-99-016-7006
C20	A-J3	J3	30p max		var, air	Z/5910-99-016-7006
C21	A-J3	L3	30p max		var, air	Z/5910-99-016-7006
C22	A-J2	K3	39p	350	fixed mic, 1p	Z1/5910-99-972-7241
C23	A-J2	K2	33p	350	fixed mic, met 1p	Z1/5910-99-972-8412
C24	A-J3	L3	18p	350	fixed mic, met 1p	Z1/5910-99-913-6731
C25	A-L2	J3	2.2p	750	fixed cer 0.5p	Z/5910-99-011-8270
C26	A-L2	J3	2.2p	750	fixed cer 0.5p	Z/5910-99-011-8270
C27	A-L3	K3	2.2p	750	fixed cer 0.5p	Z/5910-99-011-8270
C28	A-L3	K3	3.3p	750	fixed cer, tub 0.5p	Z/5910-99-011-8272
C29	A-L2	J3	30p max		var, air	Z/5910-99-016-7006
C30	A-L2	J3	30p max		var, air	Z/5910-99-016-7006



Table 2501 - (cont)

Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $\pm$ %)	Part No
	Circuit Fig 2504	Layout Fig 2507				
CAPACITORS - (cont)						
C31	A-L3	L3	30p max		var, air	Z/5910-99-016-7006
C32	A-L3	L3	30p max		var, air	Z/5910-99-016-7006
C33	A-M2	K3	30p	350	fixed mic 1p	Z1/5910-99-972-7241
C34	A-M2	K3	33p	350	fixed, mic, met 1p	Z1/5910-99-911-8412
C35	A-M3	L3	18p	350	fixed mic, met 1p	Z1/5910-99-913-6731
C36	A-O2	H3	220p	350	fixed mic, met 2	Z1/5910-99-911-6839
C37	D-P4	H3	0.01	350	fixed pap, foil 25	Z/5910-99-011-5625
C38	D-Q4	H3	0.01	350	fixed pap, foil 25	Z/5910-99-011-5625
C39	D-Q2	A3	1	350	fixed pap 25	Z1/00000-05306
C40	D-R2	M5	4p max		var, plastic	Z1/5910-99-999-0771
C41	D-R3	M5	3.3p	750	fixed cer, tub 0.5p ins	Z/5910-99-011-8272
C42	D-R3	E2	6.8p	750	fixed cer, tub 0.5p ins	Z/5910-99-011-8276
C43	D-R4	L5	34p max		var, air	Z/5910-99-016-0047
C44	D-S4	E2	0.1	300	fixed met, pap 20	Z1/ZA 56457
C45)	D-S3	E2	200p		air, dielectric	) Z1/ZA 56622
C46)	D-V3	D3	200p		4 section	
C47)	D-X3	D4	200p		200p max	
C48)	D-V3	D5	200p			)
C49	D-T4	E2	0.1	300	fixed met, pap 20	Z1/ZA 56457
C50	D-T3	E3	0.1	300	fixed met, pap 20	Z1/ZA 56457
C51	D-T4	E3	0.1	300	fixed met, pap 20	Z1/ZA 56457
C52	D-T3	E3	33p	350	fixed mic, met 1p	Z1/5910-99-911-8412
C53	D-V1	N4	0.04	250	fixed met, pap 20	Z/5910-99-012-0116
C54	D-U3	E3	6.8p	750	fixed cer, tub 0.5p ins	Z/5910-99-011-8276
C55	D-U3	L4	34p max		var, air	Z/5910-99-016-0047
C56	D-U4	E3	0.1	300	fixed met, pap 20	Z1/ZA 56457
C57	D-V3	E3	0.1	300	fixed met, pap 20	Z1/ZA 56457
C58	D-V3	E3	0.1	300	fixed met, pap 20	Z1/ZA 56457
C59	D-W3	E3	0.1	300	fixed met, pap 20	Z1/ZA 56457
C60	D-W2	E4	33p	350	fixed mic, met 1p	Z1/5910-99-911-8412
C61	D-X2	E4	6.8p	750	fixed cer, tub 0.5p ins	Z/5910-99-011-8276
C62	D-X3	L3	34p max		var, air	Z/5910-99-016-0047
C63	D-Y1	E4	0.1	300	fixed met, pap 20	Z1/ZA 56457
C64	D-Y3	N3	0.01	500	fixed met, pap 20	Z/5910-99-012-0123
C65	D-Z4	E4	0.1	300	fixed met, pap 20	Z1/ZA 56457
C66	D-Z2	E4	0.1	300	fixed met, pap 20	Z1/ZA 56457
C67	D-Z2	D2	220p	750	fixed mic, met 5	Z/5910-99-012-3936
C68	D-AA2	L6	0.003	750	fixed mic, met 5	Z/5910-99-012-4728

Table 2501 - (cont)

Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $\pm$ °/o)	Part No
	Circuit Fig 2504	Layout Fig 2507				
CAPACITORS - (cont)						
C69	B-A1	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C70	B-A1	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C71	B-A2	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C72	B-A2	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C73	B-A3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C74	B-A4	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C75	B-A4	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C76	B-A5	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C77	B-A5	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C78	B-A6	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C79	B-A7	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C80	B-A7	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C81	B-A8	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C82	B-A8	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C83	B-A8	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C84	B-A8	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C85	B-A8	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C86	B-F5	2506	0.001	500	fixed cer,feed -thru,bush mtg	20 Z1/5910-99-102-3523
C87	B-F6	2506	0.001	500	fixed cer,feed -thru,bush mtg	20 Z1/5910-99-102-3523
C88	B-F8	2506	12p	350	fixed mic,met	1p Z1/5910-99-110-2278
C89	B-F8	2506	0.04	350	fixed mic,met	20 Z1/5910-99-012-0116
C90	B-F4	2405	0.001	350	fixed mic,met	5 Z1/5910-99-012-4701
C91	B-F3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C92	B-F3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C93	B-G3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C94	B-F3	2506	10p	350	fixed mic,met	1p Z1/5910-99-102-2884
C95	B-G3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C96	B-G3	2506	15p	350	fixed mic,met	1 Z1/5910-99-110-2279
C97	B-G3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C98	B-G3	2506	22p	350	fixed mic,met	1p Z1/5910-99-110-2280
C99	B-J3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C100	B-J3	2506	27p	350	fixed mic,met	1p Z1/5910-99-911-6939
C101	B-J3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C102	B-J3	2506	39p	350	fixed mic	1p Z1/5910-99-972-7241
C103	B-K3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C104	B-K3	2506	47p	350	fixed mic	1p Z1/5910-99-911-8413
C105	B-K3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C106	B-K3	2506	47p	350	fixed mic	1p Z1/5910-99-911-8413
C107	B-L3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C108	B-L3	2506	68p	350	fixed mic,met	2 Z1/5910-99-940-9921

Table 2501 - (cont)

Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $\pm$ %)	Part No
	Circuit Fig 2504	Layout Fig 2507				
CAPACITORS - (cont)						
C109	B-M3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C110	B-M3	2506	100p	350	fixed mic,met 2	Z1/5910-99-911-6846
C111	B-N3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C112	B-N3	2506	160p	350	fixed mic,met 2	Z1/5910-99-946-6735
C113	B-N3	2506	270p	350	fixed mic,met 2	Z1/5910-99-110-2406
C114	B-N3	2506	10p	350	fixed mic,met 1p	Z1/5910-99-102-2884
C115	B-O3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C116	B-O3	2506	560p	350	fixed mic,met 2 rect	Z1/5910-99-110-2673
C117	B-O3	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C118	B-G8	2506	0.001	500	fixed cer,feed 20 -thru,bush mtg	Z1/5910-99-102-3523
C119	B-G8	2506	0.04	250	fixed met,pap 20	Z/5910-99-012-0116
C120	B-J8	2506	0.001	500	fixed cer,feed 20 -thru,bush mtg	Z1/5910-99-102-3523
C121	B-K5	2506	39p	750	fixed cer,tub 5	Z/5910-99-011-8311
C122	B-J8	2506	0.04	250	fixed met,pap 20	Z1/5910-99-911-6839
C123	B-J5	2506	39p	750	fixed cer,tub 5	Z/5910-99-011-8311
C124	B-K5	2506	680p	350	fixed mic,met 5	Z/5910-99-012-3954
C125	B-K6	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C126	B-L6	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C127	B-L6	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C128	B-L6	2506	10p	350	fixed mic,met 1p	Z1/5910-99-102-2884
C129	B-L6	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C130	B-L6	2506	12p	350	fixed met,pap 1p	Z1/5910-99-110-2278
C131	B-M6	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C132	B-M6	2506	15p	350	fixed mic,met 1p rect	Z1/5910-99-110-2279
C133	B-M6	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C134	B-M6	2506	20p	350	fixed mic,met 5	Z1/5910-99-945-9214
C135	B-N6	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C136	B-N6	2506	27p	350	fixed mic,met 1p	Z1/5910-99-911-6939
C137	B-N6	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C138	B-N6	2506	33p	350	fixed mic,met 1p	Z1/5910-99-911-8412
C139	B-O6	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C140	B-O6	2506	47p	350	fixed mic 1p	Z1/5910-99-911-8413
C141	B-O6	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C142	B-O6	2506	56p	350	fixed mic,met 2	Z1/5910-99-940-9847
C143	B-L8	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C144	B-L8	2506	18p	350	fixed mic,met 1p	Z1/5910-99-913-6731
C145	B-L8	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C146	B-L8	2506	22p	350	fixed mic,met 1p	Z1/5910-99-940-2280

Table 2501 - (cont)

Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $\pm$ %)	Part No
	Circuit Fig 2504	Layout Fig 2507				
CAPACITORS - (cont)						
C147	B-M8	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C148	B-M8	2506	27p	350	fixed mic,met 1p	Z1/5910-99-911-6939
C149	B-M8	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C150	B-M8	2506	33p	350	fixed mic,met 1p	Z1/5910-99-911-8412
C151	B-N8	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C152	B-N8	2506	39p	350	fixed mic 1p	Z1/5910-99-972-7241
C153	B-N8	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C154	B-N8	2506	47p	350	fixed,mic 1p	Z1/5910-99-911-8413
C155	B-08	2506	12.9p max		var,cer,rotary	Z1/5910-99-580-6710
C156	B-08	2506	56p	350	fixed mic,met 2	Z1/5910-99-940-9847
C157	B-H6	2506	0.001	500	fixed cer,feed 20 -thru,bush mtg	Z1/5910-99-102-3523
C158	C-R4	L7	150p	350	fixed mic,met 2	Z1/5910-99-940-9841
C159	C-R4	L7	0.01	500	fixed met,pap 20	Z/5910-99-012-0123
C160	C-R3	L7	0.01	500	fixed met,pap 20	Z/5910-99-012-0123
C161	C-S5	L2	0.01	500	fixed cer,feed +100 thru -0	Z1/5910-99-940-9700
C162	C-S4	L2	0.1	300	fixed met,pap 20	Z1/ZA 56457
C163	C-T4	L2	0.1	300	fixed met,pap 20	Z1/ZA 56457
C164	C-T4	H8	0.01	500	fixed,met,pap 20	Z/5910-99-012-0123
C165	C-U3	M2	19.5 max	1000	var, air	Z/5910-99-016-0048
C166	C-U4	G7	0.001	500	fixed, cer 2	Z1/ZA 56632
C167	C-U3	M2	6.5p		var, air	Z1/5910-99-110-2619
C168	C-U4	G7	0.001	500	fixed, cer 2	Z1/ZA 56632
C169	C-U4	G7	680p	350	fixed mic,met 5	Z/5910-99-012-3954
C170	C-V3	M2	5.6p	750	fixed cer,tub 0.5p ins	Z/5910-99-011-8275
C171	C-V3	M2	5.6p	750	fixed cer,tub 0.5p ins	Z/5910-99-011-8275
C172	C-X4	M3	0.01	500	fixed met,pap 20	Z/5910-99-012-0123
C173	C-X3	M3	100p	350	fixed mic,met 2	Z1/5910-99-911-6846
C174	C-Z2	N3	0.01	500	fixed met,pap 20	Z/5910-99-012-0123
C175	C-Z3	M3	300p	350	fixed mic,rect 2	Z1/5910-99-102-3096
C176	C-BB2	N8	0.1	300	fixed met,pap 20	Z1/ZA 56457
C177	C-AA4	N8	0.1	300	fixed,met,pap 20	Z1/ZA 56457
C178	C-AA3	N8	0.04	250	fixed met,pap 20	Z/5910-99-012-0116
C179	C-BB3	M7	300p	350	fixed mic,rect 2	Z1/5910-99-102-3096
C180	C-Q4	J1	50	70	elect tantalum 20	Z1/ZA 56613
C181	C-Q5	J1	50	70	elect tantalum 20	Z/5910-99-012-0137
C182	A-A7	N5	0.1	150	fixed met,pap 25	Z/5910-99-011-9827
C183	A-A8	N5	0.1	150	fixed met,pap 25	Z/5910-99-011-9827
C184	A-A6	N5	0.01	250	fixed met,pap 20	Z/5910-99-012-0113

Table 2501 - (cont)

Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $\pm$ %)	Part No
	Circuit Fig 2504	Layout Fig 2507				
CAPACITORS - (cont)						
C185	A-A5	N5	0.01	250	fixed met,pap	20 Z/5910-99-012-0113
C186	A-C7	N4	97.2p max		var, air	Z/5910-99-016-0006
C187	A-C8	N4	330p	750	fixed mic,met	10 Z/5910-99-012-3942
C188	A-A6	N4	0.01	250	fixed met,pap	20 Z/5910-99-012-0113
C189	A-A5	N5	0.01	250	fixed met,pap	20 Z/5910-99-012-0113
C190	A-D7	F3	0.1	350	fixed pap	Z1/00000-05306
C191	A-E7	F3	0.001	350	fixed mic,met	5 Z/5910-99-012-4701
C192	A-E8	F3	0.1	350	fixed pap	Z1/00000-05306
C193	A-F7	N4	0.001	350	fixed mic,met	5 Z/5910-99-012-4701
C194	A-F6	N4	0.1	150	fixed met,pap	25 Z/5910-99-011-9827
C195	A-G7	F4	0.1	350	fixed pap	Z1/00000-05306
C196	A-G6	N3	6.8p	750	fixed cer,tub ins	0.5p Z/5910-99-011-8276
C197	A-J7	N3	33p	350	fixed mic,met	2 Z1/5910-99-911-8412
C198	A-J6	F4	0.1	350	fixed pap	Z1/00000-05306
C199	A-J7	N3	22p	350	fixed mic,met	1p Z1/5910-99-110-2280
C200	A-K7	N3	22p	350	fixed mic,met	1p Z1/5910-99-110-2280
C201	A-L7	N2	68p	350	fixed mic,met	2 Z1/5910-99-940-9921
C202	A-M6	F5	0.1	350	fixed pap	Z1/00000-05306
C203	A-M7	N2	22p	350	fixed mic,met	1p Z1/5910-99-110-2280
C204	A-M8	F5	0.1	350	fixed pap	Z1/00000-05306
C205	A-N6	N2	4.7p	750	fixed cer,tub ins	0.5p Z/5910-99-011-8274
C206	D-X7	H3	0.04	250	fixed met,pap	20 Z/5910-99-011-0116
C207	D-W7	H3	0.04	250	fixed met,pap	20 Z/5910-99-012-0116
C208	D-U8	2506	0.001	500	fixed cer,feed thru,bush mtg	Z1/5910-99-102-3523
C209	D-U7	2506	0.04	250	fixed met,pap	20 Z/5910-99-012-0116
C210	D-R8	F4	0.1	350	fixed pap	Z1/00000-05306
C211		M6	0.01	500	fixed met,pap	20 Z/5910-99-012-0123
C212	D-S8	L3	0.01	500	fixed met,pap	20 Z/5910-99-012-0123
C213	D-U8	N5	0.01	500	fixed,met,pap	20 Z/5910-99-012-0123
C214	D-Q7	L3	0.01	500	fixed met,pap	20 Z/5910-99-012-0123
C215	A-A3	A5	0.01	500	fixed met,pap	20 Z/5910-99-012-0123

Table 2501 - (cont)

Cct ref	Component Location		Description	Part No
	Circuit Fig 2504	Layout Fig 2507		
INDUCTORS				
L1	)A-C2	J2	) Transformer, r.f. uncased	Z1/ZA 56315
L2	)A-C2	J2	) (antenna, 20-30Mc/s)	
L3	)A-C2	K2	) Transformer, r.f. uncased	Z1/ZA 56314
L4	)A-C2	K2	) (antenna, 10-20Mc/s)	
L5	)A-C3	L2	) Transformer, r.f. uncased	Z1/ZA 56313
L6	)A-C3	L2	) (antenna, 5-10Mc/s)	
L7	)A-C3	L2	) Transformer, r.f. uncased	Z1/ZA 56312
L8	)A-C3	L2	) (antenna, 2.1-5Mc/s)	
L9	A-J2	J3	R.F. uncased (anode 20-30Mc/s)	Z1/ZA 56405
L10	A-J2	K3	R.F. uncased (anode 10-20Mc/s)	Z1/ZA 56404
L11	A-J3	L3	R.F. uncased (anode 5-10Mc/s)	Z1/ZA 56317
L12	A-J3	L3	Transformer, r.f. uncased 33+8 turns (anode 2.1-5Mc/s)	Z1/5950-99-102-1721
L13	A-L2	J3	R.F. uncased (grid, 20-30Mc/s)	Z1/ZA 56405
L14	A-L2	L3	R.F. uncased (grid, 10-20Mc/s)	Z1/ZA 56404
L15	A-L3	L3	R.F. uncased (grid, 5-10Mc/s)	Z1/ZA 56327
L16	A-L3	L3	R.F. uncased (grid, 2.1-5Mc/s)	Z1/ZA 56326
L17	D-P3	H3	R.F. 10 turns, 1.5µH nominal	Z1/ZA 55883
L18	D-R3	E2	) Part of T1	
L19	D-R3	E2		
L20	D-U3	E3	) Part of T2	
L21	D-U3	E3		
L22	D-W2	E4	) Part of T3	
L23	D-W2	E4		
L24	D-AA2	D2	) Part of T4	
L25	D-AA2	D2		
L26	B-F6	2506	A.F. 364 turns, unscreened 15/32 in. dia x 17/32 in. lg	Z1/ZA 56673
L27	B-F/G7	2506	Transformer, r.f. unscreened 3.4µH	Z1/5950-99-102-1780
L28	B-K7	2506	Transformer, r.f. unscreened 0.625µH	Z1/5950-99-102-1744
L29	B-J7	2506	Transformer, r.f. unscreened 1.6µH	Z1/5950-99-102-1768
L30	B-J7	2506	R.F. 2900µH	Z1/5950-99-102-1749
L31	C-T3	E5	R.F. 71 turns, 118µH	Z1/ZA 56465
L32	A-A6	N4	R.F. 6.9µH, unscreened	Z1/ZA 55966
L33	A-A5	N5	R.F. 6.9µH, unscreened	Z1/ZA 55966
L34	A-E7	F3	) Part of T6	
L35	A-F7	F3		
L36	D-X8	J7	R.F. 6µH, unscreened	Z1/5950-99-540-2715
L37	D-W8	J8	R.F. 6µH, unscreened	Z1/5950-99-540-2715
L38	D-U7	2506	R.F. 6.9µH, unscreened	Z1/ZA 55966

Table 2501 - (cont)

Cct ref	Component Location		Description	Part No
	Circuit Fig 2504	Layout Fig 2507		
INDUCTORS - (cont)				
L39	D-U7	2506	R.F. 6 $\mu$ H, unscreened	Z1/5950-99-540-2715
L40	D-R8	N3	R.F. 6.9 $\mu$ H, unscreened	Z1/ZA 55966
L41	D-V8	N5	R.F. 6.4mH inductance at 1Mc/s	Z1/5950-99-940-4188
L42	D-R7	L3	R.F. 6 $\mu$ H, unscreened	Z1/5950-99-540-2715
TRANSFORMERS				
T1	D-R3	E2	I.F. 1.2Mc/s peak frequency, shielded	Z1/ZA 56444
T2	D-U3	E3	I.F. 1.2Mc/s peak frequency, shielded	Z1/ZA 56445
T3	D-W2	E4	I.F. 1.2Mc/s peak frequency, shielded	Z1/ZA 56445
T4	D-AA2	D2	I.F. 103kc/s, shielded	Z1/ZA 55790
T5	C-Z4	N8		
T6	AE/F7	F3	I.F. 100kc/s, shielded	Z1/ZA 56803
SWITCHES				
SA	ABC	J2/3/5		
SB	ABC	K2/3/5		
SC	C	B3	Rotary wafer, 1 pole, 11 position, shorting 1 wafer	Z1/5930-99-102-2015
SD	D	E6 & 2505	Rotary wafer, 3 pole, 9 positions - NON -shorting, 3 wafer, S.R.B.P.	Z1/ZA 56381
SE	D	F5 & 2505	Lever operated, 2 pole, CO, QMQB, 3A 250V	Z/5930-99-051-0504
SF	C	2505	Lever operated, 2 pole, CO, QMQB, 3A, 250V	Z/5930-99-051-0504
SG	BD	A1	Lever operated, 2 pole, CO, QMQB, 3A 250V	Z/5930-99-051-0504
TH1			See Miscellaneous	
CRYSTAL UNIT, QUARTZ				(Z17/5955-99-)
XL1	B-A1	2506	Style D, 14,000kc/s	102-6023
XL2	B-A1	2506	Style D, 13,000kc/s	901-4889
XL3	B-A2	2506	Style D, 12,500kc/s	102-6022
XL4	B-A2	2506	Style D, 11,500kc/s	901-4892
XL5	B-A3	2506	Style D, 11,000kc/s	901-4888
XL6	B-A3	2506	Style D, 10,000kc/s	102-6021
XL7	B-A4	2506	Style D, 9,500kc/s	901-4891
XL8	B-A4	2506	Style D, 9,000kc/s	901-4887
XL9	B-A5	2506	Style D, 8,500kc/s	901-4890
XL10	B-A6	2506	Style D, 8,000kc/s	102-6020

Table 2501 - (cont)

Cct ref	Component Location		Description	Part No (Z17/5955-99-)
	Circuit Fig 2504	Layout Fig 2507		
CRYSTAL UNITS, QUARTZ - (cont)				
XL11	B-A6	2506	Style D, 7,000kc/s	901-4866
XL12	B-A7	2506	Style D, 6,000kc/s	901-4865
XL13	B-A7	2506	Style D, 5,000kc/s	901-4864
XL14	B-A8	2506	Style D, 4,000kc/s	901-4863
XL15	A-B7	F2	Style F, 100kc/s	901-5153
LAMPS FILAMENT				(X5/6240-99-)
ILP1	A-A6	B6 & 2505	8V, 1.6W, mes, clear	995-1201
ILP2	C-R7	2505	6V, 0.6W, midget flange, clear	995-9119
ILP3	C-R7	2505	6V, 0.6W, midget flange, clear	995-9119
ILP4	C-S7	2505	6V, 0.6W, midget flange, clear	995-9119
ILP5	C-S7	2505	6V, 0.6W, midget flange, clear	995-9119
ILP6	C-Q7	2505	6V, 0.6W, midget flange, clear	995-9119
ILP7	C-Q7	2505	6V, 0.6W, midget flange, clear	995-9119
ILP8	C-Q7	2505	6V, 0.6W, midget flange, clear	995-9119
ILP9	C-R7	2505	6V, 0.6W, midget flange, clear	995-9119
RELAYS				(Z/5945-99-)
RLA	A-A2	A5	Magnetic, sealed SMSA-N96	011-9881
RLB	A-B6	F1	Magnetic, sealed SMSA-N97	011-9882
PLUGS, SOCKETS, ADAPTORS				
PLA	D-P6	H6	Plug, elec, M4, brass, fixed female shell, size 2/0, 12-pole	Z1/5935-99-911-6993
PLB	A-A2	J6	Adaptor, skt to skt, elec fixed, co-ax single pole	Z/5935-99-054-0019
PLC	C-P4	K6	Plug, elec, M4, brass, fixed female shell, size 1/0, 4-pole	Z1/5935-99-911-8297
PLD	D-CC1	K6	Plug, elec, r.f., fixed female shell, straight, entry, single pole	Z/5935-99-011-9484
PLE	D-CC2	L6	Plug, elec, r.f., fixed female shell, straight entry, single pole	Z/5935-99-011-9484
PLG	C-Z5	L6	Adaptor, skt to skt, elec fixed, co-ax single pole	Z/5935-99-054-0019
PLH	A-07	M6	Plug, elec, r.f., fixed female shell, straight entry, single pole	Z/5935-99-011-9484
PLJ	B-G7	M6	Adaptor, skt to skt, elec fixed, co-ax single pole	Z/5935-99-054-0019



Table 2501 - (cont)

Cct ref	Component Location		Description	Part No
	Circuit Fig 2504	Layout Fig 2507		
PLUGS, SOCKETS, ADAPTORS - (cont)				
PLK	D-X6	M6	Plug, elec, M4, brass, fixed female shell, size 1/0, 6-pole	Z1/5935-99-940-8504
PLL	A-08	N6	Plug, elec, r.f., fixed female shell, straight entry, single pole	Z/5935-99-011-9484
PIM	A-08	N6	Plug, elec, r.f., fixed female shell, straight entry, single pole	Z/5935-99-011-9484
SKT-M	A-A2	J5	Socket, elec, free male shell, co-ax, single pole	Z/5935-99-054-0022
SKT-P	C-Z5	L6	Socket, elec, free male shell, co-ax, single pole	Z/5935-99-054-0022
SKT-R	B-G7	M6	Socket, elec, free male shell, co-ax, single pole	Z/5935-99-054-0022
		2506	Socket assembly, crystal, 14-socket, aluminium frame, 2.27/32 in. lg, 2.3/4 in. wide	Z1/5935-99-102-1422
VALVES, ELECTRONIC				(Z/5960-99-)
V1	A-G2	A4	CV4010 (CV850)	000-4010
V2	D-P3	A4	CV4024 (CV455)	000-4024
V3	D-S3	E2	CV4009 (CV454)	000-4009
V4	D-V2	E3	CV4009 (CV454)	000-4009
V5	D-V2	E4	CV4012 (CV453)	000-4012
V6	A-E6	A2	CV4014 (CV138)	000-4014
V7	C-S3	L2	CV4010 (CV850)	000-4010
V8	C-W3	E4	CV4009 (CV454)	000-4009
V9	C-V3	E4	CV4009 (CV454)	000-4009
V10	A-D7	F3	CV4010 (CV850)	000-4010
V11	A-G6	F4	CV4010 (CV850)	000-4010
V12	A-H7	F4	CV4024 (CV455)	000-4024
V13	A-L7	F4	CV4024 (CV455)	000-4024
V14	C-AA3	L3	CV4010 (CV850)	000-4010
V15	B-H7	A3	CV4010 (CV850)	000-4010
(Types in brackets may be found in equipments)				
MISCELLANEOUS				
M1	D-AA7	A6	Meter, arbitrary, scale, 0-10, 1mA movement, panel type	Z4/ZD 05488
MR1	A-L7	N3	Semi-conductor device, diode CV448	Z/5960-99-000-0448
TH1	A-B7	F2	Switch thermostatic, 75°, 15V a.c. 15mA	Z1/5930-99-102-1848
			Flask, Dewar, pyrex glass	Z1/Za 56703
			Shield, crystal oven, metal	Z1/Za 56740
			Adaptor, crystal socket, B7G to B80	Z1/Za 56713

Table 2501 - (cont)

Cct ref	Component Location		Description	Part No
	Circuit Fig 2504	Layout Fig 2507		
MISCELLANEOUS - (cont)				
			Heating element, electrical	Z1/Z1 55922
			Core, adjustable, tuning, iron dust 8 BA thread	Z1/Z1 42749
		2505	Light indicator, flange mtg, M.E.S., base amber lens	Z1/Z1 56014
		2505	Lens, indicator light, plastic yellow	Z1/6210-99-949-1428

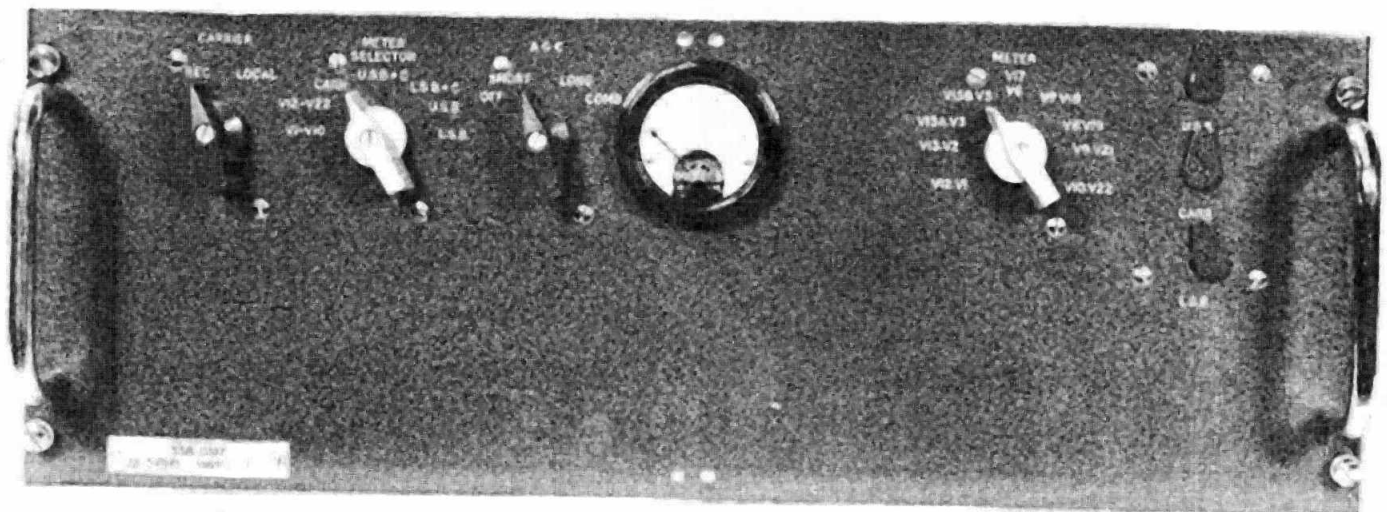
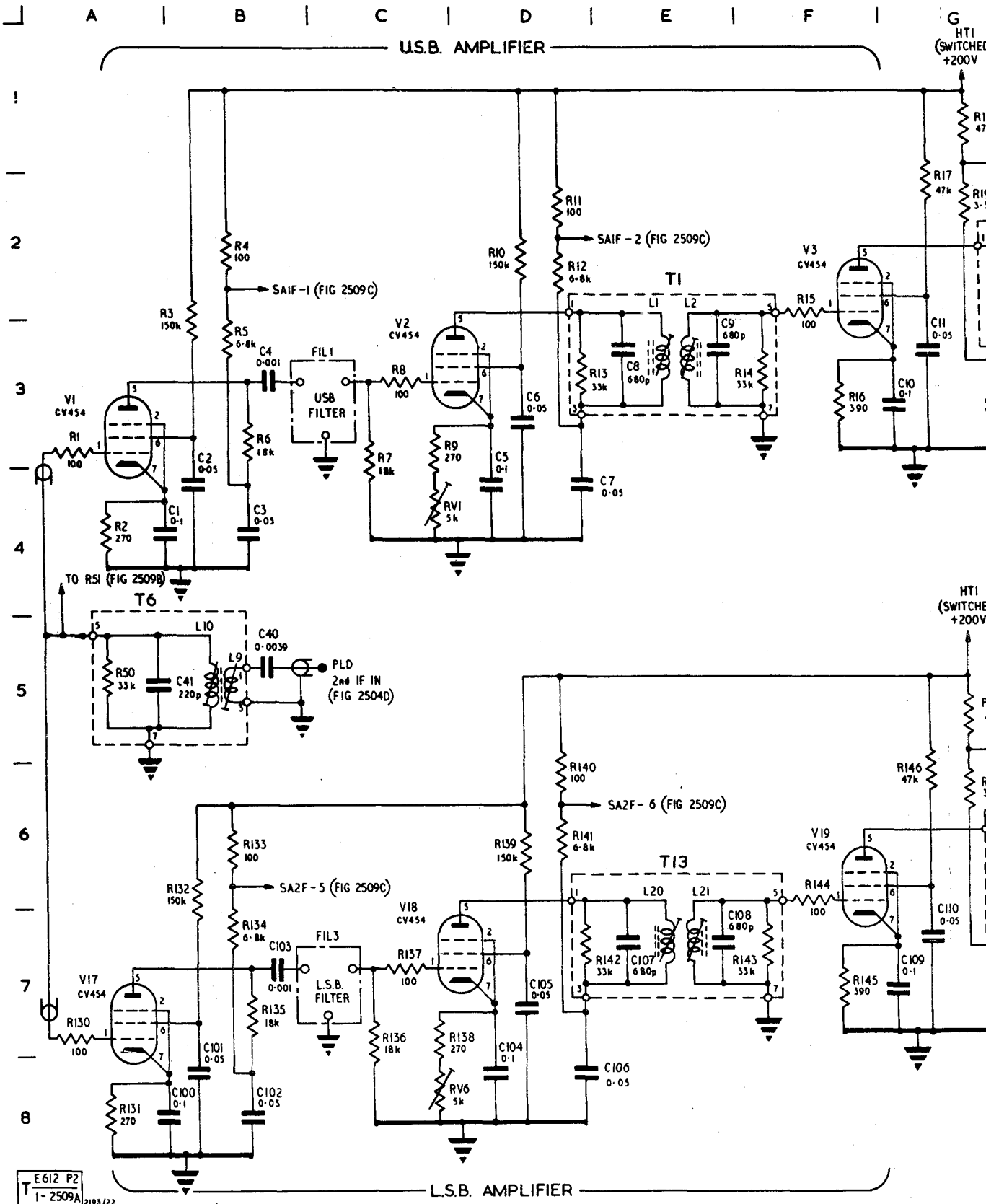


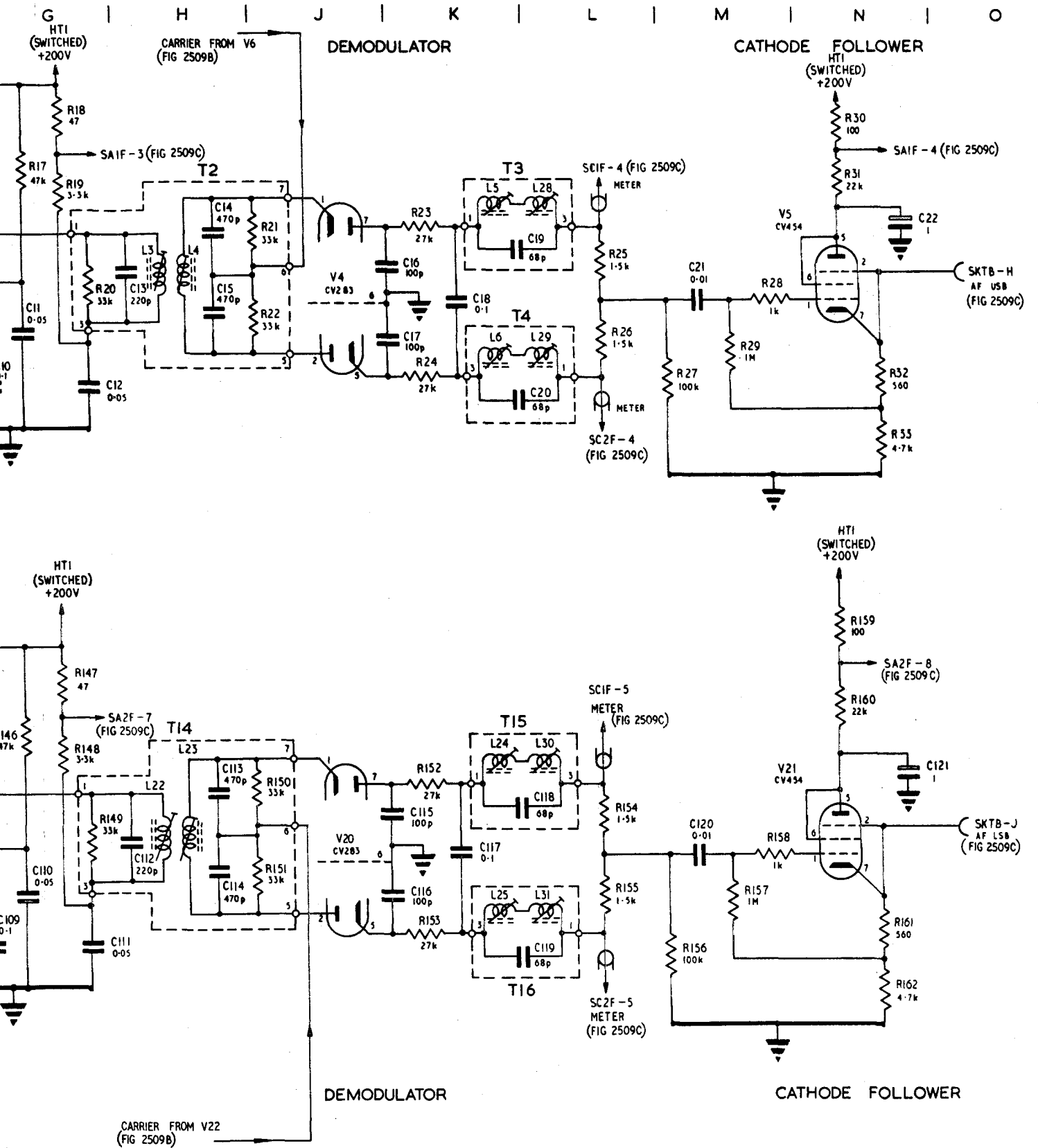
Fig 2508 - S.S.B. unit, view of front panel



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Fig 2509a - S.S.B. unit, circuit diagram





Unit diagram, sideband amplifiers and demodulators

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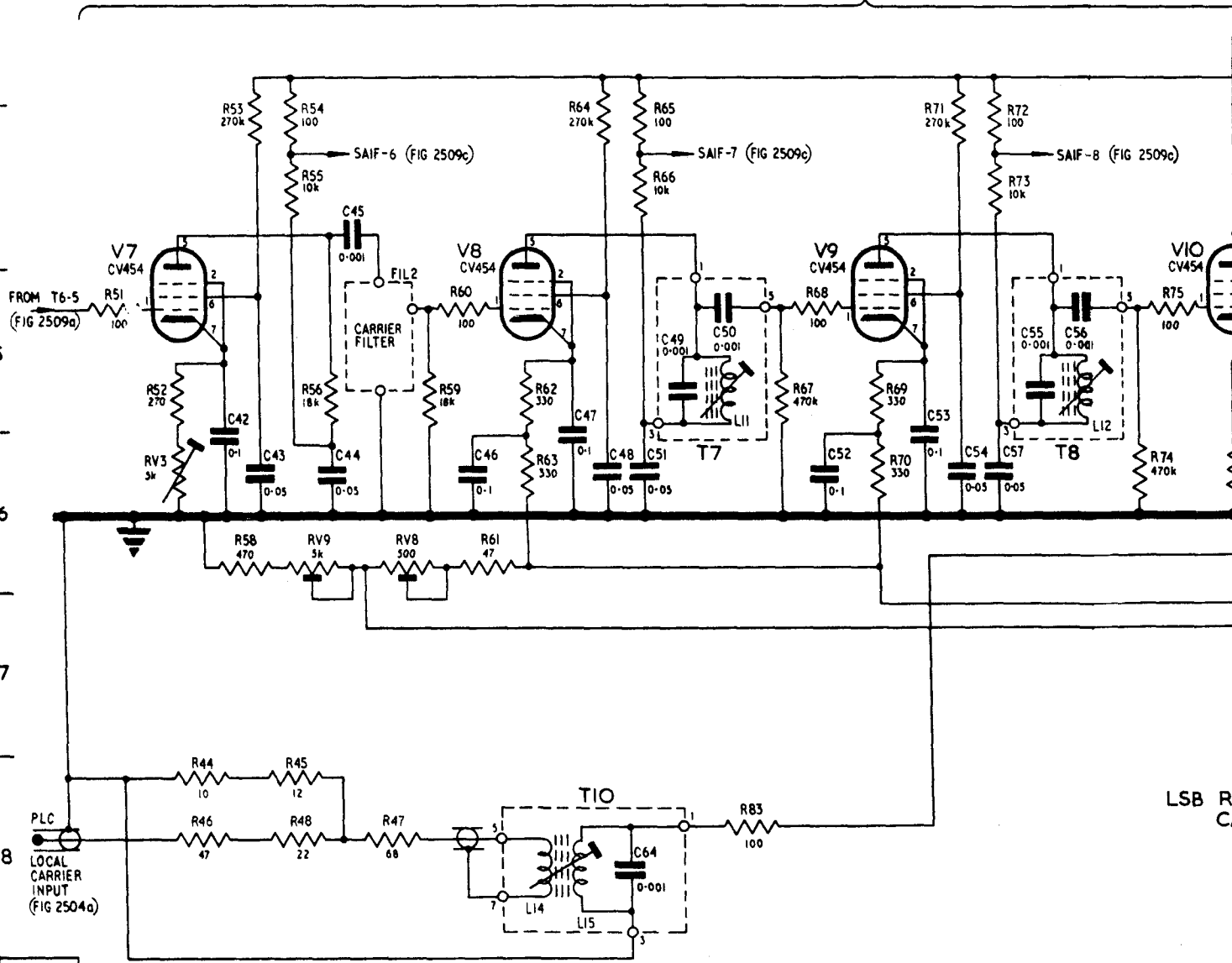




A | B | C | D | E | F | G | H

USB RECO  
 CARRIE

RECONDITIONED CARRIER  
 AMPLIFIER V7-VII



TE612 P2  
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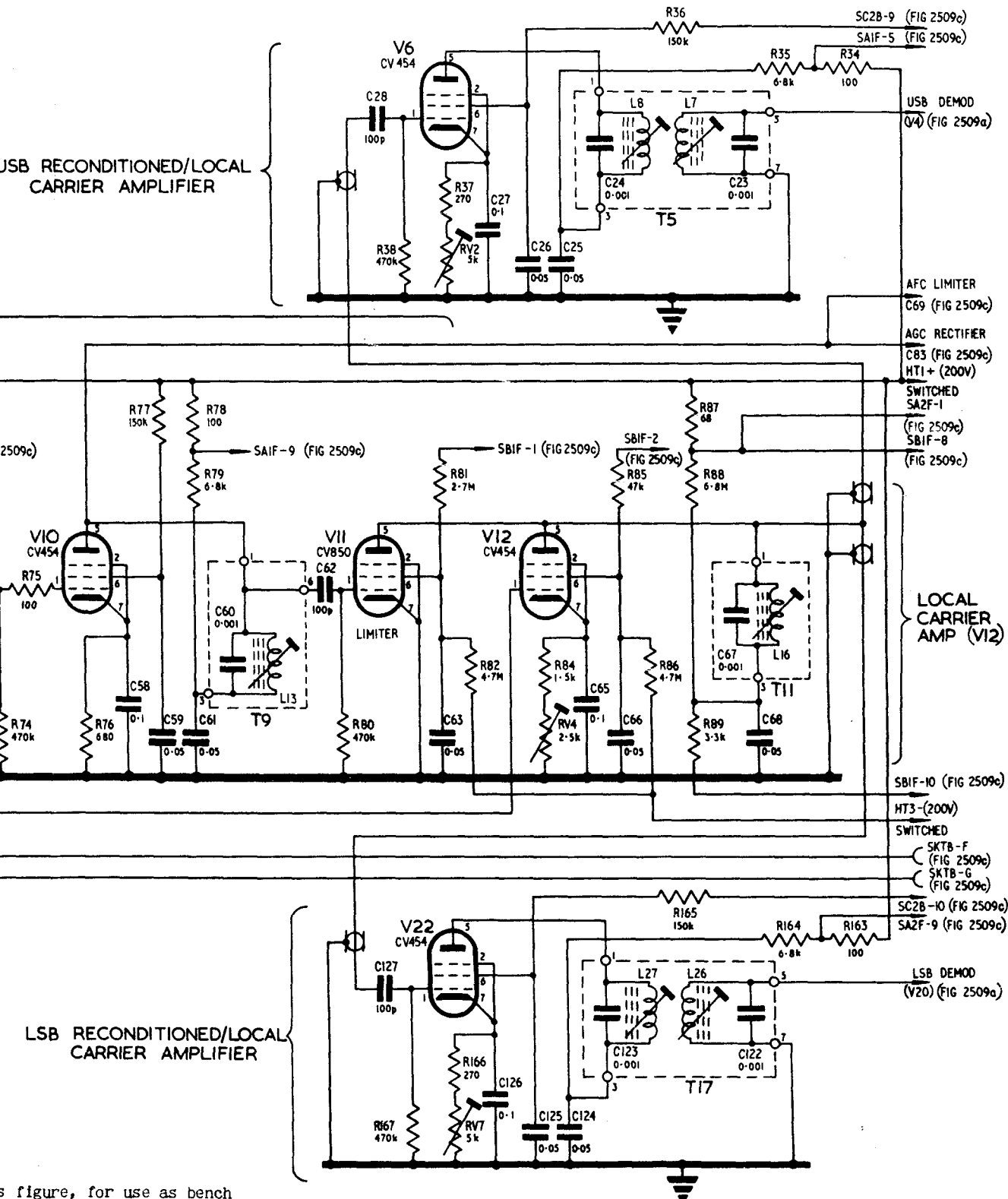
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Fig 2509b - S.S.B. unit, circuit diagram, recondi





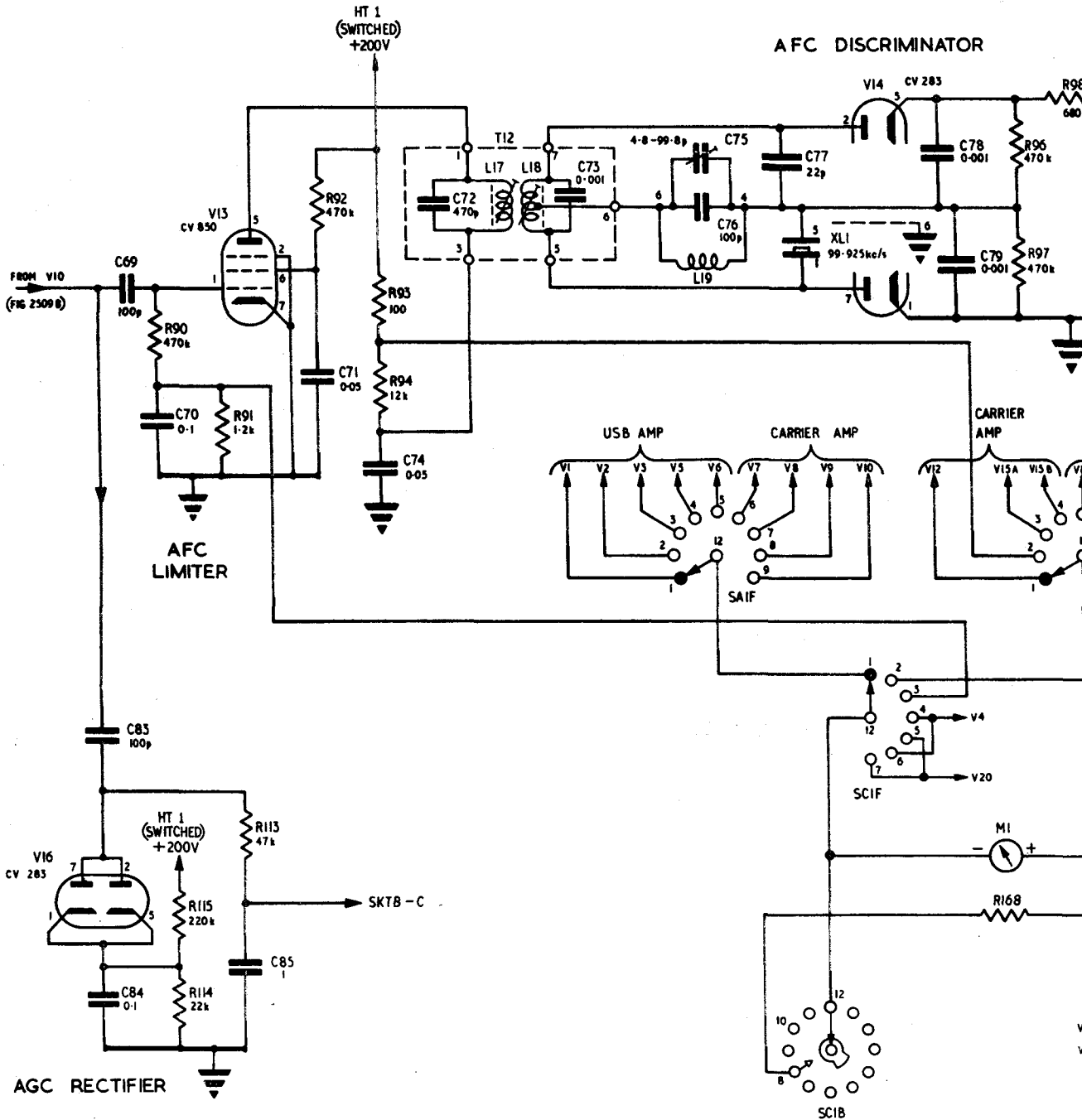
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reconditioned and local carrier amplifiers

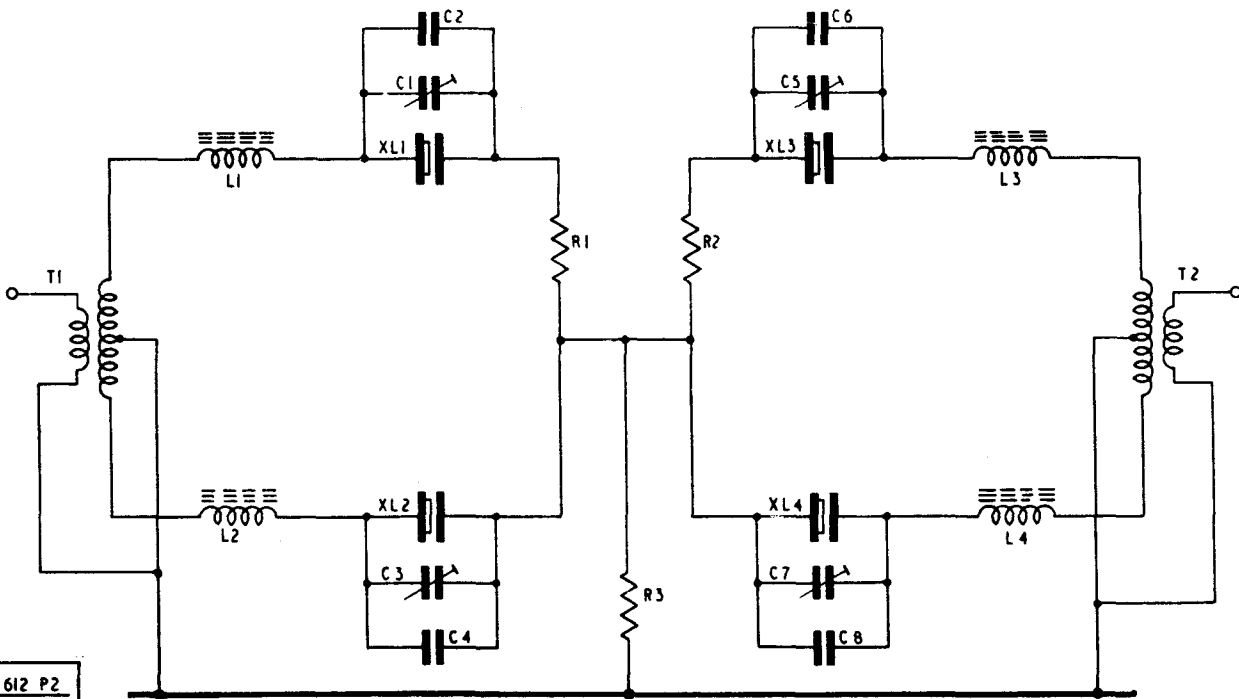
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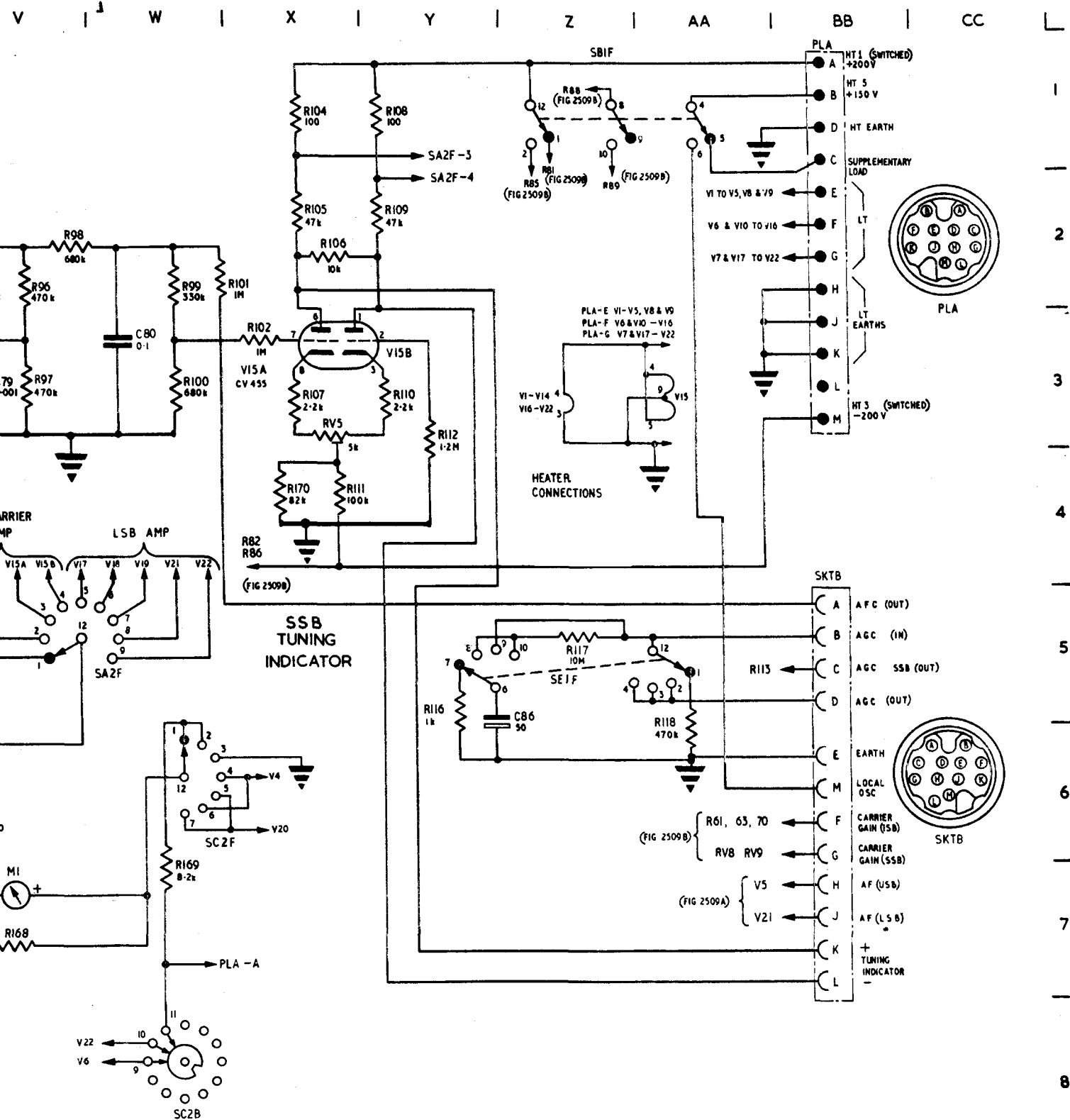
Fig 2509c - S.S.B. unit, circuit diagram  
a.g.c. rectifier, tuning



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2-2510 1230/153

Fig 2510 - S.S.B. unit, circuit diagram, sideband crystal filters

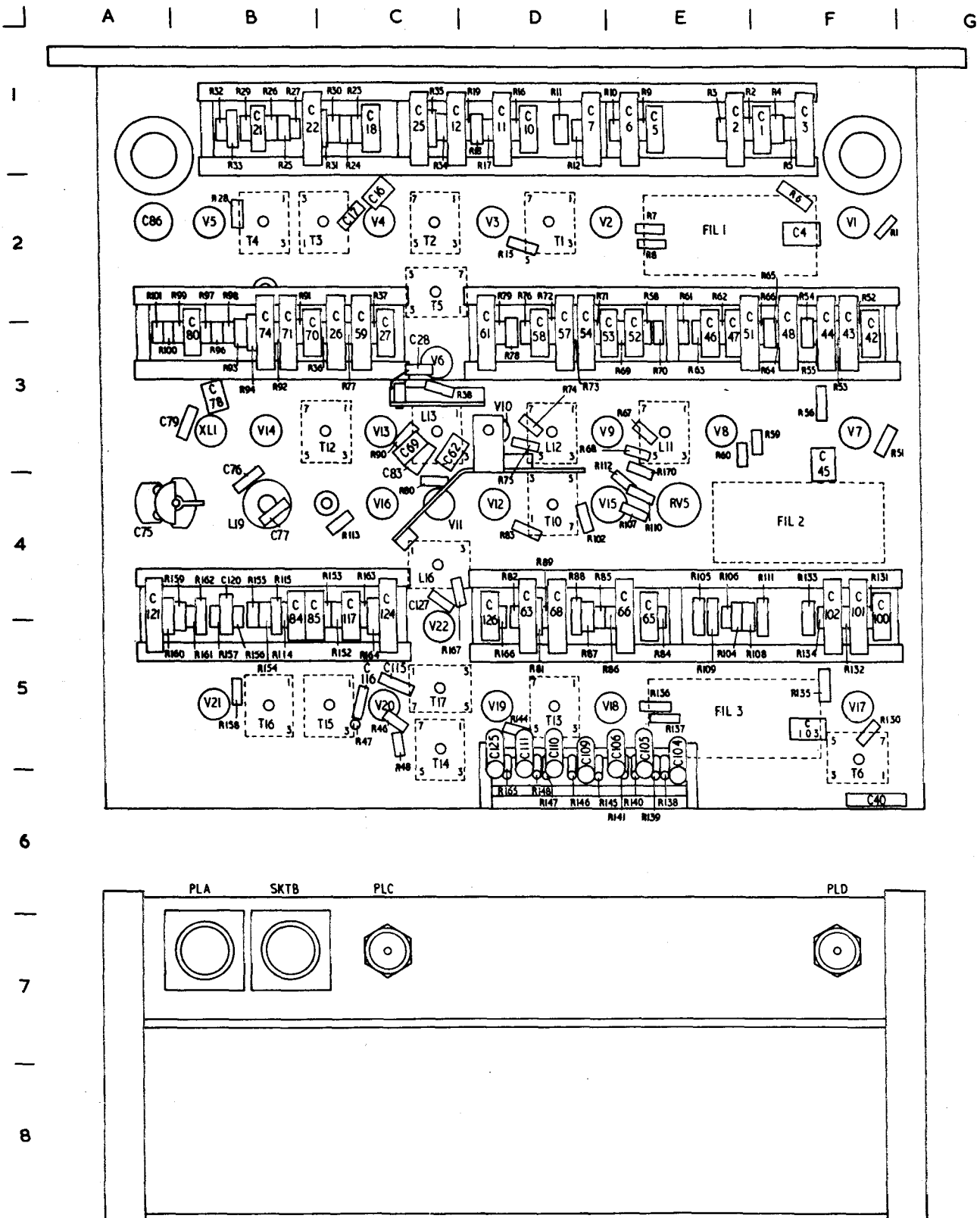
**Note:** This circuit is included for information only. FILTERS MUST NOT BE OPENED UNDER ANY CIRCUMSTANCES. When faulty, they must be dealt with in accordance with EMER Tels A 801.



copies of this figure, for use as bench  
be obtained on supplementary demand

mit diagram, a.f.c. limiter and discriminator,  
tuning indicator stage and valve heaters





T E612 P2  
1-2511 2193/10

Fig 2511 - S.S.B. unit, co

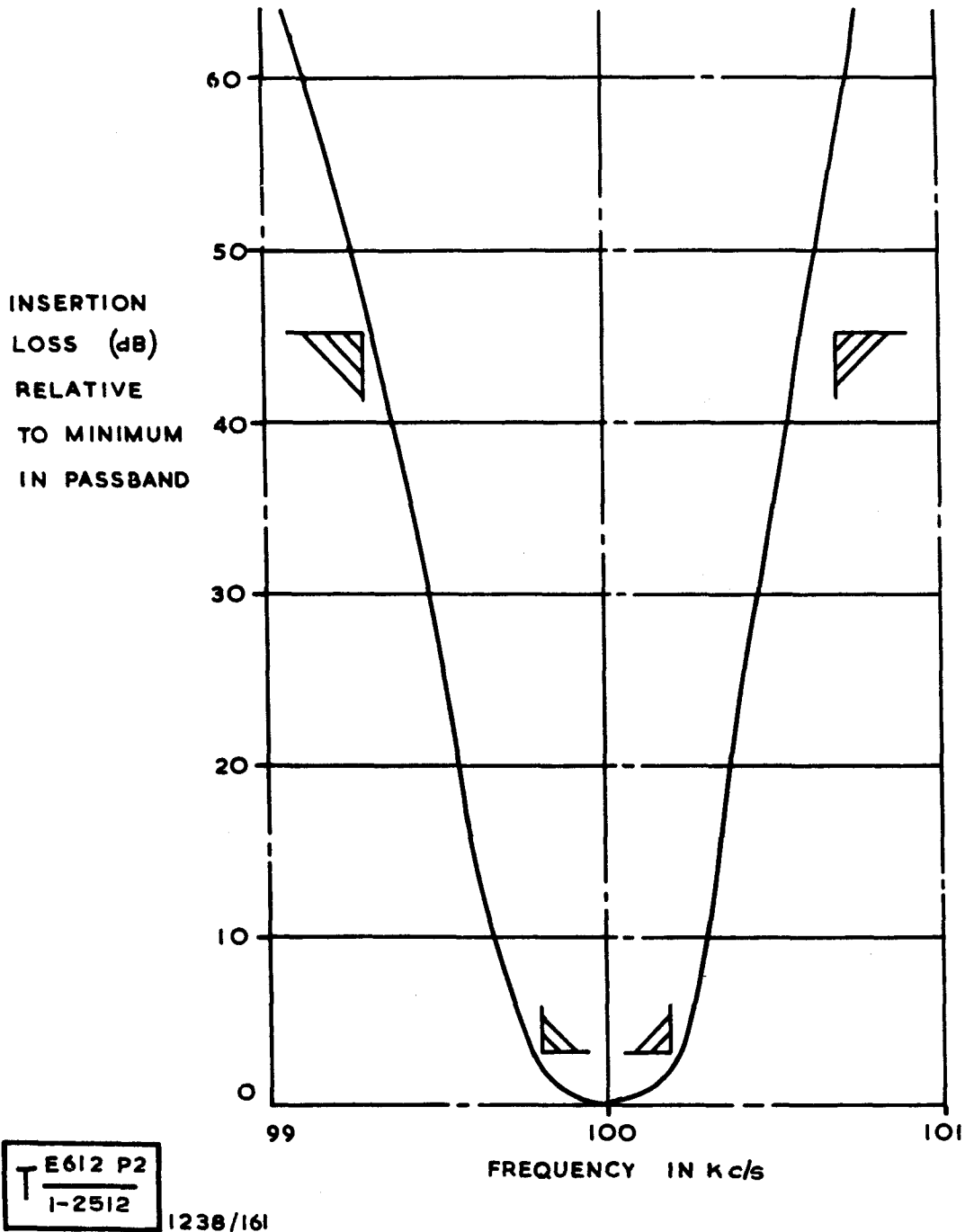
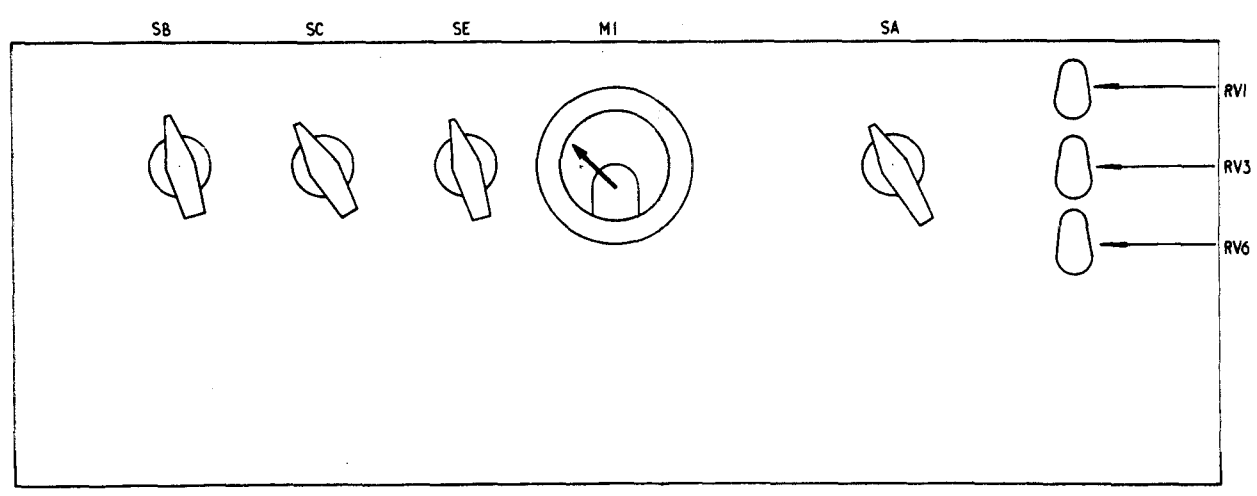
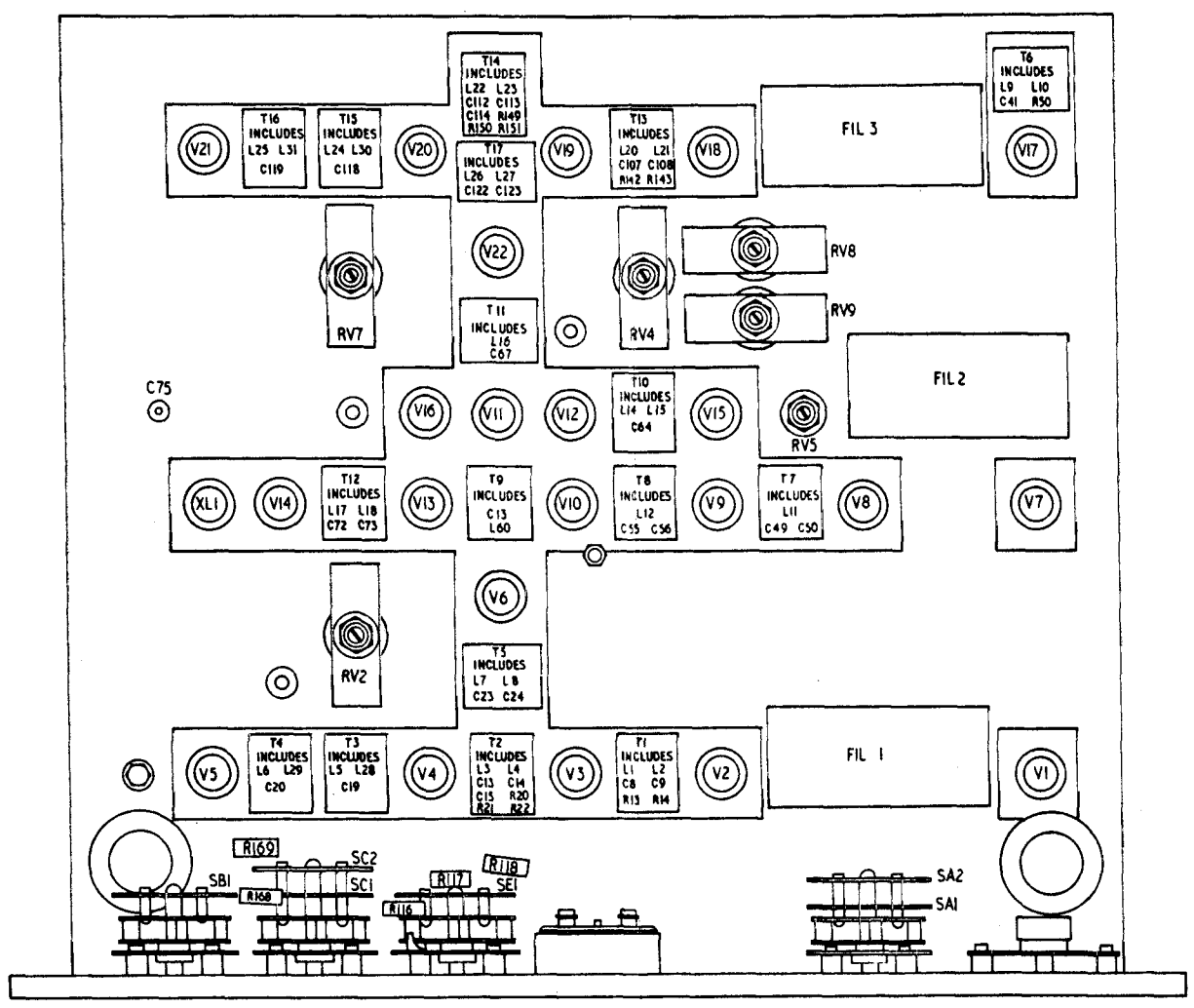


Fig 2512 - S.S.B. unit, response curve, carrier filter



G | H | J | K | L | M | N | O |



unit, component layout, chassis and panel



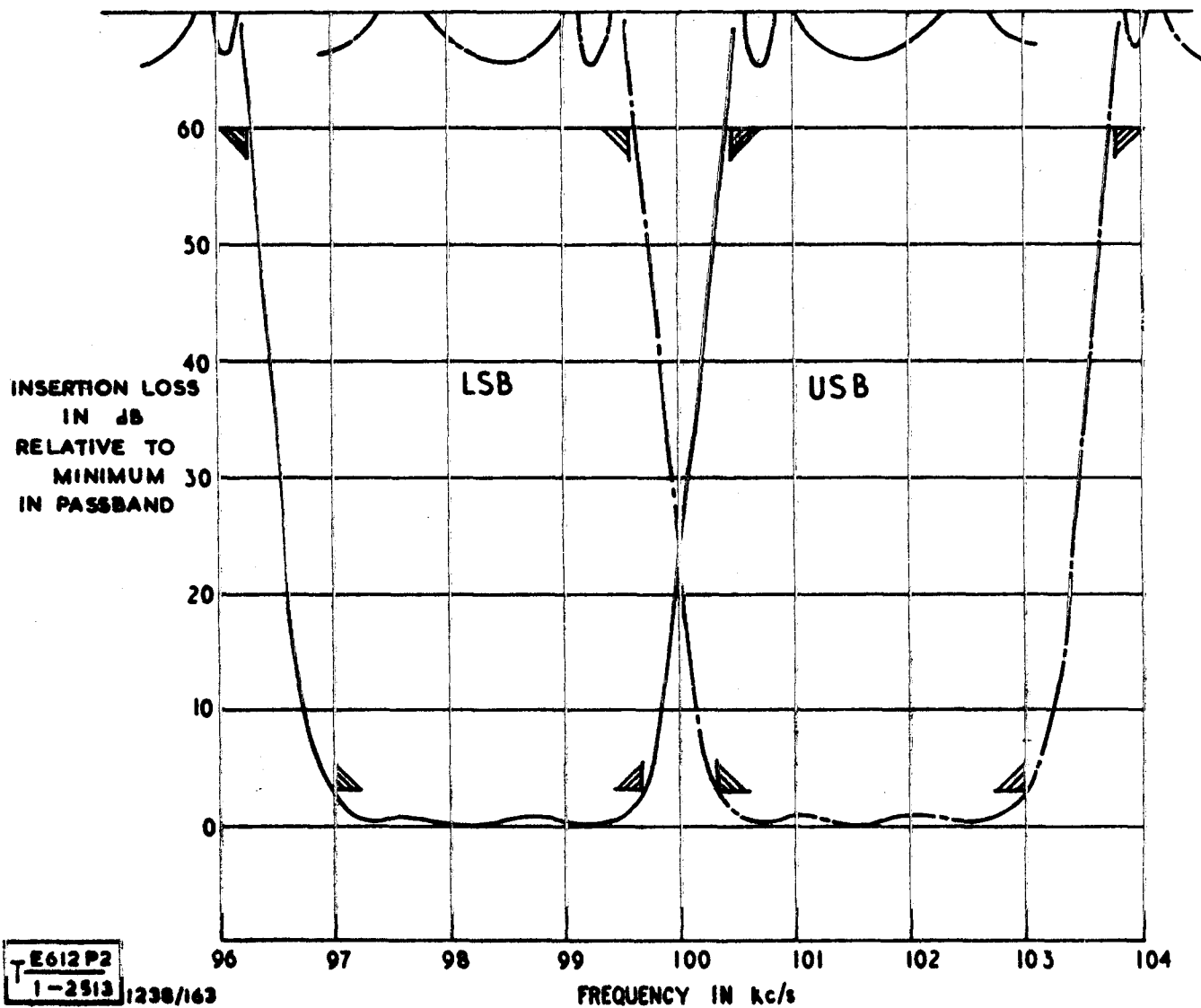


Fig 2513 - S.S.B. unit, response curves, sideband filters

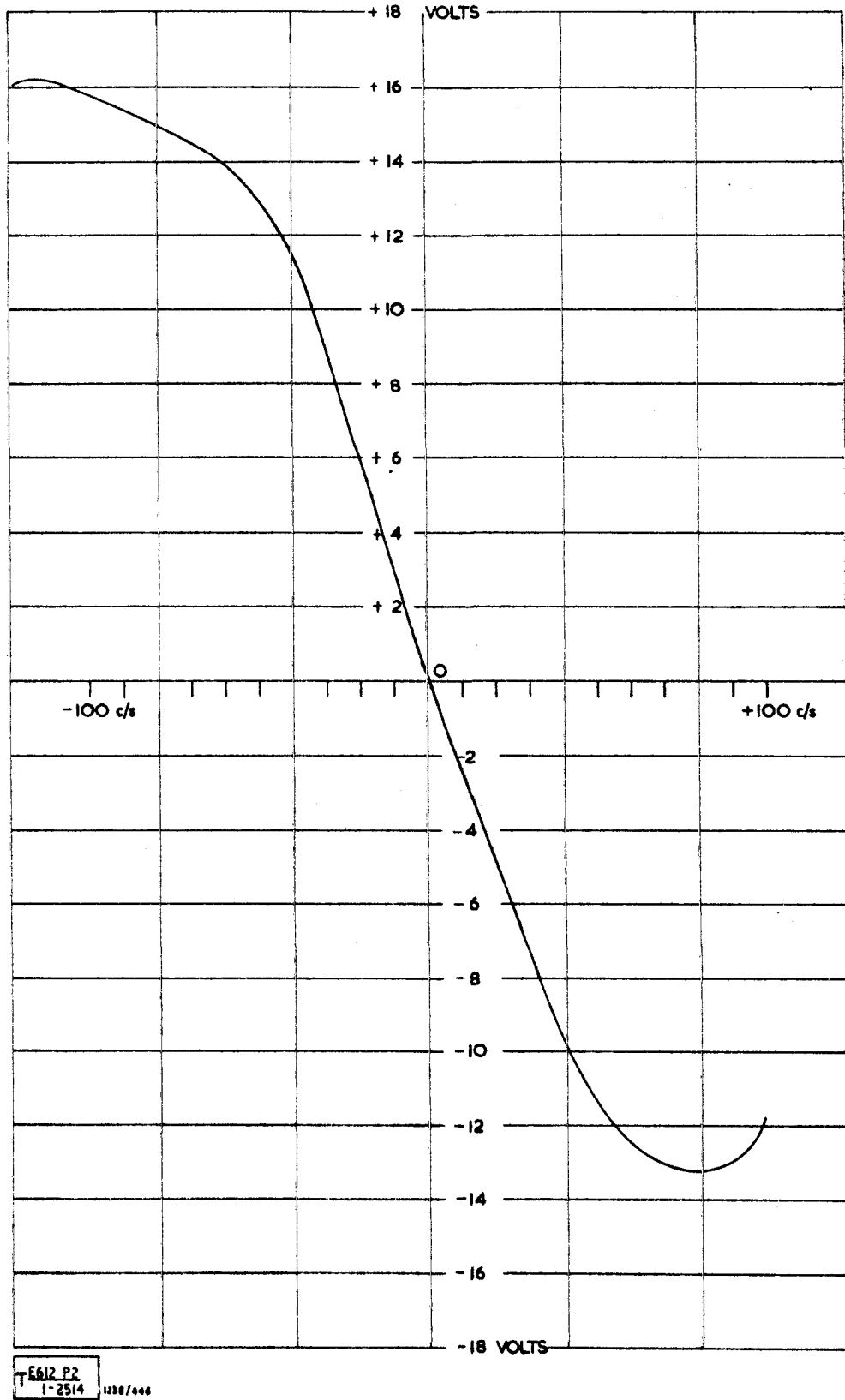


Fig 2514 - S.S.B. unit, response curve, a.f.c. discriminator

Table 2502 - S.S.B. unit, component schedule

Note: This table is current at the time of issue only. Use I.S.P.L., when published, to demand stores.

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm$ %)	Part No (Z/5905-99-)
	Circuit Fig 2509	Layout Fig 2511				
<b>RESISTORS, FIXED</b>						
R1	A-A3	F2	100	1/4	comp, ins	10 022-1109
R2	A-A4	E1	270	1/4	comp, ins	10 022-1164
R3	A-B3	E1	150k	1/4	comp, ins	10 022-3059
R4	A-B2	F1	100	1/8	comp, ins, gd 1	5 021-9040
R5	A-B3	F1	6.8k	1/4	comp, ins	10 022-2110
R6	A-B3	F2	18k	1/2	comp, ins	10 022-2165
R7	A-C3	F2	18k	1/4	comp, ins	10 022-2164
R8	A-C3	F2	100	1/4	comp, ins	10 -022-1109
R9	A-C3	E1	270	1/4	comp, ins	10 022-1164
R10	A-D2	E1	150k	1/4	comp, ins, gd 1	10 021-3059
R11	A-D2	D1	100	1/8	comp, ins, gd 1	5 021-9040
R12	A-D2	D1	6.8k	1/4	comp, ins	10 022-2110
R13	A-D3	L5	33k	1/4	comp, ins (in T1)	10 022-2193
R14	A-F3	L5	33k	1/4	comp, ins (in T1)	10 022-2193
R15	A-F2	D2	100	1/4	comp, ins	10 022-1109
R16	A-F3	D1	390	1/4	comp, ins	10 022-1185
R17	A-G2	D1	47k	1/4	comp, ins	10 022-2215
R18	A-G1	D1	47	1/8	film, ins	5 011-9714
R19	A-G2	D1	3.3k	1/4	comp, ins	10 022-2068
R20	A-G2	K5	33k	1/4	comp, ins (in T2)	10 022-2193
R21	A-J2	K5	33k	1/4	comp, ins (in T2)	10 022-2193
R22	A-J3	K5	33k	1/4	comp, ins (in T2)	10 022-2193
R23	A-K2	C1	27k	1/8	film, ins	5 021-9214
R24	A-K3	C1	27k	1/8	film, ins	5 021-9214
R25	A-L2	B1	1.5k	1/8	film, ins	5 021-9214
R26	A-L3	B1	1.5k	1/8	film, ins	5 021-9214
R27	A-M3	B1	100k	1/4	comp, ins	10 022-3038
R28	A-M2	B2	1k	1/4	comp, ins	10 022-2004
R29	A-M3	B1	1M	1/4	comp, ins	10 022-3163
R30	A-N1	C1	100	1/8	comp, ins, gd 1	5 021-9040
R31	A-N2	C1	22k	1/2	comp, ins	10 022-2174
R32	A-N3	B1	560	1/4	comp, ins	10 022-1206
R33	A-N4	B1	4.7k	1/2	comp, ins	10 022-2090
R34	B-N1	C1	100	1/8	comp, ins, gd 1	5 021-9040
R35	B-N1	C1	6.8k	1/4	comp, ins	10 022-2111
R36	B-M1	B3	150k	1/4	comp, ins	10 022-3059
R37	B-L2	C2	270	1/4	comp, ins	10 022-1164
R38	B-K2	C3	470k	1/4	comp, ins	10 022-3121
R44	B-B8		10	1/4	comp, ins	10 022-1002
R45	B-B8		12	1/4	comp, ins	10
R46	B-B8	C5	47	1/4	comp, ins	10

Table 2502 - (cont)

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm$ %)	Part No (Z/5905-99-)
	Circuit Fig 2509	Layout Fig 2511				
<b>RESISTORS, FIXED - (cont)</b>						
R47	B-C8	C5	68	1/4	comp, ins	10 022-1089
R48	B-B8	C5	22	1/4	comp, ins	10
R50	A-A5	N1	33k	1/4	comp, ins (in T6)	10 022-2193
R51	B-A5	F3	100	1/4	comp, ins	10 022-1109
R52	B-B5	F2	270	1/4	comp, ins	10 022-1164
R53	B-B4	F2	270k	1/4	comp, ins	10 022-3092
R54	B-B4	F2	100	1/8	comp, ins, gd 1	5 021-9040
R55	B-B4	F3	10k	1/4	comp, ins	10 022-2131
R56	B-C5	F3	18k	1/2	comp, ins	10 022-2165
R58	B-B6	E2	470	1/4	comp, ins	10 022-1194
R59	B-C5	E3	18k	1/4	comp, ins	10 022-2164
R60	B-C5	E3	100	1/4	comp, ins	10 022-1109
R61	B-C6	E2	47	1/4	comp, ins	10
R62	B-D5	E2	330	1/4	comp, ins	10 022-1173
R63	B-D6	E2	330	1/4	comp, ins	10 022-1173
R64	B-D4	F2	270k	1/4	comp, ins	10 022-3092
R65	B-E4	F2	100	1/8	comp, ins, gd 1	5 021-9040
R66	B-E4	F2	10k	1/4	comp, ins	10 022-2131
R67	B-E4	E3	470k	1/4	comp, ins	10 022-3121
R68	B-F5	E3	100	1/4	comp, ins	10 022-1109
R69	B-F5	E2	330	1/4	comp, ins	10 022-1173
R70	B-F6	E2	330	1/4	comp, ins	10 022-1173
R71	B-F4	D2	270k	1/4	comp, ins	10 022-3092
R72	B-G4	D2	100	1/8	comp, ins, gd 1	5 021-9040
R73	B-G4	D2	10k	1/4	comp, ins	10 022-2131
R74	B-G6	D3	470k	1/4	comp, ins	10 022-3121
R75	B-H6	D3	100	1/4	comp, ins	10 022-1109
R76	B-G6	D2	680	1/4	comp, ins	10 022-1215
R77	B-J4	C3	150k	1/4	comp, ins	10 022-3059
R78	B-J4	C3	100	1/8	comp, ins, gd 1	5 021-9040
R79	B-J4	D2	6.8k	1/4	comp, ins	10 022-2110
R80	B-K6	C4	470k	1/4	comp, ins	10 022-3121
R81	B-L4	D5	2.7M	1/2	comp, ins	10 022-3219
R82	B-L5	D4	4.7M	1/4	comp, ins	10 022-3248
R83	B-E8	D4	100	1/4	comp, ins	10 022-1109
R84	B-L5	E5	1.5k	1/4	comp, ins	10
R85	B-M4	D4	47k	1/4	comp, ins	10 022-2215
R86	B-M5	D5	4.7M	1/4	comp, ins	10 022-3248
R87	B-M4	D5	68	1/8	comp, ins, gd 1	5 011-9726
R88	B-M4	D4	6.8M	1/2	comp, ins	10 022-3270
R89	B-M6	D4	3.3k	1/4	comp, ins	10 022-2068
R90	C-Q4	C3	470k	1/4	comp, ins	5

Table 2502 - (cont)

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm\%$ )	Part No (Z/5905-99-)
	Circuit Fig 2509	Layout Fig 2511				
RESISTORS, FIXED, - (cont)						
R91	C-Q4	B2	1.2k	1/8	film, ins	5 021-9118
R92	C-R3	B3	470k	1/4	comp, ins	10 022-3121
R93	C-R3	B3	100	1/8	comp, ins, gd 1	5 021-9040
R94	C-R4	B3	12k	1/2	comp, ins	10
R96	C-V2	B3	470k	1/4	comp, ins	10 022-3121
R97	C-V3	B2	470k	1/4	comp, ins	10 022-3121
R98	C-V2	B2	680k	1/4	comp, ins	10 022-3143
R99	C-W2	B2	330k	1/4	comp, ins	10 022-3101
R100	C-W3	A3	680k	1/4	comp, ins	10 022-3143
R101	C-W2	A2	1M	1/4	comp, ins	10
R102	C-X3	D4	1M	1/4	comp, ins	10 022-3163
R104	C-X1	E4	100	1/8	comp, ins, gd 1	5 021-9040
R105	C-X2	E4	47k	1/2	comp, ins	10 022-2216
R106	C-X2	E4	10k	1/4	comp, ins	10 022-2131
R107	C-X3	E4	2.2k	1/4	comp, ins	10 022-2047
R108	C-Y1	E4	100	1/8	comp, ins, gd 1	5 021-9040
R109	C-Y2	E4	47k	1/2	comp, ins	10 022-2216
R110	C-Y3	E4	2.2k	1/4	comp, ins	10 022-2047
R111	C-Y4	E4	100k	1/2	comp, ins	10 022-3039
R112	C-Y3	D4	1.2M	1/4	comp, ins	10 022-3175
R113	C-Q7	C4	47k	1/4	comp, ins	10 022-2215
R114	C-Q8	B5	22k	1/8	film, ins	5 021-9208
R115	C-Q7	B4	220k	1/4	film, ins	5 021-9281
R116	C-Y5	K5	1k	1/4	comp, ins	10 022-2005
R117	C-Z5	K5	10M	1/4	comp, ins	10 022-3290
R118	C-Z6	K5	470k	1/4	comp, ins	10 022-3121
R130	A-A7	F5	100	1/4	comp, ins	10 022-1109
R131	A-A8	F4	270	1/4	comp, ins	10 022-1164
R132	A-B6	F5	150k	1/4	comp, ins	10 022-3059
R133	A-B6	F4	100	1/8	comp, ins, gd 1	5 021-9040
R134	A-B7	F5	6.8k	1/4	comp, ins	10 022-2110
R135	A-B7	F5	18k	1/2	comp, ins	10 022-2165
R136	A-C7	E5	18k	1/4	comp, ins	10 022-2164
R137	A-C7	E5	100	1/4	comp, ins	10 022-1109
R138	A-C7	E6	270	1/4	comp, ins	10 022-1164
R139	A-D6	E6	150k	1/4	comp, ins	10 022-3059
R140	A-D6	E6	100	1/8	comp, ins, gd 1	5 021-9040
R141	A-D6	D6	6.8k	1/4	comp, ins	10 022-2110
R142	A-D7	L2	33k	1/4	comp, ins (in T13)	10 022-2193
R143	A-F7	L2	33k	1/4	comp, ins (in T13)	10 022-2193
R144	A-F6	D5	100	1/4	comp, ins	10 022-1109
R145	A-F6	D6	390	1/4	comp, ins	10 022-1185

Table 2502-(cont)

Cot ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm$ %)	Part No (Z/5905-99-)
	Circuit Fig 2509	Layout Fig 2511				
RESISTORS, FIXED - (cont)						
R146	A-G6	D6	47k	1/4	comp, ins	10 022-2215
R147	A-G4	D6	47	1/8	film, ins	5 011-9714
R148	A-G6	D6	3.3k	1/4	comp, ins	10 022-2068
R149	A-G6	L1	33k	1/4	comp, ins (in T14)	10 022-2193
R150	A-H6	K1	33k	1/4	comp, ins (in T14)	10 022-2193
R151	A-H2	K1	33k	1/4	comp, ins (in T14)	10 022-2193
R152	A-K6	C5	27k	1/8	film, ins	5 021-9214
R153	A-K7	B4	27k	1/8	film, ins	5 021-9214
R154	A-L6	B5	1.5k	1/8	film, ins	5 021-9124
R155	A-L7	B4	1.5k	1/8	film, ins	5 021-9124
R156	A-M7	B5	100k	1/4	comp, ins	10 022-3038
R157	A-M7	B5	1M	1/4	comp, ins	10
R158	A-M6	B5	1k	1/4	comp, ins	10 022-2004
R159	A-N5	A4	100	1/8	comp, ins, gd 1	5 021-9040
R160	A-N5	A5	22k	1/2	comp, ins	10 022-2174
R161	A-N7	B5	560	1/4	comp, ins	10 022-1206
R162	A-N7	B5	4.7k	1/2	comp, ins	10 022-2090
R163	B-N7	G4	100	1/8	comp, ins, gd 1	5 021-9040
R164	B-N7	C5	6.8k	1/2	comp, ins	10 022-2111
R165	B-M7	D6	150k	1/4	comp, ins	10 022-3058
R166	B-L8	D5	270	1/4	comp, ins	10 022-1164
R167	B-K8	C4	470k	1/4	comp, ins	10 022-3121
R168	C-V7	J5	222		w.w.	1 Z1/Za 56814
R169	C-W7	J5	8.2k	1/4	film, ins	5 022-9179
R170	C-X4	E4	82k	1/4	comp, ins	10 022-3028
RESISTORS, VARIABLE						(Z1/5905-99-)
RV1	A-C4	N7	5k	1	w.w. rotary, tor	10 940-0458
RV2	B-L3	K4	5k	1	w.w. rotary, tor	10 940-0458
RV3	B-B6	N7	5k	1	w.w. rotary, tor	10 940-0458
RV4	B-L6	L2	2.5k	1	w.w. linear	10 Z1/Za 39386
RV5	C-X3	E4	5k	1	w.w. rotary, tor	10 940-0458
RV6	A-C8	N7	5k	1	w.w. rotary, tor	10 940-0458
RV7	B-L8	K2	5k	1	w.w. rotary, tor	10 940-0458
RV8	B-C6	M2	500	1/2	w.w. rotary, tor	10 940-8994
RV9	B-B6	M2	5k	1	w.w. rotary, tor	10 940-0458



Table 2502 - (cont)

Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $\pm^{\circ}/o$ )	Part No (Z/5910-99-)
	Circuit Fig 2509	Layout Fig 2511				
CAPACITORS						
C1	A-A4	F1	0.1	200	pap, met, tub	25 011-9827
C2	A-B4	E1	0.05	175	pap, met, tub	20 011-5596
C3	A-B4	F1	0.05	175	pap, met, tub	20 011-5596
C4	A-B3	F2	0.001	350	mica, met, rect	5 012-4701
C5	A-D4	E1	0.1	200	pap, met, tub	25 011-9827
C6	A-D3	E1	0.05	175	pap, met, tub	20 011-5596
C7	A-D4	D1	0.05	175	pap, met, tub	20 011-5596
C8	A-E3	L5	680p	350	mica, met, tub (in T1)	5 012-3954
C9	A-E3	L5	680p	350	mica, met, tub (in T1)	5 012-3954
C10	A-G3	D1	0.1	200	pap, met, tub	25 011-9827
C11	A-G3	D1	0.05	175	pap, met, tub	20 011-5596
C12	A-G3	C1	0.05	175	pap, met, tub	20 011-5596
C13	A-H2	K5	220p	750	mic, met, rect (in T2)	5 012-3936
C14	A-H2	K5	470p	350	mic, met, rect (in T2)	2 110-2284
C15	A-H3	K5	470p	350	mic, met, rect (in T2)	2 110-2284
C16	A-K2	C2	100p	750	mic, met, rect	5 012-3924
C17	A-K3	C2	100p	750	mic, met, rect	5 012-3924
C18	A-K2	C1	0.1	200	pap, met, tub	25 011-9827
C19	A-K2	K5	68p	750	mic, met, rect (in T3)	5 012-3918
C20	A-K3	J5	68p	750	mic, met, rect (in T4)	5 012-3918
C21	A-M2	B1	0.01	200	pap, met, tub	25 011-5627
C22	A-N2	B1	1	275	elect, al, tub, met	-20+50 014-5003
C23	B-N2	K4	0.001	350	mic, met, rect (in T5)	5 012-4701
C24	B-M2	K4	0.001	350	mic, met, rect (in T5)	5 012-4701
C25	B-L3	C1	0.05	175	pap, met, tub	20 011-5596
C26	B-L3	C3	0.05	175	pap, met, tub	20 011-5596
C27	B-L2	C3	0.1	200	pap, met, tub	25 011-9827
C28	B-K2	C3	100p	750	mic, foil, rect, met	20 012-3165
C40	A-B5	F5	0.0039	750	mic, rect, tub	5 012-4728
C41	A-A5	N1	220p	750	mic, met, rect (in T6)	5 012-3936
C42	B-B6	F3	0.1	200	pap, met, tub	25 011-9827
C43	B-B6	F3	0.05	175	pap, met, tub	20 011-5596
C44	B-C6	F3	0.05	175	pap, met, tub	20 011-5596
C45	B-C4	F3	0.001	350	mic, met, rect	5 012-4701
C46	B-C6	E3	0.1	200	pap, met, tub	25 011-9827
C47	B-D6	E3	0.1	200	pap, met, tub	25 011-9827
C48	B-D6	F3	0.05	175	pap, met, tub	20 011-5596
C49	B-E5	M3	0.001	350	mic, met, rect (in T7)	5 012-4701
C50	B-E5	M3	0.001	350	mic, met, rect (in T7)	5 012-4701
C51	B-E6	E3	0.05	175	pap, met, tub	20 011-5596
C52	B-F6	E3	0.1	200	pap, met, tub	25 011-9827

Table 2502 - (cont)

Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $\pm$ %)	Part No (Z/5910-99-)
	Circuit Fig 2509	Layout Fig 2511				
CAPACITORS - (cont)						
C53	B-F6	D3	0.1	200	pap, met, tub	25 011-9827
C54	B-F6	D3	0.05	175	pap, met, tub	20 011-5596
C55	B-G5	L3	0.001	350	mic,met,rect (in T8)	5 012-4701
C56	B-G5	L3	0.001	350	mic,met,rect (in T8)	5 012-4701
C57	B-G6	D3	0.05	175	pap, met, tub	20 011-5596
C58	B-H6	D3	0.1	200	pap, met, tub	25 011-9827
C59	B-J6	C3	0.05	175	pap, met, tub	20 011-5596
C60	B-J5	K3	0.001	350	mic,met,rect (in T9)	5 012-4701
C61	B-J6	D3	0.05	175	pap, met, tub	20 011-5596
C62	B-K5	C3	100p	750	mic,foil,rect,met	20 012-3165
C63	B-L6	D4	0.05	175	pap,met,tub	20 011-5596
C64	B-D8	L3	0.001	350	mic,met,rect (in T10)	5 012-4701
C65	B-M6	E4	0.1	200	pap, met, tub	20 011-9827
C66	B-M6	D4	0.05	175	pap, met, tub	20 011-5596
C67	B-N5	K2	0.001	350	mic,met,rect	5 012-4701
C68	B-N6	D4	0.05	175	pap, met, tub	10 011-5596
C69	C-P3	C3	100p	750	mic,foil,rect,met	20 012-3165
C70	C-Q4	B2	0.1	200	pap, met, tub	25 011-9827
C71	C-R4	B2	0.05	175	pap, met, tub	20 011-5596
C72	C-R3	K3	470p	750	mic,met,rect (in T12)	5 012-3948
C73	C-S3	K3	0.001	350	mic,met,rect (in T12)	5 012-4701
C74	C-R4	B4	0.05	175	pap, met	20 011-5596
C75	C-T2	A4	97.2p		var, air dielectric	- 016-0006
C76	C-T3	B4	56p			-
C77	C-U2	B4	22p	750	mic,met,rect	5 012-3904
C78	C-V2	B2	0.001	350	mic,met,rect	5 012-4701
C79	C-V3	B2	0.001	350	mic,met,rect	5 012-4701
C80	C-W3	B2	0.1	200	pap, met	25 011-9827
C83	C-P6	C3	100p	750	mic,foil,rect,met	20 012-3165
C84	C-P8	B4	0.1	200	pap, met, tub	25 011-9827
C85	C-Q8	B4	0.1	200	pap, met, tub	25 011-9827
C86	C-Y6	A2	50	70	elect, tantalum	20 Z1/ZA 56613
C100	A-A8	F4	0.1	200	pap, met, tub	25 011-9827
C101	A-B8	F4	0.05	175	pap, met, tub	20 011-5596
C102	A-B8	F4	0.05	175	pap, met, tub	20 011-5596
C103	A-B7	F5	0.001	350	mic,met,rect	5 012-4701
C104	A-D8	E5	0.1	200	pap, met, tub	25 011-9827
C105	A-D7	E5	0.05	175	pap, met, tub	20 011-5596
C106	A-D8	D5	0.05	175	pap, met, tub	20 011-5596
C107	A-E7	L1	680p	350	mic,met,tub (in T13)	5 012-3954
C108	A-E7	L1	680p	350	mic,met,tub (in T13)	5 012-3954
C109	A-G7	D5	0.1	200	pap, met, tub	25 011-9827

Table 2502 - (cont)

Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $\pm$ %)	Part No (Z/5910-99-)
	Circuit Fig 2509	Layout Fig 2511				
CAPACITORS - (cont)						
C110	A-G7	D5	0.05	175	pap, met, tub	20 011-5596
C111	A-G7	D5	0.05	175	pap, met, tub	20 011-5596
C112	A-H6	K1	220p	750	mic,met,rect (in T14)	5 012-3936
C113	A-H6	K1	470p	350	mic,met,rect (in T14)	2 110-2284
C114	A-H7	K1	470p	350	mic,met,rect	2 110-2284
C115	A-K6	C5	100p	750	mic,foil,rect,met	5 012-3924
C116	A-K7	C5	100p	750	mic,foil,rect,met	5 012-3924
C117	A-K6	C4	0.1	200	pap,met,tub	25 011-9827
C118	A-K6	K2	68p	750	mic,met,rect (in T15)	5 012-3918
C119	A-K7	J1	68p	750	mic,met,rect (in T16)	5 012-3918
C120	A-M6	B4	0.01	200	pap,met,tub	25 011-5127
C121	A-N6	A4	1	275	elect,al,tub,met	20 014-5003
C122	B-N8	K2	0.001	350	mic,met,rect (in T17)	5 012-4701
C123	B-M8	L2	0.001	350	mic,met,rect (in T17)	5 012-4701
C124	B-L8	C4	0.05	175	pap, met, tub	20 011-5596
C125	B-L8	D5	0.05	175	pap, met, tub	20 011-5596
C126	B-L8	D4	0.1	200	pap, met, tub	25 011-9827
C127	B-K7	C4	100p	750	mic,foil,rect,met	20 012-3165
Cct ref	Component Location		Description	Part No		
	Circuit Fig 2509	Layout Fig 2511				
INDUCTORS						
L1	A-E3	L5)	Part of T1			
L2	A-E3	L5)				
L3	A-H2	K5)	Part of T2			
L4	A-H2	K5)				
L5	A-K2	K5	Part of T3			
L6	A-K3	J5	Part of T4			
L7	B-M2	K4)	Part of T5			
L8	B-M2	K4)				
L9	A-B5	N1)	Part of T6			
L10	A-B5	N1)				
L11	B-E5	E3	R.F., screened, 2.1/16 in. high x 1.13/16 in. lg x 15/16 in. wd (containing C49,C50,L11)	Z1/Z $\Delta$ 56775		

Table 2502 - (cont)

Cct ref	Component Location		Description	Part No
	Circuit Fig 2509	Layout Fig 2511		
INDUCTORS - (cont)				
L12	B-G5	D3	R.F., screened (containing C55, C56, L12)	Z1/ZA 56775
L13	B-J5	C3	R.F., screened (containing C60, L13)	Z1/ZA 56820
L14	B-D8	L3)	Part of T10	
L15	B-D8	L3)		
L16	B-N5	C4	R.F., screened, (containing C67, L16)	Z1/ZA 56820
L17	C-S3	K3)	Part of T12	
L18	C-S3	K3)		
L19	C-T3	B4	R.F., 1200 turns, unscreened	Z1/ZA 56436
L20	A-E7	L1)	Part of T13	
L21	A-E7	L1)		
L22	A-H6	K1)	Part of T14	
L23	A-H6	L1)		
L24	A-K6	K1	Part of T15	
L25	A-K7	J1	Part of T16	
L26	B-M7/8	K2)	Part of T17	
L27	B-M7/8	K2)		
L28	A-L2	K5	Part of T3	
L29	A-L3	J5	Part of T4	
L30	A-L6	K1	Part of T15	
L31	A-L7	J1	Part of T16	
TRANSFORMERS				
T1	A-E3	L2/L5	I.F. 103kc/s, shielded (containing R13, R14, C8, C9, L1, L2)	Z1/ZA 55791
T2	A-H2	C2/K5	I.F. 103kc/s, shielded, (containing R20, R21, R22, C13, C14, C15, L3, L4)	Z1/ZA 55795
T3	A-K2	B2/K5	I.F. 100kc/s, shielded, (containing C19, L5, L28)	Z1/ZA 55792
T4	A-K3	B2/J5	I.F. 100kc/s, shielded, (containing C20, L6, L29)	Z1/ZA 55792
T5	B-M2	C2/K4	I.F. 100kc/s, shielded, (containing C23, C24, L7, L8)	Z1/ZA 56446
T6	A-A5	F5/N1	I.F. 103kc/s, shielded, (containing R50, C41, L9, L10)	Z1/ZA 55790

Table 2502 - (cont)

Cct ref	Component Location		Description	Part No
	Circuit Fig 2509	Layout Fig 2511		
TRANSFORMERS - (cont)				
T7	B-E5	M3/E3	See L11	
T8	B-G5	L3/D3	See L12	
T9	B-J5	K3/C3	See L13	
T10	B-D8	D4/L3	I.F. 100kc/s, shielded (containing C64, L14, L15)	Z1/ZA 56803
T11	B-N5		See L16	
T12	C-S3	C3/K3	I.F. 100kc/s, shielded (containing C72, C73, L17, L18)	Z1/ZA 55793
T13	A-E7	D5/L1	I.F. 97kc/s, shielded (containing R142, R143, C107, L20, L21)	Z1/ZA 55794
T14	A-H6	C5/K1	I.F. 97kc/s, shielded (containing R149, R150, R151, C112, C113, C114, L22, L23)	Z1/ZA 55796
T15	A-K5	B5/K1	I.F. 100kc/s, shielded (containing C118, L24, L30)	Z1/ZA 55792
T16	A-K7	B5/J1	I.F. 100kc/s, shielded (containing C119, L25, L31)	Z1/ZA 55792
T17	B-M7	C5/K1	I.F. 100kc/s, shielded (containing C122, C123, L26, L27)	Z1/ZA 56446
FILTERS, BANDPASS				
FIL1	A-B3	E2/M5	Marconi, W 61379 Sh 1, Ed-A	Z1/ZA 56063
FIL2	B-C5	F4/N2	Marconi, W 61380 Sh 1, Ed-A	Z1/ZA 56066
FIL3	A-B7	E5/M1	Marconi, W 61379 Sh 1, Ed-B	Z1/ZA 56064
SWITCHES, ROTARY WAFER				
SA	C-T5	M7	2-pole, 9-posn, non shorting 2-wafer SRBP	Z1/ZA 56339
SB	C-Z1	J7	3-pole, 2-posn, non shorting single wafer SRBP	Z1/ZA 56344
SC	C-W8	J7	4-pole, 7-posn, non shorting 2-wafer SRBP	Z1/ZA 56355
SE	C-Y5	K7	2-pole, 4-posn, shorting single wafer SRBP	Z1/5930-99 -949-5617

Table 2502 - (cont)

Cct ref	Component Location		Description	Part No (Z/5960-99-)	
	Circuit Fig 2509	Layout Fig 2511			
VALVES, ELECTRONIC					
V1	A-A3	F2/N5	CV4009 (CV454)	(Types in brackets may be found in equipments)	000-4009
V2	A-C3	D2/M5	CV4009 (CV454)		000-4009
V3	A-F2	D2/L5	CV4009 (CV454)		000-4009
V4	A-J2	C2/K5	CV4007 (CV283)		000-4007
V5	A-N2	B2/J5	CV4009 (CV454)		000-4009
V6	B-L1	C3/K4	CV4009 (CV454)		000-4009
V7	B-B5	F3/N3	CV4009 (CV454)		000-4009
V8	B-D5	E3/M3	CV4009 (CV454)		000-4009
V9	B-F5	D3/M3	CV4009 (CV454)		000-4009
V10	B-H5	D3/L3	CV4009 (CV454)		000-4009
V11	B-K5	C4/K3	CV4010 (CV850)		000-4010
V12	B-L5	D4/L3	CV4009 (CV454)		000-4009
V13	C-Q3	C3/K3	CV4010 (CV850)		000-4010
V14	C-U2	B3/J3	CV4007 (CV283)		000-4007
V15	C-X3	D4/M3	CV4024 (CV455)		000-4024
V16	C-P7	C4/K3	CV4007 (CV283)		000-4007
V17	A-A7	F5/N1	CV4009 (CV454)		000-4009
V18	A-C7	D5/M1	CV4009 (CV454)		000-4009
V19	A-F6	D5/L1	CV4009 (CV454)		000-4009
V20	A-J6	C5/K1	CV4007 (CV283)		000-4007
V21	A-N6	B5/J1	CV4009 (CV454)		000-4009
V22	B-L7	C5/K2	CV4009 (CV454)		000-4009
PLUGS AND SOCKETS					
PLA	C-BB 1,2,3	B7	Plug, elect, M4, brass, fixed female shell, size 2/0, 12-pole	Z1/5935-99 -911-6993	
SKT-B	C-BB 5,6,7	B7	Socket, elect, M4, fixed female shell, size 2/0, 12-pole	Z1/5935-99- -911-4461	
PLC	B-A8	C7	Plug, elect, r.f., fixed female shell, st. entry, single pole, style PR4D	Z/5935-99 -011-9484	
PLD	A-B5	F7	Plug, elect, r.f., fixed female shell, st. entry, single pole, style PR4D	Z/5935-99 -011-9484	
MISCELLANEOUS					
M1	C-V7	L7	Core, adjustable tuning, iron dust, 1.176 in. lg, 0.21 in. dia, 8 BA thread pitch Meter, arbitrary scale, moving coil, panel type, 2.012 in. dia, 50µA movement, scaled 0 to 10, c/w external shunt, hermetically sealed	Z1/Za 42749 Z4/ZD 05487	
XL1	C-U3	B3	Crystal, unit, quartz, 99.925kc/s		

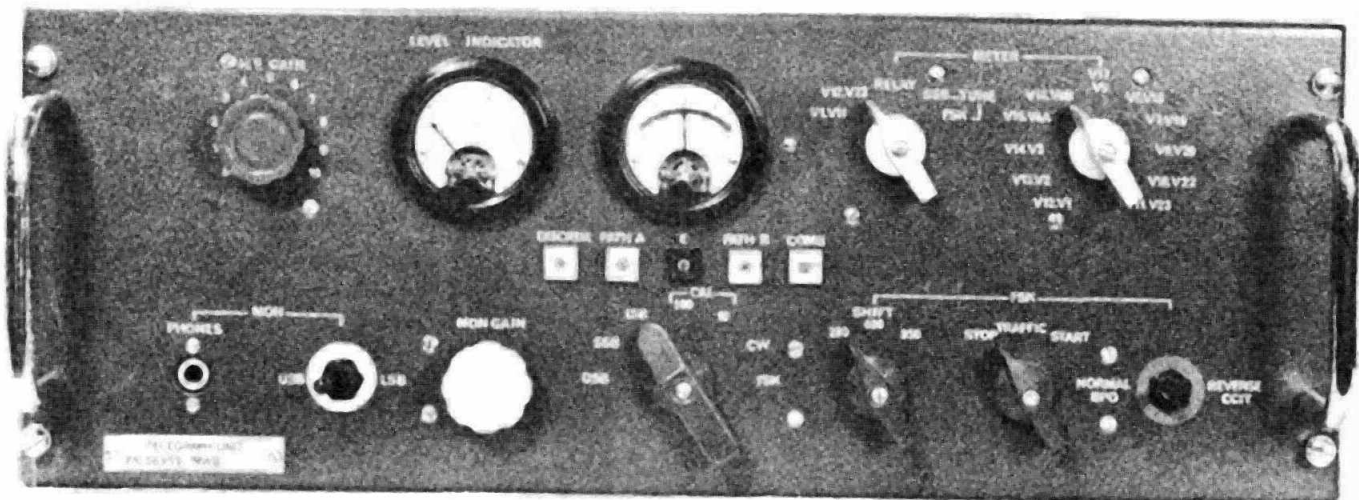
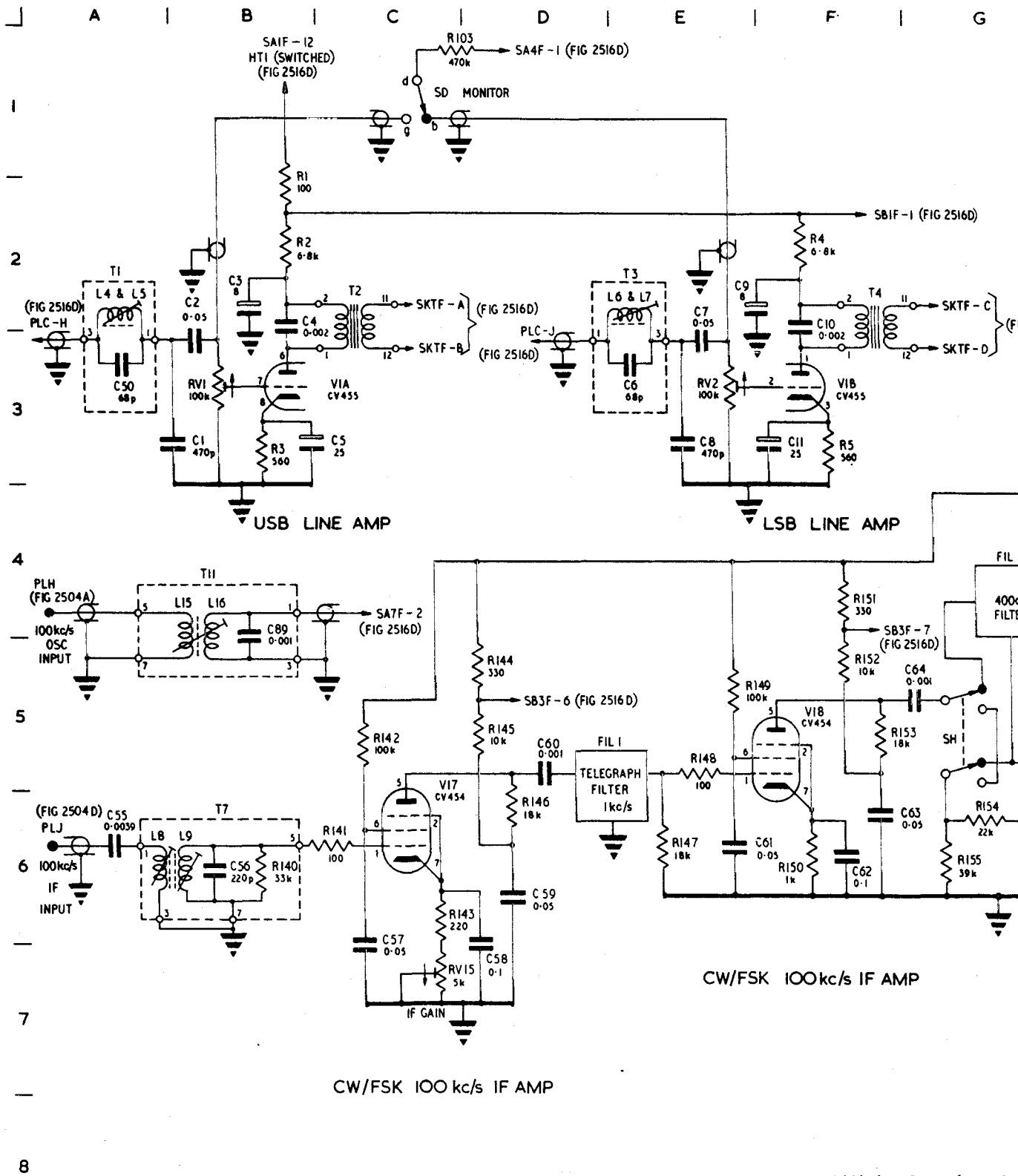


Fig 2515 - Telegraph unit, view of front panel







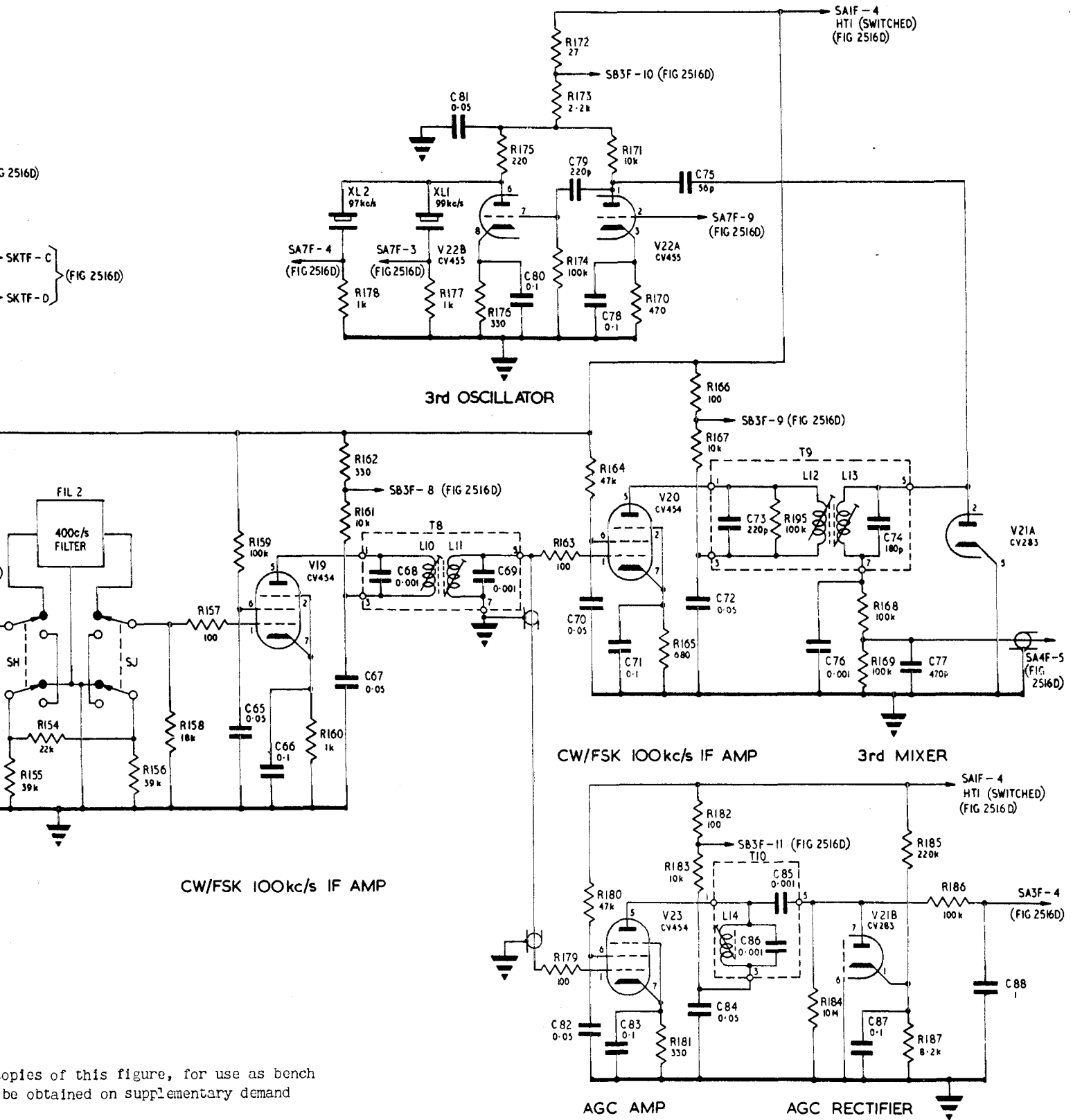
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I-2516 A 2193/25

Fig 2516a - Telegraph unit, circuit of third oscillator, a.g.c.



G | H | J | K | L | M | N | O | 7

SA7F-4 (FIG 2516D)  
SA7F-3 (FIG 2516D)  
SA7F-4 (FIG 2516D)  
SA7F-D (FIG 2516D)



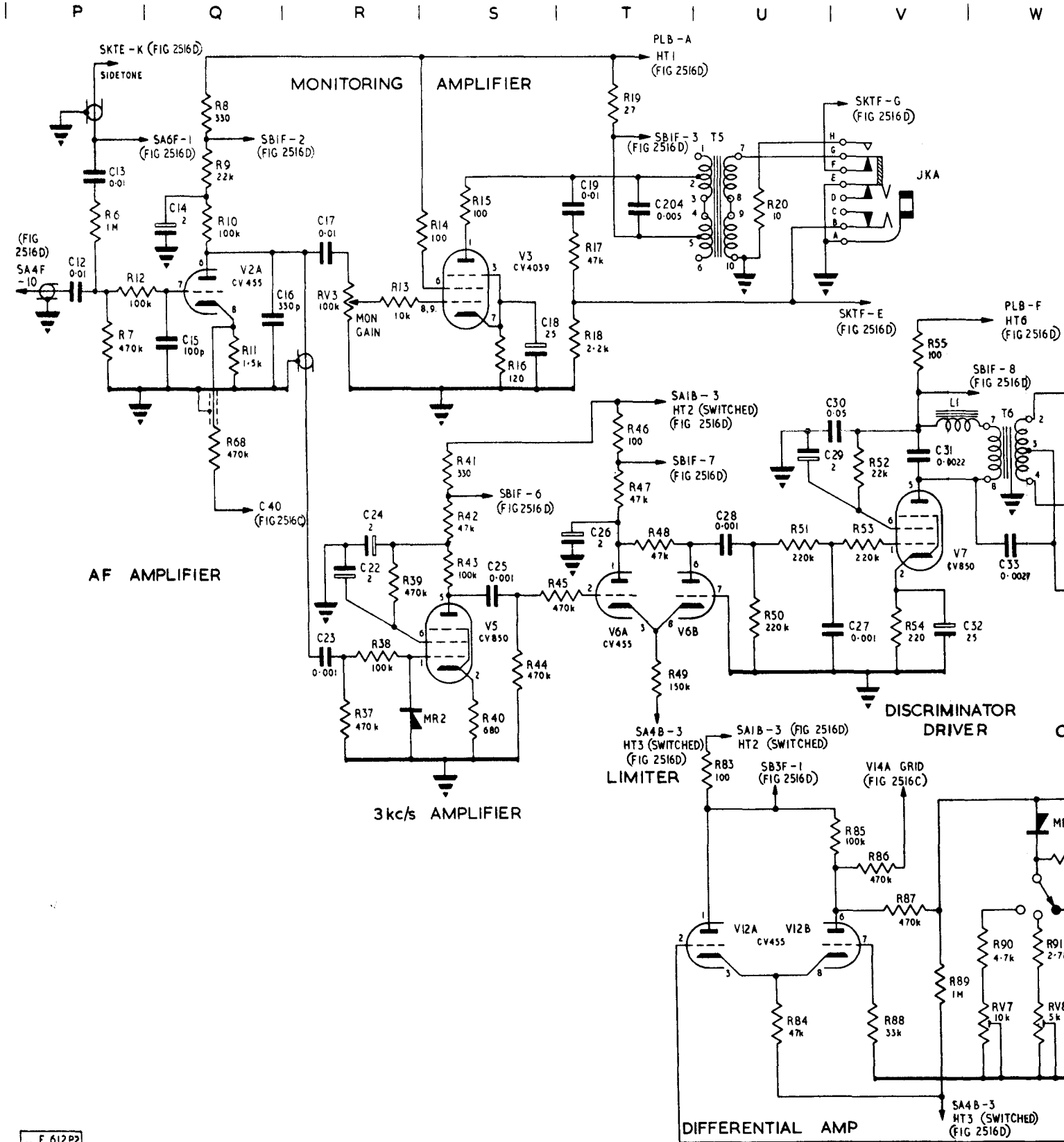
copies of this figure, for use as bench  
be obtained on supplementary demand

circuit diagram, i.f.2 amplifiers, third mixer,  
a.g.c. rectifier and sideband line amplifiers

Fig 2516a  
Page 1047







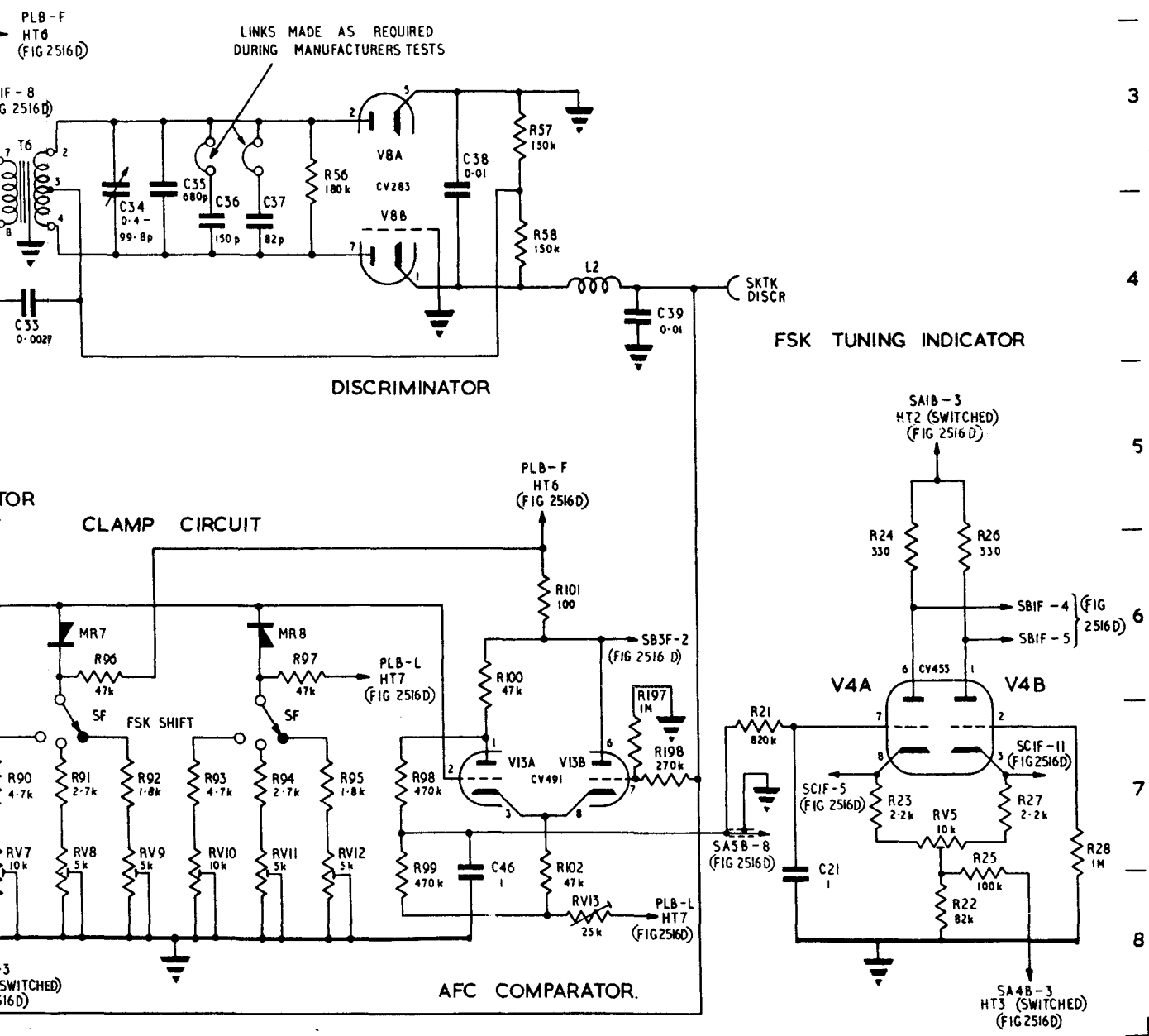
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Fig 2516b - Telegraph unit, circuit diagram, 3kc/s a.tuning indicator stage, a.f.c. comparator  
 Additional copies of this figure, copies, may be obtained on supplement



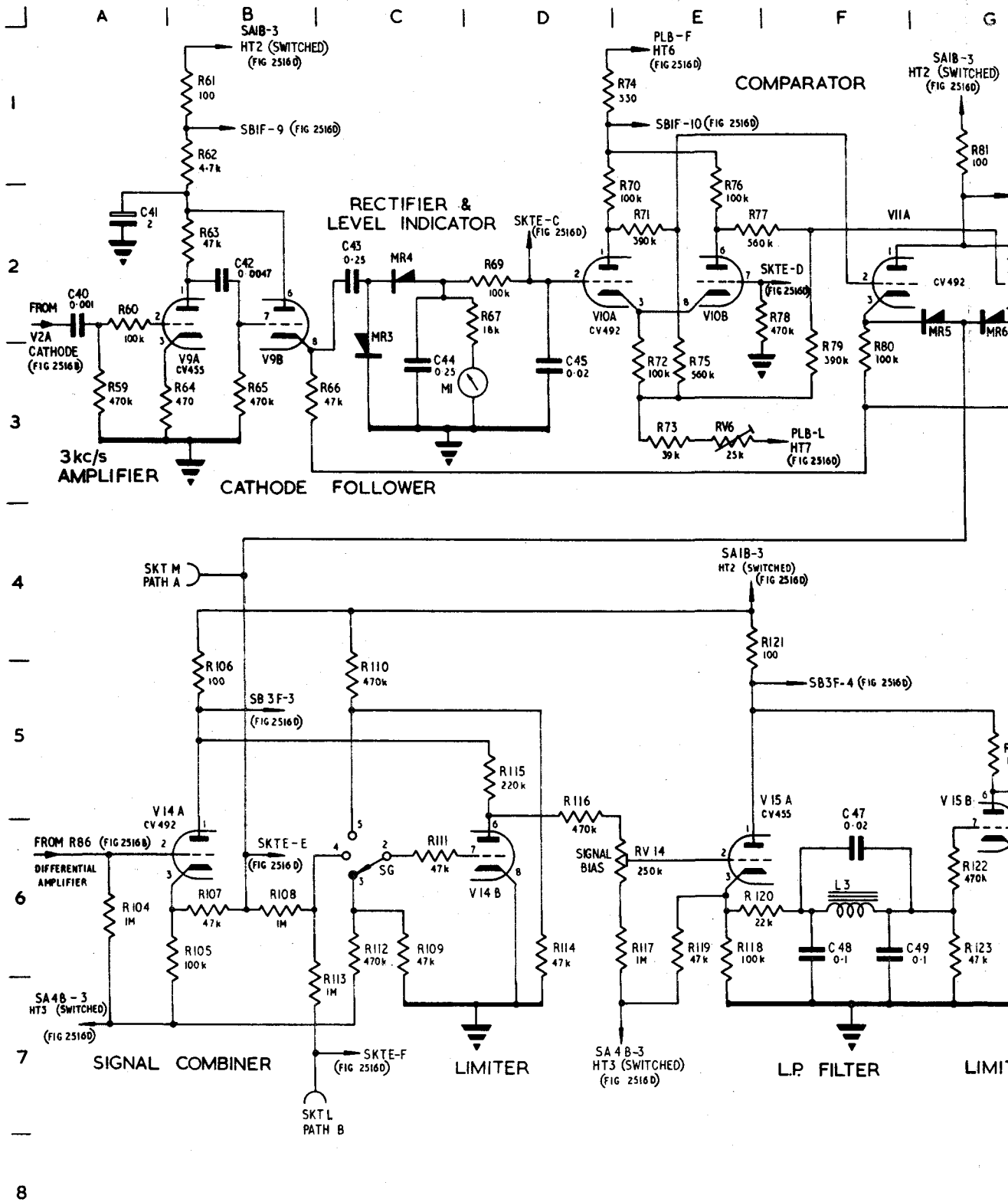
W | X | Y | Z | AA | BB | CC | L

1  
—  
2  
—  
3  
—  
4  
—  
5  
—  
6  
—  
7  
—  
8



3kc/s amplifier, f.s.k. discriminator and  
 comparator and a.f. and monitoring amplifiers  
 as figure, for use as bench  
 on supplementary demand.





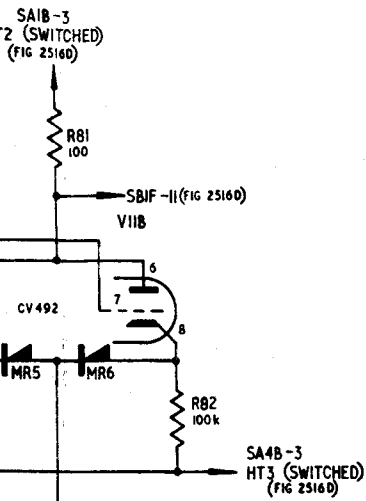
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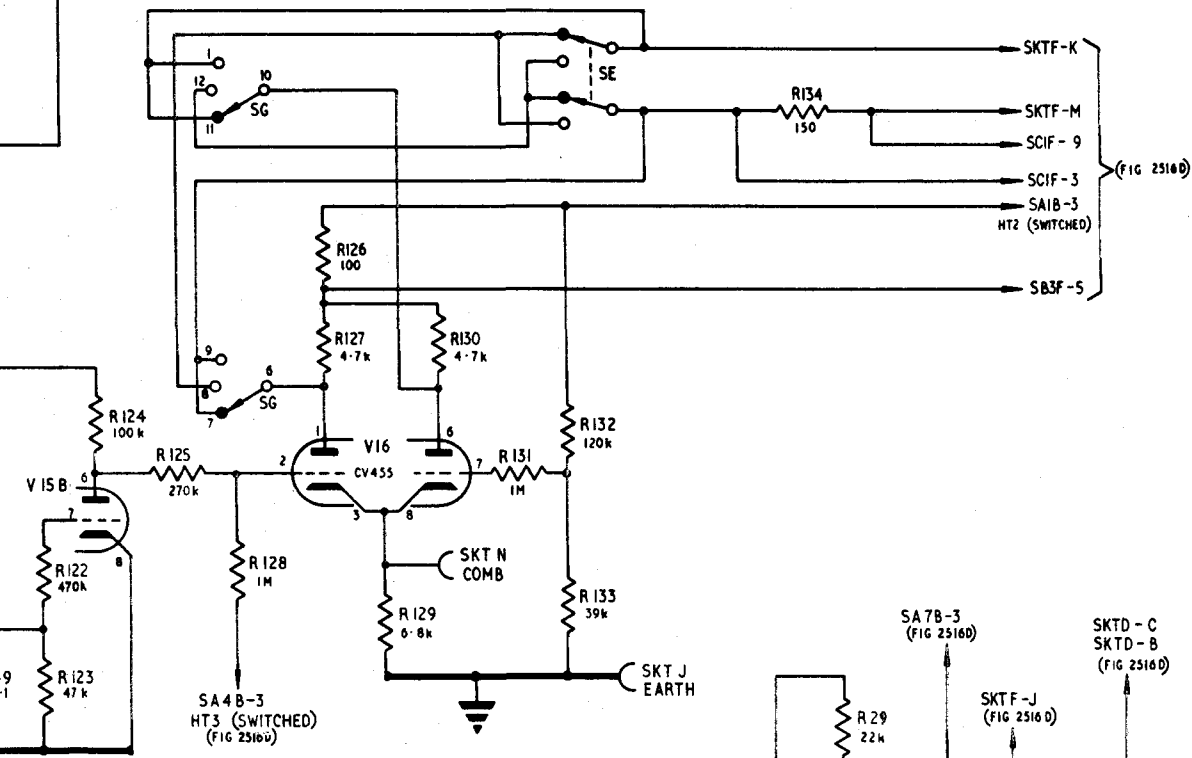
Fig 2516c - Telegraph unit, circuit  
signal combiner, a.g.c.



G | H | J | K | L | M | N | O

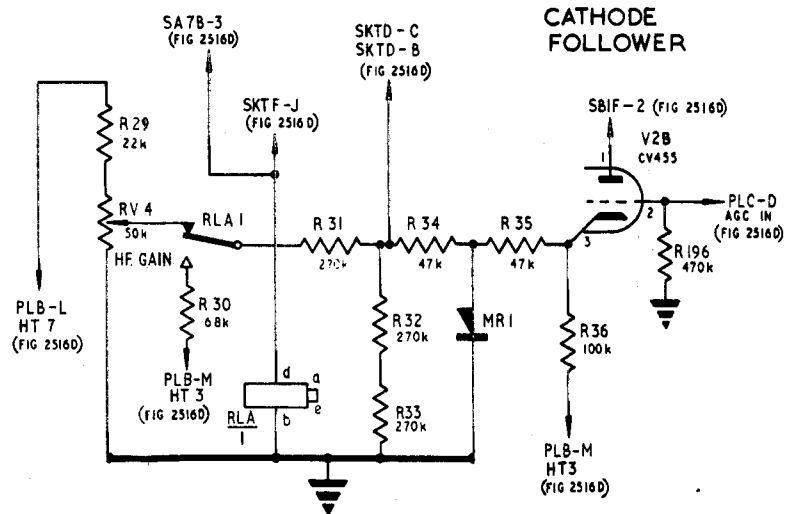


SWITCH	POS 1	POS 2	POS 3	POS 4	POS 5	POS 6	POS 7	POS 8	POS 9	POS 10	POS 11
SA (SYSTEM)	D5B	SSB	ISB	CAL 100	CAL 10	CW	FSK				
SB (METER)	V1	V2	V3	V4 A	V4 B	V5	V6	V7	V9	V10	V11
	V12	V13	V14	V15	V16	V17	V18	V19	V20	V22	V23
SC (METER)	V1-V11	V12-V23	RELAY	TUNE SSB	TUNE FSK						
SD (MONITOR)	LSB	USB									
SE (FSK KEYING)	NORMAL	REVERSE									
SF (SHIFT)	260	400	850								
SG (FSK TEST)	STOP	TRAFFIC	START								
SH	400c/s	1000c/s									
SJ	100w/s	1000w/s									



LIMITER

D.C. OUTPUT

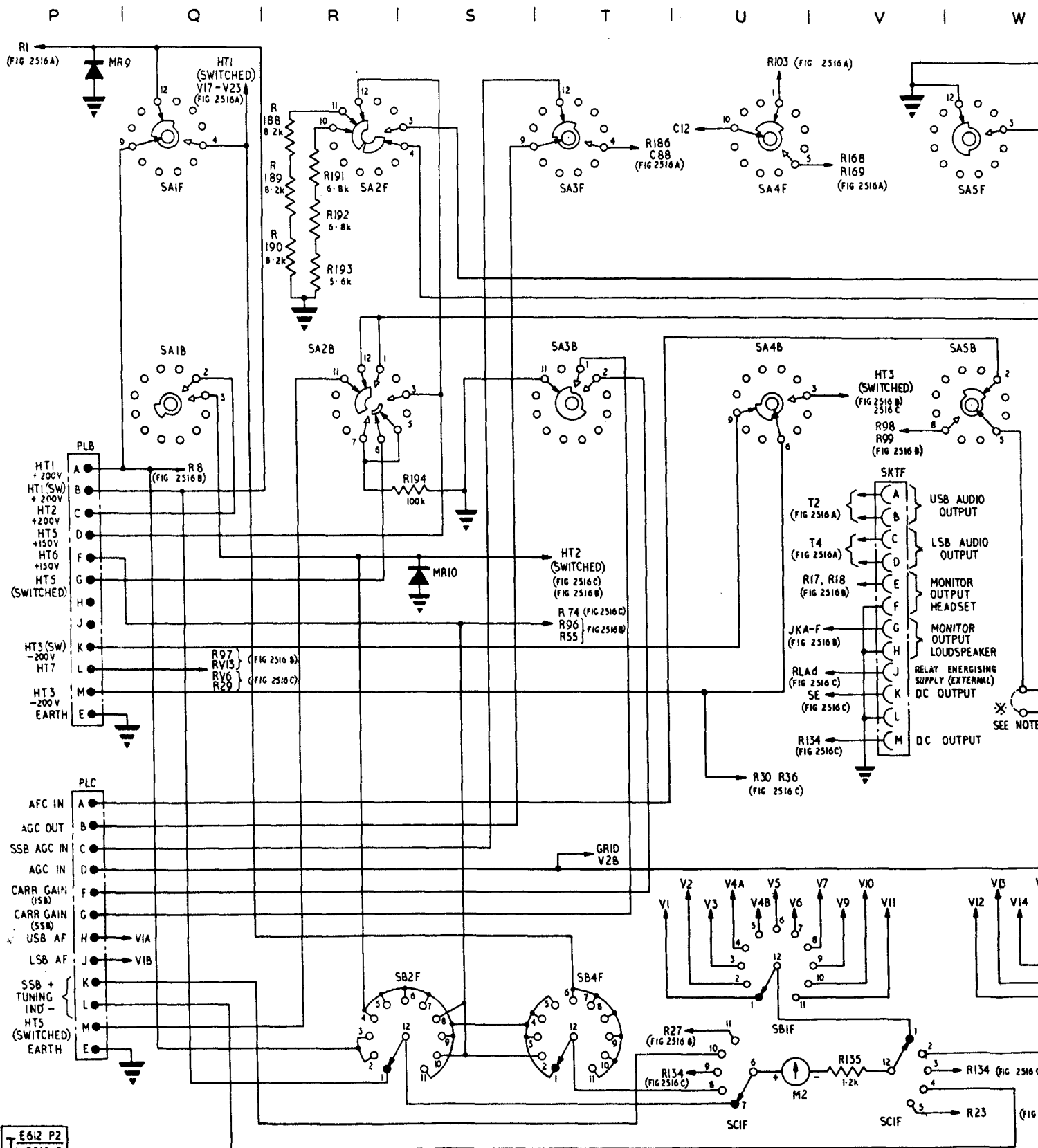


copies, of this figure, for use as bench  
y be obtained on supplementary demand.

circuit diagram, level indicator, comparator,  
, a.g.c. cathode follower and d.c. output stage





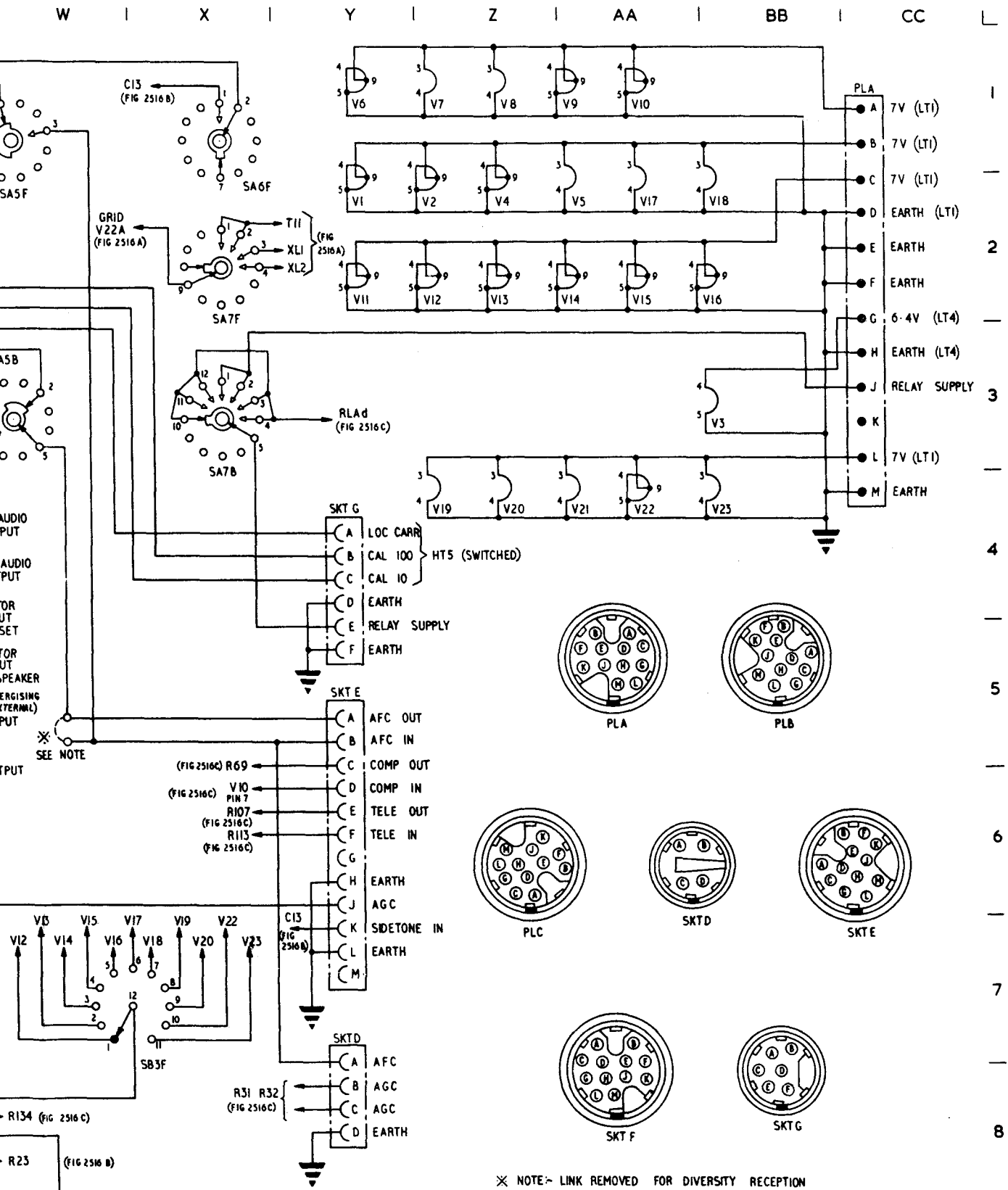


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I-2516 D 2/13/28

Fig 2516d - Telegraph unit, circuit diagram, plugs,

Additional copies of this figure, copies, may be obtained on supplement

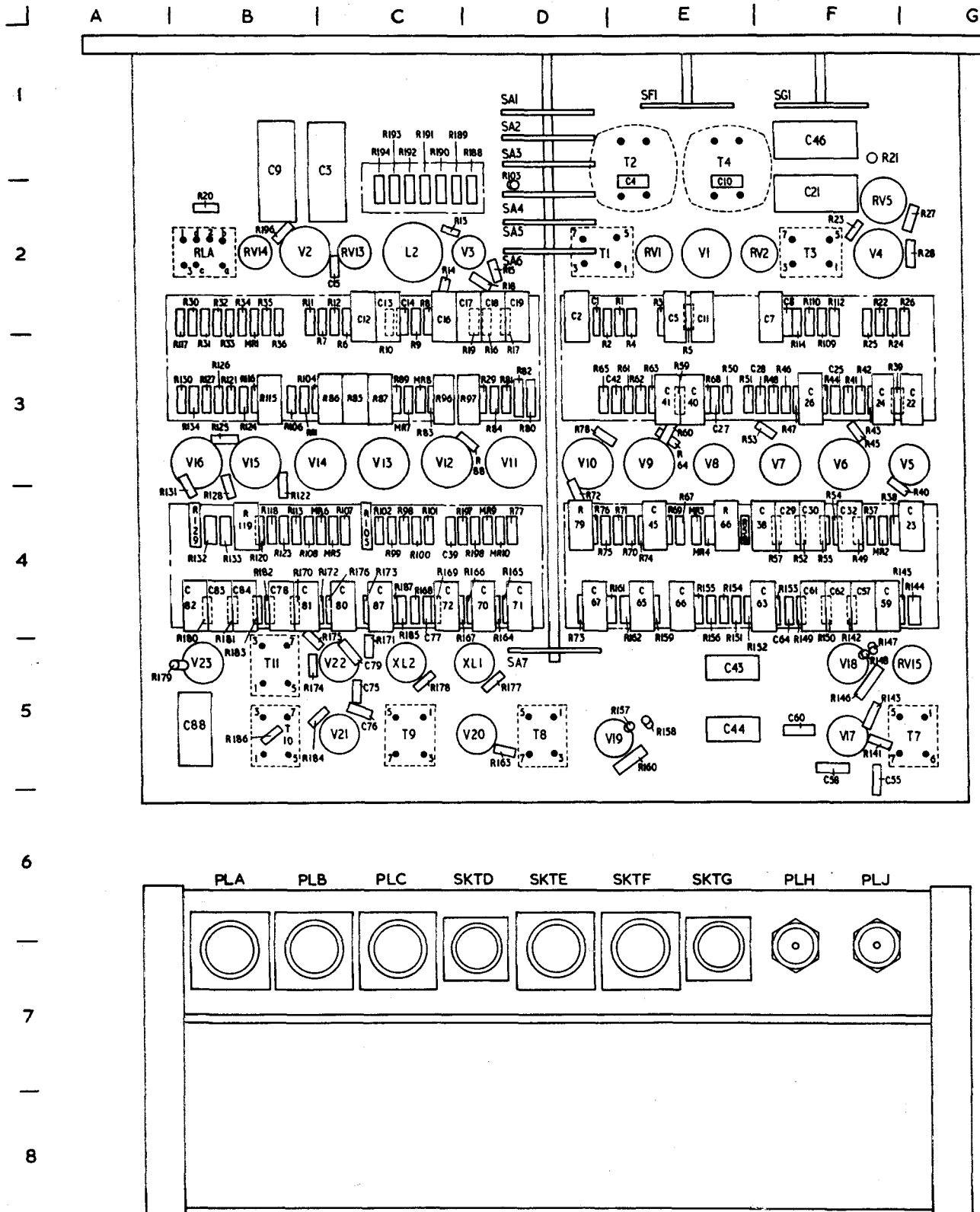




plugs, sockets, switching and valve heaters

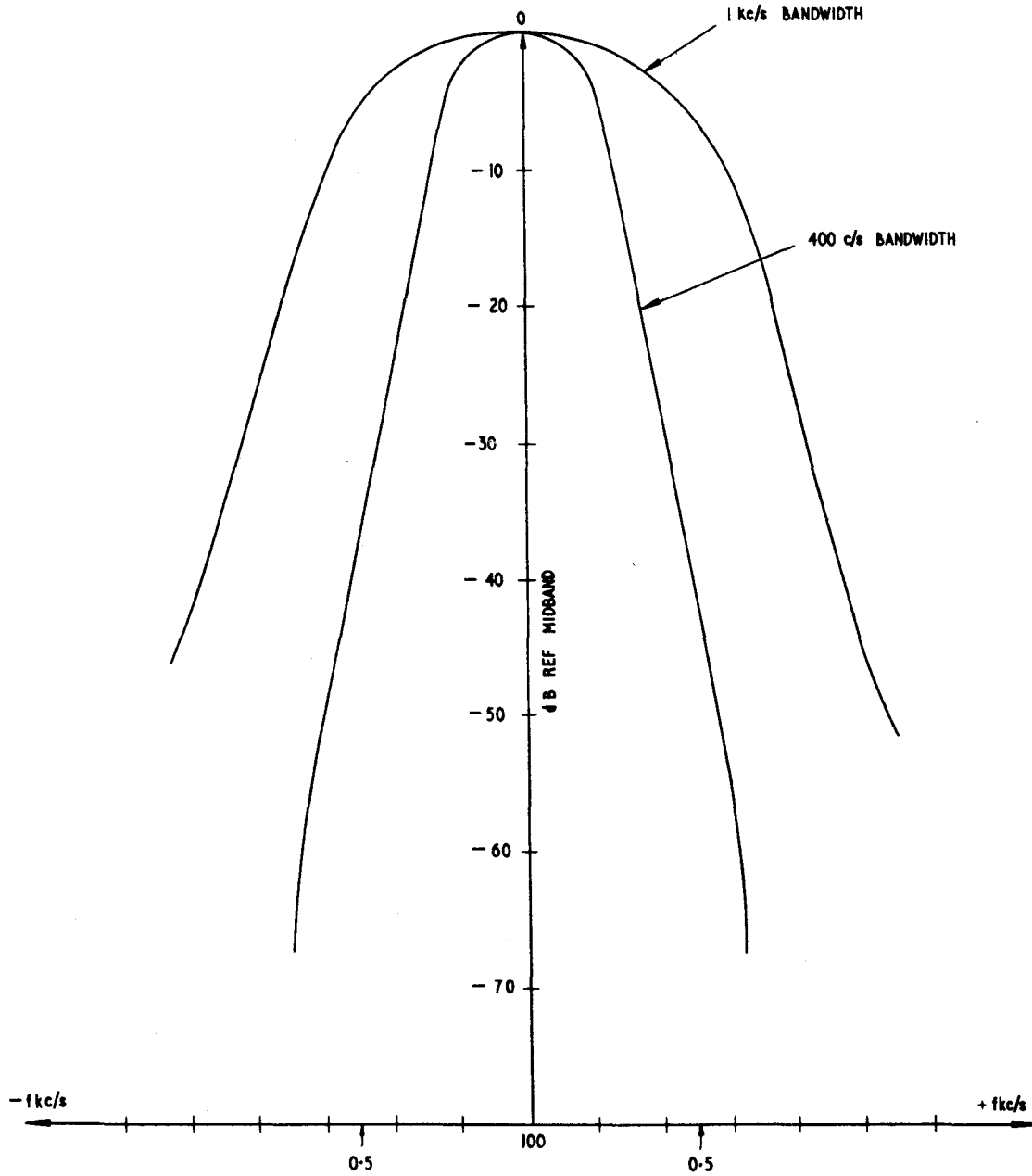
figure, for use as bench  
on supplementary demand.





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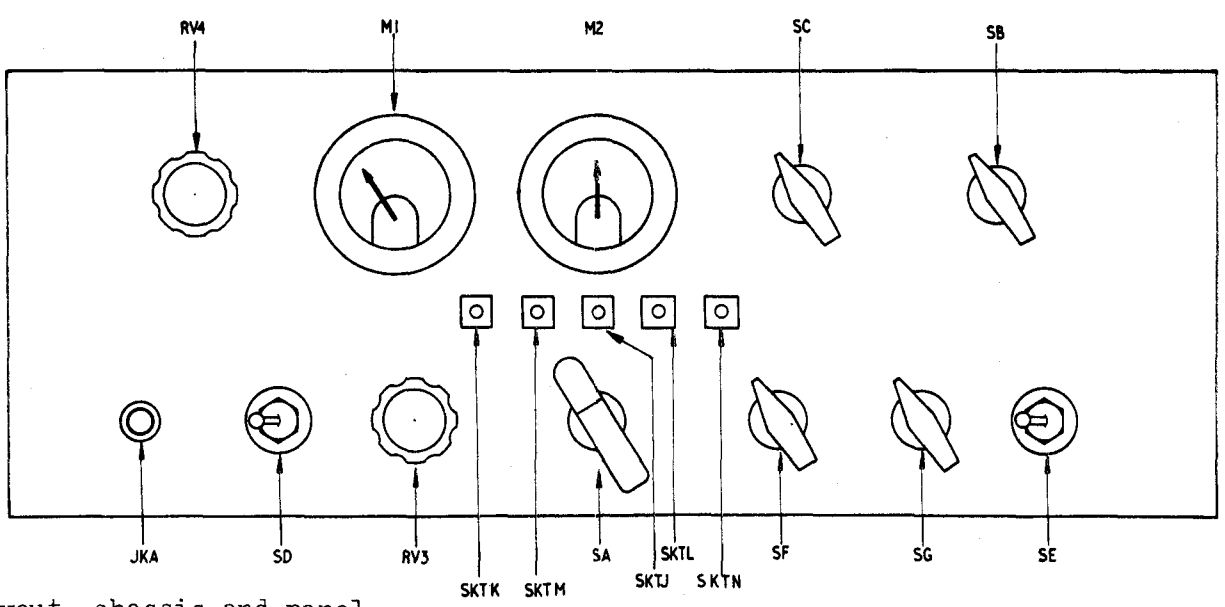
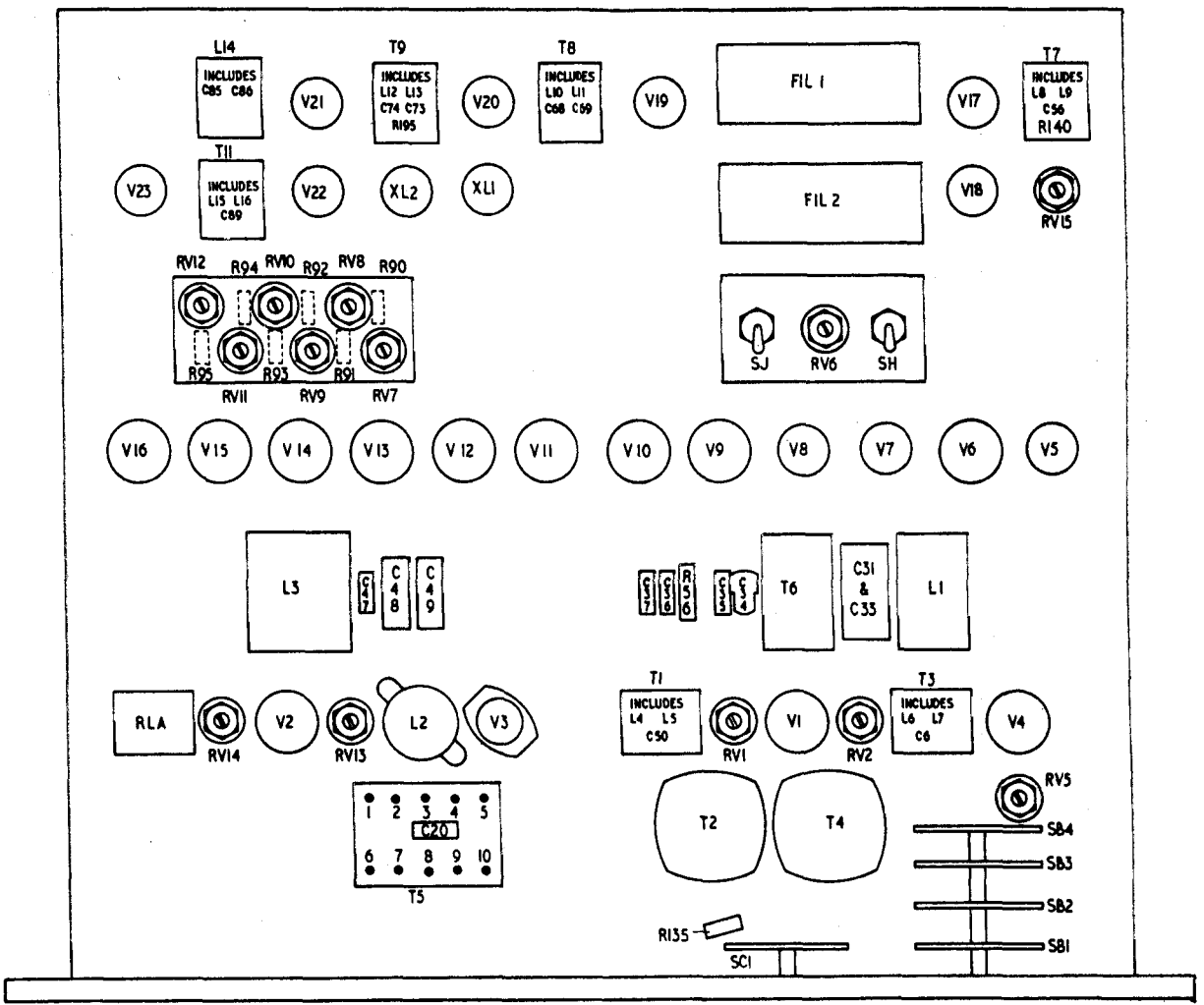
Fig 2517 - Telegraph unit, co



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1-2518 2193/14

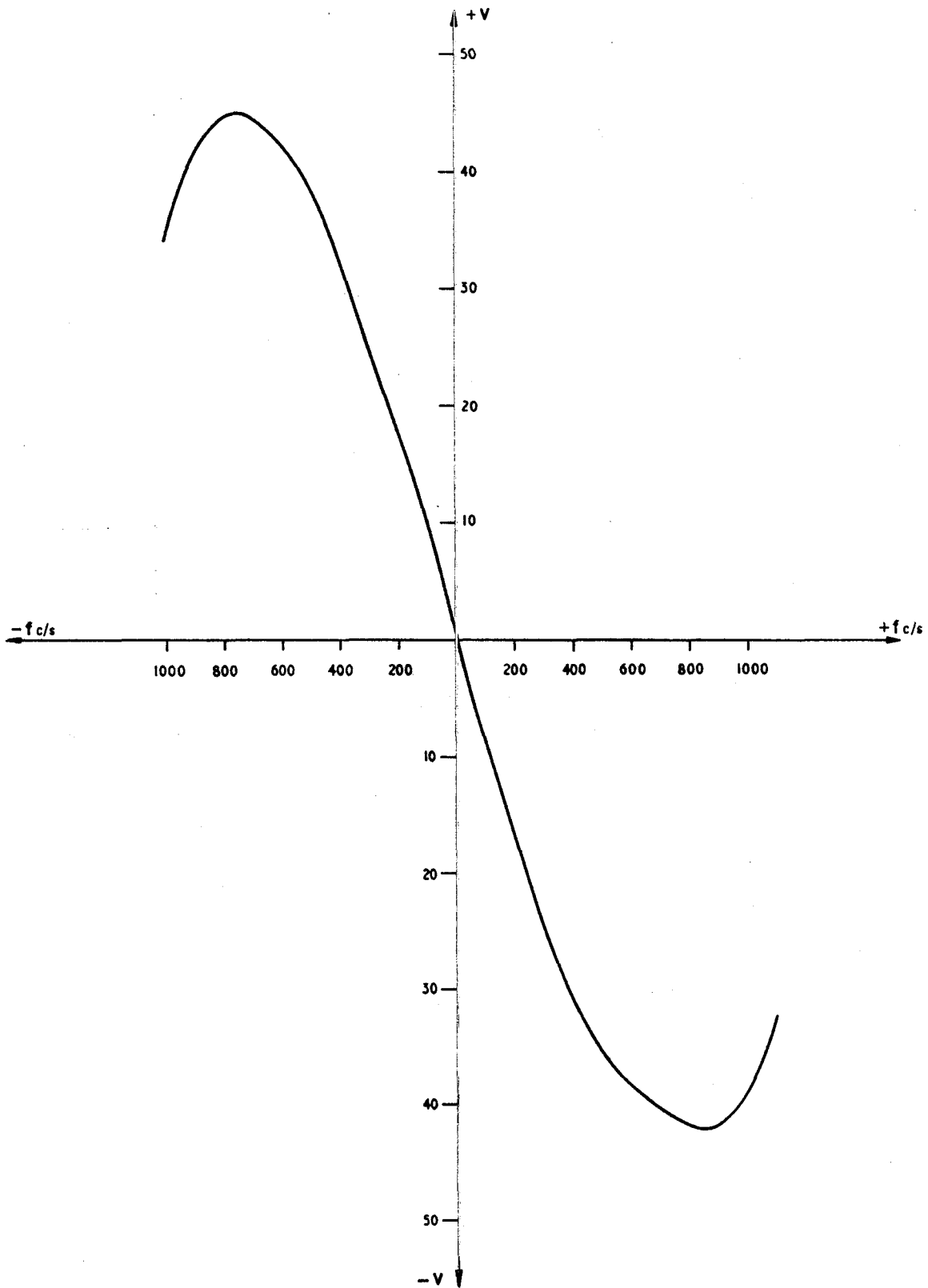
Fig 2518 - Telegraph unit, response curves, telegraph filters

G | H | I | J | K | L | M | N | O



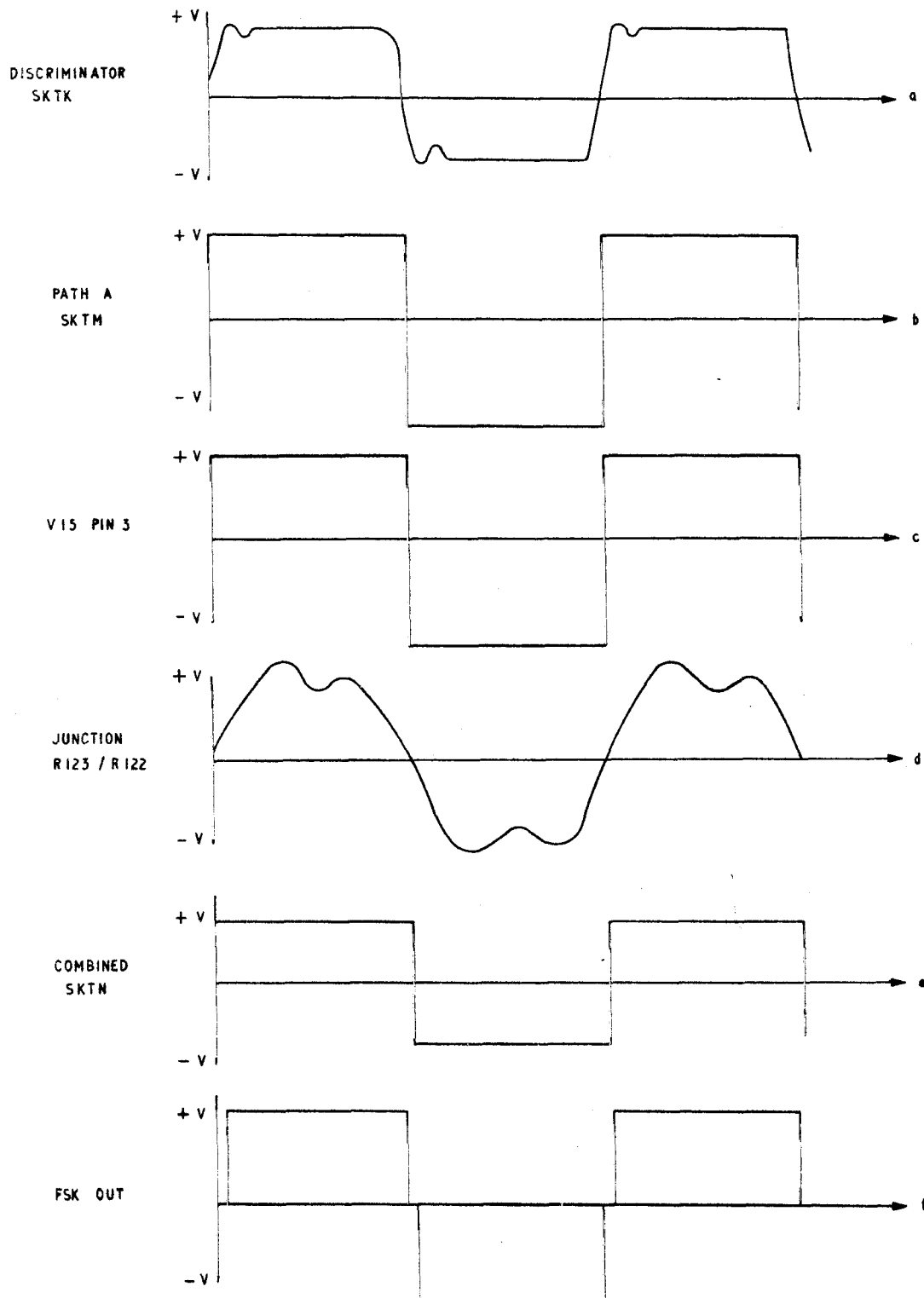
unit, component layout, chassis and panel





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F-2519 2193/72

Fig 2519 - Telegraph unit, response curve, f.s.k. discriminator



NOTE:- TIME OR AMPLITUDE RELATIONSHIP  
IS NOT INTENDED BETWEEN GRAPHS

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1-2520 2103/11

Fig 2520 - Telegraph unit, waveforms, f.s.k. circuits

Table 2503 - Telegraph unit, component schedule

Note: This table is current at the time of issue only. Use I.S.P.L., when published, to demand stores

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm$ %)	Part No (Z/5905-99-)
	Circuit Fig 2516	Layout Fig 2517				
<b>RESISTORS, FIXED</b>						
R1	A-B2	E2	100	1/8	comp, ins, gd 1	5 021-9040
R2	A-B2	E2	6.8k	1/4	comp, ins	10 022-2110
R3	A-B3	E2	560	1/4	comp, ins	10 022-1206
R4	A-F2	E2	6.8k	1/4	comp, ins	10 022-2110
R5	A-F3	E2	560	1/4	comp, ins	10 022-1206
R6	B-P2	C2	1M	1/4	comp, ins	10 022-3164
R7	B-P3	C2	470k	1/4	comp, ins	10 022-3122
R8	B-Q1	C2	330	1/8	film, ins	5 021-9076
R9	B-Q1	C2	22k	1/4	comp, ins	10 022-2173
R10	B-Q2	C2	100k	1/4	comp, ins	10 022-3037
R11	B-Q3	B2	1.5k	1/4	comp, ins	10 022-2026
R12	B-P2	C2	100k	1/4	comp, ins	10 022-3038
R13	B-R2	C2	10k	1/4	comp, ins	10 022-2130
R14	B-S2	C2	100	1/4	comp, ins	10 022-1109
R15	B-S2	D2	100	1/4	comp, ins	10 022-1109
R16	B-S3	D2	120	1/2	comp, ins	10 022-1123
R17	B-T2	D2	47k	1/2	comp, ins	10 022-2216
R18	B-T3	D2	2.2k	1/4	comp, ins	10 022-2047
R19	B-T1	D2	27	1/4	film, ins	5 021-9012
R20	B-U2	B2	10	3	w.w. vit, enam	5 011-3272
R21	B-AA7	F1	820k	1/4	comp, ins	10 022-3155
R22	B-BB8	F2	82k	1/4	comp, ins	10 022-3029
R23	B-BB7	F2	2.2k	1/4	comp, ins	10 022-2046
R24	B-BB6	F2	330	1/8	film, ins	5 021-9076
R25	B-BB8	F2	100k	1/2	comp, ins	10 022-3039
R26	B-BB6	G2	330	1/8	film, ins	5 021-9076
R27	B-CC7	G2	2.2k	1/4	comp, ins	10 022-2046
R28	B-CC7	G2	1M	1/4	comp, ins	10 022-3163
R29	C-L7	D3	22k	1/4	comp, ins	10 022-2173
R30	C-L7	B2	68k	1/2	comp, ins	10 022-3018
R31	C-M7	B2	270k	1/2	comp, ins	10 022-3093
R32	C-M7	B2	270k	1/2	comp, ins	10 022-3093
R33	C-M8	B2	270k	1/4	comp, ins	10 022-3092
R34	C-M7	B2	47k	1/4	comp, ins	10 022-2215
R35	C-N7	B2	47k	1/4	comp, ins	10 022-2215
R36	C-N7	B2	100k	3/4	comp, ins	10 022-3296
R37	B-R5	F4	470k	1/4	comp, ins	10 022-3122
R38	B-R5	G4	100k	1/4	comp, ins	10 022-3038
R39	B-R4	G3	470k	1/4	comp, ins	10 022-3122
R40	B-S5	G4	680	1/4	comp, ins	10 022-1215
R41	B-S4	F3	330	1/8	film, ins	5 021-9076
R42	B-S4	F3	47k	1/4	comp, ins	10 022-2215

Table 2503 - (cont)

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm\%$ )	Part No (Z/5905-99-)
	Circuit Fig 2516	Layout Fig 2517				
RESISTORS, FIXED - (cont)						
R43	B-S4	F3	100k	1/2	comp, ins	10 022-3039
R44	B-S5	F3	470k	1/4	comp, ins	10 022-3122
R45	B-S5	F3	470k	1/4	comp, ins	10 022-3121
R46	B-T3	F3	100	1/8	comp, ins, gd 1	5 021-9040
R47	B-T4	F3	47k	1/2	comp, ins	10 022-2216
R48	B-T4	F3	47k	1/2	comp, ins	10 022-2216
R49	B-T5	F4	150k	1/2	comp, ins	10 022-3060
R50	B-U5	E3	220k	1/4	comp, ins	10 022-3080
R51	B-U4	E3	200k	1/4	comp, ins	10 022-3080
R52	B-V4	F4	22k	1/2	comp, ins	10 022-2174
R53	B-V4	F3	220k	1/4	comp, ins	10 022-3079
R54	B-V5	F4	220	1/4	comp, ins	10 022-1152
R55	B-V3	F4	100	1/8	comp, ins, gd 1	5 021-9040
R56	B-X3	M3	180k	1/4	film, ins	5 021-9275
R57	B-Z3	F4	150k	1/4	film, ins	5 021-9296
R58	B-Z4	E4	150k	1/4	film, ins	5 021-9296
R59	C-A3	E3	470k	1/8	film, ins	5 021-9304
R60	C-A2	E3	100k	1/4	comp, ins	10 022-3037
R61	C-B1	E3	100	1/8	comp, ins, gd 1	5 021-9040
R62	C-B1	E3	4.7k	1/4	comp, ins	10 022-2089
R63	C-B2	E3	47k	1/2	comp, ins	10 022-2216
R64	C-A3	E3	470	1/4	comp, ins	10 022-1193
R65	C-B3	D3	470k	1/4	comp, ins	10 022-3122
R66	C-B3	E4	47k	1	comp, ins	10 011-1491
R67	C-D2	E4	18k	1/8	comp, ins, gd 1	5 021-9202
R68	B-Q3	E3	470k	1/8	film, ins	5 021-9304
R69	C-D2	E4	100k	1/4	comp, ins	10 022-3028
R70	C-D2	E4	100k	1/2	film, ins	2 021-9844
R71	C-E2	E4	390k	1/2	film, ins	2 021-9924
R72	C-E3	D4	100k	1/2	comp, ins	10 022-3039
R73	C-E3	D4	39k	1/4	comp, ins	10 022-2206
R74	C-D1	E4	330	1/8	film, ins	5 021-9076
R75	C-E3	C4	560k	1/2	film, ins	2 Z1/5905-99- 947-4330
R76	C-E1	D4	100k	1/2	film, ins	2 021-9844
R77	C-E2	D4	560k	1/2	film, ins	2 Z1/5905-99- 947-4330
R78	C-F2	D3	470k	1/4	comp, ins	10 022-3121
R79	C-F3	D4	390k	1/2	film, ins	2 021-9924
R80	C-F3	D3	100k	3/4	comp, ins	10 022-3296
R81	C-G1	D3	100	1/8	comp, ins, gd 1	5 021-9040
R82	C-G3	D3	100k	3/4	comp, ins	10 022-3296



Table 2503 - (cont)

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm^{\circ}/o$ )		Part No (Z/5905-99-)
	Circuit Fig 2516	Layout Fig 2517					
RESISTORS, FIXED - (cont)							
R83	B-T6	C3	100	1/8	comp, ins, gd 1	5	021-9040
R84	B-U8	D3	47k	1	comp, ins	10	011-1491
R85	B-U6	C3	100k	1/2	film, ins	5	021-9258
R86	B-V6	C3	470k	1/2	film, ins	5	021-9306
R87	B-V7	C3	470k	1/2	film, ins	5	021-9306
R88	B-U8	D3	33k	1/4	comp, ins	10	022-2194
R89	B-V7	C3	1M	1/4	film, ins	5	021-9322
R90	B-V7	C3	4.7k	1/4	film, ins	5	021-9161
R91	B-W7	K2	2.7k	1/4	film, ins	5	021-9143
R92	B-W7	K2	1.8k	1/4	film, ins	5	021-9131
R93	B-X7	K2	4.7k	1/4	film, ins	5	021-9161
R94	B-X7	J2	2.7k	1/4	film, ins	5	021-9143
R95	B-X7	J2	1.8k	1/4	film, ins	5	021-9131
R96	B-W6	C3	47k	1/2	film, ins	5	021-9234
R97	B-X6	D3	47k	1/2	film, ins	5	021-9234
R98	B-Y7	C4	470k	1/4	film, ins	5	021-9305
R99	B-Y8	C4	470k	1/4	film, ins	5	021-9305
R100	B-Y6	C4	47k	1/4	comp, ins	10	022-2215
R101	B-Z6	C4	100	1/8	comp, ins, gd 1	5	021-9040
R102	B-Z8	C4	47k	1/4	comp, ins	10	022-2215
R103	A-C1	D2	470k	1/4	comp, ins	10	022-3121
R104	C-A6	B3	1M	1/4	film, ins	5	021-9322
R105	C-A6	C4	100k	3/4	comp, ins	10	022-3296
R106	C-B5	B3	100	1/8	comp, ins, gd 1	5	021-9040
R107	C-B6	C4	47k	1/4	comp, ins	10	022-2215
R108	C-B6	B4	1M	1/4	film, ins	5	021-9322
R109	C-C6	F2	47k	1/4	comp, ins	10	022-2215
R110	C-C5	F2	470k	1/4	comp, ins	10	022-3122
R111	C-C6	B3	47k	1/4	comp, ins	10	022-2215
R112	C-C6	F2	470k	1/4	comp, ins	10	022-3122
R113	C-B7	B4	1M	1/4	film, ins	5	021-9322
R114	C-D6	F2	47k	1/4	comp, ins	10	022-2215
R115	C-D5	B3	220k	1/2	film, ins	5	021-9282
R116	C-D5	B3	470k	1/2	film, ins	5	021-9306
R117	C-D6	B2	1M	1/4	film, ins	5	021-9322
R118	C-E6	B4	100k	1/4	comp, ins	10	022-3038
R119	C-E6	B4	47k	1	comp, ins	10	011-1491
R120	C-E6	B4	22k	1/4	comp, ins	10	022-2173
R121	C-E4	B3	100	1/8	comp, ins, gd 1	5	021-9040
R122	C-G6	B4	470k	1/4	comp, ins	10	022-3121
R123	C-G6	B4	47k	1/4	comp, ins	10	022-2215
R124	C-G5	B3	100k	1/2	film, ins	5	021-9258

Table 2503 - (cont)

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm\%$ )	Part No (Z/5905-99-)
	Circuit Fig 2516	Layout Fig 2517				
RESISTORS, FIXED - (cont)						
R125	C-G5	B3	270k	1/4	film, ins	5 021-9287
R126	C-H4	B3	100	1/8	comp, ins, gd 1	5 021-9040
R127	C-H5	B3	4.7k	1/4	comp, ins	10 022-2089
R128	C-H6	B4	1M	1/4	film, ins	5 021-9322
R129	C-H6	B4	6.8k	3/4	comp, ins	10 022-2239
R130	C-J5	B3	4.7k	1/4	comp, ins	10 022-2089
R131	C-J5	B4	1M	1/4	comp, ins	10 022-3163
R132	C-J5	B4	120k	1/2	comp, ins	10 022-3051
R133	C-J6	B4	39k	1/4	comp, ins	10 022-2206
R134	C-L4	B3	150	1/8	film, ins	5 021-9052
R135	D-V8	M5	1.2k	1/4	film, ins	5 021-9119
R140	A-B6	O1	33k	1/4	comp, ins	10 022-2193
R141	A-B6	F5	100	1/4	comp, ins	10 022-1109
R142	A-C5	F4	100k	1/2	comp, ins	10 022-3039
R143	A-C6	F5	220	1/4	comp, ins	10 022-1152
R144	A-D5	G4	330	1/3	film, ins	5 021-9076
R145	A-D5	G4	10k	1/4	comp, ins	10 022-2131
R146	A-D6	F5	18k	1/2	comp, ins	10 022-2165
R147	A-E6	F5	18k	1/4	comp, ins	10 022-2163
R148	A-E5	F5	100	1/4	comp, ins	10 022-1109
R149	A-E5	F4	1k	1/4	comp, ins	10 022-3039
R150	A-F6	F4	1k	1/4	comp, ins	10 022-2025
R151	A-F4	E4	330	1/8	film, ins	5 021-9076
R152	A-F5	E4	10k	1/4	comp, ins	10 022-2131
R153	A-F5	F4	18k	1/2	comp, ins	10 022-2165
R154	A-G6	E4	22k	1/8	film, ins	5 021-9208
R155	A-G6	E4	39k	1/8	film, ins	5 021-9226
R156	A-H6	E4	39k	1/8	film, ins	5 021-9226
R157	A-H5	E5	100	1/2	comp, ins	10 022-1109
R158	A-H6	E5	18k	1/4	comp, ins	10 022-2163
R159	A-H4	E4	100k	1/2	comp, ins	10 022-3039
R160	A-J6	E5	1k	1/4	comp, ins	10 022-2025
R161	A-J4	E4	10k	1/4	comp, ins	10 022-2131
R162	A-J4	E4	330	1/8	film, ins	5 021-9076
R163	A-L4	E5	100	1/4	comp, ins	10 022-1109
R164	A-L4	D4	47k	1/2	comp, ins	10 022-2216
R165	A-L5	D4	680	1/4	comp, ins	10 022-1215
R166	A-M3	D4	100	1/4	comp, ins, gd 1	5 021-9040
R167	A-M4	D4	10k	1/4	comp, ins	10 022-2131
R168	A-N5	C4	100k	1/4	comp, ins	10 022-3038
R169	A-N5	C4	100k	1/4	comp, ins	10 022-3038
R170	A-L3	B4	470	1/4	comp, ins	10 022-1194

Table 2503 - (cont)

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm\%$ )	Part No (Z/5905-99-)
	Circuit Fig 2516	Layout Fig 2517				
RESISTORS, FIXED - (cont)						
R171	A-L2	C5	10k	1/2	comp, ins	10 022-2132
R172	A-L1	C4	27	1/4	film, ins	5 021-9012
R173	A-L1	C4	2.2k	1/4	comp, ins	10 022-2047
R174	A-L2	B5	100k	1/4	comp, ins	10 022-3037
R175	A-K2	B5	220	1/4	comp, ins	10 022-1152
R176	A-K3	C4	330	1/4	comp, ins	10 022-1173
R177	A-K3	D5	1k	1/4	eomp, ins	10 022-2004
R178	A-J3	C5	1k	1/4	comp, ins	10 022-2004
R179	A-L7	A5	100	1/4	comp, ins	10 022-1109
R180	A-L7	B4	47k	1/2	comp, ins	10 022-2216
R181	A-L8	B4	330	1/4	comp, ins	10 022-1173
R182	A-M6	B4	100	1/8	comp, ins, gd 1	5 021-9040
R183	A-M7	B4	10k	1/4	comp, ins	10 022-2131
R184	A-N7	C5	10M	1/4	comp, ins	10 022-3289
R185	A-N6	C4	220k	1/2	comp, ins	10 022-3081
R186	A-O7	B5	100k	1/4	comp, ins	10 022-3037
R187	A-N8	C4	8.2k	1/4	comp, ins	10 022-2122
R188	D-R1	D2	8.2k	1/2	comp, ins	10 022-2123
R189	D-R2	C2	8.2k	1/2	comp, ins	10 022-2123
R190	D-R2	C2	8.2k	1/2	comp, ins	10 022-2123
R191	D-R2	C2	6.8k	1/2	comp, ins	10 022-2111
R192	D-R2	C2	6.8k	1/2	comp, ins	10 022-2111
R193	D-R2	C2	5.6k	1/2	comp, ins	10 022-2102
R194	D-S4	C2	100k	1/2	comp, ins	10 022-3039
R195	A-M4	K1	100k	1/2	comp, ins	10 022-3037
R196	C-O7	B2	470k	1/4	comp, ins	10 022-3121
R197	B-Z7	D4	1M	1/4	film, ins	5 021-9322
R198	B-Z7	D4	270k	1/4	film, ins	5 021-9287
RESISTORS, VARIABLE						
RV1	A-B3	E2/M4	100k	1/4	comp, log	
RV2	A-E3	F2/N4	100k	1/4	comp, log	
RV3	B-R2	K8	100k	3/8	comp, log	20 Z1/ZA 56387
RV4	C-L7	J7	50k	3/4	comp, linear	20 026-2012
RV5	B-BB7	F2/O5	10k	1/4	comp, linear	20 011-9465
RV6	C-E3	N2	25k	1/4	comp, linear	20 026-1884
RV7	B-V8	K2	10k	1/4	comp, linear	20 011-9465
RV8	B-W8	K2	5k	1/4	comp, linear	20 011-9464
RV9	B-W8	K2	5k	1/4	comp, linear	20 011-9464
RV10	B-W8	K2	10k	1/4	comp, linear	20 011-9465
RV11	B-X8	J2	5k	1/4	comp, linear	20 011-9464

Table 2503 - (cont)

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm^{\circ}/o$ )	Part No (Z/5905-99-)
	Circuit Fig 2516	Layout Fig 2517				
RESISTORS, VARIABLE - (cont)						
RV12	B-X8	J2	5k	1/4	comp, linear	20 011-9464
RV13	B-Z8	C2/K4	25k	1/4	comp, linear	20 011-9466
RV14	C-D6	B2/J4	250k	1/4	comp, linear	20 011-9469
RV15	A-C7	G5/O1	5k	1	w.w., tor	10 940-0458
Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $\pm^{\circ}/o$ )	Part No (Z/5910-99-)
	Circuit Fig 2516	Layout Fig 2517				
CAPACITORS						
C1	A-B3	D2	470p	750	mic, foil, rect, mlded	20 012-3413
C2	A-B3	D2	0.05	175	pap, foil, tub, met, ins	20 011-5596
C3	A-B2	C1	8	350	elect, al, foil, tub, ins	+50-20 014-5503
C4	A-B2	E2	0.002	350	pap, foil, tub, met, ins	25 011-5624
C5	A-B3	E2	25	25	electrolytic, tub	+50-20 Z1/5910-99 -910-6964
C6	A-E3	N4	68p	750	mic, rec, mlded	5 012-3918
C7	A-E3	F2	0.05	175	pap, foil, tub, met, ins	20 011-5596
C8	A-E3	F2	470p	750	mic, foil, rect, mlded	20 012-3413
C9	A-E2	B1	8	350	elect, al, foil, tub, ins	+50-20 014-5503
C10	A-F2	E2	0.002	350	pap, foil, tub, met, ins	25 011-5624
C11	A-F3	E2	25	25	electrolytic, tub	+50-20 Z1/5910-99 -910-6964
C12	B-P2	C2	0.01	350	pap, foil, tub, met, ins	20 011-5594
C13	B-P2	C2	0.01	350	pap, foil, tub, met, ins	20 011-5594
C14	B-Q2	C2	2	350	electrolytic	+50-20 Z1/5910-99 -110-2596
C15	B-Q3	C2	100p	750	mic, rec, mlded	5 012-3924
C16	B-Q3	C2	330p	750	mic, stkd, foil	20 012-3362
C17	B-R2	D2	0.01	350	pap, foil, tub, met, ins	20 011-5594
C18	B-S3	D2	25	25	electrolytic, tub	+50-20 Z1/5910-99 -910-6964
C19	B-T2	D2	0.01	350	pap, foil, tub, met, ins	20 011-5594
C20	B-T2	K5	0.005	350	pap, foil, tub, met, ins	20 011-5593
C21	B-U8	F2	1	200	pap, tub, met, ins	25 011-9836
C22	B-R4	G3	2	350	electrolytic	+50-20 Z1/5910-99 -110-2596
C23	B-R5	G4	0.001	350	pap, foil, tub, met, ins	25 011-5623
C24	B-R4	F3	2	350	electrolytic	+50-20 Z1/5910-99 110-2596

Table 2503 - (cont)

Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $\pm$ %)	Part No (Z/5910-99-)
	Circuit Fig 2516	Layout Fig 2517				
CAPACITORS - (cont)						
C25	B-S5	F3	0.001	350	pap,foil,tub,met,ins 25	011-5623
C26	B-S4	F3	2	350	electrolytic +50-20	Z1/5910-99- 110-2596
C27	B-U5	E3	0.001	350	pap,foil,tub,met,ins 25	011-5623
C28	B-U4	F3	0.001	350	pap,foil,tub,met,ins 25	011-5623
C29	B-U4	F4	2	350	electrolytic +50-20	Z1/5910-99- 110-2596
C30	B-U3	F4	0.05	175	pap,foil,tub,met,ins 20	011-5596
C31	B-V4	N3	0.0022	750	mic,met,rect,mlded 5	012-4719
C32	B-V5	F4	25	25	electrolytic +50-20	Z1/5910-99- 910-6964
C33	B-W4	N4	0.0027	750	mic,rect,mlded 5	012-4722
C34	B-W4	M3	97.2p max		var,air dielectric	015-0006
C35	B-W4	M3	680p	350	mic,met,rect,mlded 5	012-3954
C36	B-X4	M3	150p	750	mic,met,rect,mlded 5	012-3930
C37	B-X4	M3	82p	750	mic,met,rect,mlded 5	012-3921
C38	B-Y4	F4	0.01	350	pap,foil,tub,met,ins 25	011-5625
C39	B-Z4	C4	0.01	350	pap,foil,tub,met,ins 25	011-5625
C40	C-A2	E3	0.001	350	pap,foil,tub,met,ins 25	011-5623
C41	C-A2	E3	2	350	electrolytic +50-20	Z1/5910-99- 110-2596
C42	C-B2	E3	0.0047	350	mic,foil 20	Z1/5910-99- 900-7826
C43	C-C2	E5	0.25	200	pap,met,tub,ins 25	011-9830
C44	C-C3	E5	0.25	200	pap,met,tub,ins 25	011-9830
C45	C-D3	E4	0.02	350	pap,foil,tub,met,ins 20	011-5595
C46	B-Y8	F1	1	200	pap,foil,tub,met,ins 25	011-9835
C47	C-F6	J3	0.02	250	pap,met,tub,ins 20	012-0114
C48	C-F6	J3	0.1	200	pap,foil,tub,met,ins 20	011-5599
C49	C-F6	J3	0.1	200	pap,foil,tub,met,ins 20	011-5599
C50	A-A3	M4	68p	750	mic,rec,mlded 5	012-3918
C55	A-A6	F5	0.0039	750	mic,rec,mlded 5	012-4728
C56	A-B6	O1	220p	750	mic,rect,mlded 5	012-3936
C57	A-C6	F4	0.05	175	pap,foil,tub,met,ins 20	011-5596
C58	A-C6	F5	0.1	200	pap,tub,met,ins 25	011-9827
C59	A-D6	F4	0.05	175	pap,foil,tub,met,ins 20	011-5596
C60	A-D5	F5	0.001	350	mic,rect,mlded 20	012-4479
C61	A-E6	F4	0.05	175	pap,foil,tub,met,ins 20	011-5596
C62	A-F6	F4	0.1	200	pap,tub,met,ins 25	011-9827
C63	A-F6	F4	0.05	175	pap,foil,tub,met,ins 20	011-5596
C64	A-F5	F4	0.001	350	mic,rect,mlded 20	012-4479

Table 2503 - (cont)

Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $\pm$ °/o)	Part No (Z/5910-99-)
	Circuit Fig 2516	Layout Fig 2517				
CAPACITORS - (cont)						
C65	A-H6	E4	0.05	175	pap,foil,tub,met,ins	20 011-5596
C66	A-J6	E4	0.1	200	pap,tub,met,ins	25 011-9827
C67	A-J5	D4	0.05	175	pap,foil,tub,met,ins	20 011-5596
C68	A-J5	L1	0.001	350	mic,rect,mlded	5 012-4701
C69	A-K5	L1	0.001	350	mic,rect,mlded	5 012-4701
C70	A-L5	D4	0.05	175	pap,foil,tub,met,ins	20 011-5596
C71	A-L5	D4	0.1	200	pap,tub,met,ins	25 011-9827
C72	A-M5	C4	0.05	175	pap,foil,tub,met,ins	20 011-5596
C73	A-M4	K1	220p			
C74	A-N4	K1	180p			
C75	A-M2	C5	56p	750	mic,rect,mlded	5 012-3915
C76	A-N5	C5	0.001	350	mic,rect,mlded	20 012-4479
C77	A-N5	C4	470p	750	mic,foil,rect,mlded	20 012-3413
C78	A-L3	C4	0.1	200	pap,tub,met,ins	25 011-9827
C79	A-L2	C5	220p	750	mic,foil,rect,mlded	20 012-3293
C80	A-L3	C4	0.1	200	pap,tub,met,ins	25 011-9827
C81	A-K1	B4	0.05	175	pap,foil,tub,met,ins	20 011-5596
C82	A-L8	B4	0.05	175	pap,foil,tub,met,ins	20 011-5596
C83	A-L8	B4	0.1	200	pap,tub,met,ins	25 011-9827
C84	A-M8	B4	0.05	175	pap,foil,tub,met,ins	20 011-5596
C85	A-M7	J1	0.001	350	mic,rect,mlded	5 012-4701
C86	A-M7	J1	0.001	350	mic,rect,mlded	5 012-4701
C87	A-N8	C4	0.1	200	pap,tub,met,ins	25 011-0827
C88	A-O7	B5	1	200	pap,tub,met,ins	25 011-9836
C89	A-B4	J2	0.001	350	mic,rect,mlded	5 012-4701
Cct ref	Component Location		Description			Part No (Z1/5950-99-)
	Circuit Fig 2516	Layout Fig 2517				
INDUCTORS						
L1	B-V3	N3	A.F. 1.12H			102-1371
L2	B-Z4	C2/K4	Transformer, a.f., output, 120 $\Omega$ to 2,100 $\Omega$			Z1/ZA 55972
L3	C-F6	K3	A.F. 100H, 100c/s			Z1/ZA 55967
L4	A-A2	M4	Part of T1			
L5	A-A2	M4	Part of T1			
L6	A-E2	N4	Part of T3			
L7	A-E2	N4	Part of T3			

Table 2503 - (cont)

Cct ref	Component Location		Description	Part No (Z1/5950-99-)
	Circuit Fig 2516	Layout Fig 2517		
INDUCTORS - (cont)				
L8	A-A6	01	Part of T7	Z1/ZA 56775
L9	A-B6	01	Part of T7	
L10	A-K4	L1	Part of T8	
L11	A-K4	L1	Part of T8	
L12	A-N4	K1	Part of T9	
L13	A-N4	K1	Part of T9	
L14	A-M7	J1	R.F., screened	
L15	A-B4	J2	Part of T11	
L16	A-B4	J2	Part of T11	
TRANSFORMERS				
T1	A-A2	D2/M4	I.F., 100kc/s, shielded	Z1/ZA 55792
T2	A-E2	E1/M5	A.F., pri impedance 10k $\Omega$ , sec'y impedance 600 $\Omega$	Z1/ZA 55792 Z1/ZA 56088 Z1/ZA 55797 102-1370 Z1/ZA 55790 901-9970 Z1/ZA 56803
T3	A-E2	F2/N4	I.F., 100kc/s, shielded	
T4	A-F2	E1/N5	A.F., pri impedance 10k $\Omega$ , sec'y impedance 600 $\Omega$	
T5	B-T2	K5	A.F. output, 4.5H at 10V	
T6	B-W3	M3	A.F.	
T7	A-A6	G5/O1	I.F. 103kc/s, shielded	
T8	A-K4	D5/L1	I.F., shielded	
T9	A-M4	C5/K1		
T10	A-M7	B5	See L14	
T11	A-B4	B5/J1	I.F., 100kc/s, shielded	
SEMI-CONDUCTOR DEVICES (Z/6960-99-)				
MR1	C-N7	B2	Diode CV7040 (0A 202)	037-2016
MR2	B-R5	F4	Diode CV7040 (0A 202)	037-2016
MR3	C-C2	E4	Diode CV448	000-0448
MR4	C-C2	E4	Diode CV448	<del>000-0448</del>
MR5	C-G2	C4	Diode CV448	000-0448
MR6	C-G2	C4	Diode CV448	000-0448
MR7	B-W6	C3	Diode CV7040 (0A 202)	037-2016
MR8	B-X6	C3	Diode CV7040 (0A 202)	037-2016
MR9	D-P1	D4	Diode CV4078	000-4078
MR10	D-S5	D4	Diode CV4078	000-4078

Table 2503 - (cont)

Cct ref	Component Location		Description	Part No (Z1/5935-99-)
	Circuit Fig 2516	Layout Fig 2517		
PLUGS AND SOCKETS				
PLA	D-CC1	B6	Plug, electrical, M4, brass, fixed female shell, size 2/0, 12-pole	911-6993
PIB	D-P4	C6	Plug, electrical, M4, brass, fixed female shell, size 2/1, 12-pole	911-8219
PLC	D-P6	C6	Plug, electrical, M4, brass, fixed female shell, size 2/2, 12-pole	110-2271
PLH	A-A4	F6	Plug, electrical, r.f., fixed, female shell, straight entry, single pole, style PR4D,	011-9484
PLJ	A-A6	F6	Plug, electrical, r.f., fixed, female shell, straight entry, single pole, style PR4D	011-9484
SKT-D	D-Y8	D6	Socket, electrical, M4, fixed female shell, size 1/0, 4-pole	940-8634
SKT-E	D-Y5	D6	Socket, electrical, M4, brass, fixed female shell, size 2/1, 12-pole	940-8682
SKT-F	D-V4	E6	Socket, electrical, M4, fixed female shell, size 2/0, 12-pole	911-4461
SKT-G	D-Y4	E6	Socket, electrical, M4, brass, fixed female shell, size 1/0, 6-pole	911-4507
SKT-J	C-K6	L7	Socket, straight entry, black	911-4163
SKT-K	B-AA4	L7	Socket, straight entry, yellow	911-4159
SKT-L	C-B7	M7	Socket, straight entry, yellow	911-4159
SKT-M	C-B4	L7	Socket, straight entry, yellow	911-4159
SKT-N	C-J6	M7	Socket, straight entry, yellow	911-4159
VALVES, ELECTRONIC				(Z/5960-99-)
V1	A-B3	E2/M4	CV4024 (CV455) (Types in brackets may be	000-4024
V2	B-Q2	B2/K4	CV4024 (CV455) found in equipments.)	000-4024
V3	B-S2	D2/L4	CV4039 (CV2129)	000-4039
V4	B-BB7	F2/O4	CV4024 (CV455)	000-4024
V5	B-S5	G3/O3	CV4010 (CV850)	000-4010
V6	B-T5	F3/N3	CV4024 (CV455)	000-4024
V7	B-V4	F3/N3	CV4010 (CV850)	000-4010
V8	B-Y3	E3/M3	CV4007 (CV283)	000-4007
V9	C-B2	E3/M3	CV4024 (CV455)	000-4024
V10	C-D2	D3/M3	CV4004 (CV492)	000-4004
V11	C-F2	D3/L3	CV4004 (CV492)	000-4004
V12	B-T7	C3/L3	CV4024 (CV455)	000-4024
V13	B-Y7	C3/K3	CV4003 (CV491)	000-4003
V14	C-B6	C2/K3	CV4004 (CV492)	000-4004
V15	C-E6	B3/J3	CV4024 (CV455)	000-4024
V16	C-H5	B3/J3	CV4024 (CV455)	000-4024



Table 2503-(cont)

Cct ref	Component Location		Description	Part No (Z/5960-99-)	
	Circuit Fig 2516	Layout Fig 2517			
VALVES, ELECTRONIC - (cont)					
V17	A-C6	F5/N1	CV4009 (CV454)	(Types in brackets may be found in equipments.)	000-4009
V18	A-F5	F5/N2	CV4009 (CV454)		000-4009
V19	A-J5	E5/M1	CV4009 (CV454)		000-4009
V20	A-L4	D5/L1	CV4009 (CV454)		000-4009
V21	A-O4	C5/K1	CV4007 (CV283)		000-4007
V22	A-K3	C5/K2	CV4024 (CV455)		000-4024
V23	A-L7	B5/J1	CV4009 (CV454)		000-4009
SWITCHES (Z/5930-99-)					
SA	D	D1,2,5			
SB	D	N7/N5	Rotary, wafer, 4-pole, 11-pos'n, non-shorting, 4 wafer, SRBP	Z1/ZA 56380	
SC	D-U8	M7/M5	Rotary, wafer, 2-pole, 5-pos'n, non-shorting, 1-wafer	102-4748	
SD	A-C1	K8	Lever operated, 2-pole changeover, QMQB, 3A 250V AC/DC	051-0504	
SE	C-J3	08	Lever operated, 2-pole changeover, QMQB, 3A, 250V AC/DC	051-0504	
SF	B-W7	E1/M8	Rotary wafer, 2-pole, 3-position, non-shorting 1-wafer	102-4743	
SG	C	F1/N8	Rotary wafer, 1-pole, 3-position, non-shorting 1-wafer	102-4700	
SH	A-G5	N2	Lever operated, 2-pole changeover, QMQB, 3A, 250V a.c./d.c.	051-0504	
SJ	A-G5	M2	Lever operated, 2-pole changeover, QMQB, 3A 250V a.c./d.c.	051-0504	
MISCELLANEOUS					
XL1	A-K2	D5/L2	Crystal unit, quartz, style F, 99kc/s, -20°C, +70°C, ±0.02°/o	Z17/5955-99 -901-4829	
XL2	A-J2	C5/K2	Crystal unit, quartz, style F, -20°C to +70°C, ±0.02°/o, 97kc/s	Z17/5955-99 -102-6024	
FIL1	A-D5	M/N1	Filter unit, crystal, type 6631		
FIL2	A-G4	M/N2	Filter, band-pass, Marconi, W61380, sht 1, ed A	Z1/ZA 56066	
JKA	B-V2	J8	Jack, telephone, single shank, accommodated contact arrangement J7-10	Y1/5935-99 -901-1510	
M1	C-D3	K7	Meter, audio level, 2 in. body dia, 40dB	Z1/6625-99- 102-1475	
M2	D-U8	L7	Meter, scale 10-0-10, 1-0-1mA	Z1/5280-99 -102-1985	
RLA	C-M7	B2/L4	Relay, magnetic, sealed, high speed 500+500 ohms, changeover, type SM8-4 Core adjustable tuning, iron dust, 1.176 in. lg, 0.21 in. dia, 8 BA thread	Z/5945-99- 053-0039 Z1/ZA 42749	

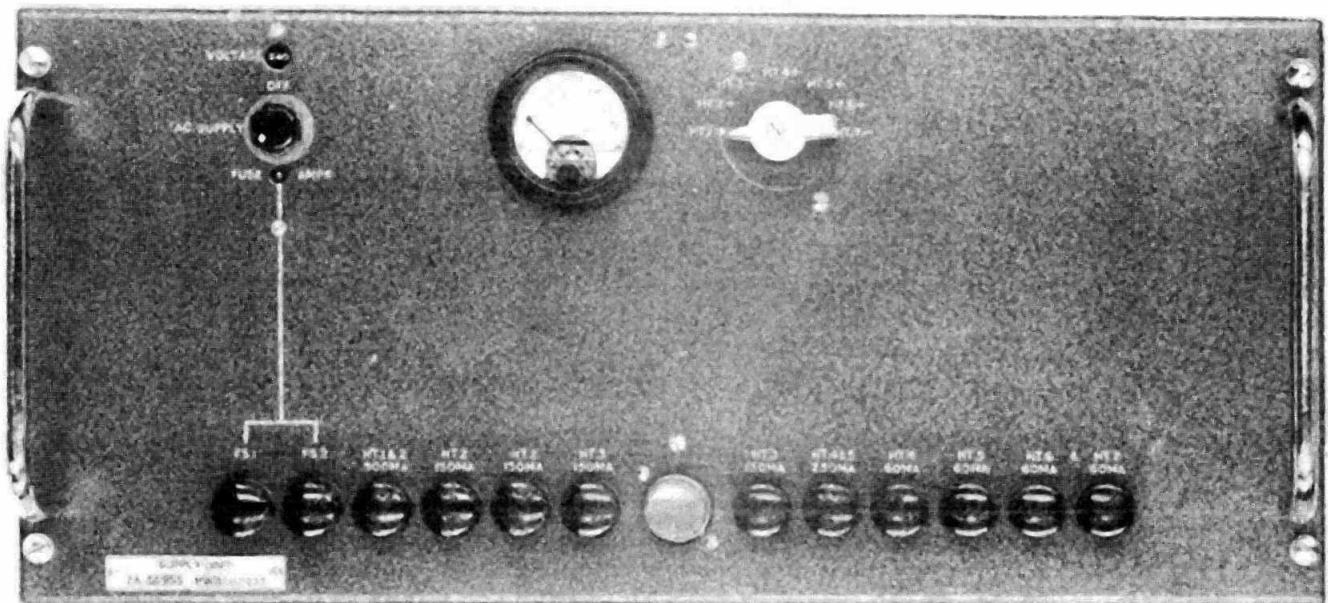
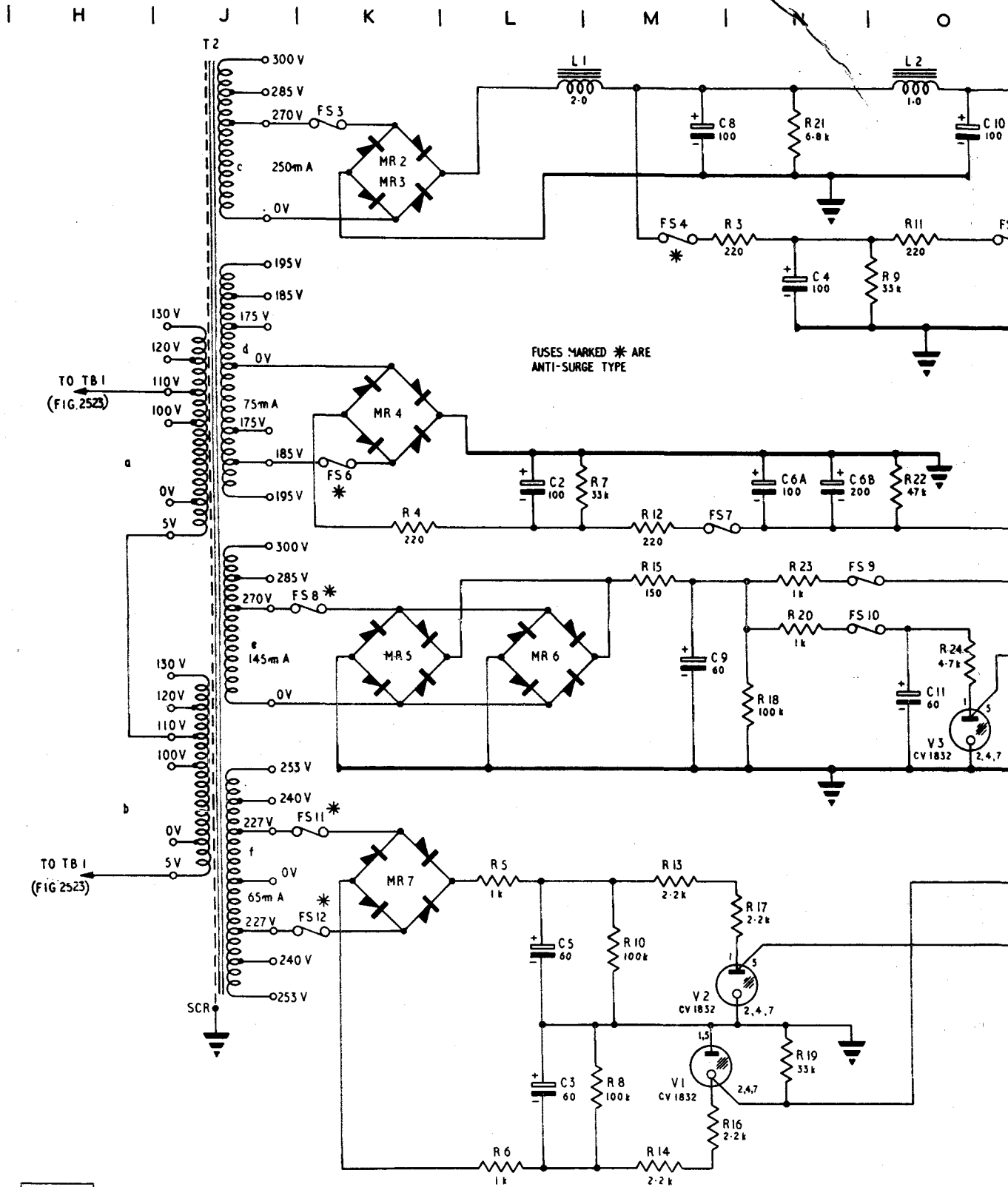


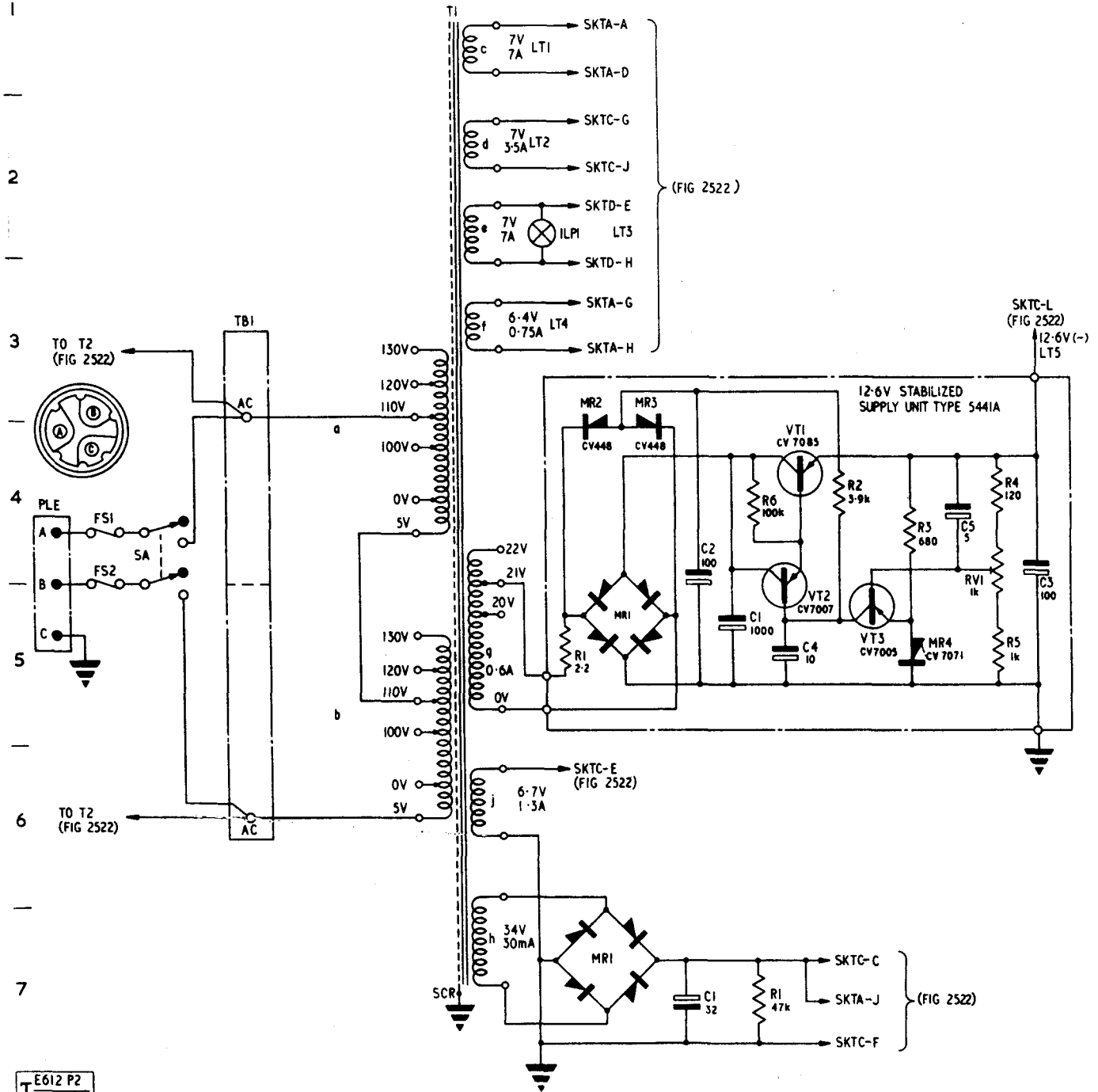
Fig 2521 - Power supply unit, view of front panel



T E 612 P2  
I-2522 2193/2

Fig 2522 - Power supply unit, circuit di

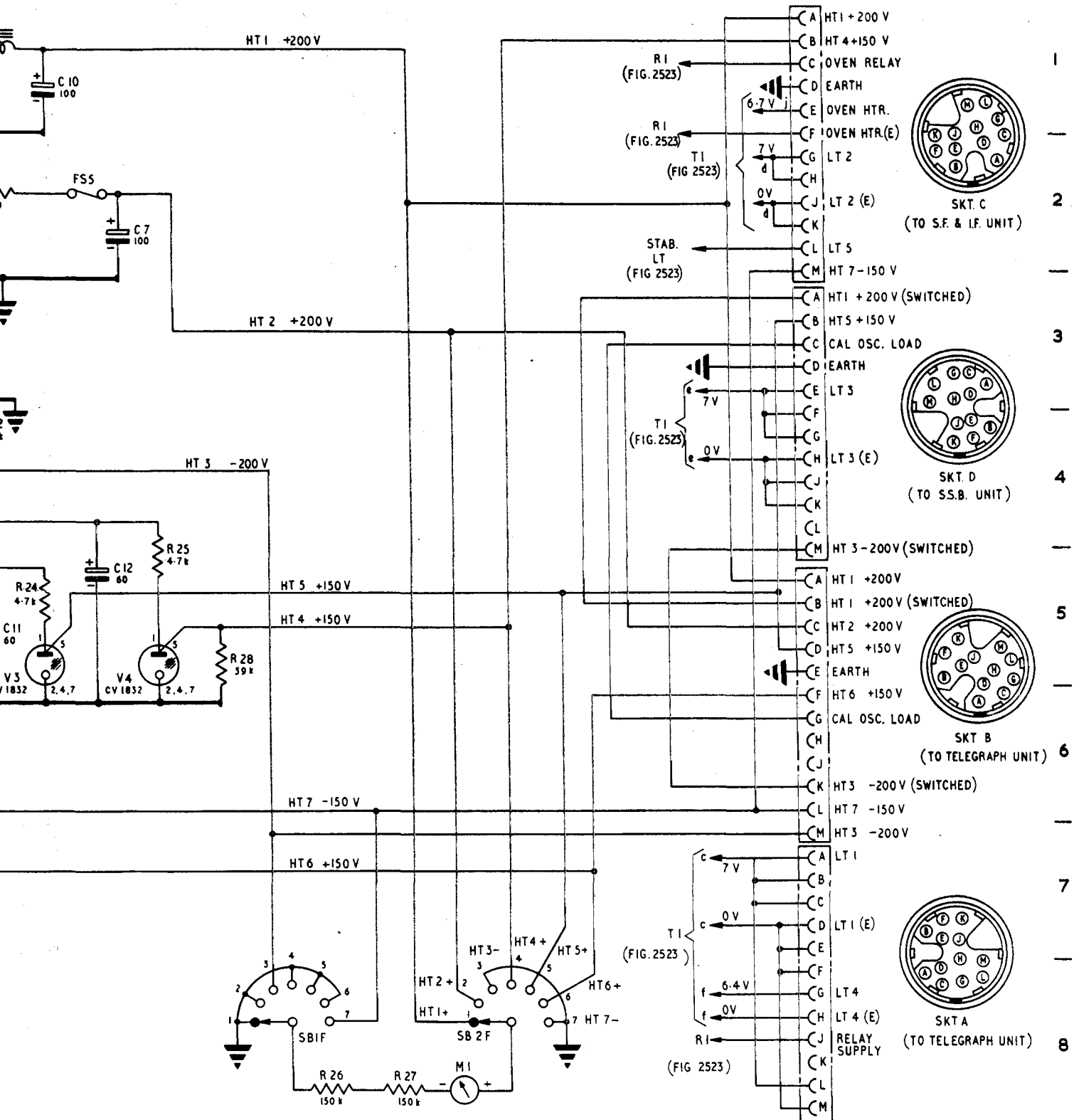
A | B | C | D | E | F | G |



E612 P2  
T-2523  
2193/29

Fig 2523 - Power supply unit, circuit diagram, l.t. transformer and stabilized l.t. supply

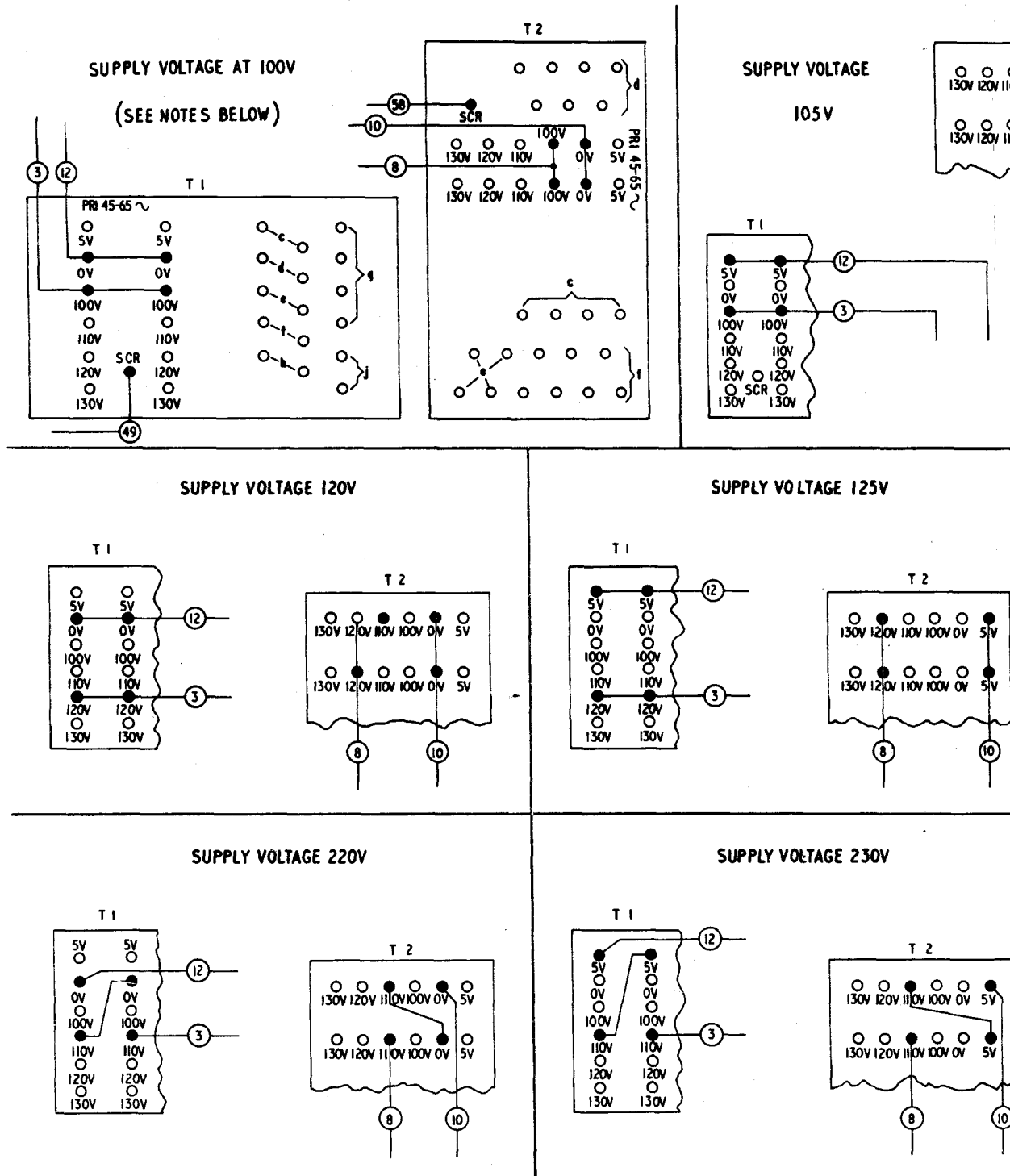
O | P | Q | R | S | T | U | V | L



Circuit diagram, h.t. supplies and output sockets

Fig 2522  
Page 1067





NOTE

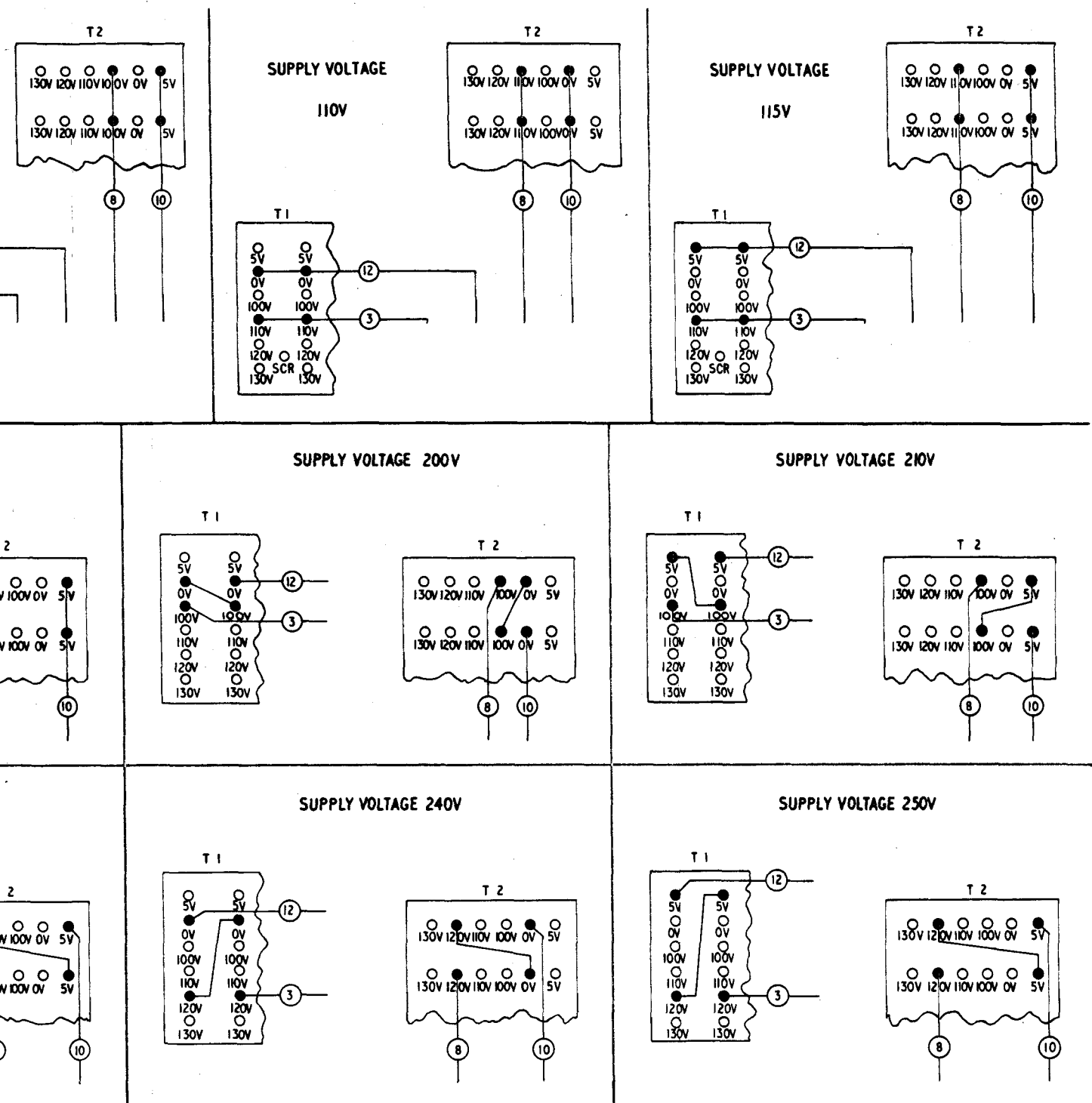
I. IMPORTANT: WHEN PRIMARY CONNECTIONS HAVE BEEN ALTERED, ENSURE THAT THE MAINS VOLTAGE INDICATING PLATE ON THE FRONT PANEL IS CORRECTLY SET.

E612 P2  
T 1-2524 2193/30

Fig 2524 - Power supply unit, tag identification



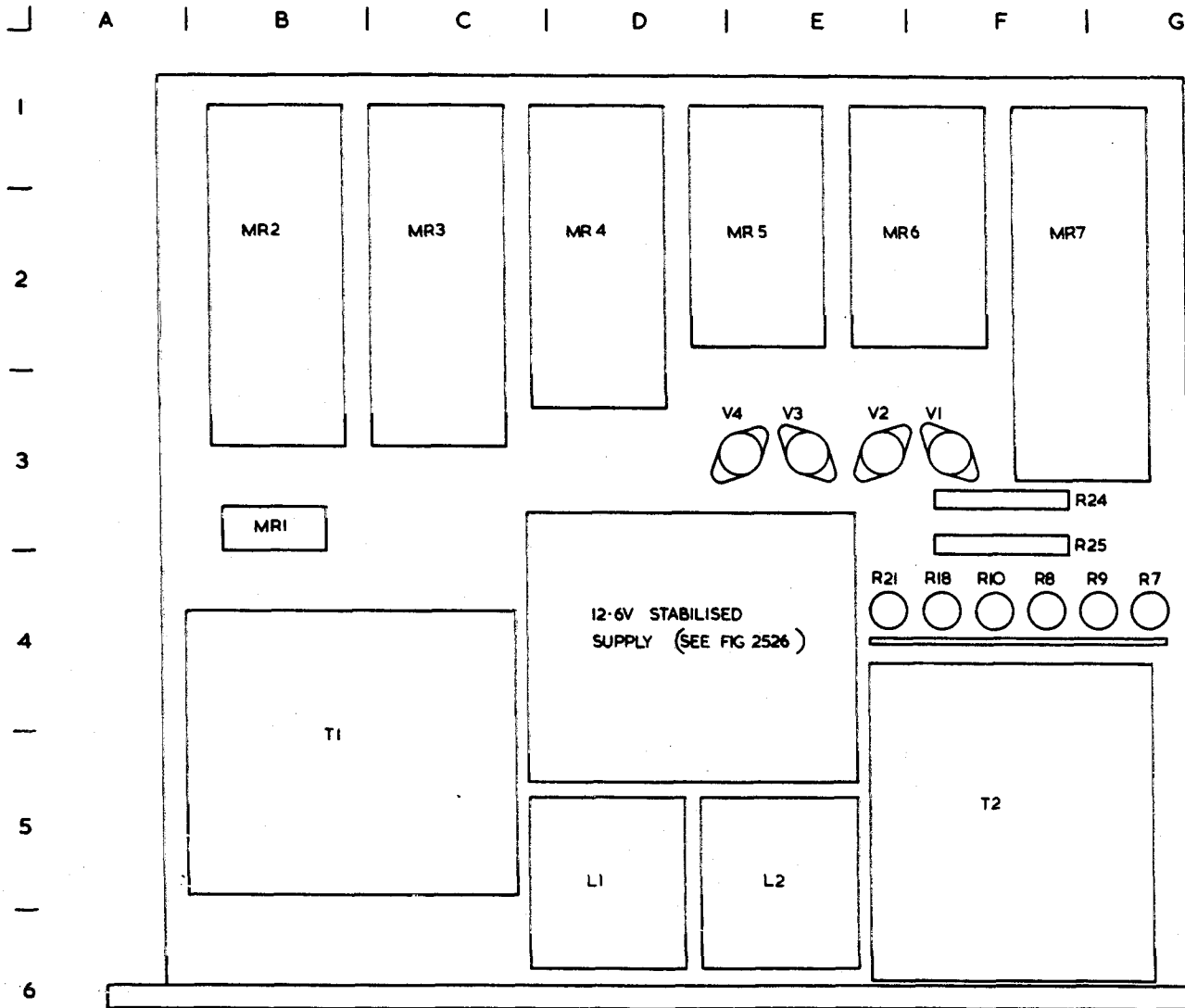




- CORRECTLY SET.
2. NUMBERED IDENTIFICATION SLEEVES AS INDICATED ARE NORMALLY FITTED TO PRIMARY WINDING AND SCREEN CONNECTING WIRES.
  3. ALL TRANSFORMER TAGBOARD LAYOUTS AND WINDING IDENTIFICATIONS ARE AS SHOWN FOR 100VOLT SUPPLY. ONLY PRIMARY TAGS ARE SHOWN IN OTHER DIAGRAMS.

ification and primary winding connection diagram, T1 and T2

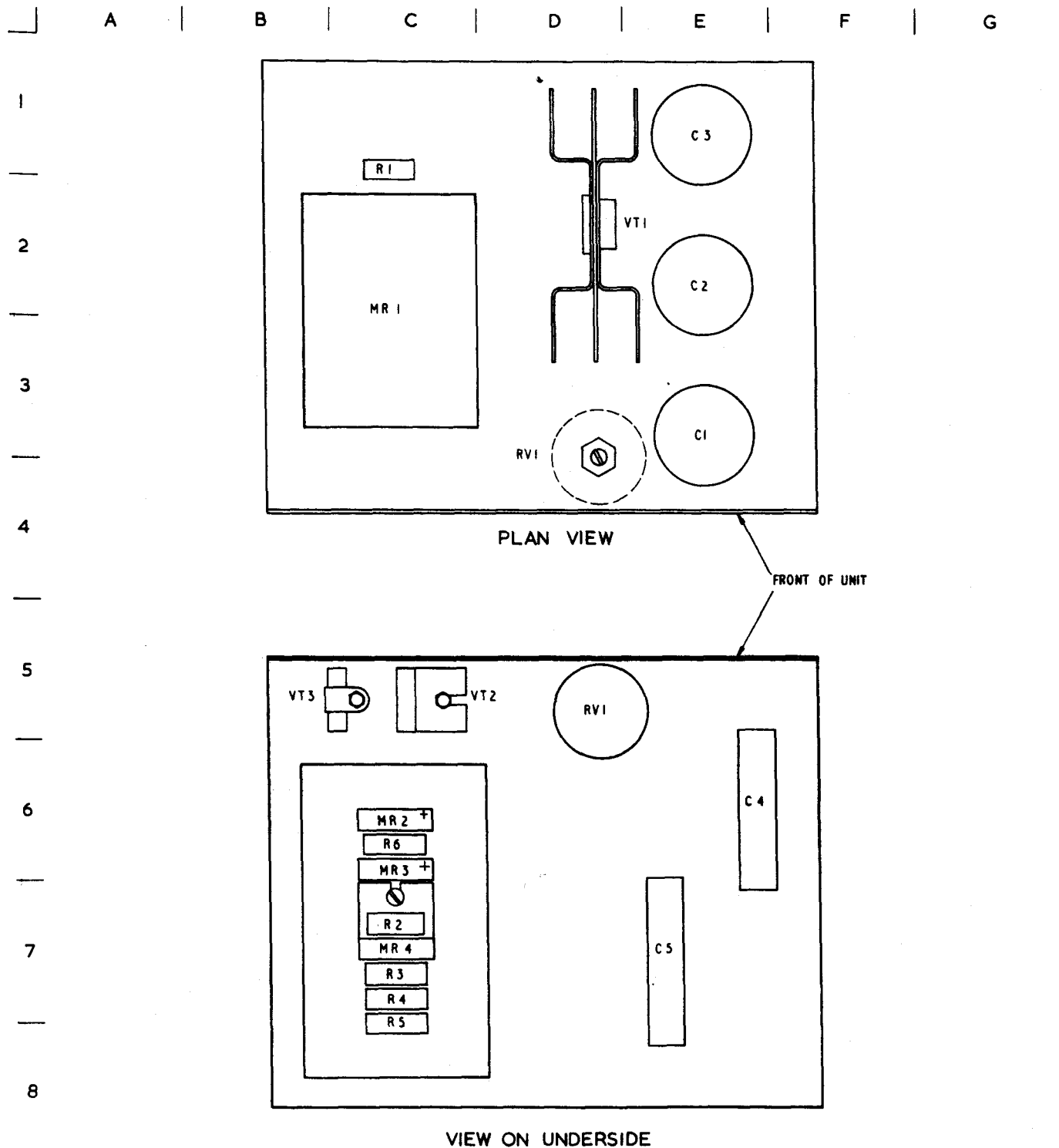




PLAN VIEW

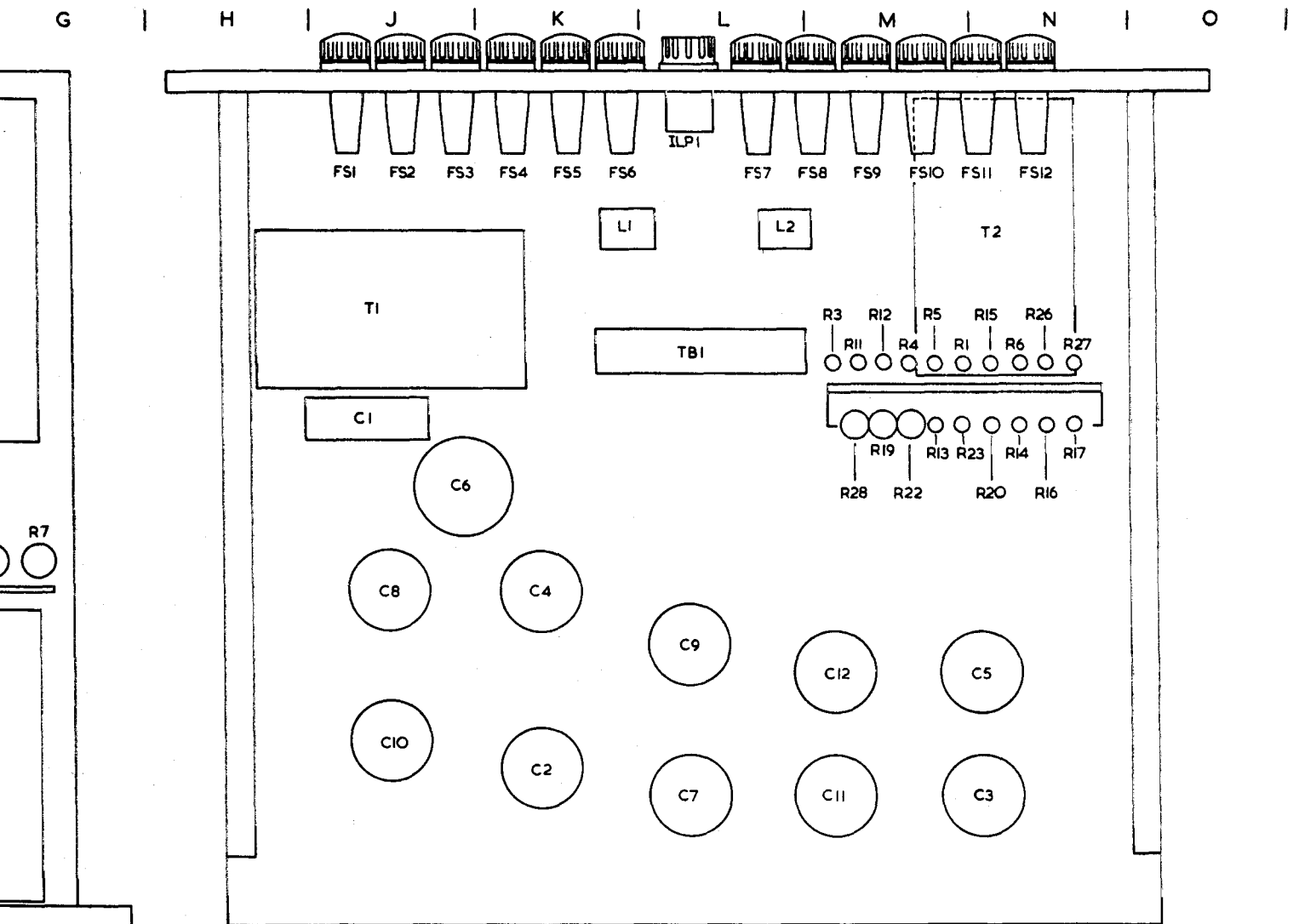
T E612 P2  
1-2525 2193/1

Fig 2525 - Power supply un



T E 612 P2  
T-2526 2193/5

Fig 2526 - Power supply unit, component layout  
sub-chassis of stabilized supply



VIEW ON UNDERSIDE

Supply unit, component layout, main chassis



Table 2504 - Power supply unit (excluding 12.6V d.c. stabilized supply) - component schedule

Note: This table is current at the time of issue only. Use I.S.P.L., when published, to demand stores.

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm$ %)	Part No (Z/5905-99-)
	Circuit Fig 2522	Layout Fig 2525				
RESISTORS, FIXED						
R1	2523-E7	M3	4.7k	1/4	comp, ins	10 022-2215
R3	M2	M3	220	1.1/2	w.w. vit, enam	5 011-3239
R4	K4	M3	220	1.1/2	w.w. vit, enam	5 011-3239
R5	L6	M3	1k	3		
R6	L8	N3	1k	3		
R7	L4	G4	33k	1	comp, non-ins	10 021-2194
R8	L8	F4	100k	1	comp, non-ins	10 021-3038
R9	N2	G4	33k	1	comp, non-ins	10 021-2194
R10	M7	F4	100k	1	comp, non-ins	10 021-3038
R11	O2	M3	220	1.1/2	w.w. vit, enam	5 011-3239
R12	M4	M3	220	1.1/2	w.w. vit, enam	5 011-3239
R13	M6	M3	2.2k	4.1/2	w.w. vit, enam	5 011-3495
R14	M8	M3	2.2k	4.1/2	w.w. vit, enam	5 011-3495
R15	M4	N3	150	3	w.w. vit, enam	5 011-3300
R16	M8	N3	2.2k	4.1/2	w.w. vit, enam	5 011-3495
R17	M7	N3	2.2k	4.1/2	w.w. vit, enam	5 011-3495
R18	N5	F4	100k	1	comp, non-ins	10 021-3038
R19	N8	M3	33k	1	comp, ins	10 011-1489
R20	N5	M3	1k	4.1/2	w.w. vit, enam	5 011-3487
R21	N1	E4	6.8k	10	w.w. vit, enam	5 011-3084
R22	O4	M3	4.7k	1		
R23	M4	M3	1k	4.1/2	w.w. vit, enam	5 011-3487
R24	O5	F3	4.7k	6	w.w. vit, enam	5 011-3413
R25	P4	F3	4.7k	6	w.w. vit, enam	5 011-3413
R26	Q8	N3	150k	1/4	film, ins	5 021-9269
R27	R8	N3	150k	1/4	film, ins	5 021-9269
R28	P5	M3	39k	1	comp, ins	10 011-1490
Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit (%)	Part No (Z/5910-99-)
	Circuit Fig 2522	Layout Fig 2525				
CAPACITORS, ELECTROLYTIC						
C1	2523-E7	J3	32	150	tub, met case	+100-20 014-5509
C2	L7	K5	100	350	tub, met case	+50-20 014-5554
C3	L8	N5	60	450	tub, met case	+50-20 014-5553
C4	N2	K4	100	350	tub, met case	+50-20 014-5554

Table 2504 - (cont)

Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $^{\circ}$ /o)	Part No (Z/5910-99-)
	Circuit Fig 2522	Layout Fig 2525				
CAPACITORS, ELECTROLYTIC - (cont)						
C5	L7	N4	60	450	tub, met case	+50-20 014-5553
C6	N4	J3	100+200	350	tub, met case	+50-20 014-5606
C7	P2	L5	100	350	tub, met case	+50-20 014-5554
C8	M1	J4	100	350	tub, met case	+50-20 014-5554
C9	M5	L4	60	450	tub, met case	+50-20 014-5553
C10	01	J5	100	350	tub, met case	+50-20 014-5554
C11	05	M5	60	450	tub, met case	+50-20 014-5553
C12	05	M4	60	450	tub, met case	+50-20 014-5553
Cct ref	Component Location		Description			Part No (Z1/5950-99-)
	Circuit Fig 2522	Layout Fig 2525				
INDUCTORS						
L1	L1	D5	A.F. 210mA, 2H			102-1454
L2	01	E5	A.F. 1H, 200mA			102-1661
TRANSFORMERS						
T1	2523-C1	J2	Power, step down, multi-secondary			102-7502
T2	J1	N2	Power, step up, multi-secondary			102-7501
SWITCHES						
SA	2523-A4					Z/5930-99
SB	Q8		Rotary, 2-pole, 7-way			-051-0583
LAMPS, FILAMENT						
ILP1	2523-D2	L1	8V, 1.6W, m.e.s., clear			X5/6240-99 -995-1201



Table 2504 - (cont)

Cct ref	Component Location		Description	Part No (Z1/6130-99-)
	Circuit Fig 2522	Layout Fig 2525		
RECTIFIERS, SELENIUM				
MR1	2523-D7	B3	Bridge, T5B18	102-4114
MR2	K1	B2	Half wave T14A201	075-2369
MR3	K1	C2	Half wave T14A201	075-2369
MR4	K3	D2	Bridge, T14A193	075-2364
MR5	K5	E2	Bridge, T14A144	075-2352
MR6	L5	F2	Bridge, T14A144	075-2352
MR7	K6	F2	Bridge, T14A232	075-2374
PLUGS, SOCKETS (Z1/5935-99-)				
SKT-A	U7		Socket, elec, M4, brass, fixed female shell, size 2/0, 12-pole	911-4461
SKT-B	U5		Socket, elec, M4, brass, fixed female shell, size 2/1, 12-pole	940-8682
SKT-C	U1		Socket, elec, M4, brass, fixed female shell size 2/2, 12-pole	940-9968
SKT-D	U3		Socket, elec, M4, brass, fixed female shell, size 2/3, 12-pole	940-8900
PLE	2523-A4		Plug, elec, M4, brass, fixed female shell, size 1/0, 3-pole	940-8628
VALVES, ELECTRONIC (Z/5960-99-)				
V1	M8	F3	CV1832	000-1832
V2	M7	E3	CV1832	000-1832
V3	O5	E3	CV1832	000-1832
V4	P5	E3	CV1832	000-1832
FUSE LINKS (X2/5920-99-)				
FS1	2523-A4	J1	Cartridge, ceramic, 5A, 440V a.c.	059-0112
FS2	2523-A4	J1	Cartridge, ceramic, 5A, 440V a.c.	059-0112
FS3	K1	J1	Cartridge, ceramic, 500mA 440V a.c.	059-0108
FS4	M2	K1	Cartridge, glass, 150mA, 250V a.c. (anti-surge)	945-7645
FS5	O2	K1	Cartridge, ceramic, 150mA, 250V a.c.	059-0132
FS6	K3	K1	Cartridge, glass, 150mA, 250V a.c. (anti-surge)	945-7645

Table 2504 - (cont)

Cct ref	Component Location		Description	Part No (X2/5920-99-)
	Circuit Fig 2522	Layout Fig 2525		
FUSE LINKS - (cont)				
FS7	M4	L1	Cartridge, ceramic, 150mA, 250V a.c.	059-0132
FS8	J4	M1	Cartridge, glass, 250mA, 1000V a.c. (anti-surge)	999-8041
FS9	N4	M1	Cartridge, ceramic, 60mA, 250V a.c.	059-0130
FS10	N5	M1	Cartridge, ceramic, 60mA, 250V a.c.	059-0130
FS11	J6	N1	Cartridge, glass, 60mA, 1000V a.c. (anti-surge)	945-3658
FS12	J7	N1	Cartridge, glass, 60mA, 1000V a.c. (anti-surge)	945-3658
MISCELLANEOUS				
M1	R8		Voltmeter, moving coil, 300V d.c., less multiplier Carrier, fuse link, cap, single way, 7A Fuse unit, protected, single way, 7A	Z4/6625-99- -102-2599 012-0232 012-0231

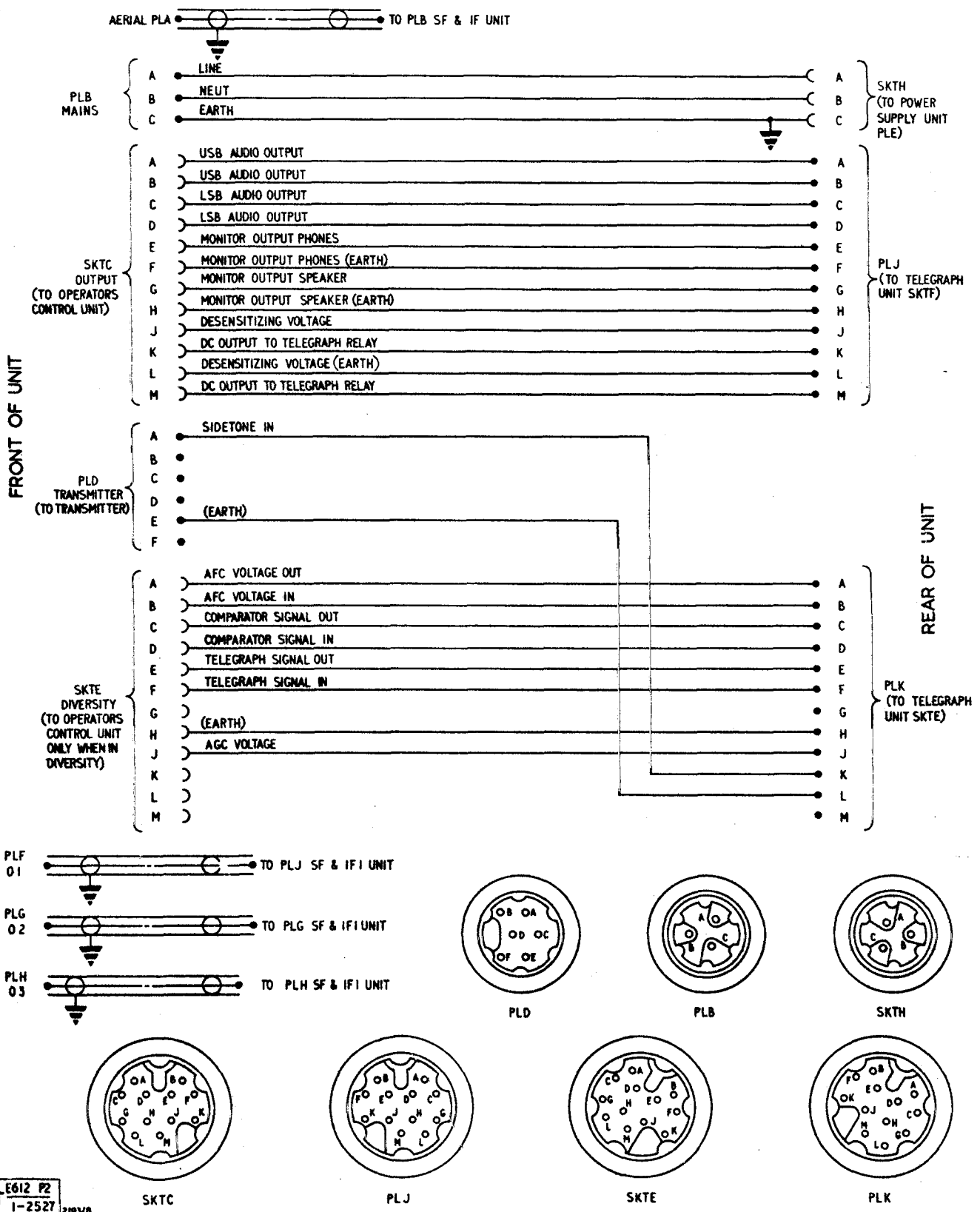
Table 2505 - Power supply unit, 12.6V stabilized  
supply, component schedule

Note: This table is current at the time of issue only. Use I.S.P.L., when published, to demand stores

Cct ref	Component Location		Value ( $\Omega$ )	Rating (W)	Type and limit ( $\pm$ %)	Part No (Z/5905-99-)
	Circuit Fig 2523	Layout Fig 2526				
RESISTORS, FIXED						
R1	D5	C1	2.2	1.1/2	w.w. vitreous	10 011-3199
R2	F4	C7	3.9k	1/4	comp, ins	10 022-2080
R3	F4	C7	680	1/4	comp, ins	10 022-1215
R4	G4	C7	120	1/4	film, ins	5 021-9047
R5	G5	C7	1k	1/4	film, ins	5 021-9113
R6	E4	C6	100k	1/4	comp, ins	10 022-3038
RESISTORS, VARIABLE						
RV1	G4	D3	1k	1	w.w. rotary, linear	10 Z1/5905-99 -911-5466

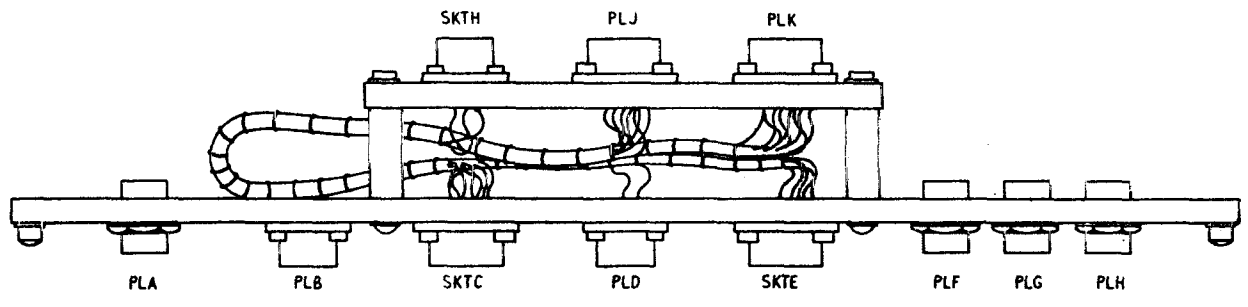
Table 2505 - (cont)

Cct ref	Component Location		Value ( $\mu$ F)	Rating (V)	Type and limit ( $\pm$ %/o)	Part No (Z/5910-99-)
	Circuit Fig 2523	Layout Fig 2526				
CAPACITORS, ELECTROLYTIC, ALUMINIUM						
C1	E5	E3	1000	25	foil,tub,met,ins +100-20	014-5520
C2	E4	E2	100	50	foil,tub,met +100-20	014-5228
C3	G4	E1	100	50	foil,tub,met +100-20	014-5228
C4	F5	E6	10	25	foil,tub,met + 50-20	014-5096
C5	G4	E7	5	50	foil,tub,met,ins + 50-20	014-5047
Cct ref	Component Location		Description			Part No.
	Circuit Fig 2523	Layout Fig 2526				
RECTIFIERS/SEMI-CONDUCTOR DEVICES/VALVES						
MR1	D5	C2	Rectifier, selenium, bridge MBA 45-2-16Z			Z/6130-99 -075-1152
MR2	D4	C6	Valve electronic, CV448			Z/5960-99 -000-0448
MR3	E4	C6	Valve electronic, CV448			Z/5960-99 -000-0448
MR4	F5	C7	Semi-conductor device dicde, CV7071			Z/5960-99 -037-2128
TRANSISTORS						(Z/5960-99-)
VT1	F4	D2	CV7085			037-2160
VT2	F4	C5	CV7007			037-2007
VT3	F5	C5	CV7005			037-2005

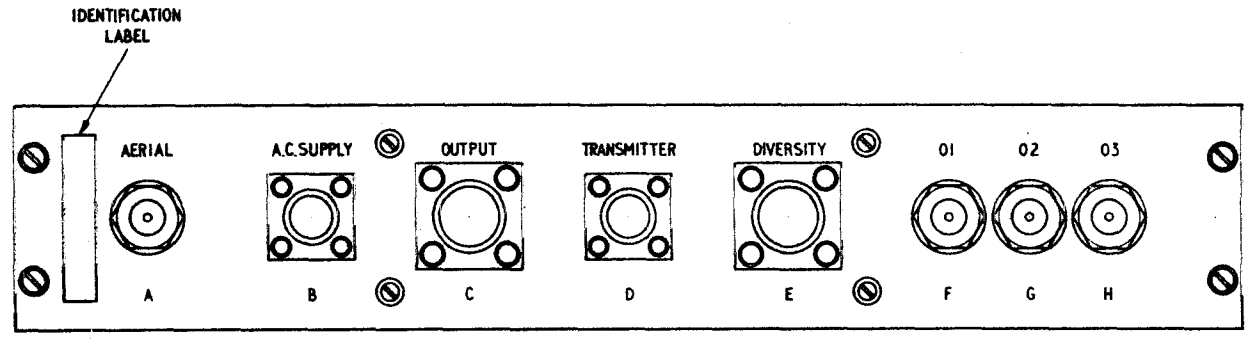


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T 1-2527 2193/0

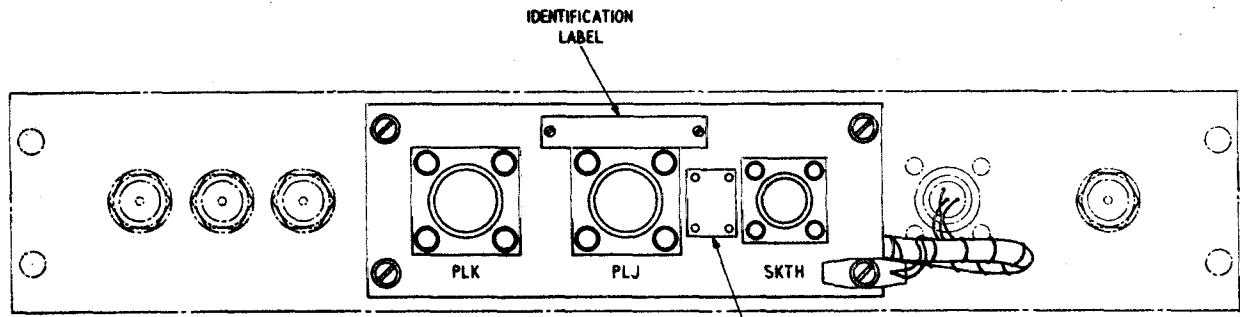
Fig 2527 - Distribution unit, circuit diagram



PLAN VIEW



FRONT PANEL



REAR VIEW

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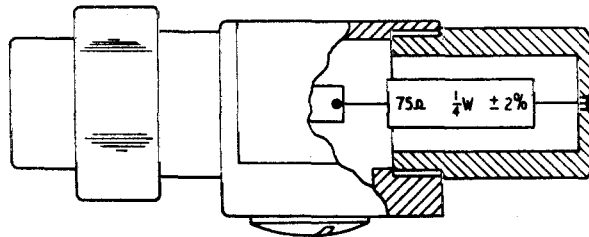
Fig 2528 - Distribution unit, component layout



Table 2506 - Distribution unit, component schedule

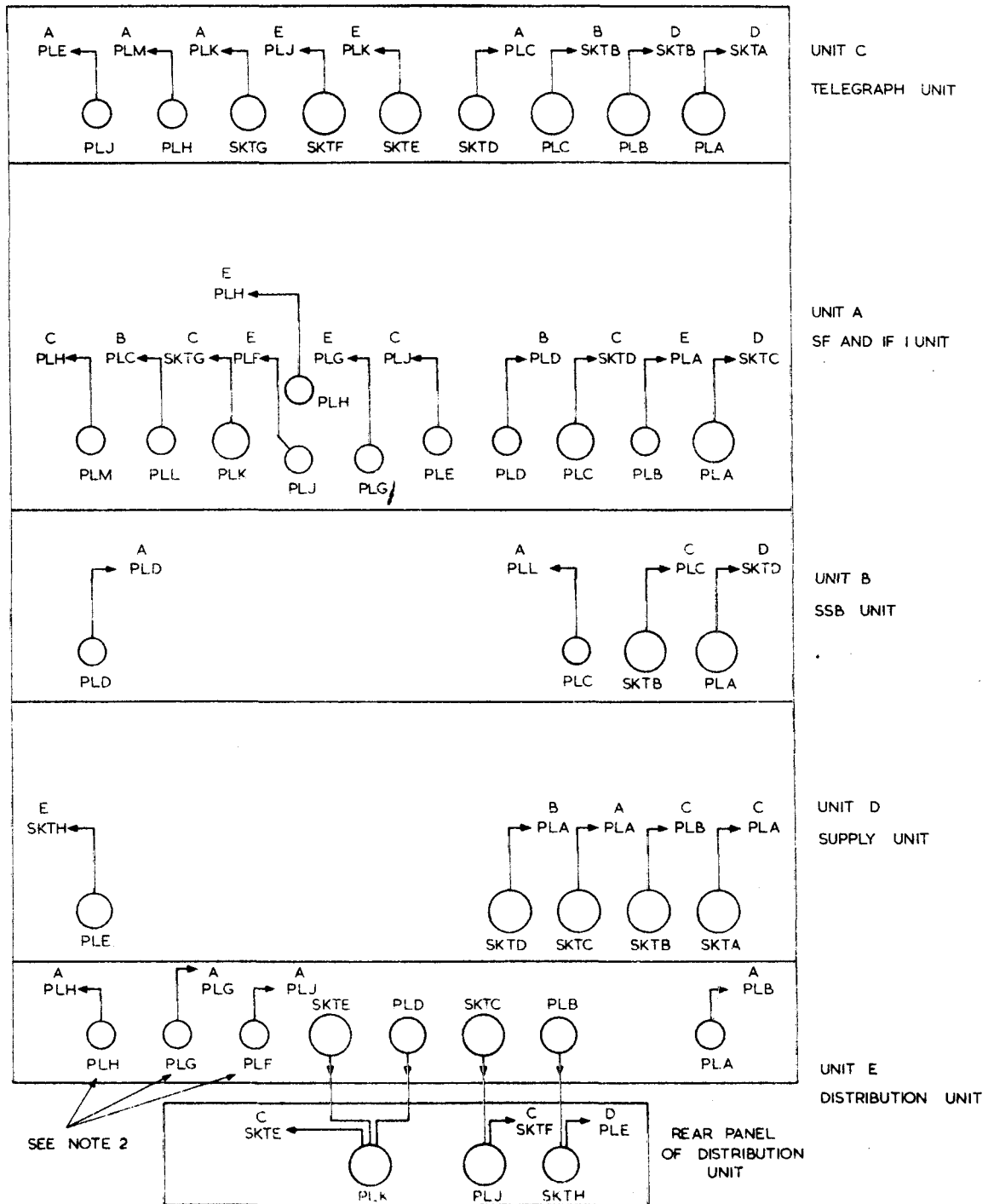
Note: This Table is current at the time of issue only. Use I.S.P.L., when published, to demand stores.

Cct Ref	Description	Part No (Z/5935-99-)
PLUGS, SOCKETS AND ADAPTORS		
PLA	Adaptor, socket-to-socket, fixed, co-ax, single pole	054-0019
PLB	Plug, fixed, M4B, female shell, size 1/0, 3-pole	940-8628
SKT-C	Socket, fixed, M4B, female shell, size 2/0, 12-pole	911-4461
PLD	Plug, fixed, M4B, female shell, size 1/0, 6-pole	940-8504
SKT-E	Socket, fixed, M4B, female shell, size 2/1, 12-pole	940-8682
PLF	Adaptor, socket-to-socket, fixed, co-ax, single pole	054-0019
PLG	Adaptor, socket-to-socket, fixed, co-ax, single pole	054-0019
PLH	Adaptor, socket-to-socket, fixed, co-ax, single pole	054-0019
SKT-H	Socket, fixed, M4B, female shell, size 1/0, 3-pole	940-8629
PLJ	Plug, fixed, M4B, female shell, size 2/0, 12-pole	911-6993
PLK	Plug, fixed, M4B, female shell, size 2/1, 12-pole	110-2271



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Fig 2529 - Distribution unit, 75Ω terminating pad



SEE NOTE 2

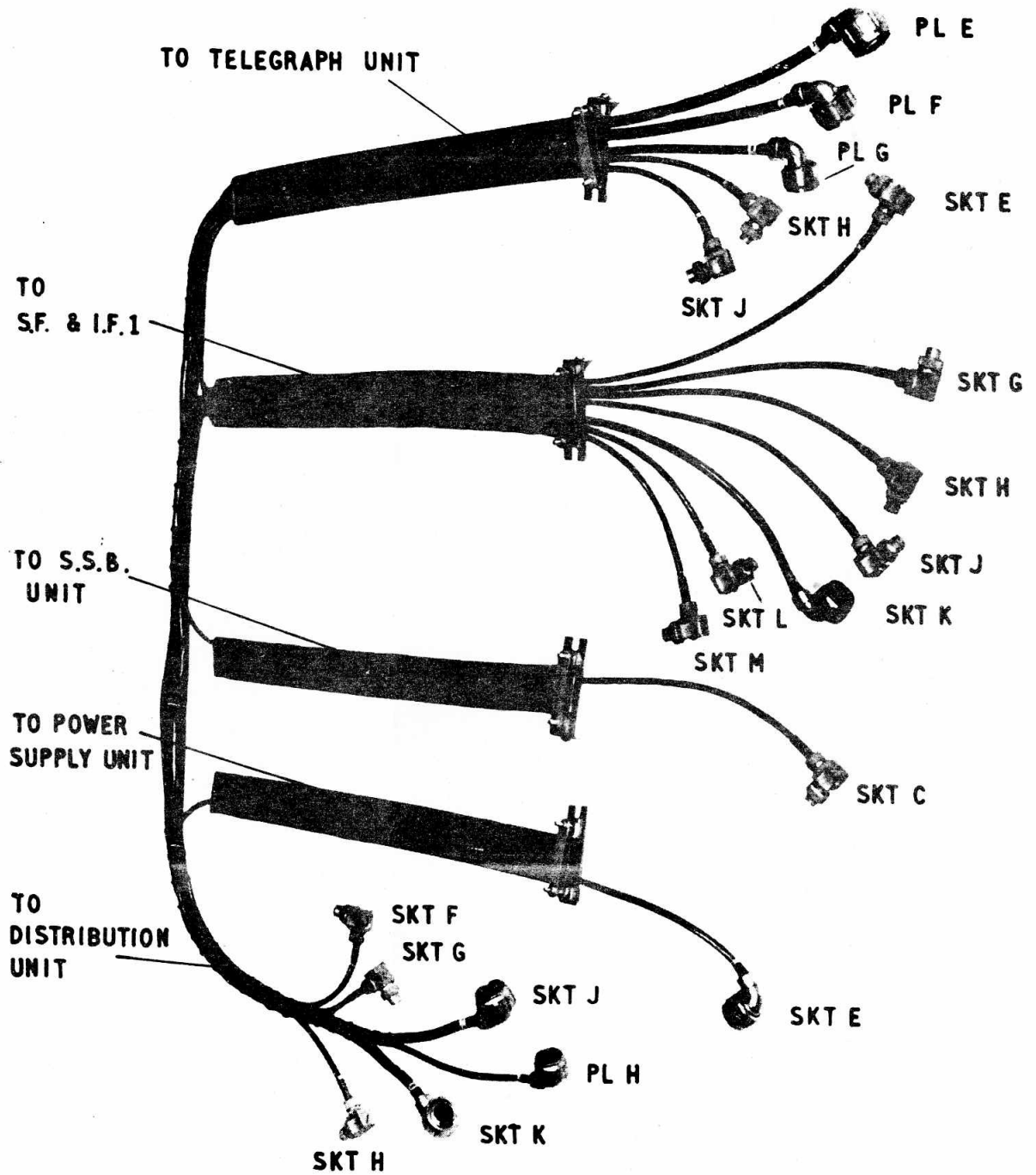
NOTES

- 1 ALL CONNECTIONS ARE IDENTICAL AT BOTH ENDS OF EACH RUN
- 2 PLF PLG AND PLH ON THE DISTRIBUTION UNIT MUST BE TERMINATED BY 75Ω DUMMY LOADS EXCEPT WHEN RECEIVER IS ACTING IN A DIVERSITY ROLE

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Fig 2530 - Cabinet, inter-unit cable connections

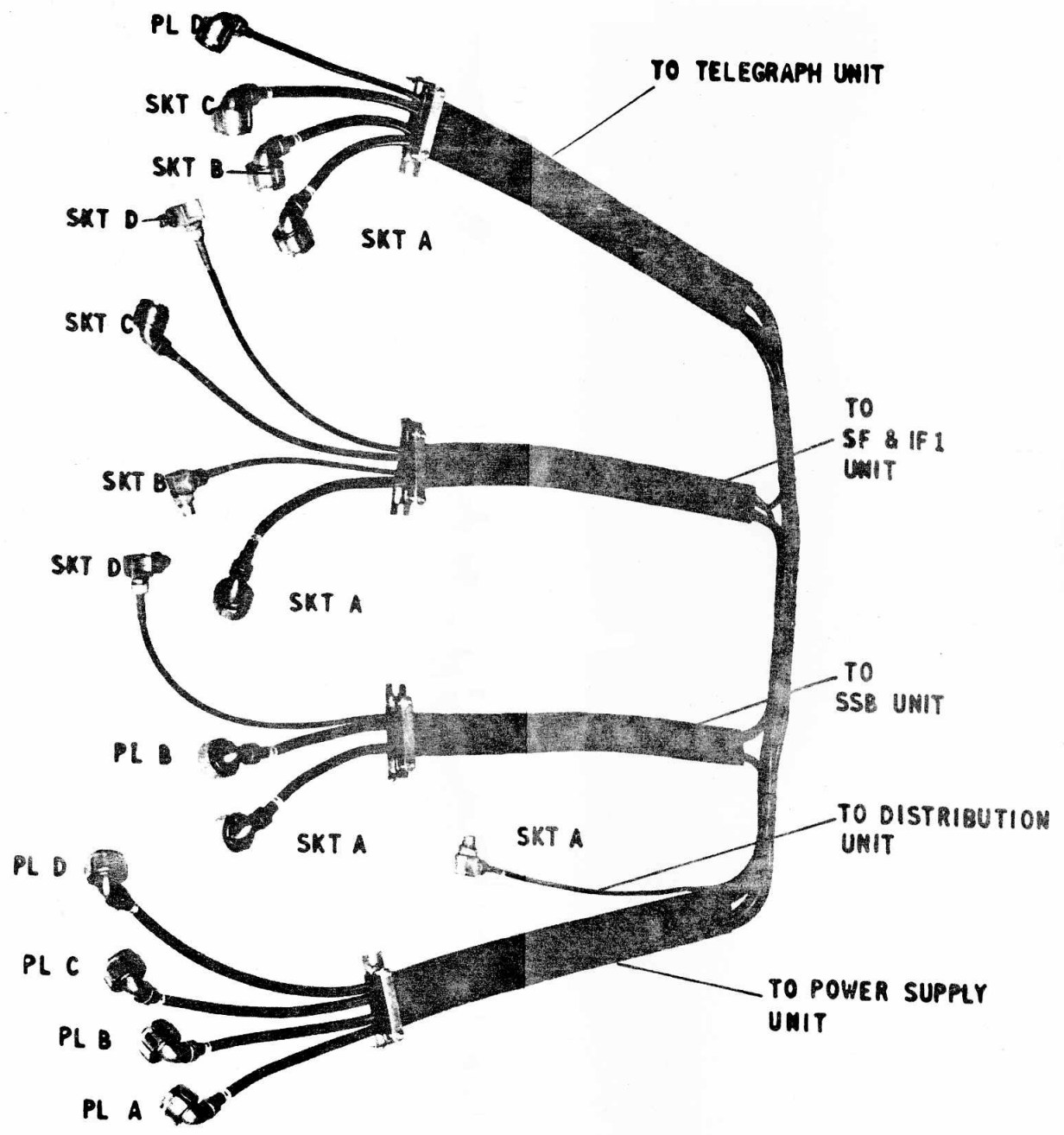




Left-hand harness, viewed from rear of equipment

Fig 2531 - Cabinet, cable harness





Right-hand harness, viewed from rear of equipment

ble harness with termination identification



Table 2507 - Cable harnesses, component schedule

Note: This table is current at the time of issue only. Use I.S.P.L., when published, to demand stores.

Unit and Circuit Ref	Description	Part No
<u>PLUGS, SOCKETS</u>		
<u>TELEGRAPH UNIT</u>		
SKT-A	Socket, elec, M4 brass, free male shell, size 2/0, 12-pole	Z1/5935-99-940-8529
SKT-B	Socket, elec, M4 brass, free male shell, size 2/1, 12-pole	Z1/5935-99-911-8226
SKT-C	Socket, elec, M4 brass, free male shell, size 2/2, 12-pole	Z1/5935-99-940-8595
PLD	Plug, elec, M4 brass, free male shell, size 1/0, 4-pole	Z1/5935-99-940-8631
PLE	Plug, elec, M4 brass, free male shell, size 2/1, 12-pole	Z1/5935-99-940-8683
PLF	Plug, elec, M4 brass, free male shell, size 2/0, 12-pole	Z1/5935-99-940-8525
PLG	Plug, elec, M4 brass, free male shell, size 1/0, 6-pole	Z1/5935-99-911-7967
SKT-H	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
SKT-J	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
<u>SF &amp; IF UNIT</u>		
SKT-A	Socket, elec, M4 brass, free male shell, size 2/0, 12-pole	Z1/5935-99-940-8529
SKT-B	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
SKT-C	Socket, elec, M4 brass, free male shell, size 1/0, 4-pole	Z1/5935-99-932-5875
SKT-D	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
SKT-E	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
SKT-G	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
SKT-H	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
SKT-J	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
SKT-K	Socket, elec, M4 brass, free male shell, size 1/0, 6-pole	Z1/5935-99-911-7968
SKT-L	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
SKT-M	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022

Table 2507 - (cont)

Unit and Circuit Ref	Description	Part No
<u>PLUGS, SOCKETS - (cont)</u>		
<u>S.S.B. UNIT</u>		
SKT-A	Socket, elec, M4 brass, free male shell, size 2/0, 12-pole	Z1/5935-99-940-8529
PLB	Plug, elec, M4 brass, free male shell, size 2/0, 12-pole	Z1/5935-99-940-8525
SKT-C	Socket, elec, free male shell, co-axial, single pole	Z /5935-99-054-0022
SKT-D	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
<u>POWER SUPPLY UNIT</u>		
PLA	Plug, elec, M4 brass, free male shell, size 2/0, 12-pole	Z1/5935-99-940-8525
PLB	Plug, elec, M4 brass, free male shell, size 2/1, 12-pole	Z1/5935-99-940-8683
PLC	Plug, elec, M4 brass, free male shell, size 2/2, 12-pole	Z1/5935-99-940-8595
PLD	Plug, elec, M4 brass, free male shell, size 2/3, 12-pole	Z1/5935-99-940-9395
SKT-E	Socket, elec, M4 brass, free male shell, size 1/0, 3-pole	Z1/5935-99-940-8630
<u>DISTRIBUTION UNIT</u>		
SKT-A	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
SKT-F	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
SKT-G	Socket, elec, free male shell, co-axial, single pole	Z/5935-99-054-0022
PLH	Plug, elec, M4 brass, free male shell, size 1/0, 3-pole	Z1/5935-99-940-8633
SKT-H	Socket, elec, free male shell, co-axial single pole	Z/5935-99-054-0022
SKT-J	Socket, elec, M4 brass, free male shell, size 2/0, 12-pole	Z1/5935-99-940-8529
SKT-K	Socket, elec, M4 brass, free male shell, size 2/1, 12-pole	Z1/5935-99-911-8226

Table 2508 - Plugs and sockets, pin connection detail

Component	Pin	Function	Remote connection
S.F. AND I.F.1 UNIT			
PLA	A	H.T.1	From SKT-C Power supply unit
	B	H.T.4	
	C	Relay energizing supply	
	D	Earth	
	E	} Oven heater supply	
	F		
	G	} L.T.2 for V1-V6, V9-V12, V14, V15 and ILP2-9	
	H		
	J	} Earth	
	K		
	L	L.T.5 for V7, V8 and V13	
M	H.T.7		
PLB	Co-ax	Antenna input	From PLA, Distribution unit
PLC	A	A.F.C. voltage	From SKT-D, Telegraph unit
	B	} Common manual gain and a.g.c. voltages	
	C		
	D	Earth	
PLD	Co-ax	100kc/s 2nd i.f. output	To PLD, S.S.B. unit
PLE	Co-ax	100kc/s 2nd i.f. output	To PLJ, Telegraph unit
PLG	Co-ax	2nd oscillator input or output	To PLG, Distribution unit
PLH	Co-ax	100kc/s oscillator, input or output	To PLH, Distribution unit
PLJ	Co-ax	1st oscillator voltage, input or output	To PLF, Distribution unit
PLK	A	H.T.5 (switched) for local carrier	From SKT-G, Telegraph unit
	B	H.T.5 (switched) for CaL 100	
	C	H.T.5 (switched) for CaL 10	
	D	Earth	
	E	Relay energizing supply (desensitizing)	
	F	Earth	

Table 2508 - (cont)

Component	Pin	Function	Remote connection
PLL	Co-ax	100kc/s oscillator output	To PLC, S.S.B. unit
PLM	Co-ax	100kc/s oscillator output	To PLH, Telegraph unit
S.S.B. UNIT			
PLA	A	H.T.1 (switched)	From SKT-D, Power supply unit
	B	H.T.5	
	C	H.T.5 (switched) to equalizing loads	
	D	Earth	
	E	L.T.3 for V1-V5, V8 and V9	
	F	L.T.3 for V6, V10-V16	
	G	L.T.3 for V7, V17-V22	
	H	) Earth	
	J		
	K		
L	-		
M	H.T.3 (switched)		
SKT-B	A	A.F.C. voltage (telephony) outgoing	To PLC, Telegraph unit
	B	A.G.C. voltage incoming to SE	
	C	A.G.C. voltage (telephony) outgoing	
	D	A.G.C. voltage outgoing from SE	
	E	Earth	
	F	) Carrier gain switching	
	G		
	H	U.S.B. audio	
	J	L.S.B. audio	
K	S.S.B. tuning indicator output (+)		
L	S.S.B. tuning indicator output (-)		
M	H.T.5 (switched) to local oscillator		
PLC	Co-ax	100kc/s oscillator input	From PLL, S.F. and i.f.1 unit
PLD	Co-ax	100kc/s 2nd i.f. input	From PLD, S.F. and i.f.1 unit



Table 2508 - (cont)

Component	Pin	Function	Remote connection
TELEGRAPH UNIT			
PLA	A	L.T.1 for V6-V10	From SKT-A, Power supply unit
	B	L.T.1 for V1, V2, V4, V5, V17 and V18	
	C	L.T.1 for V11-V16	
	D	) Earth	
	E		
	F		
	G	L.T.4 for V3	
	H	Earth	
	J	Relay energizing supply	
	K	-	
	L	L.T.1 for V19-V23	
M	Earth		
PLB	A	H.T.1	From SKT-B, Power supply unit
	B	H.T.1 (switched)	
	C	H.T.2	
	D	H.T.5	
	E	Earth	
	F	H.T.6	
	G	H.T.5 (switched) to equalizing loads	
	H	-	
	J	-	
	K	H.T.3 (switched)	
	L	H.T.7	
M	H.T.3		
PLC	A	A.F.C. voltage (telephony) incoming	From SKT-B, S.S.B. unit
	B	A.G.C. voltage outgoing	
	C	A.G.C. voltage (telephony) incoming	
	D	A.G.C. voltage incoming	
	E	Earth	
	F	) Carrier gain switching	
	G		
	H	U.S.B. audio, incoming	
	J	L.S.B. audio, incoming	
	K	S.S.B. tuning indicator input (+)	
	L	S.S.B. tuning indicator input (-)	
M	H.T.5 (switched) to local oscillator		
SKT-D	A	A.F.C. voltage	To PLC, S.F. and i.f.1 unit
	B	) Common manual gain and a.g.c. voltages	
	C		
	D	Earth	

Table 2508 - (cont)

Component	Pin	Function	Remote connection
TELEGRAPH UNIT - (cont)			
SKT-E	A	} A.F.C. Voltage	To PLK, Distribution unit
	B		
	C	} Comparator signals	
	D		
	E	} Telegraph signals	
	F		
	G	-	
	H	Earth	
	J	A.G.C. voltage	
	K	Sidetone, input	
L	Earth		
M	-		
SKT-F	A	} U.S.B. audio output	To PLJ, Distribution unit
	B		
	C	} L.S.B. audio output	
	D		
	E	Monitor output, phones	
	F	Earth	
	G	Monitor output, speaker	
	H	Earth	
	J	Relay energizing supply (desensitizing)	
	K	D.C. output to telegraph relay	
L	Earth		
M	D.C. output to telegraph relay		
SKT-G	A	H.T.5 (switched) for local carrier	To PLK, S.F. and i.f.1 unit
	B	H.T.5 (switched) for C.M.L 100	
	C	H.T.5 (switched) for C.M.L 10	
	D	Earth	
	E	Relay energizing supply	
	F	Earth	
PLH	Co-ax	100kc/s oscillator input	From PLM, S.F. and i.f.1 unit
PLJ	Co-ax	100kc/s 2nd i.f. input	From PLE, S.F. and i.f.1 unit

Table 2508 - (cont)

Component	Pin	Function	Remote connection
POWER SUPPLY UNIT			
SKT-A	A	) L.T.1 for V1-V18, excluding V3	To PL <sub>A</sub> , Telegraph unit
	B		
	C		
	D	) L.T.1 for V1-V18 excluding V3	
	E		
	F		
	G	) L.T.4 for V3	
	H		
	J	Relay energizing supply	
K	-		
L	L.T.1 strapped to pins A, B & C		
M	L.T.1 strapped to pins D, E & F		
SKT-B	A	H.T.1	To PL <sub>B</sub> , Telegraph unit
	B	H.T.1 (switched)	
	C	H.T.2	
	D	H.T.5	
	E	Earth	
	F	H.T.6	
	G	H.T.5 (switched) to equalizing loads	
	H	-	
	J	-	
	K	H.T.3 (switched)	
	L	H.T.7	
M	H.T.3		
SKT-C	A	H.T.1	To PL <sub>C</sub> , S.F. and i.f.1 unit
	B	H.T.4	
	C	Relay energizing supply	
	D	Earth	
	E	Oven heater supply	
	F	Earth	
	G	) L.T.2 for V1-V6, V9-V12, V14, V15 and	
	H		
	J	) L.T.2 for V1-V6, V9-V12, V14, V15 and	
	K		
	L	L.T.5 for V7, V8 and V13	
M	H.T.7		

Table 2508 - (cont)

Component	Pin	Function	Remote connection
POWER SUPPLY UNIT - (cont)			
SKT-D	A	H.T.4 (switched)	To PLH, S.S.B. unit
	B	H.T.5	
	C	H.T.5 (switched) to equalizing loads	
	D	Earth	
	E	)	
	F	) L.T.3 for V1-V22	
	G	)	
	H	)	
	J	) L.T.3 for V1-V22	
	K	)	
	L	-	
M	H.T.3 (switched)		
PLE	A	) Mains input	From SKT-H, Distribution unit
	B		
	C	Earth	
DISTRIBUTION UNIT (See Fig 2527,2528)			
PLA AERIAL		Antenna input	To PLB, S.F. and i.f.1 unit
PLB A.C. SUPPLY	A	) Mains input	To SKT-H Distribution unit
	B		
	C	Earth	
SKT-C OUTPUT	A	) U.S.B. audio output	To PLJ, Distribution unit
	B		
	C	) L.S.B. audio output	
	D		
	E	Monitor output, phones	
	F	Earth from telegraph unit via PLJ	
	G	Monitor output, speaker	
	H	Earth from telegraph unit via PLJ	
	J	Relay energizing supply (desensitizing)	
	K	D.C. output to telegraph relay	
L	Earth from telegraph unit via PLJ		
M	D.C. output to telegraph relay		

Table 2508 - (cont)

Component	Pin	Function	Remote connection	
DISTRIBUTION UNIT - (cont)				
PLD TRANSMITTER	A	Sidetone input	To PLK-K, Distribution unit	
	B	-		
	C	-		
	D	-		
	E	Earth from telegraph unit via PLK		To PLK-L Distribution unit
	F	-		
SKT-E DIVERSITY	A	} A.F.C. voltage	To PLK, Distribution unit	
	B			
	C	} Comparator signals		
	D			
	E	} Telegraph signals		
	F			
	G	-		
	H	Earth from telegraph unit via PLK		
	J	A.G.C. voltage		
	K	-		
	L	-		
M	-			
PLF 01 See Note 1	Co-ax	1st oscillator, input or output	From PLJ, S.F. and i.f.1 unit	
PLG 02 See Note 1	Co-ax	2nd oscillator, input or output	From PLG, S.F. and i.f.1 unit	
PLH 03 See Note 1	Co-ax	100kc/s oscillator, input or output	Fromt PLH, S.F. and i.f.1 unit	
SKT-H	A	} Mains supply	Linking PLB, Distribution unit to PLE, Power supply unit	
	B			
	C	Earth		

Table 2508 - (cont)

Component	Pin	Function	Remote connection
DISTRIBUTION UNIT - (cont)			
PLJ	A	} U.S.B. audio output	Linking SKT-F, Telegraph unit to SKT-C, Distribution unit
	B		
	C	} L.S.B. audio output	
	D		
	E	Monitor output, phones	
	F	Earth from telegraph unit	
	G	Monitor output, speaker	
	H	Earth from telegraph unit	
	J	Relay energizing supply (desensitizing)	
	K	D.C. output to telegraph relay	
L	Earth from telegraph unit		
M	D.C. output to telegraph relay		
PLK	A	} A.F.C. voltage	Linking SKT-E, Telegraph unit, to PLD and SKT-E, Distribution unit
	B		
	C	} Comparator signals	
	D		
	E	} Telegraph signals	
	F		
	G	-	
	H	Earth from telegraph unit	
	J	A.G.C. voltage	
	K	Sidetone input	
	L	Earth from telegraph unit	
M	-		

Note 1. For use when receiver is working in dual diversity. When acting singly PLF, PLG and PLH must be terminated by the special 75Ω pads provided. (Fig 2529)

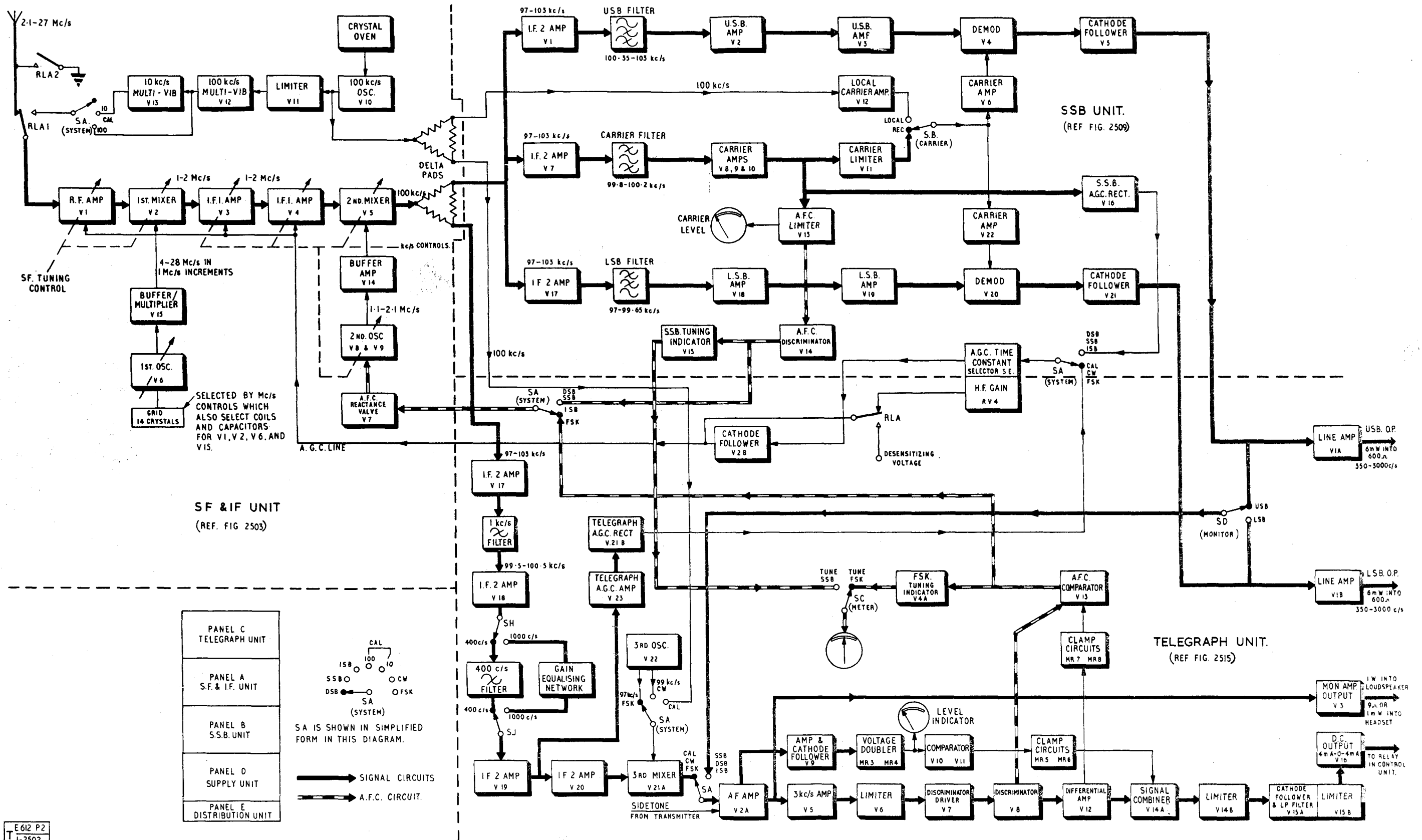


Fig 2502 - Receiver block diagram

Fig 2502

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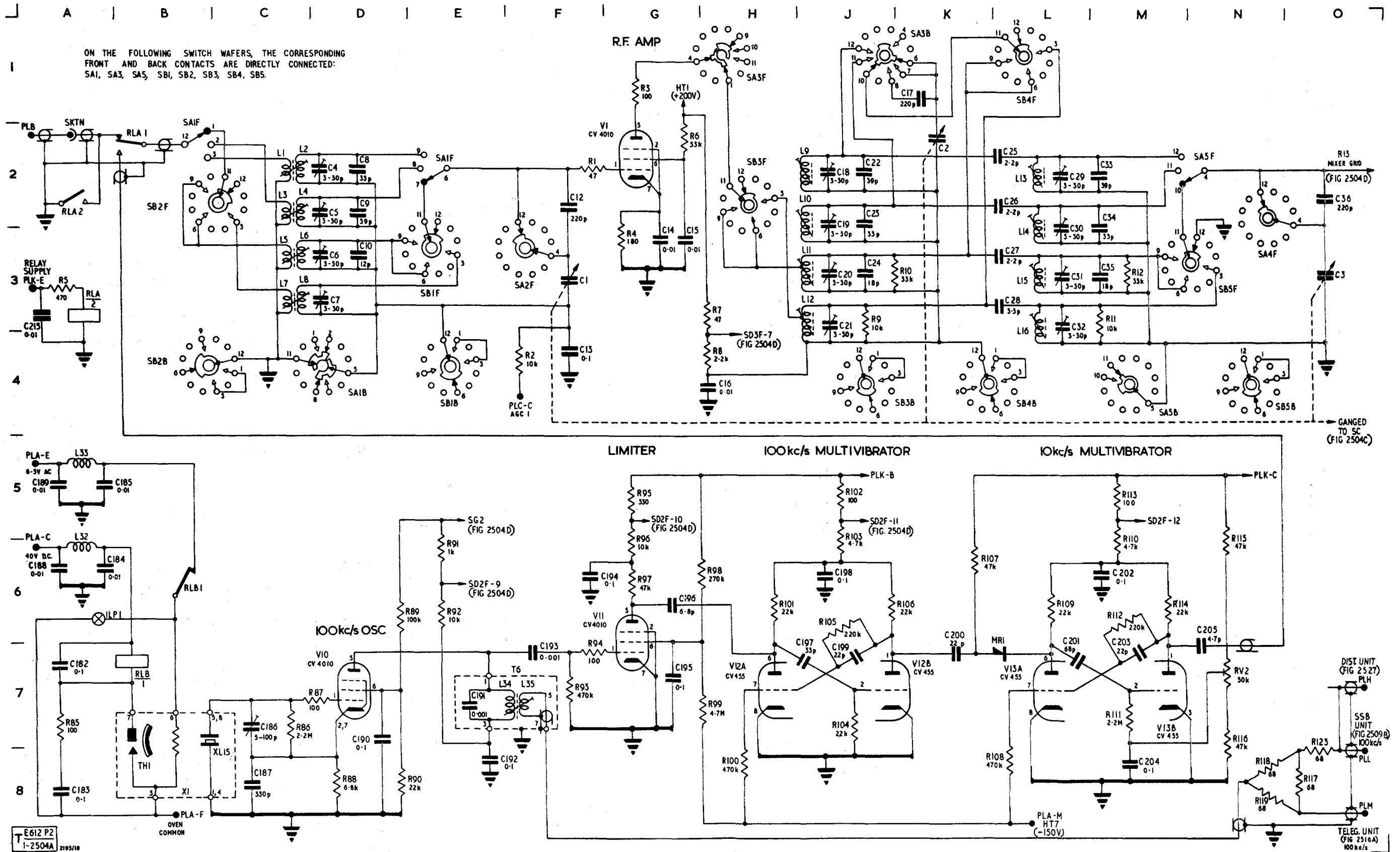


Fig 2504a - S.F. and i.f.s.1 unit, circuit diagram, s.f. amplifier and calibrator



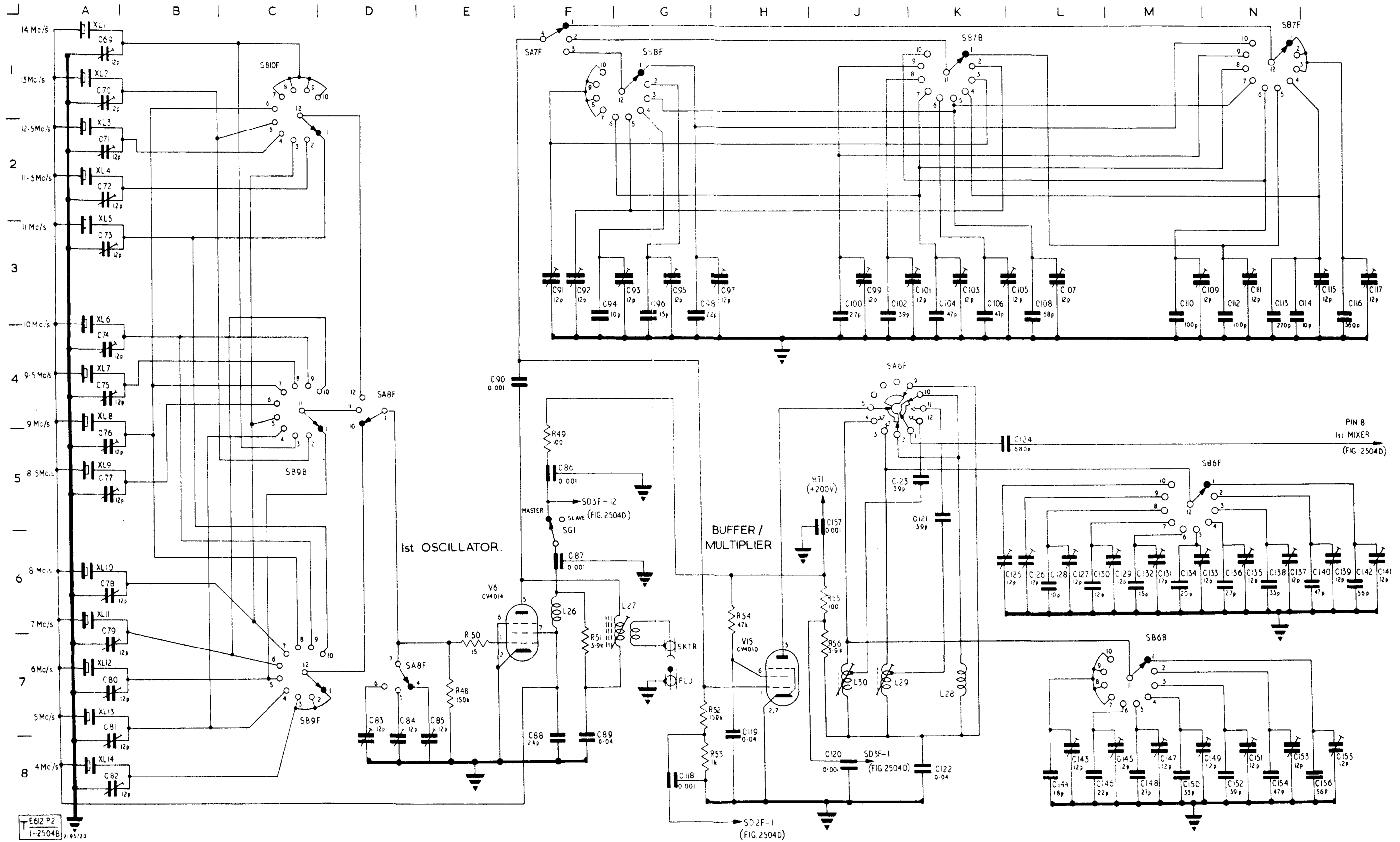
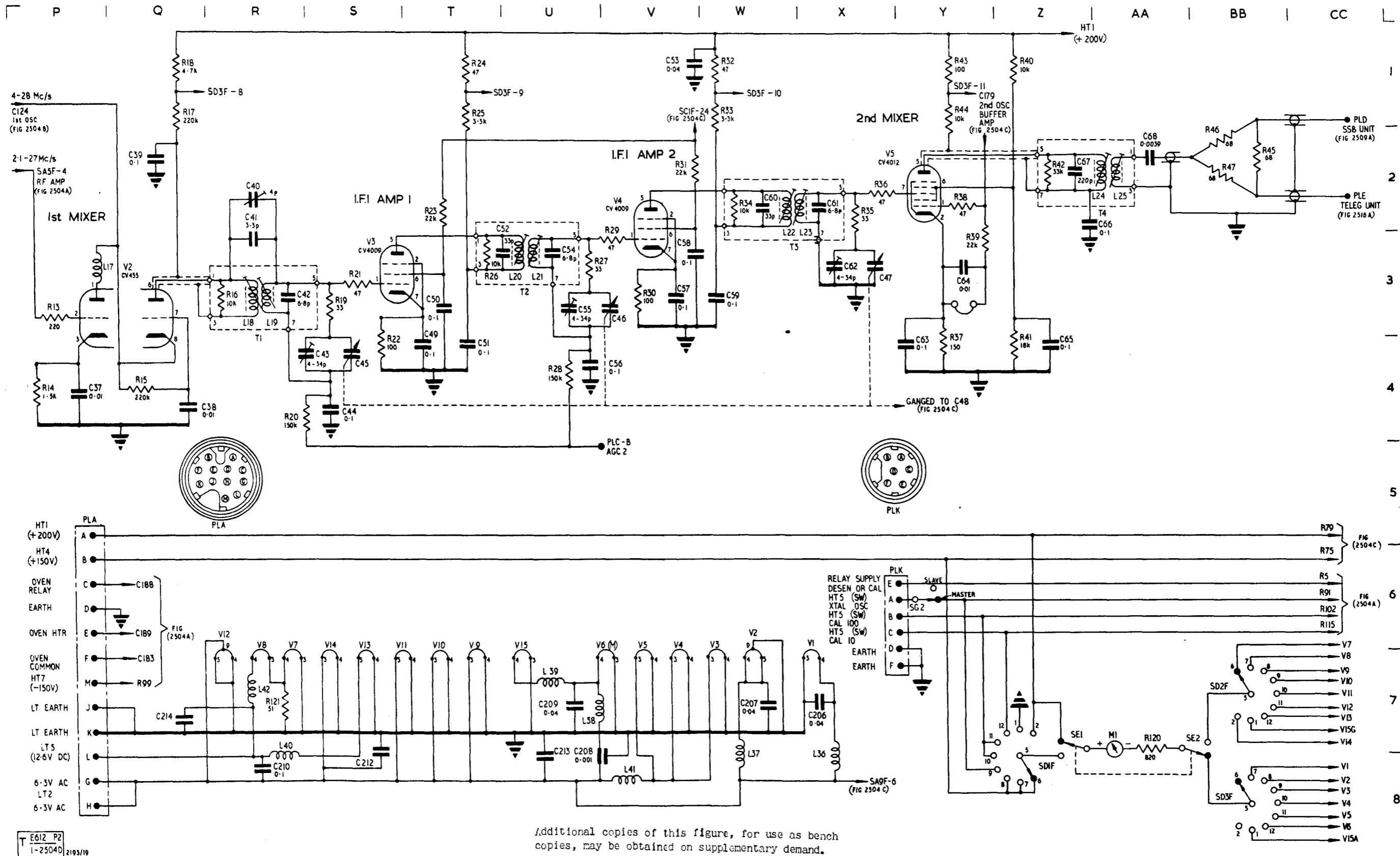


Fig 2504b - S.F. and i.f.1 unit, circuit diagram, first oscillator and buffer/multiplier

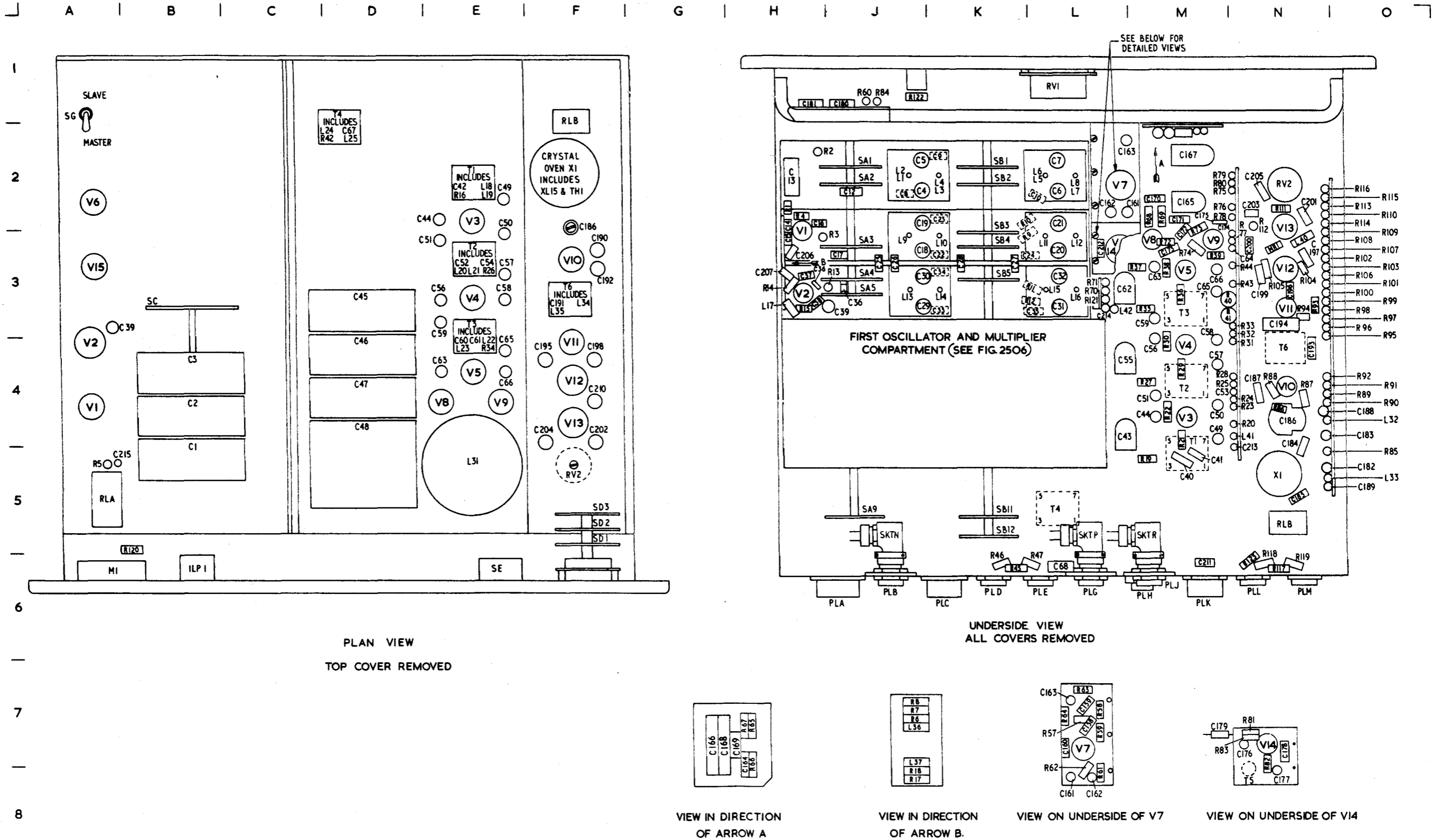
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Fig 2504d - S.F. and i.f.1 unit, circuit diagram, first mixer, i.f.1 amplifier, second mixer and valve heaters



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I-2507 2193/3

Fig 2507 - S.F. and i.f.1 unit, component layout, chassis

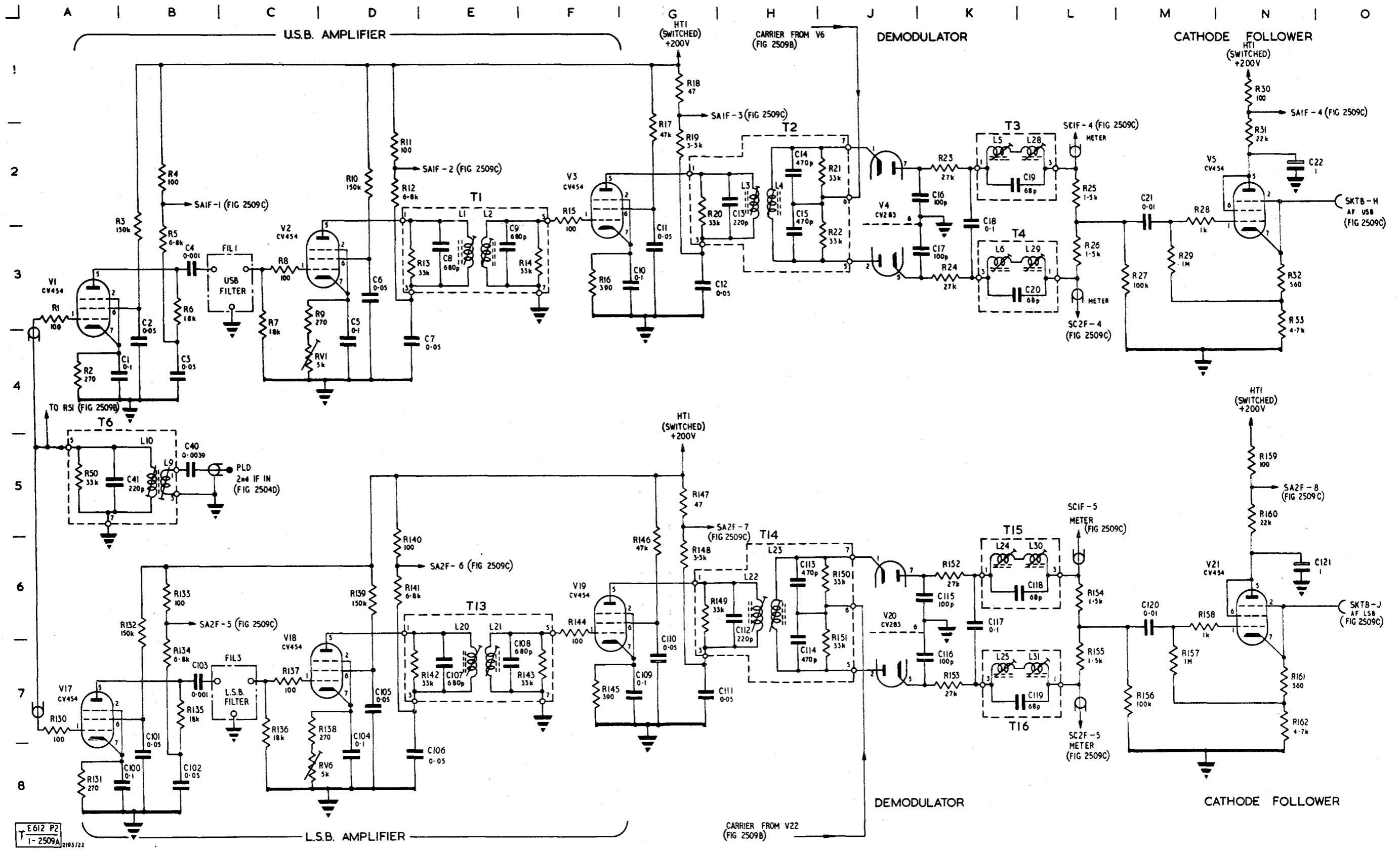
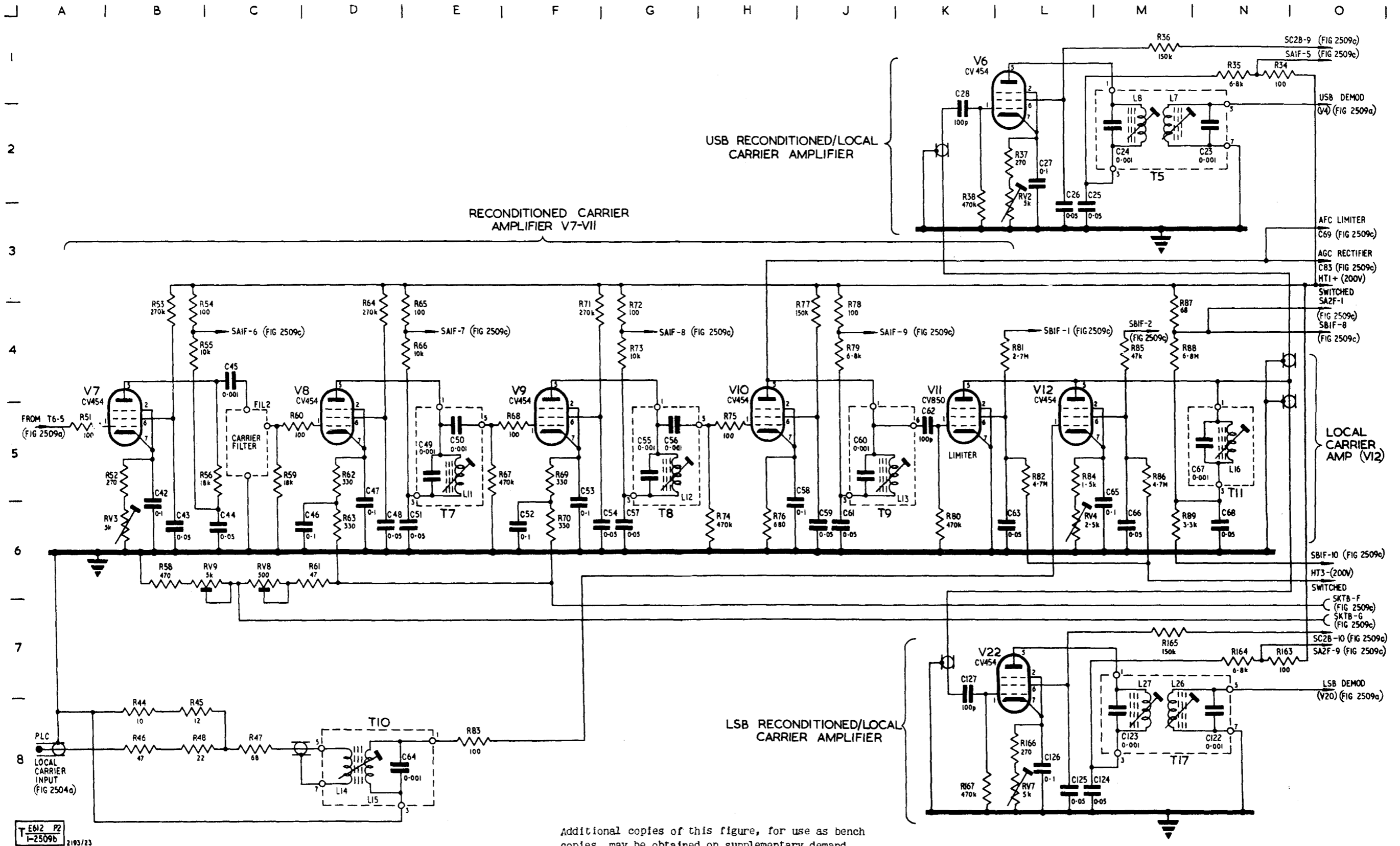
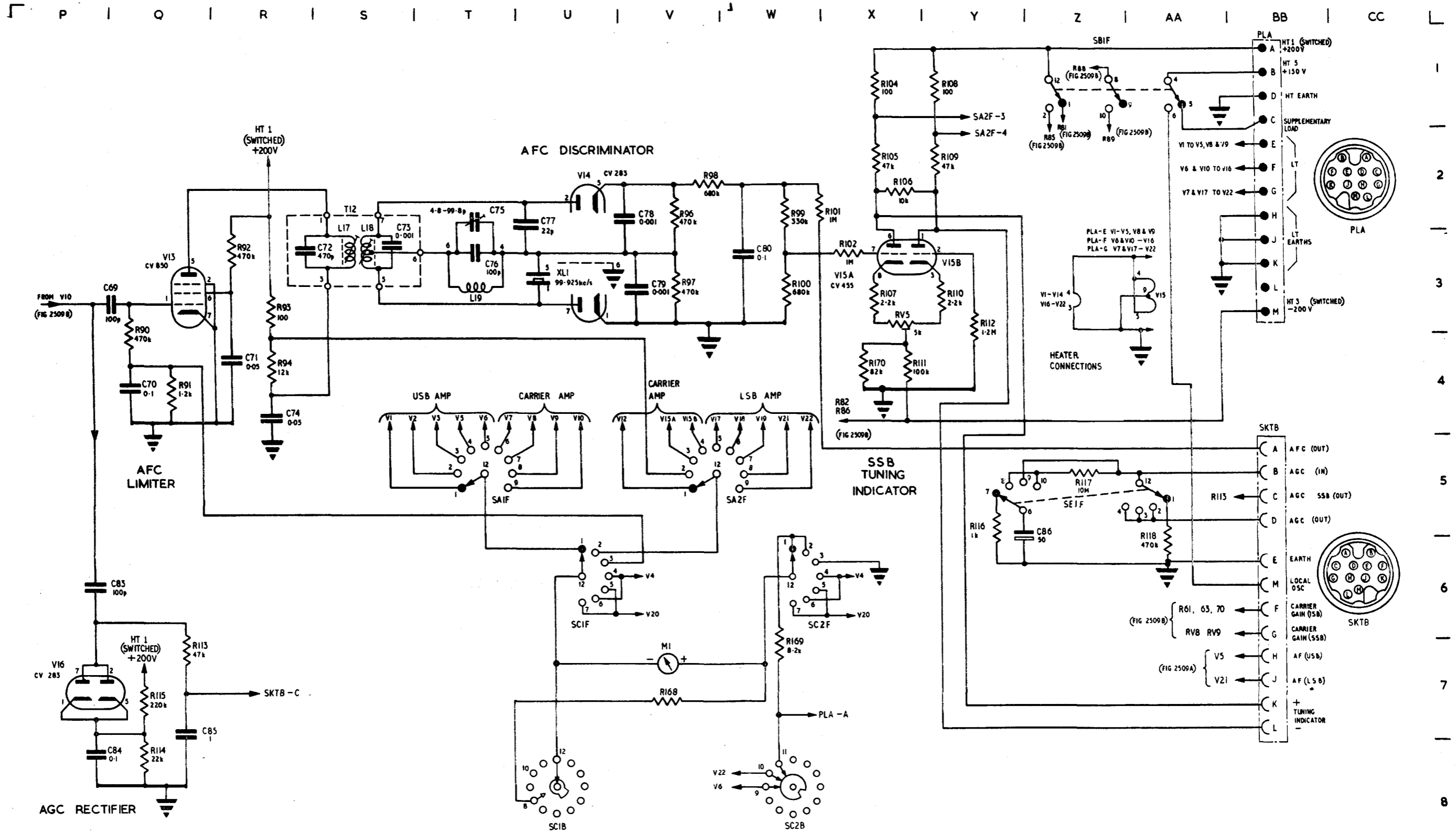


Fig 2509a - S.S.B. unit, circuit diagram, sideband amplifiers and demodulators



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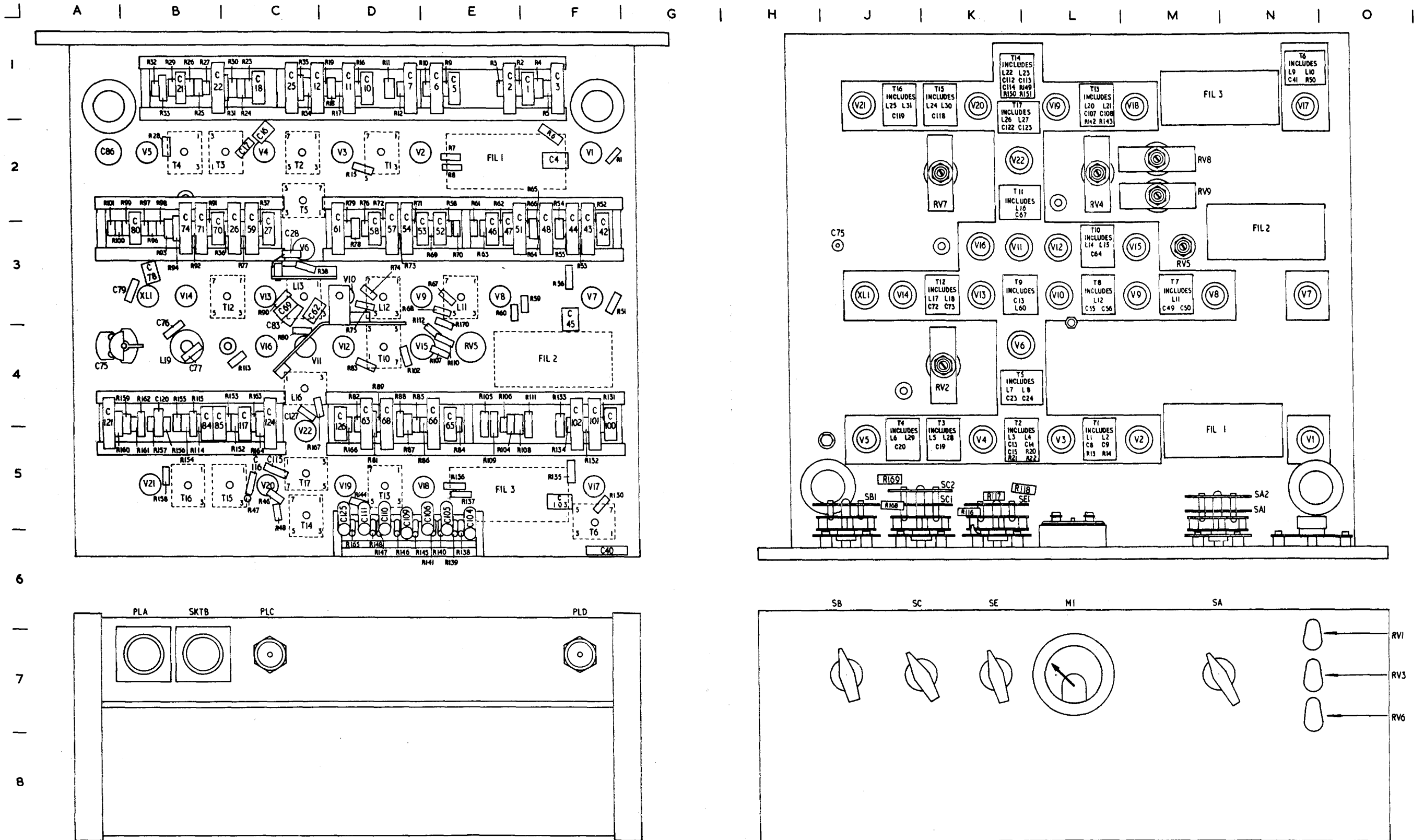
Fig 2509b - S.S.B. unit, circuit diagram, reconditioned and local carrier amplifiers



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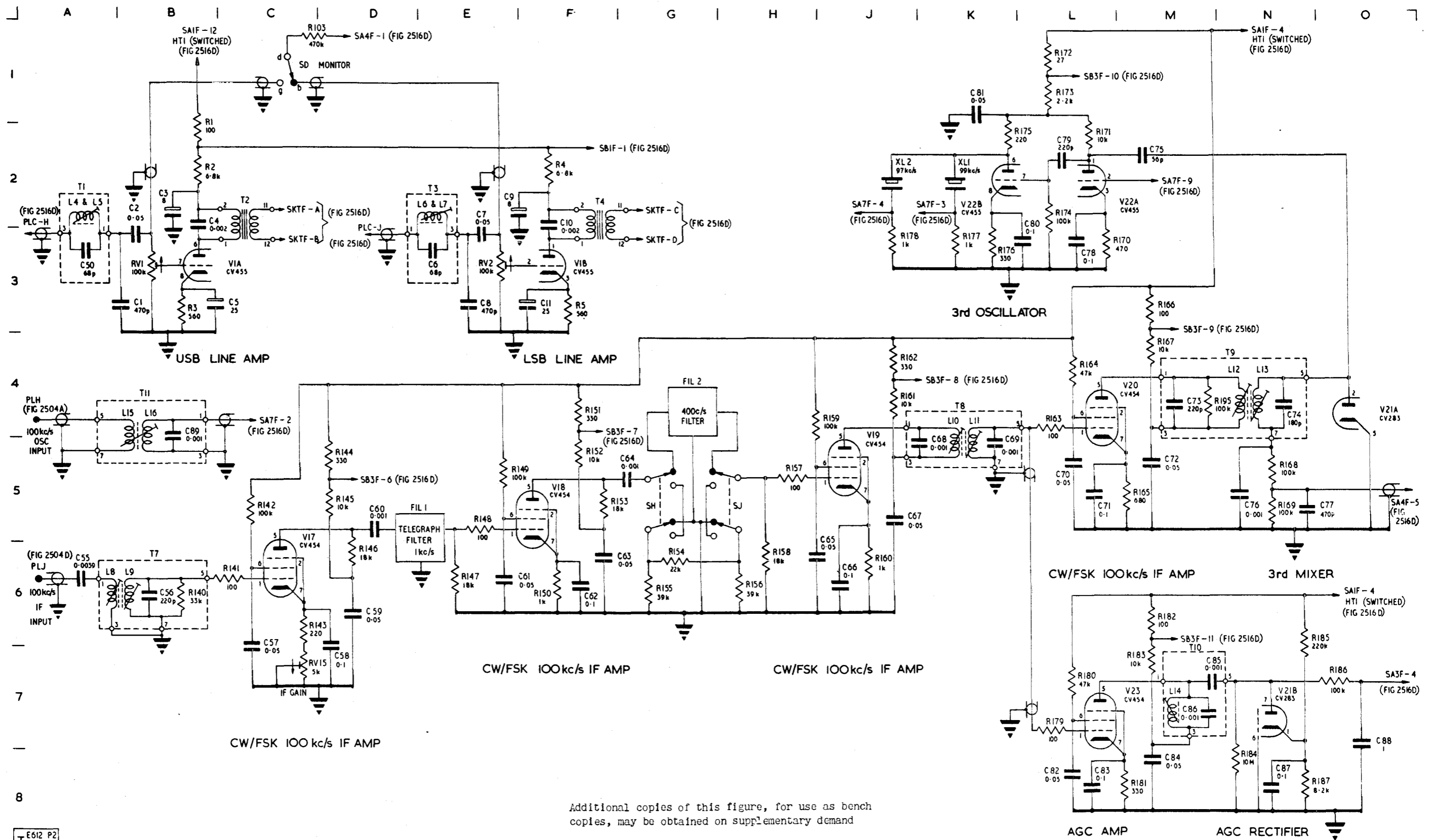
Fig 2509c - S.S.B. unit, circuit diagram, a.f.c. limiter and discriminator, a.g.c. rectifier, tuning indicator stage and valve heaters



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Fig 2511 - S.S.B. unit, component layout, chassis and panel





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Fig 2516a - Telegraph unit, circuit diagram, i.f.2 amplifiers, third mixer, third oscillator, a.g.c. rectifier and sideband line amplifiers

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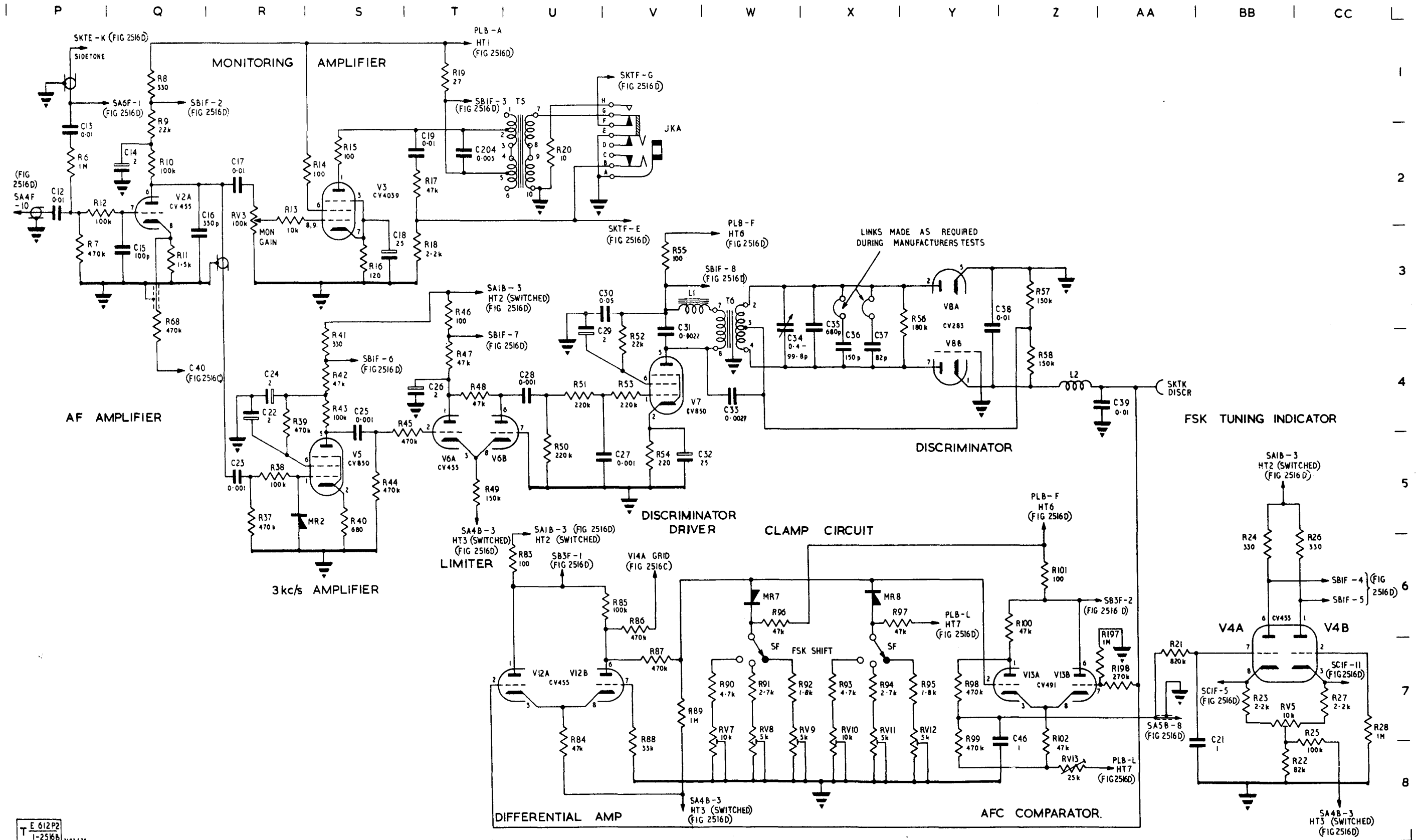


Fig 2516b - Telegraph unit, circuit diagram, 3kc/s amplifier, f.s.k. discriminator and tuning indicator stage, a.f.c. comparator and a.f. and monitoring amplifiers  
Additional copies of this figure, for use as bench copies, may be obtained on supplementary demand.

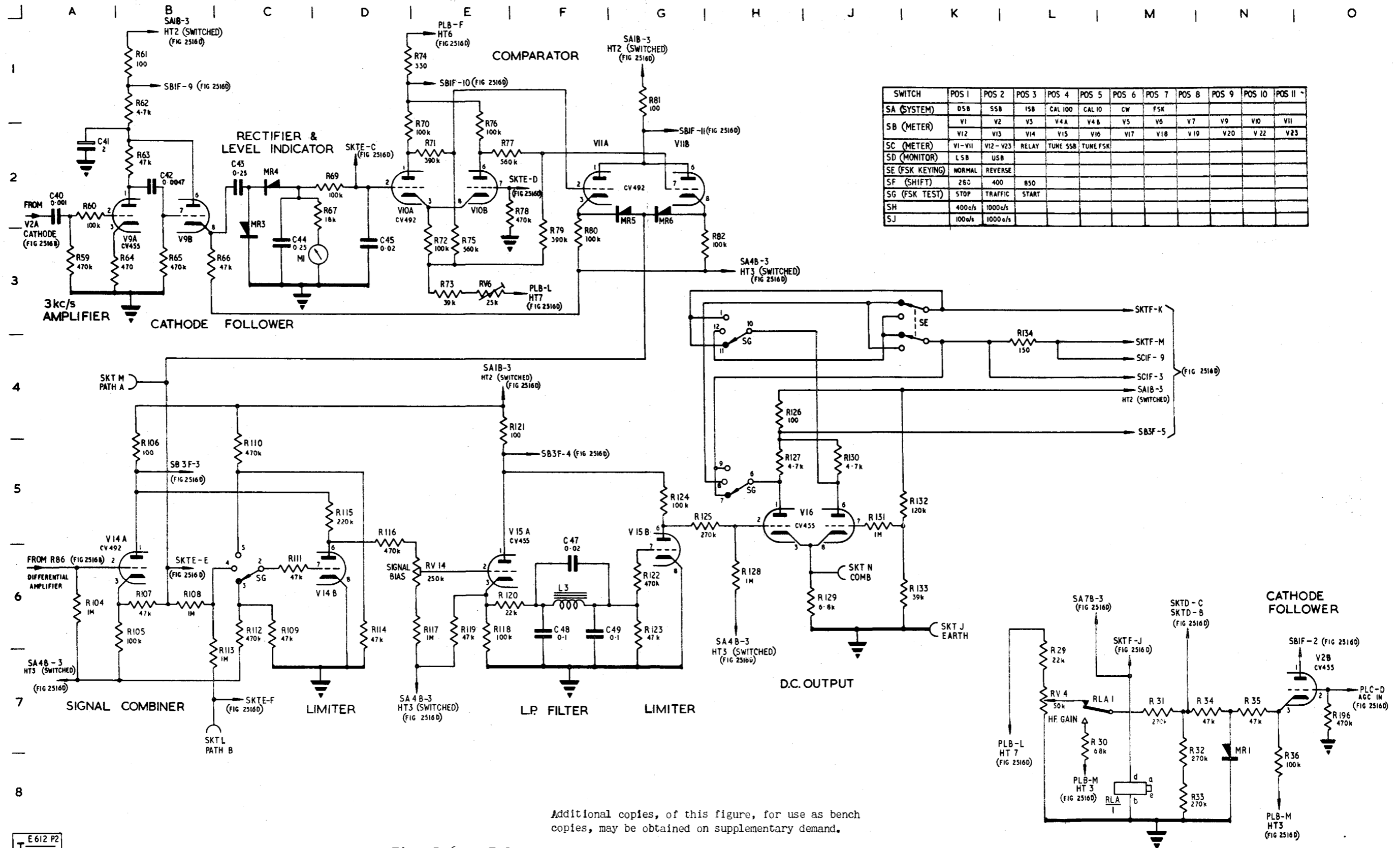


Fig 2516c - Telegraph unit, circuit diagram, level indicator, comparator, signal combiner, a.g.c. cathode follower and d.c. output stage

E 612 P2  
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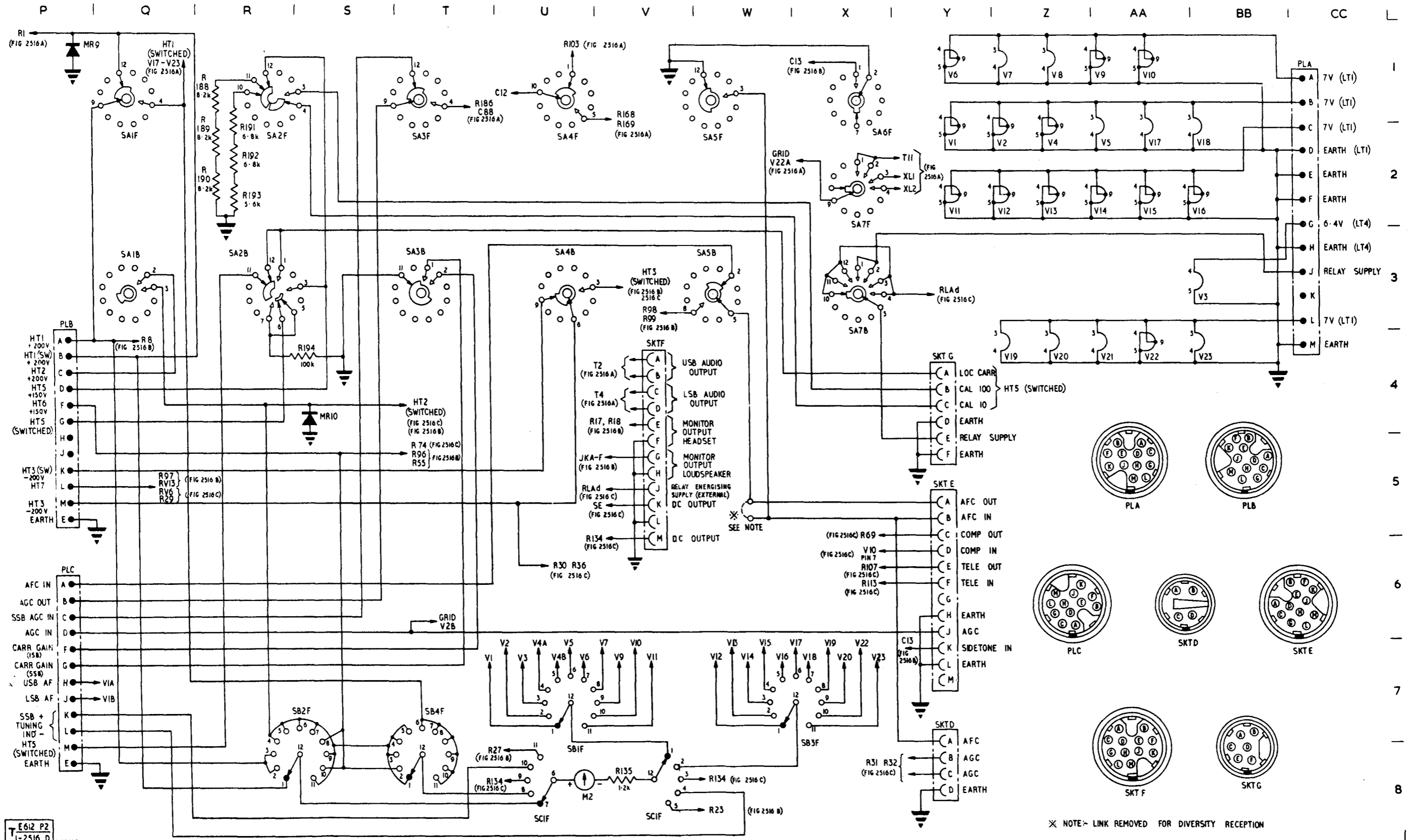
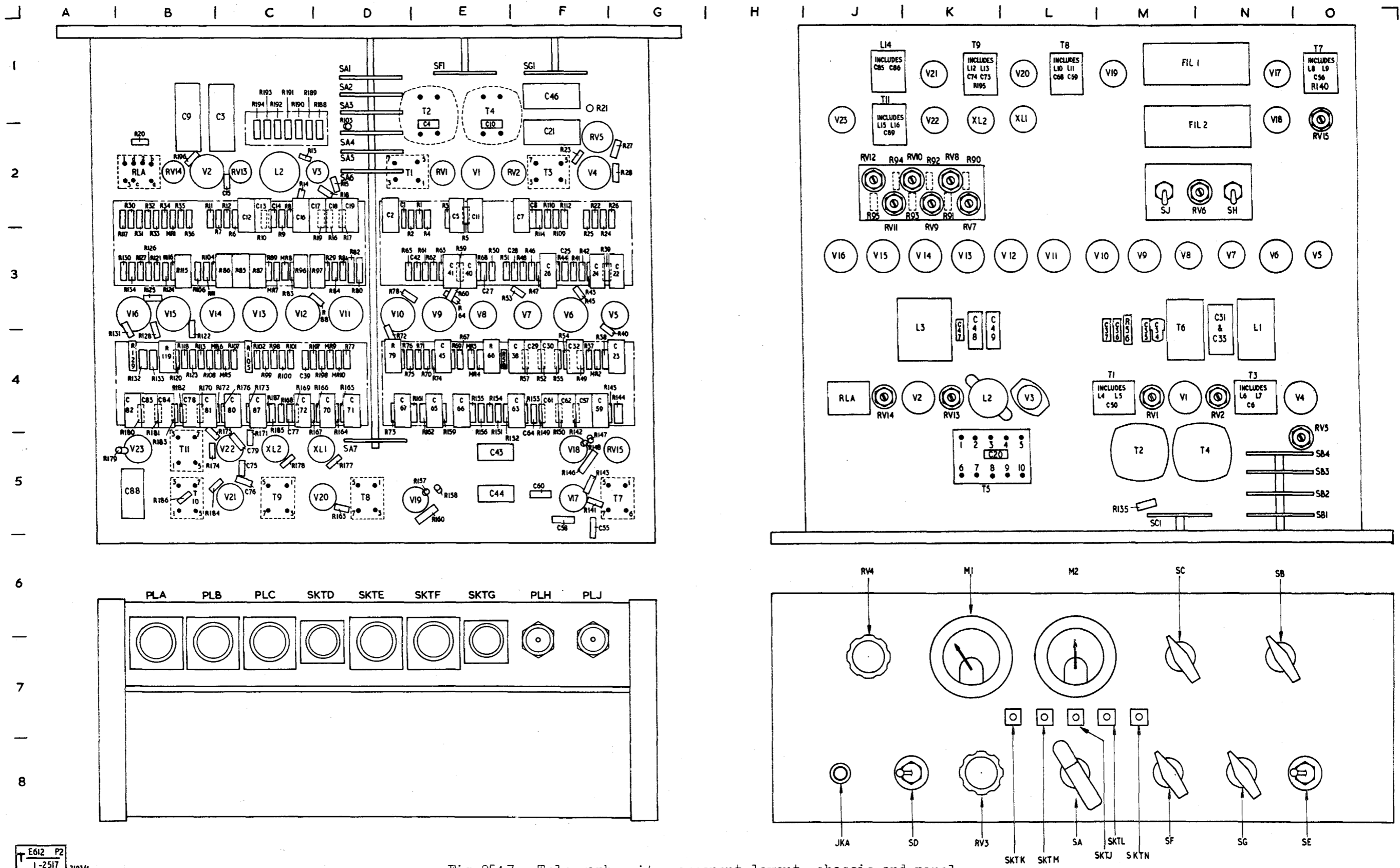


Fig 2516d - Telegraph unit, circuit diagram, plugs, sockets, switching and valve heaters

Additional copies of this figure, for use as bench copies, may be obtained on supplementary demand.



E612 P2  
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Fig 2517 - Telegraph unit, component layout, chassis and panel

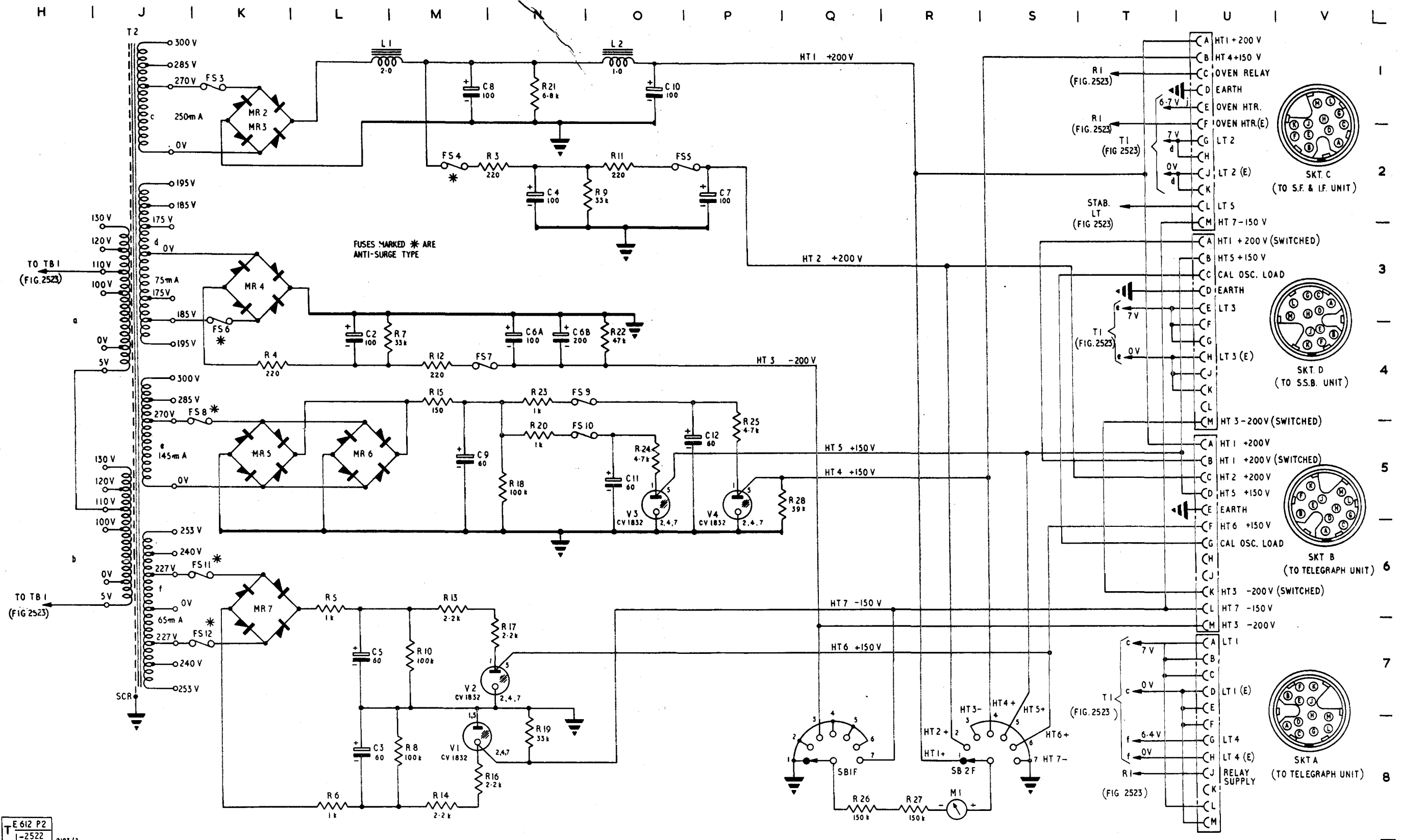
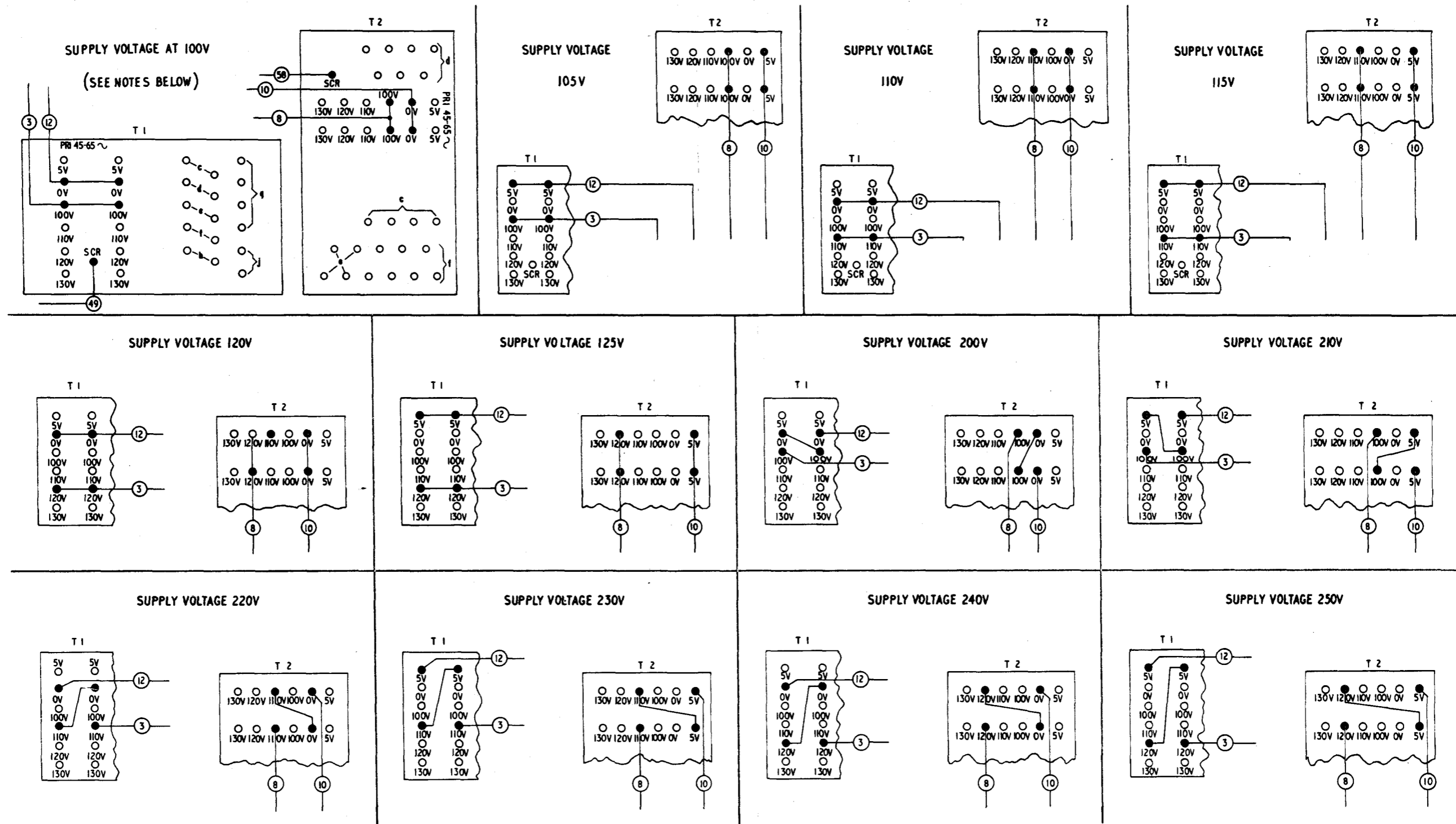


Fig 2522 - Power supply unit, circuit diagram, h.t. supplies and output sockets

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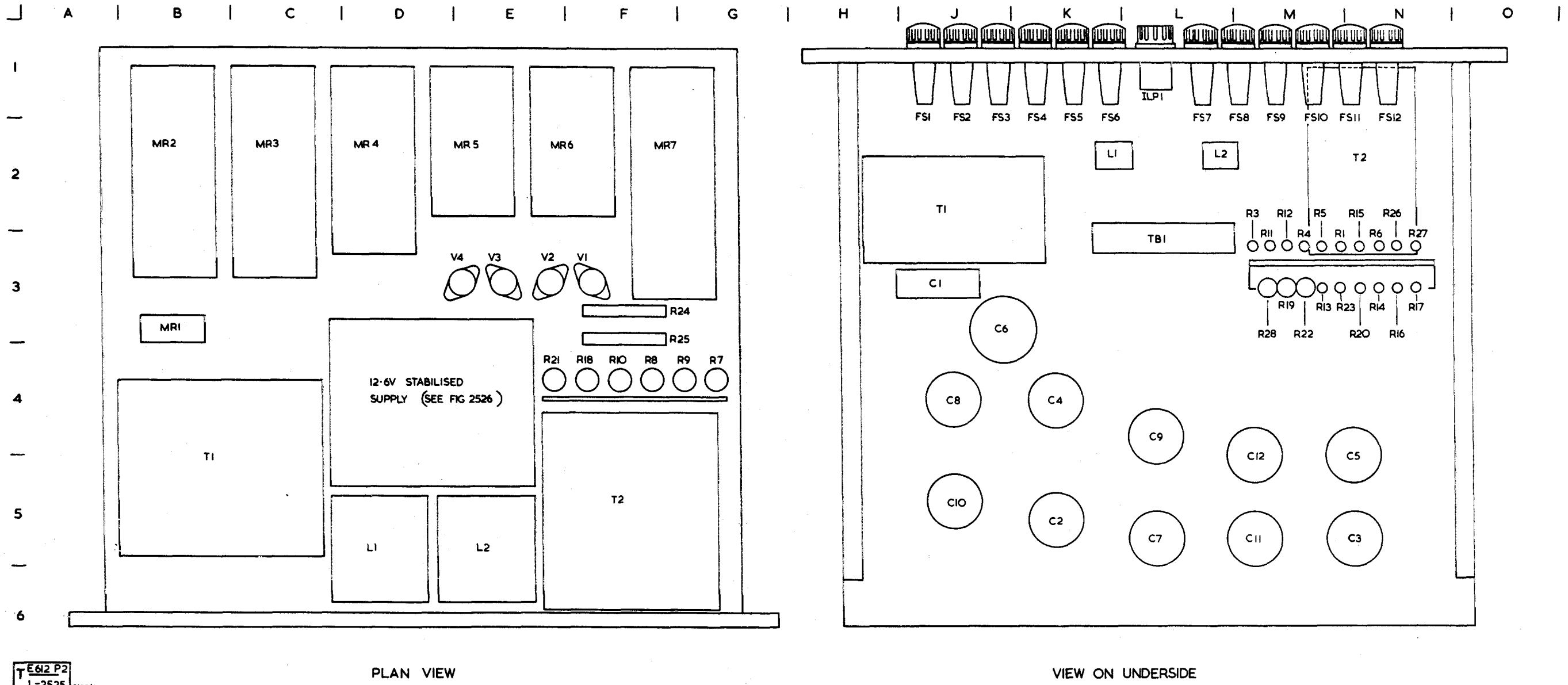


NOTE

1. IMPORTANT: WHEN PRIMARY CONNECTIONS HAVE BEEN ALTERED, ENSURE THAT THE MAINS VOLTAGE INDICATING PLATE ON THE FRONT PANEL IS CORRECTLY SET.
2. NUMBERED IDENTIFICATION SLEEVES AS INDICATED ARE NORMALLY FITTED TO PRIMARY WINDING AND SCREEN CONNECTING WIRES.
3. ALL TRANSFORMER TAGBOARD LAYOUTS AND WINDING IDENTIFICATIONS ARE AS SHOWN FOR 100VOLT SUPPLY. ONLY PRIMARY TAGS ARE SHOWN IN OTHER DIAGRAMS.

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Fig 2524 - Power supply unit, tag identification and primary winding connection diagram, T1 and T2



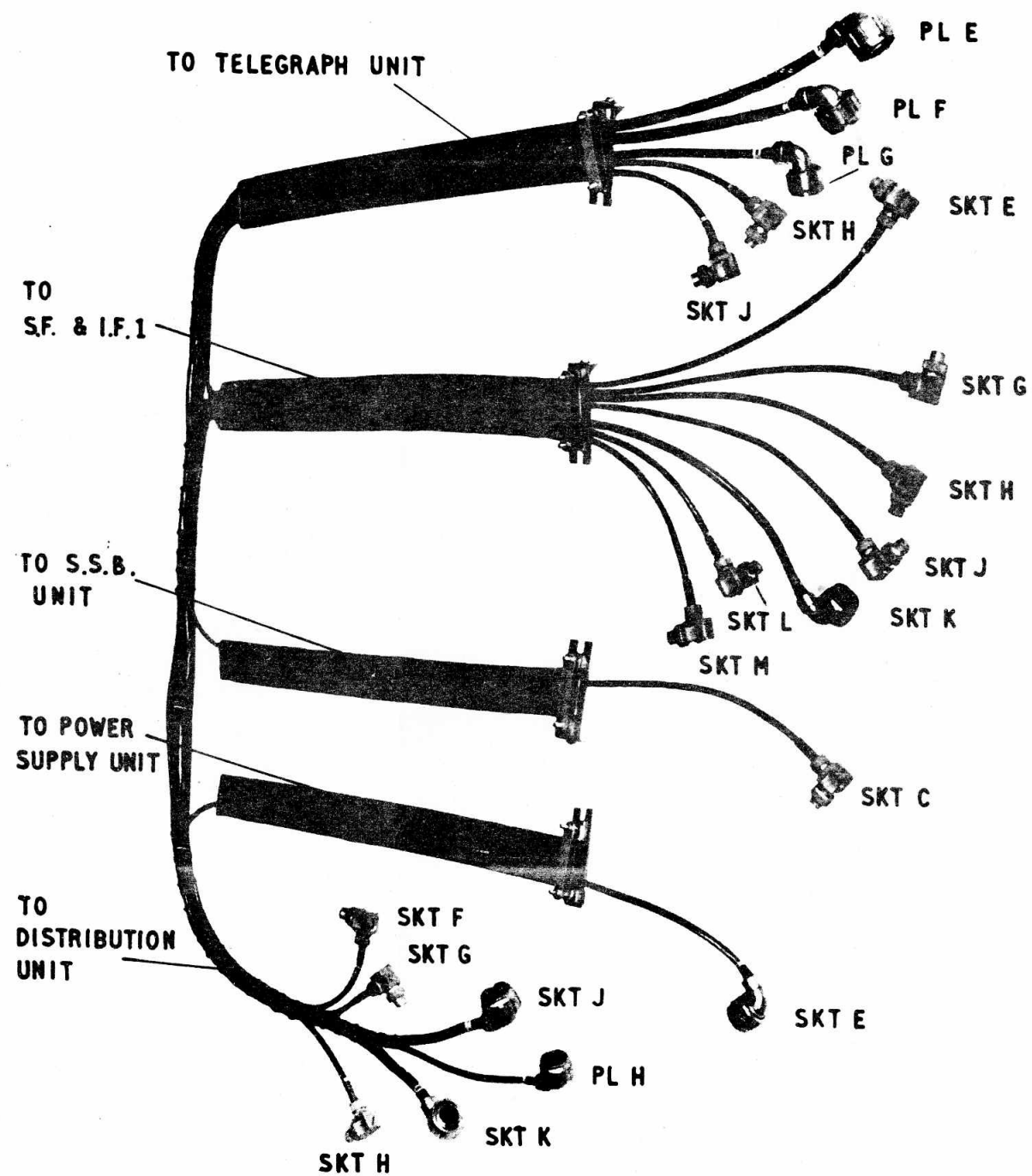
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PLAN VIEW

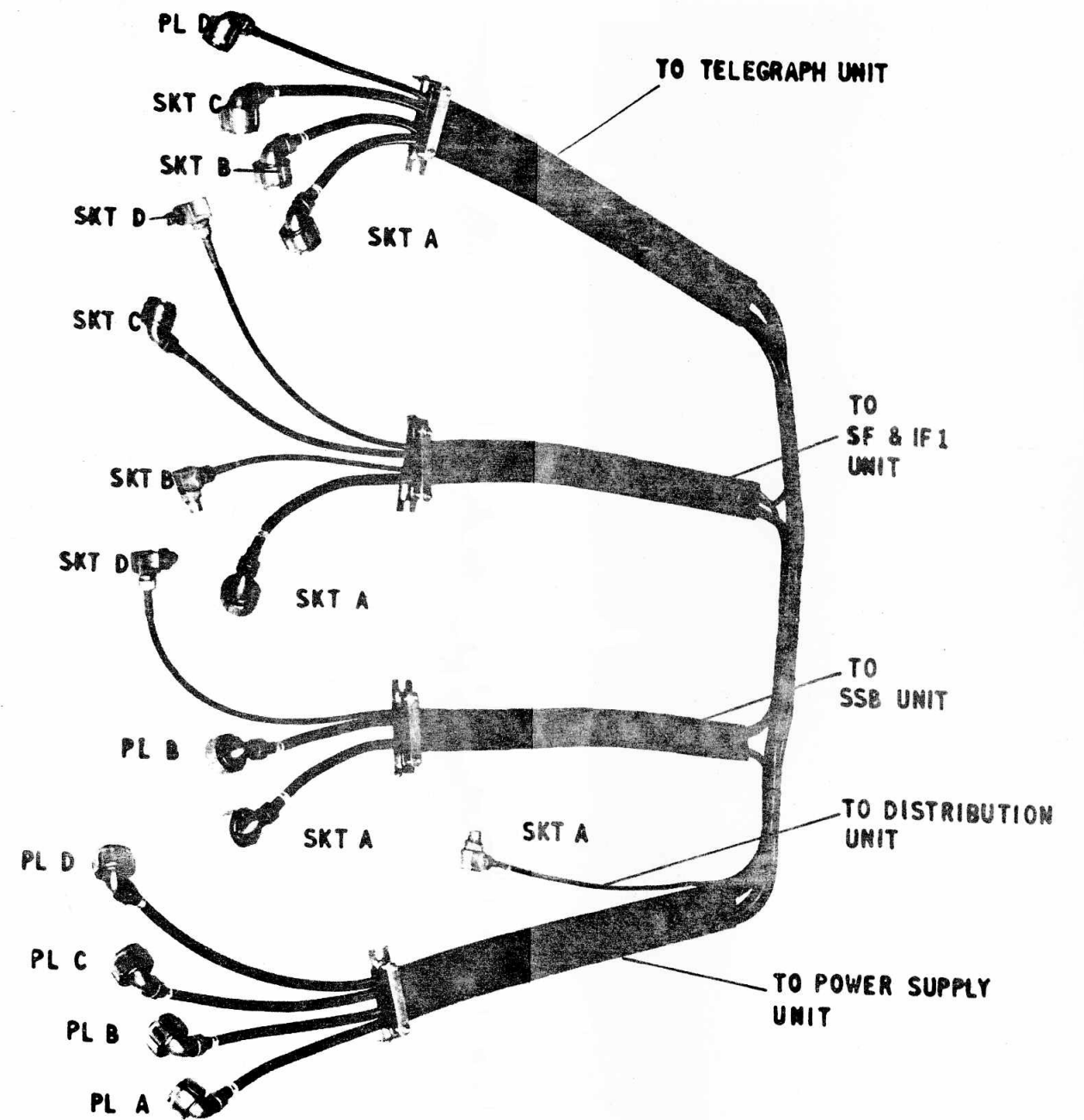
VIEW ON UNDERSIDE

Fig 2525 - Power supply unit, component layout, main chassis





Left-hand harness, viewed from rear of equipment



Right-hand harness, viewed from rear of equipment

Fig 2531 - Cabinet, cable harness with termination identification