WIRELESS SET B47

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 G 533 and G 534 deal with repairs.

Distribution - Class 870. Code No 3

INDEX TO FIGURES

Fig No		Page
2001	Block diagram	1004
2002	Sender, circuit diagram	1005
2003	Heater circuit diagram	1007
2004	Receiver r.f. and calibrator circuit diagram	1008
2005	Receiver i.f. and a.f. circuit diagram	1009
2006	Power supply unit, 12V, circuit diagram	1010
2007	Power supply unit, 24V, circuit diagram	1011
2008	Front panel and centre unit, circuit diagram	1012
2009	Unit interconnection diagram	1013
2010	Front panel and centre unit, component layout	1014
2011	Power supply unit, 12V, component layout	1017
2012	Power supply unit, 24V, component layout	1018
2013	Calibrator sub-unit, component layout and wiring	1020
2014	R.F. sub-unit, circuit diagram	1021
2015	R.F. sub-unit, component layout	1025
2016	Film scale unit, general assembly	1027
2017	I.F. sub-unit, component layout	1028
2018	I.F. sub-unit, circuit diagram	1031
2019	A.F. sub-unit, component layout	1032
2020	A.F. sub-unit, circuit diagram	1035
2021	Relay information	1036
2022	Switch S401 and tagboard TS402, wiring details	1037

INDEX TO TABLES

Table No		Page
2001	Location guide to plugs and sockets	1006
2002	Front panel and centre unit, component schedule	1015
2003	Power supply unit, 12V, component schedule	1016
2004	Power supply unit, 24V, component schedule	1019
2005	Calibrator sub-unit, component schedule	1020
2006	R.F. sub-unit, component schedule	1022
2007	Film scale unit, component schedule	1026
2008	I.F. sub-unit, component schedule	1029
2009	A.F. sub-unit, component schedule	1033
2010	Modification details	1038
2011	Test equipment schedule, field and base repairs	1039
2012	Specification tests, wireless set	1040
2013	Specification tests, power supply unit, 12V	1042
2014	Specification tests, power supply unit, 24V	1043
2015	Valve testing data	1044

General notes on using this regulation

Component schedules

1. Grid references are given in the form figure-letter-figure. The prefix figure refers to the drawing and the suffix letter and figure denote the actual grid reference on the drawing, eg 4C9 means that a component is located at C9 on Fig 2004.

2. The following abbreviations have been used in the 'Type' column.

P.m.t.	= Paper, metal, tubular
P.m.r.	= Paper, metal, rectangular
Mica s.	= Moulded silvered mica
Cer	= Ceramic
Feedthru	= Feedthrough ceramic
Elco	= Electrolytic
Comp	= Composition
W.W.	= Wire wound
N080, P100 etc	= Temperature compensated capacitors, see Tels G 532 Part 1 para 83.

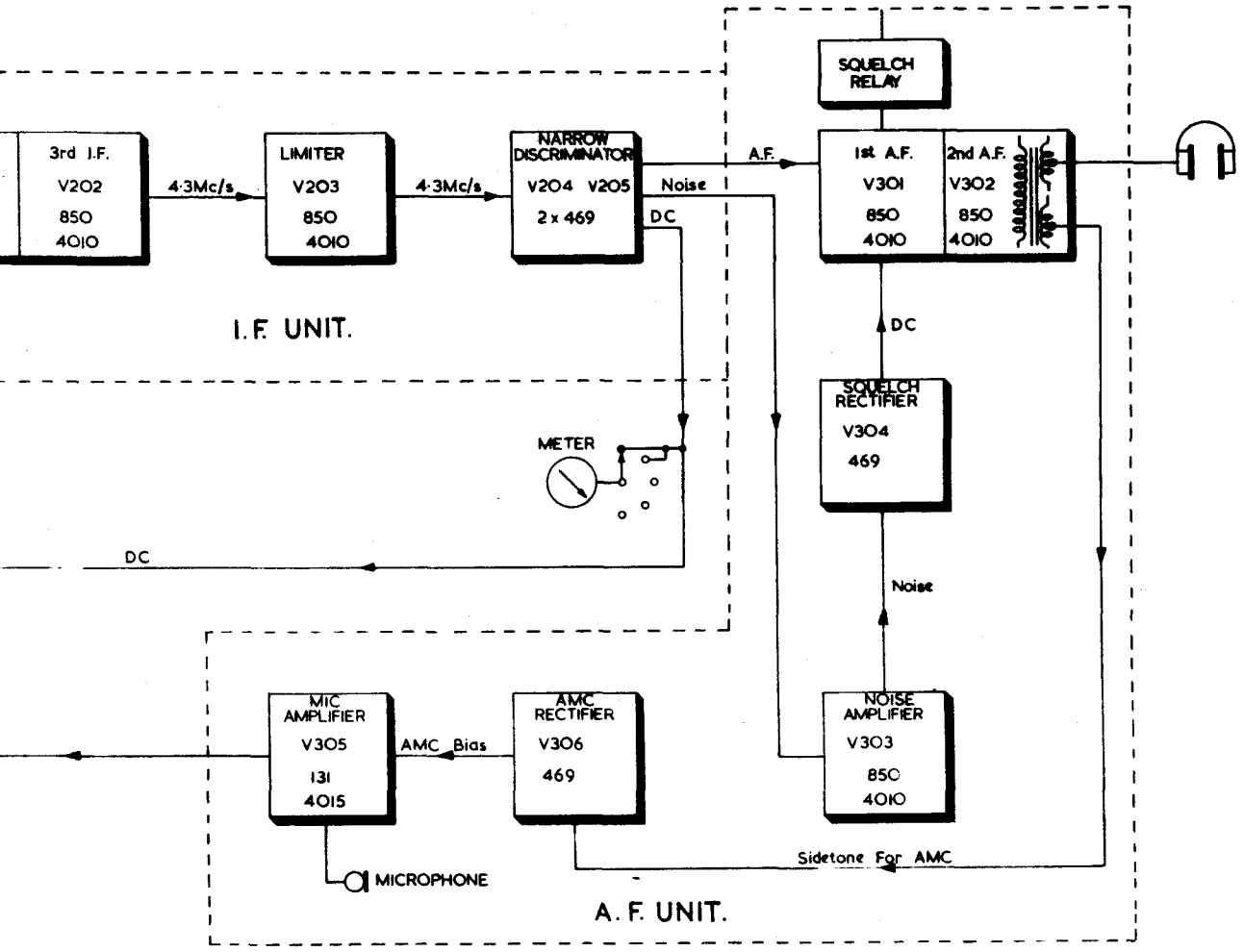
3. The valve types shown are the reliable, ie 4000 series, types and should be used whenever they are available. Alternative types are shown in brackets.

Example : CV 4010 (850) ..... CV 4010 is the reliable type
CV 850 is the alternative.

4. The limits shown under the 'Limit%' column are in percentages except in the case of small capacitors where the actual capacitative tolerance is quoted.

Modifications

5. At the date of publication six modifications have been carried out to the set during manufacture, the information in this regulation relates to sets which have had these six modifications carried out. Table 2010 gives details of these modifications and the serial numbers at which they were introduced.


SQUELCH RELAY
3rd I.F.
V202
850
4010
4·3Mc/s
LIMITER
V203
850
4010
4·3Mc/s
NARROW DISCRIMINATOR
V204 V205
2 x 469
A.F.
Noise
DC
1st A.F.
V301
850
4010
2nd A.F.
V302
850
4010
I.F. UNIT.
DC
SQUELCH RECTIFIER
V304
469
METER
DC
Noise
MIC AMPLIFIER
V305
131
4015
AMC Bias
AMC RECTIFIER
V306
469
NOISE AMPLIFIER
V303
850
4010
MICROPHONE
Sidetone For AMC
A. F. UNIT.

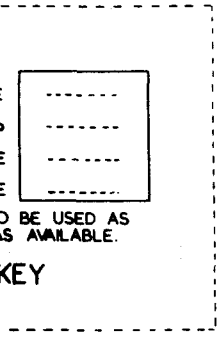
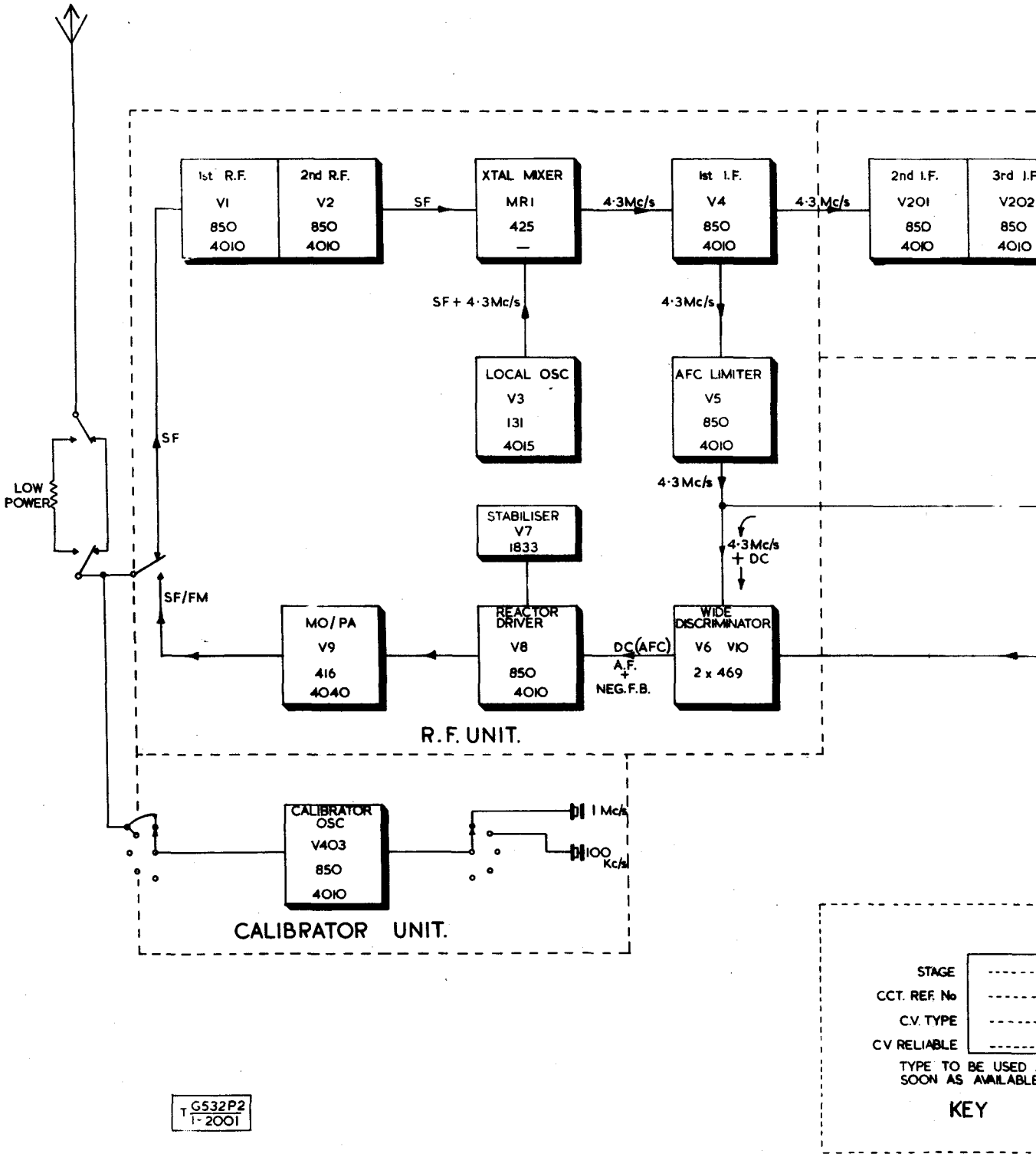

BE USED AS
AS AVAILABLE.
KEY

Fig 2001 - Block diagram



T G532P2 1-2001

Fig 2001

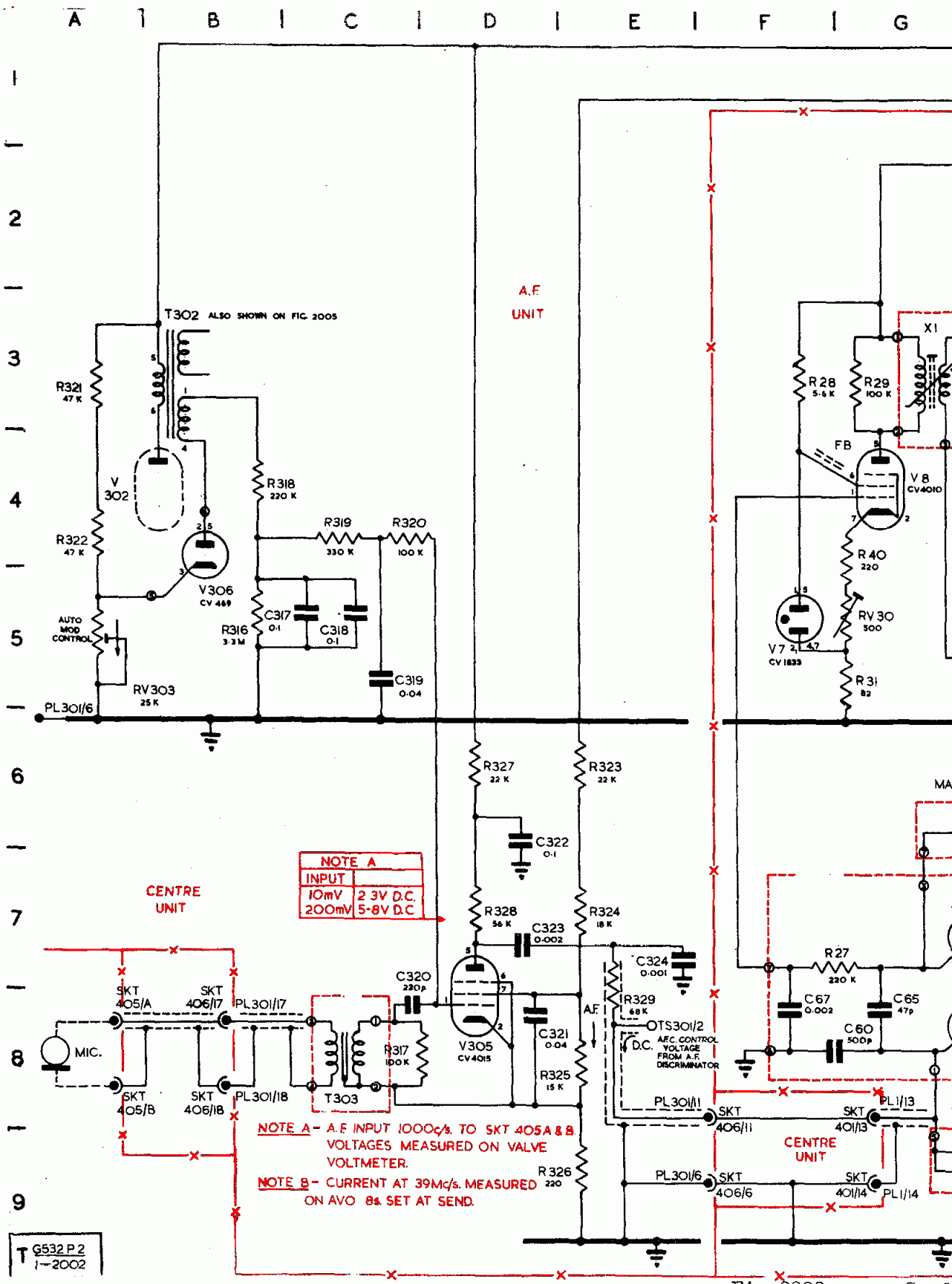
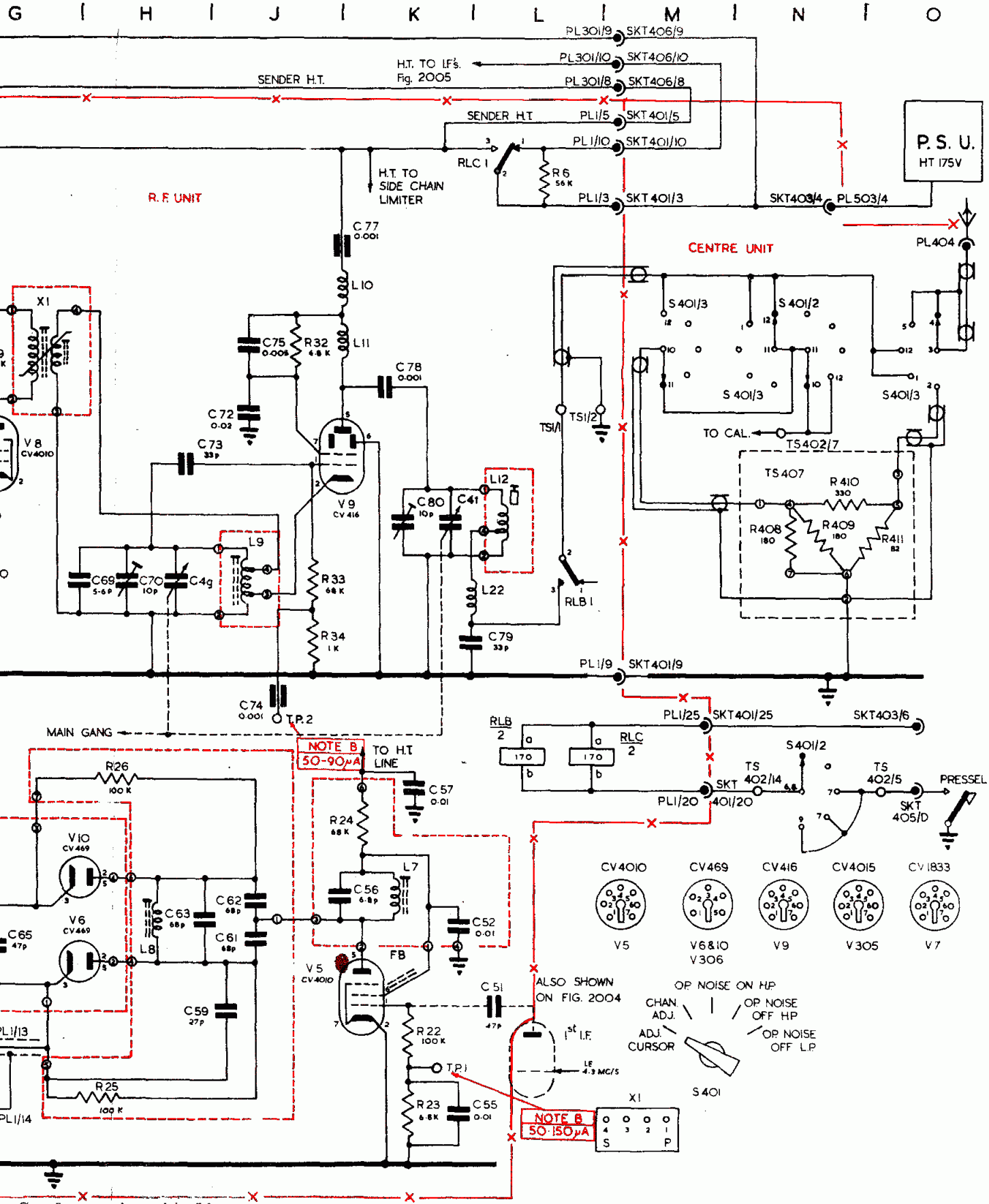


Fig 2002 - Send



Sender, circuit diagram

Fig 2002 -

Sender, circuit diagram

PL1		
Pin	Function	Cct loc
1	Not used	-
2	Not used	-
3	H.T. +	4D2
4	12V d.c.	3F3
5	Send h.t.	2M1
6	Heater supply	3F3
7	Not used	-
8	Not used	-
9	Heater earth	3G3
10	Receive h.t.	4M1
11	Muting	408
12	Screening for 11	408
13	A.F.C. and mic amp	2G8
14	Screening for 13	2G9
15	Rebroadcast	407
16	Earth	2L5
17	Muting	407
18	Screening for 17	407
19	Not used	-
20	Send-rec relays	2M7
21	H.T. to 1st a.f.	5M2
22	Meter +	407
23	Meter -	407
24	Not used	-
25	12V relay supply	2M6

PL301		
1	Heaters 6.3V a.c.	3G7
2	Screening for 3	5D8
3	Muting	5D8
4	Meter +	5D7
5	Limiter grid	5D6
6	Earth	5D6
7	H.T. to 1st a.f.	5M2
8	Send h.t.+	2M1
9	H.T.+	5A1
10	Receive h.t.+	5A1
11	A.F.C. and mic amp	2E9
12	Mic amp heaters	3G7
13	Heaters 6.3V a.c.	3G7
14	Squelch level	5D9
15	A.F. output	502
16	A.F. output	502
17	Mic input	2B8
18	Mic input screening	2B8

SKT401		
Pin	Function	Cct loc
1	Not used	-
2	Not used	-
3	H.T.+	4D2
4	12V d.c.	3F3
5	Send h.t.	2M1
6	Heater supply	3F3
7	Not used	-
8	Not used	-
9	Heater earth	3G3
10	Receive h.t.	4M1
11	Muting	5A8
12	Screening for 11	5A8
13	A.F.C. and mic amp	2G8
14	Screening for 13	2G9
15	Rebroadcast	5A7
16	Earth	2L5
17	Muting	5A7
18	Screening for 17	5A7
19	Not used	-
20	Send-rec relays	2M7
21	H.T. to 1st a.f.	5M2
22	Meter +	5A7
23	Meter -	5A7
24	Not used	-
25	12V relay supply	2M6

SKT406		
1	Heaters 6.3V a.c.	3G7
2	Screening for 3	5D8
3	Muting	5D8
4	Meter +	5D7
5	Limiter grid	5D6
6	Earth	5D6
7	H.T. to 1st a.f.	5M2
8	Send h.t.+	2M1
9	H.T.+	401
10	Receive h.t.+	401
11	A.F.C. and mic amp	2E9
12	Mic amp heaters	3G7
13	Heaters 6.3V a.c.	3G7
14	Squelch level	5D9
15	A.F. output	502
16	A.F. output	502
17	Mic input	2B8
18	Mic input screening	2B8

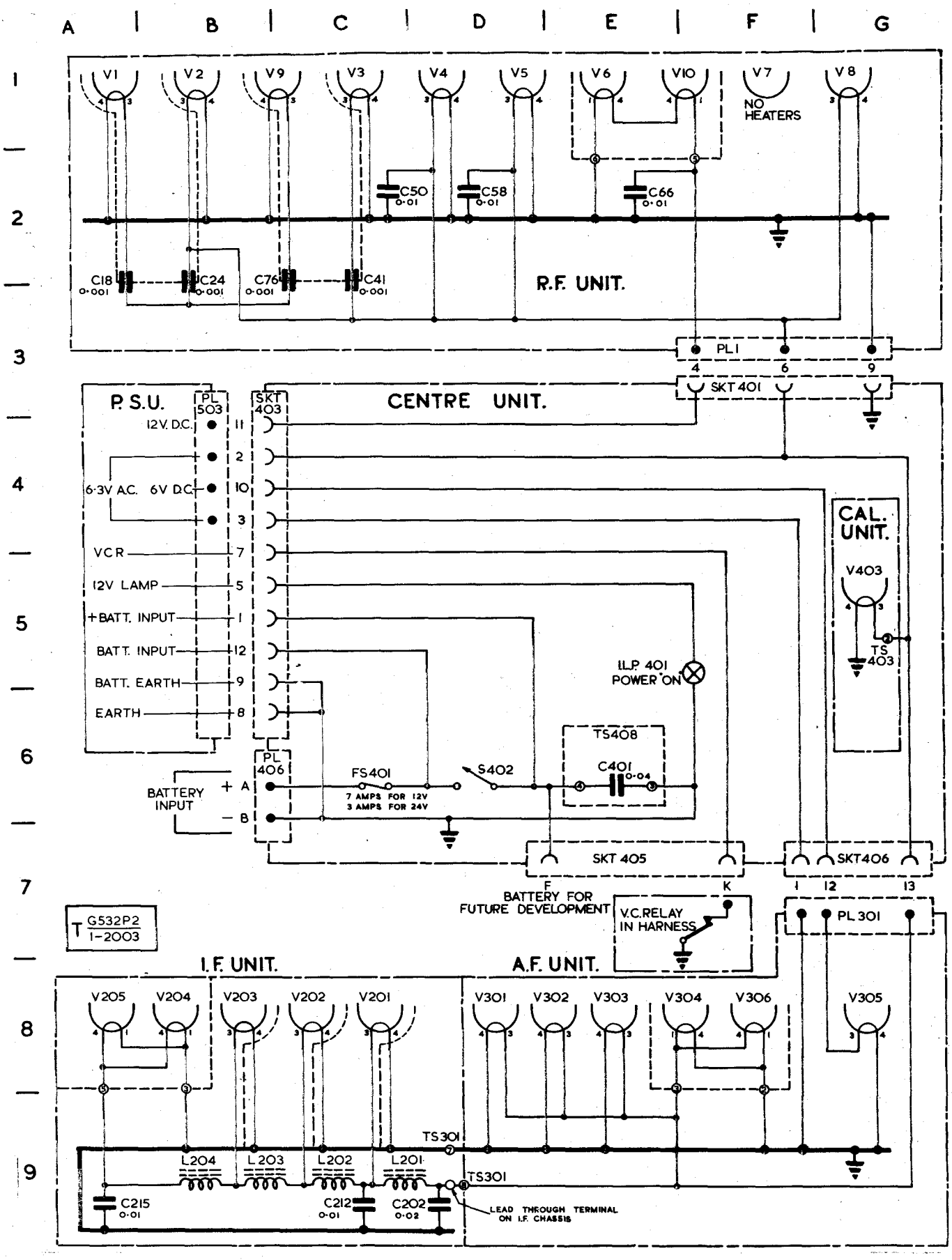
SKT405		
Pin	Function	Cct loc
A	Microphone	2A8
B	Microphone Earth	2A8
C	Not used	-
D	Pressel	207
E	Rebroadcast Earth	5A6
F	Battery	3E7
G	Phone earth	502
H	Limiter grid	5A6
J	Not used	-
K	Voltage control	3F7
L	Not used	-
M	Phone	502

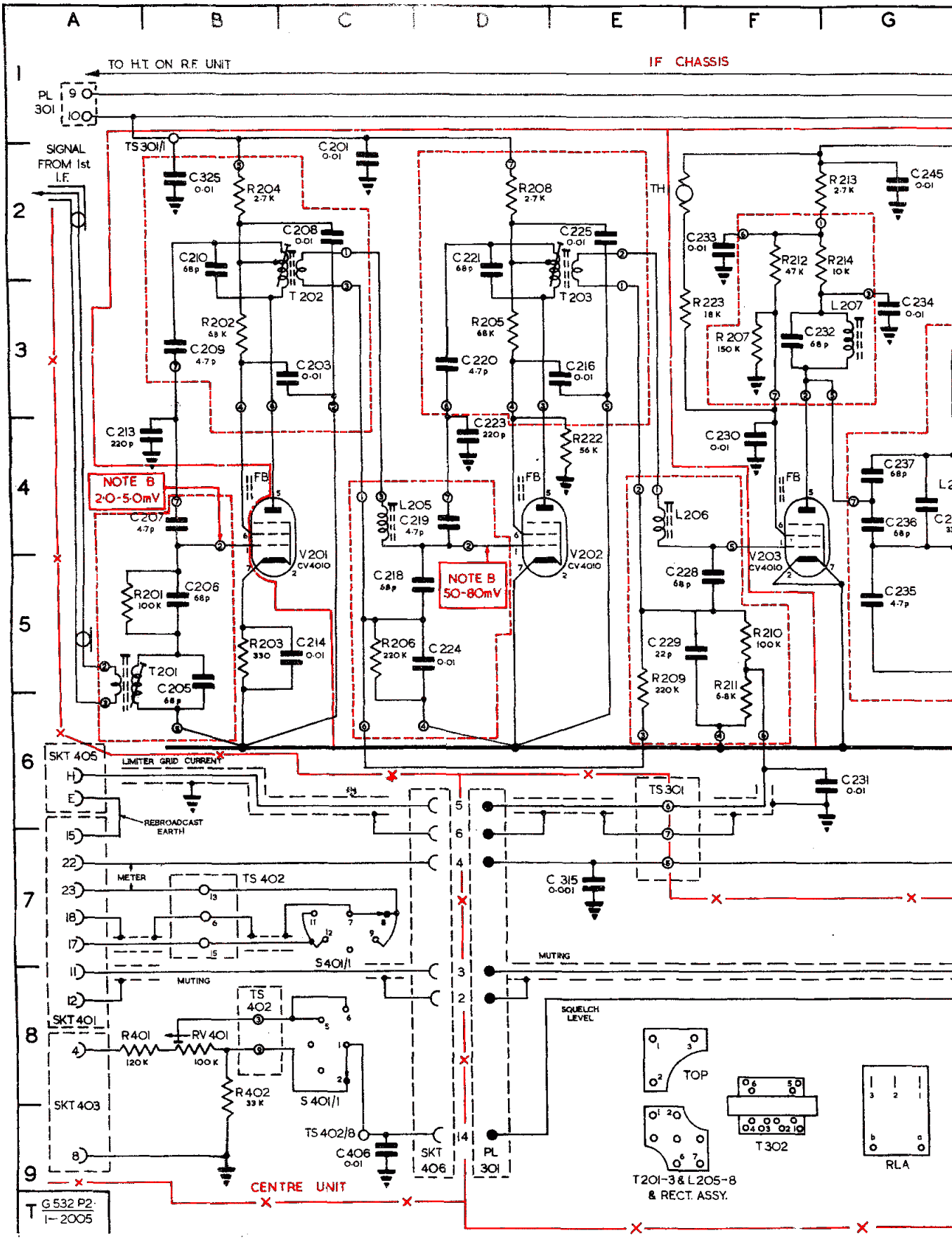
PL503		
1	Battery + input	3C5
2	Heaters 6.3V a.c.	3C4
3	Heaters 6.3V a.c.	3C4
4	H.T.+175V	2N2
5	12V for POWER ON lamp	3C5
6	12V relay supply	206
7	Voltage control	3C5
8	Earth	3C6
9	Earth, Battery -	3C6
10	D.C. heaters 6V	3C4
11	12V d.c.	3C4
12	Battery +	3C5

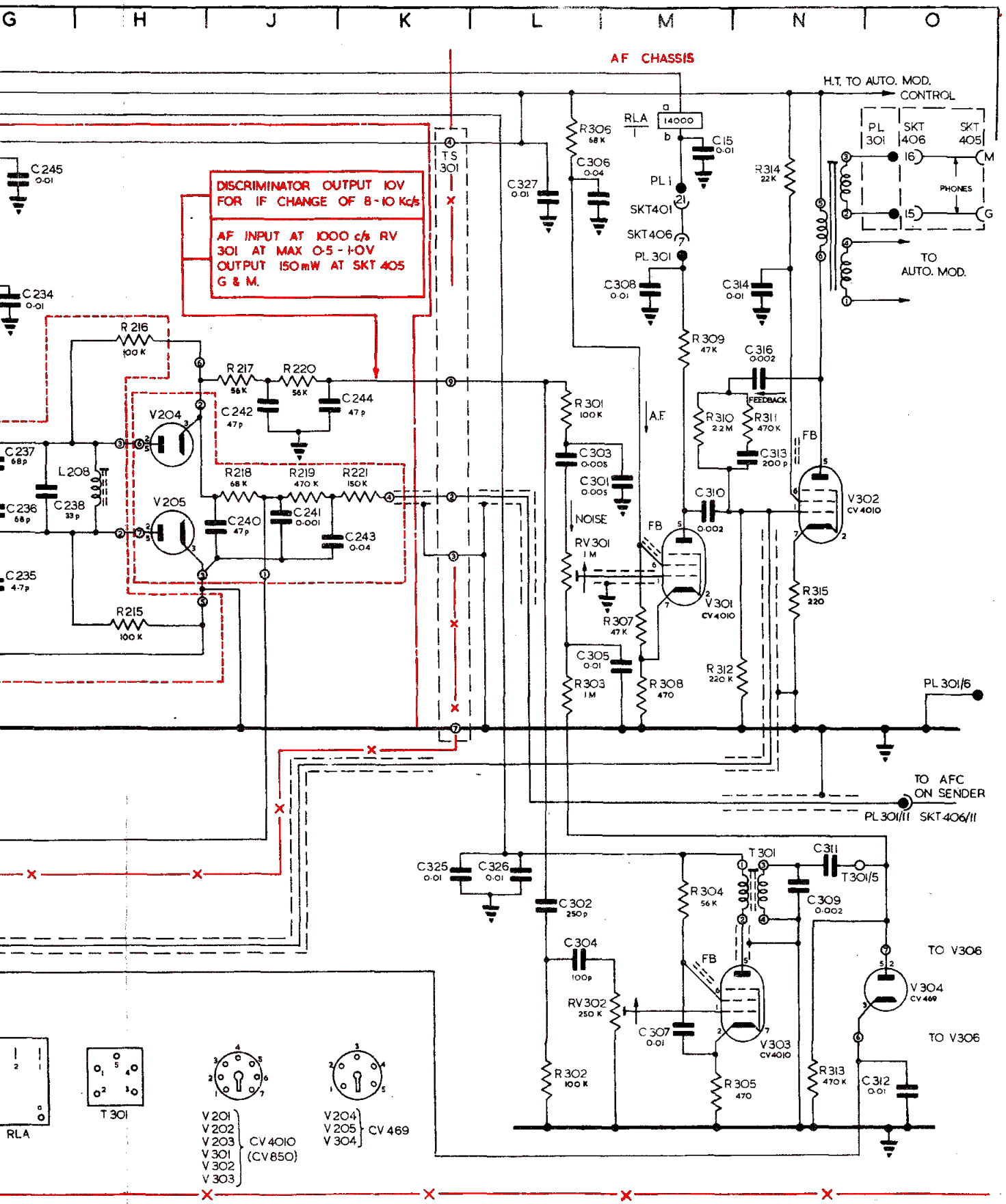
SKT403		
1	Battery + input	3C5
2	Heaters 6.3V a.c.	3C4
3	Heaters 6.3V a.c.	3C4
4	H.T.+175V	5A8
5	12V for POWER ON lamp	3C5
6	12V relay supply	206
7	Voltage control	3C5
8	Earth	5A9
9	Earth, battery -	3C6
10	D.C. heaters 6V	3C4
11	12V d.c.	3C4
12	Battery +	3C5

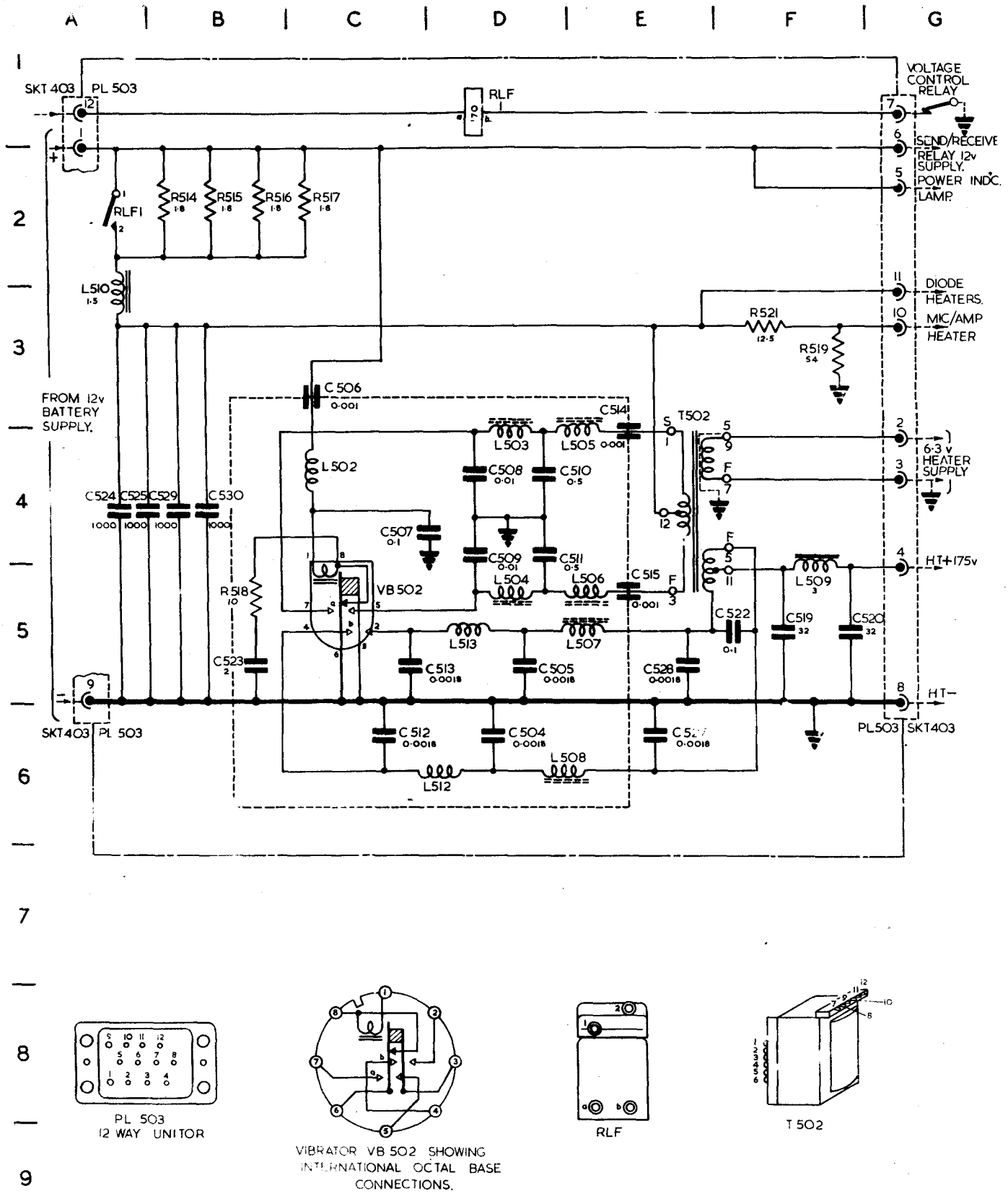
Note: The locations given above under the 'Cct loc' column are in the figure-letter-figure form described in para 1.

Table 2001 - Location guide to plugs and sockets


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
V1
V2
V9
V3
V4
V5
V6
V10
V7
NO HEATERS
V8
C50 0·01
C58 0·01
C66 0·01
C18 0·001
C24 0·001
C76 0·001
C41 0·001
R.F. UNIT.
PL1
4
6
9
SKT401
P.S.U.
PL 503
SKT 403
CENTRE UNIT.
12V. D.C.
6·3V A.C.
6V D.C.
VCR
12V LAMP
+BATT. INPUT
BATT. INPUT
BATT. EARTH
EARTH
11
2
10
3
7
5
1
12
9
8
CAL. UNIT.
V403
TS 403
ILP 401 POWER ON
TS408
C401 0·04
PL 406
BATTERY INPUT
+ A
− B
FS401
7 AMPS FOR 12V
3 AMPS FOR 24V
S402
SKT 405
SKT406
1
12
13
F
K
BATTERY FOR FUTURE DEVELOPMENT
V.C.RELAY IN HARNESS
PL 301
T G532P2 1-2003
I.F. UNIT.
A.F. UNIT.
V205
V204
V203
V202
V201
V301
V302
V303
V304
V306
V305
TS301
L204
L203
L202
L201
TS301
C215 0·01
C212 0·01
C202 0·02
LEAD THROUGH TERMINAL ON I.F. CHASSIS


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
TO H.T. ON R.F. UNIT
IF CHASSIS
PL 301
9
10
SIGNAL FROM 1st I.F.
TS 301/1
C 325 0·01
C 201 0·01
R 204 2·7 K
C 208 0·01
C 210 68 p
T 202
R 202 68 K
C 209 4·7 p
C 203 0·01
C 213 220 p
NOTE B 2·0-5·0mV
C 207 4·7 p
R 201 100 K
C 206 68 p
T 201
C 205 68 p
FB
V 201 CV4010
R 203 330
C 214 0·01
R 208 2·7 K
C 225 0·01
C 221 68 p
T 203
R 205 68 K
C 220 4·7 p
C 216 0·01
C 223 220 p
R 222 56 K
L 205
C 219 4·7 p
C 218 68 p
NOTE B 5·0-8·0mV
R 206 220 K
C 224 0·01
V 202 CV4010
TH
R 213 2·7 K
C 245 0·01
C 233 0·01
R 212 47 K
R 214 10 K
R 223 18 K
L 207
C 234 0·01
R 207 150 K
C 232 68 p
C 230 0·01
L 206
C 228 68 p
C 229 22 p
R 209 220 K
R 210 100 K
R 211 6·8 K
V 203 CV4010
C 237 68 p
C 236 68 p
C 235 4·7 p
C 231 0·01
C 315 0·001
SKT 405
LIMITER GRID CURRENT
H
E
15
REBROADCAST EARTH
22
METER
TS 402
23
13
18
6
11
12
7
8
9
17
15
S 401/1
11
MUTING
12
SKT 401
TS 402
R 401 120 K
RV 401 100 K
4
R 402 33 K
S 401/1
SKT 403
8
TS 402/8
C 406 0·01
SKT 406
CENTRE UNIT
TS 301
MUTING
SQUELCH LEVEL
PL 301
TOP
T 302
T 201-3 & L 205-8 & RECT. ASSY.
RLA
T G 532 P2 1-2005


G
H
J
K
L
M
N
O
AF CHASSIS
H.T. TO AUTO. MOD. CONTROL
DISCRIMINATOR OUTPUT 10V FOR IF CHANGE OF 8-10 Kc/s
AF INPUT AT 1000 c/s RV 301 AT MAX 0·5 - 1·0V OUTPUT 150mW AT SKT 405 G & M.
TS 301
RLA
PL 301
SKT 406
SKT 405
PHONES
TO AUTO. MOD.
SKT401
SKT406
PL 1
R306 68K
C306 0·04
C327 0·01
C15 0·01
R314 22K
C308 0·01
C314 0·01
R309 47K
C316 0·002
FEEDBACK
R310 2·2M
R311 470K
C313 200p
C245 0·01
C234 0·01
R216 100K
R217 56K
R220 56K
C242 47p
C244 47p
V204
C237 68p
L208
C236 68p
C238 33p
V205
R218 68K
R219 470K
R221 150K
C240 47p
C241 0·001
C243 0·04
C235 4·7p
R215 100K
R301 100K
A.F
C303 0·005
C301 0·005
NOISE
RV301 1M
C310 0·002
FB
V301 CV4010
V302 CV4010
R315 220
R307 47K
C305 0·01
R303 1M
R308 470
R312 220K
PL 301/6
TO AFC ON SENDER
PL 301/11 SKT 406/11
C325 0·01
C326 0·01
T 301
C311
T301/5
C309 0·002
R304 56K
C302 250p
C304 100p
RV302 250K
C307 0·01
V303 CV4010
V304 CV469
TO V306
TO V306
R302 100K
R305 470
R313 470K
C312 0·01
RLA
T 301
V201
V202
V203
V301
V302
V303
CV4010 (CV850)
V204
V205
V304
CV469



PL 503
12 WAY UNITOR

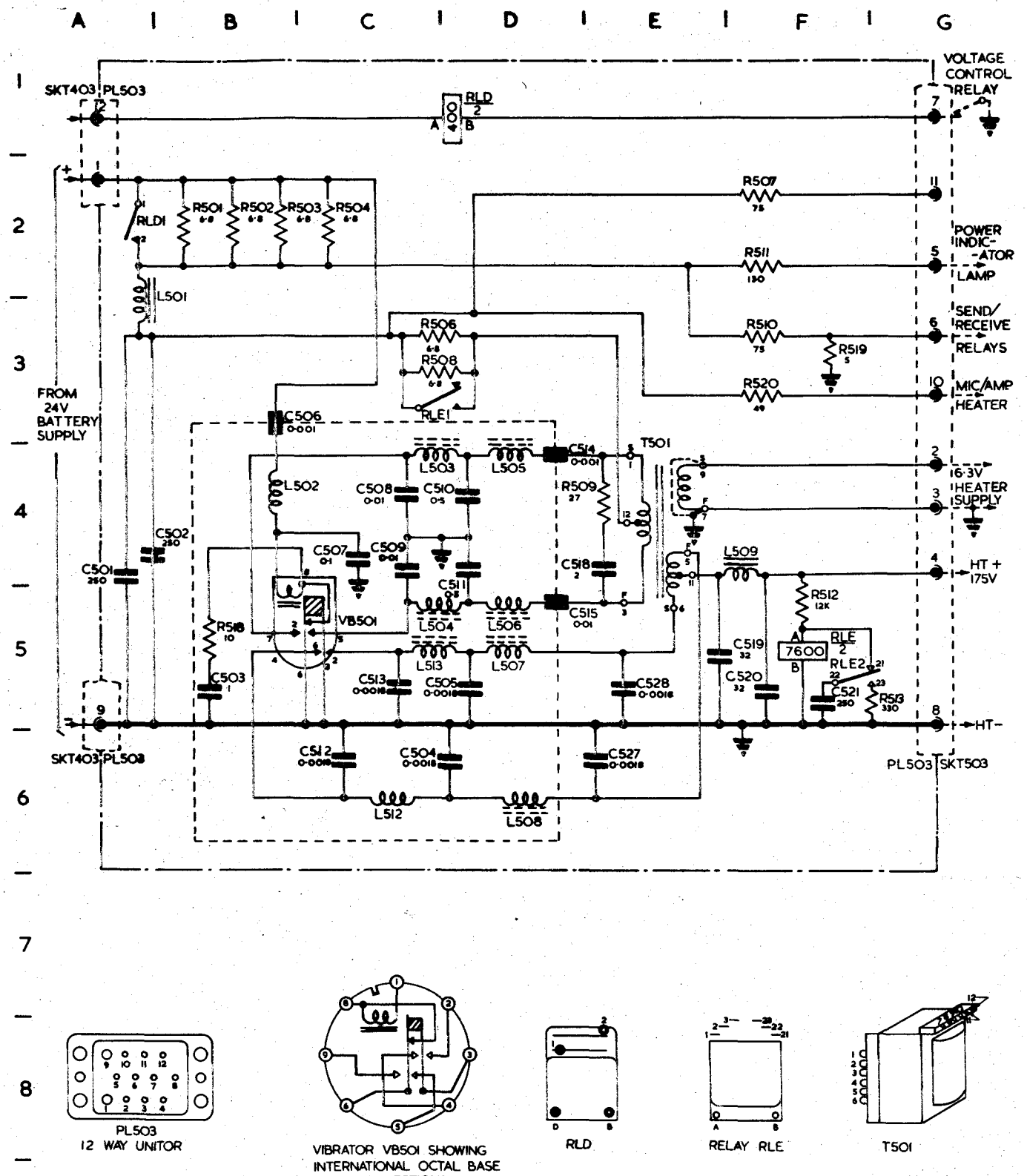
VIBRATOR VB 502 SHOWING INTERNATIONAL OCTAL BASE CONNECTIONS.

RLF

T 502

T-532P2
1-2006

Fig 2006 - Power supply unit, 12V, circuit diagram



PL503
12 WAY UNITOR

VIBRATOR VB501 SHOWING INTERNATIONAL OCTAL BASE CONNECTIONS.

RLD

RELAY RLE

T501

T G532P2 1-2007

Fig 2007 - Power supply unit, 24V, circuit diagram

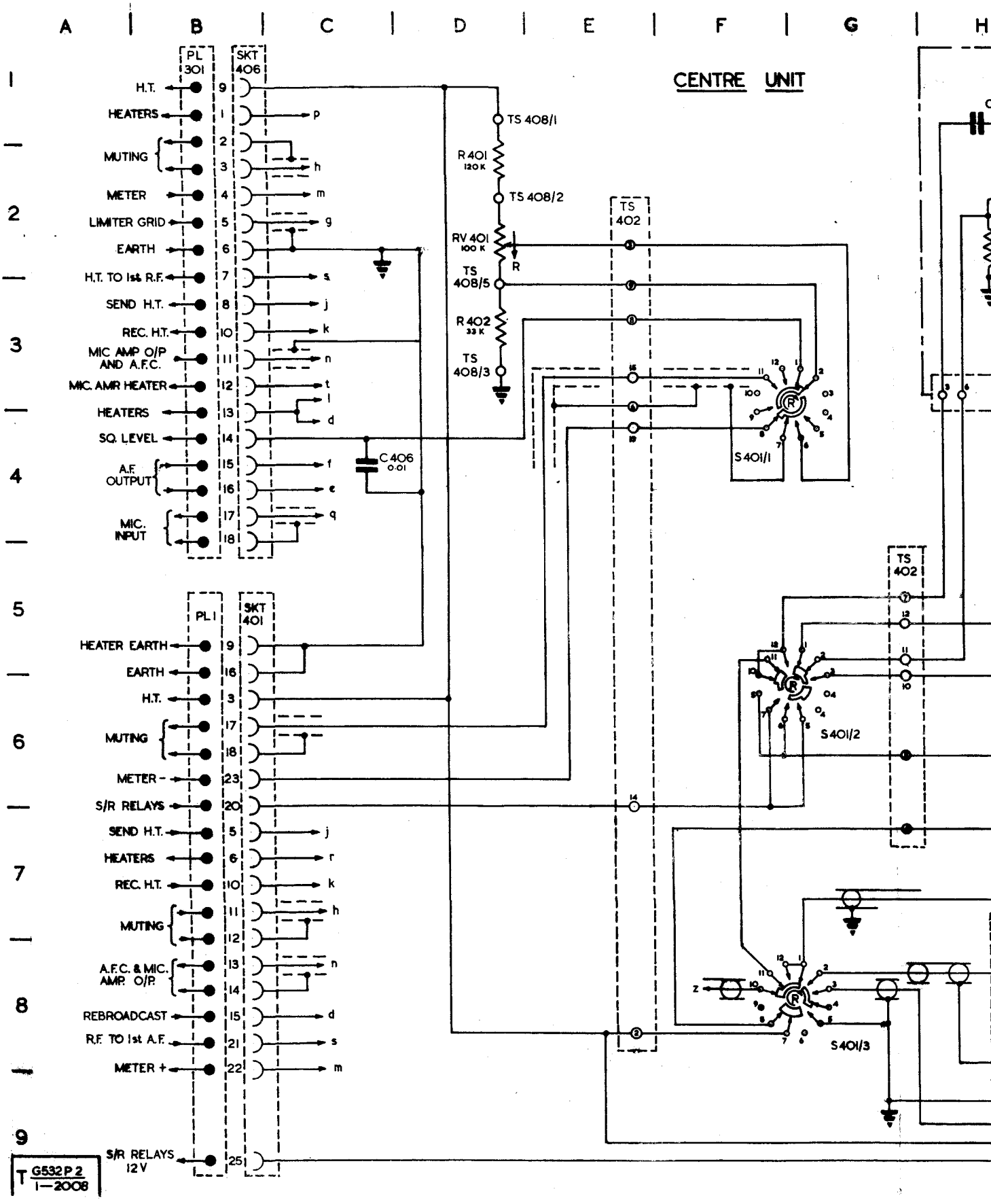
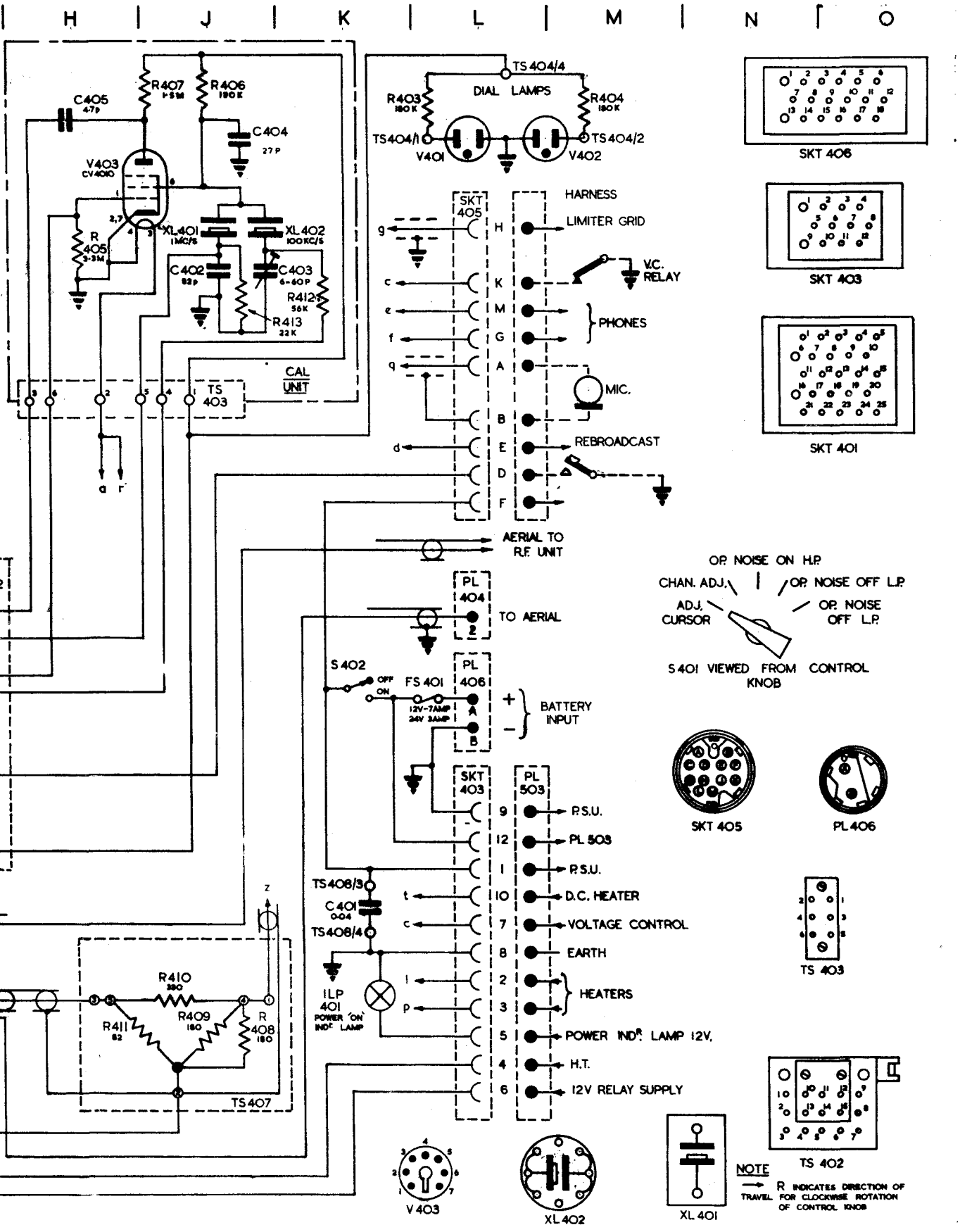
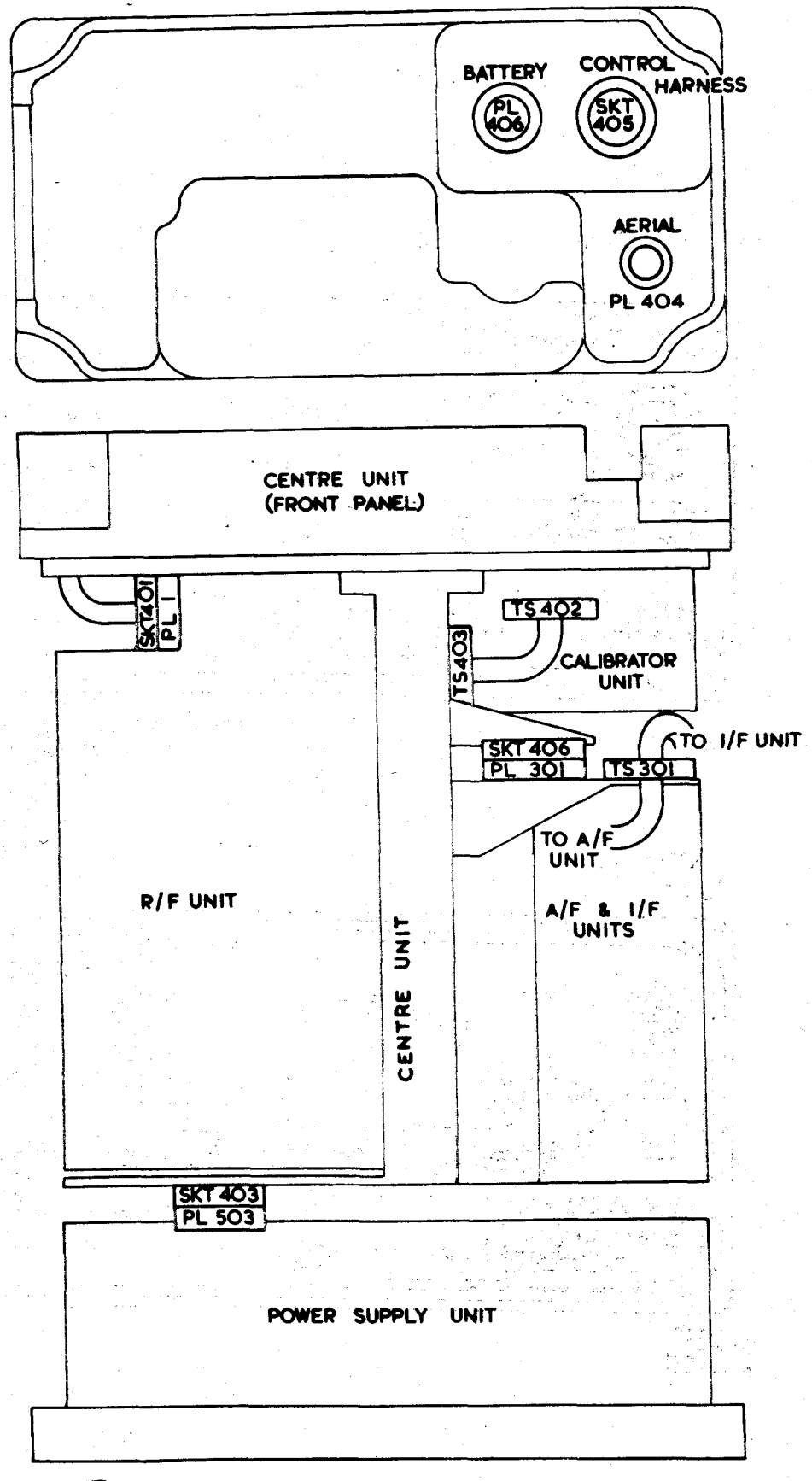


Fig 2008 - Front panel and c



l and centre unit, circuit diagram



T G532P2 1-2009

Fig 2009 - Unit interconnection diagram

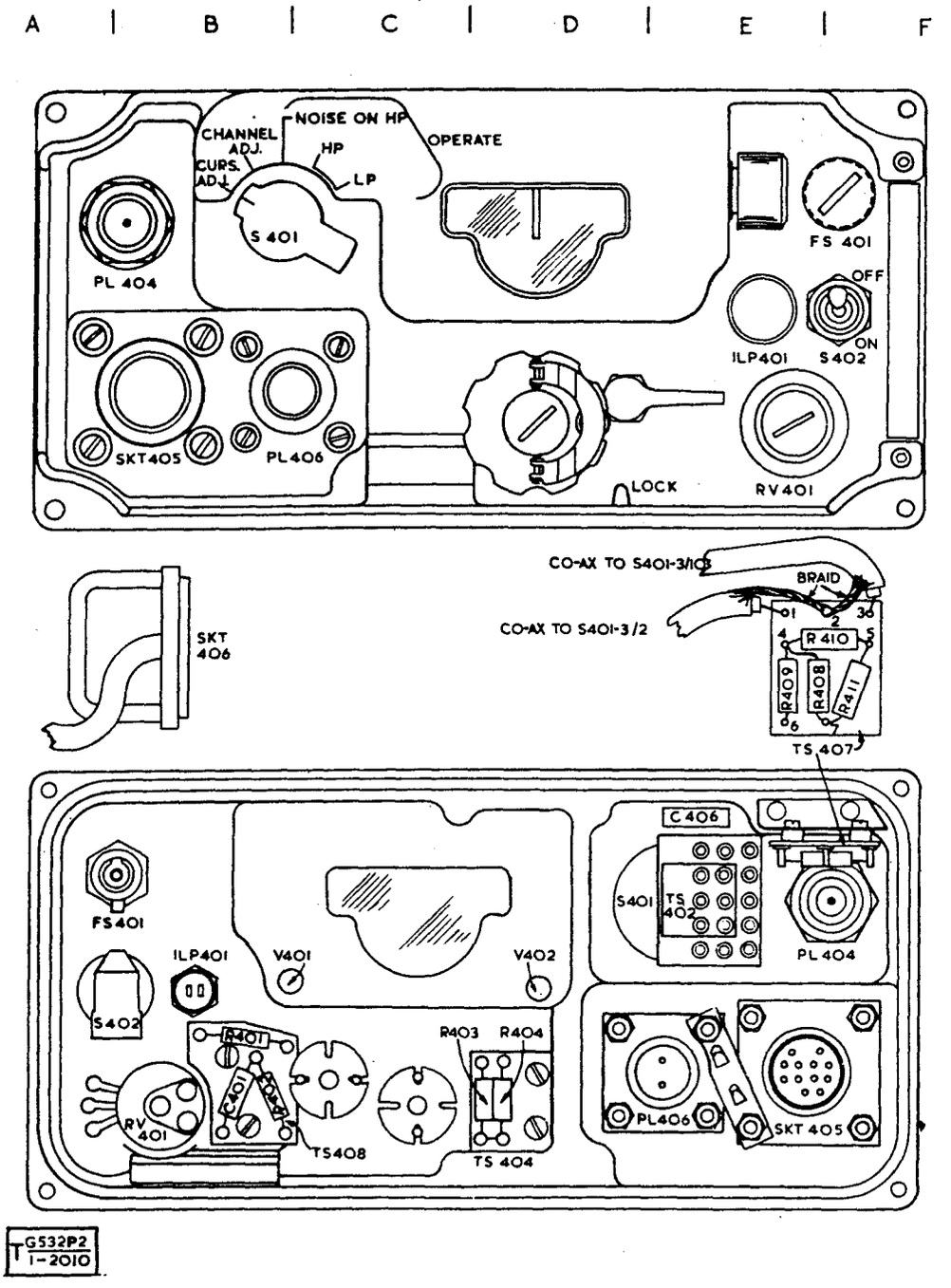


Fig 2010 - Front panel and centre unit, component layout

Cct Ref	*Component location Main Cct	Fig 2008	Fig 2010	Value	Rating	*Type	Limit %	Part No.
RESISTORS AND CAPACITORS								
R401	5A8	D2	B6	120k	1/4W	Comp	±10	Z223050
R402	5B8	D3	B7	33k	1/4W	Comp	±10	Z222194
R403	4B1	L1	D7	180k	1/4W	Comp	±10	Z223071
R404	4C1	M1	D7	180k	1/4W	Comp	±10	Z223071
R408	4C5	J8	D7	180	1/2W	Comp	±10	Z221144
R409	4C5	J8	F4	180	1/2W	Comp	±10	Z221144
R410	4B5	J8	F4	330	1/4W	Comp	±10	Z221173
R411	4B5	J8	F4	82	1/4W	Comp	±10	Z221101
RV401	5E8	D2	A7	100k	1.1/2W	Linear	±20	Z260007
C401	3E6	K7	B7	0.04	200V	P.m.t.	±20	Z115830
C406	5C9	C4	E5	0.01	150V	P.m.t.	±20	Z115826

Cct Ref	*Component location Main Cct	Fig 2008	Fig 2010	Value	Rating	Description	Part No.
MISCELLANEOUS							
SKT401	-	B5	-	-		Socket 25-way Unitor	Z562510
SKT403	-	L6	-	-		Socket 12-way Unitor	Z562508
SKT405	-	L2	F7	-		Socket 12-way Mk 4B	ZA40337
SKT406	-	B1	A4	-		Socket 18-way Unitor	Z562509
PL404	-	L5	E6	-		Plug co-axial	Z560045
PL406	-	L6	D7	-		Plug 2-way Mk 4B	ZA40229
FS401	-	L6	A5	3A		Fuse (24V unit)	Z590111
FS401	-	L6	A5	7A		Fuse (12V unit)	Z590113
S401	-		E6			Switch rotary 3-bank 5-position	ZA45982
S402	-	K6	B6	3A	250V	Switch ON-OFF	Z510551
ILP401	-	K8	B6	0.1A	12V	Lamp midget panel	X2/6240-99-911-9120
V401	4B1	L1	B6	-		Neon dial lamp	Z1/CV2213
V402	4C1	L1	D6	-		Neon dial lamp	Z1/CV2213

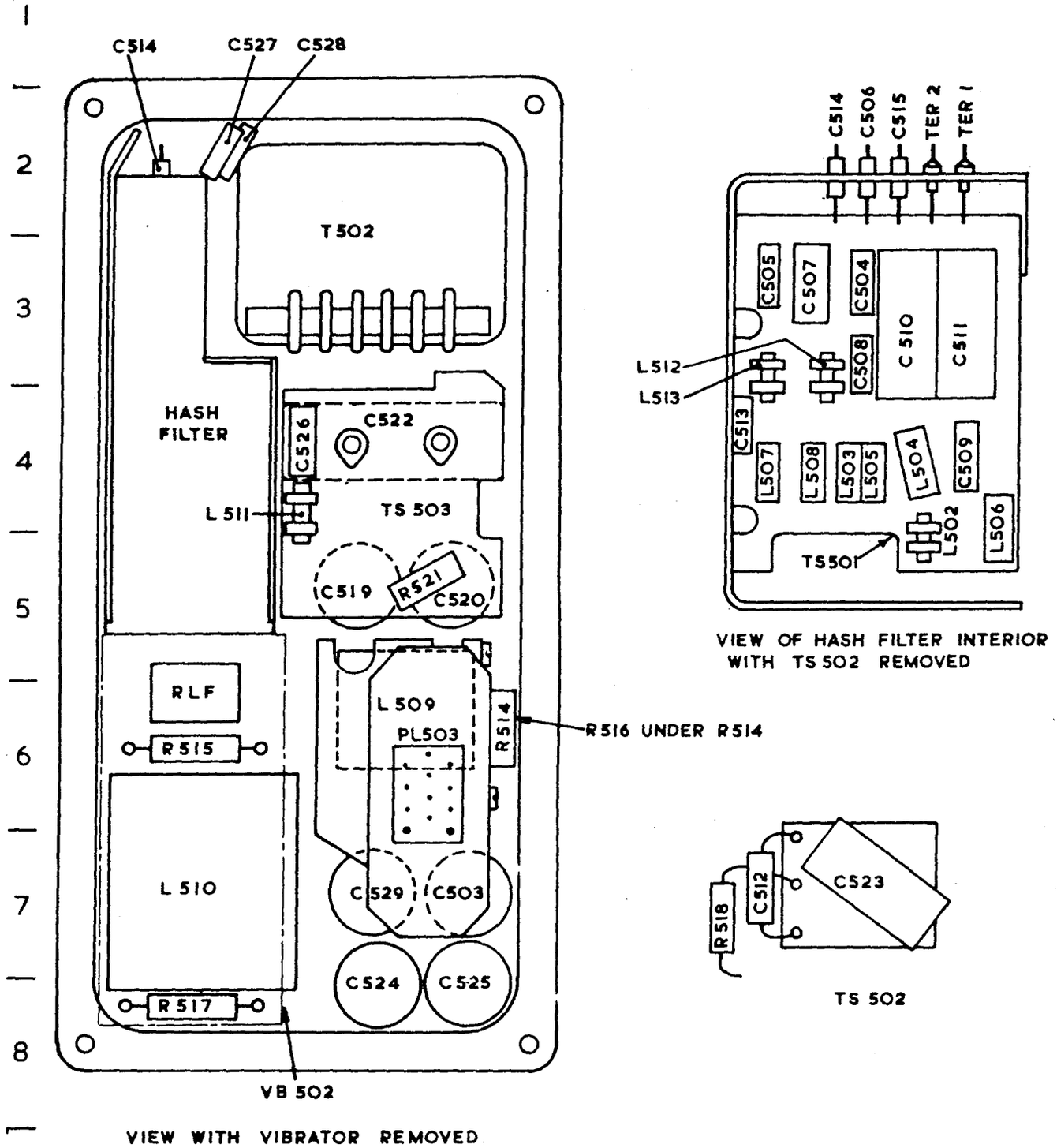
*Note: See paras 1 and 2 for abbreviations

Table 2002 - Front panel and centre unit, component schedule

Circuit Ref	*Component location Fig 2006	Fig 2011	Value	Rating	*Type	Limit %	Part No
				RESISTORS			
R514	B2	D6	1.8	3W	W.W.	±5	Z1/5905-99-911-5269
R515	B2	B6	1.8	3W	W.W.	±5	Z1/5905-99-911-5269
R516	B2	D6	1.8	3W	W.W.	±5	Z1/5905-99-911-5269
R517	C2	B8	1.8	3W	W.W.	±5	Z1/5905-99-911-5269
R518	B5	E7	10	1/4W	Comp	±10	Z221002
R519	F3		54	1.5W	W.W.	±5	Z1/5905-99-911-5240
R521	F3	C5	12.5	3W	W.W.	±5	Z1/5905-99-911-5241
				CAPACITORS			
C504	D6	F3	0.0018	1250V	Feedthru	+80-20	Z1/5910-99-911-5252
C505	D5	F3	0.0018	1250V	Feedthru	+80-20	Z1/5910-99-911-5252
C506	C3	F2	0.001	500V	Feedthru	+50-20	ZA48638
C507	C4	F3	0.1	200V	P.m.t.	±20	Z1/5910-99-911-4976
C508	D4	F3	0.01	150V	P.m.t.	±20	Z115826
C509	D4	G4	0.01	150V	P.m.t.	±20	Z115826
C510	D4	F3	0.5	150V	P.m.t.	±25	Z115566
C511	D4	G3	0.5	150V	P.m.t.	±25	Z115566
C512	C6	F7	0.0018	1250V	Feedthru	+80-20	Z1/5910-99-911-5252
C513	C5	E4	0.0018	1250V	Feedthru	+80-20	Z1/5910-99-911-5252
C514	E4	F3	0.001	500V	Feedthru	+50-20	ZA48638
C515	E5	F3	0.001	500V	Feedthru	+50-20	ZA48638
C519	F5	C5	32	350V	Elco	+50-20	Z1/5910-99-911-4968
C520	F5	D5	32	350V	Elco	+50-20	Z1/5910-99-911-4968
C522	F5	C4	0.1	1000V	P.m.r.	±20	Z111458
C523	B5	F7	2	75V	P.m.t.	±25	Z115572
C524	A4	C8	1000	25V	Elco	+50-20	Z1/5910-99-911-4966
C525	A4	D8	1000	25V	Elco	+50-20	Z1/5910-99-911-4966
C527	E6	B2	0.0018	1250V	Feedthru	+80-20	Z1/5910-99-911-5252
C528	E5	B2	0.0018	1250V	Feedthru	+80-20	Z1/5910-99-911-5252
C529	B4	C7	1000	25V	Elco	+50-20	Z1/5910-99-911-4966
C530	B4		1000	25V	Elco	+50-20	Z1/5910-99-911-4966
				MISCELLANEOUS			
L502	C4	G5	25m				ZA43464
L503	D4	F4					ZA47474
L504	D5	G4					ZA47474
L505	E4	F4					ZA47474
L506	E5	G5					ZA47474
L507	E5	F4					ZA47474
L508	E6	F4					ZA47474
L509	F5	C6	4.5H				ZA47475
L510	A3	B7	1.5m				ZA47483
L512	D6	F3	25m				ZA43464
L513	D5	F3	25m				ZA43464
VB502	C5	B8	-	12V	XC 331B	-	ZA45102
VB502	alternative type		-	12V	XC 354	-	ZA48664
T502	E4	C2	-	-	-	-	ZA47484
PL503	G5	C6	-	12 way	Unitor	-	Z562503

*Note: See paras 1 and 2 for abbreviations

Table 2003 - Power supply unit, 12V, component schedule



T G532P2 1-2011

Fig 2011 - Power supply unit, 12V, component layout

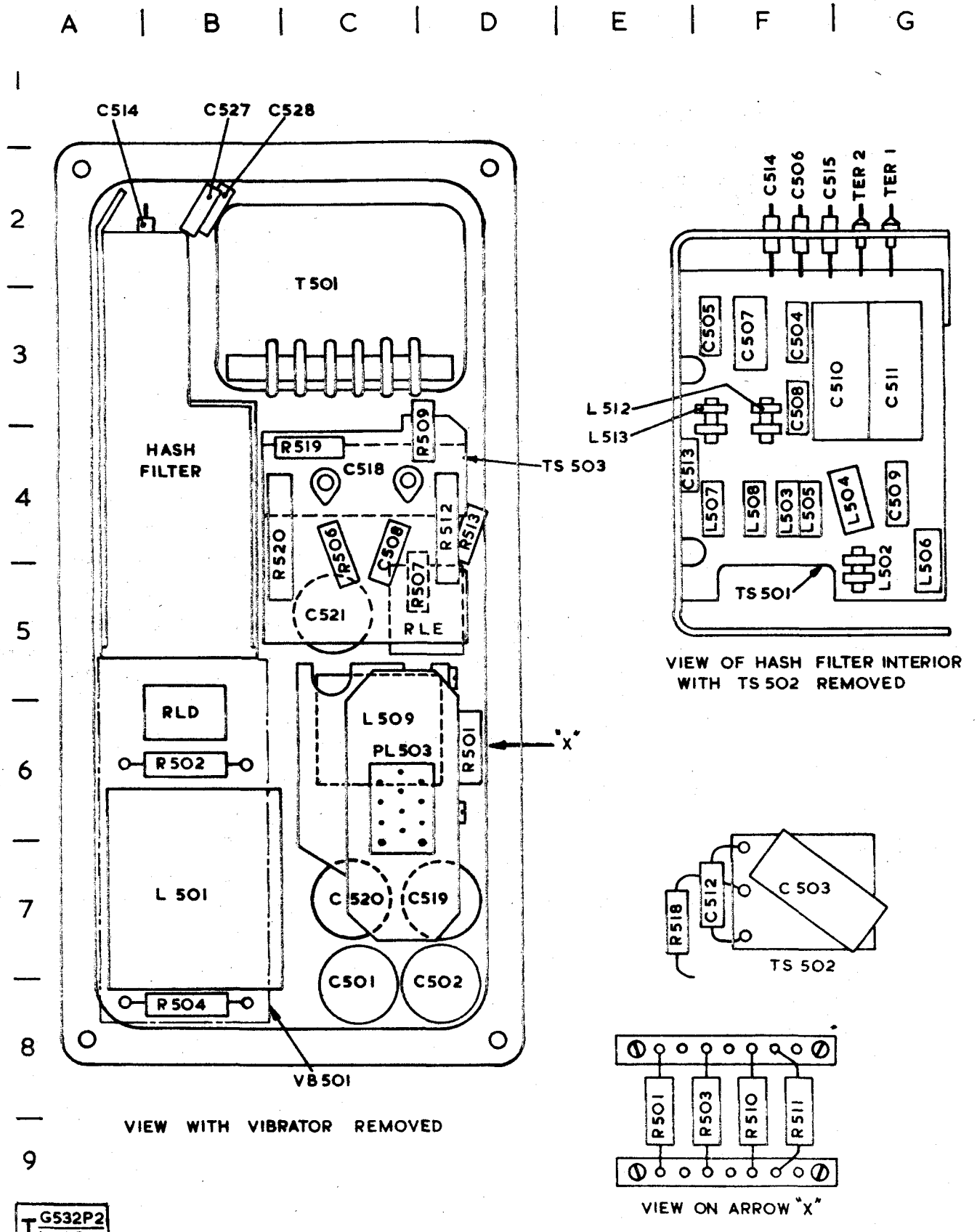


Fig 2012 - Power supply unit, 24V, component layout

Circuit Ref	*Component location Fig 2007	Fig 2012	Value	Rating	*Type	Limit %	Part No.
				RESISTORS			
R501	B2	B6	6.8	3W	W.W.	±5	Z1/5905-99-911-4930
R502	B2	B6	6.8	3W	W.W.	±5	Z1/5905-99-911-4930
R503	C2	E8	6.8	3W	W.W.	±5	Z1/5905-99-911-4930
R504	C2	B8	6.8	3W	W.W.	±5	Z1/5905-99-911-4930
R506	D3	C5	6.8	3W	W.W.	±5	Z1/5905-99-911-4930
R507	F2	D5	75	3W	W.W.	±5	Z1/5905-99-911-3293
R508	D3	C5	6.8	3W	W.W.	±5	Z1/5905-99-911-4930
R509	E4	D4	27	1/4W	Comp	±10	Z221038
R510	F3	F8	75	3W	W.W.	±5	Z1/5905-99-911-3293
R511	F3	F8	130	3W	W.W.	±5	Z5905-Z113299
R512	F4	D4	12k	4½W	W.W.	±5	Z5905-Z113513
R513	G5	D4	330	1/4W	Comp	±10	Z221173
R518	B5	E7	10	1/4W	Comp	±10	Z221002
R519	F3	C4	54	1½W	W.W.	±5	Z1/5905-99-911-5240
R520	F3	C5	49	6W	W.W.	±5	Z1/5905-99-911-5239
				CAPACITORS			
C501	A4	C8	250	50V	Elco	+100-20	Z1/5910-99-911-4697
C502	A4	D8	250	50V	Elco	+100-20	Z1/5910-99-911-4697
C503	B5	F7	1	150V	P.m.t.	±25	Z1/5910-99-911-5570
C504	C6	F3	0.0018	1250V	Feedthru	+80-20	Z1/5910-99-911-5252
C505	D5	F3	0.0018	1250V	Feedthru	+80-20	Z1/5910-99-911-5252
C506	B3	F2	0.001	500V	Feedthru	+50-20	ZA48638
C507	C4	F3	0.1	200V	P.m.t.	±20	Z1/5910-99-911-4976
C508	C4	F4	0.01	150V	P.m.t.	±20	Z115826
C509	C4	G4	0.01	150V	P.m.t.	±20	Z115826
C510	D4	F3	0.5	150V	P.m.t.	±25	Z115566
C511	D4	G3	0.5	150V	P.m.t.	±25	Z115566
C512	C6	F7	0.0018	1250V	Feedthru	+80-20	Z1/5910-99-911-5252
C513	C5	F4	0.0018	1250V	Feedthru	+80-20	Z1/5910-99-911-5252
C514	D3	F2	0.001	500V	Feedthru	+50-20	ZA48638
C515	D4	F2	0.001	500V	Feedthru	+50-20	ZA48638
C518	D4	C4	2	200V	P.m.t.	±20	Z112882
C519	E5	D7	32	350V	Elco	+50-20	Z1/5910-99-911-4968
C520	F5	C7	32	350V	Elco	+50-20	Z1/5910-99-911-4968
C521	F5	C5	250	50V	Elco	+100-20	Z1/5910-99-911-4968
C527	E5	B2	0.0018	1250V	Feedthru	+80-20	Z1/5910-99-911-5252
C528	E5	B2	0.0018	1250V	Feedthru	+80-20	Z1/5910-99-911-5252
				MISCELLANEOUS			
L501	B3	B7	3.3m				ZA47481
L502	C4	G5	25m				ZA43464
L503	C4	F5					ZA47474
L504	C5	F4	4.5H				ZA47475
L505	D4	F4	4.5H				ZA47475
L506	D5	G5	4.5H				ZA47475
L507	D5	F4	4.5H				ZA47475
L508	D6	F4	4.5H				ZA47475
L509	F4	C6	4.5H				ZA47475
L512	C6	F4	25m				ZA43464
L513	C5	F4	25m				ZA43464
VB501	C5	B7	-	24V	XC331C	-	ZA45590
RLD	D1	B6	700Ω	-	-	-	Z530468
RLE	F5	D5	7600Ω	-	-	-	Y1/YA9978
T501	E4	C3	-	-	-	-	ZA47482
PL503	G5	C6	-	12 way	Unitor	-	Z562503

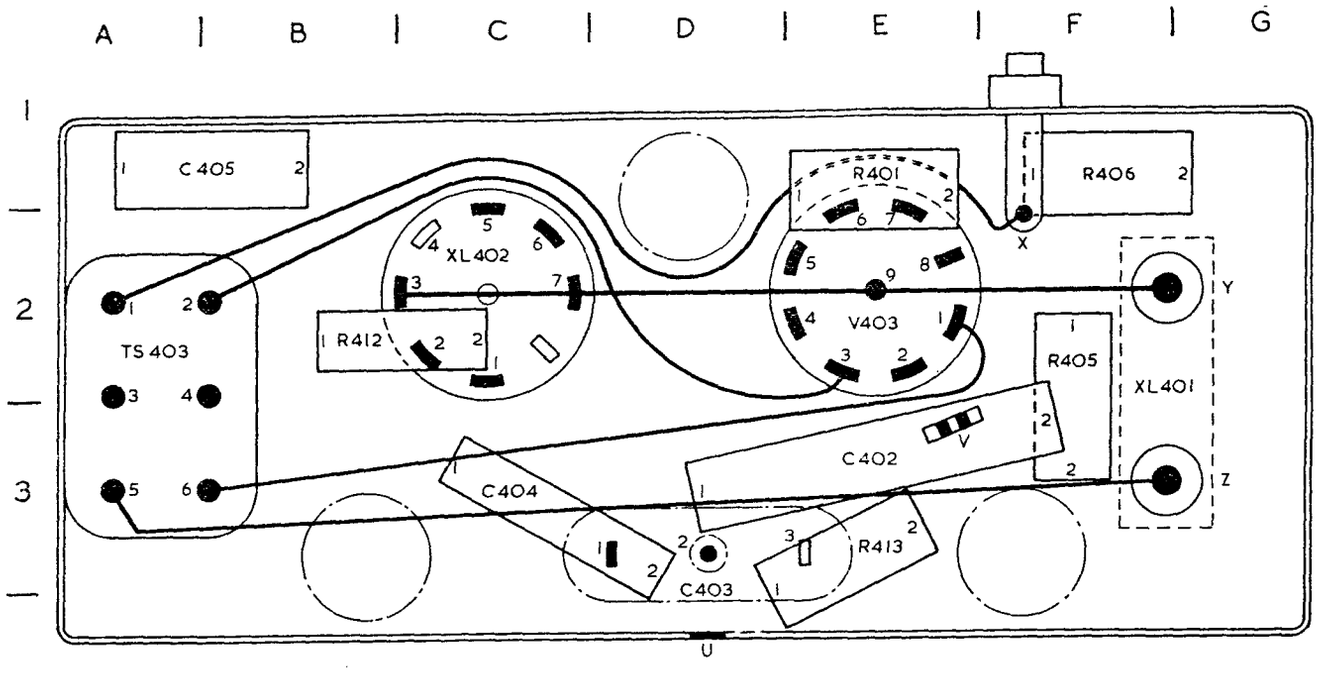
*Note: See paras 1 and 2 for abbreviations

Table 2004 - Power supply unit 24V, component schedule

Circuit Ref	*Component location: Main Circuit	Fig 2008	Fig 2013	Value	Rating	*Type	Limit %	Part No
				RESISTORS				
R405	4B8	H2	F2	3.3M	1/4W	Comp	±10	Z223227
R406	4B8	J1	F1	150k	1/4W	Comp	±10	Z223059
R407	4B7	J1	E1	1.5M	1/4W	Comp	±10	Z223185
R412	4D8	K3	B2	56k	1/4W	Comp	±10	Z223008
R413	4E8	J3	E3	22k	1/4W	Comp	±10	Z222173
				CAPACITORS				
C402	4D8	J3	E3	82p	750V	Cer N030	±2	
C403	4D8	J3	D4	6-60p		Trimmer		
C404	4B7	J2	C3	27p	750V	Cer N030	±.5p	
C405	4A7	H2	A1	4.7p	500V	Cer P100	±.5p	Z132420
				MISCELLANEOUS				
XL401	4D7	J2	F3	1Mc/s		2-pin		ZA49683
XL402	4E7	J2	C2	100kc/s		B7G base		ZA44053
V403	4B8	H2	E2			CV4010(850)		Z1/CV4010

*Note: See paras 1 and 2 for abbreviations

Table 2005 - Calibrator sub-unit, component schedule



UNDERSIDE VIEW

NOTE: IT IS IMPORTANT THAT LEADS SHALL RUN IN EXACT POSITIONS SHOWN ABOVE.

T G532P2 1-2013

Fig 2013 - Calibrator sub-unit, component layout and wiring

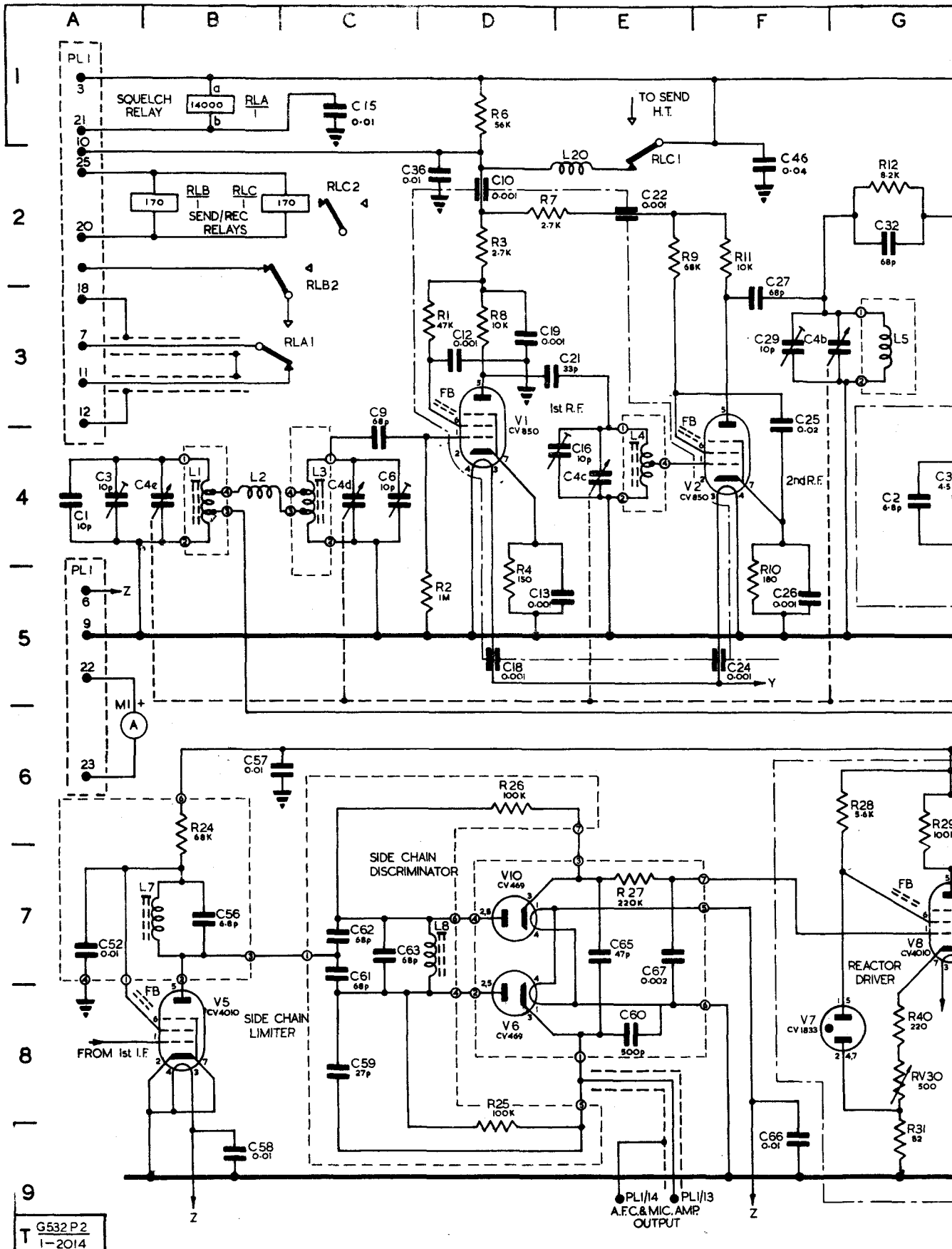
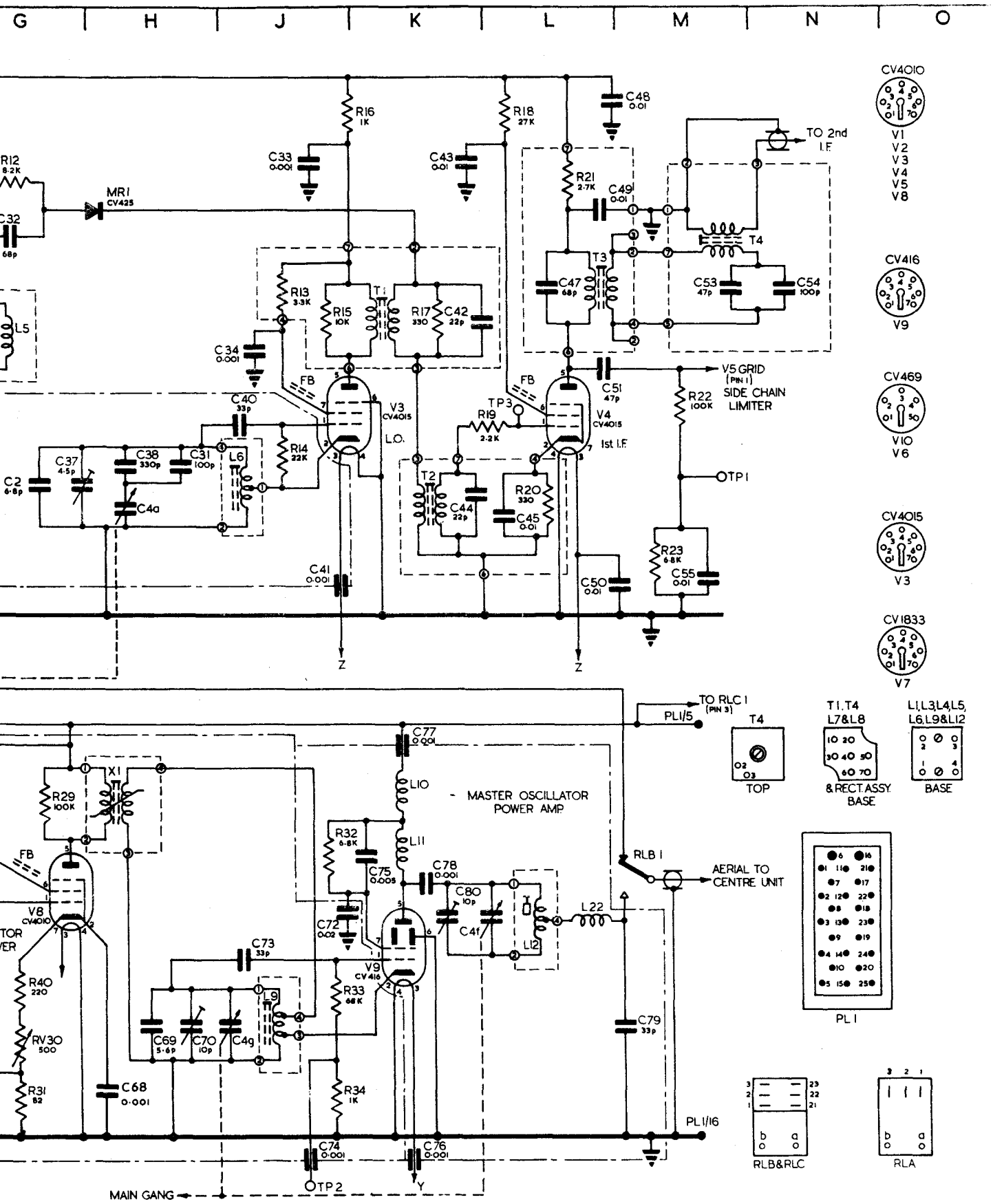


Fig 2014 - R.F. sub-u



. sub-unit, circuit diagram

Table 2006 - R.F. sub-unit, component schedule

Cct Ref	*Component location			Value	Rating	* Type	Limit %	Part No
	Main Cct	Fig 2014	Fig 2015					
				RESISTORS				
R1	4G4	C3	B5	47k	1/4W	Comp	±5	ZA48126
R2	4F5	C5	A6	1M	1/4W	Comp	±10	Z223164
R3	4G3	D2	C5	2.7k	1/4W	Comp	±5	ZA48139
R4	4G5	D5	B6	150	1/4W	Comp	±5	ZA48145
R6	4G2	D1	D6	56k	1/2W	Comp	±5	Z216092
R7	4H3	D2	B4	2.7k	1/4W	Comp	±10	Z222059
R8	4G4	D3	A5	10k	1/4W	Comp	±5	ZA48125
R9	4J3	E2	B3	68k	1/4W	Comp	±5	ZA48130
R10	4J5	F5	C4	180	1/4W	Comp	±5	ZA48144
R11	4J3	F2	B4	10k	1/4W	Comp	±10	Z222131
R12	4K3	G2	D3	8.2k	1/4W	Comp	±10	Z222122
R13	4K4	J3	K3	3.3k	1/4W	Comp	±5	ZA48140
R14	4K7	J4	E2	22k	1/4W	Comp	±10	Z222173
R15	4K4	J3	K3	10k	1/4W	Comp	±5	ZA48125
R16	4L2	J1	F3	1k	1/4W	Comp	±5	ZA48141
R17	4L4	K3	K3	330	1/4W	Comp	±5	ZA48129
R18	4L2	L2	F4	27k	1/4W	Comp	±5	ZA48128
R19	4L5	M4	G2	2.2k	1/4W	Comp	±10	Z222047
R20	4L5	L4	H1	330	1/4W	Comp	±5	ZA48129
R21	4L2	L2	H4	2.7k	1/4W	Comp	±5	ZA48139
R22	2K8	M4	F5	100k	1/4W	Comp	±10	Z223038
R23	2K9	M5	F6	6.8k	1/4W	Comp	±10	Z222110
R24	2K7	B6	H6	68k	1/4W	Comp	±5	ZA48130
R25	2H9	D9	K7	100k	1/4W	Comp	±5	ZA48159
R26	2H7	D6	K7	100k	1/4W	Comp	±5	ZA48159
R27	2G7	E7	H7	220k	1/4W	Comp	±10	Z223080
R28	2F3	G6	E9	5.6k	3W	W.W.	±5	Z113338
R29	2G3	G6	B8	100k	1/4W	Comp	±10	Z223038
RV30	2G5	G8	F8	500	1/4W	Comp	±20	ZA48146
R31	2G5	G9	E9	82	1/4W	Comp	±10	Z221101
R32	2J3	J7	B8	6.8k	1/4W	Comp	±5	ZA48143
R33	2J5	J8	B9	68k	1/4W	Comp	±10	Z223017
R34	2J5	J9	B9	1k	1/4W	Comp	±10	Z222005
R40	2G5	G8	G8	220	1/4W	Comp	±5	ZA48135
				CAPACITORS				
C1	4D6	A4	C7	10p	750V	Cer	±0.5p	ZA45067
C2	4H7	G4	C2	6.8p	500V	Cer	±0.5p	ZA45500
C3	4D5	A4	L6	10p max	500V	Semi fixed		Z160040
C4	-	-	-	6x38.5p+ 1x27.6p		7 section variable		ZA48504
C6	4F5	C4	L5	10p max	500V	Semi fixed		Z160040
C9	4F5	C4	B5	68p	500V	Cer	±10	Z132295
C10	4G3	D2	C5	0.001	500V	Feedthru	±20	ZA45960
C12	4G4	D3	A5	0.001	600V	P.m.t.	±20	Z115813
C13	4G6	D5	B6	0.001	600V	P.m.t.	±20	Z115813
C15	5M2	B1	A3	0.01	150V	P.m.t.	±20	Z115826
C16	4G5	E4	J4	10p max	500V	Semi fixed		Z160040

Table 2006 (contd)

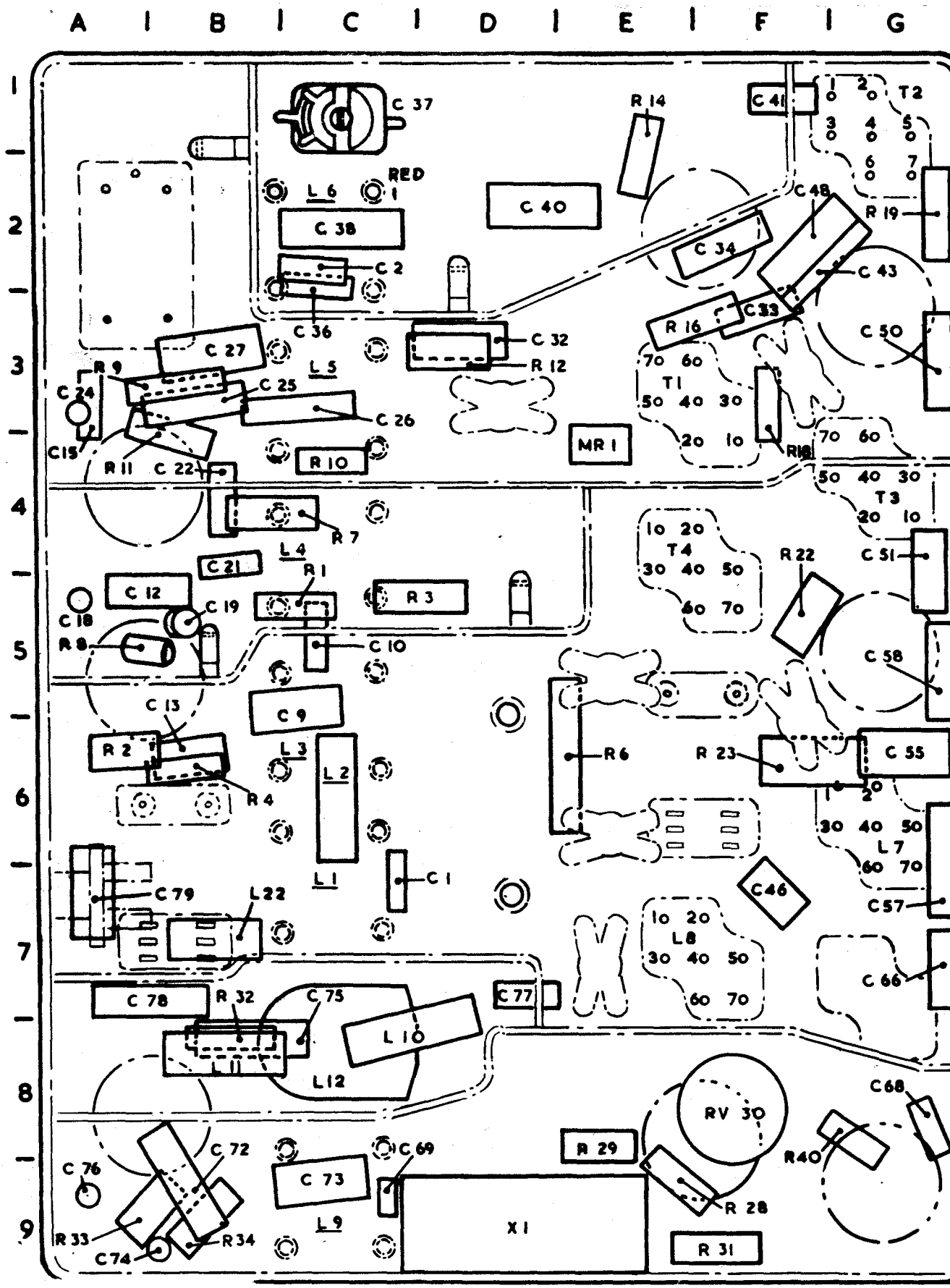
Cct Ref	*Component location			Value	Rating	*Type	Limit %	Part No
	Main Cct	Fig 2014	Fig 2015					
				CAPACITORS				
C18	3A2	D5	A5	0.001	500V	Feedthru	±20	ZA45960
C19	4F4	D3	B5	0.001	600V	P.m.t.	±20	Z115813
C21	4G4	D3	B4	33p	750V	Cer N750	±5	ZA48009
C22	4J3	E2	B4	0.001	500V	Feedthru	±20	ZA45960
C24	3B2	F5	A3	0.001	500V	Feedthru	±20	ZA45960
C25	4J4	F4	B3	0.02	200V	P.m.t.	±20	Z115828
C26	4J5	F5	C3	0.001	600V	P.m.t.	±20	Z115813
C27	4J4	F3	B3	68p	500V	Cer	±10	Z132295
C29	4K5	F3	L4	10p max	500V	Semi fixed		Z160040
C31	4J7	H4	C2	100p	350V	Mica s.	±5	Z123923
C32	4K3	G2	D3	68p	500V	Cer	±10	Z132295
C33	4K2	J2	F3	0.001	600V	P.m.t.	±20	Z115813
C34	4K6	J3	F2	0.001	600V	P.m.t.	±20	Z115813
C36	4G2	D2	C3	0.01	400V	P.m.t.	±20	Z115827
C37	4H7	G4	C1	4.5p max	500V	Semi fixed		Z160039
C38	4J7	H4	C2	330p	350V	Mica s.	±5	Z123942
C40	4K7	J4	D2	33p	500V	Cer	±10	Z132283
C41	3C2	J5	F1	0.001	500V	Feedthru	±20	ZA45960
C42	4M4	K3	K3	22p	750V	Cer	±1p	ZA45066
C43	4L2	K2	F2	0.01	200V	P.m.t.	±20	Z115826
C44	4M5	K4	H1	22p	750V	Cer	±1p	ZA45066
C45	4M5	K5	H1	0.01	200V	P.m.t.	±20	Z115826
C46	4J2	F2	F7	0.04	400V	P.m.t.	±20	Z115030
C47	4M3	L3	H4	68p	750V	Cer N080	±2	Z1/5910-99-911-4883
C48	4M2	L1	F2	0.01	400V	P.m.t.	±20	Z115827
C49	4M3	L2	H4	0.01	200V	P.m.t.	±20	Z115826
C50	3C2	L5	G3	0.01	200V	P.m.t.	±20	Z115826
C51	4M4	L3	G5	47p	500V	Cer	±10	Z132289
C52	2L7	A7	H6	0.01	200V	P.m.t.	±20	Z115826
C53	4N3	M3	K5	4.7p	750V	Cer	±0.5p	ZA45851
C54	4N3	N3	K5	100p	750V	Cer	±2	ZA45062
C55	2L9	M5	G6	0.01	200V	P.m.t.	±20	Z115826
C56	2K7	B7	H6	6.8p	750V	Cer	±0.5p	ZA45069
C57	2K7	B6	G7	0.01	400V	P.m.t.	±20	Z115827
C58	3D2	B9	G5	0.01	200V	P.m.t.	±20	Z115826
C59	2J8	C8	K7	27p	750V	Cer	±5	ZA45999
C60	2G8	E8	H7	500p	600V	P.m.t.	±20	Z115811
C61	2J8	C7	K7	68p	750V	Cer N080	±2	Z1/5910-99-911-4883
C62	2J7	C7	K7	68p	750V	Cer N080	±2	Z1/5910-99-911-4883
C63	2H7	C7	K7	68p	750V	Cer N080	±2	Z1/5910-99-911-4883
C65	2G8	E7	H7	47p	500V	Cer	±10	Z132289
C66	3E2	F9	G7	0.01	200V	P.m.t.	±20	Z115826
C67	2F8	E7	H7	0.002	400V	P.m.t.	±20	Z115815
C68	2G5	H9	G8	0.001	600V	P.m.t.	±20	Z115813
C69	2G5	H8	C9	5.6p	500V	Cer N2200	±0.5p	Z1/5910-99-940-8474
C70	2H5	H8	L8	10p max	500V	Semi fixed		Z160040
C72	2J4	J7	B9	0.02	200V	P.m.t.	±20	Z115828
C73	2H4	J7	C9	33p	500V	Cer	±10	Z132283

Table 2006 (contd)

Cct Ref	*Component location: Main Cct	Fig 2014	Fig 2015	Value	Rating	*Type	Limit %	Part No
C74	2J6	J9	B9	0.001	500V	Feedthru	±20	ZA45960
C75	2J3	J7	C8	0.005	200V	P.m.t.	±20	Z115832
C76	3C2	K9	A9	0.001	500V	Feedthru	±20	ZA45960
C77	2J2	K6	D7	0.001	500V	Feedthru	±20	ZA45960
C78	2K3	K7	A7	0.001	350V	Mica s.	±20	Z124702
C79	2L5	M8	A7	33p	500V	Cer	±10	Z132283
C80	2K4	K7	L7	10p max	500V	Semi fixed		Z160040

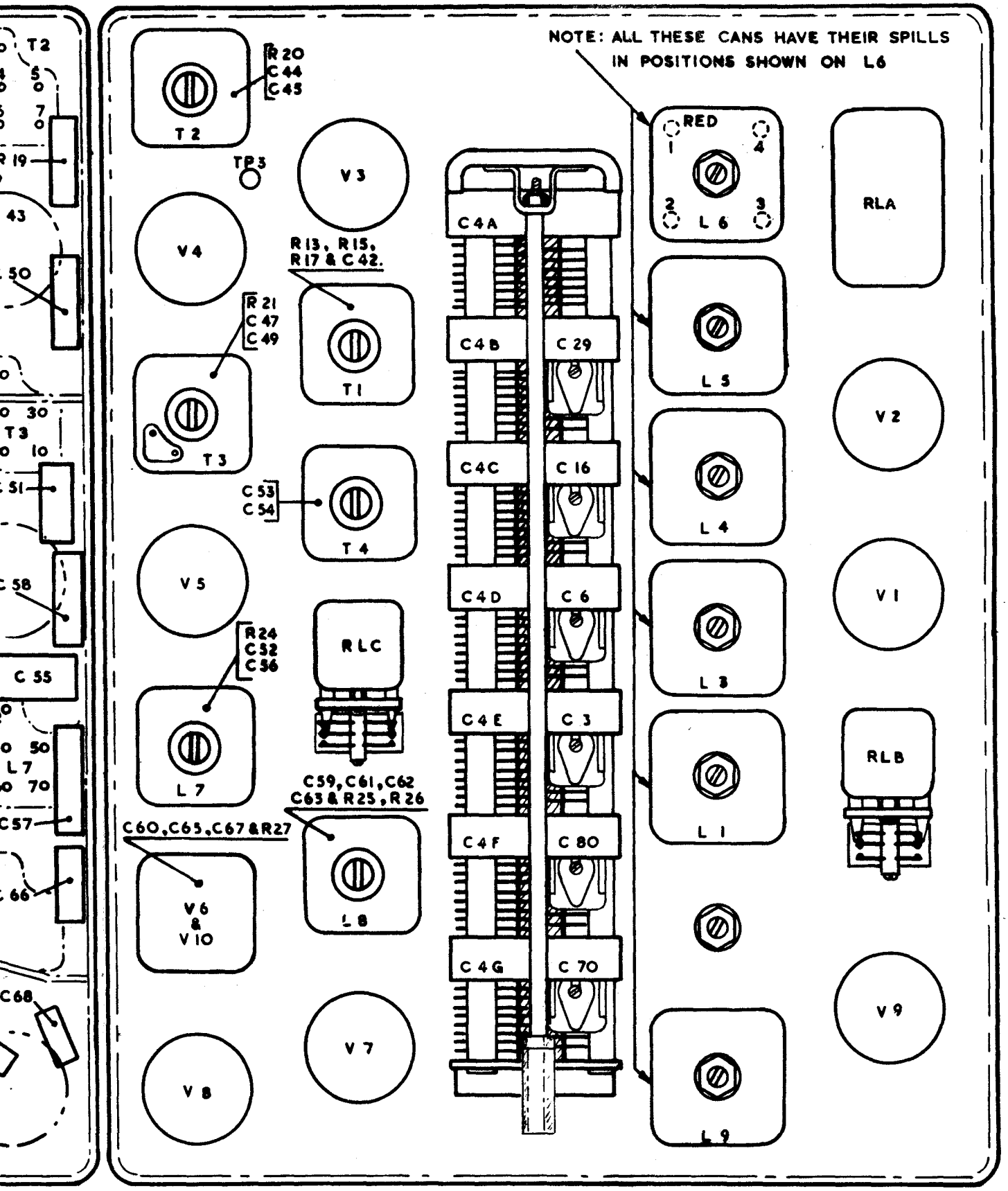
Cct Ref	*Component location: Main Cct	Fig 2014	Fig 2015	Description	Part No
				INDUCTORS AND TRANSFORMERS	
T1	4L4	K3	K3	Transformer I.F. No 135	ZA47585
T2	4L6	K4	H1	Transformer I.F. No 140	ZA47656
T3	4M3	L3	H4	Transformer I.F. No 136	ZA47586
T4	4N3	M2	K5	Transformer I.F. No 137	ZA47587
L1	4D5	B4	M6	Receiver aerial coil	ZA47588
L2	4E5	B4	C6	Receiver coupling coil	ZA47589
L3	4E5	C4	M6	Sender r.f. grid coil	ZA47590
L4	4H5	E4	M5	Receiver grid coil	ZA47591
L5	4J5	G3	M4	Sender mixer coil	ZA47592
L6	4K7	J4	M3	Receiver oscillator coil	ZA47593
L7	2K7	A7	H6	Transformer I.F. No 141	ZA47657
L8	2H7	D7	K7	Transformer I.F. No 142	ZA47658
L9	2J5	J8	M8	M.O. coil	ZA47594
L10	2J3	K6	C8	R.F. choke	ZA47589
L11	2J4	K7	B8	R.F. choke	ZA47654
L12	2L5	L7	M7	P.A. anode coil	ZA
L22	2L5	L7	B7	R.F. choke	ZA47653
				VALVES	
V1	4G5	D4	05	CV 4010(850)	Z1/CV4010
V2	4J5	F4	04	CV 4010(850)	Z1/CV4010
V3	4L7	J4	K2	CV 4015(131)	Z1/CV4015
V4	4M5	L4	H3	CV 4010(850)	Z1/CV4010
V5	2K8	A8	H5	CV 4010(850)	Z1/CV4010
V6	2H8	D8	H7	CV 469	Z1/CV469
V7	2F5	F8	K8	CV 1833	Z1/CV1833
V8	2G4	G7	H9	CV 4010(850)	Z1/CV4010
V9	2J4	K8	08	CV 4040(416)	Z1/CV4040
V10	2G7	D7	H7	CV 469	Z1/CV469
				MISCELLANEOUS	
MR1	4K3	H2	E4	CV 425	Z1/CV425
X1	2G3	H6	D9	Transformer reactor	ZA47655
PL1	-	-	-	Plug 25-way Unitor	Z562505
M1	4N7	A6	-	Meter 250-0-250μA	ZA47561
RLA	5M1	B1	02	Relay, squelch, 1400Ω	Z5945-Z11468
RLB	2L6	B2	07	Relay, send/receive, 170Ω	Z530457
RLC	2L6	B2	K6	Relay, send/receive, 170Ω	Z530457

*Note: See paras 1 and 2 for abbreviations



T G532P2 1-2015

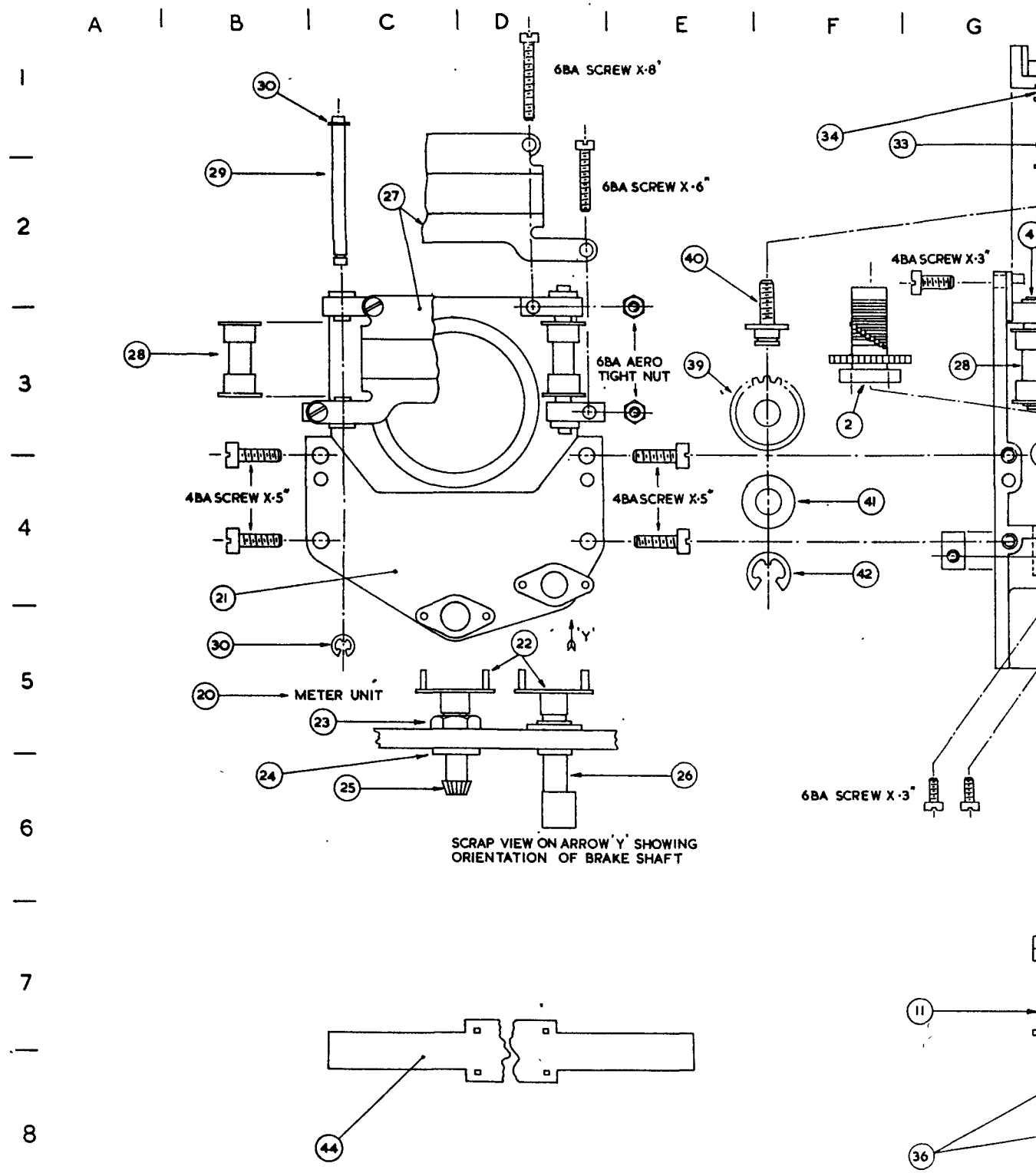
Fig 2015 - R.F. sub-u



sub-unit, component layout

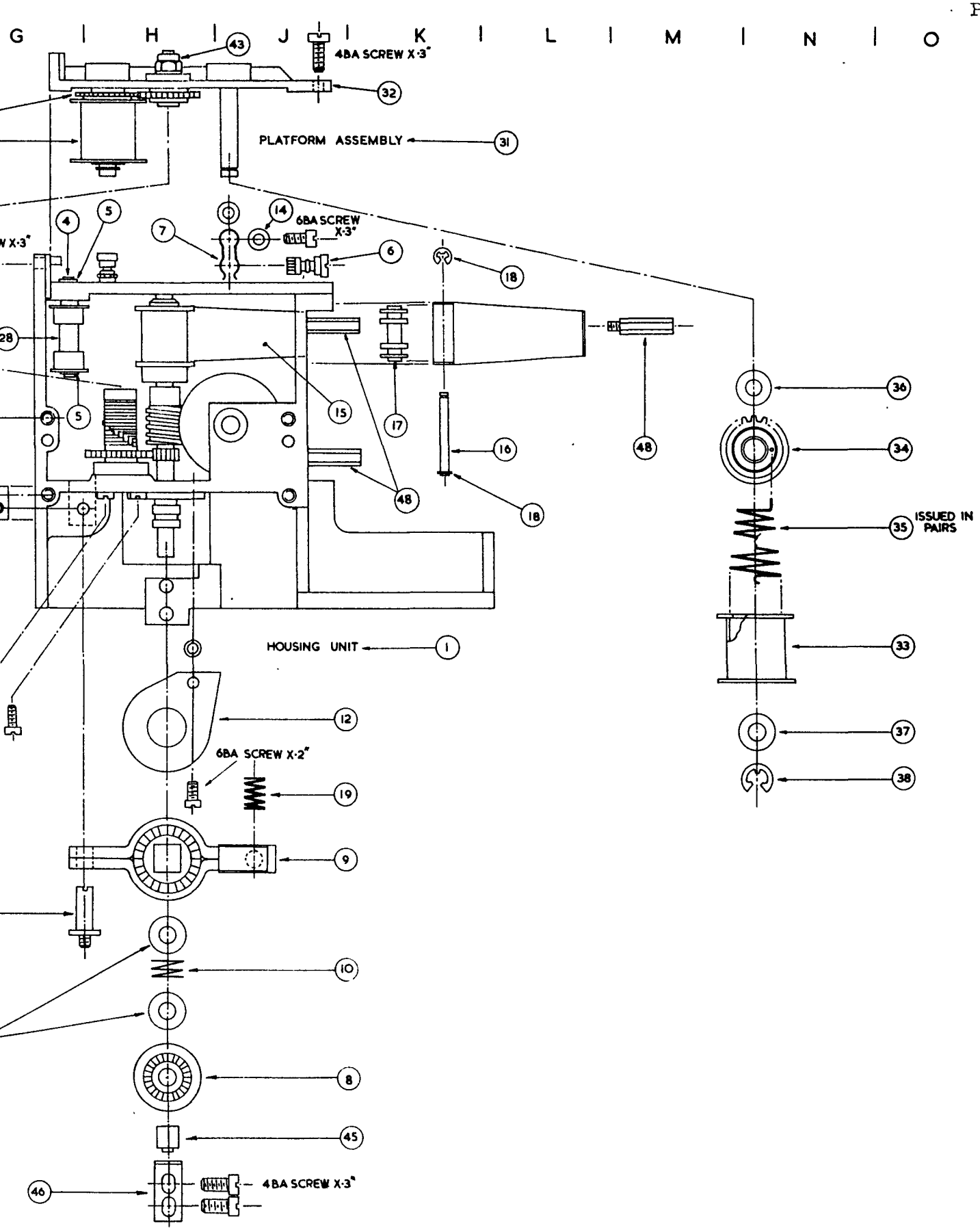
Item No	Grid ref Fig 2016	Designation	Cat No
1	K5	HOUSING UNIT	ZA47578
2	F3	Gear and stop assemblies, phos bronze, 36 teeth, 31/64 in. O.D.	ZA47580
3	G4	Nutplates, M.S., 3/8 in. x 15/16 in. x 13 s.w.g.	ZA50438
4	G2	Shafts, S.S., 1/8 in. O.D. x 1 7/32 in.	ZA47521
5	G2	Circlips, ext, steel, special, shaft dia 1/8 in.	ZA47400
6	J2	Knob and gear assembly, metal, 5/8 in. O.D. x 7/8 in.	ZA47807
7	J2	Circlips, ext, steel, double, shaft dia 1/8 in. and 1/10 in.	ZA47811
8	M8	Gear and clutch assemblies, S.S., 26 teeth, 3/4 in. O.D.	ZA47510
9	H7	Clutch wheel and arm assemblies No. 1	ZA47516
10	H8	Springs, helical, compression, steel, 3 turns x 26 s.w.g.	ZA47525
11	G7	Screws, special, BA, S.S., No. 4 x 11/16 in. O.L.	ZA47528
12	H6	Shims, phos bronze, 7/8 in. x 1 3/16 in. x 38 s.w.g.	ZA47527
13	J3	Roller and spring assemblies (items 15, 16, 17 and 18 assembled)	ZA50400
14	J2	Washers, special, M.S., 1/8 in. I.D. x 1/4 in. O.D. x 5/64 in. dia.	ZA50407
15	J3, L3	Bracket and spring assemblies	ZA50401
16	K4	Spindles, S.S., 3/32 in. dia. x 7/8 in.	ZA50403
17	K3	Rollers, brass, 7/32 in. x 19/64 in. x 11/16 in.	ZA50402
18	K4	Circlips, ext, steel, 3/32 in. shaft x 3/16 in. O.D. x 1/64 in. thick	ZA50435
19	J6	Springs, helical, compression, steel, 3 turns x 21 s.w.g.	ZA47808
46	H9	Brackets, M.S., L shape, 27/64 in. x 5/16 in. x 11/16 in.	ZA50406
45	H9	Bushes, S.S., 7/32 in. I.D. x 9/32 in. O.D. x 11/32 in.	ZA47523
48	M3	Pillars, mounting, M.S., hex No. 6 BA, 3/16 in. A/F x 1/2 in.	ZA47809
20	B5	METER UNIT	
21	C4	Bracket and gear assemblies No. 1	ZA47530
22	D5	Plate and bush assemblies, M.S., No. 1	ZA47531
23	C5	Nuts, precision, UNF No. 2 BA, steel, hex, cad plated	G1/5310-418232
24	C5	Bushes, phos bronze, 1/4 in., 28 UNF, 1/2 in. O.D. x 25/64 in. O.L.	ZA47532
25	C6	Gears, pinion, S.S., 13 teeth x 5/16 in. O.D.	ZA47533
26	D6	Shafts, S.S., 3/8 in., O.D. x 1 25/64 in.	ZA47534
27	C3	Plates, M.S., 3 1/8 in. x 1 7/32 in. x 22 s.w.g.	ZA47536
28	B3, C3	Rollers, brass, 3/8 in. O.D. x 45/64 in.	ZA47519
29	C2	Shafts, S.S., 1/8 in. O.D. x 1 17/32 in.	ZA47535
30	C2	Circlips, 1/8 in. shaft	ZA50408
31	L1	GEAR AND SPOOL ASSEMBLIES	ZA50408
32	J1	Plate and spindle assemblies, A1 3.21/64 in. x 7/8 in. x 15/32 in.	ZA47537
33	H1, N5	Spools, brass, 29/32 in. O.D. x 41/64 in.	ZA47540
34	H1, N4	Gears, spur, bushed, phos bronze, 33 teeth x 47/64 in. O.D.	ZA47542
35	N4	Springs, helical, torsion, conical, 20 turns, 24 s.w.g. prs.	ZA47544
36	HF8,N3	Washers, special, brass x 21 s.w.g.	ZA47545
37	N6	Washers, spring, copper, 7/32 in. I.D. x 7/16 in. O.D.	ZA47556
38	N6	Circlips, ext, steel, special, shaft dia 3/16 in.	ZA47529
39	E3	Gears, spur, phos bronze, 33 teeth x 47/64 in. O.D.	ZA47543
40	F2	Shafts, flanged, S.S., 7/16 in. O.D. x 19/32 in.	ZA47546
41	F4	Shims, phos bronze, 13/64 in. I.D. x 13/32 in. O.D. x 42 s.w.g.	ZA47810
42	F4	Circlips, ext, steel, 1/4 in. shaft, 17/32 in. O.D. x 1/32 in. thick	ZA47660
43	H1	Nuts, stiff, aircraft, BA, S.S., hex, all metal, thick No 4	G1/5310-418217
44	D7	Scales, film, 16 mm, 5 ft. 8 in. long	ZA49413

Table 2007 - Film scale unit, component schedule

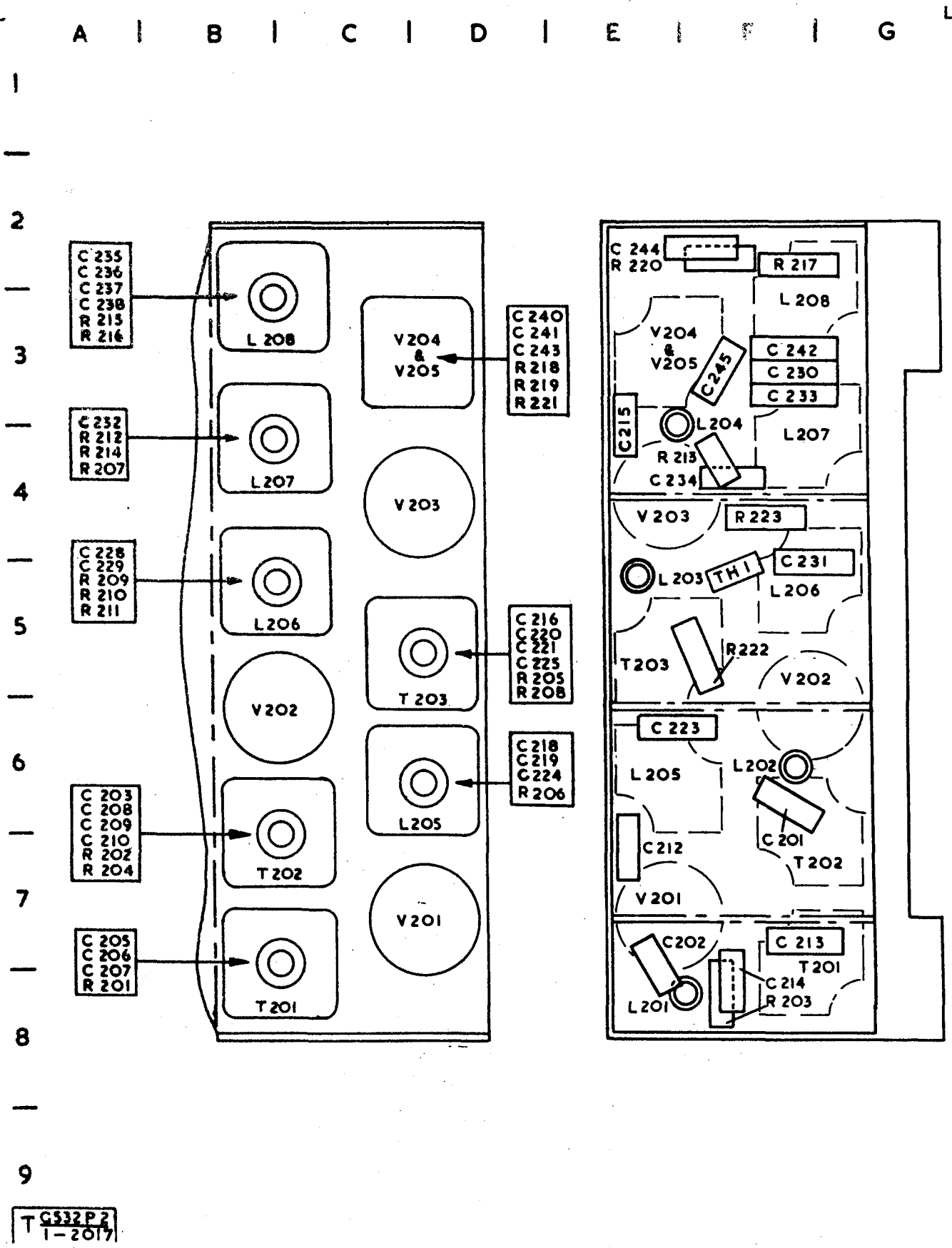


T G532P2 1-2016

Fig 2016 - Film scale u



scale unit, general assembly



T G532 P 2
1-2017

Fig 2017 - I.F. sub-unit, component layout

Table 2008 - I.F. sub-unit, component schedule

Cct	*Component location: Main Cct	Fig 2018	Fig 2017	Value	Rating	*Type	Limit %	Part No
				RESISTORS				
R201	5A5	B6	B8	100k	1/4W	Comp	±5	ZA48159
R202	5B3	C3	B7	68k	1/4W	Comp	±5	ZA48130
R203	5B5	C7	F7	330	1/4W	Comp	±5	ZA48129
R204	5B2	D3	B7	2.7k	1/4W	Comp	±5	ZA48139
R205	5D3	E4	D5	56k	1/4W	Comp	±10	Z223008
R206	5C5	E6	D6	220k	1/4W	Comp	±5	ZA48160
R207	5F3	H4	B4	150k	1/4W	Comp	±5	ZA48129
R208	5D2	F3	D5	2.7k	1/4W	Comp	±5	ZA48139
R209	5E6	H7	B5	220k	1/4W	Comp	±5	ZA48160
R210	5F5	H6	B5	100k	1/4W	Comp	±5	ZA48159
R211	5F6	H7	B5	6.8k	1/4W	Comp	±5	ZA48143
R212	5F3	J4	B4	47k	1/4W	Comp	±5	ZA48126
R213	5F2	J2	E4	2.7k	1/4W	Comp	±10	Z222059
R214	5F3	J3	B4	10k	1/4W	Comp	±5	ZA48125
R215	5F5	K5	B3	100k	1/4W	Comp	±5	ZA48159
R216	5H3	M4	B3	100k	1/4W	Comp	±5	ZA48159
R217	5J3	M7	F2	56k	1/4W	Comp	±10	Z223008
R218	5J4	M6	D3	68k	1/4W	Comp	±10	Z223017
R219	5J4	M6	D3	470k	1/4W	Comp	±10	Z223122
R220	5J4	N7	E2	56k	1/4W	Comp	±10	Z223008
R221	5K4	N6	D3	150k	1/4W	Comp	±10	Z223059
R222	5E4	F5	F5	56k	1/4W	Comp	±10	Z223008
R223	5F3	H3	F4	18k	1/4W	Comp	±5	ZA48136
				CAPACITORS				
C201	5C2	B3	F6	0.01	400V	P.m.t.	±20	Z115827
C202	3C9	B7	E7	0.02	200V	P.m.t.	±20	Z115828
C203	5C3	B4	B7	0.01	200V	P.m.t.	±20	Z115826
C205	5D5	B6	B8	68p	750V	Cer N080	±2	Z1/5910-99-911-4883
C206	5B5	B6	B8	68p	750V	Cer N080	±2	Z1/5910-99-911-4883
C207	5B4	C5	B8	4.7p	500V	Cer	±0.5p	Z132420
C208	5C2	B3	B7	0.01	200V	P.m.t.	±20	Z115826
C209	5B3	C4	B7	4.7p	500V	Cer	±0.5p	Z132420
C210	5B2	D4	B7	68p	750V	Cer N080	±2	Z1/5910-99-911-4883
C212	3C9	B7	E7	0.01	200V	P.m.t.	±20	Z115826
C213	5B4	C5	F7	220p	600V	Cer	±20	Z1/5910-99-911-5253
C214	5C5	D6	F7	0.01	200V	P.m.t.	±20	Z115826
C215	5F7	D7	E3	0.01	200V	P.m.t.	±20	Z115826
C216	5E3	E4	D5	0.01	200V	P.m.t.	±20	Z115826
C218	5D5	F5	D6	68p	750V	Cer N080	±2	Z1/5910-99-911-4883
C219	5D4	F5	D6	4.7p	500V	Cer	±0.5p	Z132420
C220	5D3	F4	D5	4.7p	500V	Cer	±0.5p	Z132420
C221	5D2	F4	D5	68p	750V	Cer N080	±2	Z1/5910-99-911-4883
C223	5D4	F4	E6	220p	600V	Cer	±20	Z1/5910-99-911-5253
C224	5D5	F6	D6	0.01	200V	P.m.t.	±20	Z115826
C225	5E2	E4	D5	0.01	200V	P.m.t.	±20	Z115826
C228	5F5	H6	B5	68p	750V	Cer N080	±2	Z1/5910-99-911-4883
C229	5F5	H6	B5	22p	750V	Cer	±1p	ZA45066
C230	5F3	H5	F3	0.01	200V	P.m.t.	±20	Z115826
C231	5F6	K7	F5	0.01	200V	P.m.t.	±20	Z115826

Table 2008 (contd)

Cct	*Component location: Main Cct	Fig 2018	Fig 2017	Value	Rating	*Type	Limit %	Part No
C232	5F3	J4	B4	68p	750V	Cer N080	±2	Z1/5910-99-911-4883
C233	5F2	H3	F3	0.01	200V	P.m.t.	±20	Z115826
C234	5G3	K3	E4	0.01	200V	P.m.t.	±20	Z115826
C235	5G5	K4	B3	4.7p	500V	Cer	±0.5p	Z132420
C236	5G4	L3	B3	68p	750V	Cer N080	±2	Z1/5910-99-911-4883
C237	5G4	L3	B3	68p	750V	CerN080	±2	Z1/5910-99-911-4883
C238	5G4	L4	B3	33p	750V	Cer	±5	Z1/5910-99-911-4882
C240	5J5	M6	D3	47p	500V	Cer	±10	Z132289
C241	5J5	M6	D3	0.001	600V	P.m.t.	±20	Z115813
C242	5J4	M6	F3	47p	500V	Cer	±10	Z132289
C243	5J5	N6	D3	0.04	200V	P.m.t.	±20	Z115830
C244	5J4	N7	E2	47p	500V	Cer	±10	Z132289
C245	5G2	K2	F3	0;01	400V	P.m.t.	±20	Z115827

Cct	*Component location: Main Cct	Fig 2018	Fig 2017	Description	Part No
				INDUCTORS AND TRANSFORMERS	
L201	3C9	B8	E8	Heater choke	ZA47440
L202	3C9	C8	F6	Heater choke	ZA47440
L203	3B9	C8	E5	Heater choke	ZA47440
L204	3B9	D8	E4	Heater choke	ZA47440
L205	5C4	E5	E6	Transformer I.F. No 128	ZA47441
L206	5E4	H6	F5	Transformer I.F. No 129	ZA47442
L207	5G3	J4	F4	Transformer I.F. No 130	ZA47443
L208	5G4	L5	F3	Transformer I.F. No 131	ZA47444
T201	5A5	B6	F7	Transformer I.F. No 132	ZA47446
T202	5C2	D4	F7	Transformer I.F. No 133	ZA47447
T203	5E3	G4	E5	Transformer I.F. No 134	ZA47448
				VALVES	
V201	5C4	D5	E7	CV 4010(850)	Z1/CV4010
V202	5D4	F5	F6	CV 4010(850)	Z1/CV4010
V203	5F4	J5	E4	CV 4010(850)	Z1/CV4010
V204	5H4	L6	E3	CV 469	Z1/CV469
V205	5H4	L6	E3	CV 469	Z1/CV469
				MISCELLANEOUS	
TH1	5E2	H2	F5	Thermistor	

*Note: See paras 1 and 2 for abbreviations

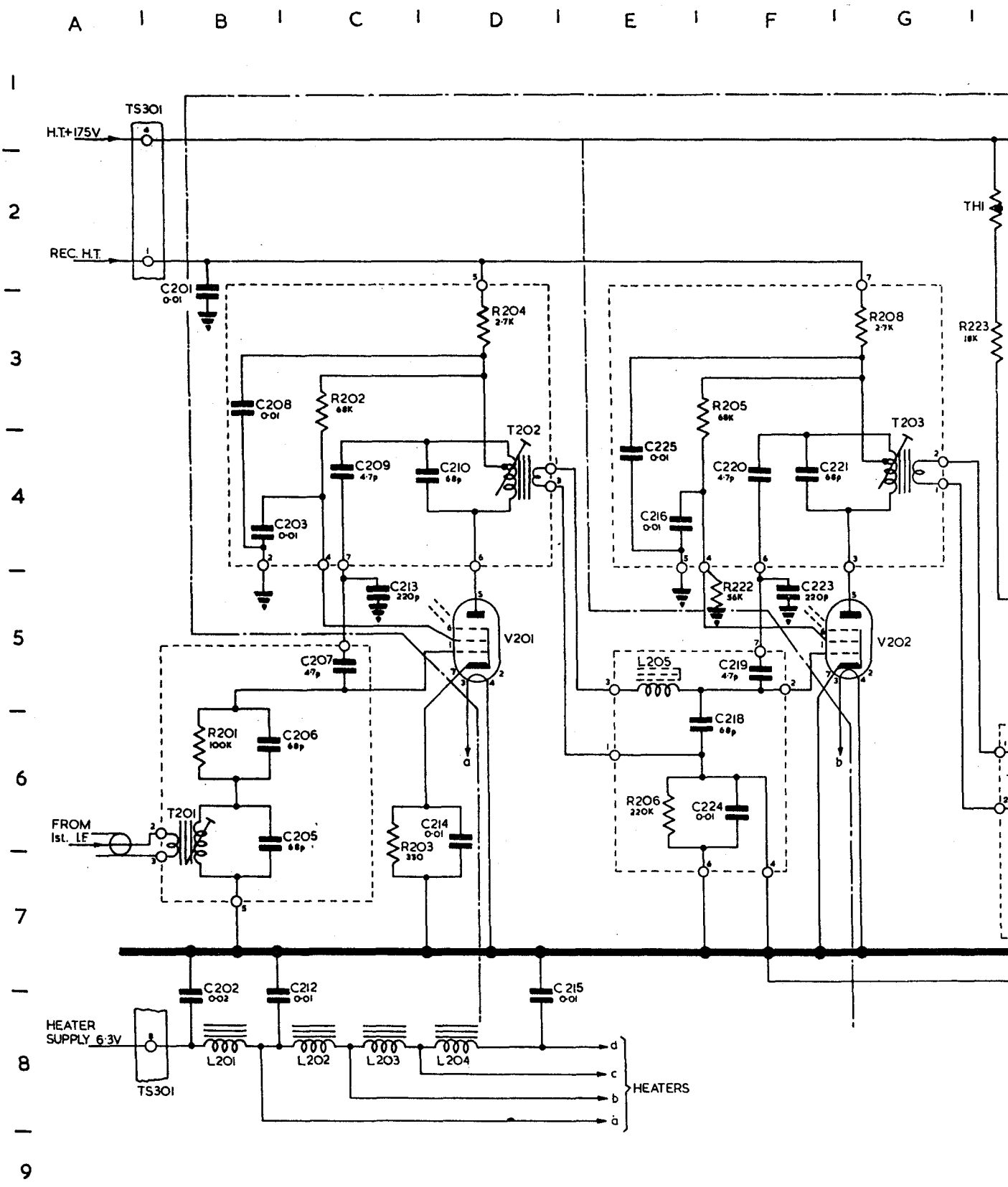
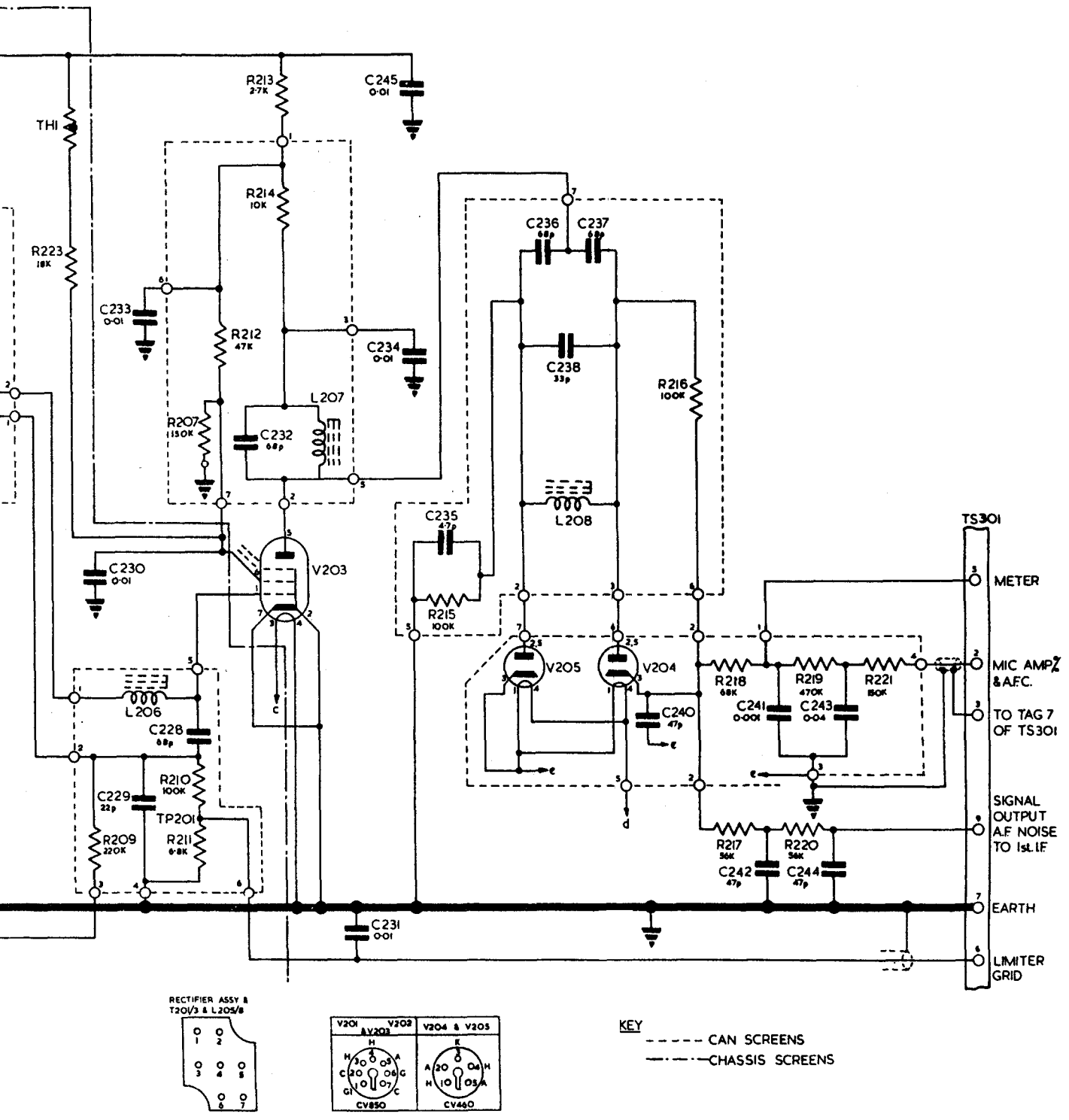
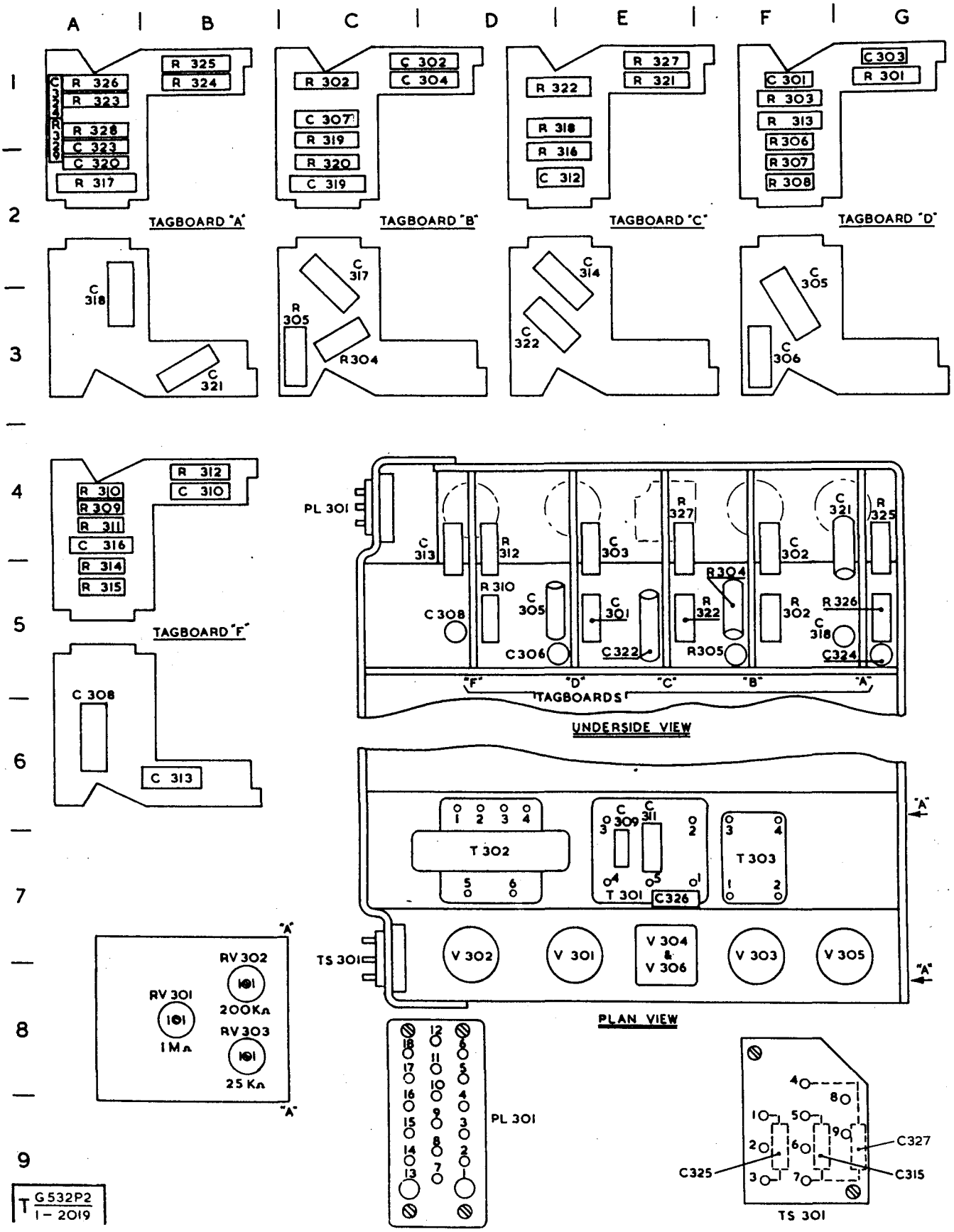


Fig 2018 - I.F. sub-

H J K L M N O



F. sub-unit, circuit diagram



T G532P2 1-2019

Fig 2019 - A.F. sub-unit, component layout

Table 2009 - A.F. sub-unit, component schedule

Cct Ref	⁎Component location: Main Cct	Fig 2020	Fig 2019	Value	Rating	⁎Type	Limit %	Part No
				RESISTORS				
R301	5L4	C3	C1	100k	1/4W	Comp	±10	Z223038
R302	5L9	C7	C1	100k	1/4W	Comp	±10	Z223038
R303	5L6	C4	F1	1M	1/4W	Comp	±10	Z223164
R304	5M7	D5	C3	56k	1/4W	Comp	±10	Z223008
R305	5M9	D7	C3	470	1/4W	Comp	±10	Z221194
R306	5L2	D2	F2	68k	1/4W	Comp	±5	ZA48130
R307	5M5	D3	F2	47k	1/4W	Comp	±5	ZA48126
R308	5M6	D4	F2	470	1/4W	Comp	±5	ZA48131
R309	5M3	E2	A4	47k	1/4W	Comp	±5	ZA48126
R310	5M4	F3	A4	2.2M	1/4W	Comp	±5	ZA48132
R311	5N4	F3	A4	470k	1/4W	Comp	±5	ZA48133
R312	5M6	F4	B4	220k	1/4W	Comp	±10	Z223080
R313	5N9	G6	F1	470k	1/4W	Comp	±10	Z223122
R314	5N2	G2	A5	22k	1/4W	Comp	±5	ZA48134
R315	5N5	G4	A5	220	1/4W	Comp	±5	ZA48135
R316	2C5	G4	D2	3.3M	1/4W	Comp	±10	Z223227
R317	2C8	H6	A2	100k	1/4W	Comp	±10	Z223038
R318	2B4	H3	D2	220k	1/4W	Comp	±10	Z223080
R319	2C4	H5	C2	330k	1/4W	Comp	±10	Z223101
R320	2C4	H5	C2	100k	1/4W	Comp	±10	Z223038
R321	2A3	K2	E1	47k	1/4W	Comp	±10	Z222215
R322	2A4	K3	D1	47k	1/4W	Comp	±10	Z222215
R323	2E6	K5	A1	22k	1/4W	Comp	±5	ZA48134
R324	2E7	K5	B1	18k	1/4W	Comp	±5	ZA48136
R325	2E8	K6	B1	15k	1/4W	Comp	±5	ZA48137
R326	2E9	K7	A1	220	1/4W	Comp	±5	ZA48135
R327	2D6	L3	E1	22k	1/4W	Comp	±10	Z222173
R328	2D7	L5	A1	56k	1/4W	Comp	±5	ZA48138
R329	2E7	M5	A1	68k	1/4W	Comp	±5	ZA48130
RV301	5L5	C3	B8	1M	1/4W	Linear preset	±20	Z/5905-Z111680
RV302	5M8	C7	B8	250k	1/4W	Linear preset	±20	Z/5905-Z111628
RV303	2A5	K4	B8	25k	1/4W	Linear preset	±20	Z/5905-Z111625
				CAPACITORS				
C301	5L4	C3	F1	0.005	200V	P.m.t.	±20	Z115823
C302	5L7	C5	D1	220p	600V	P.m.t.	±20	Z1/5910-99-911-5253
C303	5L4	C2	C1	0.005	200V	P.m.t.	±20	Z115823
C304	5L8	C6	D1	100p	600V	P.m.t.	±20	Z115803
C305	5L6	D4	F3	0.1	200V	P.m.t.	±20	ZA48034
C306	5L2	D2	F3	0.04	200V	P.m.t.	±20	Z115830
C307	5M8	D7	C1	0.01	200V	P.m.t.	±20	Z115826
C308	5M3	E2	A6	0.1	200V	P.m.t.	±20	ZA48034
C309	5N7	E6	E7	0.002	400V	P.m.t.	±20	Z115815
C310	5M4	E3	B4	0.002	400V	P.m.t.	±20	Z115815
C311	5N7	E5	E7	0.04	200V	P.m.t.	±20	Z115830
C312	509	F8	D2	0.01	200V	P.m.t.	±20	Z115826
C313	5N4	F3	B6	220p	600V	P.m.t.	±20	Z1/5910-99-911-5253
C314	5N3	F4	D3	0.1	200V	P.m.t.	±20	ZA48034

Table 2009 (contd)

Cct Ref	*Component location: Main Cct	Fig 2020	Fig 2019	Value	Rating	*Type	Limit %	Part No
C315	5E7	H4	F9	0.001	200V	P.m.t.	±20	Z115826
C316	5N3	G3	A4	0.002	400V	P.m.t.	±20	Z115815
C317	2C5	H4	C2	0.1	200V	P.m.t.	±20	ZA48034
C318	2C5	H4	A3	0.1	200V	P.m.t.	±20	ZA48034
C319	2C5	J6	C2	0.04	200V	P.m.t.	±20	Z115830
C320	2D8	H6	A2	220p	600V	P.mlt.	±20	Z1/5910-99-911-5253
C321	2D7	K6	B3	0.04	200V	P.m.t.	±20	Z115830
C322	2D7	L4	D3	0.1	200V	P.m.t.	±20	ZA48034
C323	2D7	L6	A2	0.002	400V	P.m.t.	±20	Z115815
C324	2E7	M6	A1	0.001	600V	P.m.t.	±20	Z115813
C325	5L7	C5	F9	0.01	200V	P.m.t.	±20	Z115826
C326	5L7	C5	E7	0.01	200V	P.m.t.	±20	Z115826
C327	5L2	C2	G9	0.01	200V	P.m.t.	±20	Z115826

Cct Ref	*Component location: Main Cct	Fig 2020	Fig 2019	Description	Part No
				MISCELLANEOUS	
T301	5M7	E6	E7	Squelch transformer	ZA47449
T302	2B3	H2	D7	Output transformer	ZA47450
T303	2C8	H6	F7	Microphone transformer	ZA47451
V301	5M5	E2	E8	CV 4010(850)	Z1/CV4010
V302	5N4	G3	D8	CV 4010(850)	Z1/CV4010
V303	5M8	E6	F8	CV 4010(850)	Z1/CV4010
V304	508	F6	E8	CV 469	Z1/CV469
V305	2D8	L5	F8	CV 4015(131)	Z1/CV4015
V306	2B4	K3	E8	CV 469	Z1/CV469
PL301	-	N4	C4	Plug 18-way Unitor	Z562504

*Note: See paras 1 and 2 for abbreviations

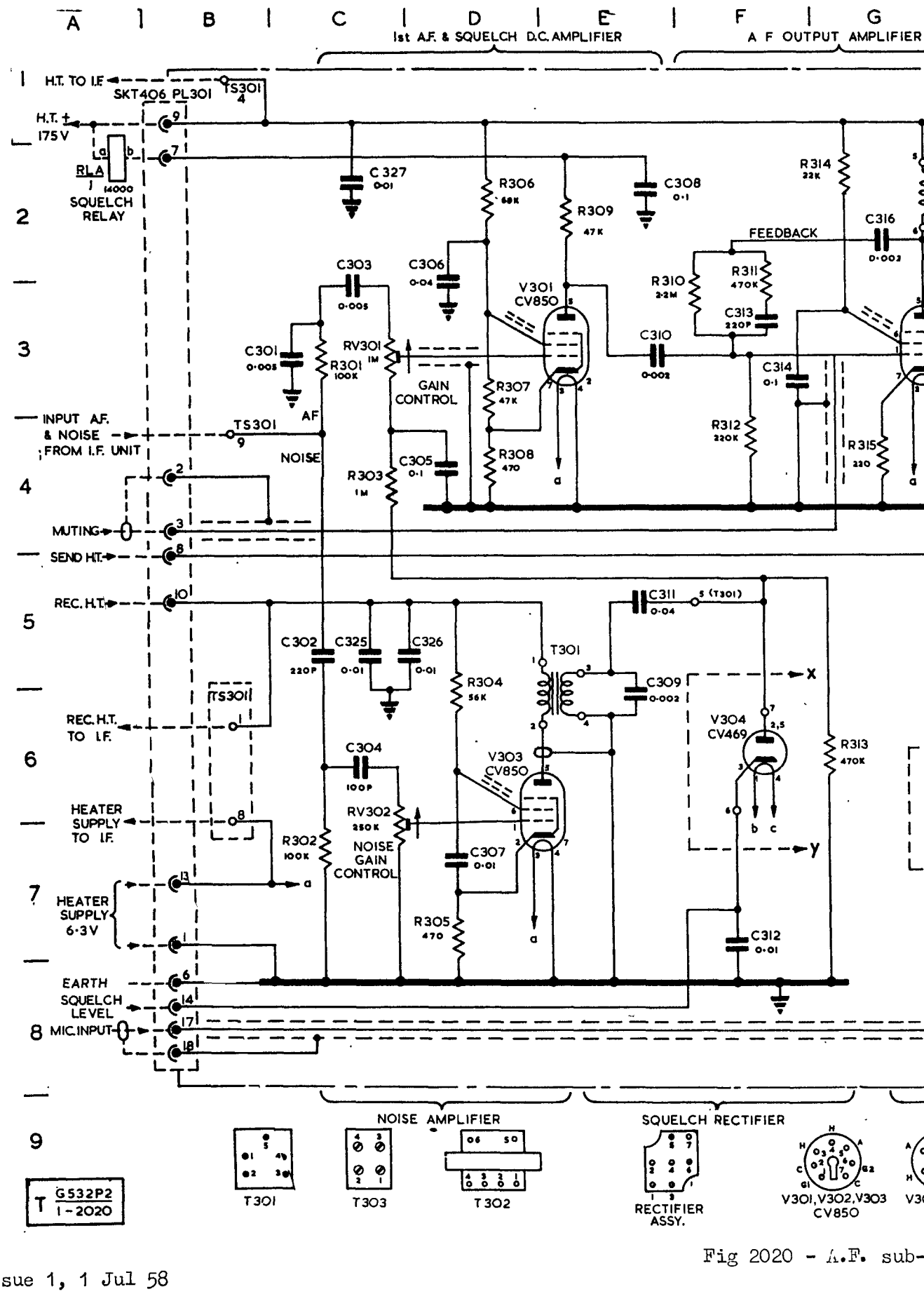
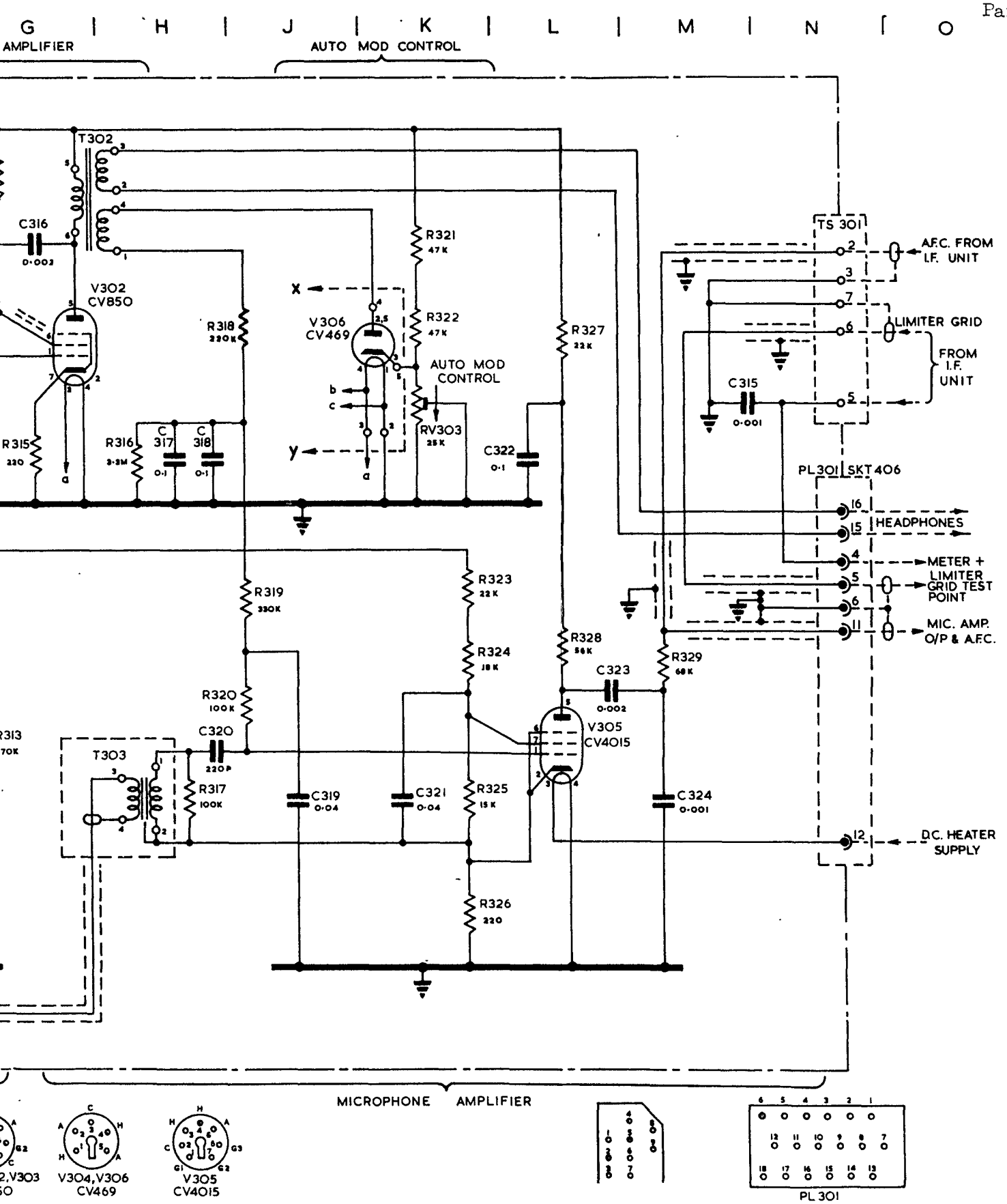
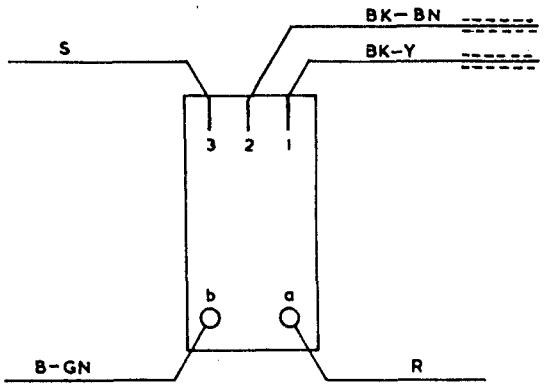


Fig 2020 - A.F. sub-



F. sub-unit, circuit diagram

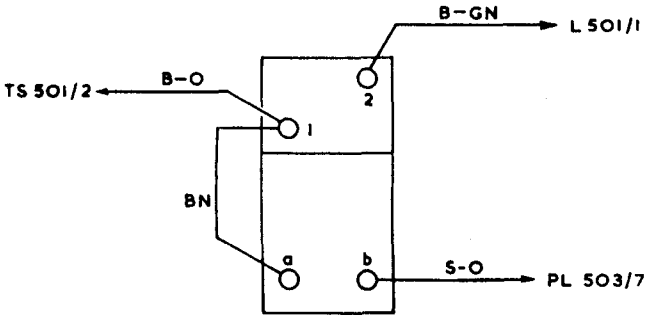


RLA

TYPE Z 114685

D.C. RES. 14000 ohms

OP. CURRENT 0·8 mA

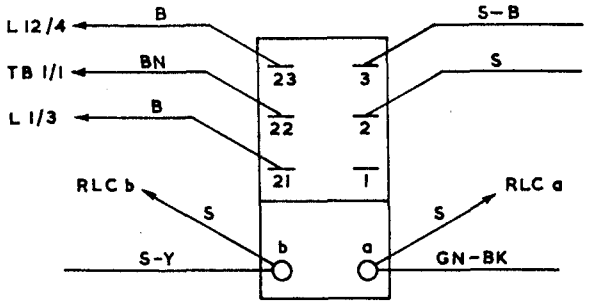


RLD

TYPE Z 530468

D.C. RES. 700 ohms

OP. CURRENT 17 mA

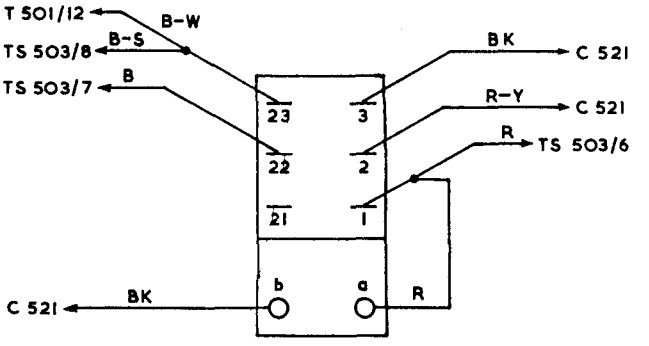


RLB

TYPE Z 530457

D.C. RES. 170 ohms

OP. CURRENT 32 mA

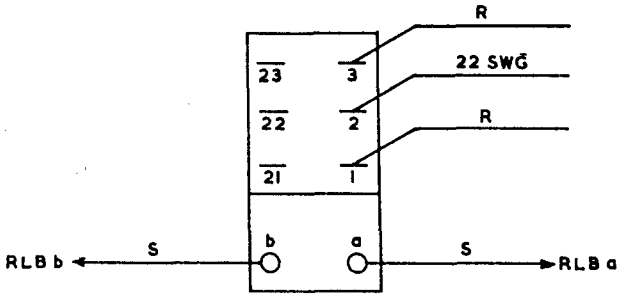


RLE

TYPE { YA 9978 / Z 11793O

D.C. RES. 7600 ohms

OP. CURRENT 5·5 mA

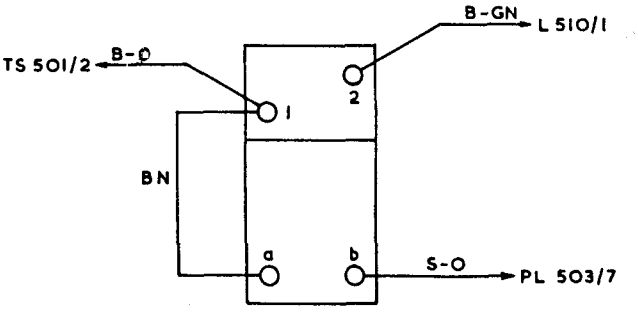


RLC

TYPE Z 530457

D.C. RES. 170 ohms

OP. CURRENT 32 mA



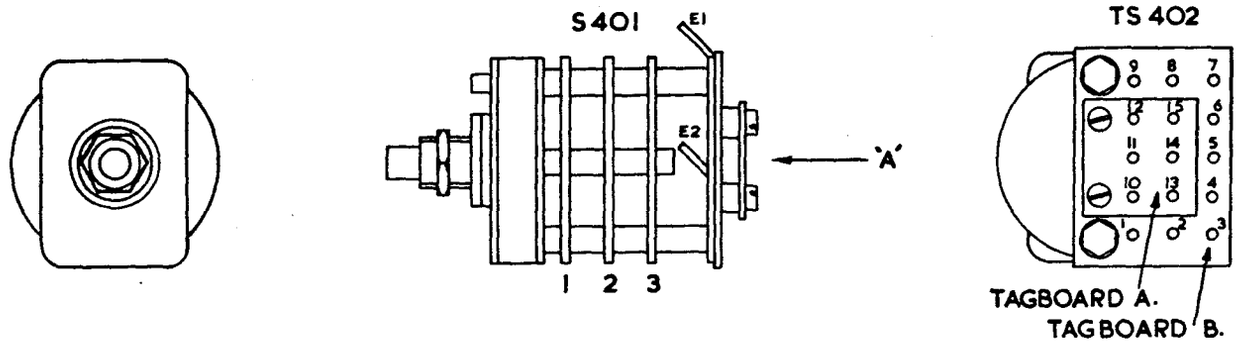
RLF

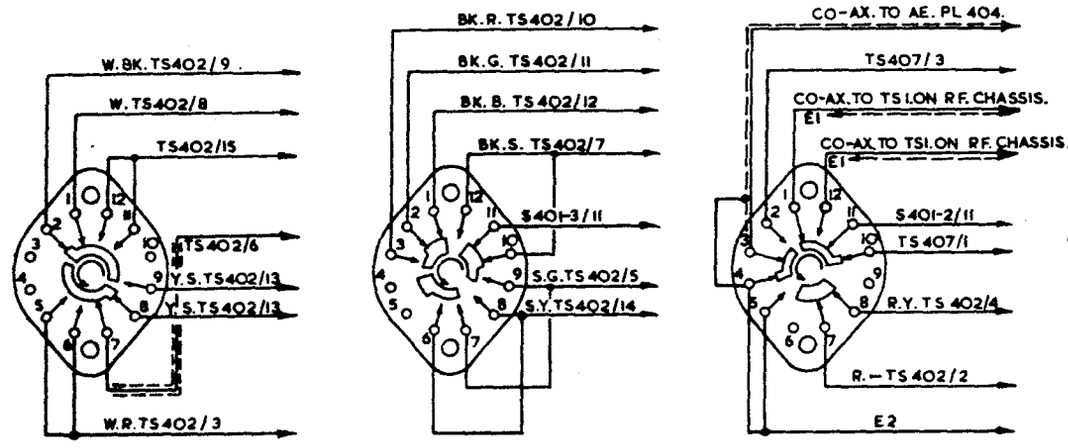
TYPE Z 530467

D.C. RES. 170 ohms

OP. CURRENT 32 mA

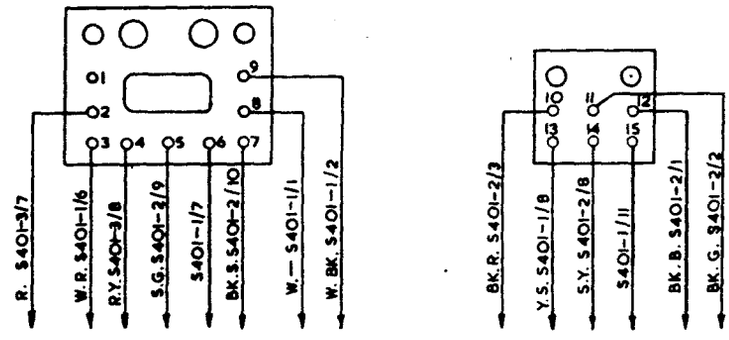
T G532P2 1—2021





S 401-1 S 401-2 S 401 - 3

SECTIONS VIEWED IN DIRECTION OF ARROW 'A'



TAGBOARD B. TS 402 TAGBOARD A. TS 402

T G532P2 1-2022

Fig 2022 - Switch S401 and tagboard TS402, wiring details

Table 2010 - Modification details

<table>
<tr><th>Set Mod No</th><th>Unit Mod No</th><th>Introduced at Serial No</th><th>Detail</th></tr>
<tr><td>1</td><td>A.F./I.F. 1</td><td>1211</td><td>Additional capacitor C327 connected between terminals 4 and 7 on TS301</td></tr>
<tr><td>2</td><td>CAL 2</td><td>1612</td><td>Calibrator re-designed to prevent oscillations in unwanted modes.

R407 was 1MΩ changed to 1.5MΩ
R406 was 100kΩ changed to 150kΩ
R405 was 2.2MΩ changed to 3.3MΩ
C404 was 33pF changed to 27pF

Additional resistor R412 connected between the junction of XL402 and C403 and terminal TS403/4

Grid circuit wiring re-routed and 18 SWG used

TS403 connections changed:-

<table><tr><th>Function</th><th>Former terminal</th><th>Present terminal</th></tr><tr><td>Grid</td><td>1</td><td>6</td></tr><tr><td>100kc/s</td><td>2</td><td>4</td></tr><tr><td>1Mc/s</td><td>3</td><td>5</td></tr><tr><td>Output</td><td>4</td><td>3</td></tr><tr><td>L.T.</td><td>5</td><td>2</td></tr><tr><td>H.T.</td><td>6</td><td>1</td></tr></table>
C403 was 3-30pF changed to 4-60pF</td></tr>
<tr><td>3</td><td>R.F. 1</td><td>1596 to 1611 and 1617 onwards</td><td>Additional padder C31 added. Film scale (ZA49413) introduced to fit new tracking law due to C31, the new film scale can be identified as the Part No is printed on it.

C46 was 0.01μF, increased to 0.04μF</td></tr>
<tr><td>4</td><td>CAL 2</td><td>2635</td><td>Additional resistor R413 connected in parallel with C402</td></tr>
<tr><td>5</td><td>R.F. 2</td><td>2982</td><td>Series-parallel combination (C2, C7, C35) replaced by C2 (6.8pF N1500) in parallel with C37.</td></tr>
<tr><td>6</td><td>R.F. 3</td><td>Approx 3400</td><td>C69 was 4.7pF N2500, replaced by 5.6pF N2200</td></tr>
</table>

Note: The circuit diagrams in this EMER incorporate the above modifications. This EMER does not authorise the carrying out of these modifications; the relevant Modification instruction will give details and authority.

Table 2011 - Test equipment schedule, field and base repairs

Preferred instrument		Suitable alternative	
Part No	Designation	Part No	Designation
ZD02674	Signal generator No 12	ZD00391	Signal generator No 1 Mk 3
ZD04302	Signal generator No 18	WD3941	Signal generator No 13
N.I.V.	Multi-range testmeter (20,000Ω per volt)	ZD00252	Instrument, testing, Avometer 8S, 28-range
Z4/105/831	Oscilloscope type 13A	WY2435	Oscillograph, C.R., No 1 Mk 2
ZD00661	Wattmeter, absorption, A.F., No 1	ZD0063	Meter, output power, No 3 Mk 2
N.I.V.	Calibrator, crystal, precision	WY0241	Wavemeter, standard, No 2
	*Test set, type AM193		-
	*Test set, type AM330		-
ZD00747	Wattmeter, absorption, H.F., No 2		-
ZD00657	Voltmeter, valve, No 3	ZD00617	Instrument, testing, electronic, multi-range, No 1
N.I.V.	Audio frequency oscillator (under development)	ZD00198	Oscillator, B.F., No 8
ZD00193	Test set, deviation, F.M., No 2		-
N.I.V.	Frequency meter, R.F., portable (under development)	ZC1411	Frequency meter SCR 211
Z4/6625-99-942-4825	Ovens, drying, Tels, 240V, A.C.		-
ZD02172	Tester, valve, CT 160	ZD00286	Tester, valve, AVO No 3 or No 1 Mk 2
NC53340	Apparatus, seal, testing		-
N.I.V.	Multi-range testmeter (1,000Ω per volt)	ZD00207	Instrument, testing, Avometer universal, 50-range, No 2
ZD03985	Kits, testing, vehicle and manpack wireless sets		Local manufacture, see Tels H 444 Part 1

*Used in conjunction with Wavemeter, standard, No 2 in base workshops for crystal testing.

Table 1012 - Specification tests, wireless set

Notes

1. The conditions of test are as specified in Tels G 534.

2. The tests quoted are those considered necessary to check the serviceability of a set. They do not include those tests in the original specification which are purely of design interest.

3. The figures quoted are those in the original design specification. During production these figures are sometimes modified. Any such changes will be included in the Inspection Standard Tels G 538.

Receiver

4. Quieting: Input signal: 1.25μV for a minimum of 10dB quieting.

Test frequencies: 38.7, 47 and 55Mc/s.

5. Bandwidth:

(a)

Input voltage		Bandwidth	Test frequency
Initial	1.0μV	-	47Mc/s
3 dB	1.4μV	50 - 74kc/s	
60 dB	1.0mV	260kc/s max	

(b) Asymmetry at 3 dB: ±2kc/s

Asymmetry at 60 dB: ±10kc/s

6. A.F. output and regulation:

Test signal: 47Mc/s modulated 1kc/s, deviation 10kc/s, 10μV.

A.F. output: 150mW ±25mW into 50Ω (adjustment of RV301).

A.F. regulation: When the load impedance is changed from 50 to 150Ω the a.f. output shall decrease by more than 40%.

7. Squelch:

(a) Tune the set to 47Mc/s, set the front panel control RV401 two thirds of the way towards its fully clockwise position, adjust RV302 until the set just 'mutes'.

(b) Maximum sensitivity test: 5 dB.

(c) Minimum sensitivity test: 10 dB.

Sender

8. R.F. output:

(a) Test frequencies: 38.7, 47 and 55Mc/s.

Input volts: 23 or 11.5 dependant upon set voltage.

Switch S401	Dummy load	Output
HP NOISE OFF	70Ω	0.5W min
LP NOISE OFF	70Ω	*0.5 - 1.5V min
*Measured on valve voltmeter connected across the load.		

(b) Low input volts: 20.7 or 10.35

R.F. output: To be not less than 50% of that obtained in the HP NOISE OFF test at normal volts.

9. Deviation:

Microphone input		Signal Frequency	Deviation
Volts	Frequency		
20mV	2,200c/s	47Mc/s	4.5 ±0.5kc/s
200mV	300c/s	47Mc/s	not to exceed three times that with 20mV
200mV	3,000c/s	47Mc/s	not to exceed three times that with 20mV

10. Sealing test:

Pressure: Initial, 5 lb per square inch.

After 12 hours, 4 lb per square inch minimum.

Leakage rate: 30 c.c. per hour max.

Time constant: 50 hours.

Table 2013 - Specification tests, power supply unit, 12V

1. Input current:

Load conditions: HP SEND

Input voltage: 11.5V

Input current: 6.0A max.

2. H.T. ripple voltage:

Conditions as in 1. Ripple voltage 0.8 max.

3. Output voltages: HP SEND, nominal input voltages

Output voltage	*Specification with 11.5V input	Specification with 13.0V input
175V d.c.	155 - 170	145 - 160
6.3V a.c.	5.9 - 6.7	5.5 - 6.4
Lamps	10.5 - 11.5	10.2 - 11.3
Relays	10.5 - 12.5	10.0 - 11.0
Sidechain diodes	10.7 - 11.7	

*Voltage control line earthed.

4. Output voltages: with limit input voltages

Output voltage	*Specification with 10.35V or 12.75V input	Specification with 11.75V or 14.5V input	Condition
175V d.c.	135 - 190	135 - 185	HP SEND
6.3V a.c.	5.1 - 7.6	5.1 - 7.2	
Lamps	9.5 - 12.5	9.3 - 12.0	
Relays	9.5 - 12.5	9.3 - 12.0	
Mic. amp.		Not less than 5.1	
175V d.c.	140 - 200	140 - 193	RECEIVE
6.3V a.c.	5.1 - 7.6	5.1 - 7.3	
Lamps	9.5 - 12.5	9.5 - 12.5	
Mic. amp.		Not greater than 7.8	

*Voltage control line earthed

Table 2014 - Specification tests, power supply unit, 24V

1. Guard relay check: relay should operate one second after switching on.

2. Input current:

   Load conditions: HP SEND

   Input voltage: 23V

   Input current: 3.0A max.

3. H.T. ripple voltage:

   Conditions as in 2. Ripple voltage 0.8 max.

4. Output voltages: HP SEND, nominal input voltages

Output voltage	*Specification with 23V input	Specification with 26V input
175V d.c.	155 - 170	145 - 160
6.3V a.c.	5.9 - 6.7	5.5 - 6.4
Lamps	10.5 - 11.5	10.2 - 11.3
Relays	11.5 - 12.6	11.1 - 11.9
Sidechain diodes	10.7 - 11.7	10.7 - 11.7
*Voltage control line earthed		

5. Output voltages: with limit input voltages.

Output voltage	*Specification with 20.7V or 25.5V input	Specification with 23.3V or 29V input	Condition
175V d.c.	135 - 190	135 - 185	
6.3V a.c.	5.2 - 7.6	5.1 - 7.2	
Lamps	9.5 - 12.8	9.3 - 12.5	HP SEND
Relays	10.5 - 14.0	10.1 - 13.7	
Mic. amp.		Not less than 5.1	
175V d.c.	145 - 200	145 - 193	
6.3V a.c.	5.2 - 7.6	5.1 - 7.3	RECEIVE
Lamps	10.0 - 12.9	9.5 - 12.6	
Mic. amp.		Not more than 7.8	
* Voltage control line earthed			

Table 2015 - Valve testing data

Service Type	Civilian Type	Selector switch	Tester	Vh	Vg-	Va	Vsg	An Selr	mA/V	Ia
CV 4010	6AK5	412 365 100	a	6	-	100	100	-	4.0	-
			b	6	2.3	150	150	-	4.3	7
CV 469	EA76	281 380 000	a	6	-	-	-	-	-	-
			b	6	-	-	-	-	-	5
CV 4015	9D6	412 361 500	a	6	-	100	100	-	2.5	-
			b	6	2.5	250	200	-	2.5	8
CV 4040	6F17	412 361 500	a	6	-	-	-	-	-	-
			b	6	2	150	150	-	6	46
CV 1833	OB2	610 160 100	b	Maximum striking voltage 127 Approx. working voltage 108 Operating current: min 5mA, max 30mA						

Notes: Tester a refers to Tester, valve, Avo, No 1 Mk 1 or Mk 2

b refers to Tester, valve, Avo, No 3 and Tester, valve, CT 160

END

EME8/739

STATION, RADIO, B47

FORWARD CODING

Note: The following list of Assembly Codes must be used in conjunction with EMER Mgmt J 021 Part 4.

Assembly Code	Designation
0001	Transmitter-receiver, radio, B47
0002	R.F. unit
0003	I.F. unit
0004	A.F. unit
0005	Calibrator unit
0006	Power supply unit, 12V
0007	Power supply unit, 24V
0008	Front panel and centre unit
0009	Case assembly (normal)
0010	Case assembly (aircraft installation)
0011	Cableform
0012	Antenna
0013	Aerial tuning unit 2 (No 8)
9999	Miscellaneous

EME8c/739/Tels

END

ELECTRICAL AND MECHANICAL ENGINEERING REGULATIONS
(By Command of the Army Council)

TELECOMMUNICATIONS
G 532
Part 2

TRANSMITTER-RECEIVER, RADIO, B47

TECHNICAL HANDBOOK - FAULT-FINDING AND REPAIR DATA

Errata

Note: These Pages 02 and 03, Issue 2, supersede Pages 03 and 04, Issue 1, dated 30 Apr 63, and will be filed immediately in front of Page 1001, Issue 1, dated 1 Jul 58. The para and page numbers have been amended.

8. The following amendments will be made to the regulation.

9. Page 1005, Fig 2002 - Sender, circuit diagram, grid ref G5

Insert a capacitor symbol, the connections, and the designation 'C68 0.001', between pin 2 of V8 and earth

(Fig 2014 - R.F. sub-unit, circuit diagram, grid ref H9 refers).

10. Page 1009, Fig 2005 - Receiver i.f. and a.f. circuit diagram, grid ref B3, R202.

Delete: '68K'
Insert: '27K'

11. Page 1011, Fig 2007 - Power supply unit 24V, circuit diagram, grid ref G6

Delete: 'SKT 503'
Insert: 'SKT 403'

12. Page 1019, Table 2004 - Power supply unit 24V, component schedule

(a) Component ref L504-L508

Delete: '4.5H, ZA 47475'
Insert: 'ZA 47474'

(b) Component ref VB 501

Delete: 'ZA 45590'
Insert: 'ZA 45990'

13. Page 1024, Table 2006 - R.F. sub-unit, component schedule, component ref RLA

Delete: '1400Ω'
Insert: '14,000Ω'

14. Page 1029, Table 2008 - I.F. sub-unit, component schedule, component ref R202

Delete: '68k, ZA 48130'
Insert: '27k, ZA 48128'

15. Page 1031, Fig 2018 - I.F. sub-unit, circuit diagram, grid ref C3, component ref R202

Delete: '68K'
Insert: '27K'

16. Page 1040, Table 2012 - Specification tests, wireless set

(a) Title

Delete: 'Table 1012'
Insert: 'Table 2012'

(b) Note 5(a) - table - centre column, bandwidth, line 2

Delete: '50-74kc/s'
Insert: '58-74kc/s'

EME 8/2146

TRANSMITTER-RECEIVER, RADIO, B47

TECHNICAL HANDBOOK - FAULT-FINDING AND REPAIR DATA

Errata

Note: These Pages 04 - 05, Issue 1, will be filed immediately in front of Page 1001, Issue 1, dated 1 Jul 58

17. The following amendments will be made to the regulation.

18. Page 1021, Fig 2014, R.F. sub-unit, circuit diagram

(a) PL1 (grid ref 2A) the unnumbered pin between 20 and 18 is to be numbered '15'.

(b) V3, V4 and V5, heater lead arrows,

Delete: 'Z'
Insert: 'Y'

Distribution - Class 334. Code No 3

(c) PL1/6 (grid ref 5A), arrow head from pin,

Delete: 'Z'
Insert: 'Y'

(d) Unit containing V6 and V10, end of lead from pin 5 (grid ref 9F),

Delete: 'Z'
Insert: 'PL1/4'

T/61306/MAG

TRANSMITTER-RECEIVER, RADIO, B47

TECHNICAL HANDBOOK - FAULT-FINDING AND REPAIR DATA

Errata

Note: This Page 06, Issue 1, will be filed immediately in front of Page 1001, Issue 1, dated 1 Jul 58.

The following amendments will be made to the regulation.

19. Page 1011, Fig 2007, component ref R519, grid ref F3

Delete: R519 and earth symbol in its entirety
Insert: R519 at the junction of R520 and PL503/10 (immediately below) and earth symbol, and correct the value of R519 to 54Ω

EME8c/739

TRANSMITTER-RECEIVER, RADIO, B47

TECHNICAL HANDBOOK - FAULT FINDING AND REPAIR DATA

Errata

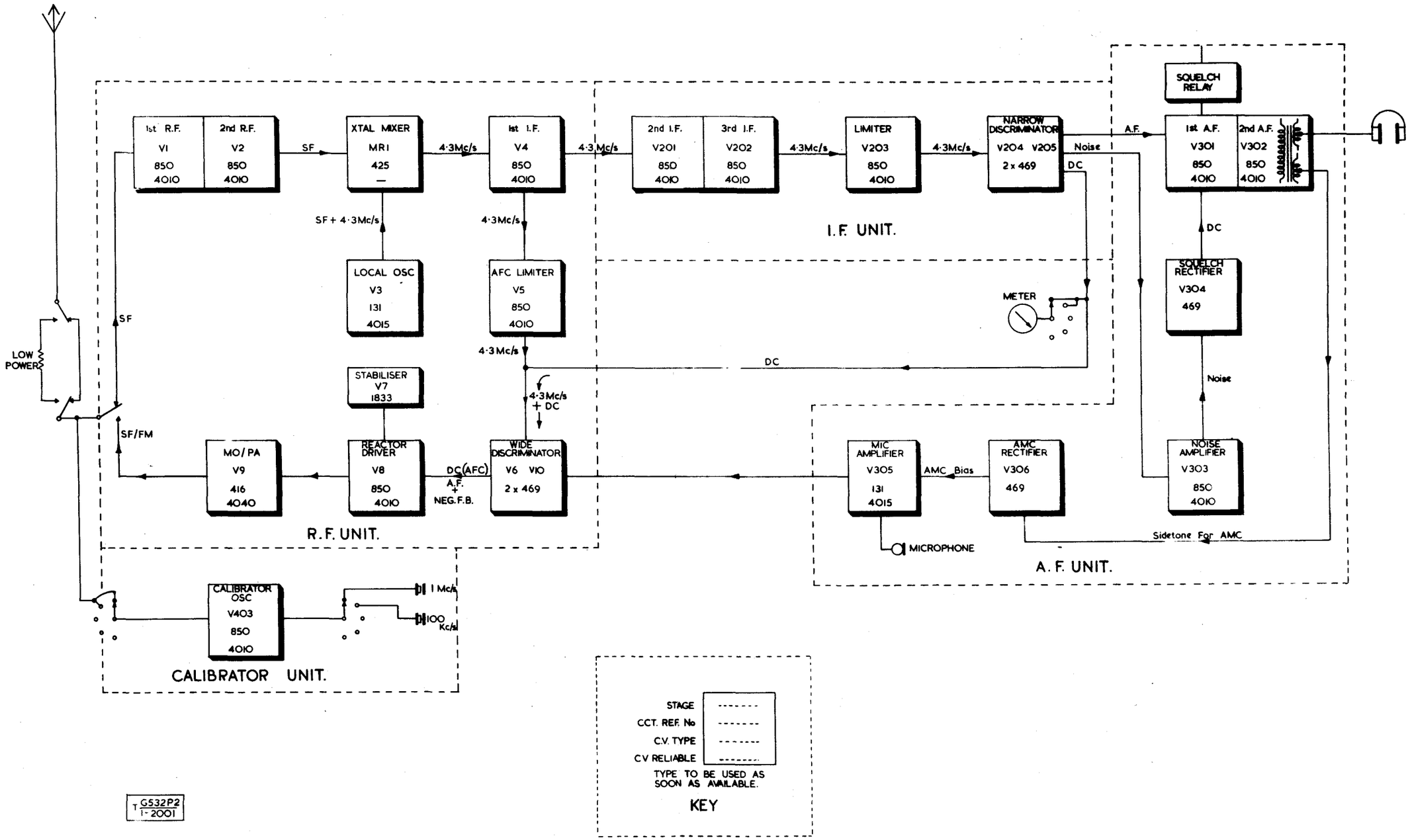
Note: This Page 07, Issue 1, will be filed immediately in front of Page 1001, Issue 1, dated 1 Jul 58.

(The following amendments will be made to the regulation).

17. Page 1021 Fig 2014 on PL1 cct ref A3 pin 7

Delete: '7'
Insert: '17'

T/8/739


1st R.F.
V1
850
4010
2nd R.F.
V2
850
4010
SF
XTAL MIXER
MR1
425
—
4·3Mc/s
1st I.F.
V4
850
4010
4·3Mc/s
2nd I.F.
V201
850
4010
3rd I.F.
V202
850
4010
4·3Mc/s
LIMITER
V203
850
4010
4·3Mc/s
NARROW DISCRIMINATOR
V204 V205
2 x 469
Noise
DC
A.F.
SQUELCH RELAY
1st A.F.
V301
850
4010
2nd A.F.
V302
850
4010
I.F. UNIT.
SF + 4·3Mc/s
LOCAL OSC
V3
131
4015
4·3Mc/s
AFC LIMITER
V5
850
4010
DC
SQUELCH RECTIFIER
V304
469
METER
Noise
LOW POWER
SF
4·3Mc/s
DC
STABILISER
V7
1833
4·3Mc/s
+ DC
SF/FM
MO/PA
V9
416
4040
REACTOR DRIVER
V8
850
4010
DC(AFC)
A.F.
+
NEG.F.B.
WIDE DISCRIMINATOR
V6 V10
2 x 469
MIC AMPLIFIER
V305
131
4015
AMC Bias
AMC RECTIFIER
V306
469
NOISE AMPLIFIER
V303
850
4010
MICROPHONE
Sidetone For AMC
A. F. UNIT.
R.F. UNIT.
CALIBRATOR OSC
V403
850
4010
1 Mc/s
100 Kc/s
CALIBRATOR UNIT.
STAGE
CCT. REF. No
C.V. TYPE
C.V RELIABLE
TYPE TO BE USED AS SOON AS AVAILABLE.
KEY
T G532P2 1-2001

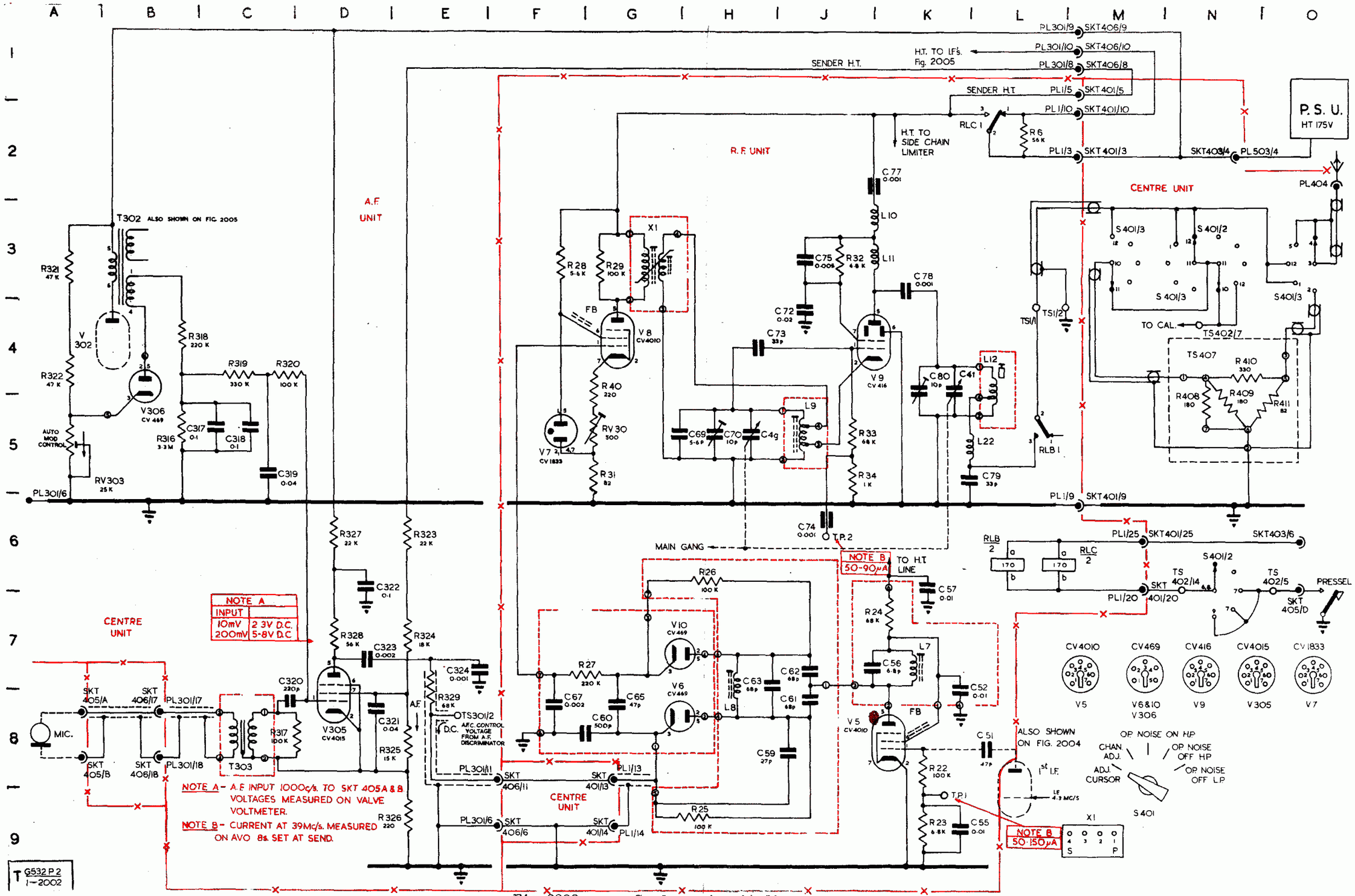
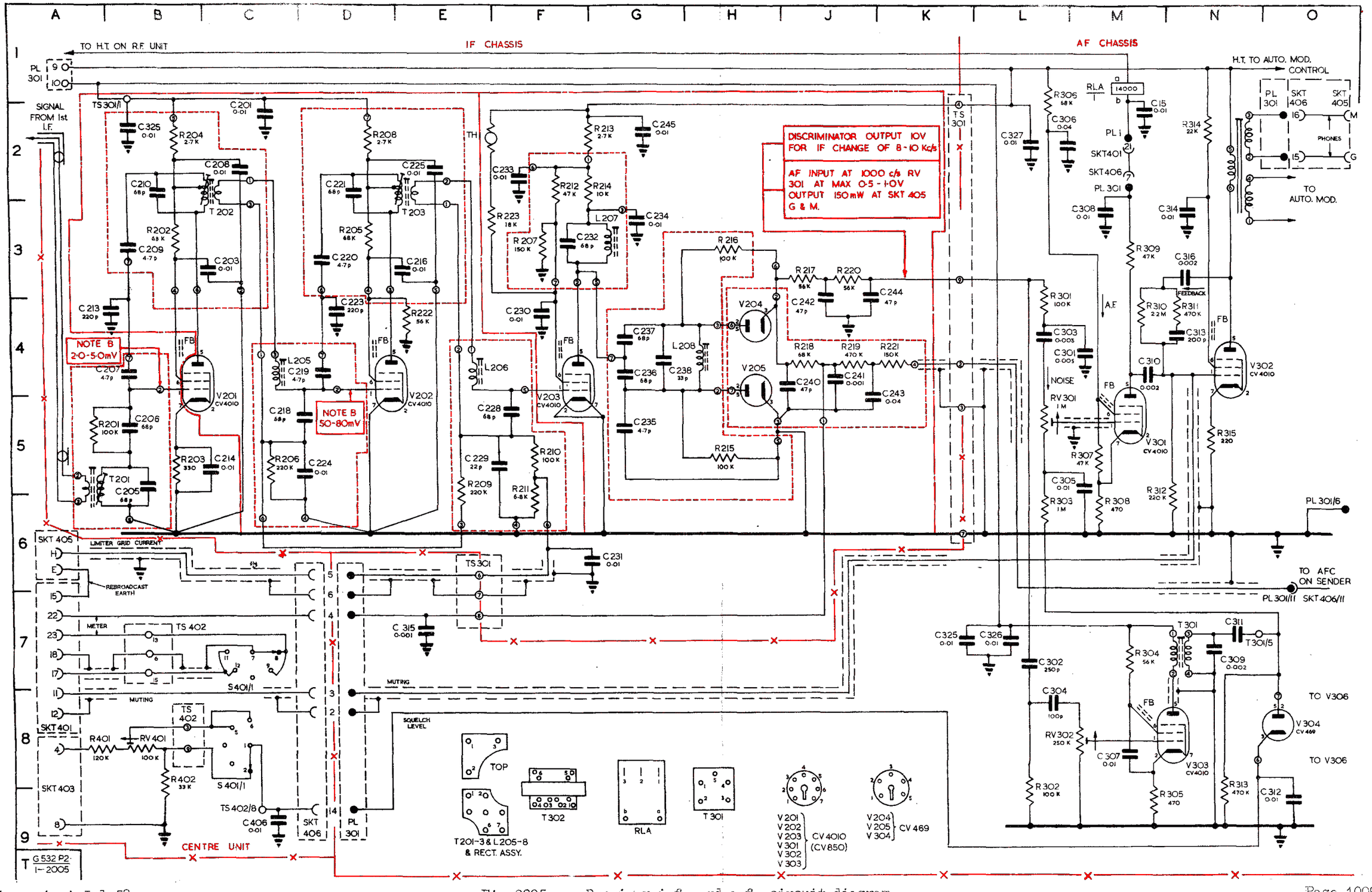


Fig 2002 - Sender, circuit diagram



T G 532 P2 1-2005

Issue 1, 1 Jul 58

Fig 2005 - Receiver i.f. and a.f. circuit diagram

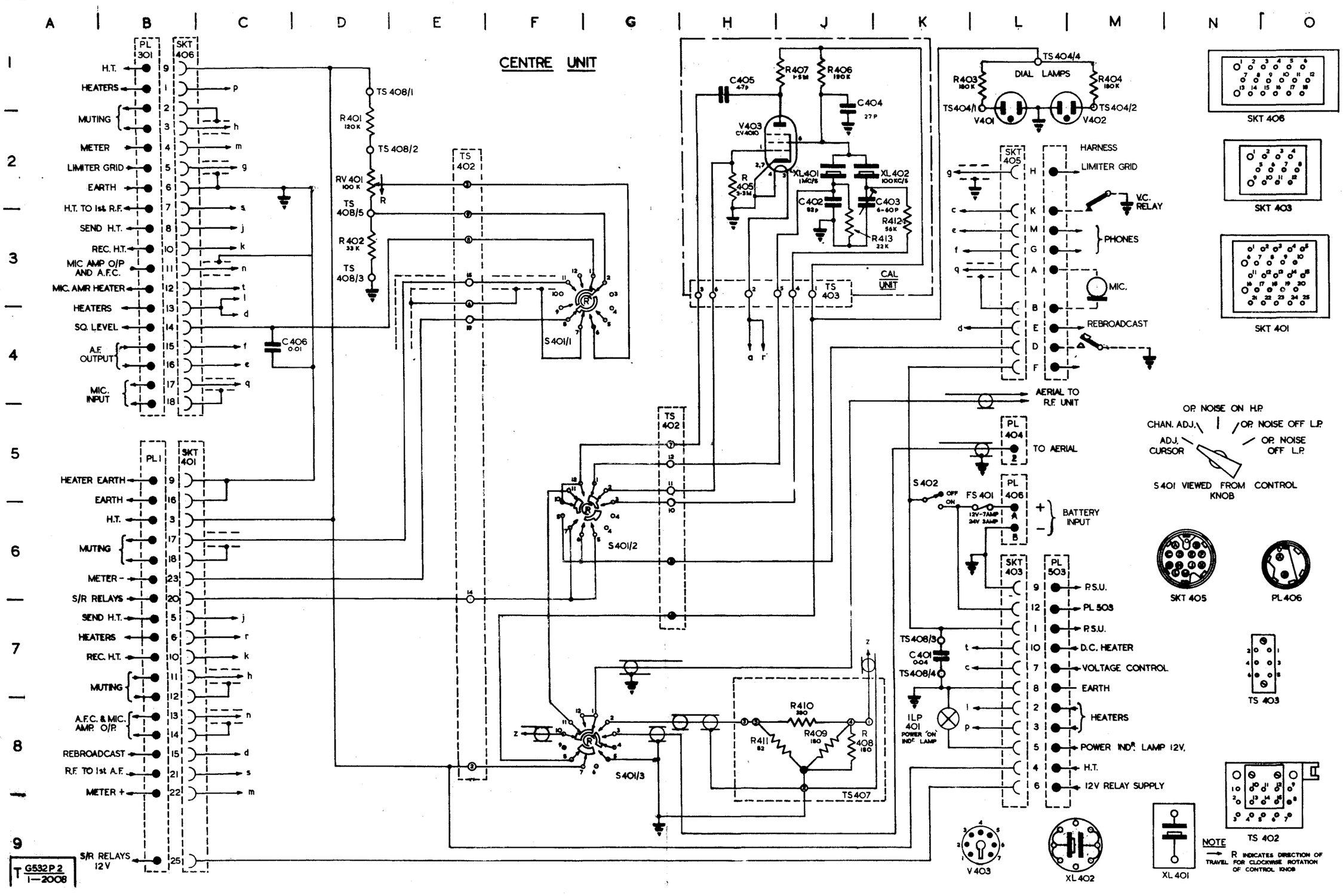


Fig 2008 - Front panel and centre unit, circuit diagram

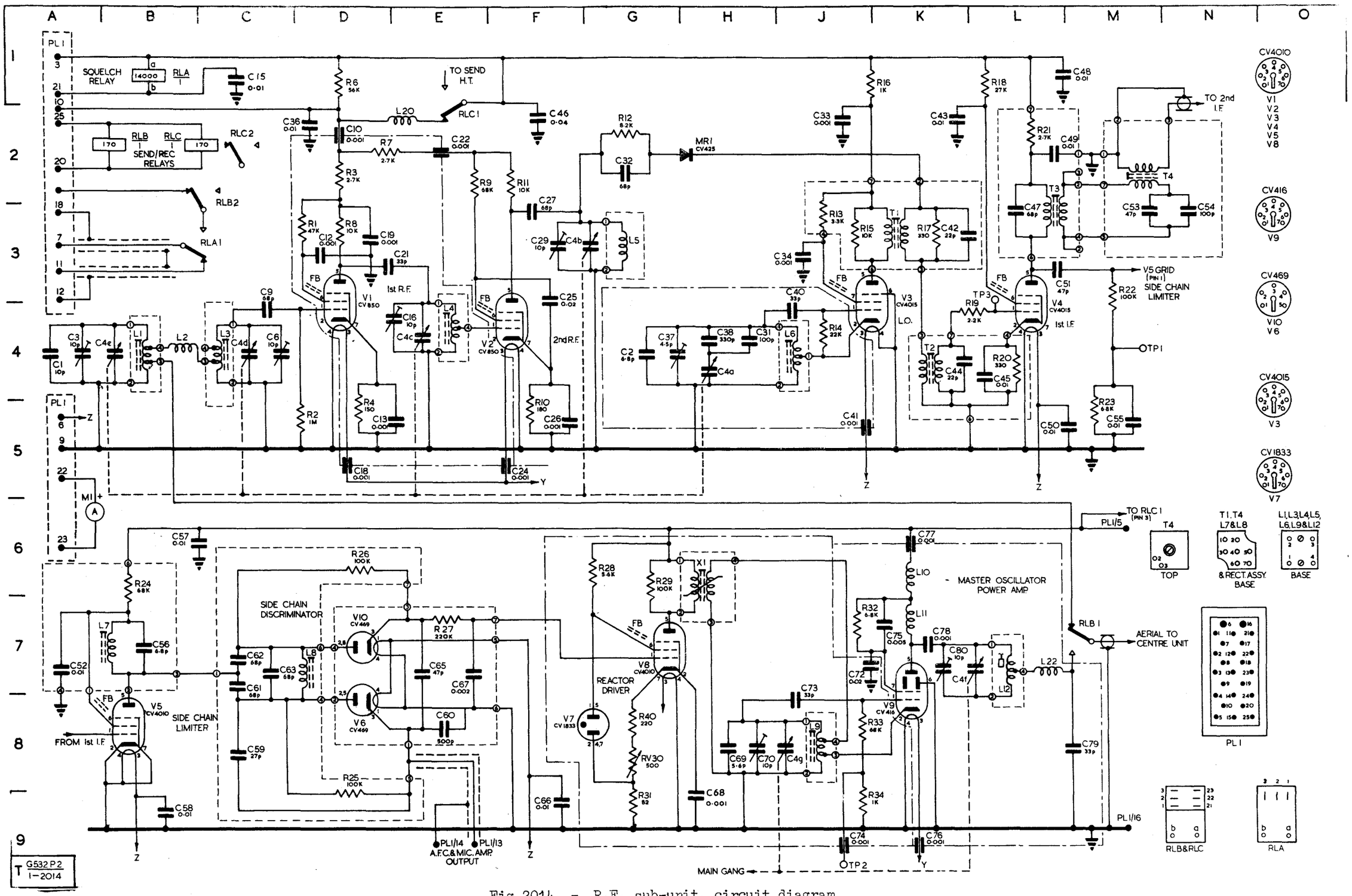
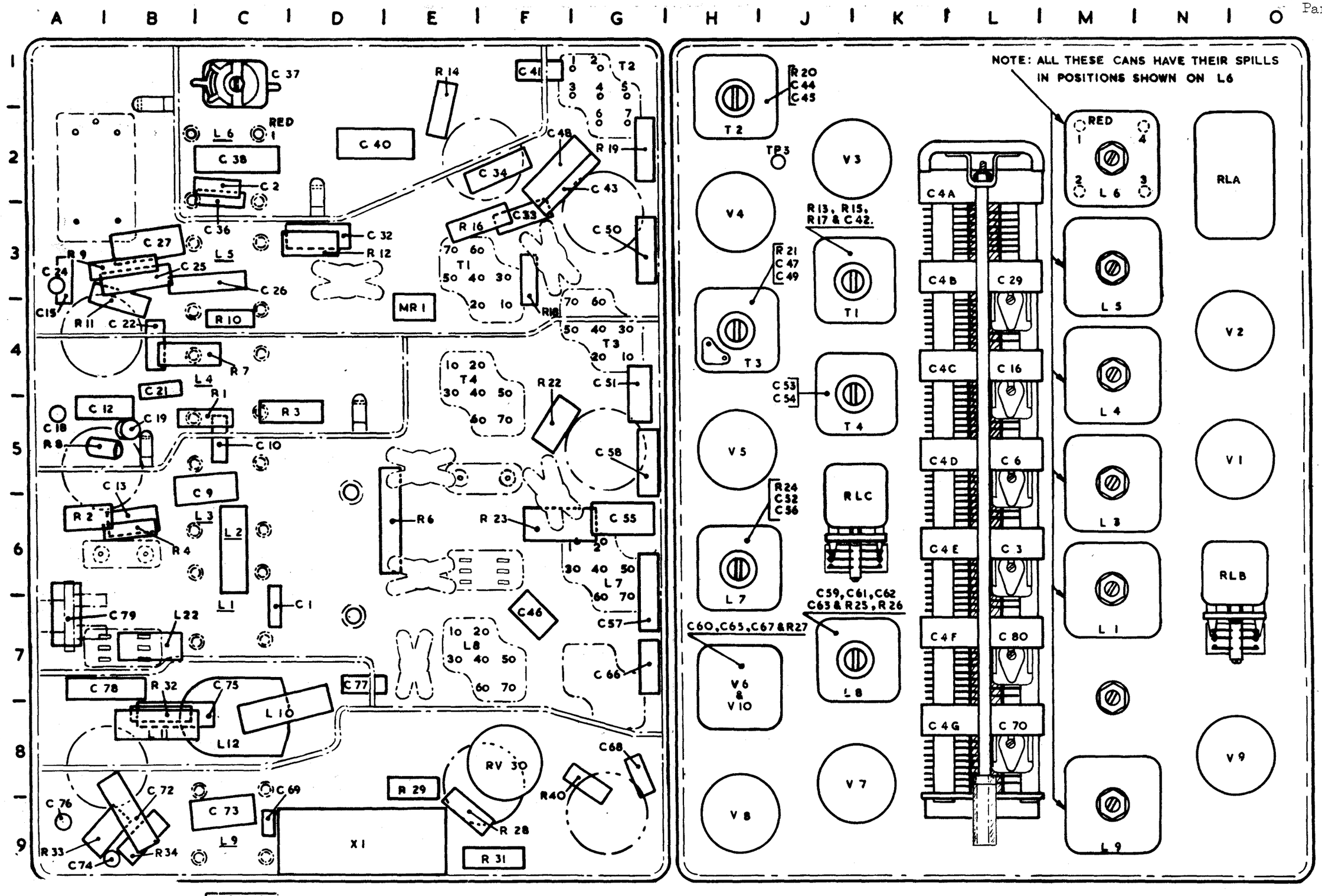


Fig 2014 - R.F. sub-unit, circuit diagram



T C532P2 1-2015

Fig 2015 - R.F. sub-unit, component layout

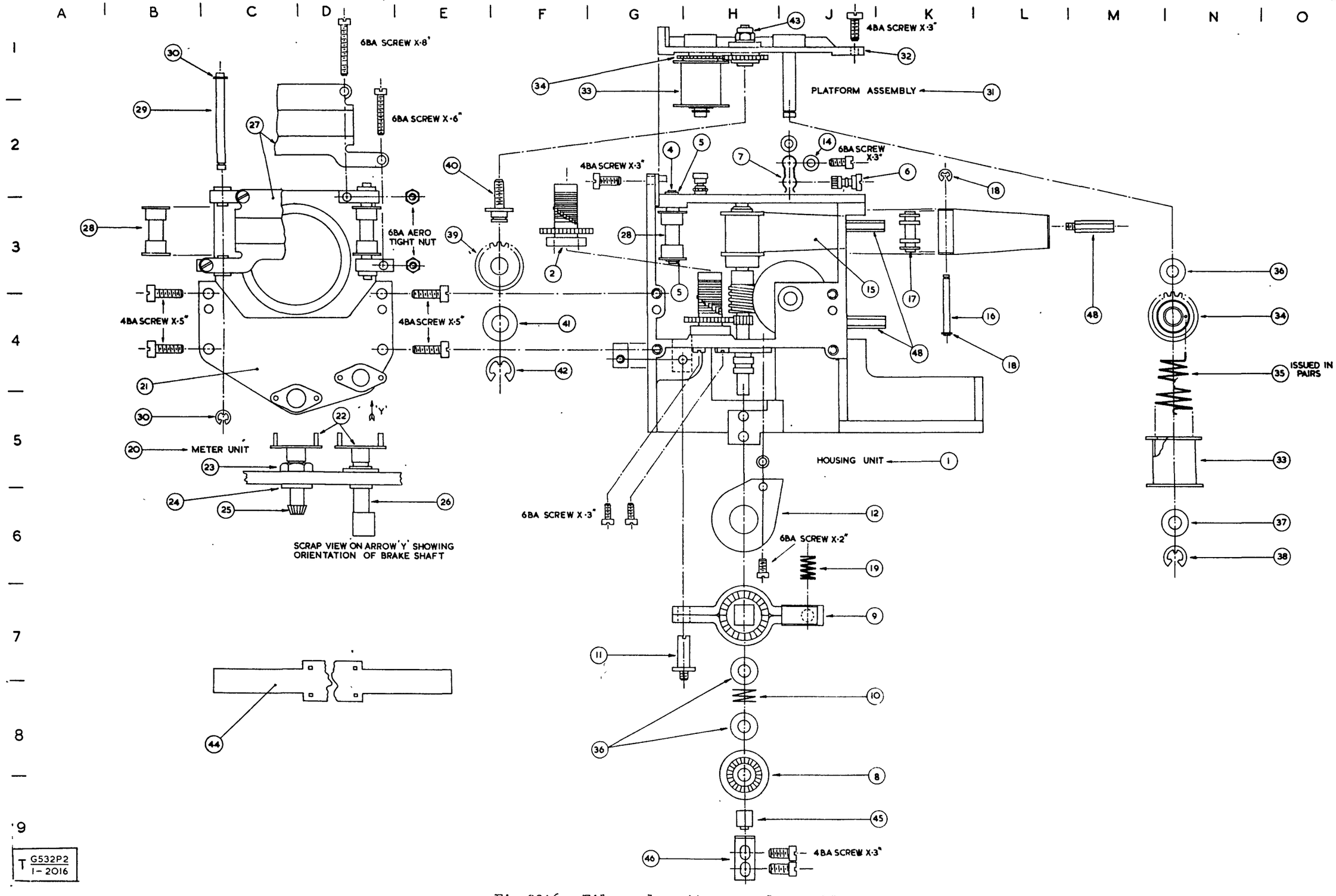
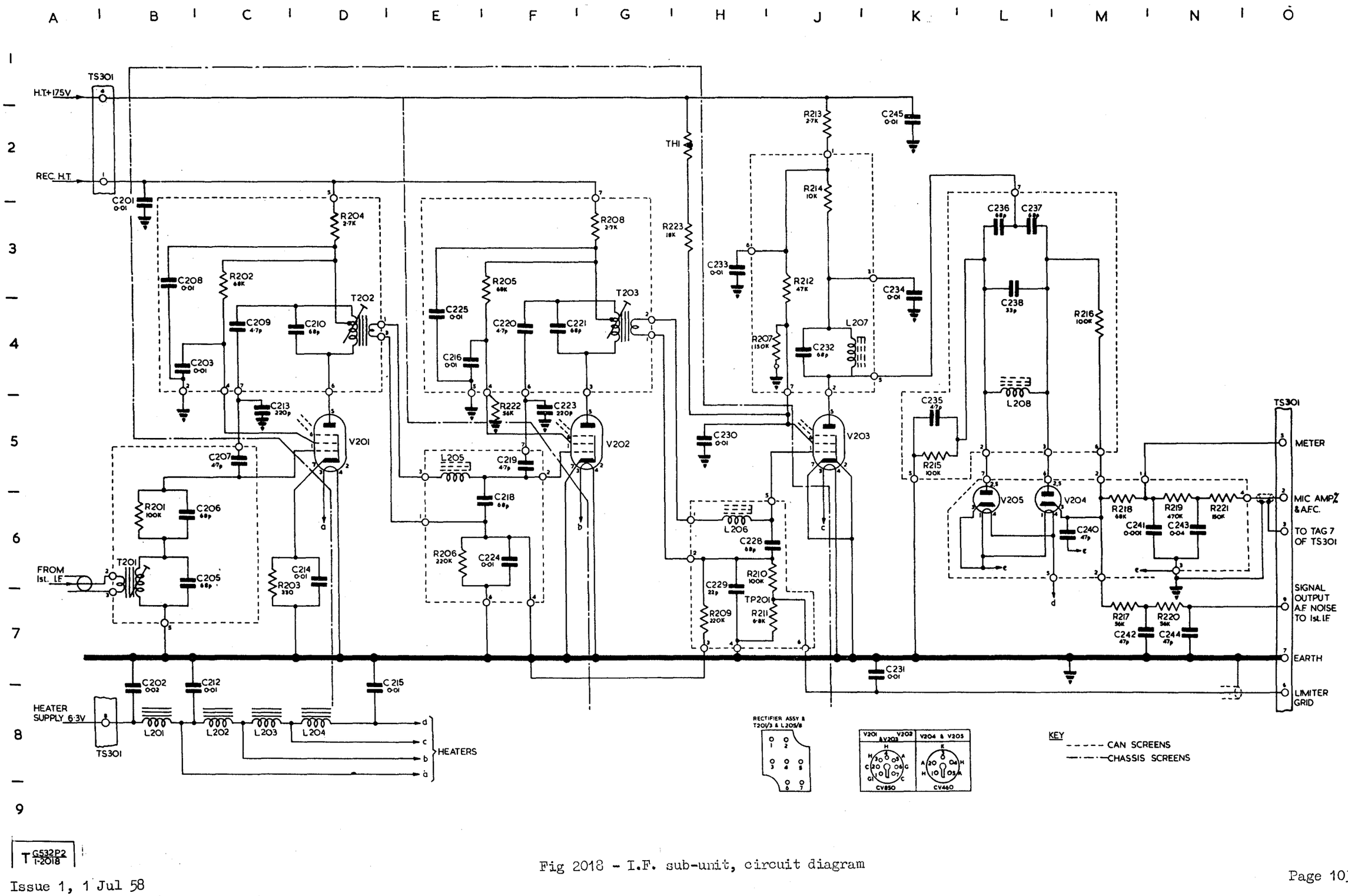


Fig 2016 - Film scale unit, general assembly

T G532P2 1-2016



T G532P2 1-2018

Fig 2018 - I.F. sub-unit, circuit diagram

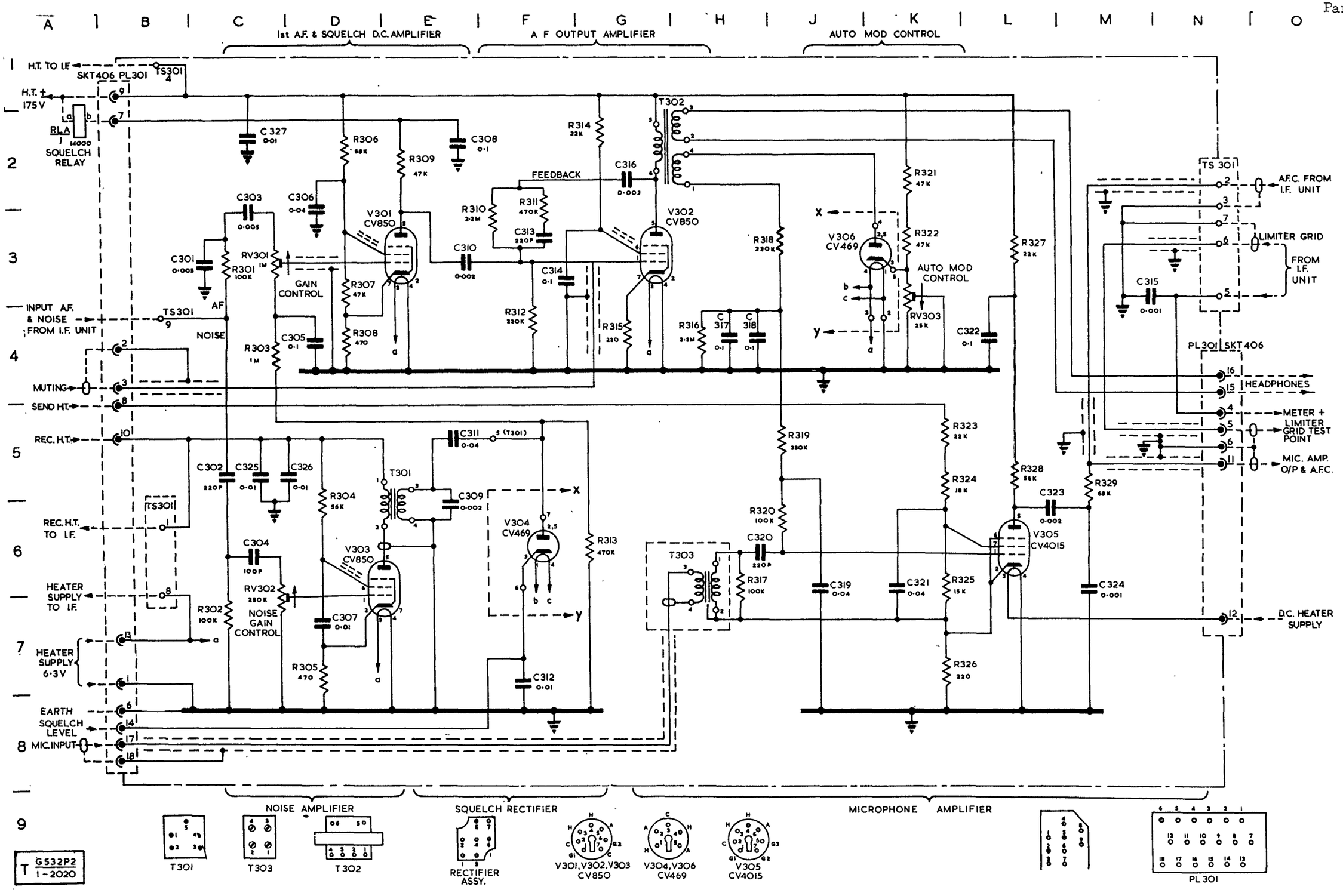


Fig 2020 - A.F. sub-unit, circuit diagram