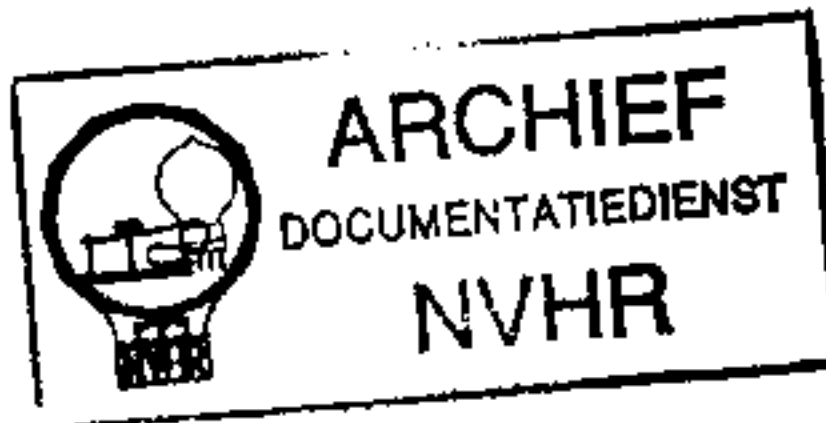


Service
Service
Service

Met dank aan www.radiomuseum-hengelo.nl

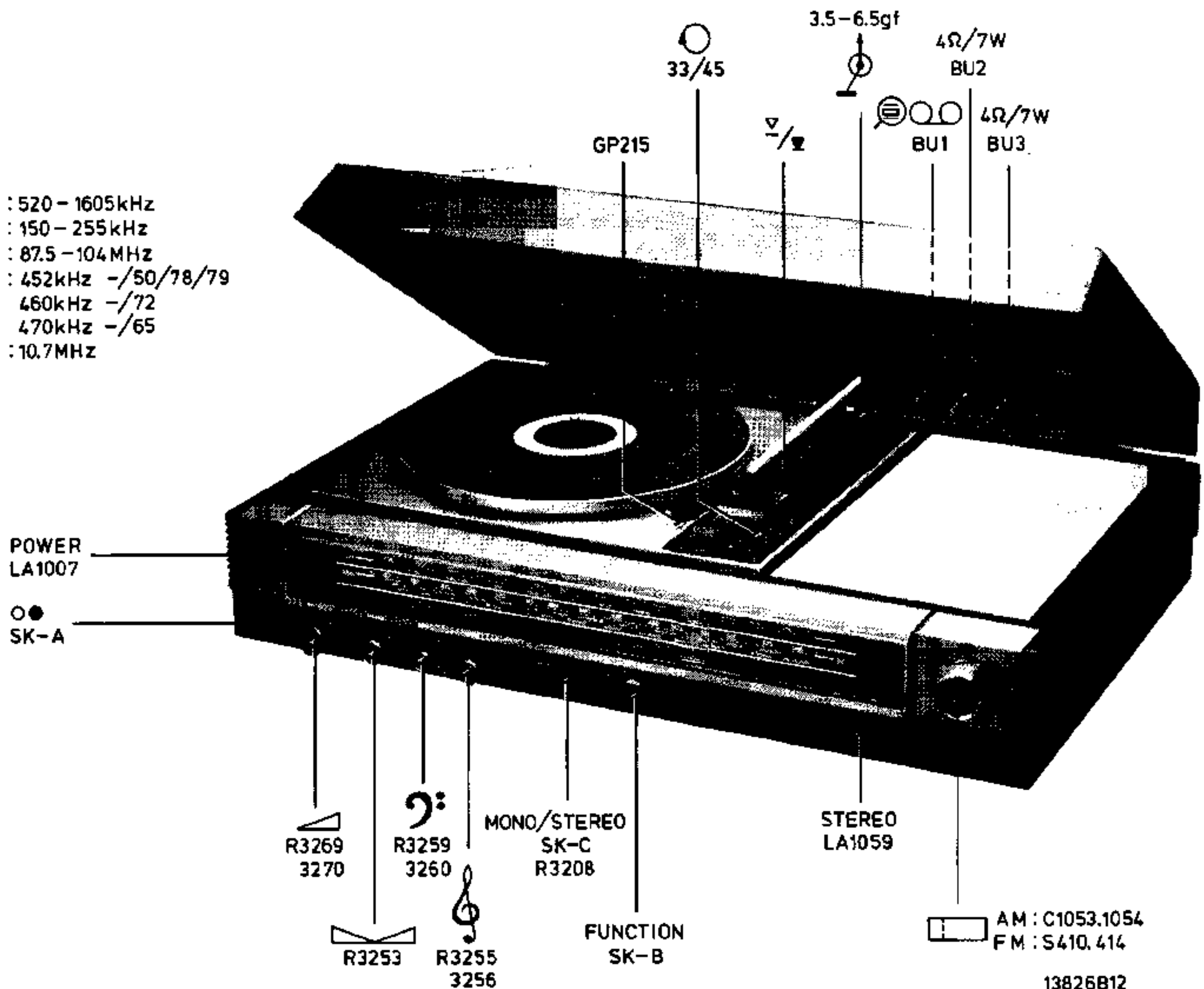
Ned. Ver. v. Historie v/d Radio



-/50 = -/00 +2 luidspreker boxen 22AH460/21Z

Service Manual

MW : 520 - 1605 kHz
LW : 150 - 255 kHz
FM : 87.5 - 104 MHz
IF-AM : 452 kHz -/50/78/79
460 kHz -/72
470 kHz -/65
IF-FM : 10.7 MHz



Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

Documentation Technique Service Dokumentation Documentazione di Servizio Huolto-Ohje Manual de Servicio Manual de Servicio

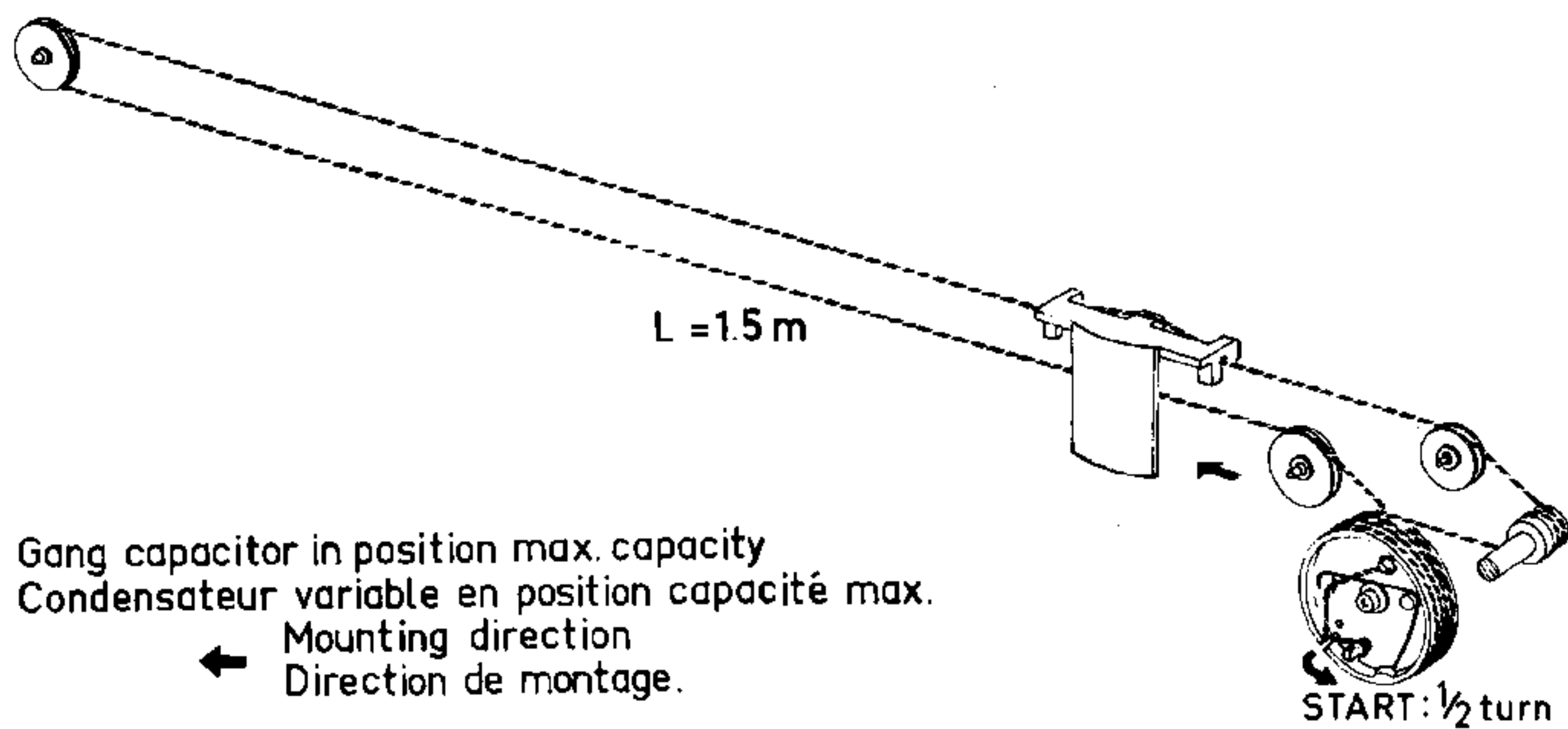
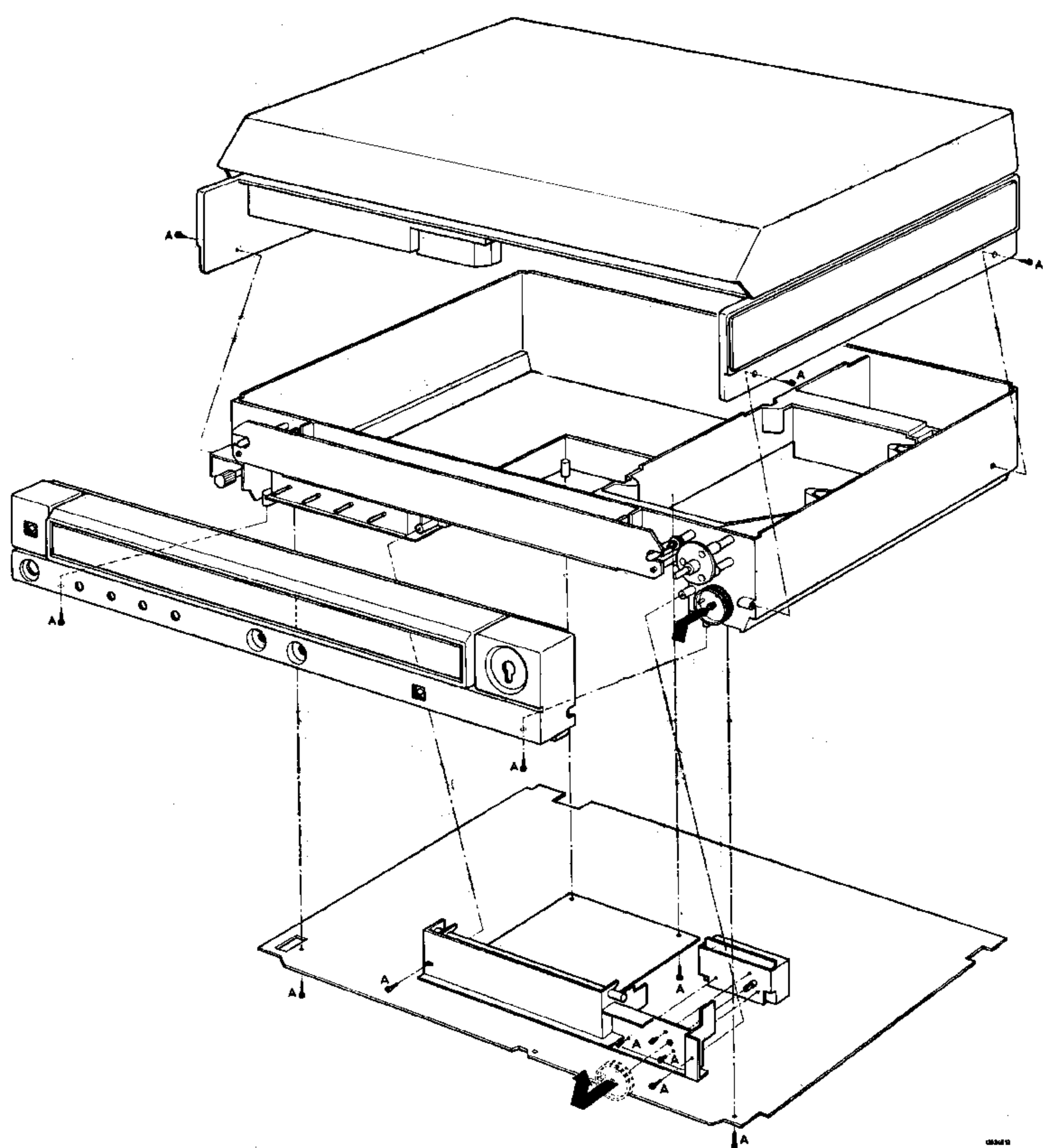


Subject to modification

4822 725 12396

Printed in The Netherlands

PHILIPS



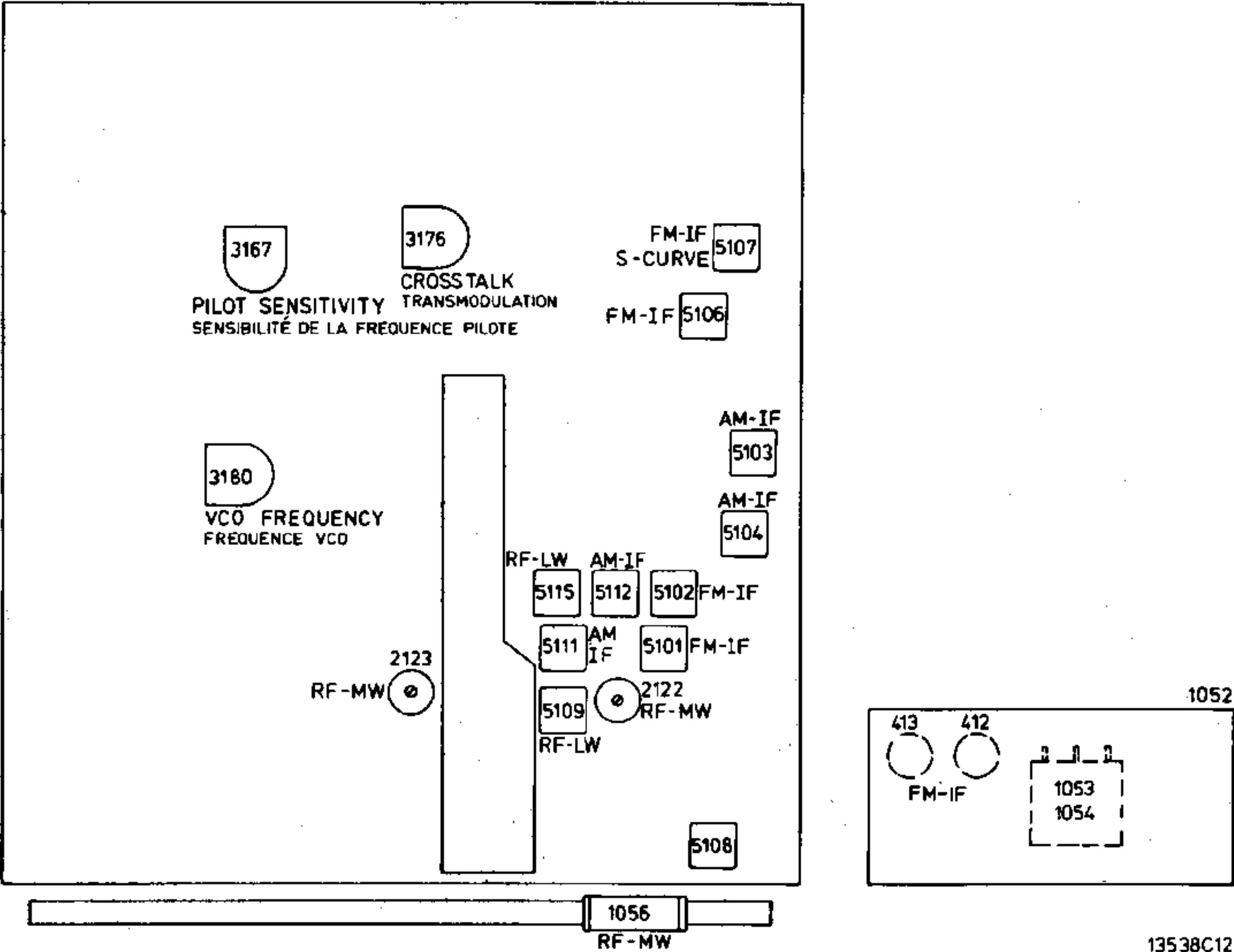
Gang capacitor in position max. capacity
 Condensateur variable en position capacité max.
 ← Mounting direction
 Direction de montage.

START: $\frac{1}{2}$ turn

11883B14

Stereodecoder

FM (87.5-104 MHz)				R3180	3 76 kHz $\pm$ 1 kHz via 10 M Ω
	98 MHz Multiplex (1 kHz) 4...12 μ V	D	S410/414 	R3167	7
	98 MHz Pilot+R+1 kHz (pilot+L+1 kHz)			R3176	Min L 4 via 100 k Ω (Min R) 5



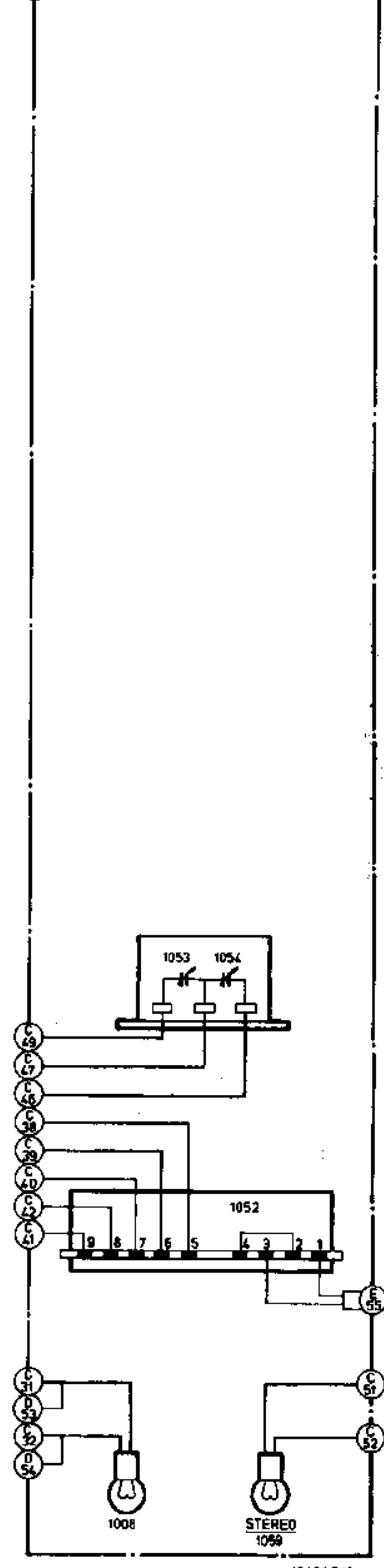
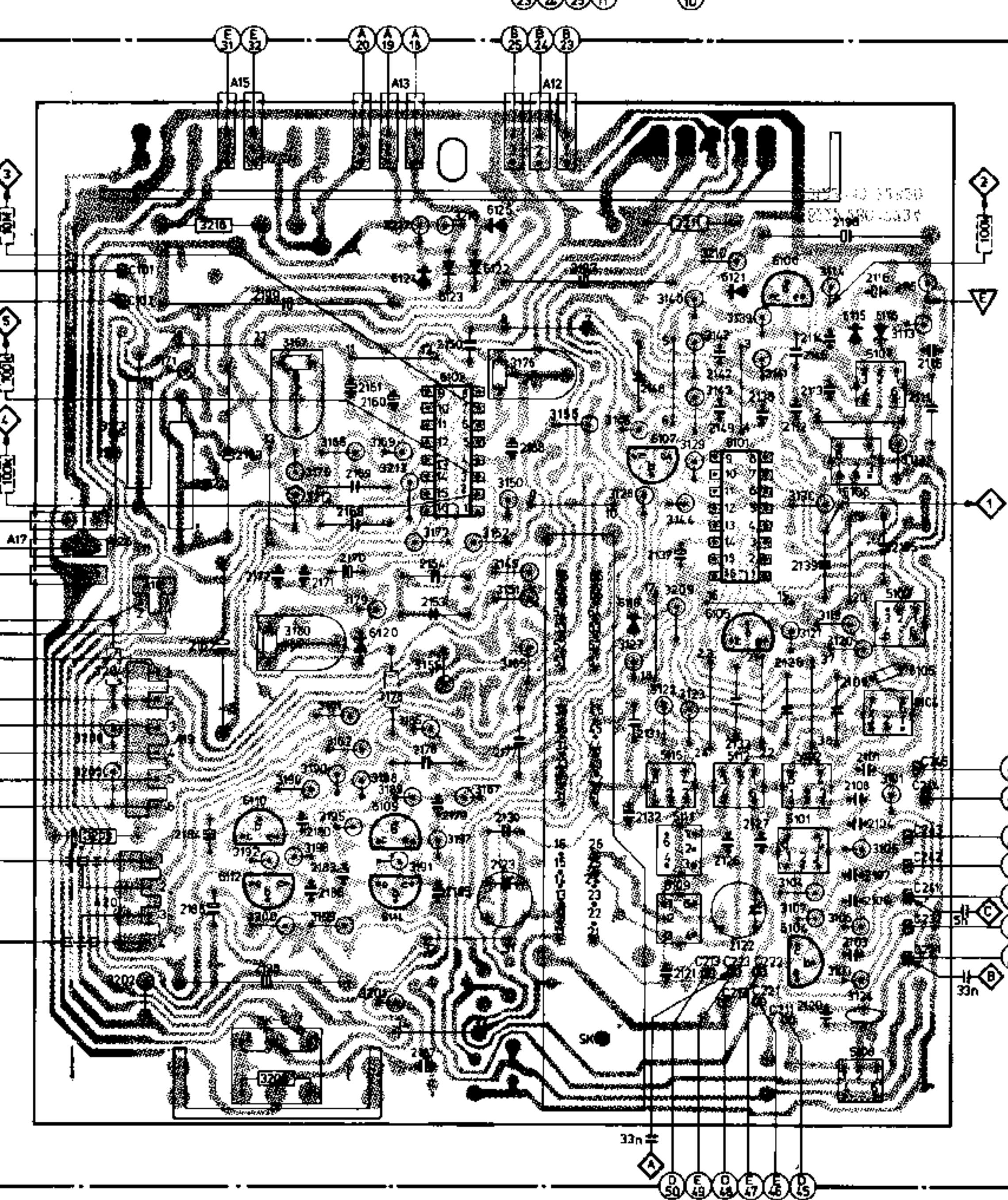
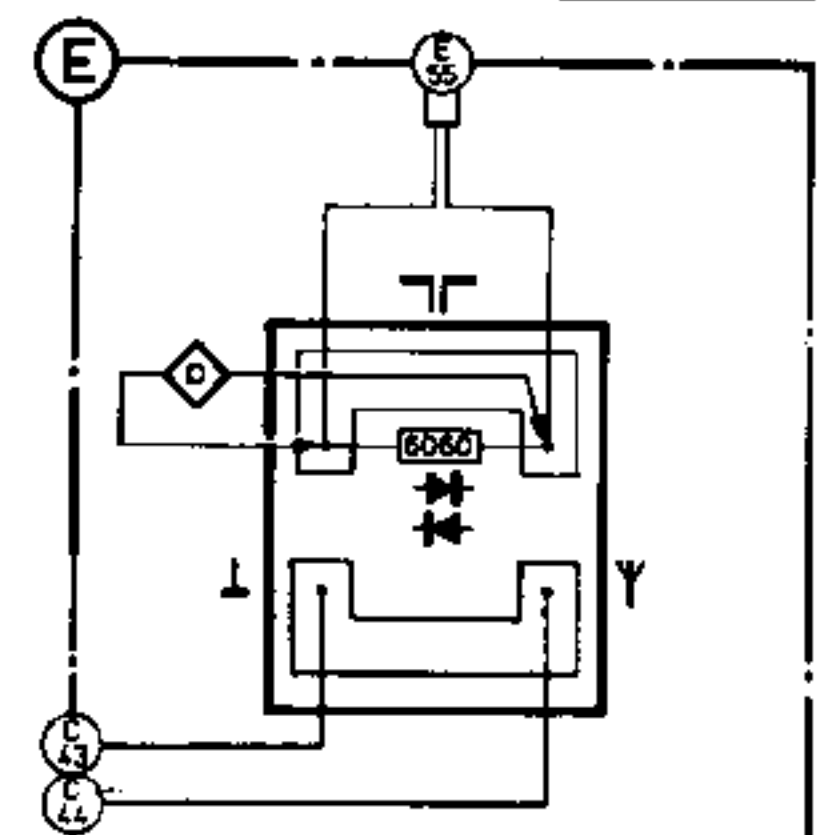
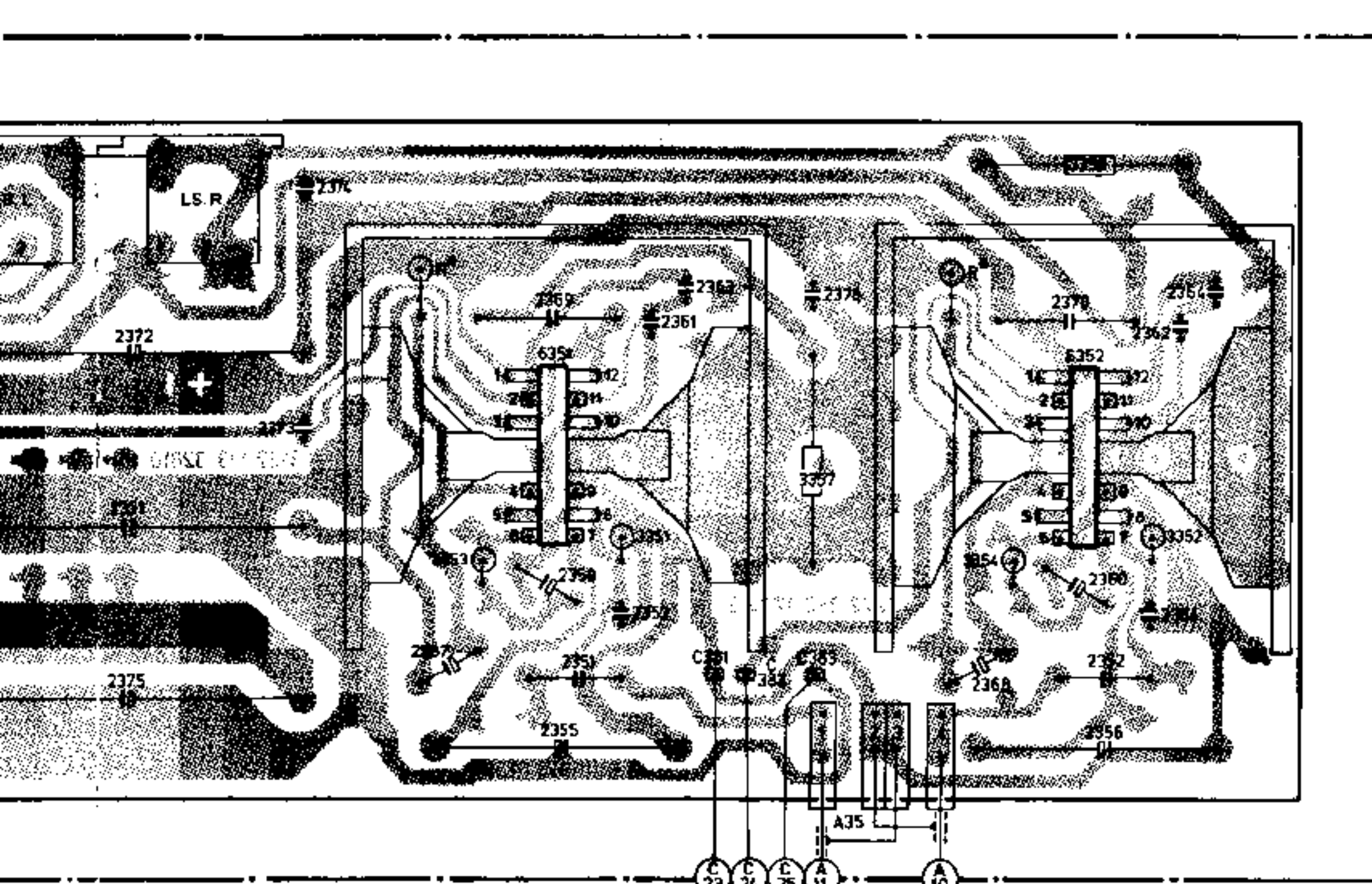
- 1 De kernen van de spoelen gelijkzetten met de bovenkant van de spoelbus.
- 2 Zet eerst C2122 en C2123 in de middenstand.
- 3 Open brug

E
- 4 Afregelen op maximum hoogte en symmetrie
- 5 Sluit brug

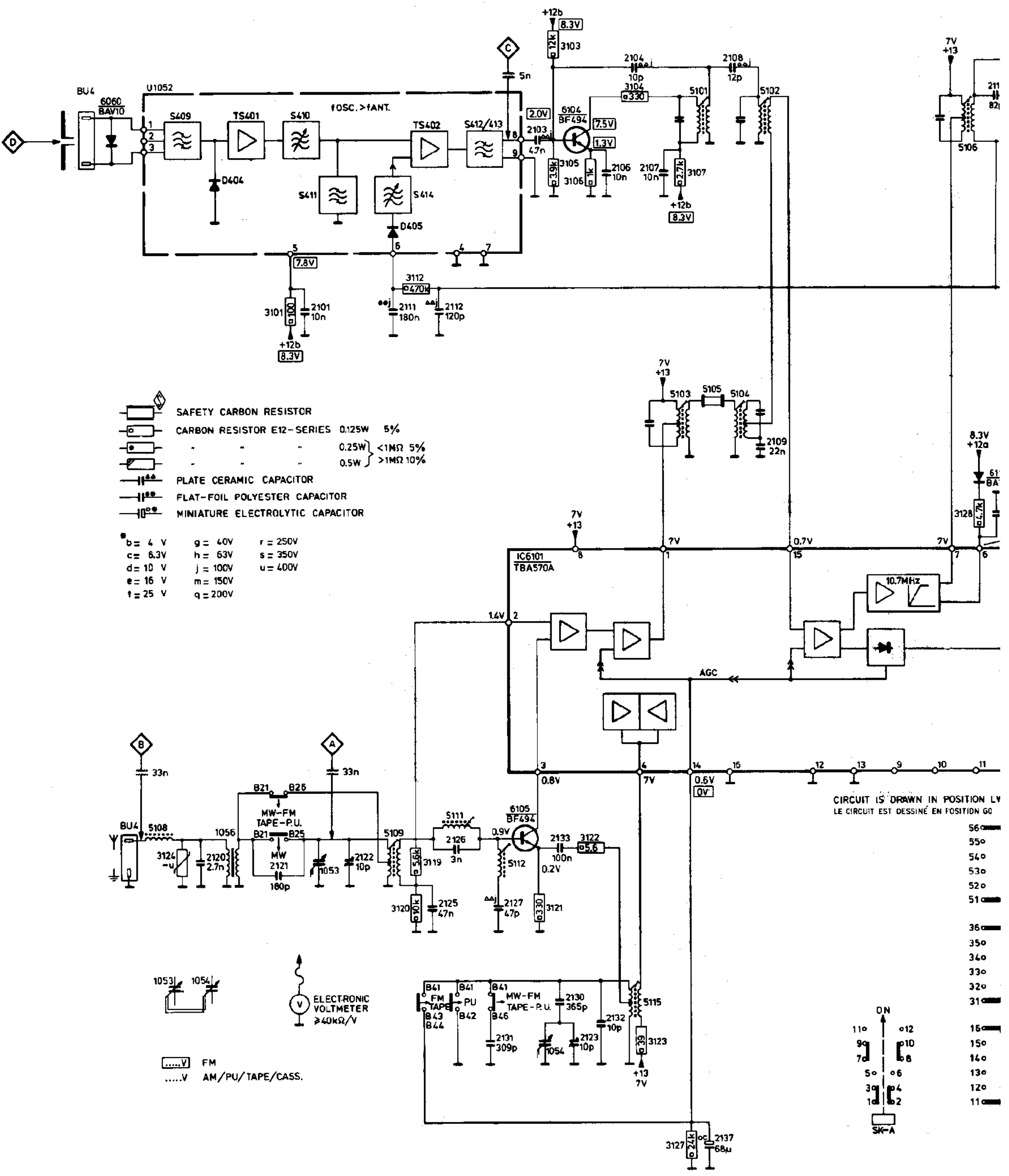
E

S-kromme controleren op lineariteit en symmetrie.
Eventueel S5107 naregelen.
- 7 R3167 eerst tegen de aanslag draaien waarbij de stereo-indikator gedooft is en vervolgens zodanig afregelen dat de indikator juist gaat branden.

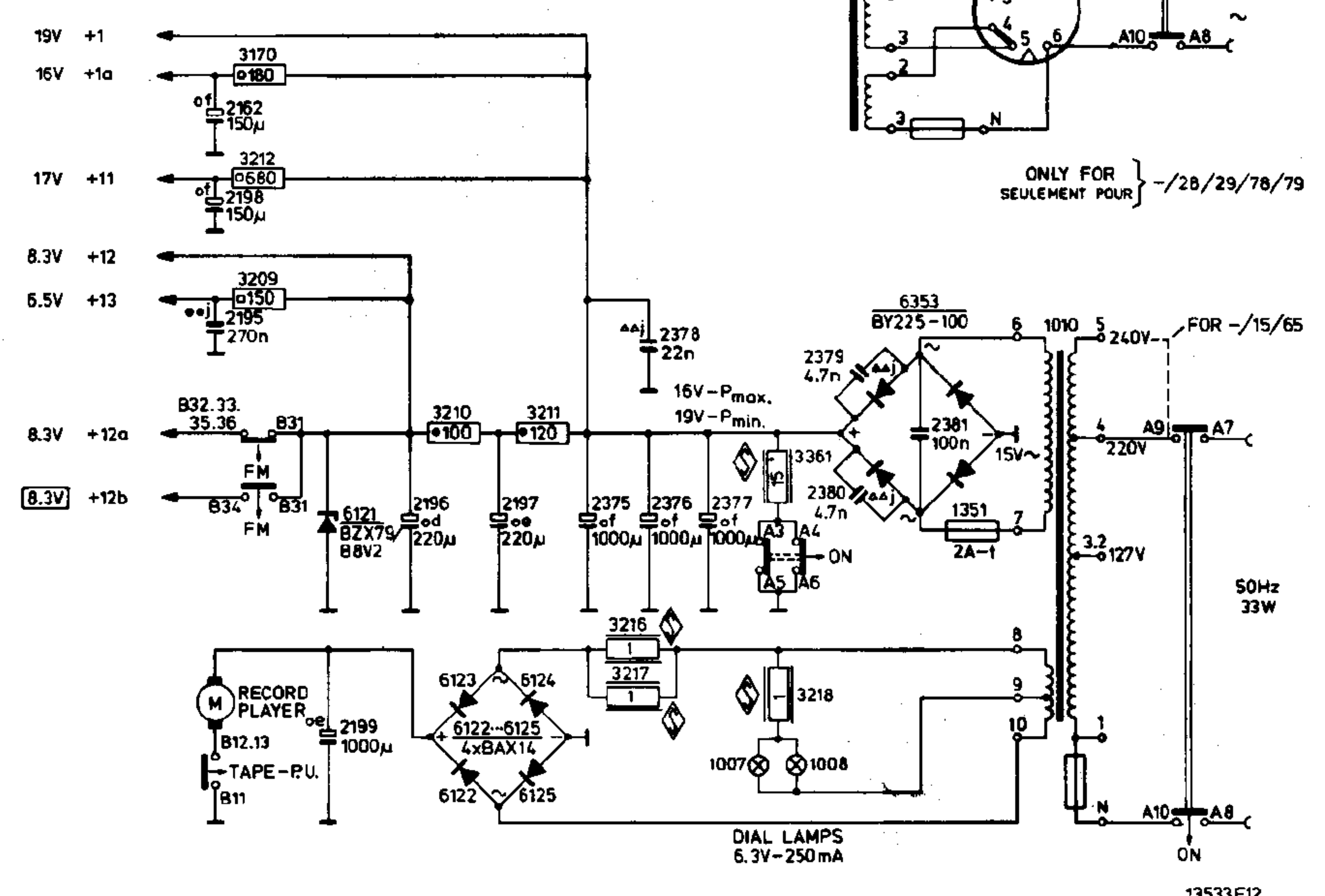
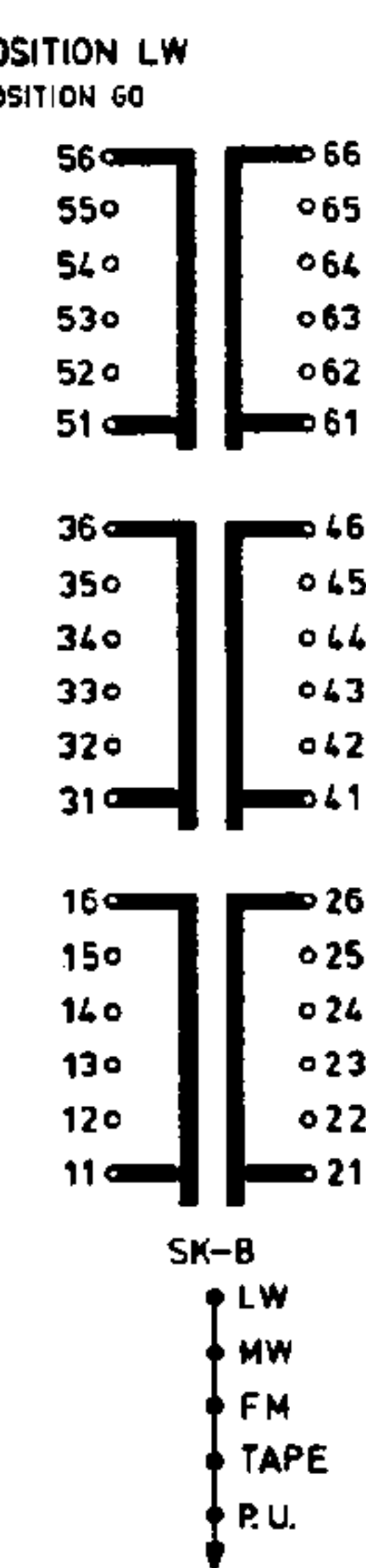
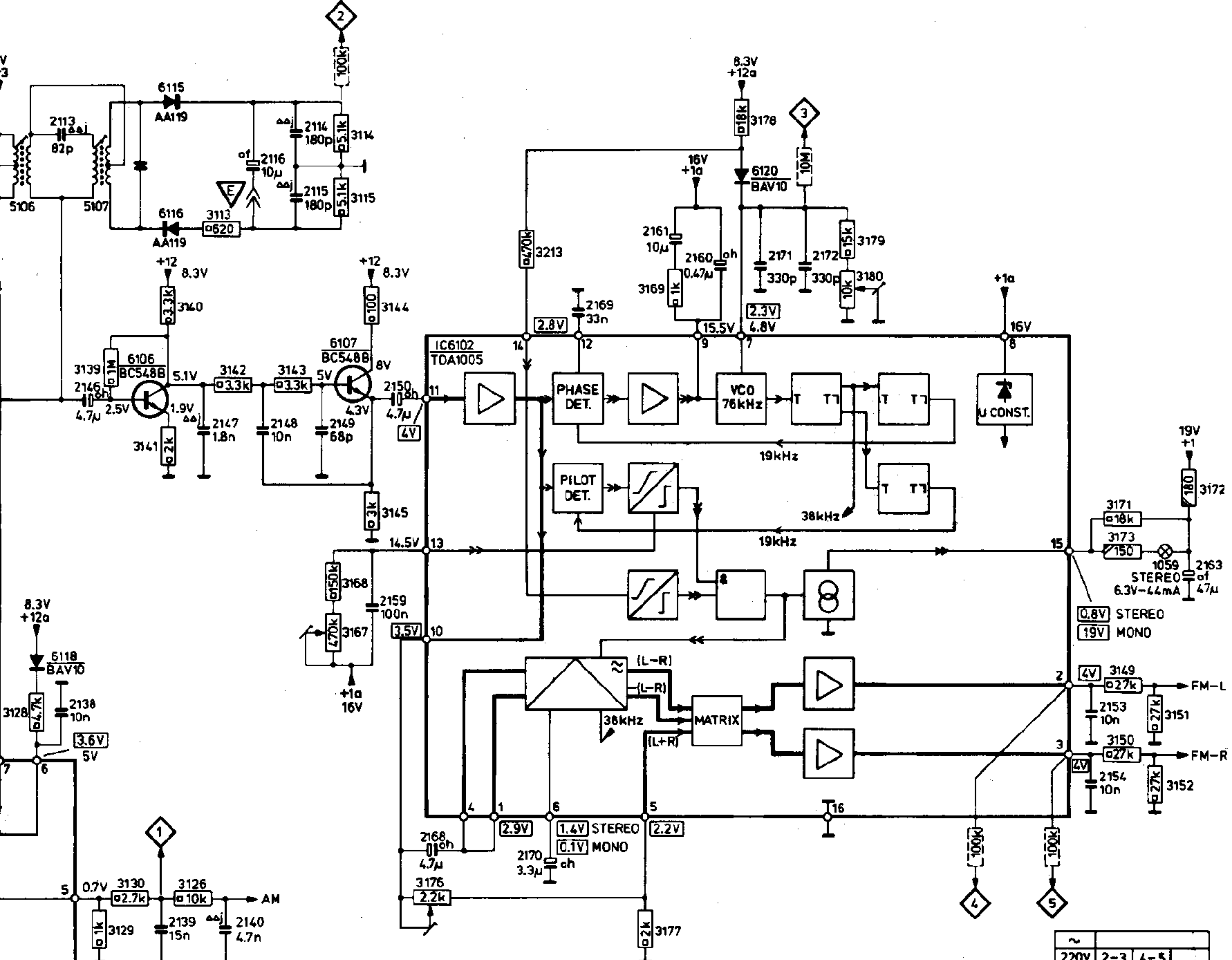
8110, 8112 SK-C	6120, 6109, 6351, 6111, 6102, 6122... 6125 SK-B	6118, 6107	6121, 6101, 6105	6352, 6106, 6104, 6115, 6116	1008 1054	1052	1053	1050
		5115, 5111, 5109, 5112		5101... 5108				
2372, 2371, 2375	2373, 2374	2367	2369, 2359, 2355, 2361, 2353, 2361, 2363, 2376	2368, 2370, 2360, 2352, 2356, 2354, 2362, 2364				
	2164, 2168, 2159, 2159... 2163, 2180, 2163, 2169... 2172, 2165, 2167, 2154, 2153, 2150, 2177... 2179, 2168, 2157, 2146... 2149, 2137... 2139, 2195, 2195			2130... 2133, 2120... 2123, 2125... 2127, 2108... 2109, 2103, 2104, 2101, 2111... 2116				
3202 3206	3218, 3208, 3202, 3197	3201, 3353, 3217, 3213, 3216, 3351	3357	3209 3211, R	3354 3358 3352			6060
	3192, 3167... 3173, 3190, 3195, 3168, 3191, 3176... 3180, 3155, 3167, 3165... 3187, 3156, 3149... 3152			3139... 3145, 3127... 3130, 3119... 3124, 3103... 3107, 3101, 3112... 3115				



MISC	6060	U1052	6105, 6101, 6104										SK-A	6118, 51
S	5108	1056		5109	5111	5112	5103	5115	5103, 5101, 5105, 5104	5102				5106
C			2101	2111	2112	2103	2106	2104	2107	2108	2109			2113, 2
C		2120	2121	1053	2122	2125, 2126	2131, 2127, 1054, 2133, 2130, 2123, 2132			2137				
R			3101		3112		3103, 3105, 3106	3104	3107					3128
R		3124		3119, 3120			3121	3122	3123	3127				



6118.SK-B	6106.6115.6116	6107	M.IC6102	6121	6122...6125	6120	1007.1008	6353	1351	1010	1059
5106	5107										
2113.2138.2146	2147.2148.2114...2116.2149	2159.2150.2168.2162	2170	2169	2161	2160	2171	2172	2153.2154	2163	
2139	2140	2162.2198.2195.2199	2195	2197	2375...2378	2379...2381					
3128	3139...3142	3113...3115.3143...3145.3168.3167.3176	3213	3177.3169	3178	3179.3180	3171.3173.3149...3152.3172				
3129.3130	3126	3170.3212.3209	3210	3211	3216.3217	3361.3218					



M	M	C
	1056	1053 1054
SK-C	5108 SK-B	2187
		2120
	6104	2198
		2121
A20	5109	2103
6111		2188 2123 2185 2183
	5111 5101	2106 2107
6112		2126 2127
6109 6110 A19		2184 2130 2180
	5112 5102 5115	2104 2132 2108
		2179
		2178
BU	5104	2177
		2131 2109 2125 2133
	6105 5105 5103	2162
6120		2153
	6116	
A18	6101	2154 2171 2172 2170
A17		2137 2139
		2195
6102		2159
	5106	
	6107	2163 2168
		2136
	5107	2160 2111 2112 2148 2113 2147
		2146
		2115 2114
1059	6115 6116 6121	2199
6124		2116
6122	6106	
6123		2196
6125		
A15 A13	A12	
1010		

RF-IF PANEL PANNEAU HF-FI

6111, 6112
e = 0V
b = 0.6V
c = 6V

6109, 6110
e = 5V
b = 4.3V
c = 6V

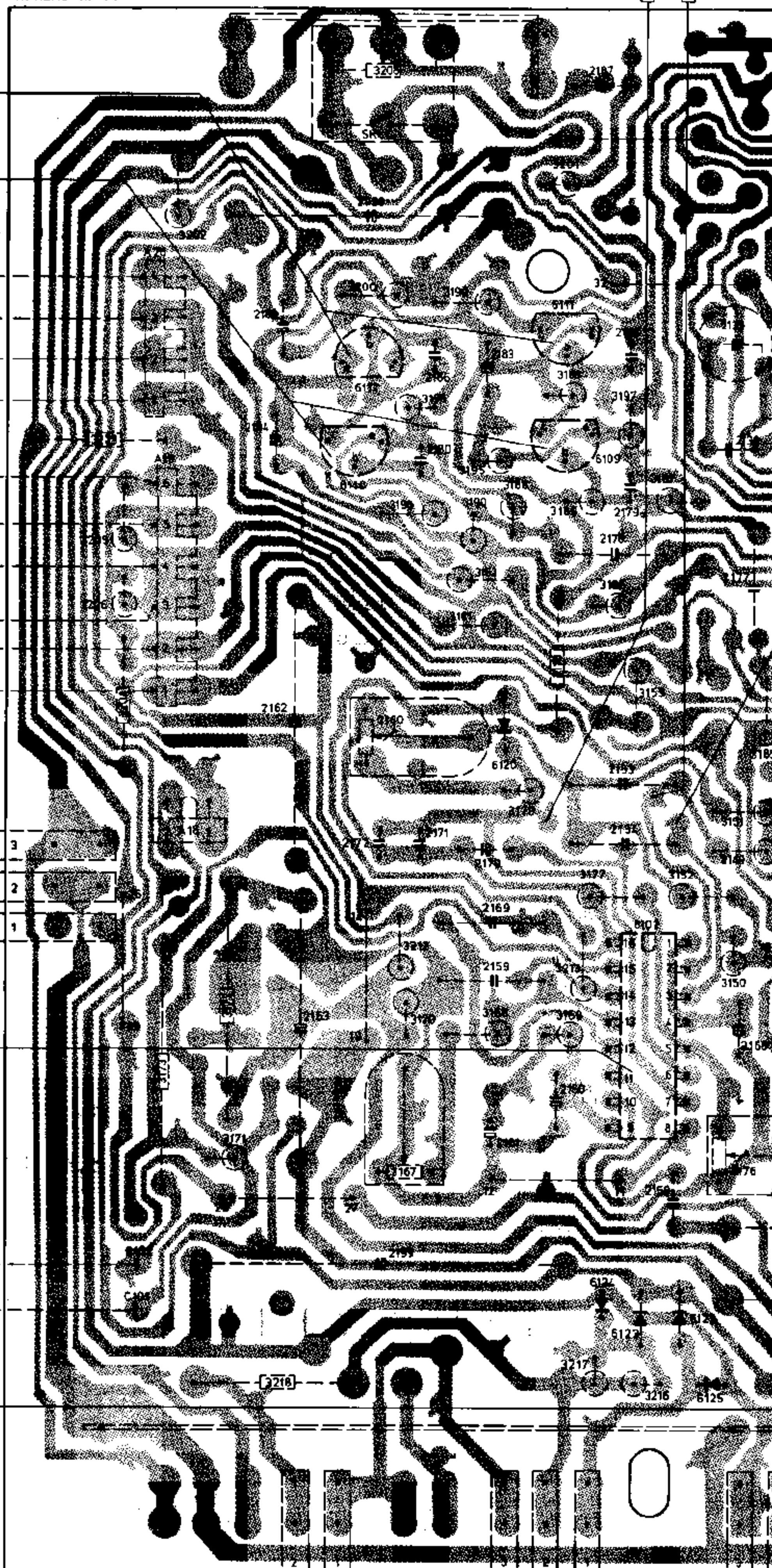
BU1

6102
1 = 2.9V
2 = 4.0V
3 = 4.0V
4 = 2.9V
5 = 2.2V
6 = 1.6V STEREO
0.1V MONO
7 = 4.8V AM
2.3V FM
8 = 16V
9 = 15.5V
10 = 3.5V
11 = 4V
12 = 2.6V
13 = 14.5V
14 =
15 = 0.8V STEREO
19V MONO
16 = 0V

L IN/ENTREE
A17
R IN/ENTREE

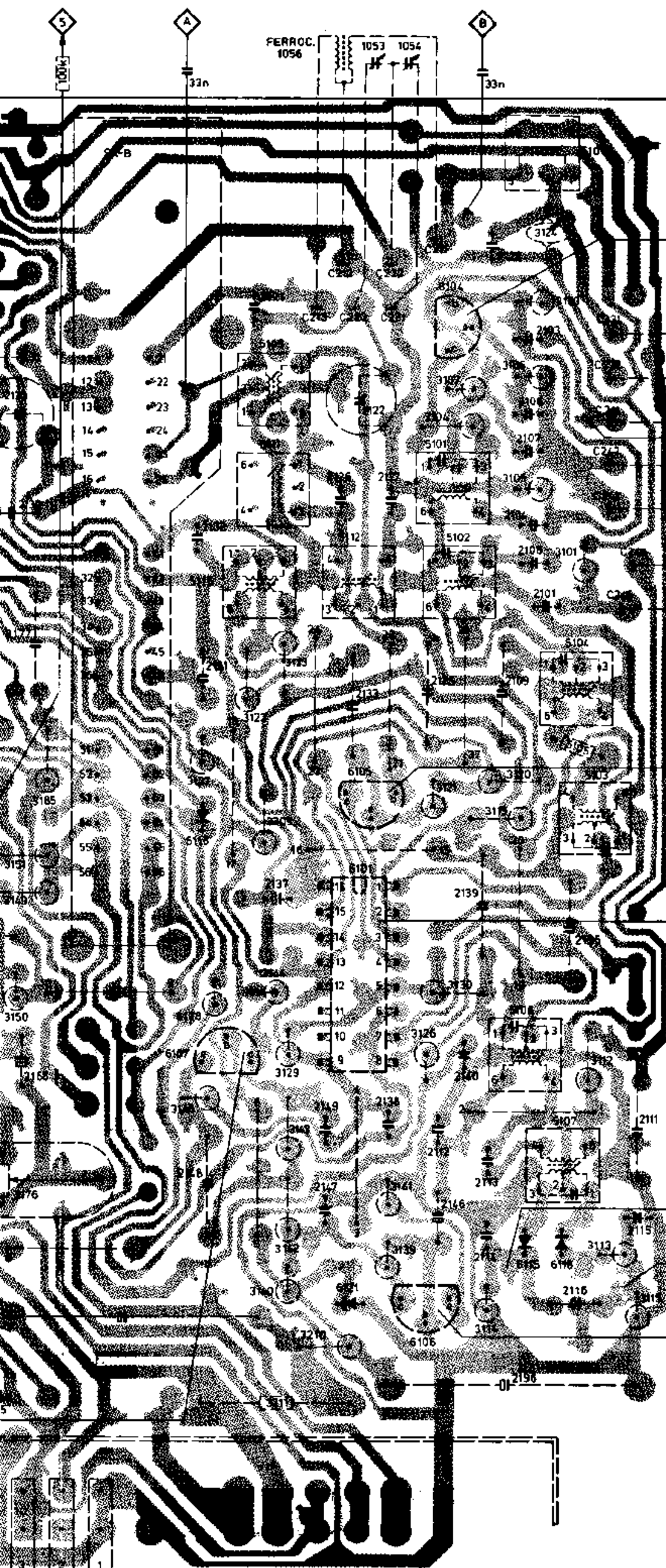
STEREO
1059

6107
e = 4.3V
b = 5.0V
c = 0.8V



TRANSFORMER
TRANSFORMATEUR

AF-PANN
CONN

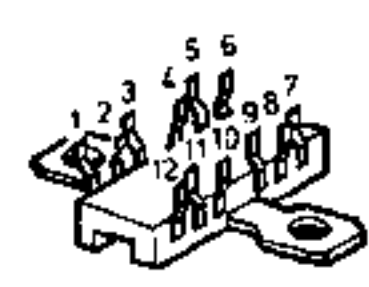


6104
 a = 1.3V
 b = 2.0V
 c = 7.5V

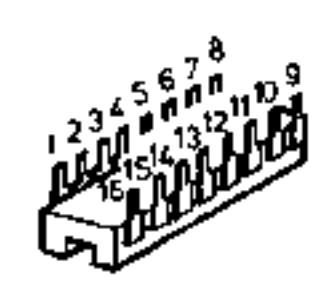
6105
 a = 0.2V
 b = 0.9V
 c = 0.8V

6101
 1 = 7V
 2 = 1.4V
 3 = 0.8V
 4 = 7V
 5 = 0.7V
 6 = 5V
 7 = 7V
 8 = 7V
 9 =
 10 =
 11 =
 12 = 0V
 13 = 0V
 14 = 0.6V
 15 = 0.7V
 16 = 0V

6106
 a = 1.9V
 b = 2.5V
 c = 5.1V



6251, 6352
 TBA 810AS



6101
 TBA 750A
 6102
 TBA 1005



6115, 6116
 AA119



6118, 6060
 BAV 10



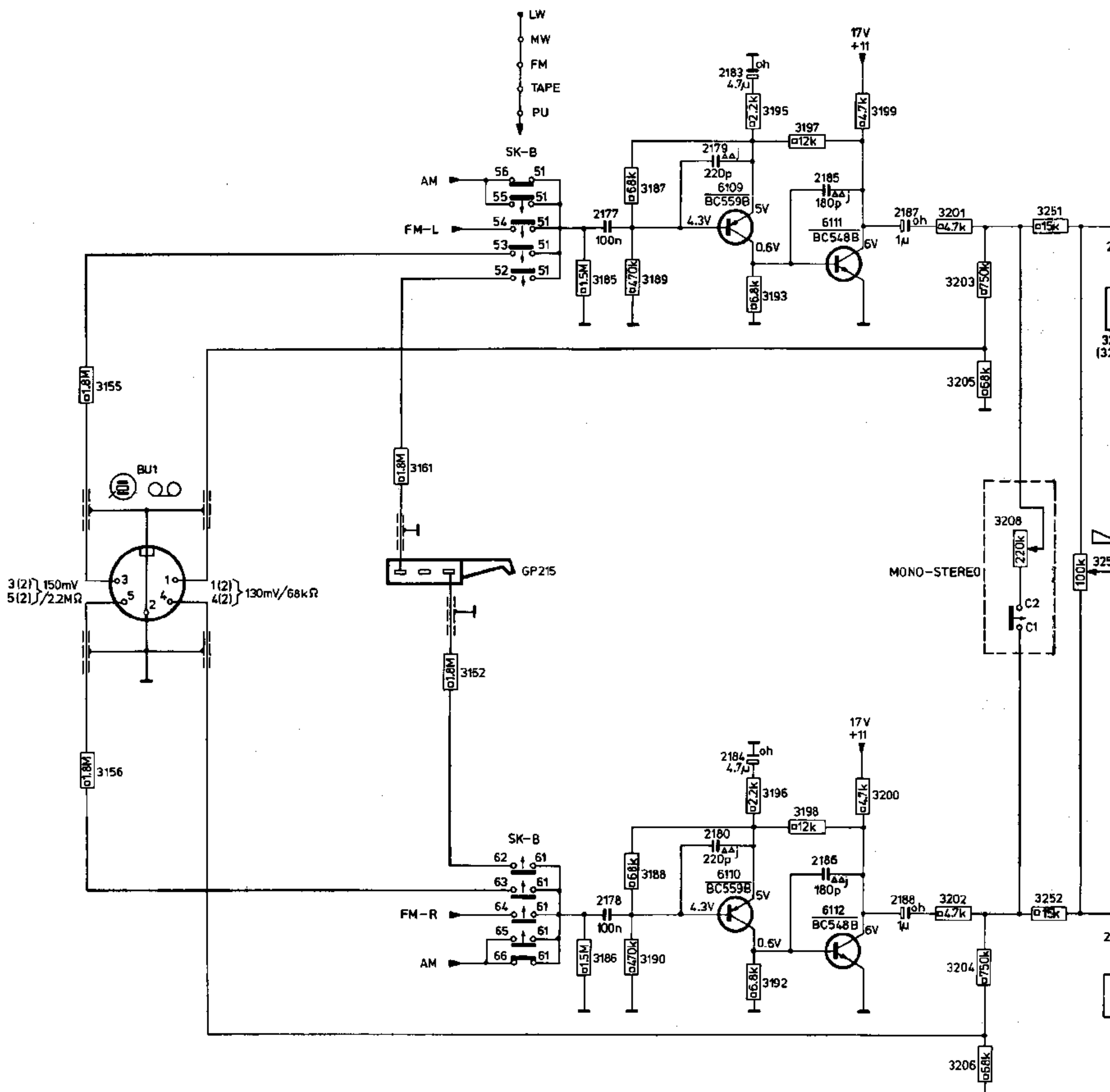
6121
 BZX79/B8V2



6122...6125
 BAX18

R			
3208			
	3201		3124
			3103
3202			
3200	3199		3106
			3107
			3104
	3189		
3198	3197		3105
3203	3195		
	3187		
	3188		
3196	3190		3101
	3189		
3205			
	3162		
	3166		
3206	3161	3123	
	3178	3122	
	3155		
3204			3120
3180	3127		3121
	3105		3119
	3209		
	3179		
	3151		
	3149		
	3177		
	3152		
		3144	
			3130
3212	3213		
	3150	3128	
3712			3126
3170	3168		
	3169	3129	3112
3173		3145	
		3143	
	3171		
		3141	
3167	3178		
		3142	3113
		3139	
		3140	3115
		3210	3114
	3217		
3218	3216	3211	

MISC.	BU1	SK-B	6109 6110	6111 6112
C		2177, 2178	2179, 2180, 2183, 2184	2185, 2186
R	3155, 3156	3161 3162	3185...3190	3193, 3192, 3195...3200
				3201...3206, 3208, 3251...3253

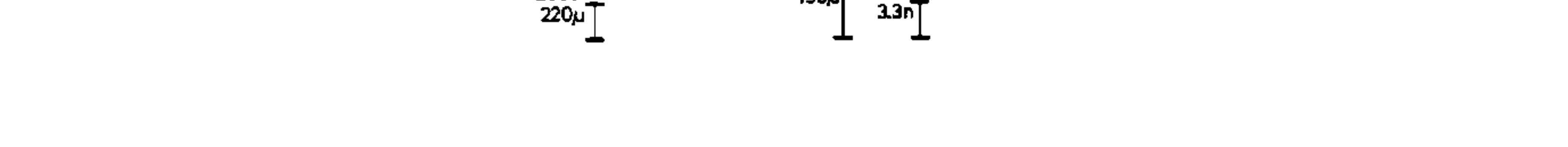
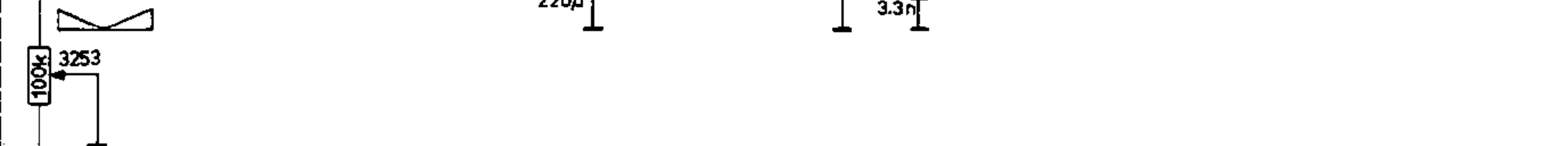


- SAFETY CARBON RESISTOR
- CARBON RESISTOR E12-SERIES 0.125W 5%
- CARBON RESISTOR E12-SERIES 0.25W } <1MΩ 5%
- CARBON RESISTOR E12-SERIES 0.5W } >1MΩ 10%
- PLATE CERAMIC CAPACITOR
- FLAT-FOIL POLYESTER CAPACITOR
- MINIATURE ELECTROLYTIC CAPACITOR

* b = 4V g = 40V r = 250V
 c = 6.3V h = 63V s = 350V
 d = 10V j = 100V u = 400V
 e = 16V m = 150V
 f = 25V q = 200V

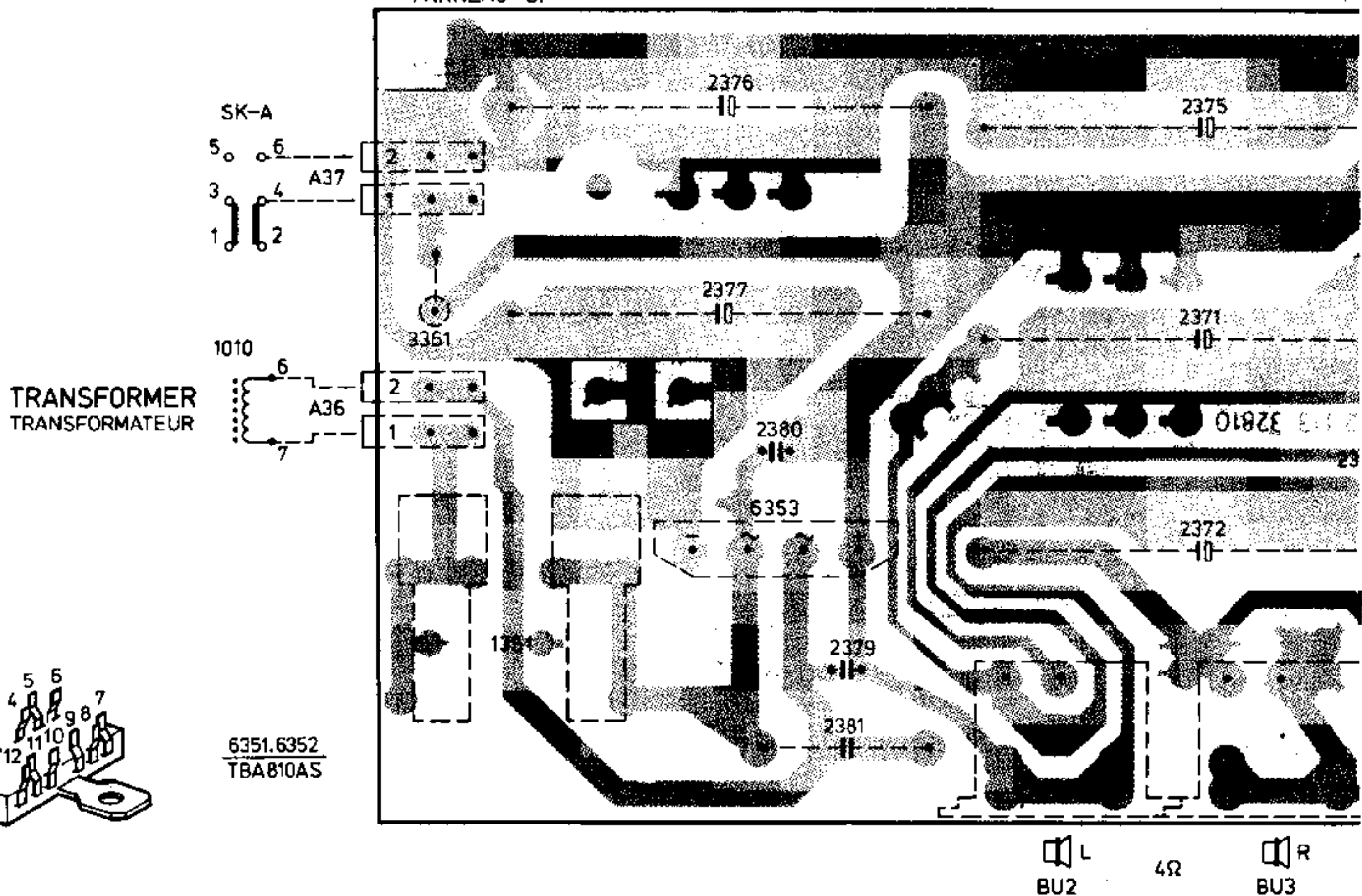
PU
 TAPE
 FM
 MW
 LW

ELECTRONIC
 VOLTMETER



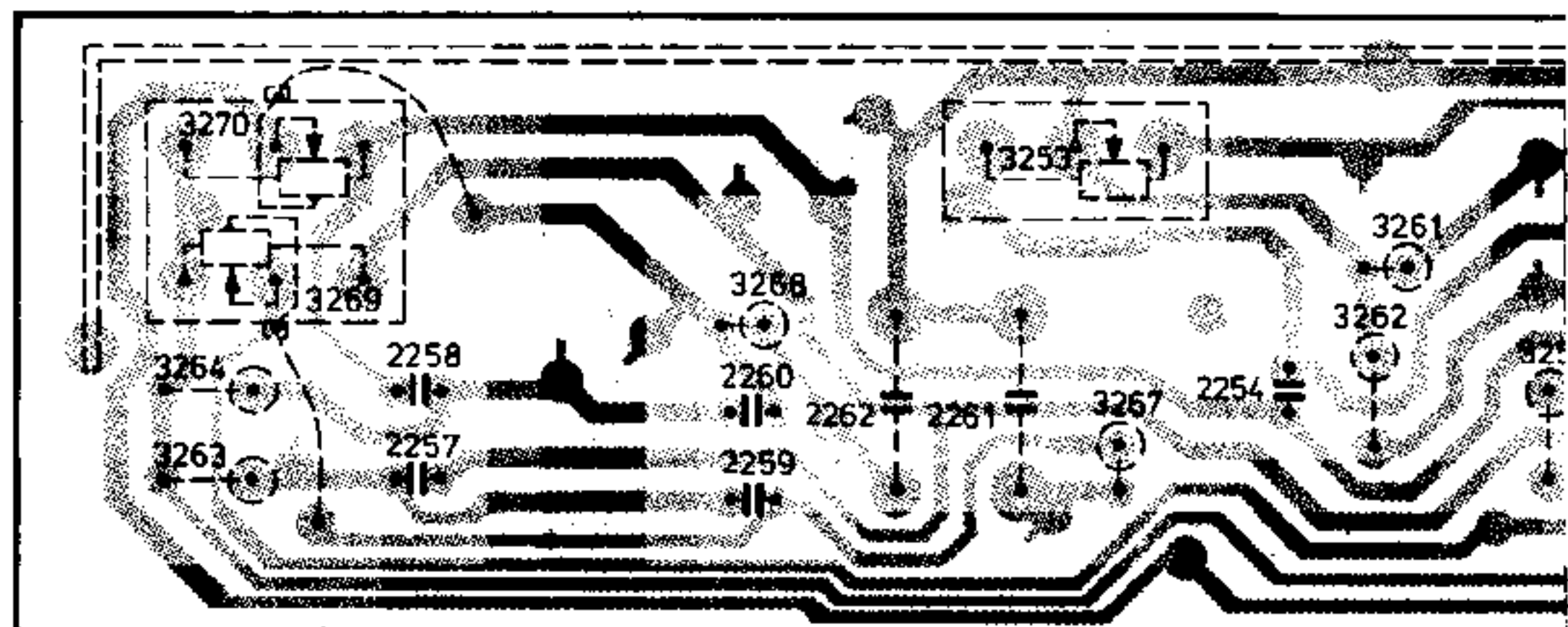
MISC.	1351	6353	BU2	BU3
C	2377.2376.2380.2379.2381			2375.2371.2372
R	3361			237

AF-PANEL PANNEAU BF

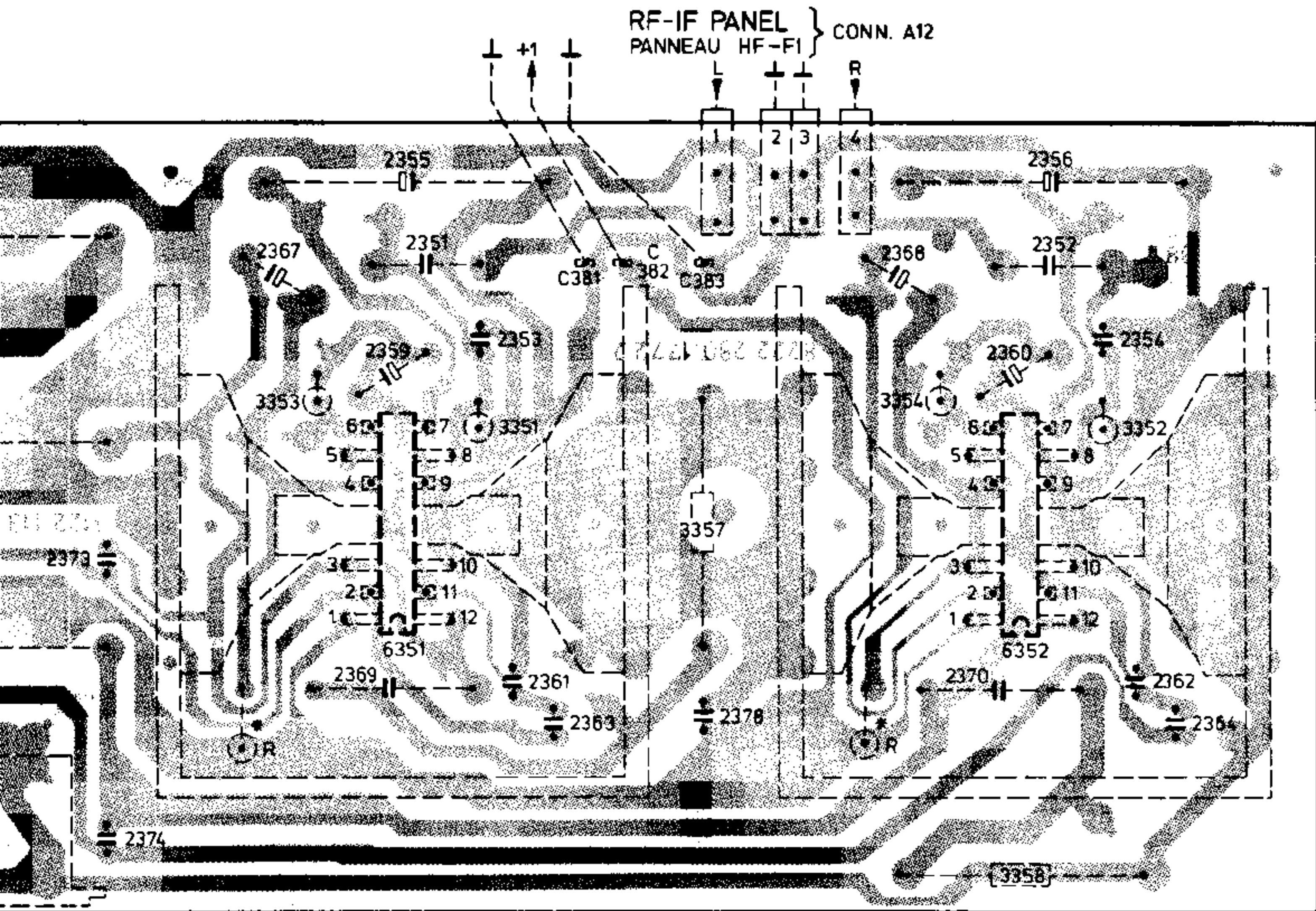


C	2258.2257	2260.2259.2262.2261	2254
R	3263.3264.3270.3269	3268	3253.3267 3262.3261 325

TC-PANEL PANNEAU CONTRÔLE DE TONALITÉ



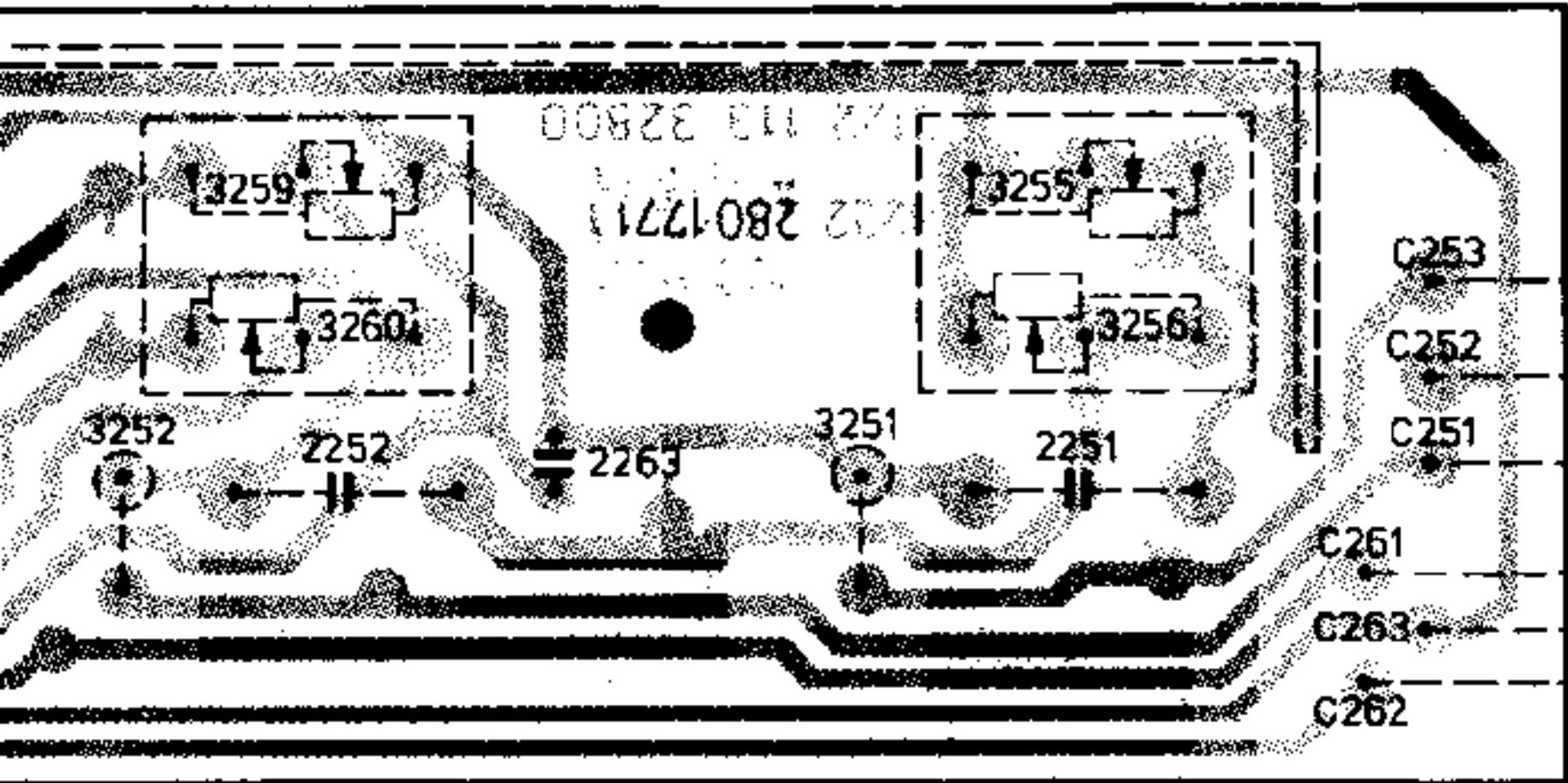
J3	6351								6352								MISC.		
2373	2374	2367.2369.2359.2355.2351.2353.2361.2363								2378	2368.2370.2360.2356.2352.2354.2362.2364								C
		*R.3353				3351						*R.3354		3358	3352	R			



* USE THESE RESISTORS R ONLY IF A „ATES“- IC IS APPLIED
 * USEZ CES RESISTANCES R SEULEMENT QUAND IL EST APPLIQUÉ UN CI-„ATES“

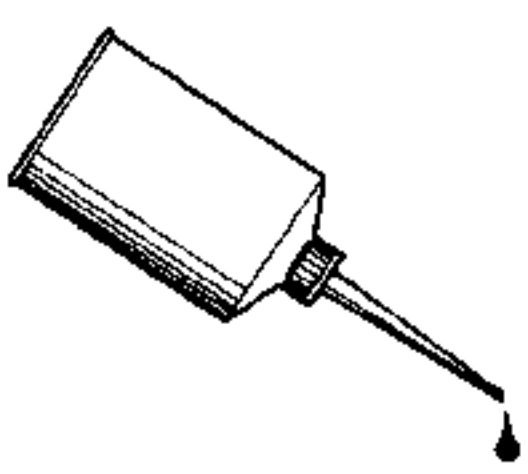
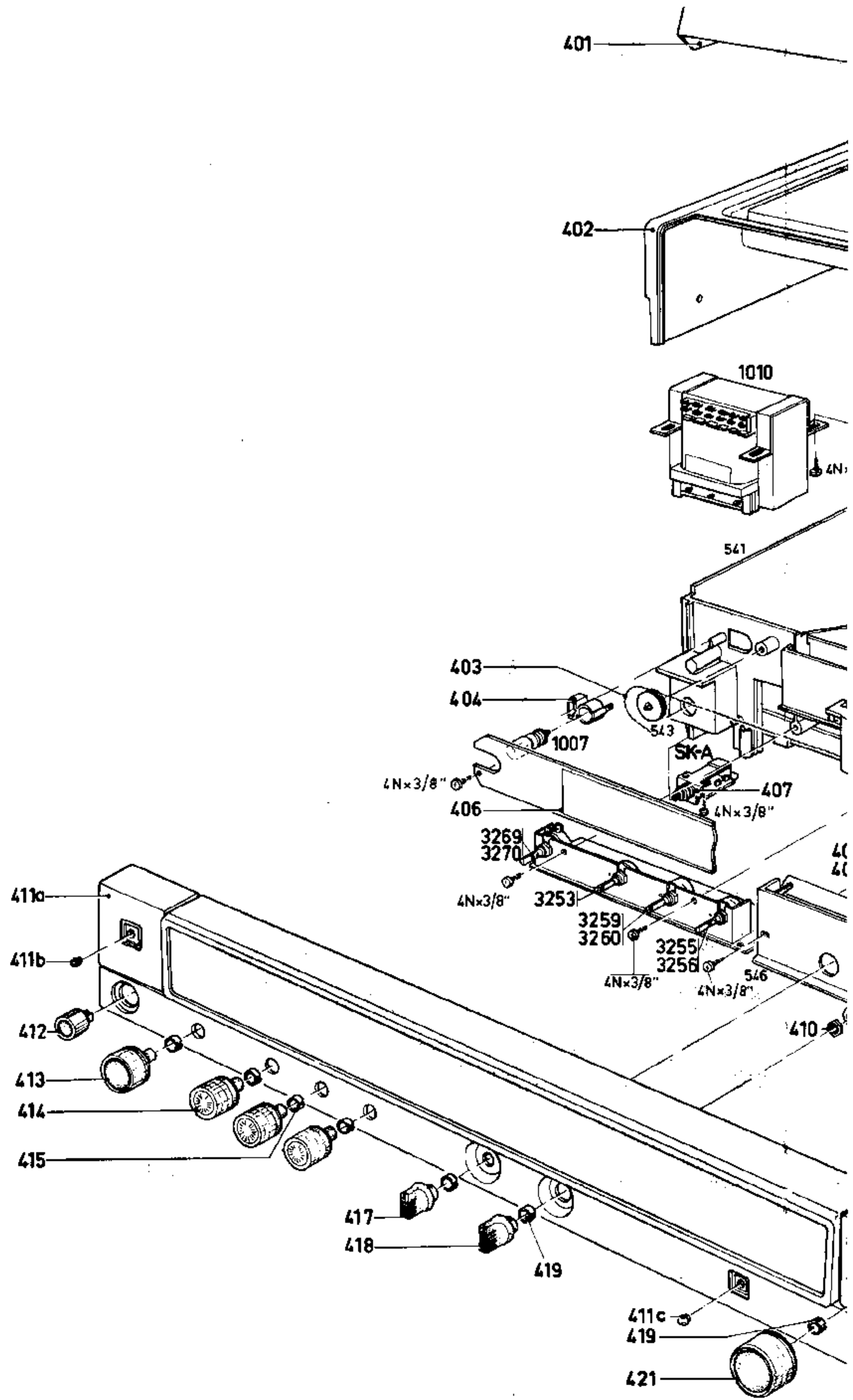
13536D12

2252	2263	2251	C
3252.3259 3260	3251	3255.3256	R



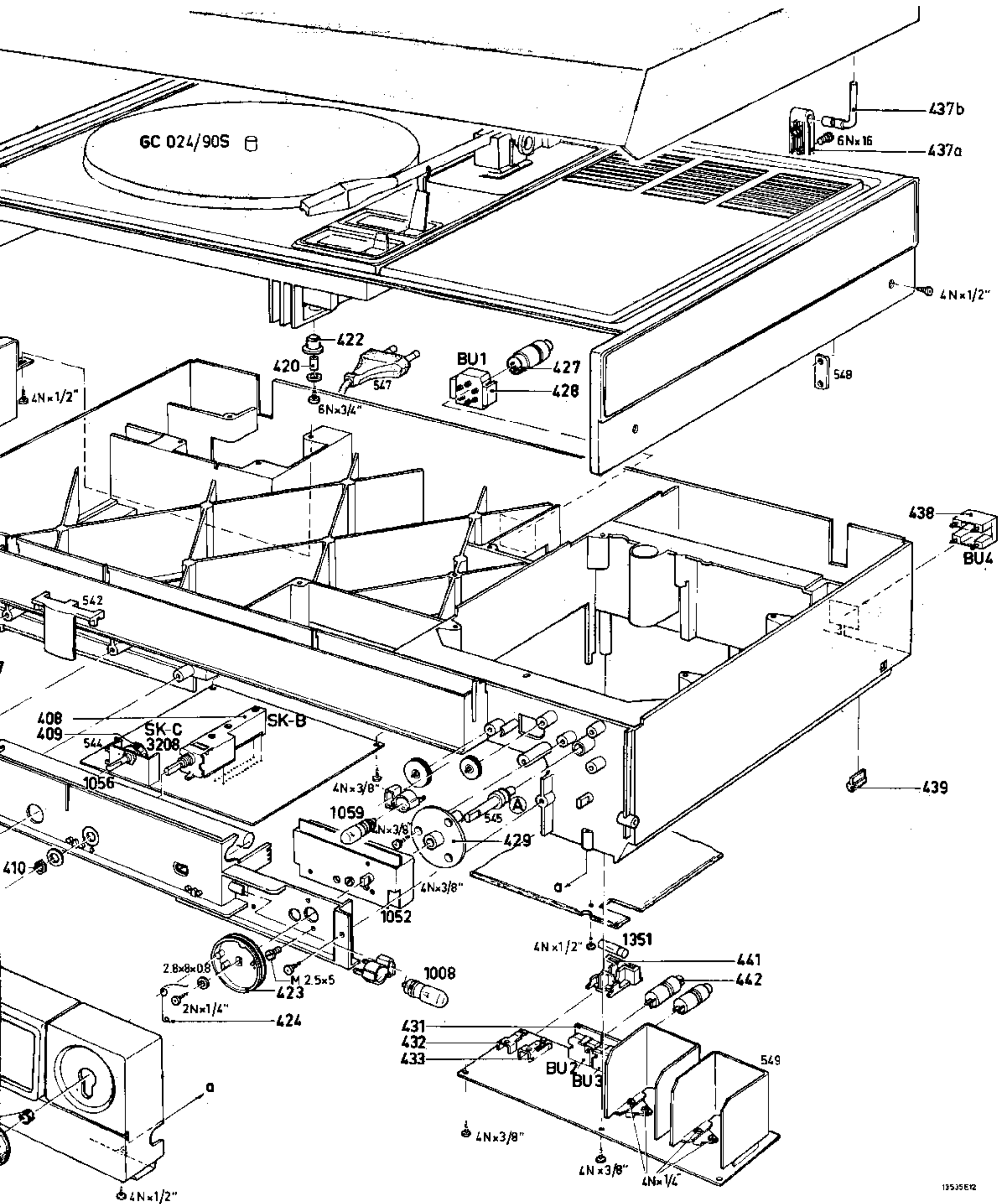
13537C12

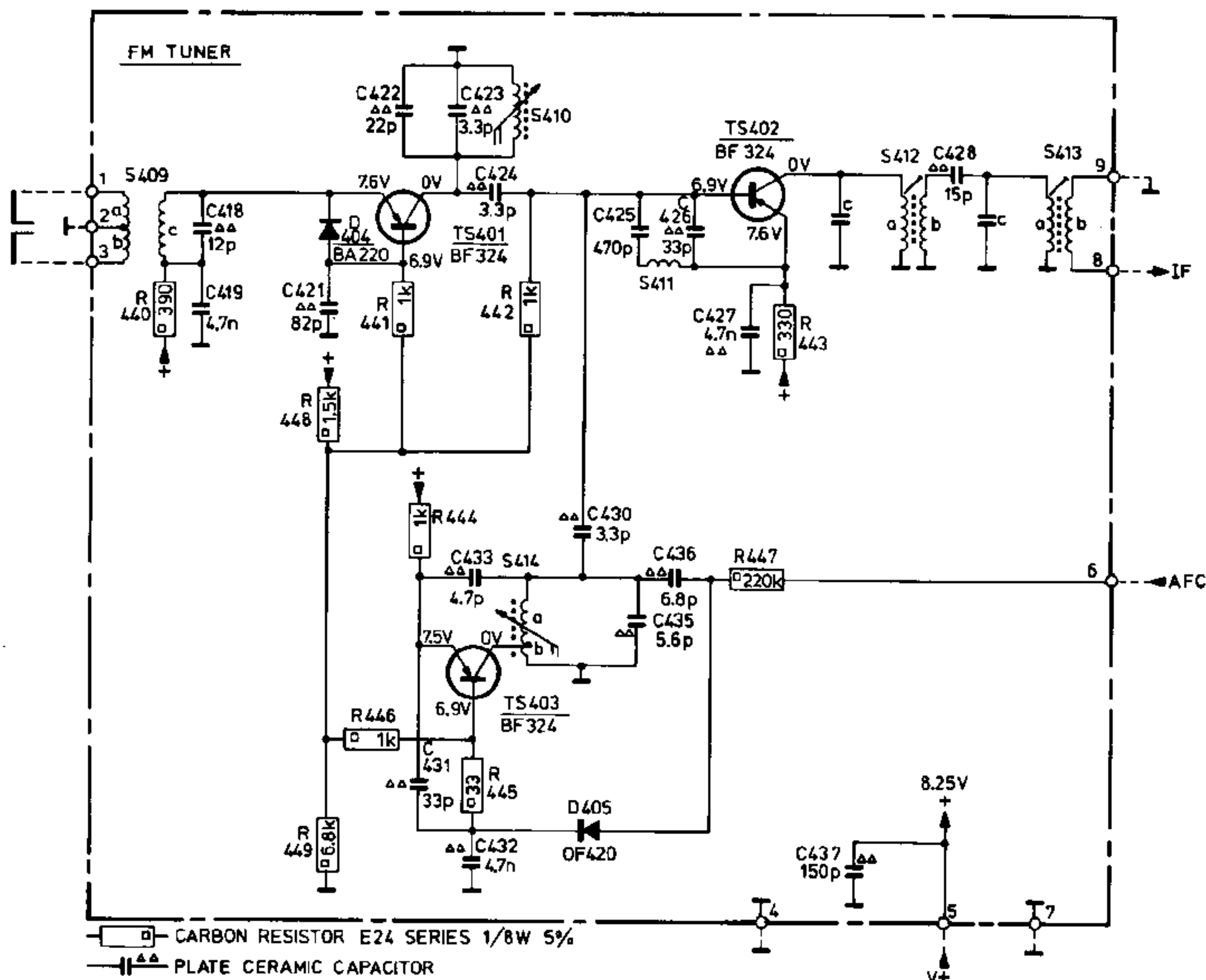
401	4822 426 60116
402	4822 426 40128
403	4822 321 30215
404	4822 255 10007
406	4822 333 70227
407	4822 276 10481
408	4822 273 80168
409	4822 101 50216
410	5322 505 10422
411 (a+b+c)	4822 426 50242
411b	4822 381 70007
411c	4822 381 70005
412	4822 413 10158
413	4822 413 40737
414	4822 413 30689
415	4822 532 10284
417	4822 413 30688
418	4822 413 30687
419	4822 492 61974
420	4822 532 20696
421	4822 413 40738
422	4822 462 71016
423	4822 528 80676
424	4822 492 40704
427	4822 264 40023
428	4822 267 40201
429	4822 528 90269
431	4822 267 30264
432	4822 256 30145
433	4822 256 30144
437 (a+b)	4822 417 10631
438	4822 267 40129
439	4822 462 40245
441	4822 256 30143
442	4822 264 30041



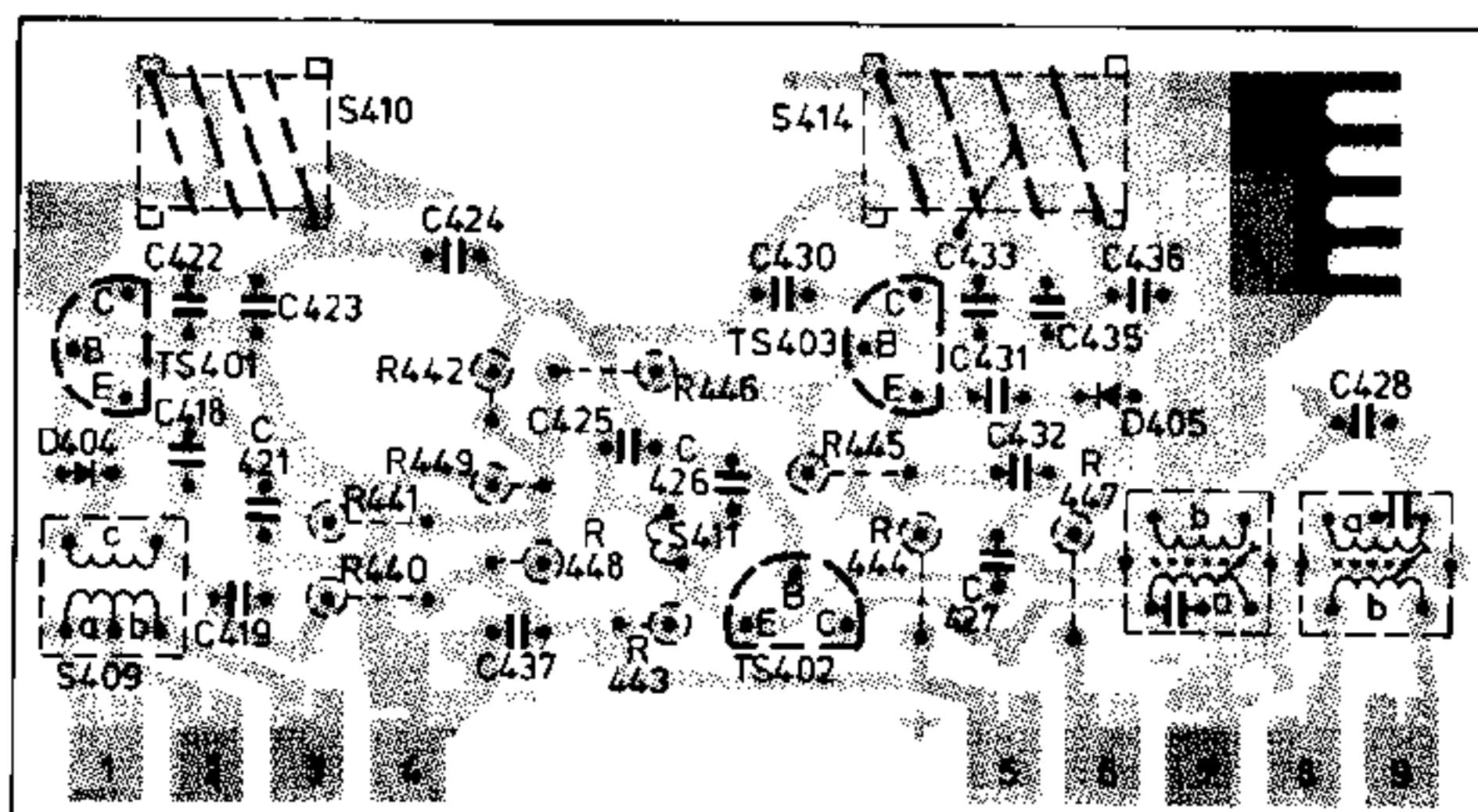
12475 A7

(A) Shell Alvania 2 4822 389 10001

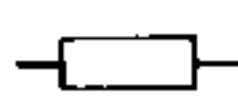
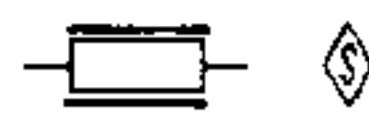




11925C10



11924A10

-IC- 			-R- 		
6101	TBA570	4822 209 80358	3124	VDR 18 V ± 12 %	4822 116 20073
6102	TDA1005	4822 209 80315	3167	470 kΩ trimmer lin.	4822 100 10107
6351,6352	TBA810AS	4822 209 80298	3176	2.2 kΩ trimmer lin.	4822 100 10029
			3180	10 kΩ trimmer special	4822 100 10202
-D- 			3208	220 kΩ log.	4822 101 50216
6060,6118,6120	BAV10	5322 130 30594	3253	100 kΩ lin. balance	4822 101 20507
6115,6116	2AA119	4822 130 30312	3255,3256	100 kΩ log. treble	4822 102 30272
6121	BZX79/B8V2	5322 130 34382	3259,3260	2.2 MΩ log. bass	4822 102 30269
6122...6125	BAX14	5322 130 34193	3269,3270	50 kΩ+170 kΩ log. volume	4822 102 30271
6353	BY225-100	4822 130 30917			
-TS- 			-R- 		
6104,6105	BF494	5322 130 44195	3216,3217	1 Ω - 1/8 W	4822 111 30215
6106,6107	BC548B	4822 130 40937	3218	1 Ω - 1/4 W	4822 111 30339
6111,6112			3361	15 Ω - 1/4 W	4822 111 30027
6109,6110	BC559B	5322 130 44358			
-S- 			-C- 		
5101,5102		4822 153 50205	2102,2106	10 nF, -20+100 % 63 V	4822 122 30043
5103		4822 156 30577	2107,2138		
5104		4822 156 30578	2109	22 nF, 10 % -630 V	4822 121 40407
5106		4822 153 50207	2120	2,7 nF, 5 % - 63 V	5322 121 54065
5107		4822 153 50208	2121	180 pF, 1 % -500 V	5322 121 54057
5108		4822 156 30581	2122,2123	10 pF trimmer	4822 125 50062
5109		4822 156 30564	2125	47 nF, 10 % -400 V	4822 121 40239
5111		4822 156 30582	2126	3 nF, 5 % - 63 V	4822 121 50414
5112		4822 156 30583	2130	365 pF, 1 % -500 V	4822 121 50551
5115		4822 156 30579	2131	309 pF, 1 % -500 V	4822 121 50628
			2132	10 pF, 2 % -100 V	4822 122 31054
			2133,2159,2177	100 nF, 10 % -250 V	4822 121 41161
			2178,2351,2352		
			2139	15 nF, 10 % -630 V	4822 121 40406
			2148,2153,	10 nF, 10 % -630 V	4822 121 41134
			2154		
			2149	68 pF, 2 % -100 V	4822 122 31076
			2161	10 μF - 3 V	5322 124 14084
			2169	33 nF, 20 % -400 V	4822 121 40411
			2171	330 pF, 10 % -100 V	4822 122 30055
			2172	220 pF, 10 % -500 V	4822 122 31173
			2251,2252	6,8 nF, 10 % -400 V	4822 121 40347
			2369,2370,2381	100 nF, 10 % -100 V	4822 121 40334
			-Miscellaneous-		
			1052	FM-tuner + Var.cap.	4822 210 10188
			1056	Ferroceptor	4822 158 60405
			1010	Mains transformer	4822 146 20524
			5105	Ceramic resonator	
				452 kHz	4822 242 70255
				460 kHz	4822 242 70256
				470 kHz	4822 242 70257