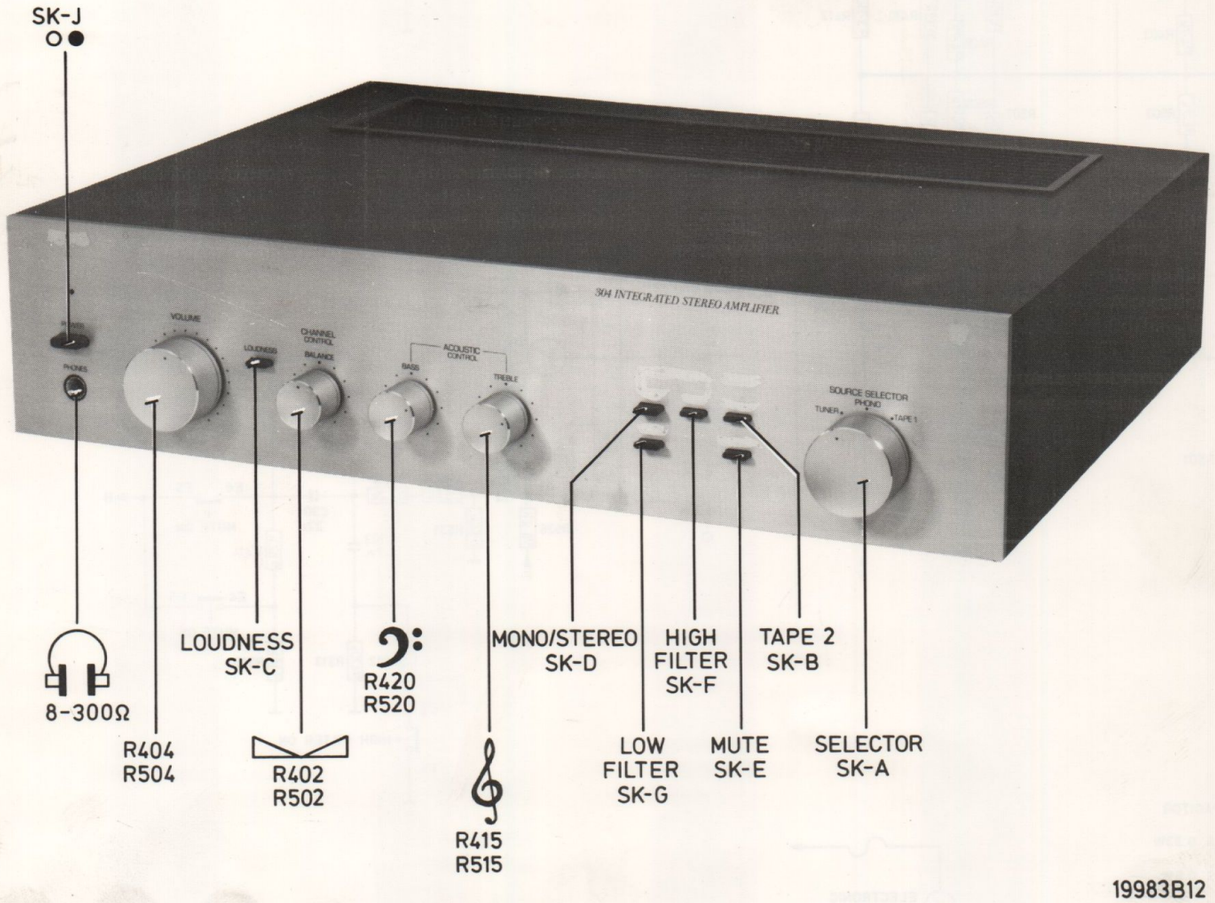
Service
Service
Service

Service Manual



19983B12

Documentation Technique Service Dokumentation Documentazione di Servizio Huolte-Ohje Manual de Servicio Manual de Serviço
Subject to modification
4822 725 13579
Printed in The Netherlands
PHILIPS

(GB)

Supply voltage	220 V
Power consumption	20 - 100 W
Dimensions (w x h x d)	450 x 102 x 367 mm
Output	2 x 40 W
Tape 1 (DIN-plug)	0,3 mV/k ohm
Tape 2	200 mV/47 k ohm
2 x 2 loudspeakers	8 ohm
MFB loudspeakers	2,5 mV/1 k ohm
Headphones	8 - 600 ohm

For more detailed technical specifications please consult commercial documentation.

(F)

Tension d'alimentation	220 V
Puissance absorbée	20 - 100 W
Dimensions	450 x 102 x 367 mm
Sortie	2 x 40 W
Tape 1 (fiche DIN)	0,3 mV/k ohm
Tape 2	200 mV/47 k ohm
Haut-parleurs 2 x 2	8 ohm
Haut-parleurs MFB	2,5 mV/ 1 k ohm
Ecouteurs	8 - 600 ohm

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

(I)

Tensione alimentazione	220 V
Potenza assorbita	20 - 100 W
Dimensioni	450 x 102 x 367 mm
Uscita	2 x 40 W
Tape 1 (presa DIN)	0,3 mV/k ohm
Tape 2	200 mV/47 k ohm
Altoparlanti 2 x 2	8 ohm
Altoparlanti M.F.B.	2,5 mV/1 k ohm
Cuffia	8 - 600 ohm

In modo da ottenere dati tecnici piu particolareggiati, vi preghiamo di riferirvi alla documentazione commerciale.

(NL)

Voedingsspanning	220 V
Opgenomen vermogen	20 - 100 W
Afmetingen (b x h x d)	450 x 102 x 367 mm
Output	2 x 40 W
Tape 1 (DIN-plug)	0,3 mV/k ohm
Tape 2	200 mV/47 k ohm
2 x 2 luidsprekers	8 ohm
MFB luidsprekers	2,5 V/1 k ohm
Koptelefoon	8 - 600 ohm

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

(D)

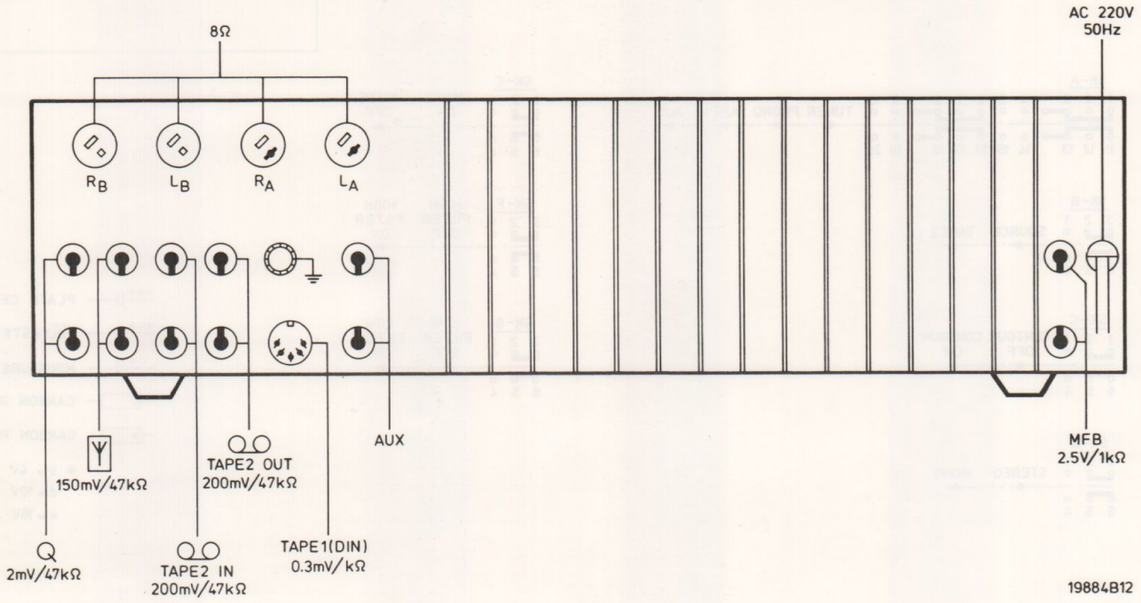
Speisespannung	220 V
Leistungsaufnahme	20 - 100 W
Abmessungen (b x h x t)	450 x 102 x 367 mm
Ausgangsleistung	2 x 40 W
Tape 1 (DIN-stecker)	0,3 mV/k ohm
Tape 2	200 mV/47 k ohm
2 x 2 Lautsprecher	8 ohm
MFB Lautsprecher	2,5 mV/1 k ohm
Kopfhörer	8 - 600 ohm

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

(S)

Matningsspänning	220 V
Effektförbrukning	20 - 100 W
Dimensioner (b x d x h)	450 x 102 x 367 mm
Uteffekt	2 x 40 W
Tape 1 (DIN-kontakt)	0,3 mV/k ohm
Tape 2	200 mV/47 k ohm
2 x 2 Högtalare	8 ohm
MFB Högtalare	2,5 mV/1 k ohm
Hörtelefoner	8 - 600 ohm

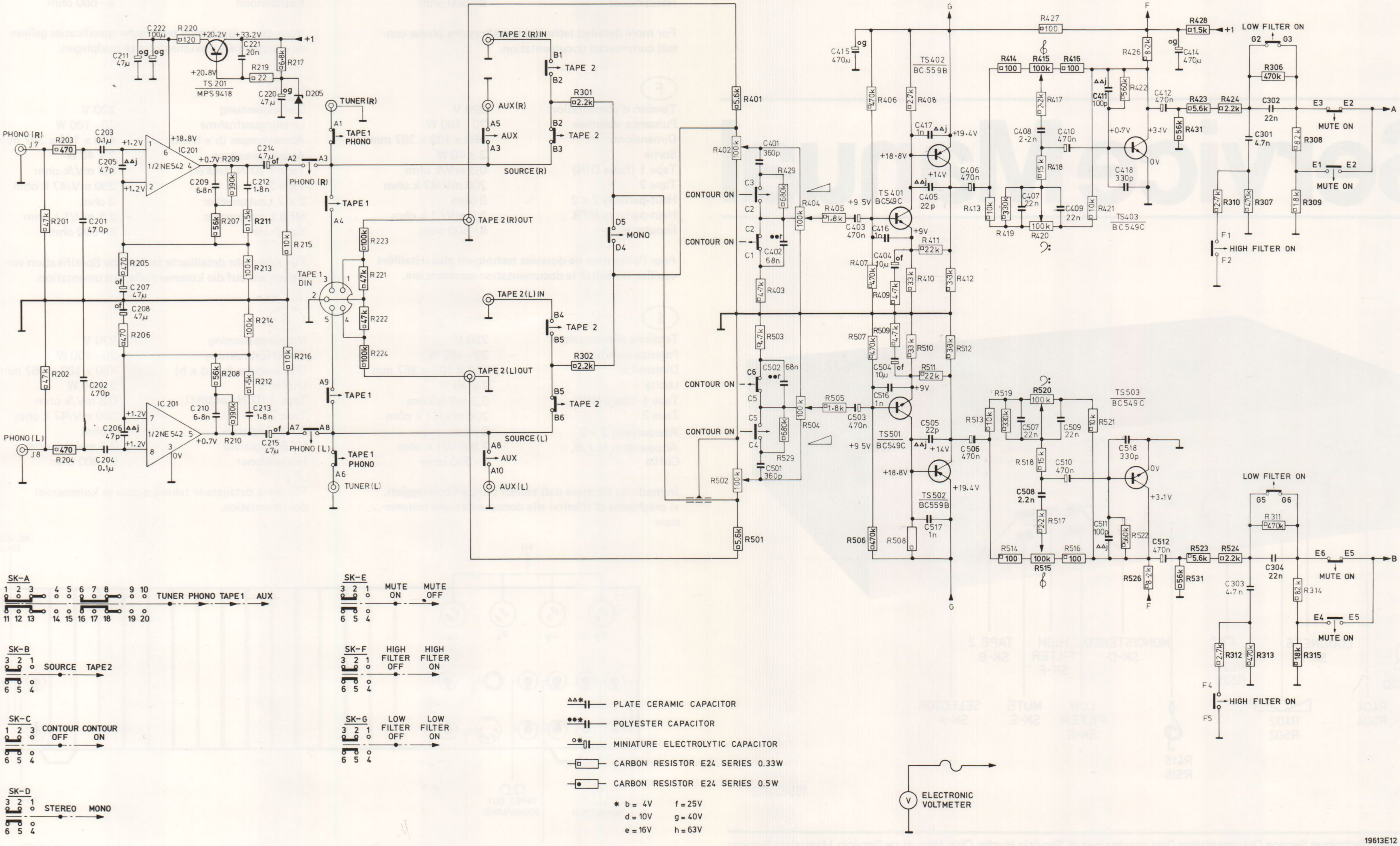
För mera detaljerade tekniska data se kommersiel dokumentation.



19884B12

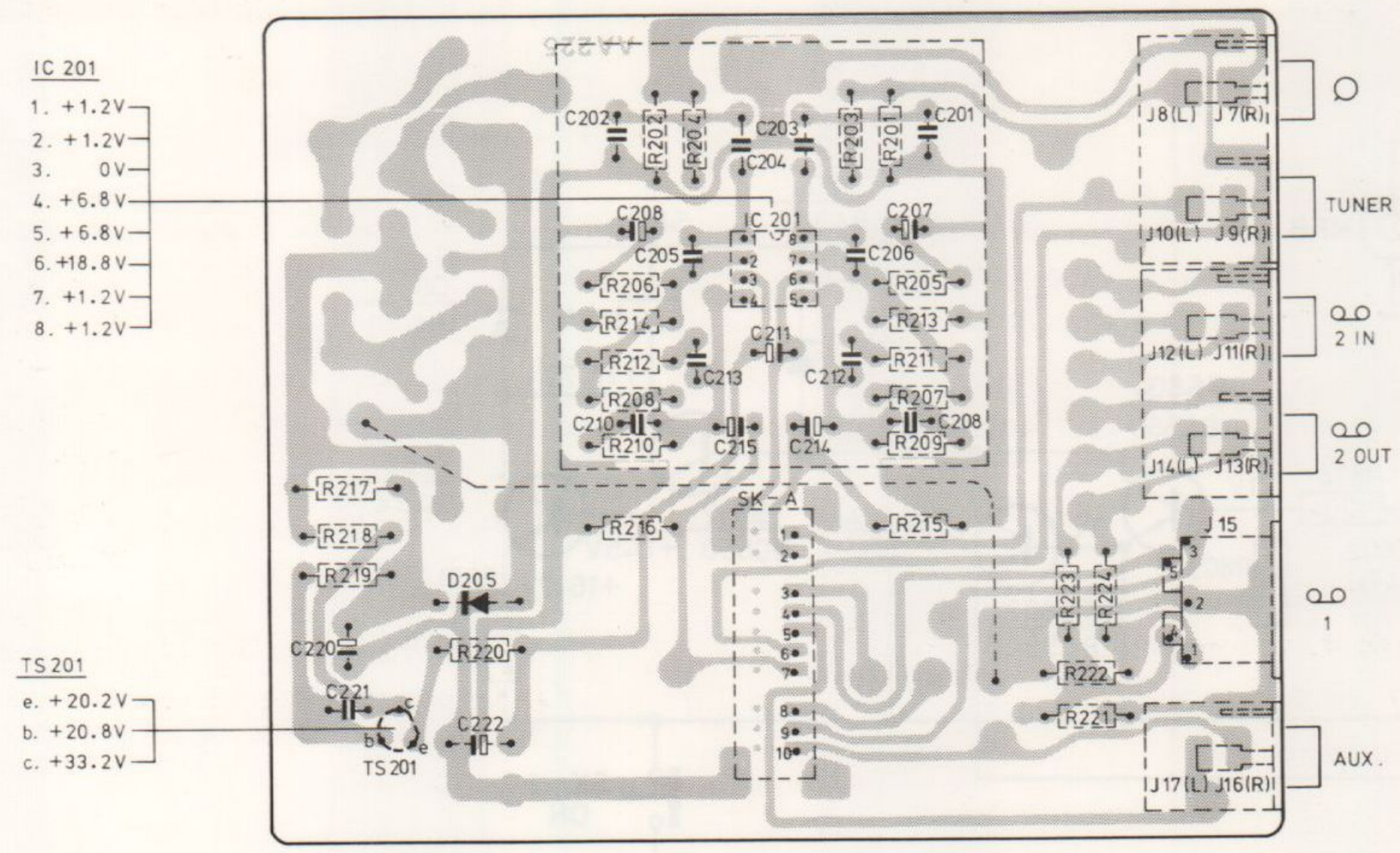
CS 69 954

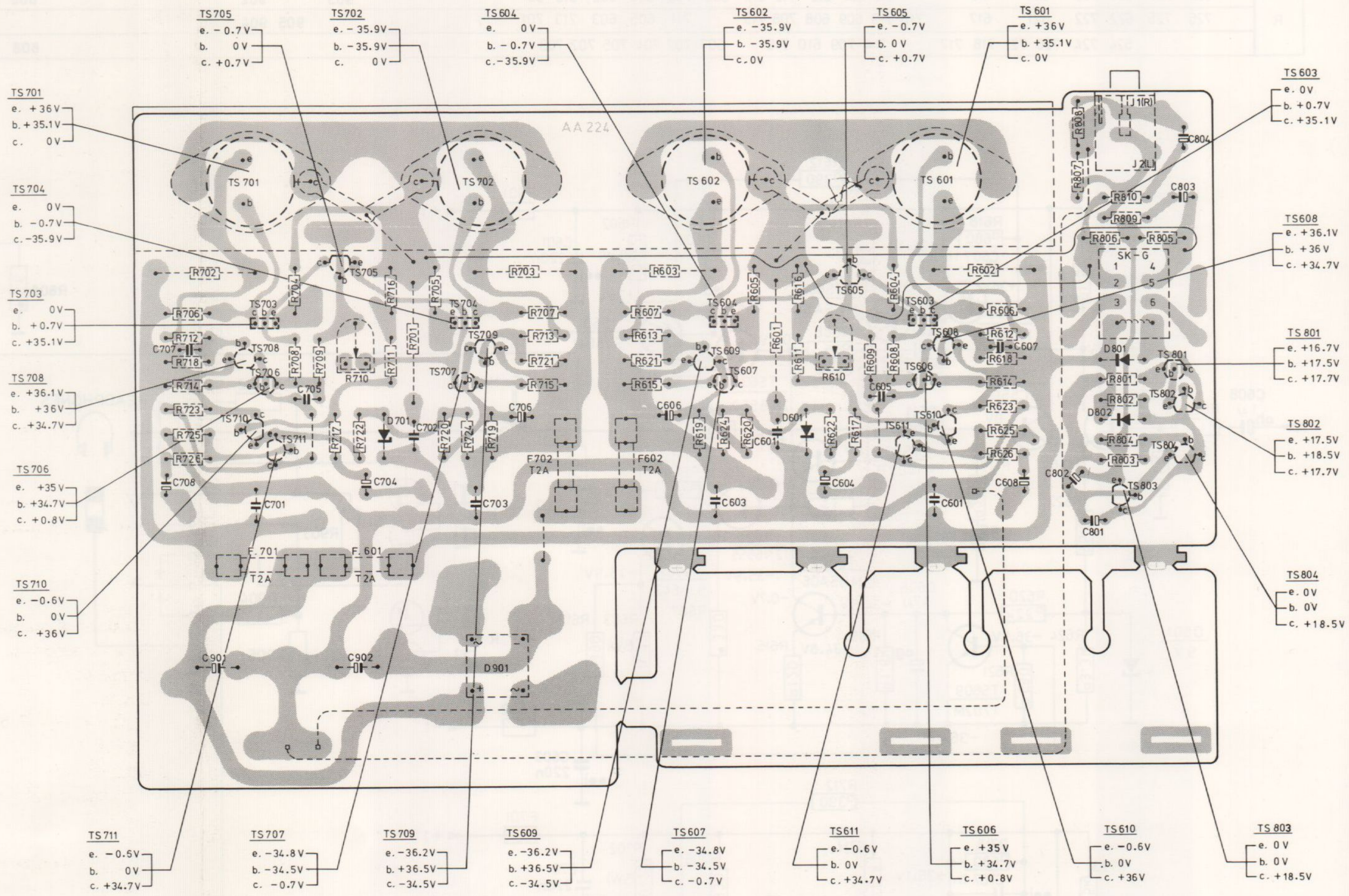
MISC	IC 201 · TS 403
	TS201 · D205 · TS401 · TS402 · TS503
	TS501 · TS502
C	201 · 208 206 · 209 · 213.214 · 401 · 403 · 416 516 · 405 · 406 · 407 · 409 · 411 · 412 · 302
	202 204 · 205 211 · 210 · 212 · 220 · 501 · 402 · 503 · 404 · 505 · 506 · 507 · 408 · 509 · 511 · 418 · 512
	203 · 207 · 222 · 221 · 215 · 502 · 415 · 504 · 417 517 · 508 · 410 · 510 · 518 · 414 · 304
R	201 · 205 · 220 · 207 · 215 · 212 · 216 · 223 · 301 · 402 · 404 · 407 · 406 · 408 · 410 · 412 · 419 414 · 417 517 · 427 · 422 · 431 · 423 · 423.424 · 306 · 308
	202 204 · 208 210 · 213 · 219 · 211 · 222 221 · 302 · 401 · 502 · 403 · 504 · 405 · 507 · 506 · 409 · 508 · 510 · 512 · 413 · 519 · 514 · 418 · 518 · 416 · 421 · 522 · 426 · 523 · 310.524.307 · 311 · 309
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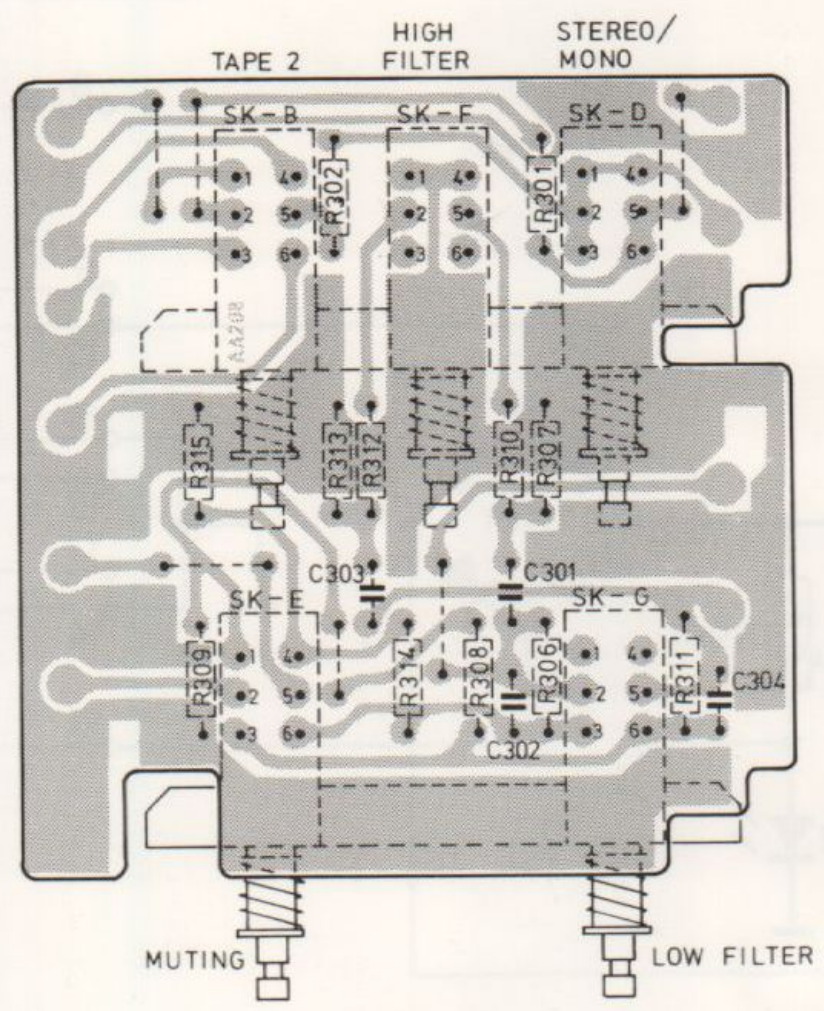


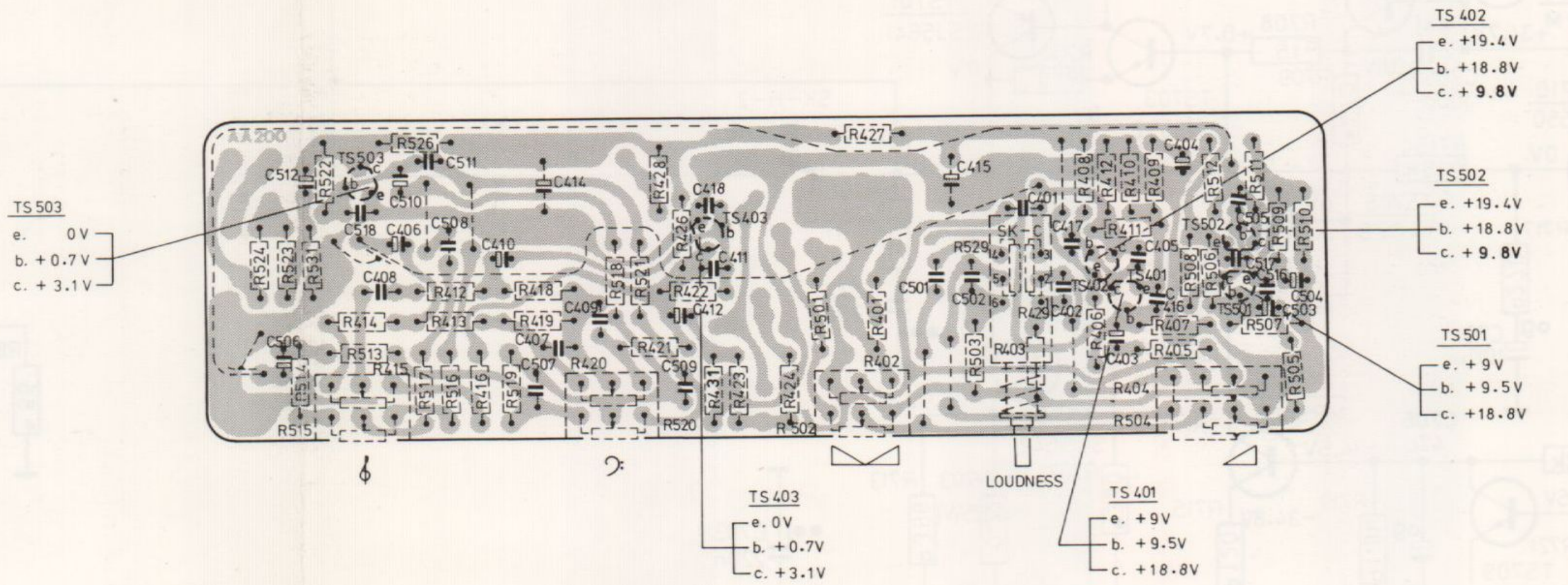
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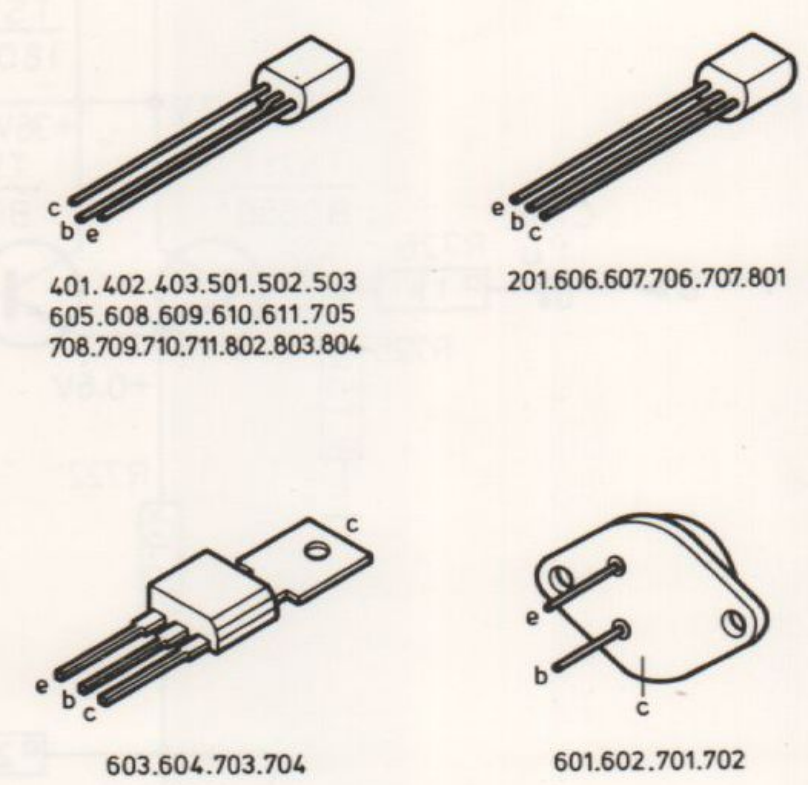
MISC.	TS 201 IC 201 J8 J14 J7 J13 TS701 TS703 TS708 TS705 TS704 TS702 TS602 TS609 TS605 TS611 TS601 D802 J1 J2 TS801
	D205 SK-A J10 J17 J9 J16 TS710 TS706 TS711 F. 601 TS707 TS709 F. 602 TS604 D601 TS 603 TS608 D801 SK-G TS802
	J12 J15 J11 F. 701 D701 D901 F. 702 TS607 TS606 TS610 TS803 TS804
C	220 222 202 208 213 204 203 212 207 201 707 901 701 704 702 706 606 601 604 605 607 802 804
	221 210 205 215 211 214 206 208 708 705 902 703 603 601 608 801 803
R	217 220 206 208 202 203 201 211 215 223 224 706 714 726 704 710 701 724 703 707 607 615 624 601 610 609 602 618 625 808 801 810
	218 214 210 204 205 207 222 712 723 702 708 722 716 705 719 713 613 603 620 616 622 604 606 614 626 807 802 809 805
	219 212 216 213 209 221 718 725 709 717 711 720 721 715 621 619 605 611 617 608 612 623 806 804 803









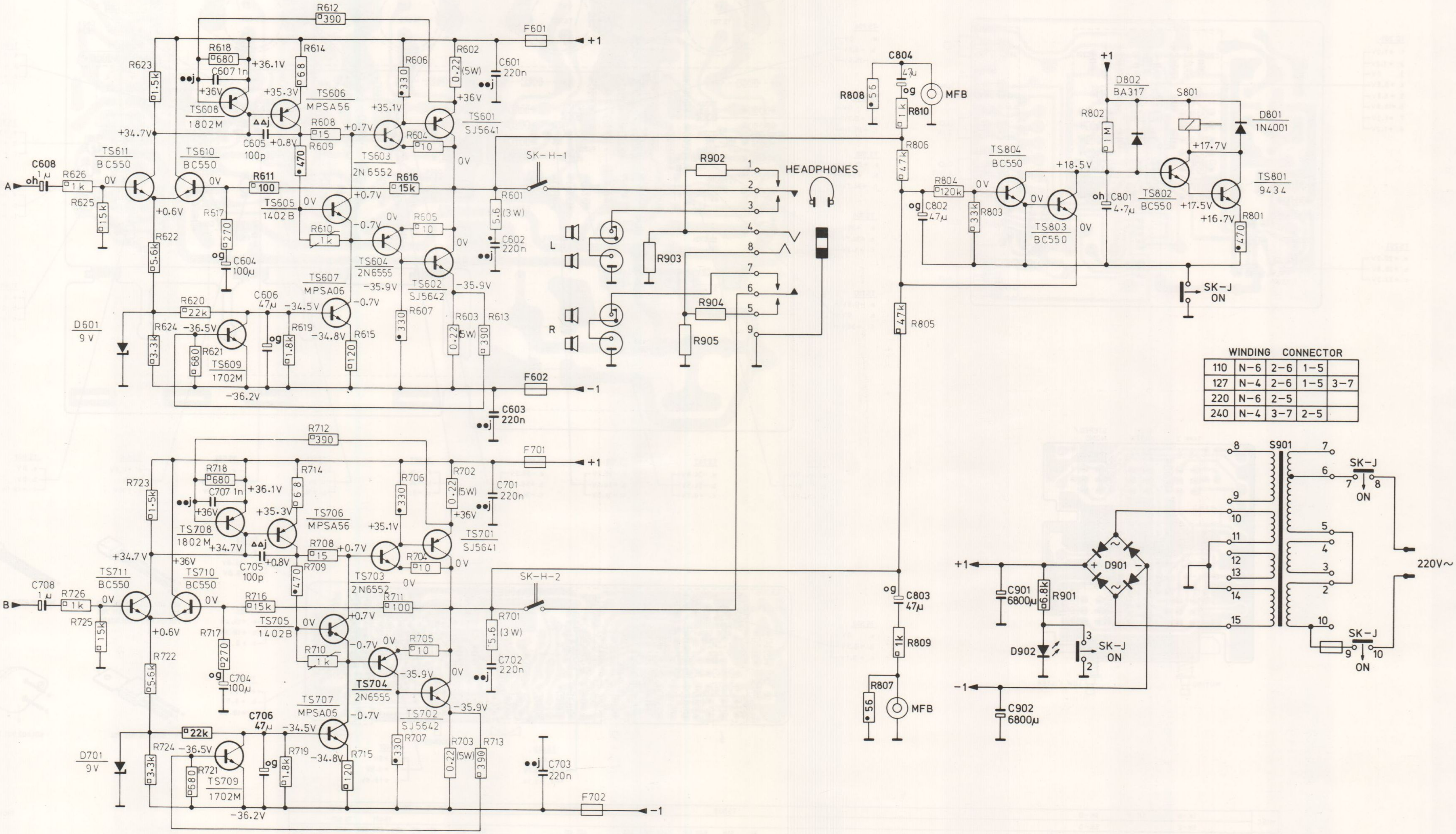


MISC.	SK-B SK-F SK-D TS503 TS403 SK-C TS402 TS 502
	SK-E SK-G TS401 TS 501
C	303 301 304 512 518 510 511 410 407 409 412 411 501 415 401 417 403 405 404 505 516 504
	302 506 408 406 508 507 414 509 418 502 402 416 517 503
R	315 302 314 310 306 311 531 414 526 412 418 518 521 426 501 427 503 408 410 409 508 512 509 510
	309 313 308 301 524 514 513 415 517 413 519 419 426 421 422 423 424 401 403 406 411 407 405 506 511 505
	312 307 523 522 515 516 416 520 428 431 502 402 529 429 412 404 504 507

19612E12

CS 69 956

MISC	D601 TS611 TS610 TS608 TS606 TS605 TS603 TS601 F601 F602 TS804.D902 D901.D802 TS802 D801 S901
	D701 TS711 TS710 TS609 TS706 TS607 TS604 TS602 SK-H-1 F702 TS803 SK-J TS801
	TS708 TS709 TS705 TS707 TS703 TS704 TS701 TS702 F701 SK-H-2 SK-J SK-J
C	607 605 601 603 804 802 801
	707 604 606 602 703
	704 705 706 701 702 803 901.902
R	626 625 623 723 620 618 619 614 612 712 615 606 706 604 602 613 601 903 902 808 810.806 804 803 802
	726 725 622 722 621 617 716 719 609 608 708 715 711 605 603 713 701 905 904 805 801
	624 724 720 721 718 717 714 709 610 710 607 707 704 705 702 703 808 810 901



WINDING CONNECTOR

110	N-6	2-6	1-5	
127	N-4	2-6	1-5	3-7
220	N-6	2-5		
240	N-4	3-7	2-5	

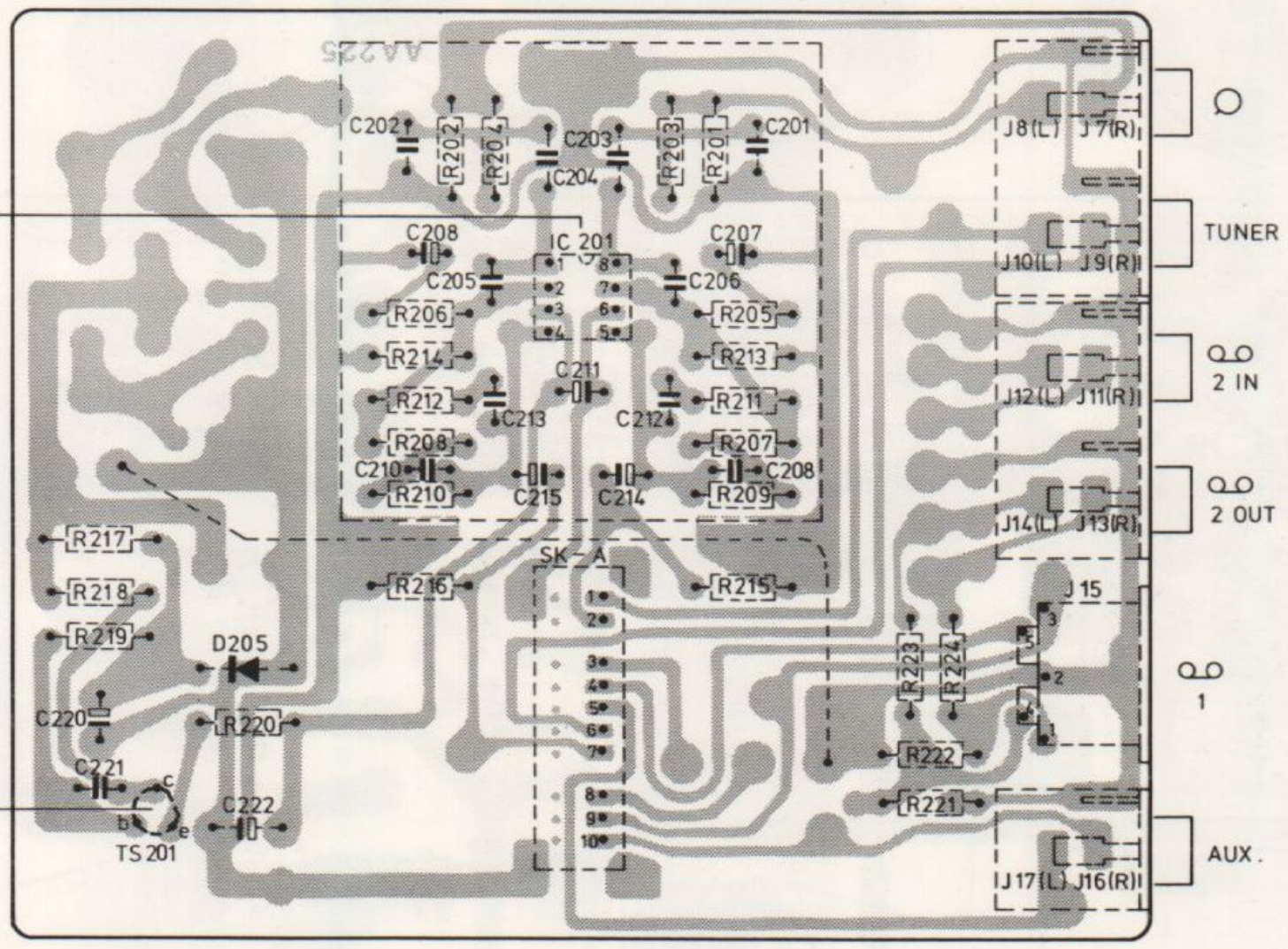
19614E12

CS 69 957

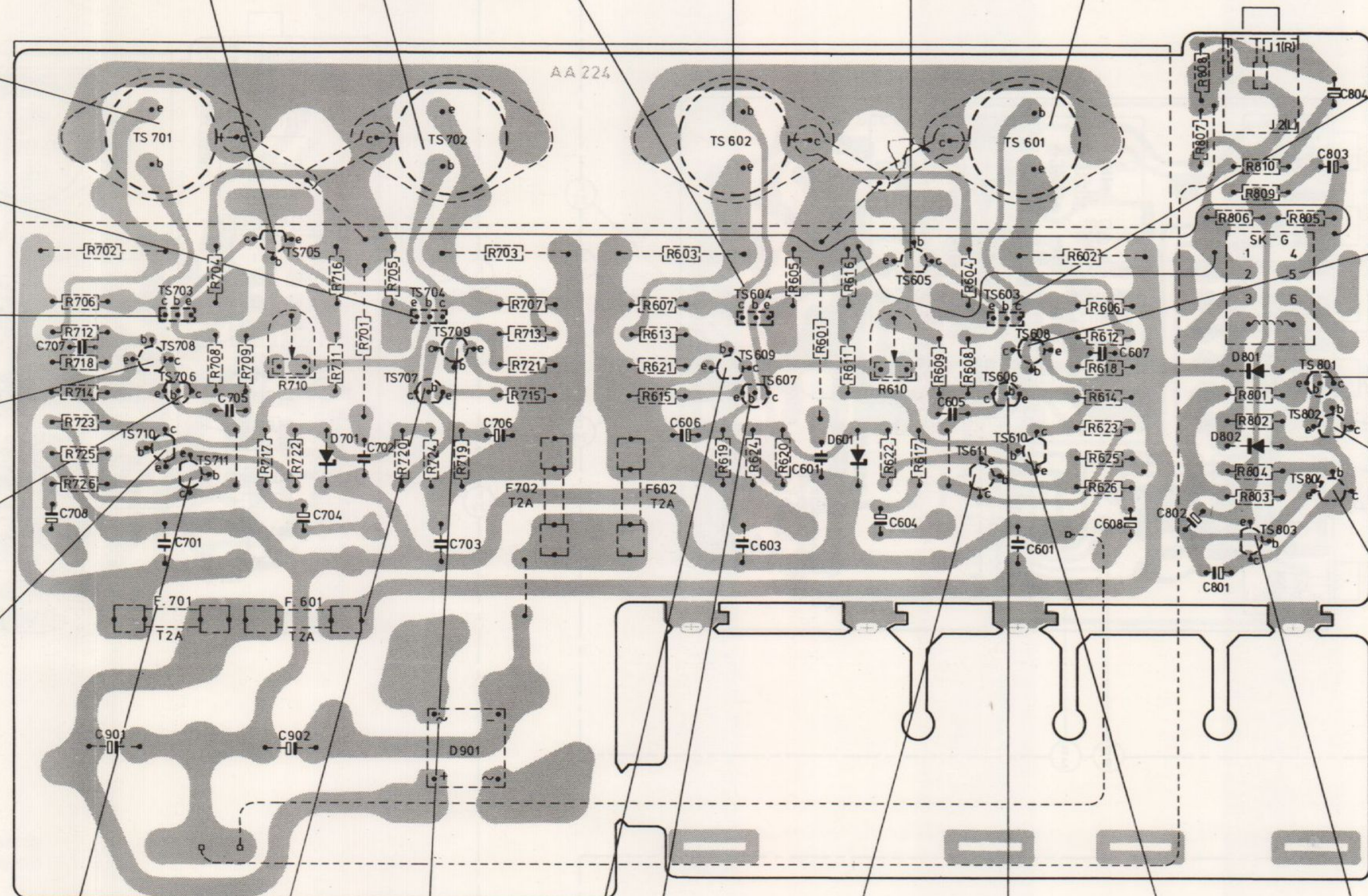
MISC.	TS201 IC201 J8 J14 J7 J13 TS701 TS703 TS708 TS705 TS704 TS702 TS602 TS609 TS605 TS611 TS601 D802 J1 J2 TS801
	D205 SK-A J10 J17 J9 J16 TS710 TS706 TS711 F.601 TS707 TS709 F.602 TS604 D601 TS603 TS608 D801 SK-G TS802
	J12 J15 J11 F.701 D701 D901 F.702 TS607 TS606 TS610 TS803 TS804
C	220 222 202 208 213 204 203 212 207 201 707 901 701 704 702 706 606 601 604 605 607 802 804
	221 210 205 215 211 214 206 208 708 705 902 703 603 601 608 801 803
R	217 220 206 208 202 203 201 211 215 223 224 706 714 726 704 710 701 724 703 707 607 615 624 601 610 609 602 618 625 808 801 810
	218 214 210 204 205 207 222 712 723 702 708 722 716 705 719 713 613 603 620 616 622 604 606 614 626 807 802 809 805
	219 212 216 213 209 221 718 725 709 717 711 720 721 715 621 619 605 611 617 608 612 623 806 804 803

IC 201
1. +1.2V
2. +1.2V
3. 0V
4. +6.8V
5. +6.8V
6. +18.8V
7. +1.2V
8. +1.2V

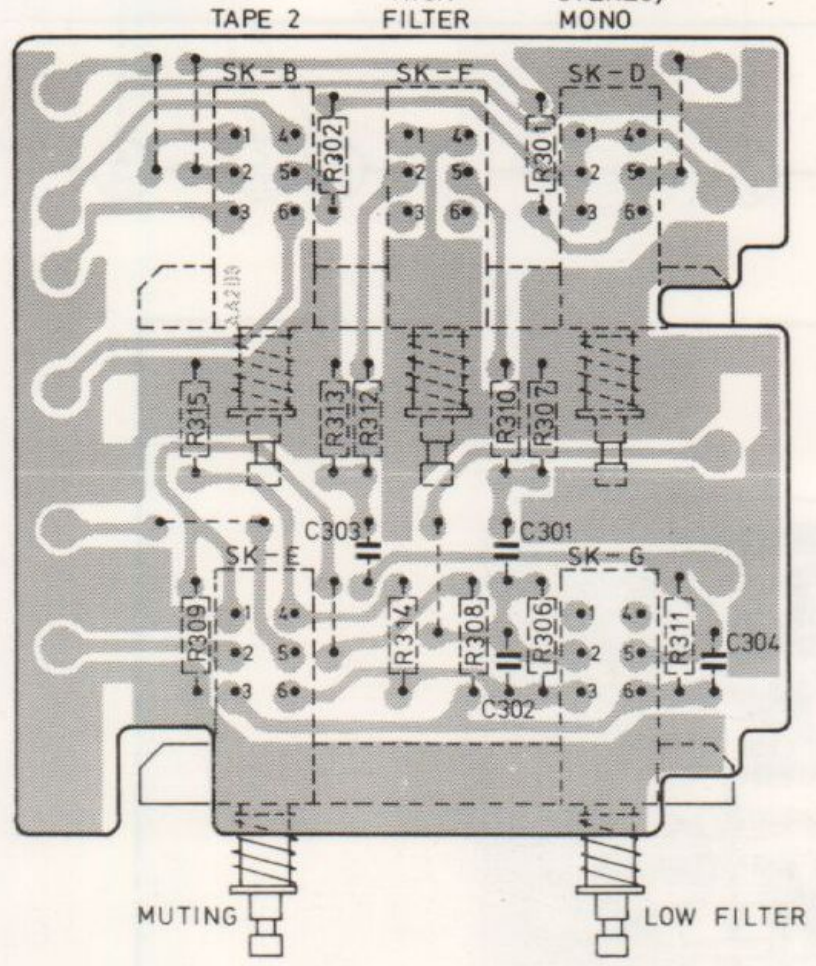
TS 201
e. +20.2V
b. +20.8V
c. +33.2V



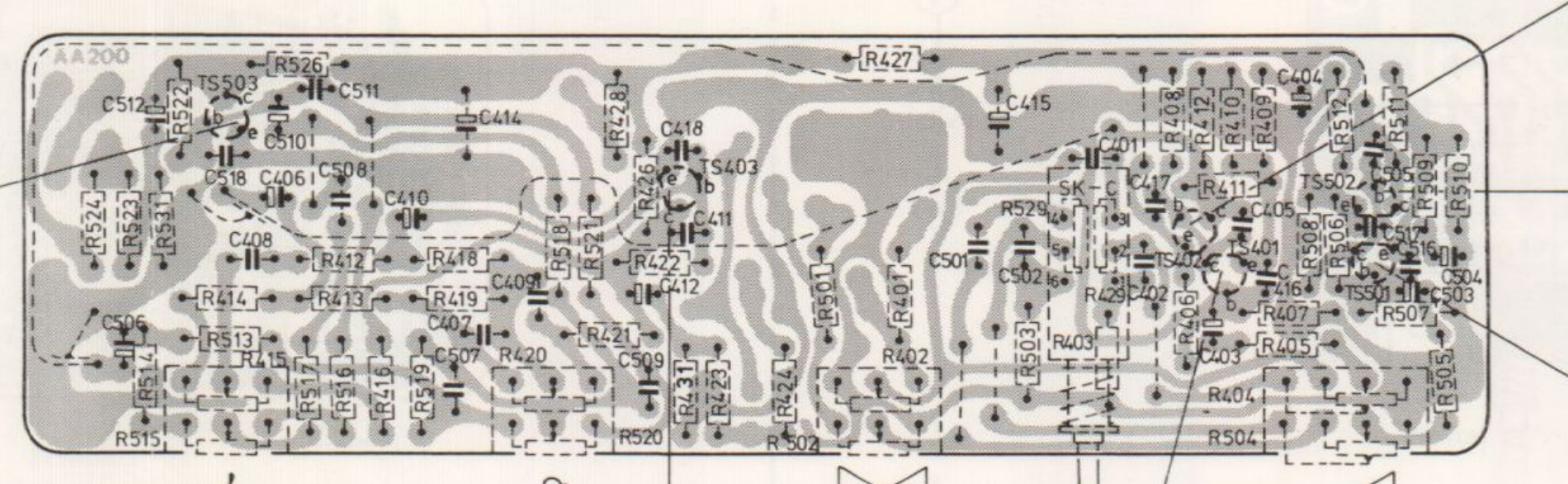
TS705: e. −0.7V, b. 0V, c. +0.7V
TS702: e. −35.9V, b. −35.9V, c. 0V
TS604: e. 0V, b. −0.7V, c. −35.9V
TS602: e. −35.9V, b. −35.9V, c. 0V
TS605: e. −0.7V, b. 0V, c. +0.7V
TS601: e. +36V, b. +35.1V, c. 0V
TS701: e. +36V, b. +35.1V, c. 0V
TS704: e. 0V, b. −0.7V, c. −35.9V
TS703: e. 0V, b. +0.7V, c. +35.1V
TS708: e. +36.1V, b. +36V, c. +34.7V
TS706: e. +35V, b. +34.7V, c. +0.8V
TS710: e. −0.6V, b. 0V, c. +36V
TS603: e. 0V, b. +0.7V, c. +35.1V
TS608: e. +36.1V, b. +36V, c. +34.7V
TS801: e. +16.7V, b. +17.5V, c. +17.7V
TS802: e. +17.5V, b. +18.5V, c. +17.7V
TS804: e. 0V, b. 0V, c. +18.5V



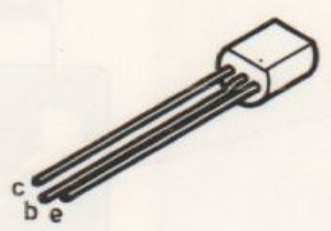
TS711: e. −0.6V, b. 0V, c. +34.7V
TS707: e. −34.8V, b. −34.5V, c. −0.7V
TS709: e. −36.2V, b. +36.5V, c. −34.5V
TS609: e. −36.2V, b. +36.5V, c. −34.5V
TS607: e. −34.8V, b. −34.5V, c. −0.7V
TS611: e. −0.6V, b. 0V, c. +34.7V
TS606: e. +35V, b. +34.7V, c. +0.8V
TS610: e. −0.6V, b. 0V, c. +36V
TS803: e. 0V, b. 0V, c. +18.5V



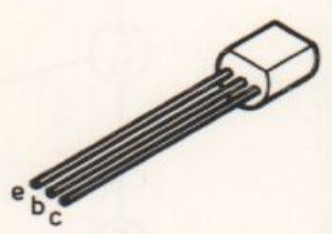
TS 503: e. 0V, b. +0.7V, c. +3.1V
TS 402: e. +19.4V, b. +18.8V, c. +9.8V
TS 502: e. +19.4V, b. +18.8V, c. +9.8V
TS 501: e. +9V, b. +9.5V, c. +18.8V



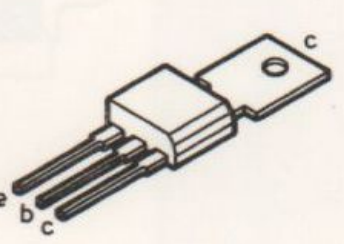
TS 403: e. 0V, b. +0.7V, c. +3.1V
TS 401: e. +9V, b. +9.5V, c. +18.8V



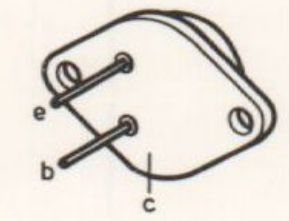
401.402.403.501.502.503
605.608.609.610.611.705
708.709.710.711.802.803.804



201.606.607.706.707.801



603.604.703.704

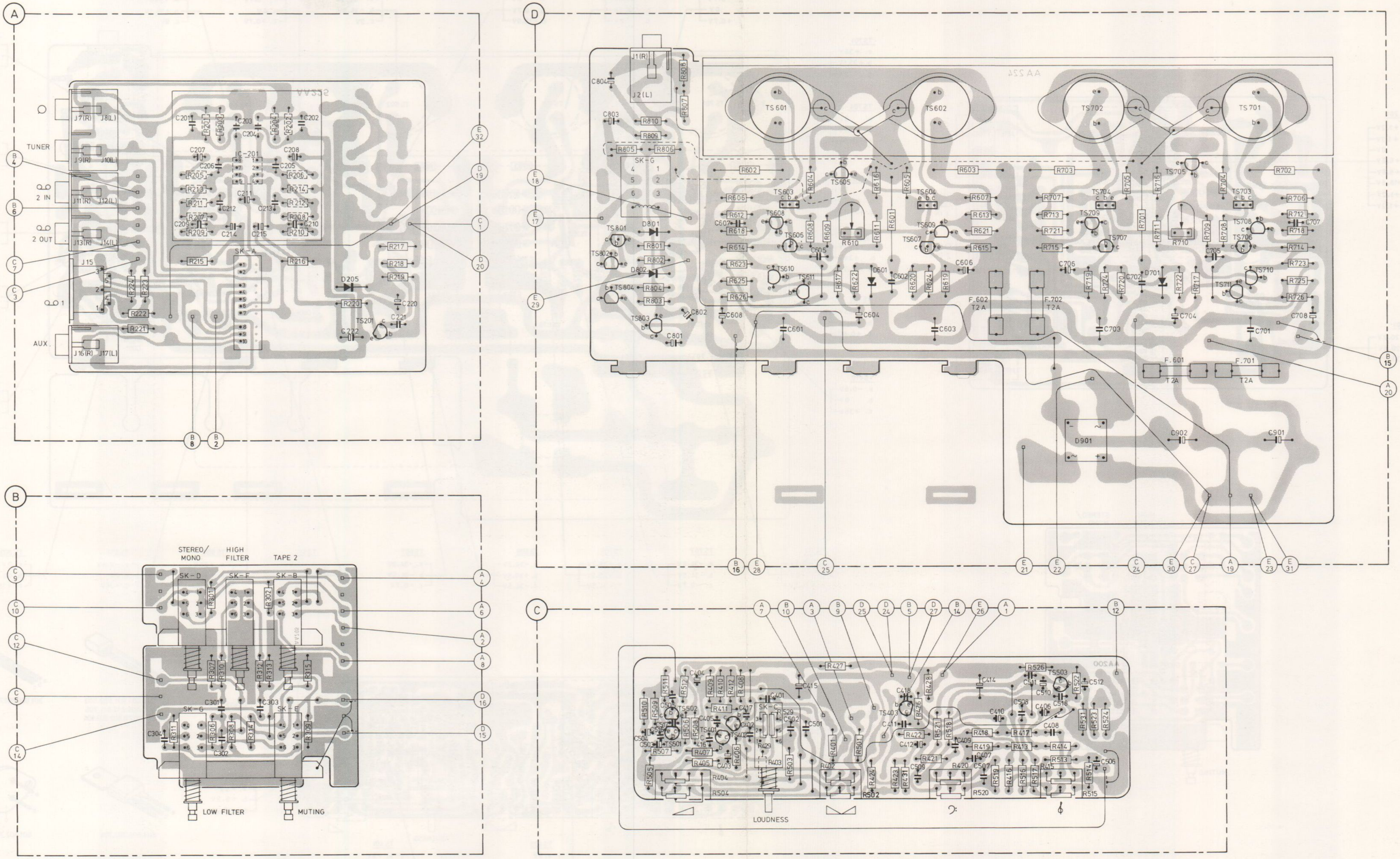


601.602.701.702

MISC.	SK-B SK-F SK-D TS503 TS403 SK-C TS402 TS502
	SK-E SK-G TS401 TS501
C	303 301 304 512 518 510 511 410 407 409 412 411 501 415 401 417 403 405 404 505 516 504
	302 506 408 406 508 507 414 509 418 502 402 416 517 503
R	315 302 314 310 306 311 531 414 526 412 418 518 521 426 501 427 503 408 410 409 508 512 509 510
	309 313 308 301 524 514 513 415 517 413 519 419 426 421 422 423 424 401 403 406 411 407 405 506 511 505
	312 307 523 522 515 516 416 520 428 431 502 402 529 429 412 404 504 507

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MISC.	J7 J13 J8 J14 IC 201 TS 201 TS802 J1 TS803 TS601 TS603 TS605 **TS604** **F.602** **TS702** D701 TS705 TS703 TS701
	J9 J15 J10 J17 SK-A D205 TS801 J2 D801 TS608 TS606 D601 **TS607 TS602** **F.702** **TS709 TS707** F. 601 TS706 F.701 TS710
	J11 J16 J12 TS804 SK-G D802 TS610 TS611 **TS609** **D901 TS704** TS711 TS708
C	201 207 206 214 211 215 213 208 202 222 220 804 801 608 605 602 **606** **702** 704 705 707
	209 212 203 204 205 210 221 803 802 607 601 604 **603** **706 703** **902** 701 901 708
R	224 223 205 207 201 204 202 212 217 805 810 802 806 606 614 602 604 617 616 605 **603** **707** 703 705 716 710 709 702 718
	222 213 209 203 206 208 218 809 804 808 612 623 626 608 610 611 620 619 607 **621** **713 715** 724 701 711 722 704 706 714 725
	221 211 215 214 210 216 220 219 801 803 807 618 625 609 622 601 624 613 **615** **721** **719** **720** 717 708 712 723 726

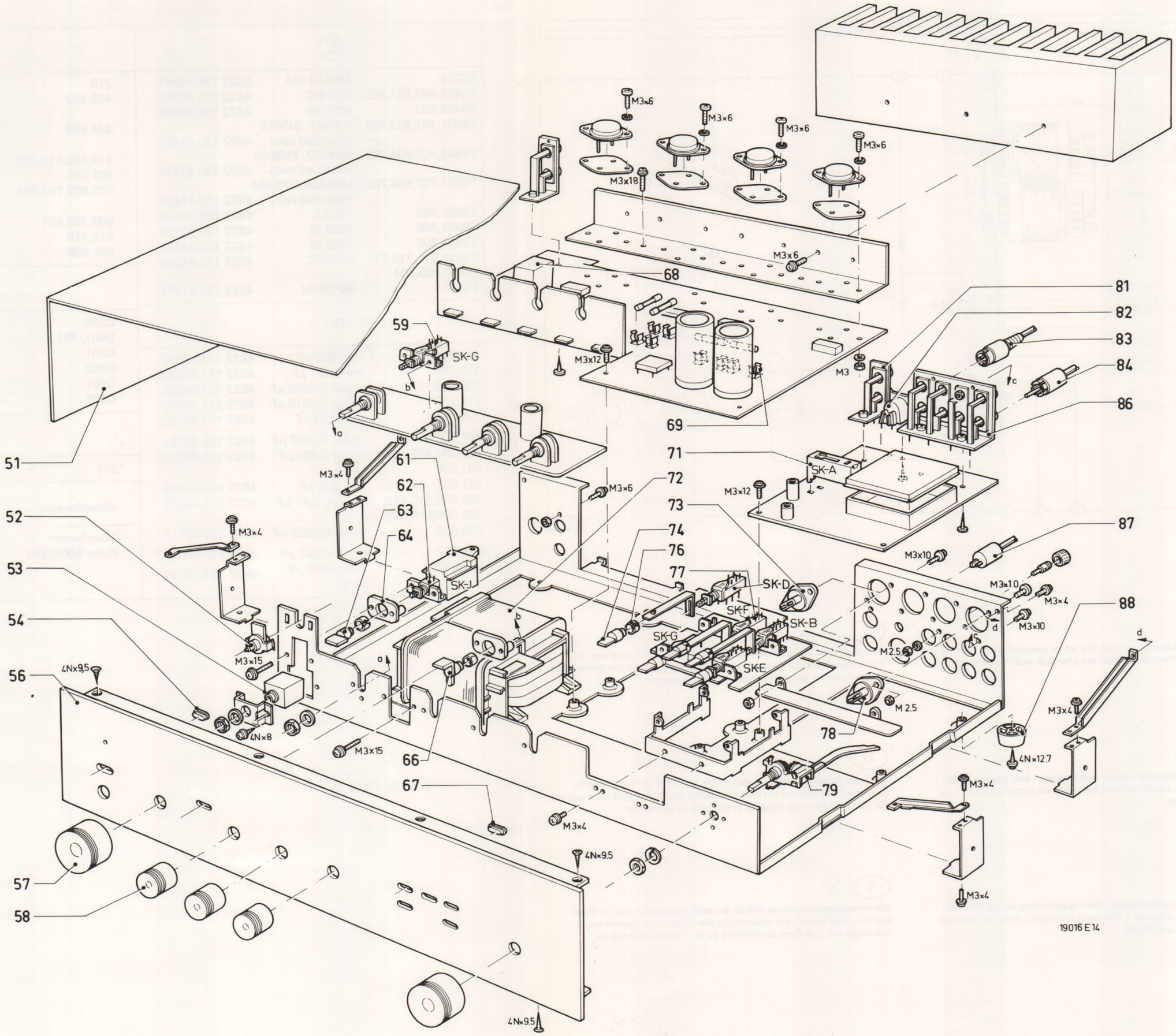


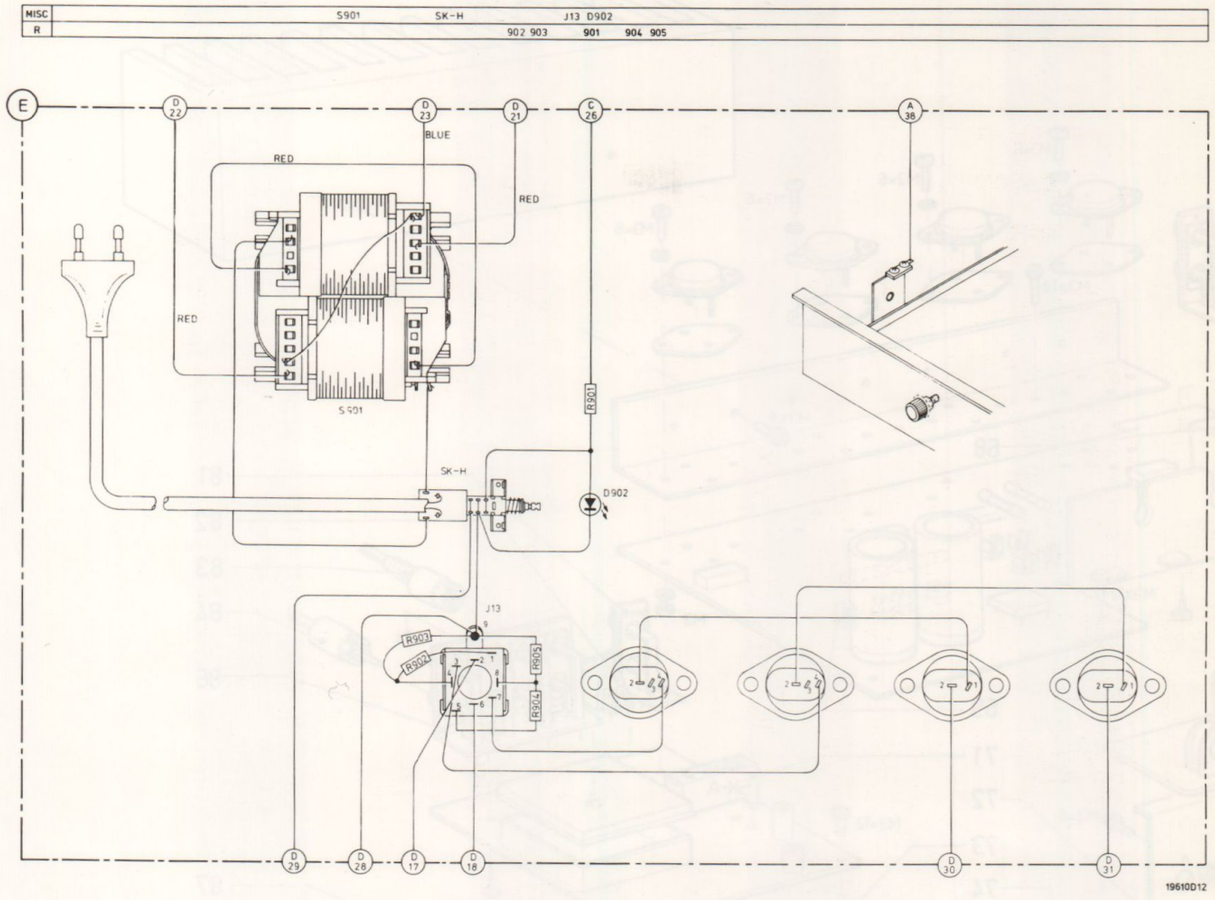
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	302 503 517 416 403 402 502 501 418 509 407 509 508 406 518 506
R	311 301 310 312 315 510 507 512 407 409 410 408 429 529 427 501 422 428 518 418 416 417 526 414 522 523
	307 308 302 309 505 511 506 405 404 411 406 403 401 422 423 426 521 420 419 413 513 531 524
	306 .314 313 509 508 504 412 503 402 502 431 421 520 519 516 517 415 515 514

19611E12

Mechanische stuklijst

51	4822 426 40179
52	4822 255 40168
53	4822 267 30334
54	4822 532 51114
56	4822 426 50409
57	4822 413 51057
58	4822 413 30856
59	4822 276 10764
61	4822 462 71161
62	4822 276 10654
63	4822 413 10169
64	4822 404 20308
66	4822 413 30855
67	4822 532 51115
68	4822 280 80443
69	4822 256 31067
71	4822 277 20602
72	4822 146 60093
73	4822 267 30184
74	4822 410 40163
76	4822 492 61974
77	4822 276 30259
78	4822 267 30184
79	4822 273 30249
81	4822 267 30333
82	4822 267 30279
83	4822 264 40023
84	4822 264 30027
86	4822 267 50291
87	4822 264 40041
88	4822 462 40399





TS201	MPS 9418A	5322 130 44647
TS401,403,501,503	BC549C	4822 130 44246
TS402,502	BC559B	4822 130 44358
TS601,701,602,702	SJ5641, SJ5642 (matched pair)	4822 130 41481
TS603,703,604,704	2N6552, 2N6555 (matched pair)	4822 130 41479
TS607,707,606,706	MPSA06,MPSA56 (matched pair)	4822 130 41478
TS605,705	1402 B	4822 130 40948
TS608,708	1802 M	4822 130 44104
TS609,709	1702 M	4822 130 44121
TS610,611,710,711, 802,803,804	BC550C	4822 130 41096
TS801	MPS9434	4822 130 41477

201,202	Cer. 200 pF	4822 121 50532
203,204	mylar 0,1 µF	4822 121 40522
209,210	mylar 0,0068 µF	4822 121 50538
212,215	mylar 0,0018 µF	4822 121 40299
221	Cer. 0,02 µF	4822 122 30103
301,303	mylar 0,0047 µF	4822 122 30128
302,304,407,409, 507,509	mylar 0,022 µF	4822 121 40513
401,501	Cer. 360 pF	4822 122 31409
403,406,410,412, 503,506,510,512	Lo-leak 0,47 µF	4822 124 20929
408,508	mylar 0,0022 µF	4822 122 30114
607,707	mylar 0,001 µF	4822 122 30027
901,902	Elect 6800 µF 50 V	4822 124 20935

218	Res. 39E 0,5 W	4822 110 53069
402,502	Potm.100k Balance	4822 103 20243
404,504	Potm. 100k Volume	4822 103 20242
415,420,515,520	Potm. 100k Tone	4822 103 20241
601,701	Res. 5,6E 3W	4822 112 21047
602,603,702,703	Res. 0,22E 5W (wire)	5322 113 24158
609,709,801	Res. 470E 0,5 W	4822 110 53098
610,710	Trimpotm. 1k	4822 103 20245
807,808	Res. 56E 0,5 W	4822 110 53074

D205	Zener 20 V	4822 130 31245
D601, 701	Zener 9,1 V	4822 130 30862
D801	IN4001	4822 130 30829
D802	BA317	4822 130 30847
D901	Bridge rectifier	4822 130 50324
D902	LED Red	4822 130 31246

201	IC NE 542	4822 209 80359

-Miscellaneous-

Transformer	4822 146 60093
Relay 500E/24V	4822 280 80443

(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.

(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.

(S)

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