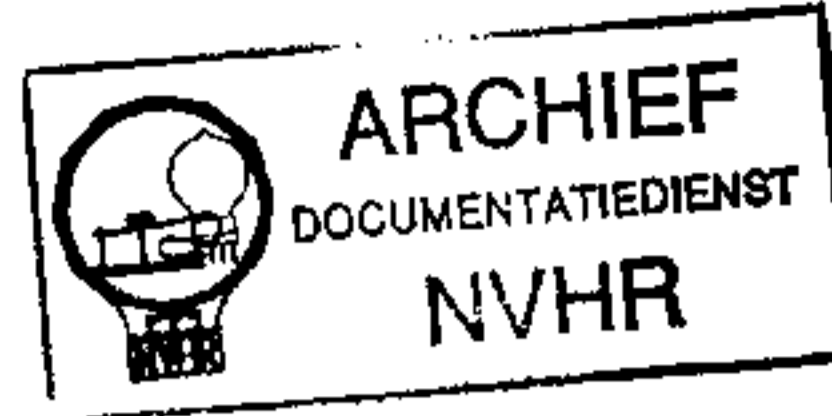


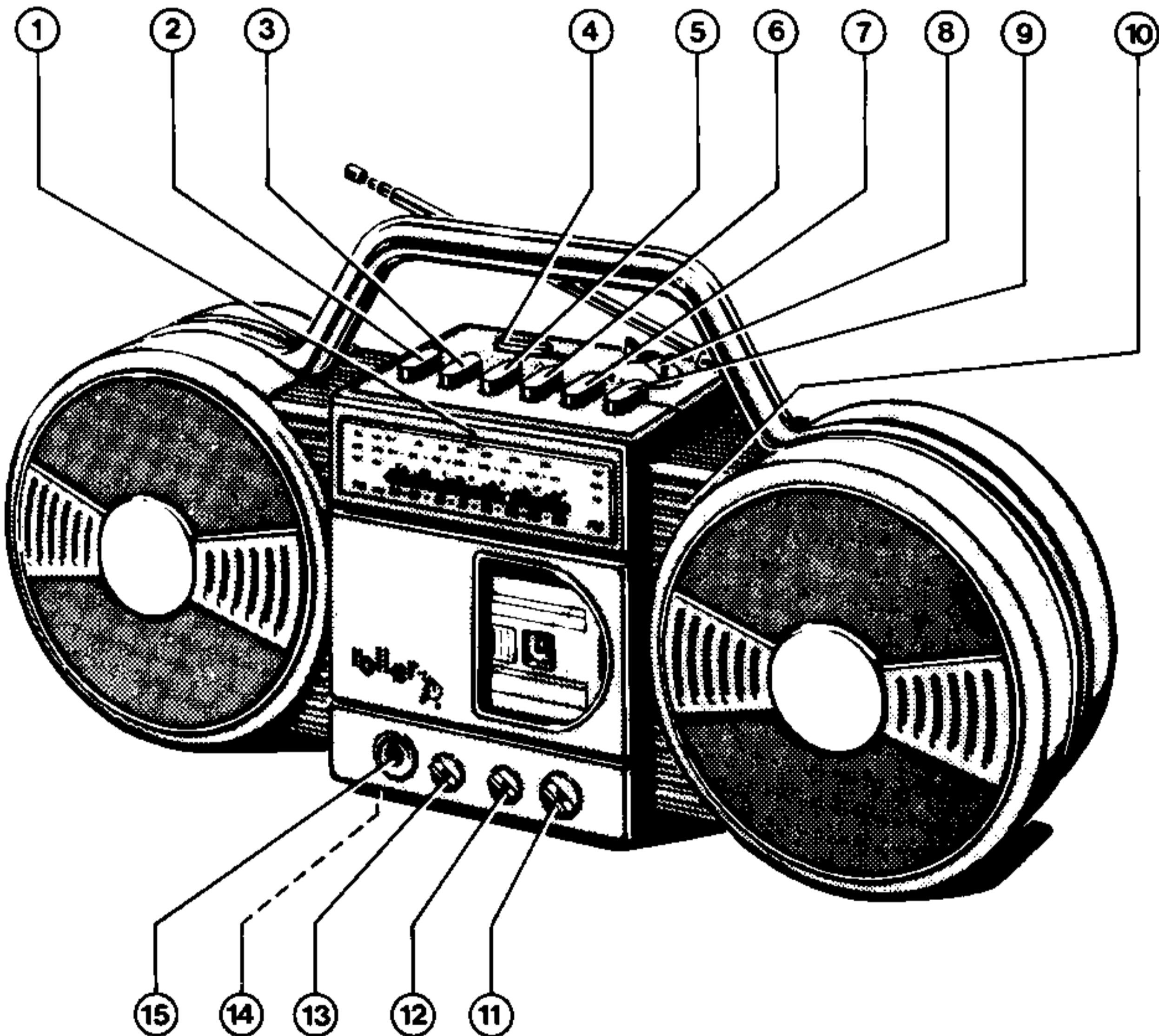
Service  
Service  
Service

Ned. Ver. v. Historie v/d Radio



For repair information of the cassette mechanism see Service Manual of "Recorders tape deck RT-1" and "RT-63"

# Service Manual



"After servicing and before returning set to customer perform a leakage current or resistive measurement test from all exposed metal parts to earth ground to assure no shock hazard exist. The leakage current must not exceed 0.5 mA".

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














"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".

Subject to modification  
4822 725 21085

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**PHILIPS** Published by Service Consumer Electronics

# Controls

1. FM Stereo LED	7018	9. ●	SK-B
2. 		10. 	1011
3. 		11. 	3231
4. FM AM Tape	SK-A	12. 	3230
5. 		13. Stereo	3250
6. 		14. V ~ 	BU-1
7. 		15. 	BU-2
8. 	2101		

# Specifications

MW : 520-1605 KHz  
 FM : 87.5-108 MHz  
 AM-IF : 468 KHz  
           455 KHz - /01E/L  
                       /17E/L  
                       /40E/L  
 FM-IF : 10.7 MHz  
 : 220 V 50 Hz  
 : 120 V 60 Hz  
 : 240 V /40E-L  
 : 110 V/220 V-/01E-L/31E-L

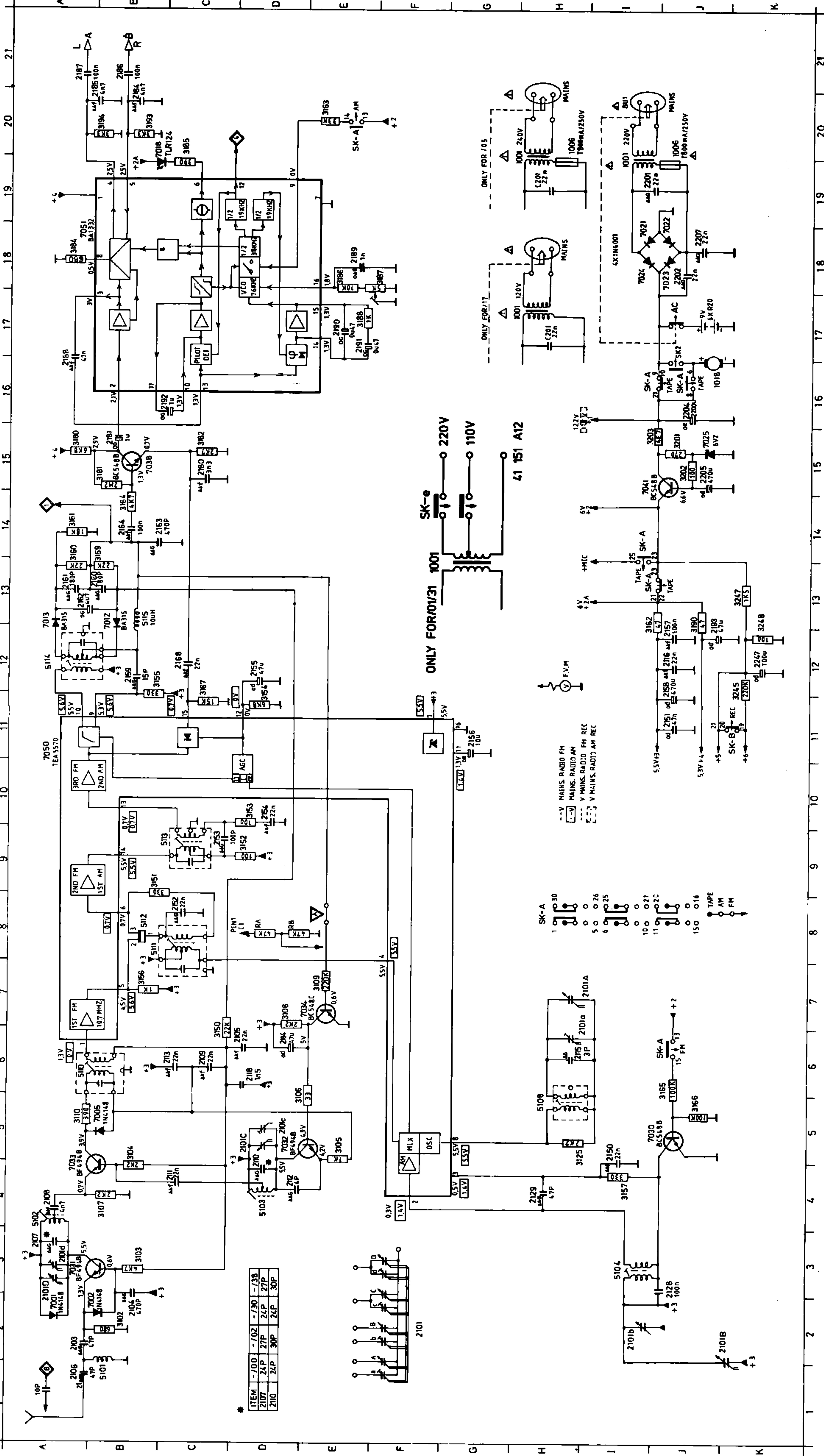
 : 9 V 6xR14  
 : ~ 2x1.4 W ± 1 dB(d=10%)  
 : 2x2.0 W ± 1 dB(d=10%)  
 Tape speed : 4.76 cm/sec ± 3%  
 Wow and flutter : ≤0.35%  
 Signal to noise ratio : ≥ 40 dB

Adjustment	Cassette	Recorder in position	Apply signal to	Measure on	Read on	Adjust with	Adjust to
Play back speed	3150 Hz of SBC420*	PLAY	—	BU-1	Wow- and flutter meter	Preset in motor	**a
Azimuth R/P head	8 kHz of SBC420*	PLAY	—	BU-1	mV-meter	Left screw R/PB head	Max. output

\* SBC420: 4822 397 30071.

\*\*a The maximum permissible speed deviation is 3%.  
 Moreover, the wow-and-flutter value can be read.  
 This value should not exceed 0.35%.

- 2101 E2
- 2103 A2
- 2104 B2
- 2105 D6
- 2106 A1
- 2107 A3
- 2108 A4
- 2109 C6
- 2110 D5
- 2111 C4
- 2112 D4
- 2113 C6
- 2114 D6
- 2115 H6
- 2116 J12
- 2118 D6
- 2128 I3
- 2129 H4
- 2150 I5
- 2151 J11
- 2152 C8
- 2153 C9
- 2154 D10
- 2155 D12
- 2156 G11
- 2157 J12
- 2158 J12
- 2159 B12
- 2160 B13
- 2161 A13
- 2162 A13
- 2163 B14
- 2164 B14
- 2168 C12
- 2180 C15
- 2181 B15
- 2184 B20
- 2185 A20
- 2186 B21
- 2187 A21
- 2188 A16
- 2189 E18
- 2190 E17
- 2191 E17
- 2192 B16
- 2193 J12
- 2201 I19
- 2202 J18
- 2204 J16
- 2205 J5
- 2247 K12
- 2207 J18
- 3102 B2
- 3103 B3
- 3104 B5
- 3105 E5
- 3106 D5
- 3107 B4
- 3108 D7
- 3109 E7
- 3110 A5
- 3125 H5
- 3150 C6
- 3151 B8
- 3152 D9
- 3153 D10
- 3154 D12
- 3155 B12
- 3156 B7
- 3157 I4
- 3159 B14
- 3160 A14
- 3161 A14
- 3162 I13
- 3163 E20
- 3164 B14
- 3165 J6
- 3166 J5
- 3167 C12
- 3180 A15
- 3181 B15
- 3182 C15
- 3184 A18
- 3185 C20
- 3186 E18
- 3187 E18
- 3188 E17
- 3189 C1
- 3190 J13
- 3194 B20
- 3193 B20
- 3201 J15
- 3202 J15
- 3203 I15
- 3245 K12
- 3247 K13
- 3248 K13
- 7001 A2
- 7002 B2
- 7005 B5
- 7012 B3
- 7013 A3
- 7018 B20
- 7021 I18
- 7022 K13
- 7023 B2
- 7024 J15
- 7025 J15
- 7050 B3
- 7051 A8
- 7031 A3
- 7032 D5
- 7033 A4
- 7034 E7
- 7038 B5
- 7030 J5
- 7041 I15
- 1001 I20
- 1006 J20
- 5101 B2
- 5102 A4
- 5103 D4
- 5104 I3
- 5108 I5
- 5110 A6
- 5111 B8
- 5112 B8
- 5113 B9
- 5114 A12
- 5115 B12

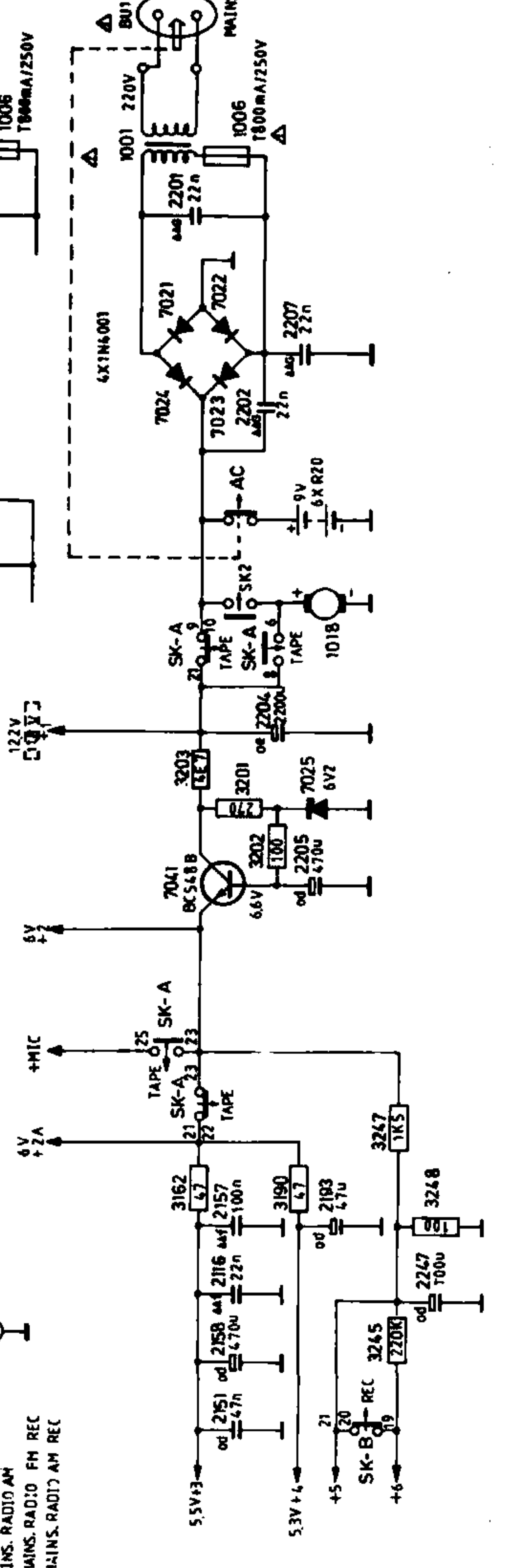


ITEM	-/00	-/02	-/30	-/38
2107	24P	27P	24P	27P
2110	24P	30P	24P	30P

SK-A  
 1 0 30  
 5 0 0 26  
 6 0 0 25  
 10 0 0 21  
 11 0 0 20  
 15 0 0 16  
 TAPE  
 AM  
 FM

-V MAINS. RADIO FM  
 V MAINS. RADIO FM REC  
 V MAINS. RADIO FM REC  
 V MAINS. RADIO AM REC

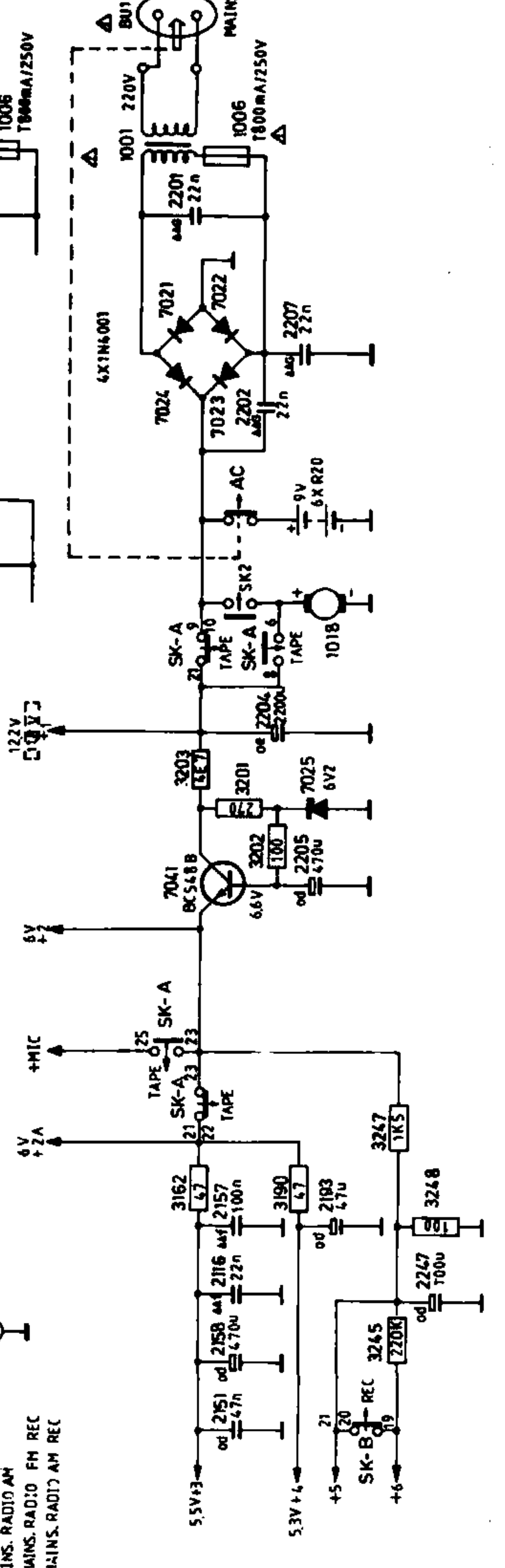
ONLY FOR 101/31  
 ONLY FOR 175  
 ONLY FOR 105



SK-A  
 1 0 30  
 5 0 0 26  
 6 0 0 25  
 10 0 0 21  
 11 0 0 20  
 15 0 0 16  
 TAPE  
 AM  
 FM

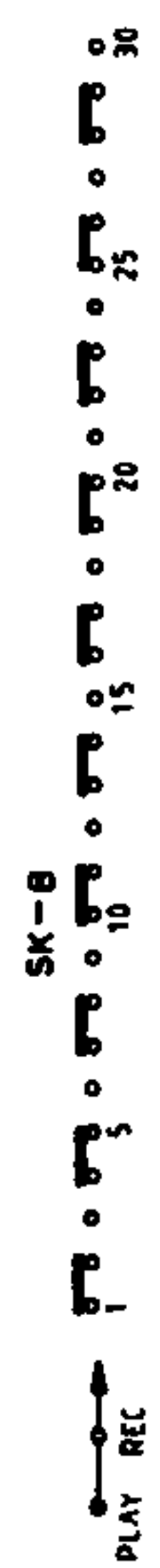
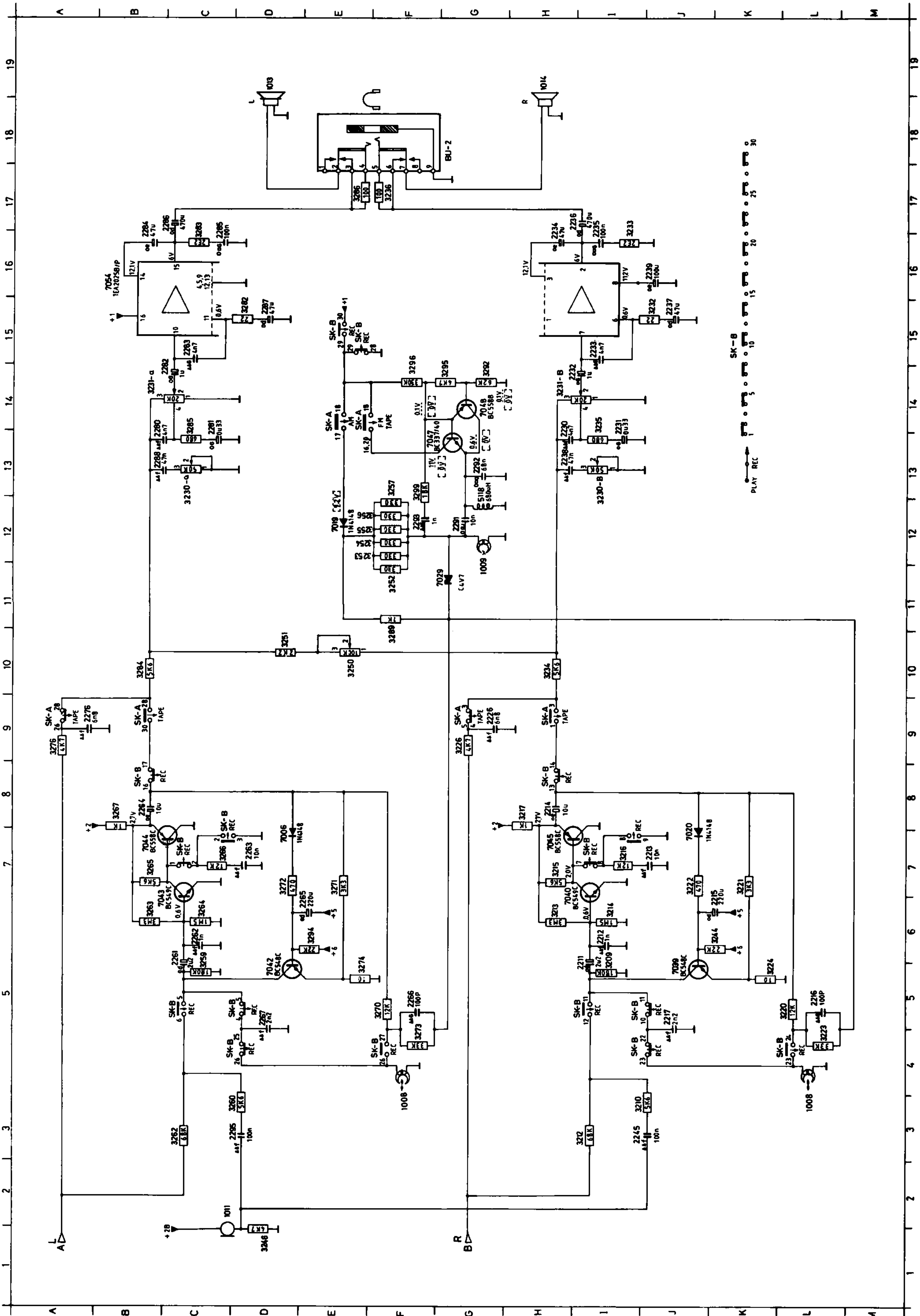
-V MAINS. RADIO FM  
 V MAINS. RADIO FM REC  
 V MAINS. RADIO FM REC  
 V MAINS. RADIO AM REC

ONLY FOR 101/31  
 ONLY FOR 175  
 ONLY FOR 105





1013 2215 2214 H8 2231 J7 2230 H13 2236 J9 2226 J5 2216 L5 2234 H16 2261 C5 2276 B9 2286 C17 3210 J3 3220 L5 3231-B 114 3246 D1 3256 F12 3265 B7 3274 E5 3285 C14 3299 F13 7039 J5 7054 L4 7054 L4  
 1014 2217 J5 2235 H16 2262 C6 2280 B13 2287 D15 3212 I3 3221 K7 3222 J7 3232 J15 3250 E10 3257 F13 3265 F12 3274 E5 3285 C14 3299 F13 7040 I6 7054 L4  
 2211 15 2236 J9 2263 O7 2281 C13 2288 B13 2291 G12 3213 H6 3222 J7 3233 I7 3251 D10 3259 C5 3266 C7 3276 A9 3286 F17 5118 G12 7040 I6  
 2212 16 2237 J15 2264 B8 2282 C14 2291 G12 3214 I6 3223 L4 3234 H10 3252 F11 3260 D3 3267 B8 3270 F5 3289 D7 7042 D5 7043 C7  
 2213 J7 2238 H13 2265 E6 2283 C15 2293 F12 3215 H7 3224 K5 3235 I14 3253 F12 3262 C3 3271 E7 3282 D5 3291 E6 7043 C7 7044 B7  
 2214 H8 2239 J16 2266 F5 2284 B16 2295 D3 3216 I7 3226 G9 3236 F17 3254 F12 3263 B6 3272 D7 3283 C17 3295 G14 7045 H7  
 2215 K6 2233 I15 2245 J3 2267 D5 2285 D16 3209 I5 3217 H8 3230-B 113 3244 K6 3255 F12 3264 C6 3273 F4 3284 B10 3296 F14 7045 H7 7048 G14



SK-A  
 SK-B  
 PLAY REC

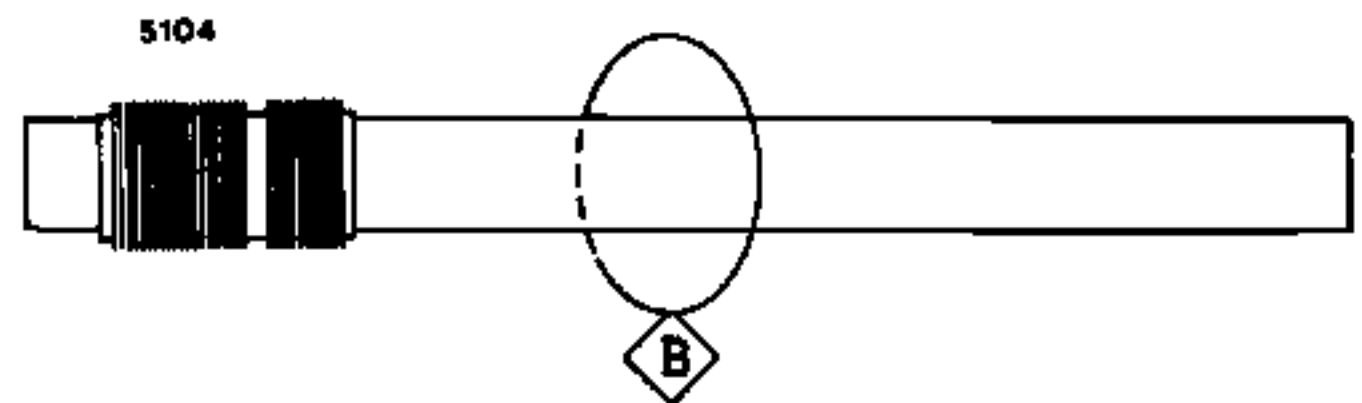
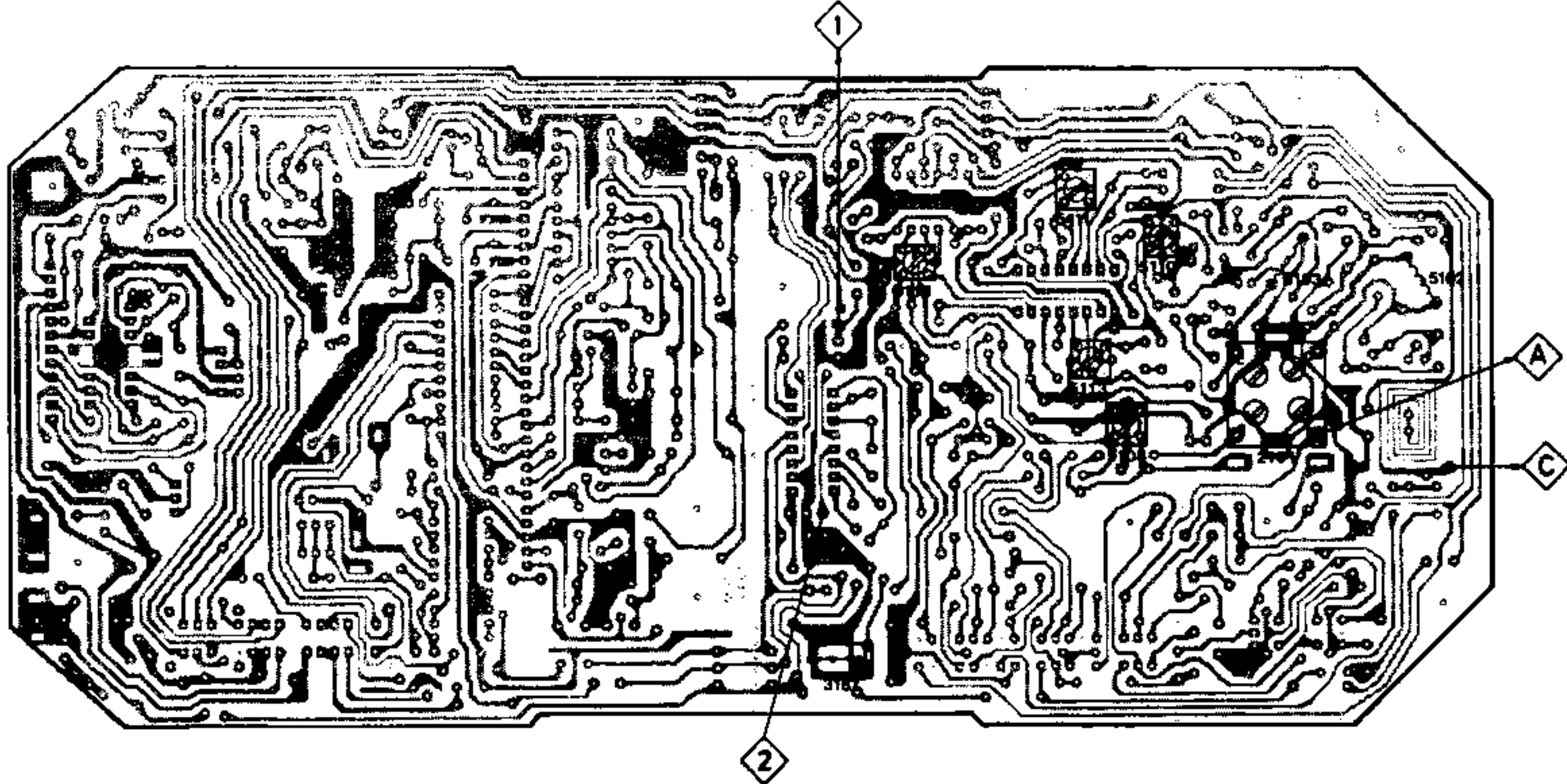
SK-A								
<b>AM-IF</b>								
MW	468 KHz*	 via 10nF	min.		5111 5113			max.
<b>AM-RF</b>								
MW 520-1605 KHz	512 KHz 1635 KHz 550 KHz 1500 KHz		max. min. 		5108 2101a 5104 2101b			max.
<b>FM-IF</b>								
FM	≈ 10.7 MHz	 via 10nF	min.	2101C 5114	5110			max.
				2101C	5110 5114		symmetrical 	
<b>FM-RF</b>								
FM 87.5-108MHz	86.5 MHz** 109 MHz** 88 MHz 106 MHz		max. min. 		5103 2101c 5102 2101d			max.
<b>STEREO DECODER</b>								
FM					3187	 	19±0.08KHz	

Repeat

\* For -/17 -/47 -/67 IF=455KHz

\*\* For -/32 FM 87.35±0.15 - 107.5±0.25  
- /38 FM 87.35±0.15 - 108.25±0.25

"Bei notwendigem Abgleich ist das Gerät auf die gesetzlich vorgeschriebenen Eckfrequenzen abzugleichen".



**GB**

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used.

**NL**

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

**I**

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

**F**

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

**D**

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.

**GB**

Because, generally speaking, MOS IC's are very sensitive to overload and too high voltages, measurements should be carried out with greatest possible care. For further instructions, see the directions enclosed in the separate IC-packages.

**NL**

Omdat MOS IC's in het algemeen zeer gevoelig zijn voor overbelasting en te hoge spanning dient bij het meten de grootst mogelijke zorgvuldigheid in acht genomen te worden. Zie voor verdere instructies de bijsluiter in de verpakking van de IC's.

**F**

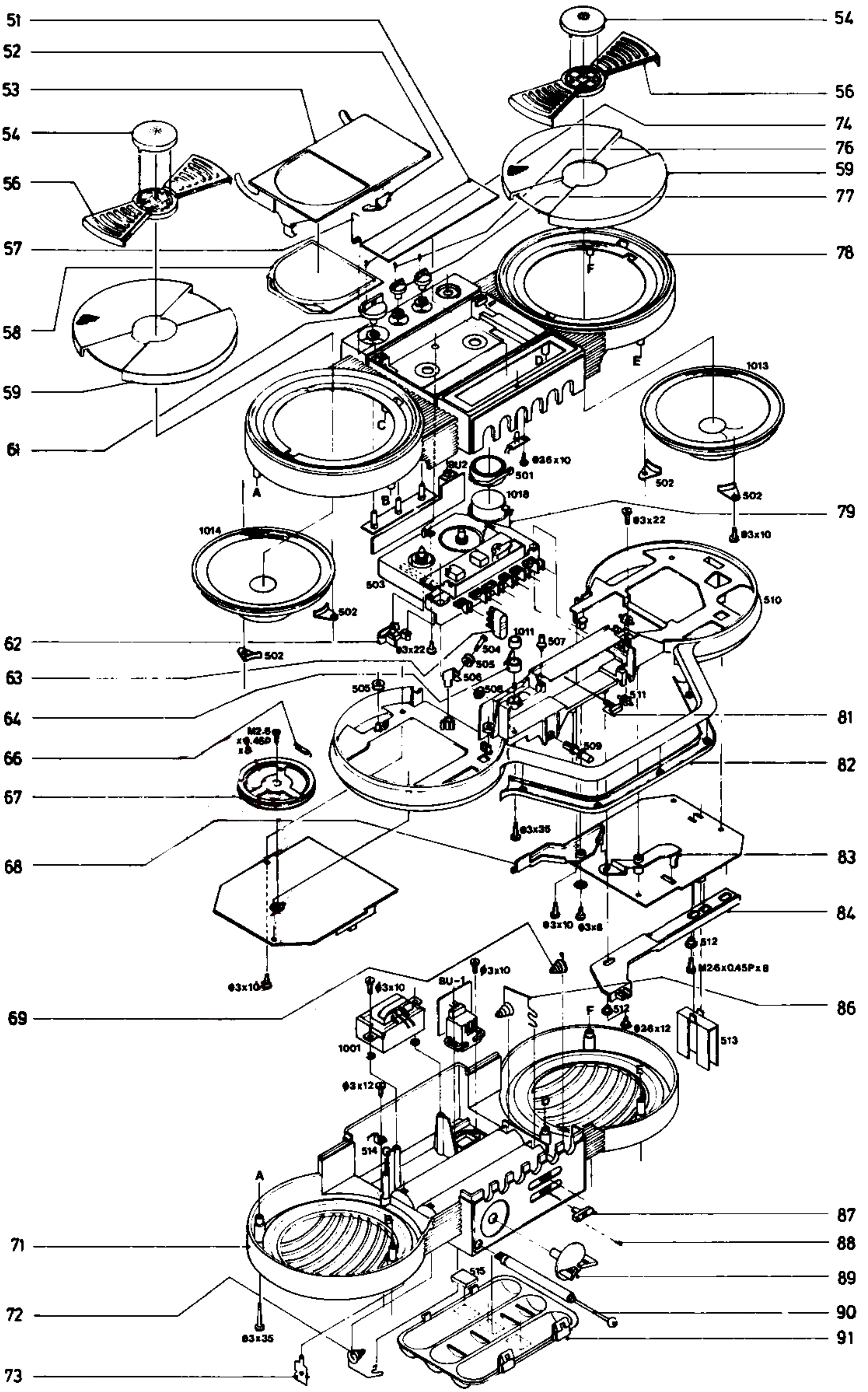
Parce qu'en général, les IC MOS sont très sensibles à la surcharge et à des tensions trop élevées, il faudra procéder aux mesures avec le plus grand soin. Pour plus de détails, voir les instructions accompagnant l'emballage des IC.

**D**

Da MOS IC's im allgemeinen sehr empfindlich gegen Überbelastung und zu hohe Spannung sind, muss man beim Messen äusserst vorsichtig vorgehen. Für weitere Weisungen siehe den beigefügten Zettel in der Verpackung der IC's.

**I**

Dato che gli IC MOS sono molto sensibili alla sovraccarica e alle tensioni troppo alte, occorrerà procedere alle misure con particolare cautela. Per altri particolari riferirsi alla istruzioni comprese nell'imballaggio di ogni IC.





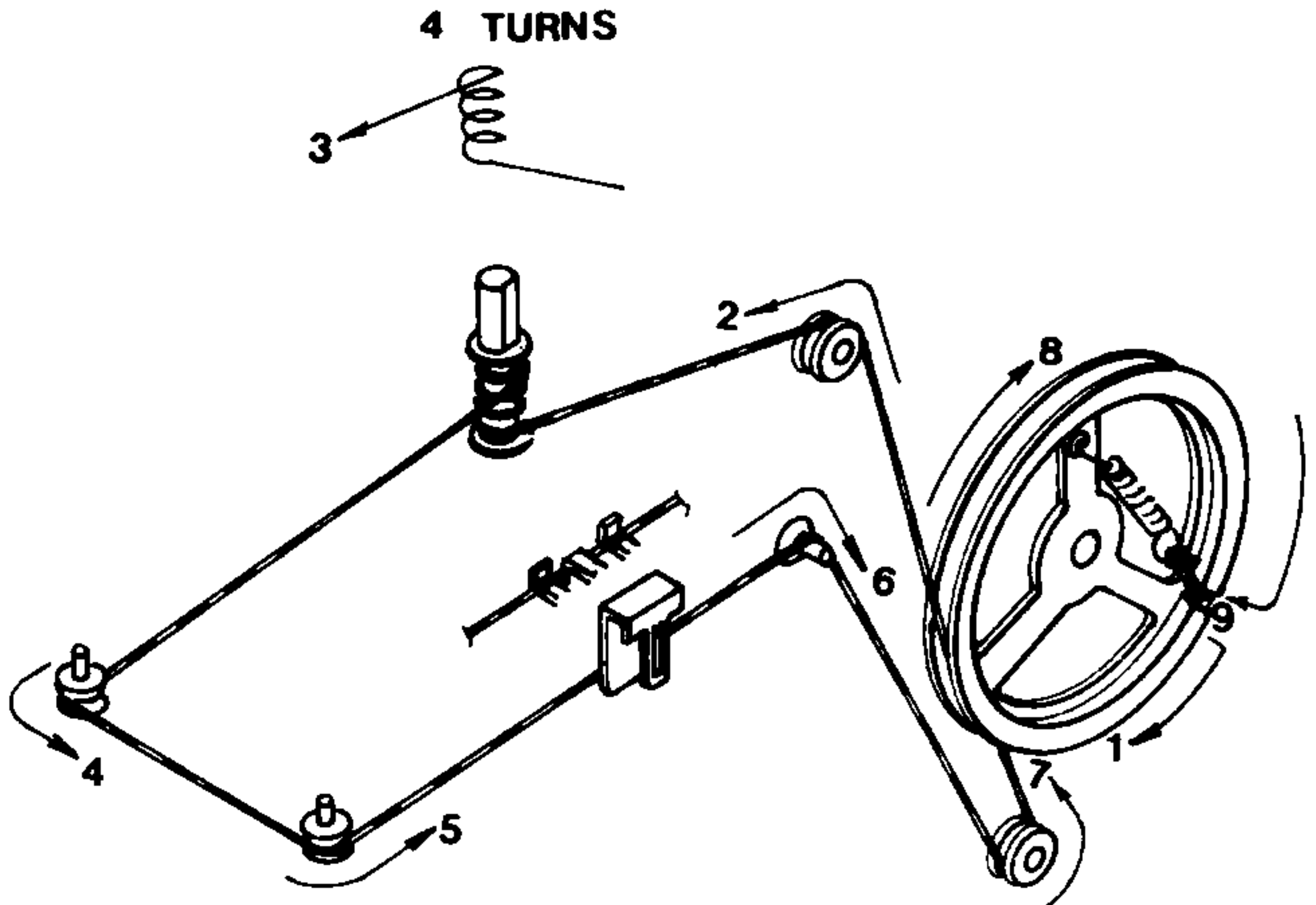
FOR /..E




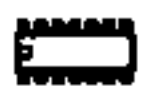

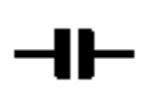
51	4822 333 20066	74	4822 413 70237
52	4822 492 63426	76	4822 413 70238
53	4822 443 61879	77	4822 413 41338
53	4822 443 61876 only for /17E/L/37E/L	78	4822 443 50916
54	4822 443 61897	79	4822 256 90591
56	4822 443 61877	81	4822 450 81027
57	4822 492 63427	82	4822 498 60435
58	4822 450 60805	83	4822 403 52945
59	4822 458 20122	84	4822 403 30604
61	4822 413 41337	86	4822 290 80677
62	4822 403 52943	87	4822 411 61245
63	4822 410 25302	88	4822 413 70239
64	4822 426 60219	89	4822 413 41336
66	4822 492 40445	90	4822 303 30321
67	4822 528 40271	91	4822 443 61881
68	4822 403 52944		
69	4822 492 51846		
71	4822 443 50915		
71	4822 443 50962 only for /01E/L/31E/L		
72	4822 290 80678		
73	4822 290 80679		

FOR /..L, same as /..E except

54	4822 443 61878
78	4822 443 50914
82	4822 498 60434
90	4822 303 30319

DIAL SYSTEM

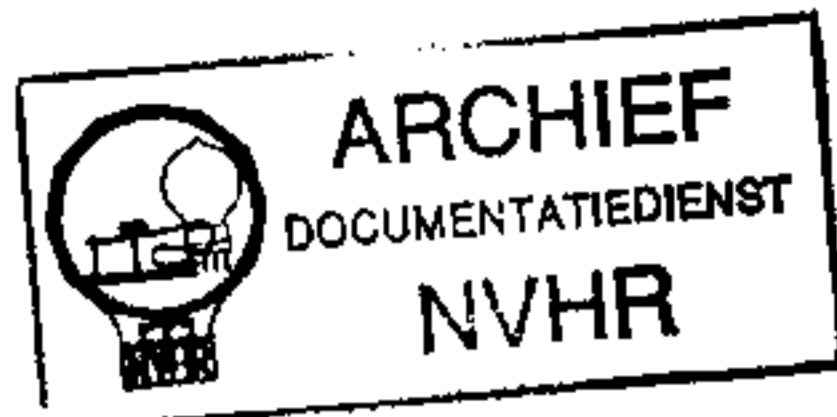


<b>-R-</b>				<b>-L-</b>			
3187	VR-Pre 5KB	4822 100 20551		5116	Ind 10 μH	4822 157 51462	
3230	VR-Tone	4822 102 30448		5118	Ind 680 μH	4822 157 51718	
3231	VR-Volume	4822 102 30451		(/-30E/L/-31E/L/-32E/L/-40E/L)			
3250	VR-Mono/stereo	4822 100 20549		5102 5103	FM RF/OSC	4822 156 30947	
<b>-TS-</b>				5104	MW ferr bar	4822 158 60558	
7030 7038	BC548B	4822 130 40937		5108	MW OSC	4822 156 21397	
7031-7033	BF494B	4822 130 41376		5110	FM IFT	4822 153 50206	
7034 7039	BC548C	4822 130 44196		5111 5113	AM IFT	4822 156 10737	
7040 7043	BC549C	4822 130 44246		5112	Cer. filter 10.7 M	4822 242 70249	
7044 7045	BC558C	5322 130 60068		5114	FM Det	4822 156 10686	
7047	BC337/40	4822 130 41344		(/-00E/L/-01E/L/-02E/L/-17E/L/-37E/L)			
7048	BC558B	4822 130 44197		5102 5103	FM RF/OSC	4822 156 21393	
<b>-IC-</b>				5104	MW ferr bar	4822 156 21392	
7050	TEA5570	4822 209 81563		5108	MW OSC	4822 156 21394	
7051	BA1332	4822 209 83105		5110	FM IFT	4822 156 21395	
7054	TEA2025B/P	4822 209 82487		5111 5113	AM IFT	4822 156 21396	
<b>-Miscellaneous-</b>				5112	Cer. filter 10,7M	4822 242 71564	
SK-A	Function switch	4822 277 30622		5114	FM Det	4822 156 21398	
SK-B	Switch, recording	4822 277 60189		<b>-D-</b>			
SK-C	Voltage selector	4822 272 10243		7001 7002	IN148	4822 130 30621	
BU-1	Socket, mains Δ	4822 265 20287		7012 7013	BA315	4822 130 30843	
BU-1	(-/17E/L-/37E/L) AC Socket Δ	4822 267 30763		7018	TLR124	4822 130 31274	
BU-2	Stereo jack	4822 267 30764		7021-7024	IN4001	4822 130 31438	
1001	Trans mains Δ	4822 146 21184		7025	Zener 6 V 2	4822 130 34167	
1001	(17E/L-/37E/L) Trans mains Δ	4822 146 21183		7029	Zener 4 V 7	4822 130 34174	
1001	(01E/L-/31E/L) Trans mains Δ	4822 146 21216		<b>-C-</b>			
1001 (40E/L)	Trans mains Δ	4822 146 21201		2101	PVC	4822 125 20283	
1008	R/P head	4822 249 10186					
1009	Erase head	4822 249 40093					
1011	Mic, electret	4822 242 30105					
1013 1014	Speaker 4 OHM	4822 240 40083					
1018	Motor DC 9 V	4822 361 20644					
	Motor grommet	4822 532 51691					

Service  
Service  
Service

30S/30X/30Z/31X/31Z/32S/32X/32Z/35S/35X/35Z/40X/40Z/47X/47Z

Ned. Ver. v. Historie v/d Radio



# Service Manual

- GB** Except for the following changes, we refer to the Service Manual of the D8007/00E/00L/01E/01L/02E/02L/17E/17L/30E/30L/31E/31L/32E/32L/37E/37L/40E/40L
- NL** Behalve voor onderstaande wijzigingen verwijzen wij U naar de Service Manual van de D8007/00E/00L/01E/01L/02E/02L/17E/17L/30E/30L/31E/31L/32E/32L/37E/37L/40E/40L
- F** A l'exception de changements ci-dessous, nous nous référons à la Documentation Technique du D8007/00E/00L/01E/01L/02E/02L/17E/17L/30E/30L/31E/31L/32E/32L/37E/37L/40E/40L
- D** Mit Ausnahme folgender Änderungen verweisen wir Sie auf den Service Manual des D8007/00E/00L/01E/01L/02E/02L/17E/17L/30E/30L/31E/31L/32E/32L/37E/37L/40E/40L
- I** Eccetto i cambiamenti di cui sotto, ci riferiamo alla Documentazione Servizio del D8007/00E/00L/01E/01L/02E/02L/17E/17L/30E/30L/31E/31L/32E/32L/37E/37L/40E/40L



Item	<b>/30S/32S/35S</b>	<b>/30X/31X/32X /35X/40X/47X</b>	<b>/30Z/31Z/32Z /35Z/40Z/47Z</b>
	<b>Service codenr.</b>	<b>Service codenr.</b>	<b>Service codenr.</b>
51	4822 333 20068	4822 333 20071	4822 333 20069
53	4822 443 62217	4822 443 62223 (not for /47X)	4822 443 62221 (not for /47Z)
53		4822 443 62226 (only for /47X)	4822 444 62227 (only for /47Z)
54	4822 443 62218	4822 443 62224	4822 443 61878
56	4822 443 61877	4822 443 62225	4822 443 61877
58	4822 450 61066	4822 450 60805	4822 450 60805
59	4822 458 20122	4822 458 20147	4822 458 20122
61	4822 413 41396	4822 413 41403	4822 413 41399
63	4822 410 26012	4822 410 26014	4822 410 26012
63 play	4822 410 26013	4822 410 26015	4822 410 26013
63 record		4822 410 26016	
71	4822 443 51068	4822 443 51074 (not for /31X)	4822 443 51071 (not for /31Z)
71		4822 443 51076 (only for /31X)	4822 443 51073 (only for /31Z)
74	4822 413 70256	4822 413 70237	4822 413 70257
76	4822 413 70255	4822 413 70258	4822 413 70255
77	4822 413 41398	4822 413 41402	4822 413 41398
78	4822 443 51069	4822 413 51075	4822 443 51072
82	4822 498 60443	4822 498 60443	4822 498 60443
87	4822 411 61381	4822 411 61382	4822 411 61381
88	4822 413 70257	4822 443 70237	4822 413 70257
89	4822 413 41397	4822 413 41404	4822 413 41401
90	4822 303 30321	4822 303 30319	4822 303 30319
91	4822 443 62216	4822 443 62222	4822 443 62219
505	4822 528 80857	4822 528 80857	4822 528 80857
510	4822 403 53236	4822 403 53236	4822 403 53236
511	4822 535 92379	4822 535 92379	4822 535 92379
BU1	4822 265 20287	4822 265 20287 (not for /47X)	4822 265 20287 (not for /47Z)
BU1		4822 265 20226 (only for /47X)	4822 265 20226 (only for /47Z)

Item	<b>/30S/30X/30Z /32S/32X/32Z</b>	<b>/31X/31Z</b>	<b>/47X/47Z</b>	<b>/35S/35X/35Z /40X/40Z</b>
	<b>Service codenr.</b>	<b>Service codenr.</b>	<b>Service codenr.</b>	<b>Service codenr.</b>
1001	4822 146 21184	4822 146 21216	4822 146 21277	4822 146 21201