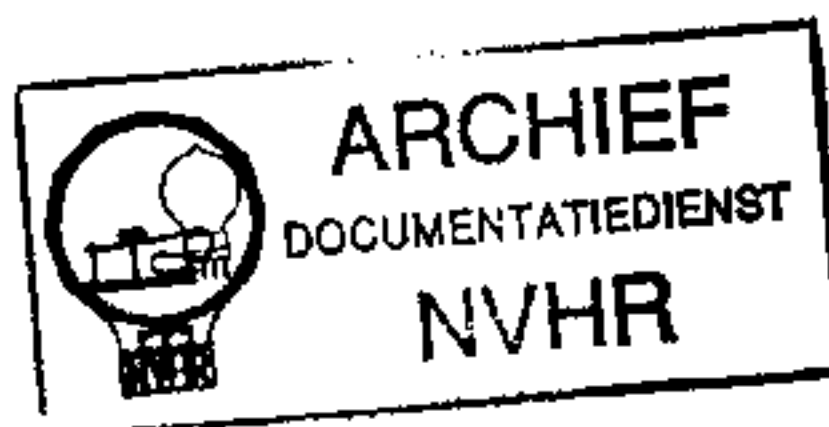
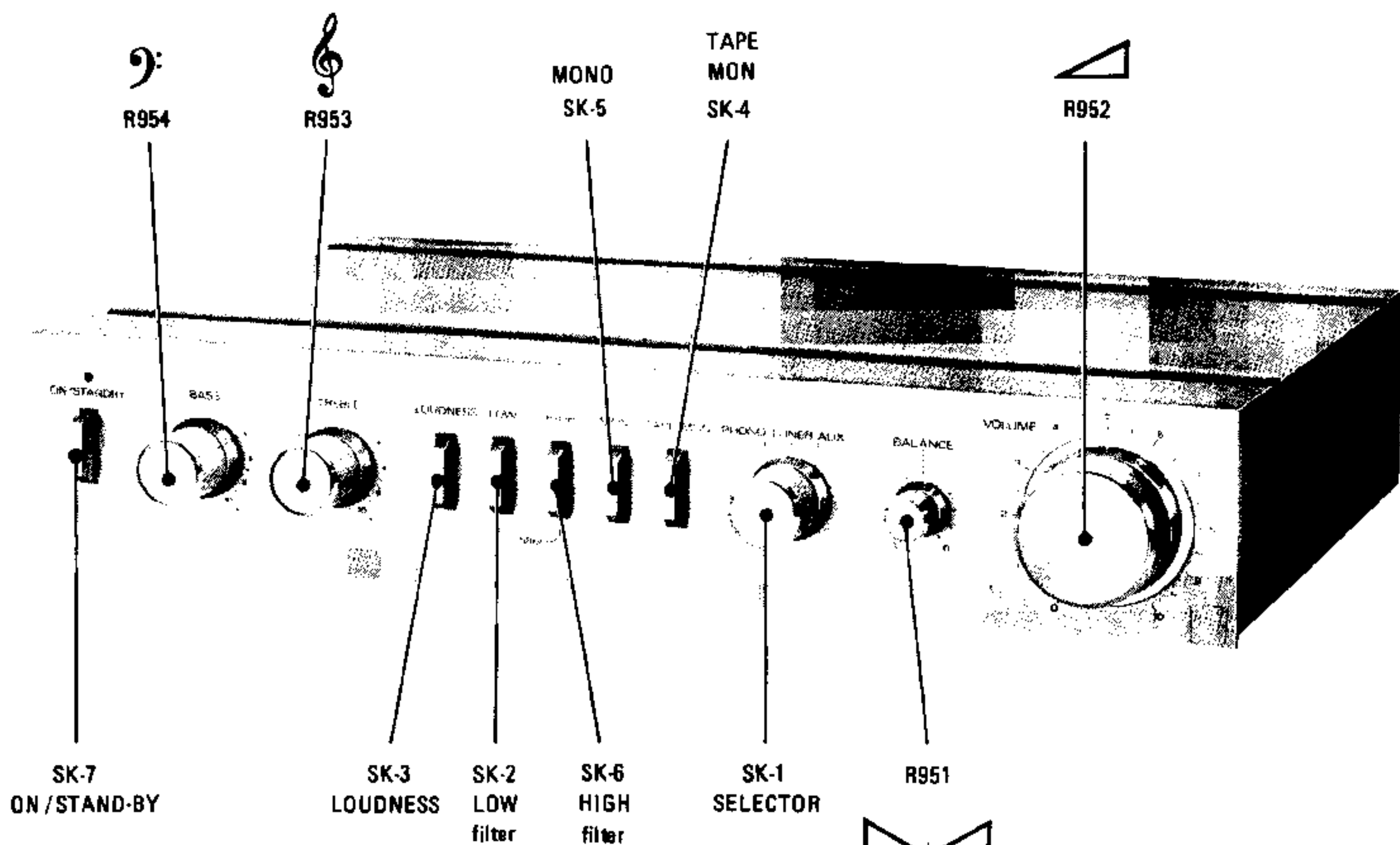


Service  
Service  
Service

Ned. Ver. v. Historie v/d Radio



# Service Manual



19517A12



(GB)

Supply voltage : 220 V  
 Dimensions : 260 x 50 x 183 mm  
 Input sensitivity for 1V output voltage  
 Phono : 2.5 mV/50k ohm  
 Aux : 250 mV/100k ohm  
 Tuner : 250 mV/100k ohm  
 Tape : 250 mV/100k ohm

For more technical specification please consult commercial documentation.

(NL)

Voedingsspanning : 220 V  
 Afmetingen : 260 x 50 x 183 mm  
 Ingangsevoeligheid bij 1V uitgangsspanning  
 Phono : 2.5 mV/50k ohm  
 Aux : 250 mV/100k ohm  
 Tuner : 250 mV/100k ohm  
 Recorder : 250 mV/100k ohm

Voor meer uitgebreide technische specificaties gelieve de commerciële documentatie te raadplegen.

(F)

Tension d'alimentation : 220 V  
 Encombrement : 260 x 50 x 183 mm  
 Sensibilité d'entrée à 1V tension de sortie  
 Phono : 2.5 mV/50k ohm  
 Aux : 250 mV/100k ohm  
 Adaptateur : 250 mV/100k ohm  
 Magnetophone : 250 mV/100k ohm

Pour l'obtention de données techniques plus détaillées veuillez consulter la documentation commerciale.

(D)

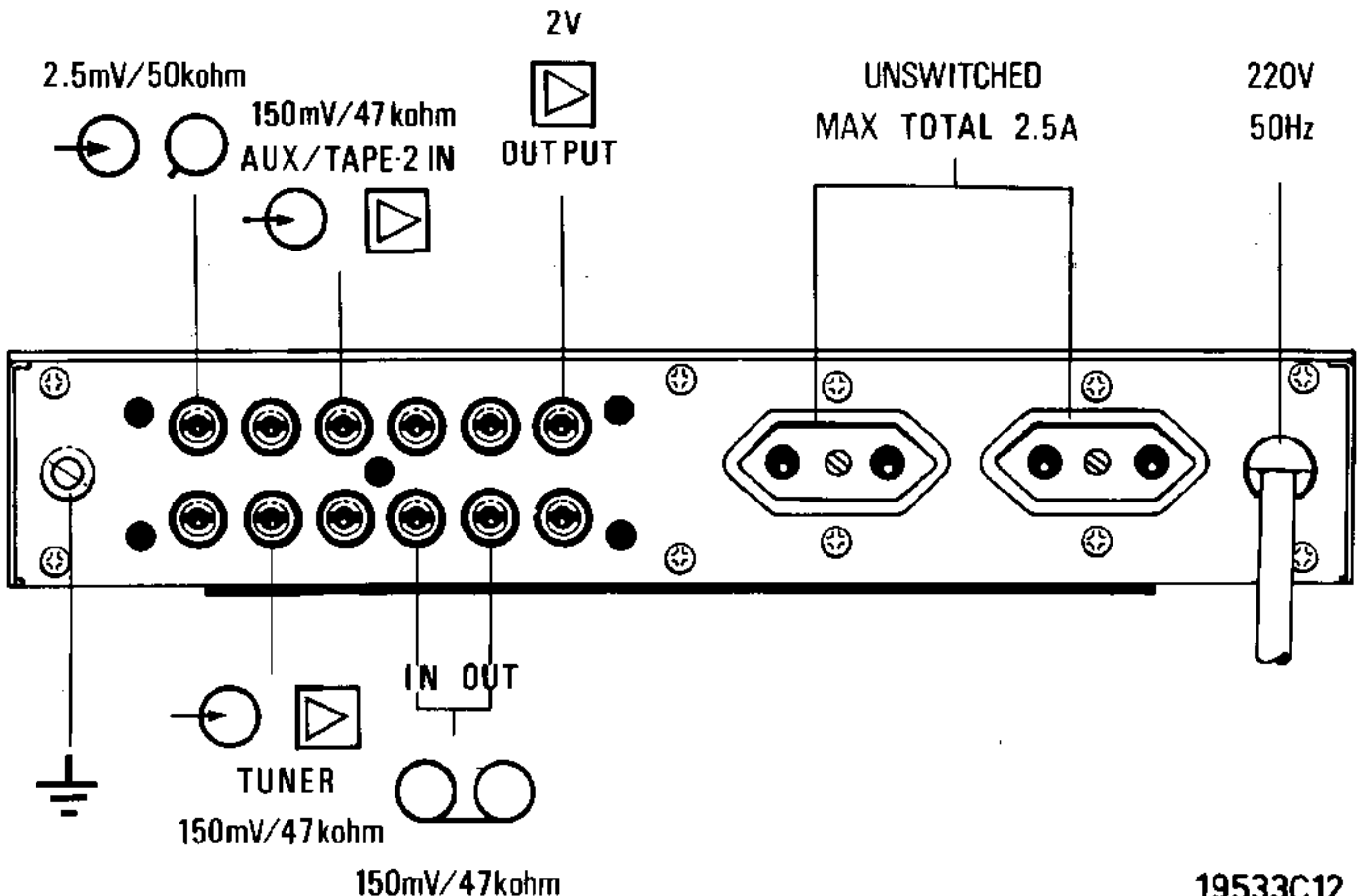
Speisespannung : 220 V  
 Abmessungen : 260 x 50 x 183 mm  
 Eingangsempfindlichkeit bei 1V Ausgangsspannung  
 Phono : 2.5 mV/50k ohm  
 Aux : 250 mV/100k ohm  
 Tuner : 250 mV/100k ohm  
 Recorder : 250 mV/100k ohm

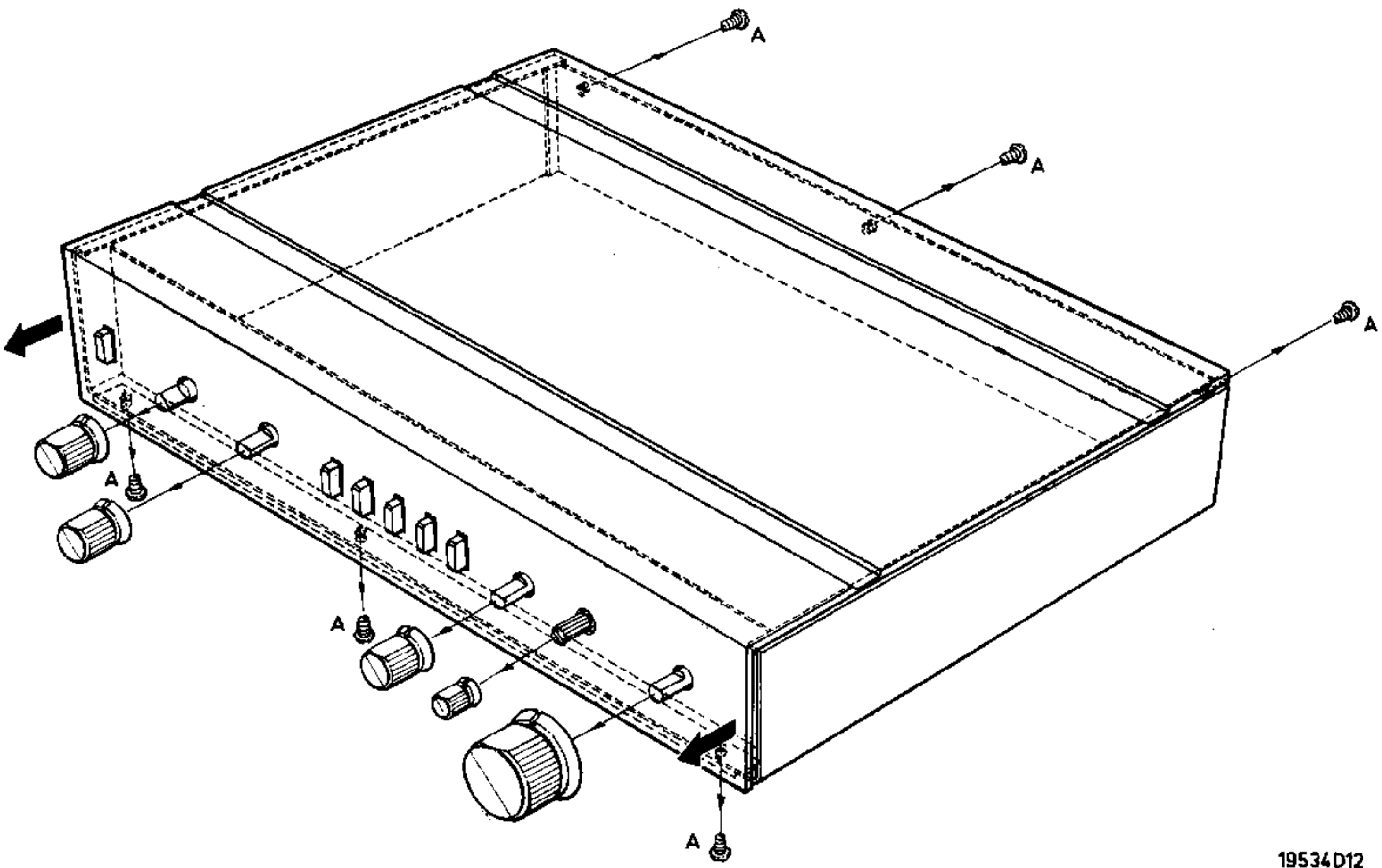
Für eine mehr detaillierte technische Spezifikation verweisen wir auf die kommerzielle Dokumentation.

(S)

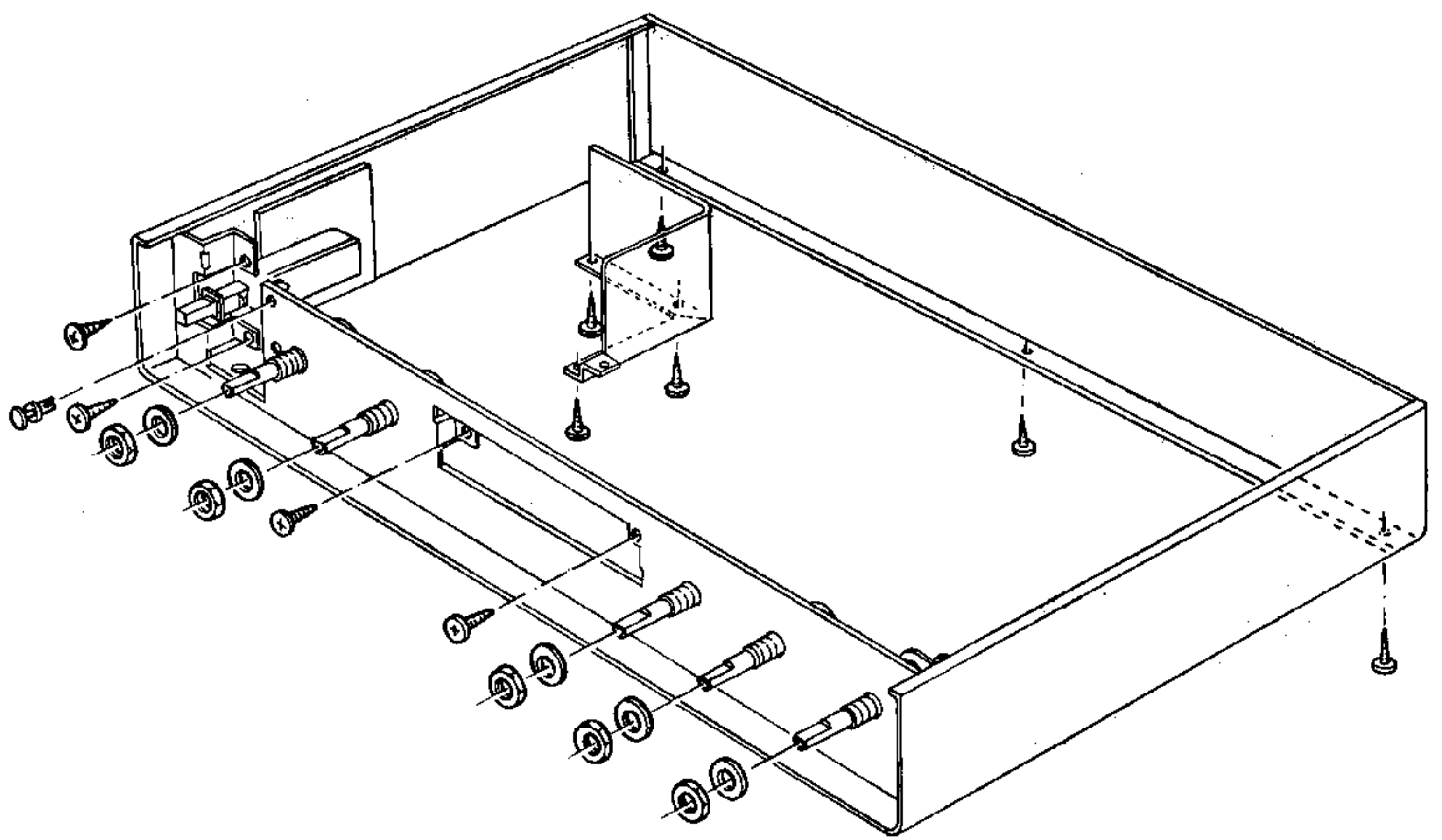
Matningsspanning : 220 V  
 Demensioner : 260 x 50 x 183 mm  
 Ingångskänslighet vid 1V utgångsspanning  
 Grammofon : 2.5 mV/50k ohm  
 Aux : 250 mV/100k ohm  
 Tuner : 250 mV/100k ohm  
 Bandspelare : 250 mV/100k ohm

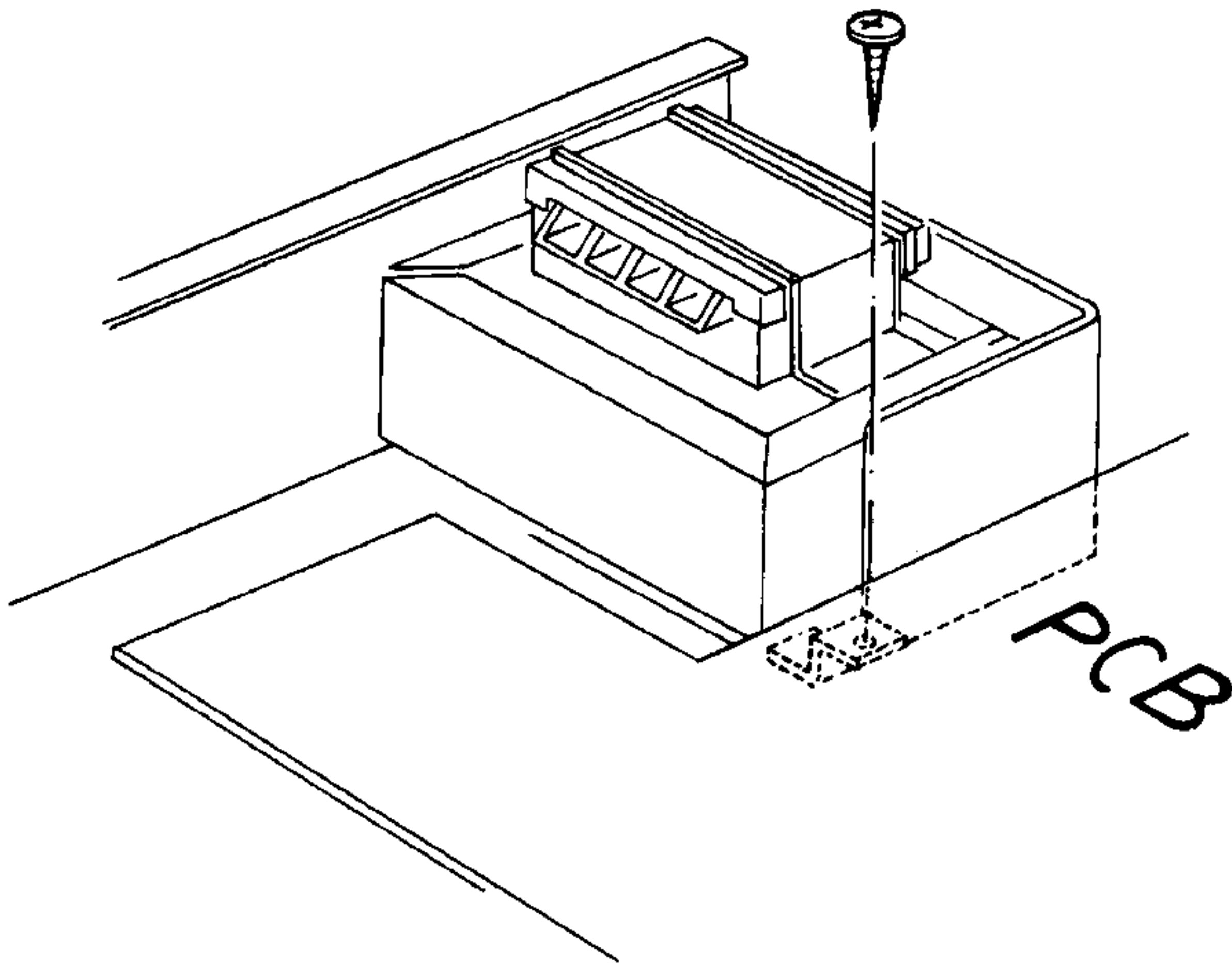
För mera detaljerade tekniska data se kommersiell dokumentation.





19534D12

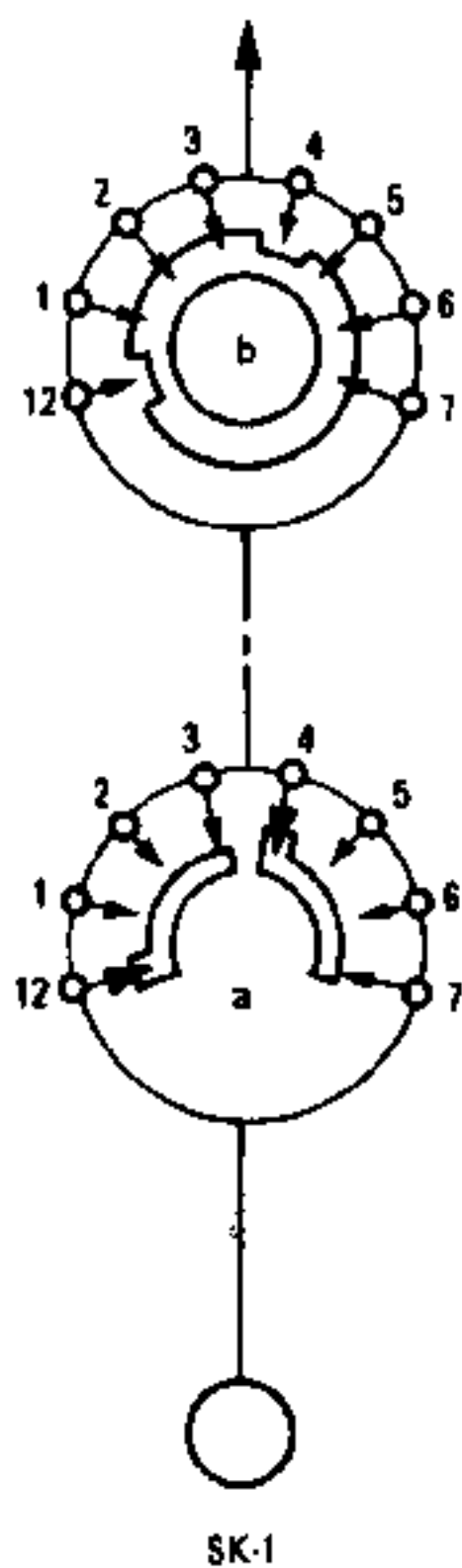




19953A12

SELECTOR  
 12 4 PHONO  
 1 5 TUNER  
 2 6 AUX  
 3 7 COMMON: GROUND

SELECTOR



LD FIL

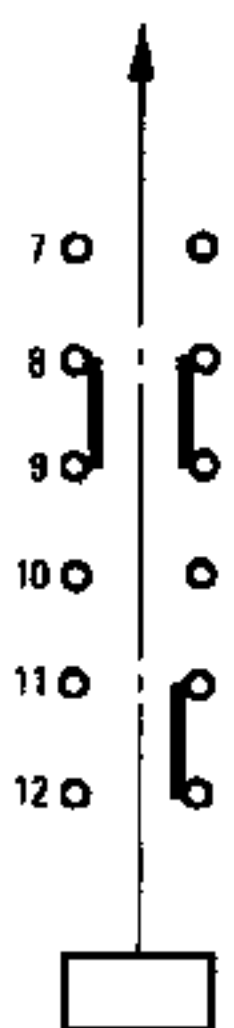
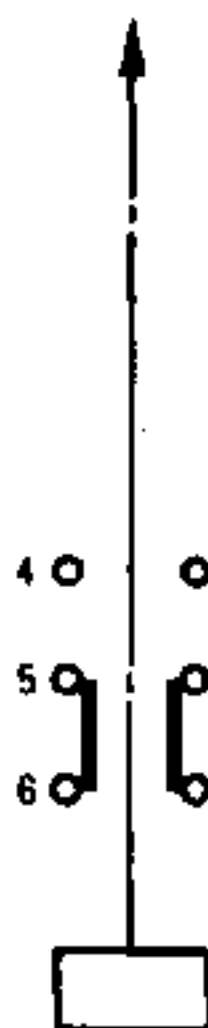
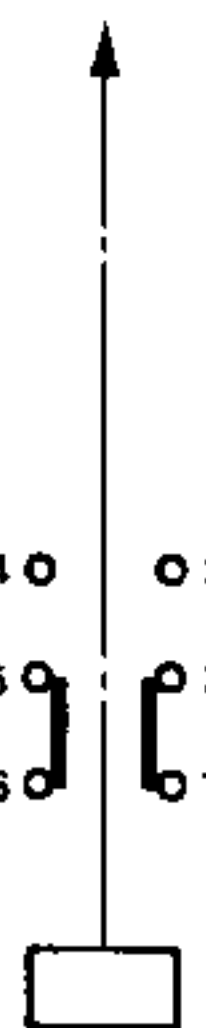
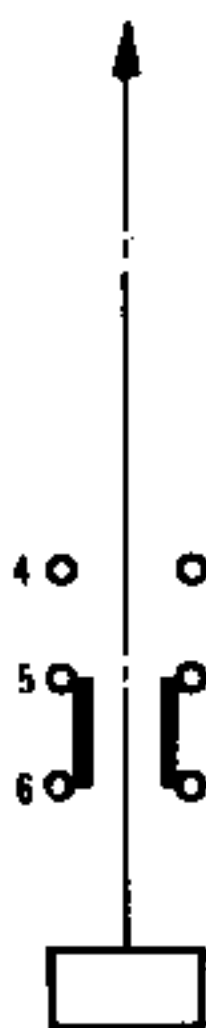
LOUDNESS

TAPE

MONO

HI FIL

STAND-BY



SK-2

SK-3

SK-4

SK-5

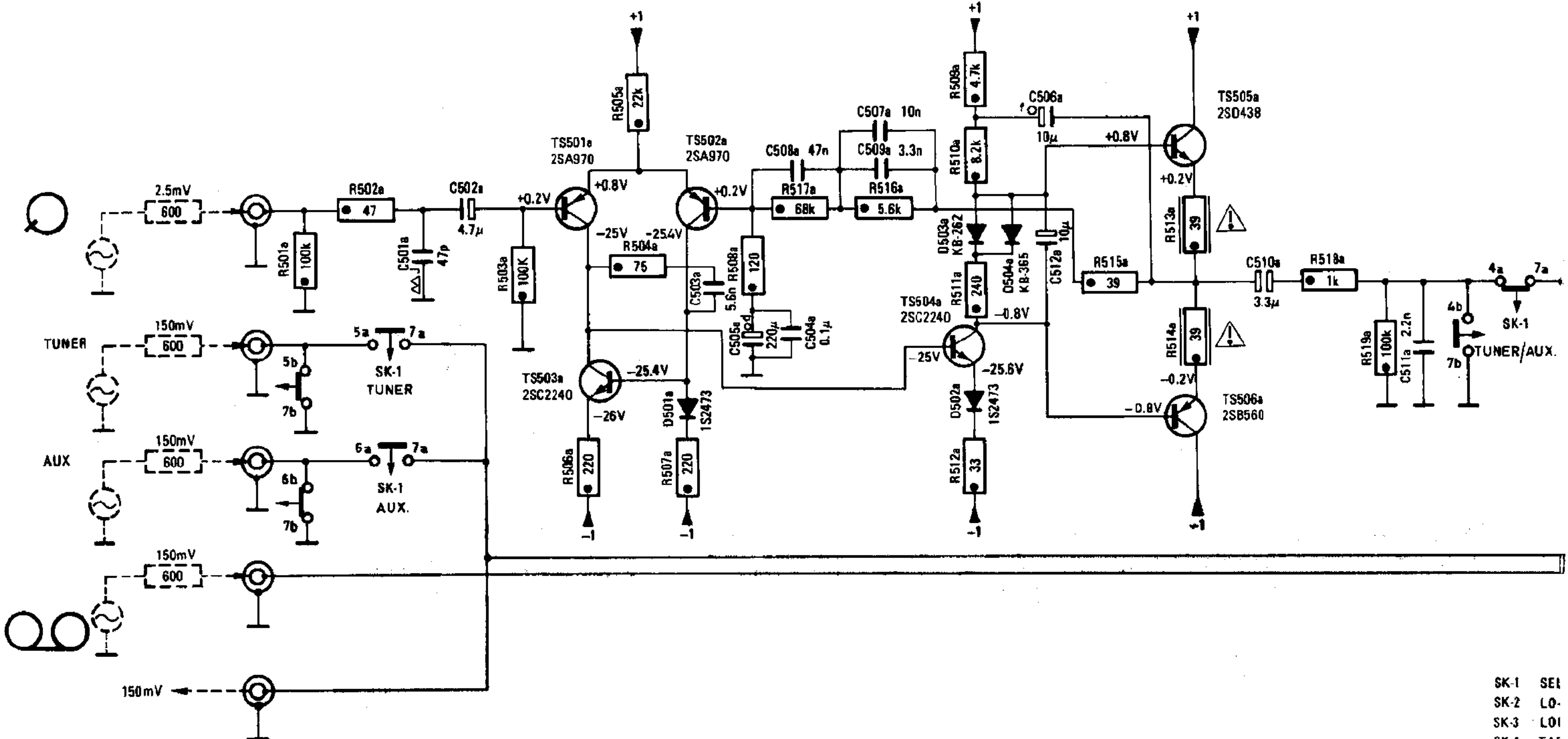
SK-6

SK-7

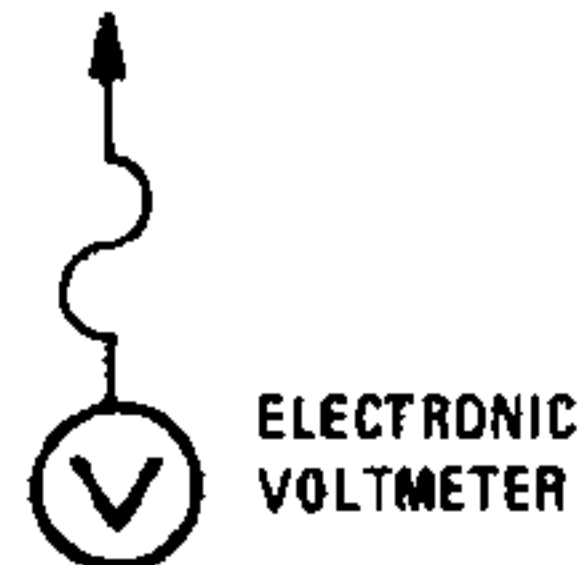
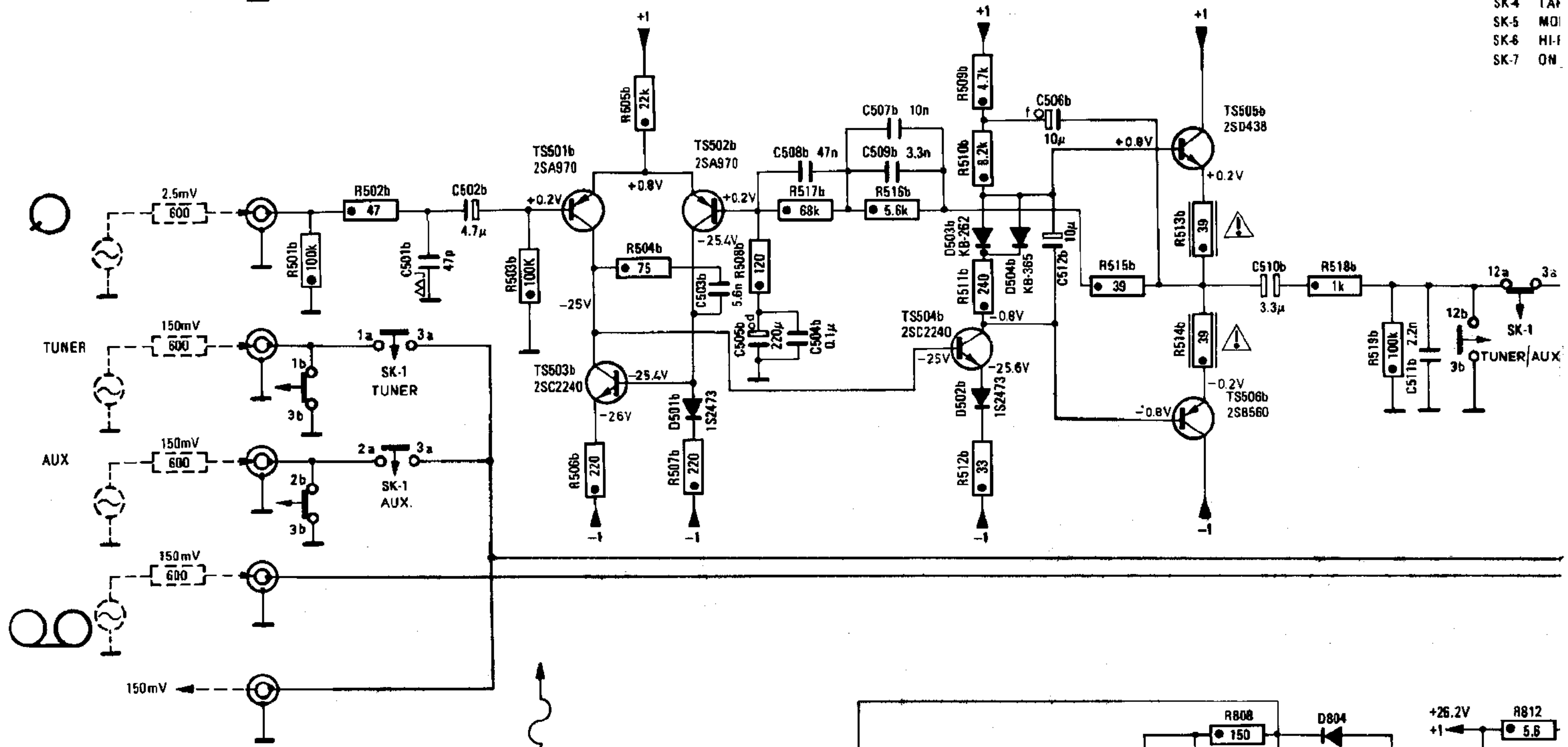
19531C12

CS 69 932

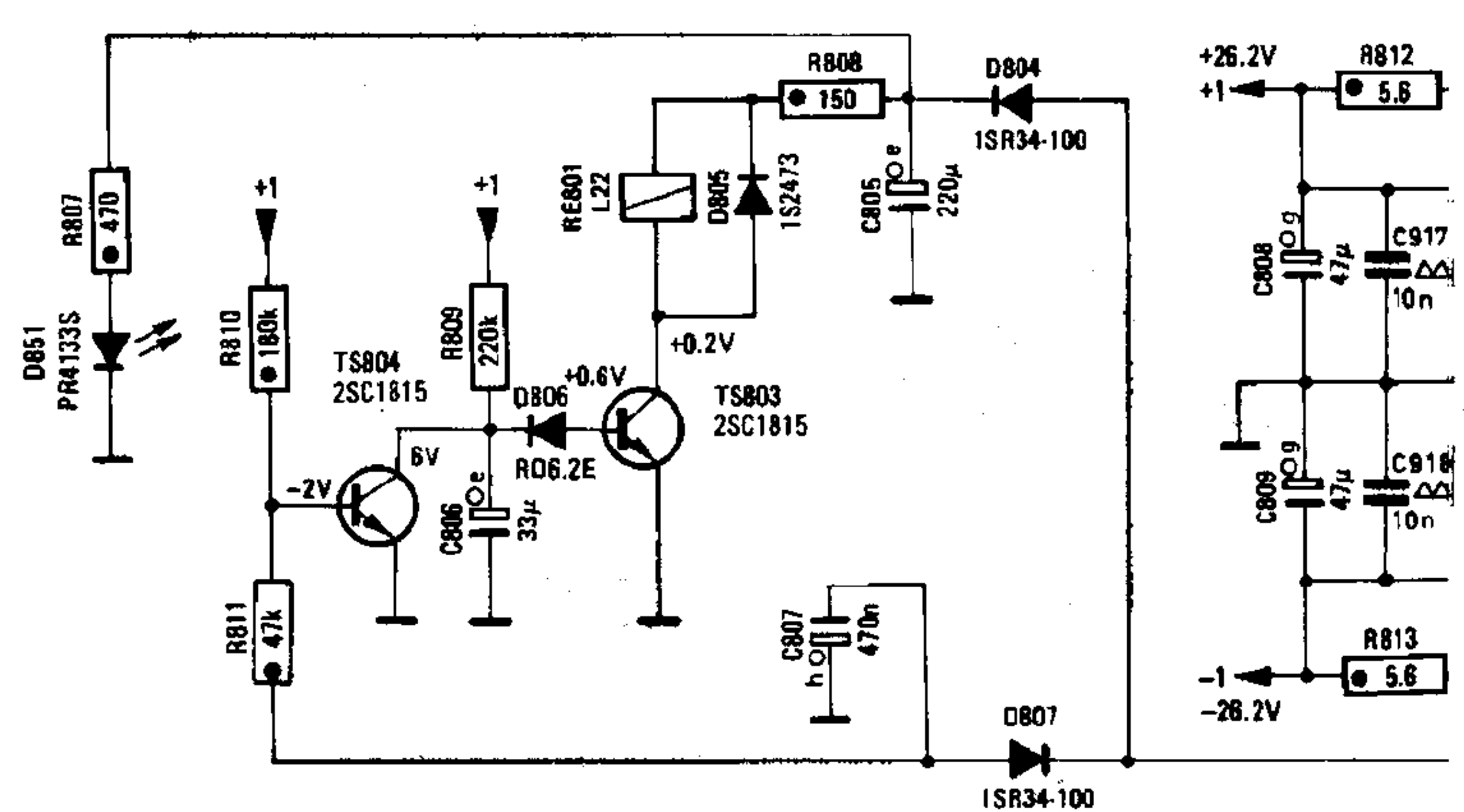
M		TS501a	TS503a	TS502a	D501a		D502a	TS504a	D503a	D504a	D505a	TS506a													
M		TS501b	TS503b	TS502b	D501b		D502b	TS504b	D503b	D504b	D505b	TS506b													
M							D851		TS804	D806	TS803	RE801	D805	D804	D807	TS806	TS806	TS801							
C		501a	502a		503a	504a	505a	508a	507a	509a	506a	512a		510a		511a					918				
C		501b	502b		503b	504b	505b	508b	507b	509b	506b	512b		510b		511b					917				
C									807		806			805		808	809	803	804						
R		501a	502a		503a	506a	505a	504a	507a	508a	517a	516a	509a	510a	511a	512a	515a	513a	514a		518a	519a			
R		501a	502b		503b	508b	505b	504b	507b	508b	517b	518b	509b	510b	511b	512b	515b	513b	514b		518b	519b			
R													807	810	811	809				808		812	813	805	806



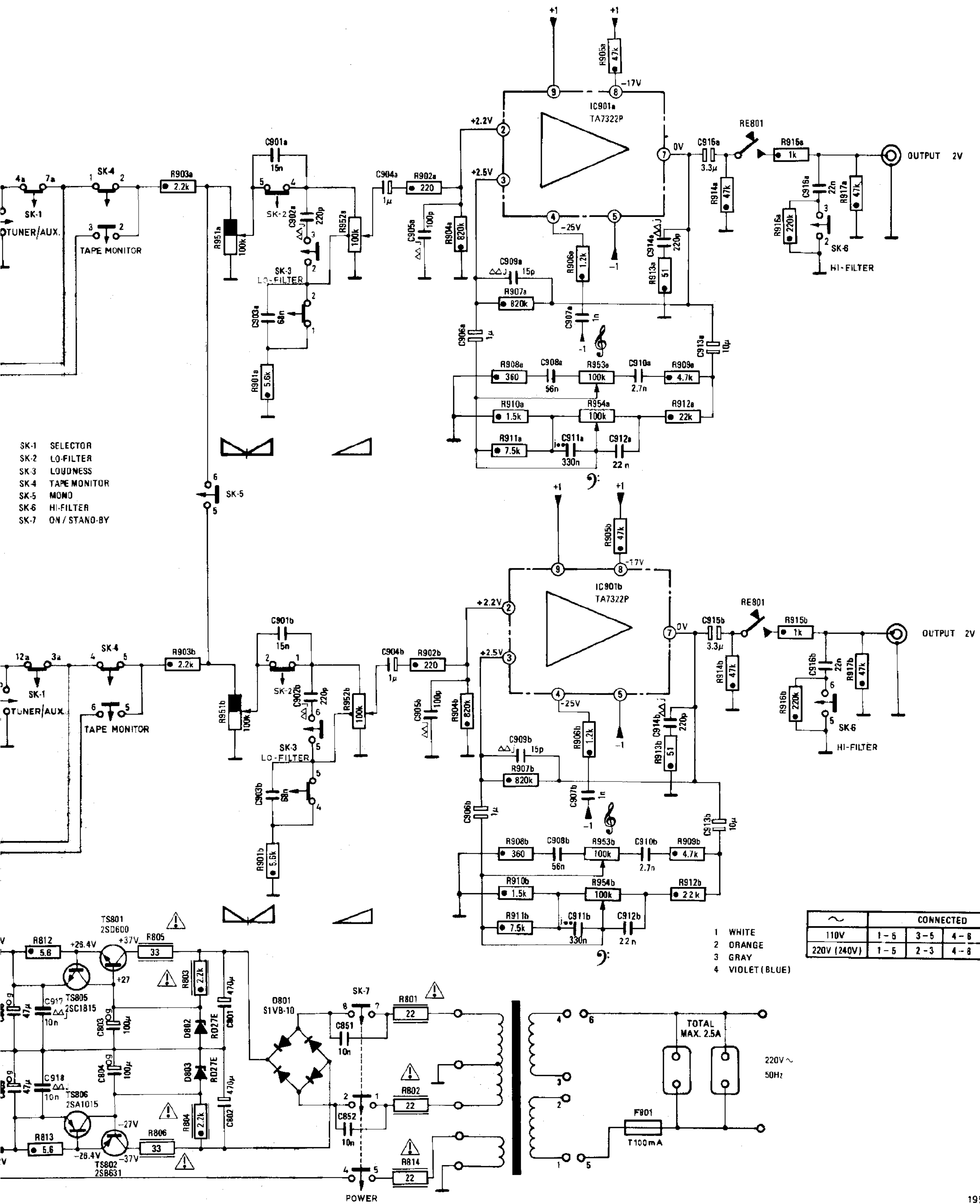
- SK-1 SEI
- SK-2 LO-
- SK-3 LOI
- SK-4 TAF
- SK-5 MOI
- SK-6 HI-I
- SK-7 ON



- \* c = 6.3V
- d = 10V
- e = 16V
- f = 25V
- g = 40V
- h = 63V
- i = 100V
- j = 500V
- PLATE CERAMIC CAPACITOR
- FLAT-FOIL POLYESTER CAPACITOR
- MINIATURE ELECTROLYTIC CAPACITOR
- MINIATURE BIPOLAR ELECTROLYTIC CAPACITOR
- CARBON RESISTOR E24 SERIES 0.25W 5%



										IC901a										M					
										IC901b										M					
9906	TS801	TS802	D802	D803	D801					F801										M					
918					903a	901a	902a	904a	905a	906a	909a	907a	908a	911a	912a	910a	914a	913a	915a	916a	C				
917					903b	901b	902b	904b	905b	906b	909b	907b	908b	911b	912b	910b	914b	913b	915b	916b	C				
803	804	801			802															C					
				903a	951a	901a	952a	902a	904a	907a	908a	910a	911a	953a	954a	906a	905a	913a	909a	912a	914a	915a	916a	917a	R
				903b	951b	901b	952b	902b	904b	907b	908b	910b	911b	953b	954b	906b	905b	913b	909b	912b	914b	915b	916b	917b	R
805	806	803	804	801										802	814						R				



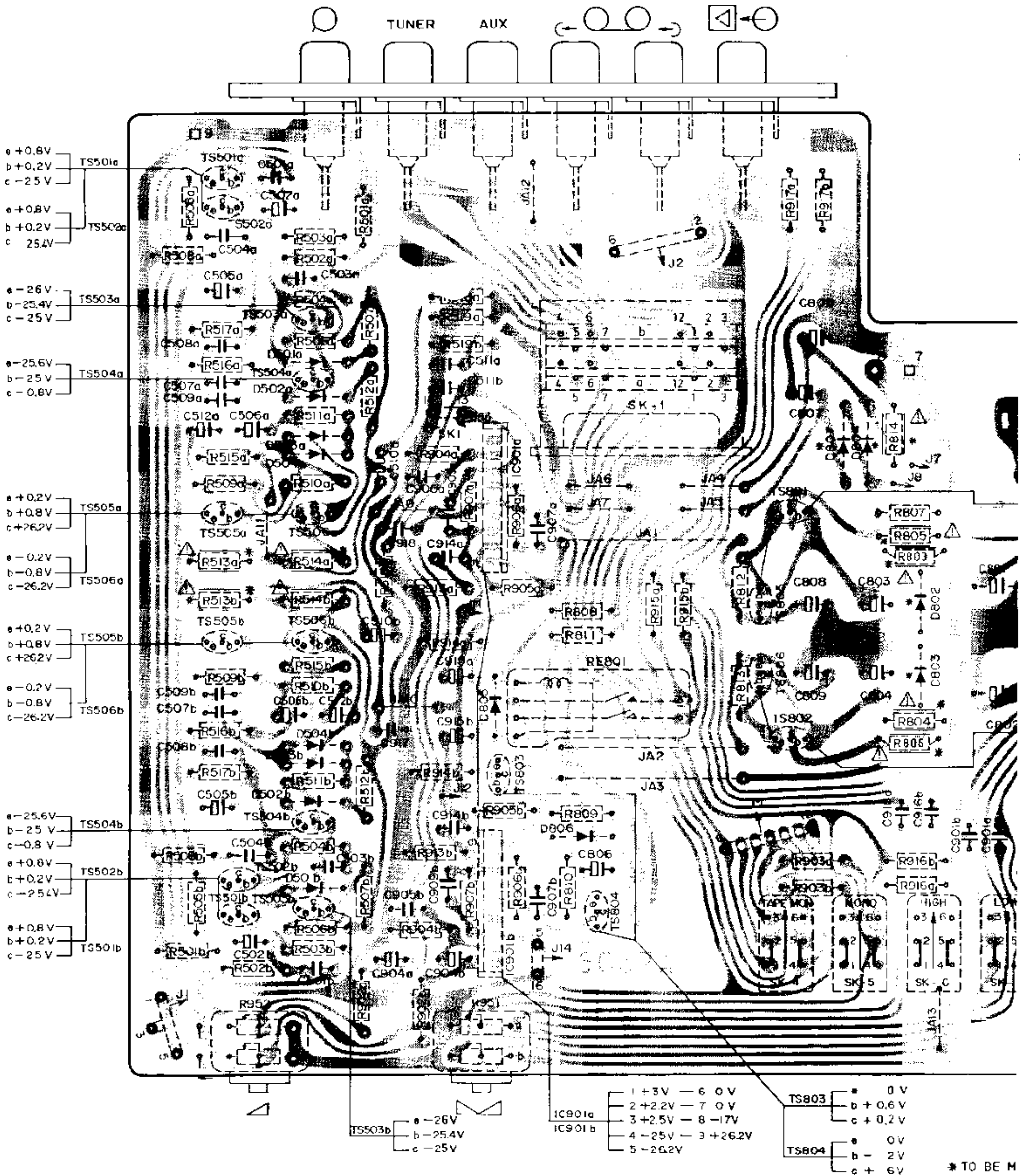
- SK-1 SELECTOR
- SK-2 LO-FILTER
- SK-3 LOUDNESS
- SK-4 TAPE MONITOR
- SK-5 MOMO
- SK-6 HI-FILTER
- SK-7 ON / STANO-BY

- 1 WHITE
- 2 ORANGE
- 3 GRAY
- 4 VIOLET (BLUE)

~	CONNECTED			
110V	1-5	3-5	4-8	2-6
220V (240V)	1-5	2-3	4-8	

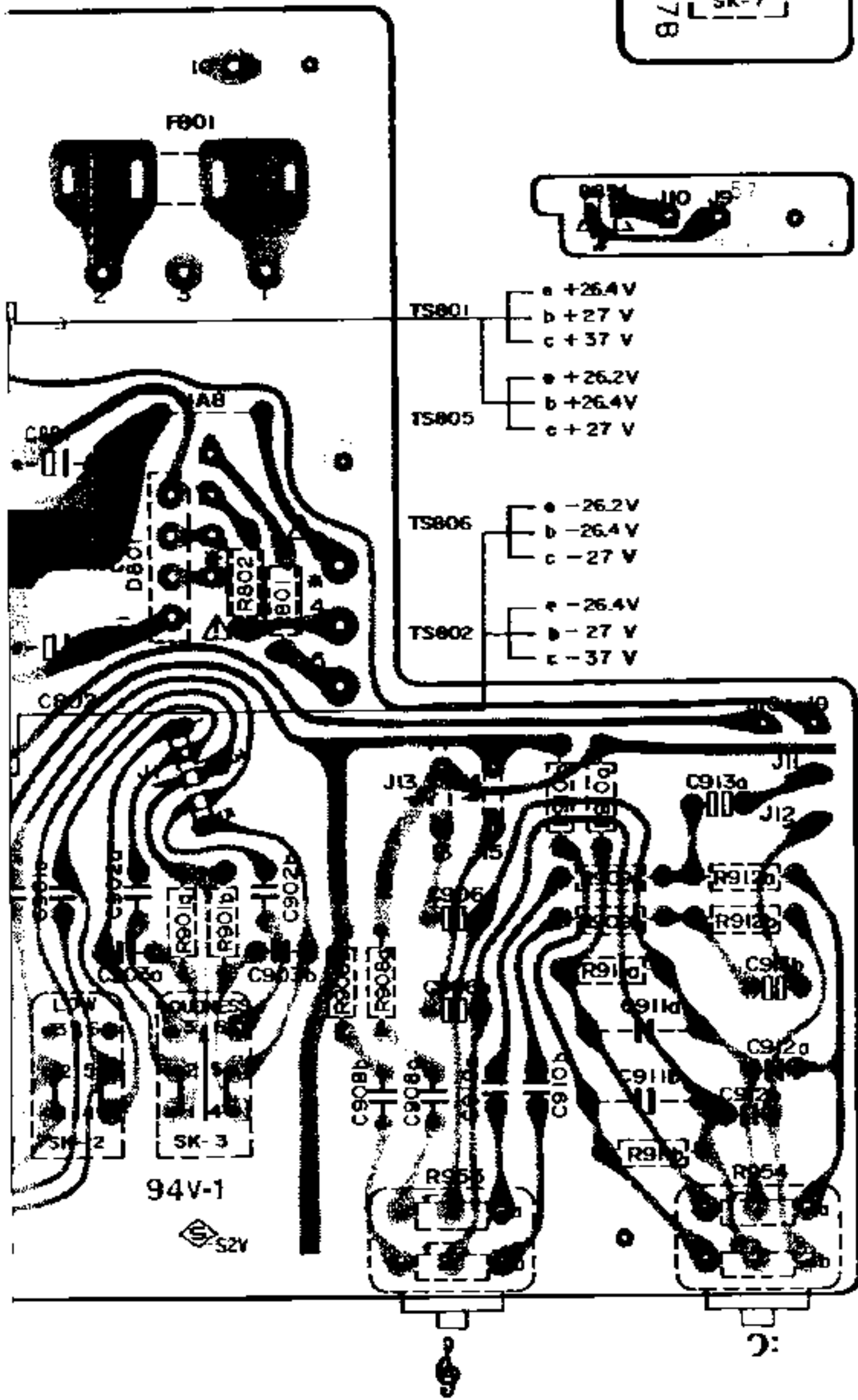
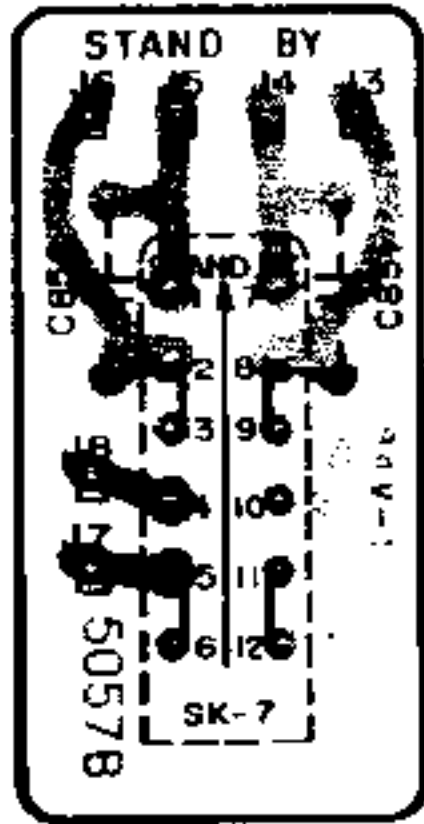


M	TS501a-TS506a	D501a-D504a	IC901a	DB05	SK-1	TS805	TS801	DB07	DB04	DB02				
M	TS501h-TS506h	D501h-D504h	IC901h	TS803	DB06	TS804	RE801	TS806	TS807	SK-4	SK-5	DB03	SK-6	S
C	501a-512a	918 904a 914a 905a 915a 909a	907a					807-809	803-805					802
C	501b-512b	917 904b 914b 905b 915b 909b	907b	806										916a 916b
R	501a-519a	902a 914a 913a	904a-907a	808-811		915a 915b	812	917a 917b	814	803-807				
R	952 501b-519b	902b 914b 913b 951	904b-907b				813	903b 903a	916a 916b					



\* TO BE M

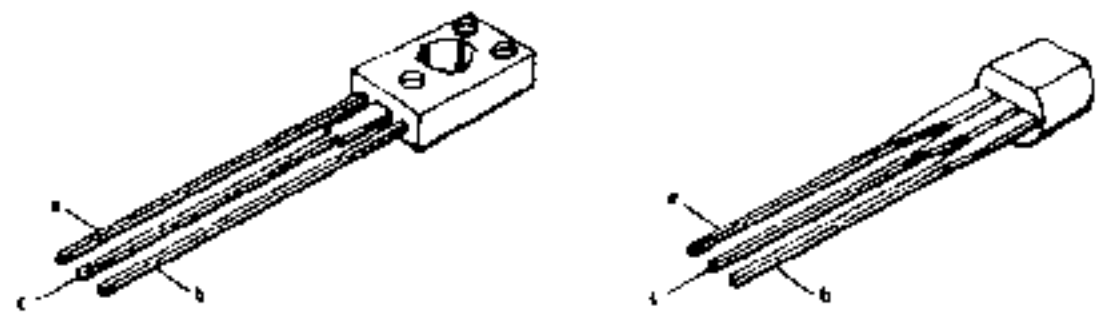
D801	F801					SK-7	M
SK-2	SK-3	D851					M
B02 B01	901a-903a	908a	906a	852 910a-913a	851		C
	901b-903b	908b	906b	910b-913b			C
	B02 B01	908a	909a-912a				R
	901a 901b	908b	953	909b-912b	954		R



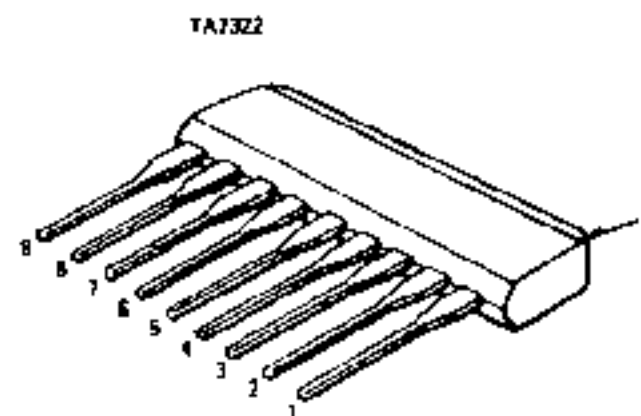
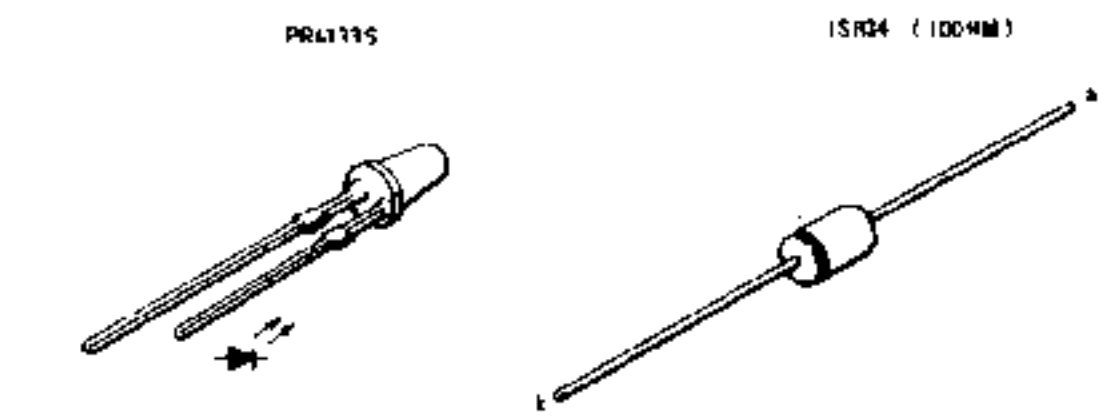
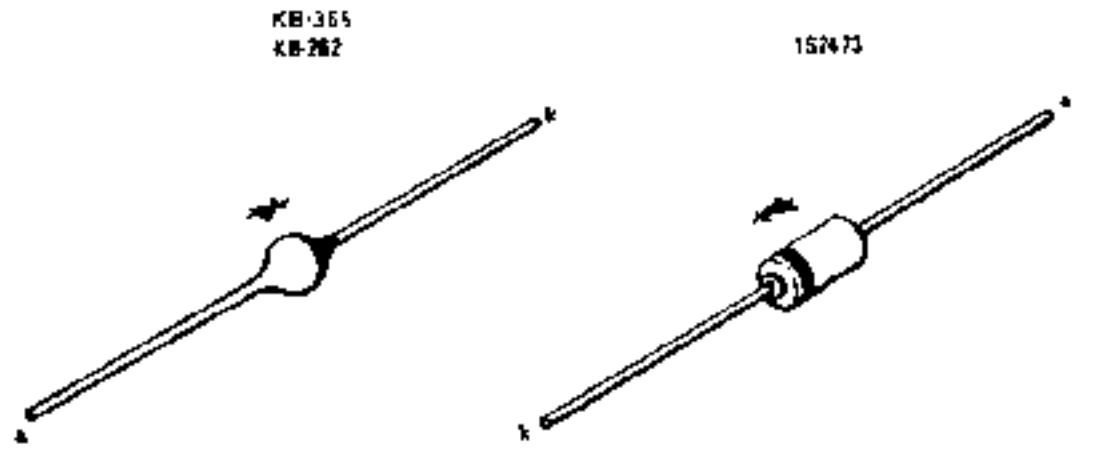
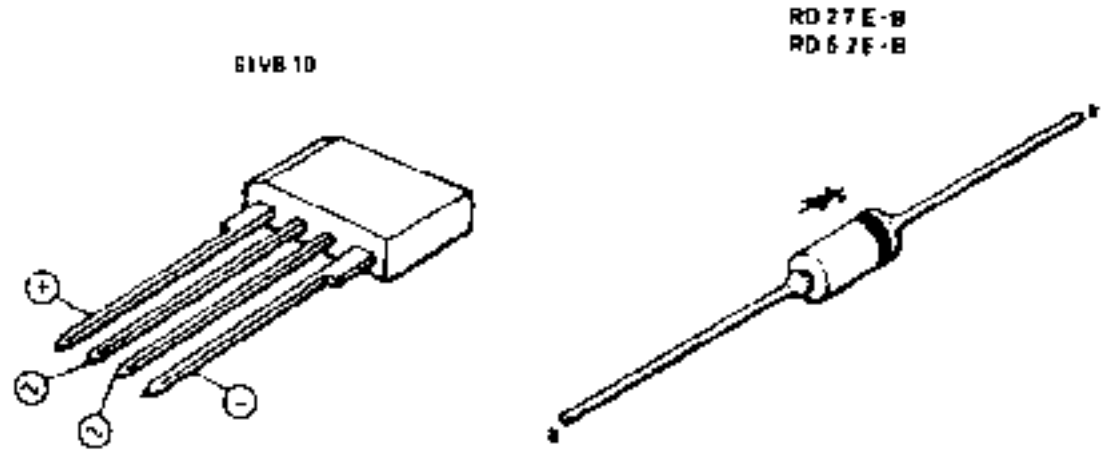
- TS801 — a +26.4 V  
b +27 V  
c +37 V
- TS805 — a +26.2V  
b +26.4V  
c +27 V
- TS806 — a -26.2V  
b -26.4 V  
c -27 V
- TS802 — a -26.4V  
b -27 V  
c -37 V

0 BE MOUNTED 10mm ABOVE THE PRINT

19536D12



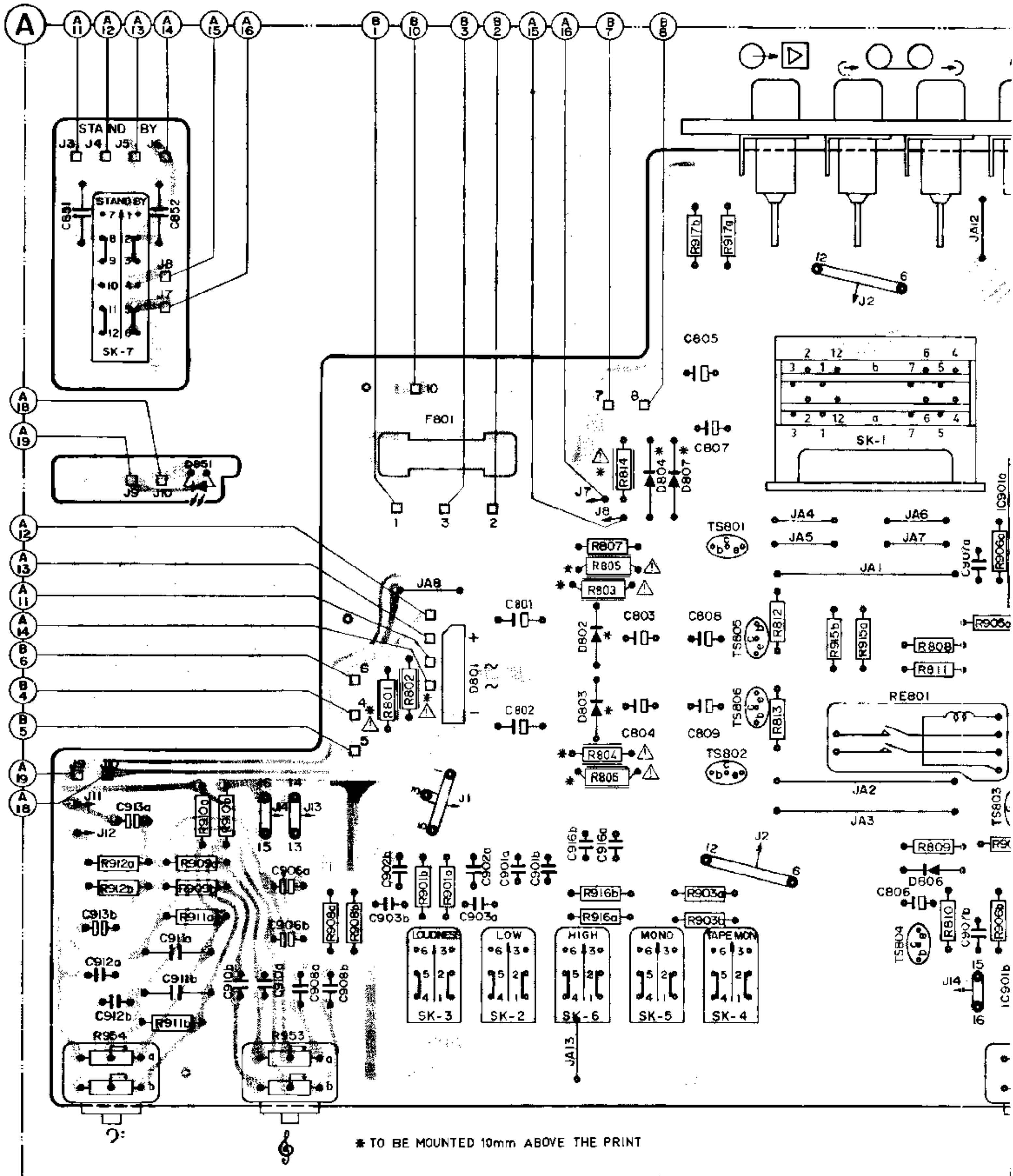
75A1075V  
75B560  
75D438  
75A970  
75C2240  
75C1815



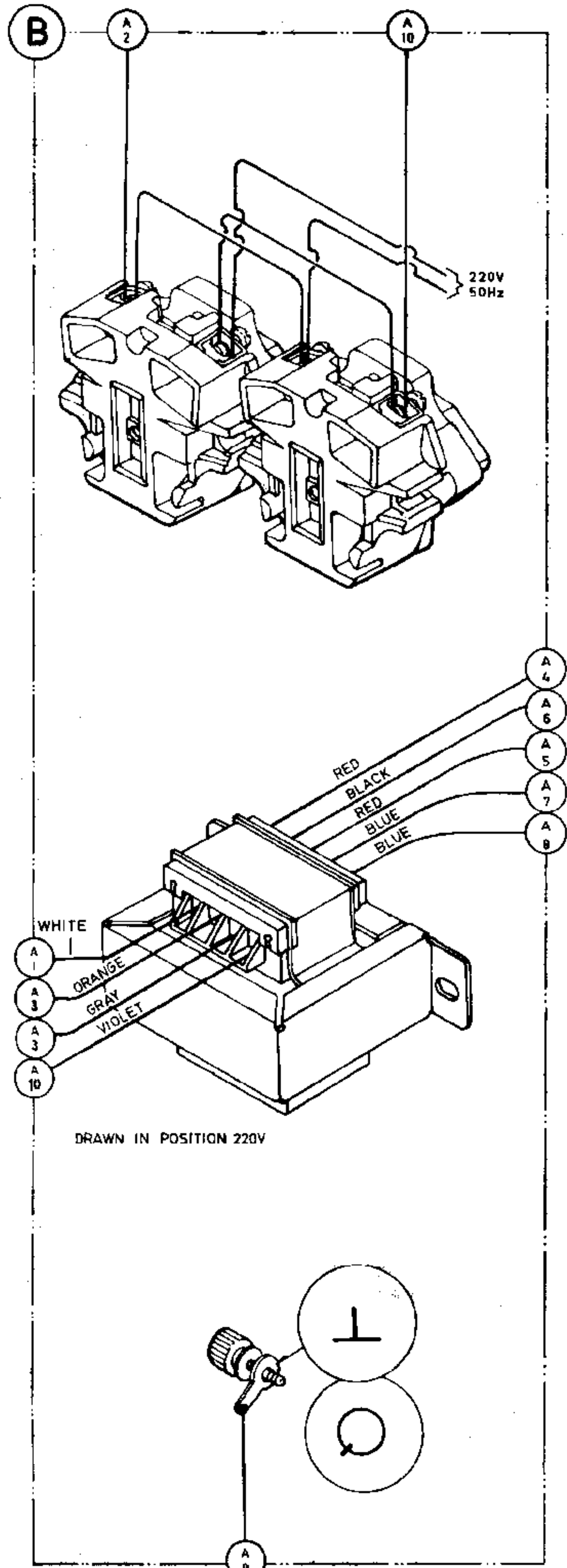
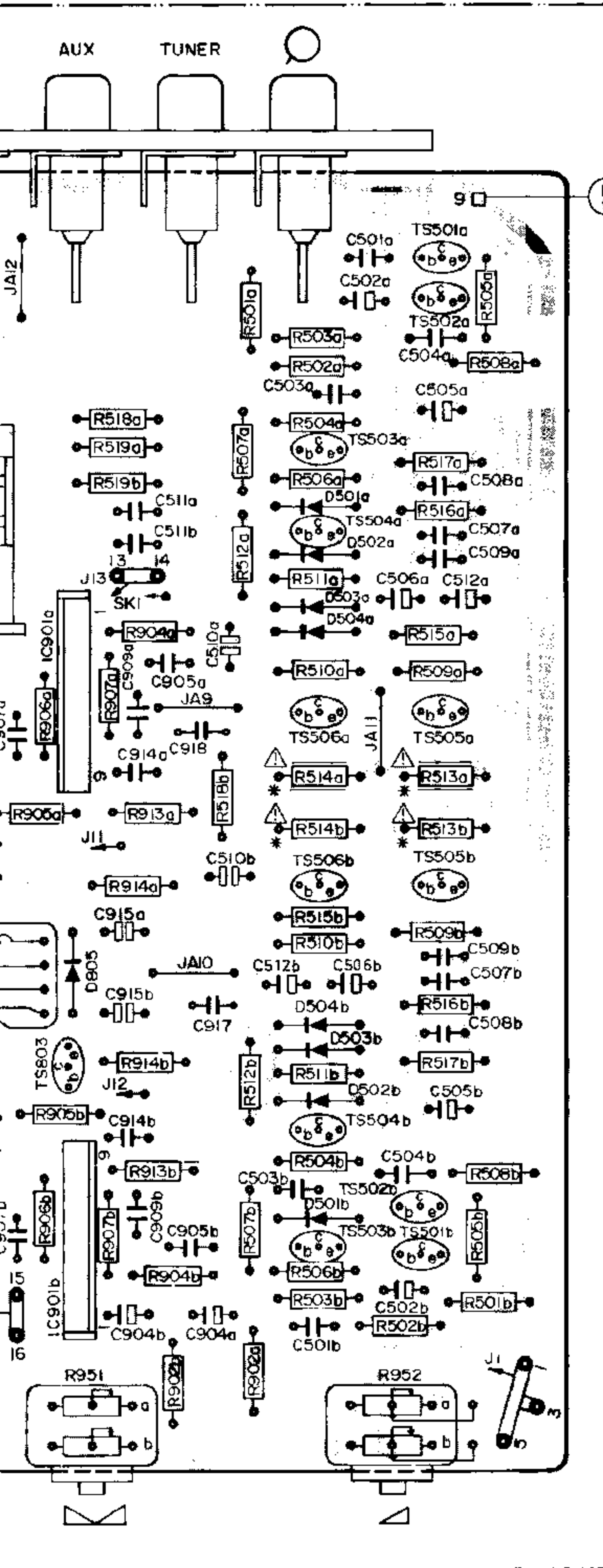
19532D\*2



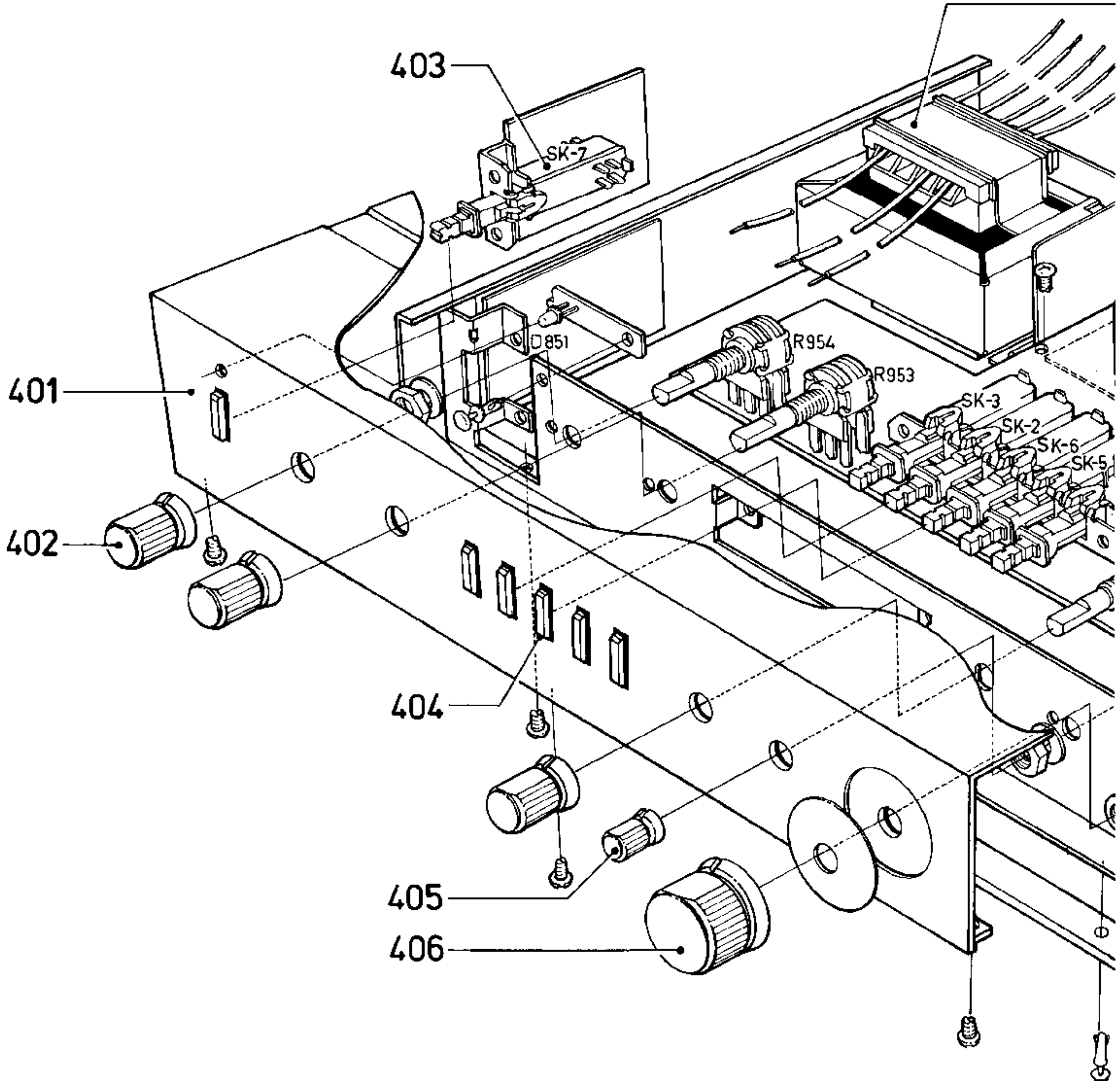
M	SK-7	F801 D801		D802 D804 D807 TS801 TS805		SK-1	D805 IC
M	D851	SK-3	SK-2	SK-6 D803	SK-5	SK-4 TS802 TS806	RE801 TS804 D806 TS803 IC
C	851 900a-913a 852	906a 908a	901a-903a 801 802	803-805 807-809		907a 90	
C	910b-913b	906b 908b	901b-903b	916b 916a		806 907b 9	
R	909a-912a	908a	801 802	803-807 814 917b 917a		812 915b 915a	808-811 904a-90
R	954 909b-912b	953 908b	901b 901a	916b 916a		903a 903b	813 904b-90

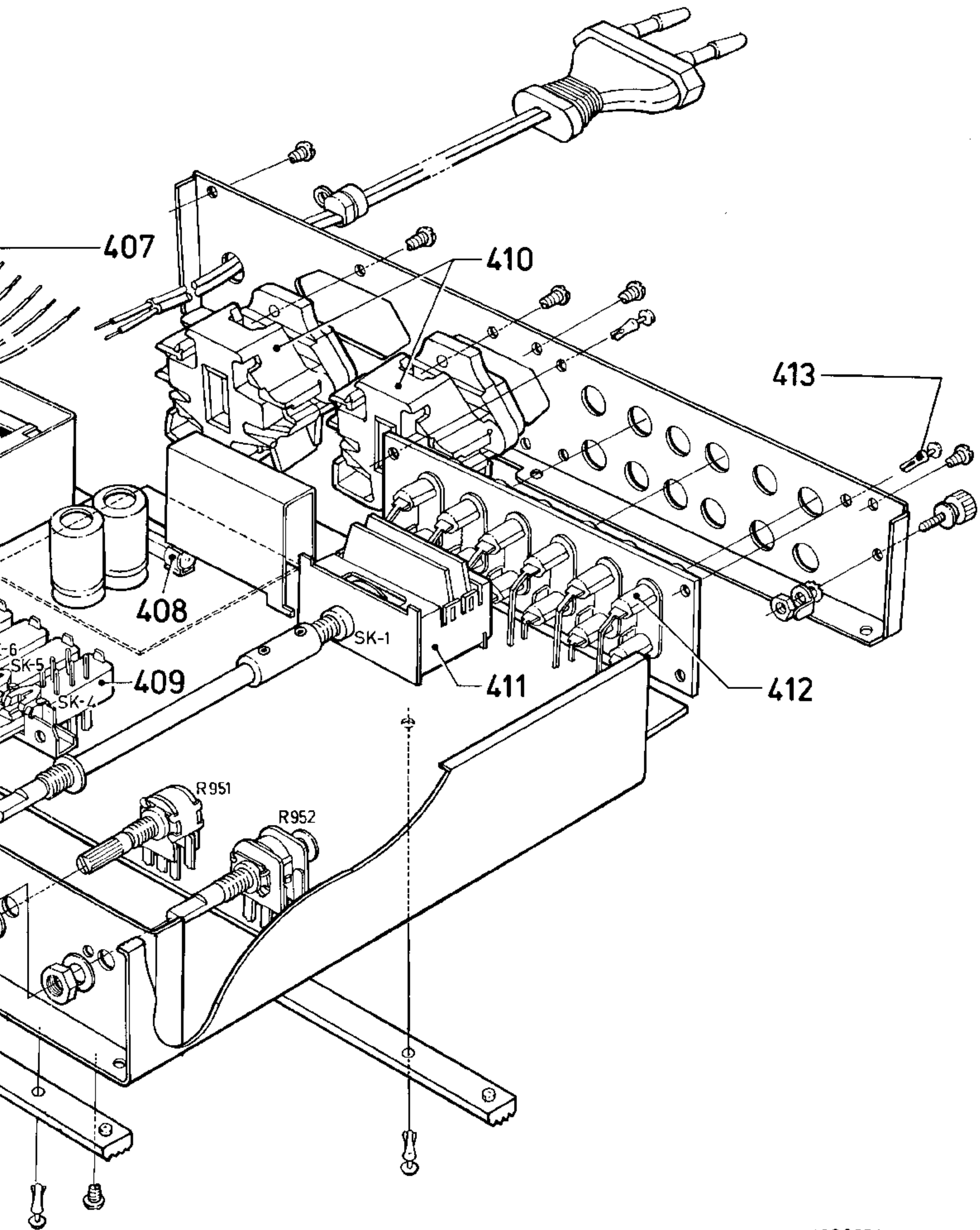






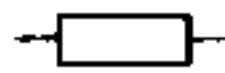
805	IC901a	D501a-D504a	TS501a-TS506a	M			
TS803	IC901b	D501b-D504b	TS501b-TS506b	M			
909a	915a	905a	914a	904a	918	501a-512a	C
909b	915b	905b	914b	904b	917	501b-512b	C
904a-907a	913a	914a	902a	501a-519a	R		
904b-907b	913b	914b	902b	501b-519b	952	R	



401	4822 426 50408
402	4822 413 30865
403	4822 276 10767
404	4822 410 22308
405	4822 413 30864
406	4822 413 40875
407	4822 146 20584
408	4822 256 30154
409	4822 276 50265
410	4822 267 40348
411	4822 273 30248
412	4822 267 50298
413	4822 502 11422





<b>-D-</b>				<b>-C-</b>			
501a,b 502a,b	1S2473HJ FRM	4822 130 31139		502a,b	Elco lo-leak 4.7 $\mu$ F- 25 V	5322 124 10014	
503a,b	KB262	4822 130 31095		503a,b	Mylar 5.6 nF 50 V	4822 121 41186	
504a,b	KB365	4822 130 31142		504a,b	Mylar 100 nF 50 V	4822 122 31271	
801	S1VB-100	4822 130 31256		507a,b	Mylar 10 nF 50 V	4822 121 41245	
802, 803	RD27E-B	4822 130 31255		508a,b	Mylar 47 nF 50 V	4822 121 41251	
804, 807	1SR34-100HM	4822 130 50317		509a,b	Mylar 3.3 nF 50 V	5322 121 54049	
805	1S2473HJ FRM	4822 130 31139		510a,b	Elect BP 3.3 nF 25 V	4822 124 20748	
806	RD6.2E-B	4822 130 31157		511a,b	Mylar 2.2 nF 50 V	4822 121 41247	
851	LED PR4133S	4822 130 31257		512a,b	Elect 10 $\mu$ F 35 V	4822 124 20655	
				801-802	Elect 470 $\mu$ F 50 V	4822 124 20951	
				851-852	CERA 10 nF 500 V	5322 122 50046	
				901a,b	Mylar 15 nF 50 V	4822 121 41246	
				903a,b	Mylar 68 nF 50 V	4822 121 41252	
				904a,b	Elect lo-leak 1 $\mu$ F- 50 V	4822 124 20658	
				906a,b	Elect BP 1 $\mu$ F 50 V	4822 124 20949	
				907a,b	Mylar 1 nF 50 V	4822 122 31269	
				908a,b	Mylar 56 nF 50 V	4822 121 41154	
				910a,b	Mylar 2.7 nF 50 V	4822 121 41184	
				912a,b	Mylar 22 nF 50 V	4822 121 41248	
				913a,b	Elect BP 10 $\mu$ F 25 V	4822 124 20958	
				915a,b	Elect BP 3.3 $\mu$ F 25 V	4822 124 20748	
				916a,b	Mylar 22 nF 50 V	4822 121 41248	
<b>-TS-</b>							
501a,b 502a,b	2SA970 BL	4822 130 41316					
503a,b 504a,b	2SC2240 GR or BL	4822 130 41321					
505a,b	2SD438 E,F	4822 130 41139					
506a,b	2SB560 E,F	4822 130 41462					
801	2SD600	4822 130 41141					
802	2SB631	4822 130 41136					
803-805	2SC1815 Y, GR	4822 130 41306					
806	2SA1015 Y	4822 130 41298					
<b>-IC-</b>							
901a,b	TA7332P	4822 209 80648					
<b>-R-</b>							
513a,b 514a,b	Fail Safe Res. 39 $\Omega$ - 1/4 W	4822 111 30595					
801, 802	Fus. Res. 22 $\Omega$ - 1/4 W	4822 113 90077					
803, 804	Fail Safe Res. 2.2k $\Omega$ - 1/4 W	4822 111 30594					
805, 806	Fus. Res. 33 $\Omega$ - 1/4 W	4822 113 90078					
814	Fus. Res. 22 $\Omega$ - 1/4 W	4822 113 90077					
951a,b	Potm. 100k $\Omega$ - Balance	4822 100 30016					
952a,b	Potm. 100k $\Omega$ - Volume	4822 100 20059					
953a,b	Potm. 100k $\Omega$ - Treble	4822 100 20061					
954a,b	Potm. 100k $\Omega$ - Bass	4822 100 30015					
				<b>-Miscellaneous-</b>			
				Relay RE801 L22	4822 280 20074		
				Fuse F801 100mA Slow	4822 253 20006		

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.

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.

S

Säkerhetsbestämmelserna kräver att varje reparation skall utföras korrekt med hänsyn till ursprunglig placering av komponenter, ledningar etc. och med användning av föreskrivna reservdelar.