Service
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Ned. Ver. v. Historie v/d Radio

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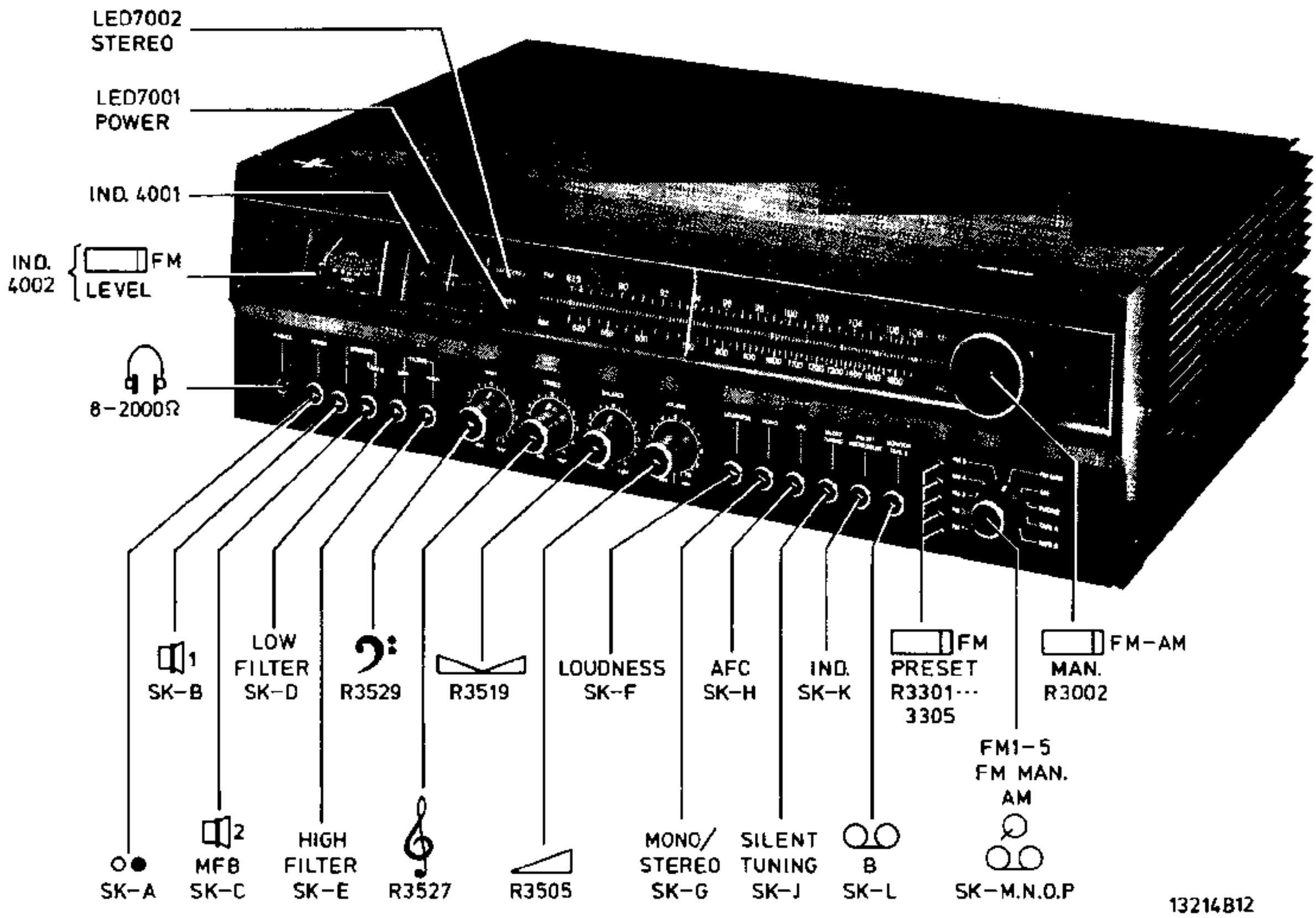
Service Manual



DocumentationTechnique Service Dokumentation Documentazione di Servizio Huolte-Ohje Manual de Servicio Manual de Serviçio

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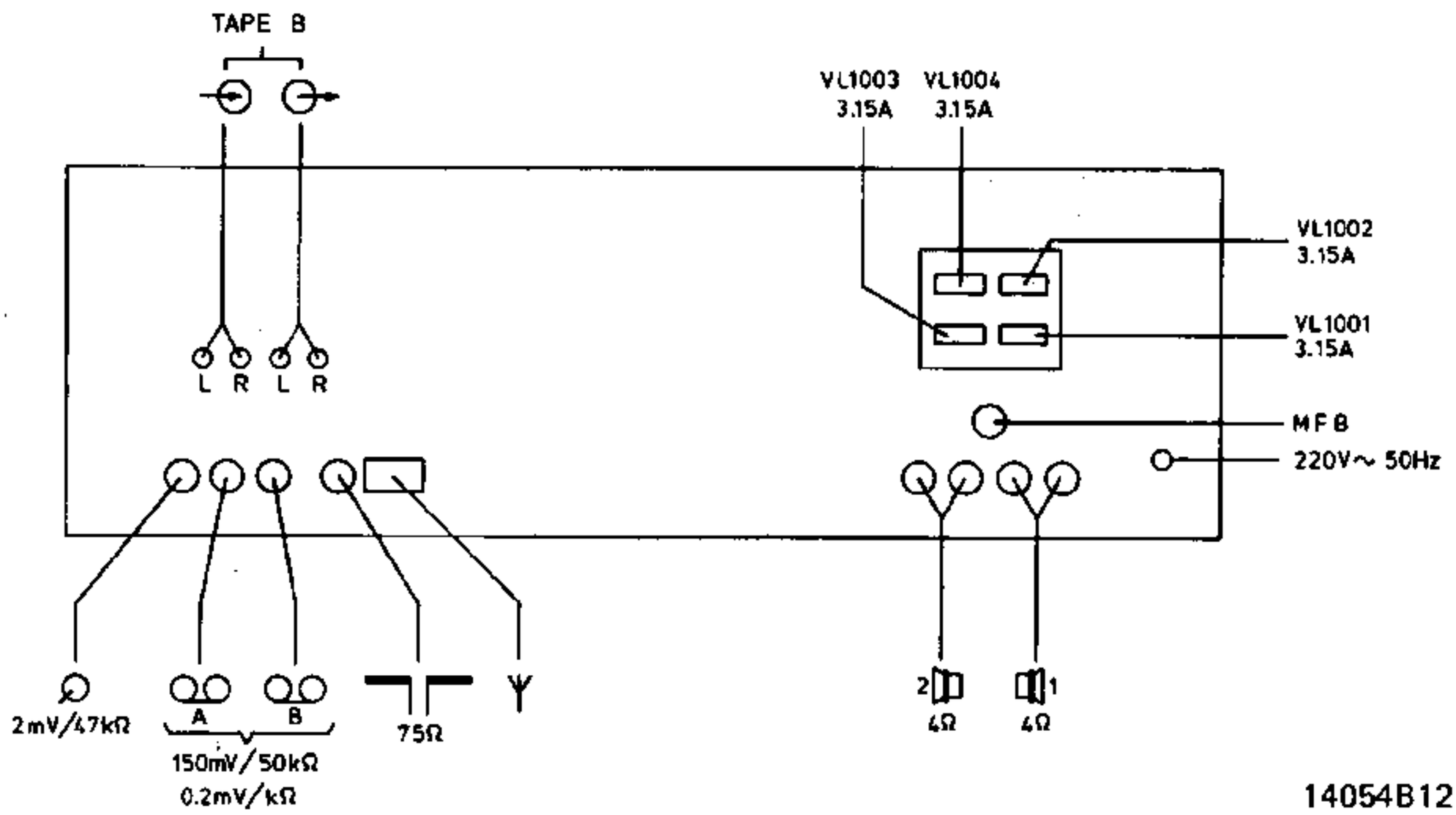
PHILIPS



(GB) SPECIFICATION

Amplifier

– Output power RMS	: 55 W (4 Ω)
– Harmonic distortion	
65 W	: d ⩽ 0,4 %
55 W	: d ⩽ 0,2 %
– Power bandwidth	: 10 Hz - 60 kHz
– Frequency range	
linear input	: 10 Hz-60 kHz (± 1 dB)
non-linear input	: 30 Hz-15 kHz (± 0,5dB)
– S/N-ratio	
at 55 W linear input	: ⩾ 75 dB
at 55 W non-linear input	: ⩾ 60 dB
at 50 mW linear input	: ⩾ 55 dB
at 50 mW non-linear input	: ⩾ 50 dB
– Cross-talk at 1000 Hz	: 80 dB
– Cross-talk between 250 Hz and 10 kHz	: 70 dB
– Balance control per channel	: 0...20 dB
– Bass control at 50 Hz	: –12 ... +12 dB
– Treble control at 10 kHz	: –10 ... +10 dB
– Loudness control	
at 50 Hz	: +10 dB
at 10 kHz	: +5 dB
– Input sensitivities for 55 W output power at 1 kHz:	
MD-PU	: 2 mV/47 kΩ
tape A-B	: 150 mV/50 kΩ
– Outputs tape A-B	: 0,2 mV/kΩ

Receiver

– Sensitivity	
mono: 26 dB S/N	: 1 μV at 40 kHz sweep
stereo: 46 dB S/N	: 50 μV at 40 kHz sweep
– Total harmonic distortion	
mono	: 0,2 %
– Capture ratio	: 1,8 dB
– AM-suppression	: 50 dB
– HF-suppression	: 80 dB
– Pilot tone suppression	: 45 dB
– Subcarrier suppression	: 55 dB
– Audio range	: 20 Hz-14 kHz,-1,5 dB
– Stereo separation	
1 kHz	: 40 dB
100 Hz-10 kHz	: 30 dB

(NL) SPECIFIKATIE

Versterker

– Uitgangsvermogen RMS	: 55 W (4 Ω)
– Harmonische vervorming	
65 W	: d ≤ 0,4 %
55 W	: d ≤ 0,2 %
– Vermogensbandbreedte	: 10 Hz - 60 kHz
– Frequentiebereik	
lineaire ingang	: 10 Hz-60 kHz (± 1 dB)
niet-lineaire ingang	: 30 Hz-15 kHz (± 0,5 dB)
– Signaal-ruisverhouding	
bij 55 W lineaire ingang	: ≥ 75 dB
bij 55 W niet lineaire ingang	: ≥ 60 dB
bij 50 mW lineaire ingang	: ≥ 55 dB
bij 50 mW niet lineaire ingang	: ≥ 50 dB
– Overspraak bij 1000 Hz	: 80 dB
– Overspraak tussen 250 Hz en 10 kHz	: 70 dB
– Balansregeling per kanaal	: 0...20 dB
– Lage toonregeling bij 50 Hz	: –12 ... +12 dB
– Hoge toonregeling bij 10 kHz	: –10 ... +10 dB
– Loudness regeling	
bij 50 Hz	: +10 dB
bij 10 kHz	: +5 dB
– Ingangsgevoeligheden voor 55 W uitgangsvermogen bij 1 kHz	
MD-PU	: 2 mV/47 kΩ
tape A-B	: 150 mV/50 kΩ
– Uitgangen tape A-B	: 0,2 mV/kΩ

Ontvanger

– Gevoeligheid	
mono, 26 dB S/N	: 1 μV bij 40 kHz zwaai
stereo, 46 dB S/N	: 50 μV bij 40 kHz zwaai
– Totale harmonische distorsie mono	: 0,2 %
– Capture ratio	: 1,8 dB
– AM onderdrukking	: 50 dB
– HF onderdrukking	: 80 dB
– Piloottoononderdrukking	: 45 dB
– Hulpdraaggolf onderdrukking	: 55 dB
– Audiobereik	: 20 Hz-14 kHz, -1,5 dB
– Stereoscheiding	
1 kHz	: 40 dB
100 Hz-10 kHz	: 30 dB

(D) SPEZIFIKATION

Verstärker

– Ausgangsleistung RMS	: 55 W (4 Ω)
– Harmonische Verzerrung	
65 W	: d ≤ 0,4 %
55 W	: d ≤ 0,2 %
– Leistungsbandbreite	: 10 Hz - 60 kHz
– Frequenzbereich	
linearer Eingang	: 10 Hz-60 kHz (± 1 dB)
nichtlinearer Eingang	: 30 Hz-15 kHz (± 0,5 dB)
– Signal/Rausch-Verhältnis	
bei 55 W linearer Eingang	: ≥ 75 dB
bei 55 W nichtlinearer Eingang	: ≥ 60 dB
bei 50 mW linearer Eingang	: ≥ 55 dB
bei 50 mW nichtlinearer Eingang	: ≥ 50 dB
– Übersprechen bei 1000 Hz	: 80 dB
– Übersprechen zwischen 250 Hz und 10 kHz	: 70 dB
– Balanceregelung für jeden Kanal	: 0...20 dB
– Tieftonregelung bei 50 Hz	: –12 ... +12 dB
– Hochtonregelung bei 10 kHz	: –10 ... +10 dB
– Hochtonregelung	
bei 50 Hz	: +10 dB
bei 10 kHz	: +5 dB
– Eingangsempfindlichkeit für 55 W Ausgangsleistung bei 1 kHz	
MD-PU	: 2 mV/47 kΩ
Tape A-B	: 150 mV/50 kΩ
– Ausgänge Tape A-B	: 0,2 mV/kΩ

Empfänger

– Empfindlichkeit	
Mono 26 dB S/N	: 1 μV bei 40 kHz Hub
Stereo 46 dB S/N	: 50 μV bei 40 kHz Hub
– Gesamtharmonische Verzerrung Mono	: 0,2 %
– Einfangsverhältnis	: 1,8 dB
– AM-Unterdrückung	: 50 dB
– HF-Unterdrückung	: 80 dB
– Pilottonunterdrückung	: 45 dB
– Hilfsträgerunterdrückung	: 55 dB
– Audiobereich	: 20 Hz-14 kHz, -1,5 dB
– Stereotrennung	
1 kHz	: 40 dB
100 Hz-10 kHz	: 30 dB

(F) CARACTERISTIQUES TECHNIQUES

Amplificateur

- Puissance de sortie
  Intens. eff. : 55 W (4 Ω)
- Distorsion harmonique
  65 W : d ⩽ 0,4 %
  55 W : d ⩽ 0,2 %
- Largeur de bande, puissance : 10 Hz - 60 kHz
- Gamme de fréquence
  entrée linéaire : 10 Hz-60 kHz (± 1 dB)
  entrée non linéaire : 30 Hz-15 kHz (± 0,5 dB)
- Rapport signal/bruit
  à 55 W entrée linéaire : ⩾ 75 dB
  à 55 W entrée non linéaire : ⩾ 60 dB
  à 50 mW entrée linéaire : ⩾ 55 dB
  à 50 mW entrée non linéaire : ⩾ 50 dB
- Diaphonie à 1000 Hz : 80 dB
- Diaphonie entre 250 Hz et 10 kHz : 70 dB
- Réglage de l'équilibrage par canal : 0...20 dB
- Réglage des basses à 50 Hz : −12 ... +12 dB
- Réglage des aigus à 10 kHz : −10 ... +10 dB
- Régulation du volume
  à 50 Hz : + 10 dB
  à 10 kHz : + 5 dB
- Sensibilités d'entrée pour une puissance de sortie de 55 W à 1 kHz
  MD-PU : 2 mV/47 kΩ
  tape A-B : 150 mV/50 kΩ
- Sorties tape A-B : 0,2 mV/kΩ

Récepteur

- Sensibilité
  mono, 26 dB s/b : 1 μV à une déviation de 40 kHz
  stéréo, 46 dB s/b : 50 μV à une déviation de 40 kHz
- Distorsion harmonique totale
  mono : 0,2 %
- Taux de capture : 1,8 dB
- Suppression AM : 50 dB
- Suppression HF : 80 dB
- Suppression du son pilote : 45 dB
- Suppression de la porteuse auxiliaire : 55 dB
- Gamme audio : 20 Hz-14 kHz, -1,5 dB
- Séparation stéréo
  1 kHz : 40 dB
  100 Hz-10 kHz : 30 dB

(I) DATI TECNICI

Amplificatore

- Potenza di uscita Intens.effic : 55 W (4 Ω)
- Distorzione armonica
  65 W : d ⩽ 0,4 %
  55 W : d ⩽ 0,2 %
- Larghezza di banda,potenza : 10 Hz - 60 kHz
- Gamma di frequenza
  ingresso lineare : 10 Hz-60 kHz (± 1 dB)
  : 30 Hz-15 kHz (± 0,5 dB)
- Rapporto segnale/disturbo
  a 55 W ingresso lineare : ⩾ 75 dB
  a 55 W ingresso non lineare : ⩾ 60 dB
  a 50 mW ingresso lineare : ⩾ 55 dB
  a 50 mW ingresso non lineare : ⩾ 50 dB
- Diafonia a 1000 Hz : 80 dB
- Diafonia fra 250 Hz e 10 kHz : 70 dB
- Regolazione dell'equilibrio per canale : 0...20 dB
- Regolazione dei bassi a 50 Hz : −12 ... +12 dB
- Regolazione degli acuti a 10 kHz : −10 ... +10 dB
- Regolazione del volume sonore
  a 50 Hz : +10 dB
  a 10 kHz : +5 dB
- Sensibilità d'ingresso per una potenza di uscita di 55 W a 1 kHz
  MD-PU : 2 mV/47 kΩ
  tape A-B : 150 mV/50 kΩ
- Uscite tape A-B : 0,2 mV/kΩ

Ricevitore

- Sensibilità
  mono, 26 dB rapporto s/d : 1 μV per una deviazione di 40 kHz
  stereofonica, 46 dB s/d : 50 μV per una deviazione di 40 kHz
- Distorzione armonica totale
  mono : 0,2 %
- Tasso di cattura : 1,8 dB
- Soppressione AM : 50 dB
- Soppressione AF : 80 dB
- soppressione del tonopilota : 45 dB
- Soppressione della : 55 dB
- Gamma audio : 20 Hz-14 kHz, - 1,5 dB
- Separazione stereofonica
  1 kHz : 40 dB
  100 Hz-10 kHz : 30 dB

(N) TEKNISKE DATA

Forsterker

– Utgangseffekt RMS	: 55 W (4 Ω)
– Harmonisk forvrengning	
65 W	: d ≤ 0.4 %
55 W	: d ≤ 0.2 %
– Effektbåndbredde	: 10 Hz - 60 kHz
– Frekvensområde	
lin. inngang	: 10 Hz-60 kHz (± 1 dB)
ulin. inngang	: 30 Hz-15 kHz (± 0.5 dB)
– Signal/støy forhold	
ved 55 W lin. inngang	: ≥ 75 dB
ved 55 W ulin. inngang	: ≥ 60 dB
ved 50 mW lin. inngang	: ≥ 55 dB
ved 50 mW ulin. inngang	: ≥ 50 dB
– Krysstale ved 1000 Hz	: 80 dB
– Krysstale ved 250 Hz - 10 kHz	: 70 dB
– Balansekontroll, pr. kanal	: 0-20 dB
– Basskontroll ved 50 Hz	: –12 ... +12 dB
– Diskantkontroll ved 10 kHz	: –10 ... +10 dB
– Volumkontroll	
ved 50 Hz	: +10 dB
ved 10 kHz	: +5 dB
– Inngangsfølsomhet ved 55 W utgangseffekt ved 1 kHz	
MO-PU	: 2 mV/47 kΩ
Bånd A-B	: 150 mV/50 kΩ
– Utganger bånd A-B	: 0.2 mV/kΩ

Mottaker

– Følsomhet	
mono, 26 dB signal/støy	: 1 μV ved 40 kHz sving
stereo, 46 dB signal/støy	: 50 μV ved 40 kHz sving
– Total harmonisk forvrenging mono	: 0.2 %
– Innfangningsforhold	: 1.8 dB
– AM-undertrykkelse	: 50 dB
– HF-undertrykkelse	: 80 dB
– pilottoneundertrykkelse	: 45 dB
– Hjelpebærebølgeundertrykkelse	: 55 dB
– Audio-område	: 20 Hz-14 kHz,-1.5 dB
– Stereoseparasjon	
1 kHz	: 40 dB
100 Hz-10 kHz	: 30 dB

(S) TEKNISKA DATA

Förstärkardelen

– Uteffekt	: 2x55 W vid 4 Ω
– Harmonisk distorsion	
vid 65 W	: d ≤ 0,4 %
vid 55 W	: d ≤ 0,2 %
– Effektbandbredd	: 10-60000 Hz
– Frekvensomfång	
linjära ingångar	: 10-60000 Hz ± 1 dB
olinjära ingångar	: 30-15000 Hz ± 0,5 dB
– Signal/brusförhållande	
vid 55 W linjära ingångar	: ≥ 75 dB
vid 55 W olinjära ingångar	: ≥ 60 dB
vid 50 mW linjära ingångar	: ≥ 55 dB
vid 50 mW olinjära ingångar	: ≥ 50 dB
– Kanalseparation	: 80 dB vid 1000 Hz : 70 dB inom 250-10000 Hz
– Balanskontroll	: 0-20 dB per kanal
– Baskontroll	: –12 ... +12 dB
– Diskantkontroll	: –10 ... +10 dB 10 kHz
– Konturkontrol	
vid 50 Hz	: +10 dB
vid 10 kHz	: +5 dB
– Ingång vid 1 kHz, 55 W	
magnetodynamisk pickup	: 2 mV/47 kΩ
band A-B	: 150 mV/50 kΩ
– Utgång, band A-B	: 0,2 mV/1 kΩ

Mottagardelen

– Känslighet 40 kHz svep	
26 dB signal/brus mono	: 1 μV
26 dB signal/brus stereo	: 50 μV
– Harmonisk distorsion mono	: 0,2 %
– Infångningsindex	: 1,8 dB
– AM-undertryckning	: 50 dB
– MF-undertryckning	: 80 dB
– Pilottondämpning, 19 kHz	: 45 dB
– Underbärvågsdämpning, 38 kHz	: 55 dB
– Frekvensomfång	: 20-14000 Hz, -1,5 dB
– Kanalseparation vid 1 kHz	: 40 dB vid 1 kHz 30 dB inom 100-10000 Hz

(DK) TEKNISKE DATA

Forstærker

– Udgangseffekt, effektiv	: 55 W (4 Ω)
– Harmonisk forvrængning	
65 W	: d ⩽ 0,4 %
55 W	: d ⩽ 0,2 %
– Båndbredde, udgangstrin	: 10 Hz - 60 kHz
– Frekvensområde	
lineær indgang	: 10 Hz-60 kHz (± 1 dB)
non-lineær indgang	: 30 Hz-15 kHz (± 0,5 dB)
– Signal/støjforhold	
ved 55 W lineær indgang	: ⩾ 75 dB
ved 55 W non-lineær indgang	: ⩾ 60 dB
ved 50 mW lineær indgang	: ⩾ 55 dB
ved 50 mW non-lineær indgang	: ⩾ 50 dB
– Cross-talk ved 1000 Hz	: 80 dB
– Cross-talk mellem 250 Hz og 10 kHz	: 70 dB
– Balance-kontrol pr. kanal	: 0...20 dB
– Bas-kontrol ved 50 Hz	: –12 ... +12 dB
– Diskant-kontrol ved 10 kHz	: –10 ... +10 dB
– Loudness-kontrol	
ved 50 Hz	: +10 dB
ved 10 kHz	: +5 dB
– Indgangsfølsomheden for 55 W udgangseffekt ved 1 kHz	
Magnetodynamisk pick-up	: 2 mV/47 kΩ
Tape A-B	: 150 mV/50 kΩ
– Udgange tape A-B	: 0,2 mV/kΩ

Modtager

– Følsomhed	
mono: 26 dB S/N	: 1 μV ved 40 kHz sweep
stereo: 46 dB S/N	: 50 μV ved 40 kHz sweep
– Total harmonisk forvrængning mono	: 0,2 %
– Gribeforhold	: 1,8 dB
– AM-undertrykkelse	: 50 dB
– HF-undertrykkelse	: 80 dB
– Pilottone-undertrykkelse	: 45 dB
– Hjælpebærebølge-undertrykkelse	: 55 dB
– LF-område	: 20 Hz-14 kHz, -1,5 dB
– Stereo-separation	
1 kHz	: 40 dB
100 Hz-10 kHz	: 30 dB

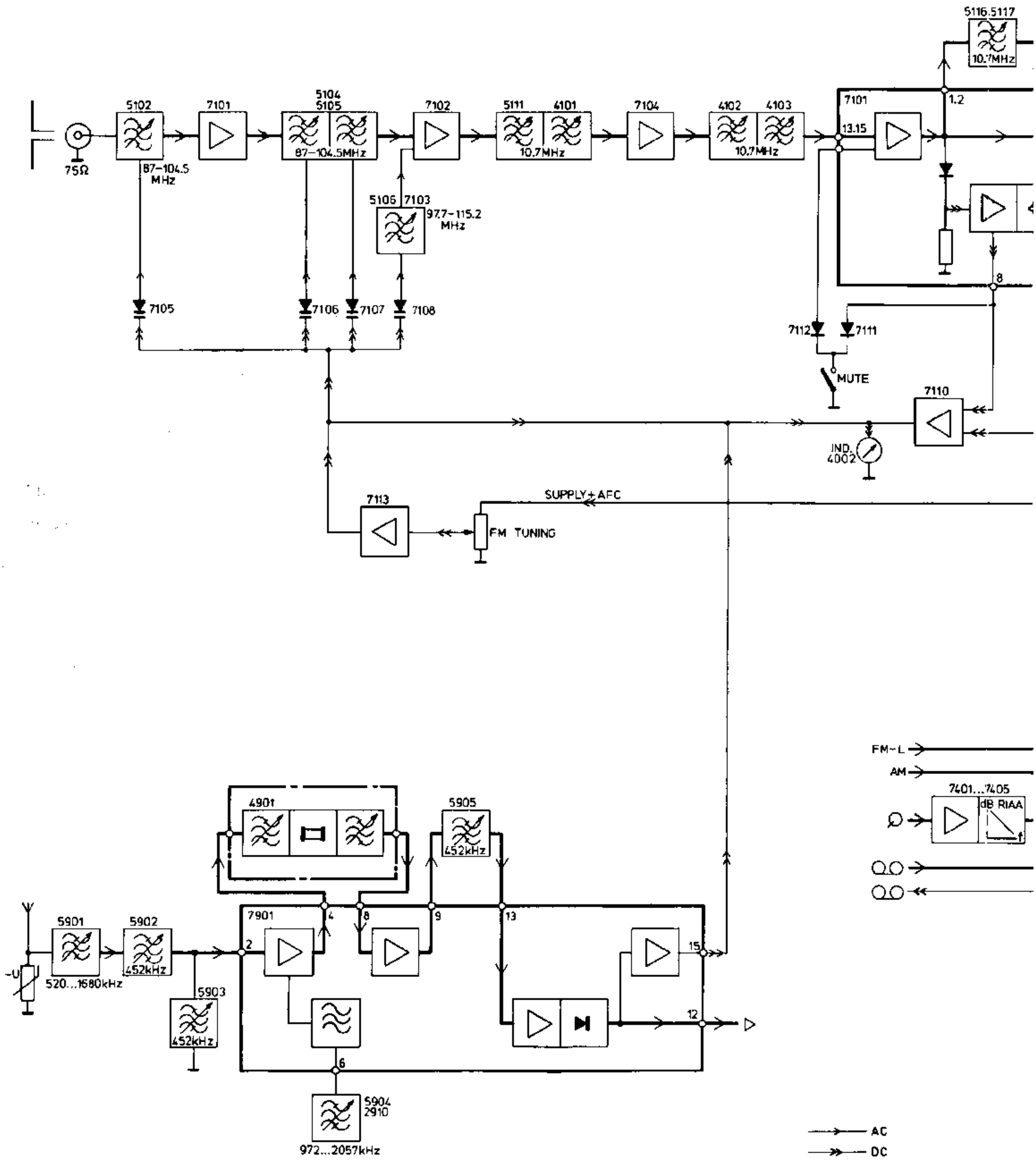
(SF) TEKNISET TIEDOT

Vahvistin

– Lähtöteho RMS	: 55 W (4 Ω)
– Harmoninen särö	
65 W:lla	: d ⩽ 0,4 %
55 W:lla	: d ⩽ 0,2 %
– Tehokaistaleveys	: 10 Hz - 60 kHz
– Toistoalue	
lineaarinen tulo	: 10 Hz-60 kHz (± 1 dB)
ei-lineaarinen tulo	: 30 Hz-15 kHz (± 0,5dB)
– Signaalikohinasuhde	
55 W:lla, lineaarinen tulo	: ⩾ 75 dB
55 W:lla, ei-lineaarinen tulo	: ⩾ 60 dB
50 mW:lla, lineaarinen tulo	: ⩾ 55 dB
50 mW:lla, ei-lineaarinen tulo	: ⩾ 50 dB
– Ylikuuluminen 1000 Hz:llä	: 80 dB
– Ylikuuluminen 250 Hz - 10 kHz	: 70 dB
– Kanavatasaus/kanava	: 0...20 dB
– Bassosäätö 50 Hz:llä	: –12 ... +12 dB
– Diskanttisäätö 10 kHz:llä	: –10 ... +10 dB
– Fysiologian säätö	
50 Hz:llä	: +10 dB
10 kHz:llä	: +5 dB
– Tuloherkkyydet 55 W:n lähtöteholle 1 kHz:llä	
MO-PU	: 2 mV/47 kΩ
nauha A-B	: 150 mV/50 kΩ
– Lähdöt nauha A-B	: 0,2 mV/kΩ

Vastaanotin

– Herkkyys	
mono: 26 dB:n signaalikohinasuhteella	: 1 μV 40 kHz:n pyhhkäisyllä
stereo: 46 dB:n signaali kohinasuhteella	: 50 μV 40 kHz:n pyyhkäisyllä
– Harmoninen kokonaissärö, mono	: 0,2 %
– Sieppaussuhde	: 1,8 dB
– AM-vaimennus	: 50 dB
– ST-vaimennus	: 80 dB
– Pilotäänen vaimennus	: 45 dB
– Apukantoaallon vaimennus	: 55 dB
– Äänialue	: 20 Hz-14 kHz, -1,5 dB
– Stereoerotus	
1 kHz:llä	: 40 dB
100 Hz - 10 kHz	: 30 dB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5102
7101
5104
5105
7102
5111
4101
7104
4102
4103
7101
1.2
13.15
87–104.5MHz
10.7MHz
10.7MHz
75Ω
87–104.5
MHz
5106
7103
97.7–115.2
MHz
8
7105
7106
7107
7108
7112
7111
MUTE
7110
IND.
4002
7113
SUPPLY+AFC
FM TUNING
FM-L
AM
7401...7405
dB RIAA
4901
5905
452kHz
5901
5902
452kHz
520...1680kHz
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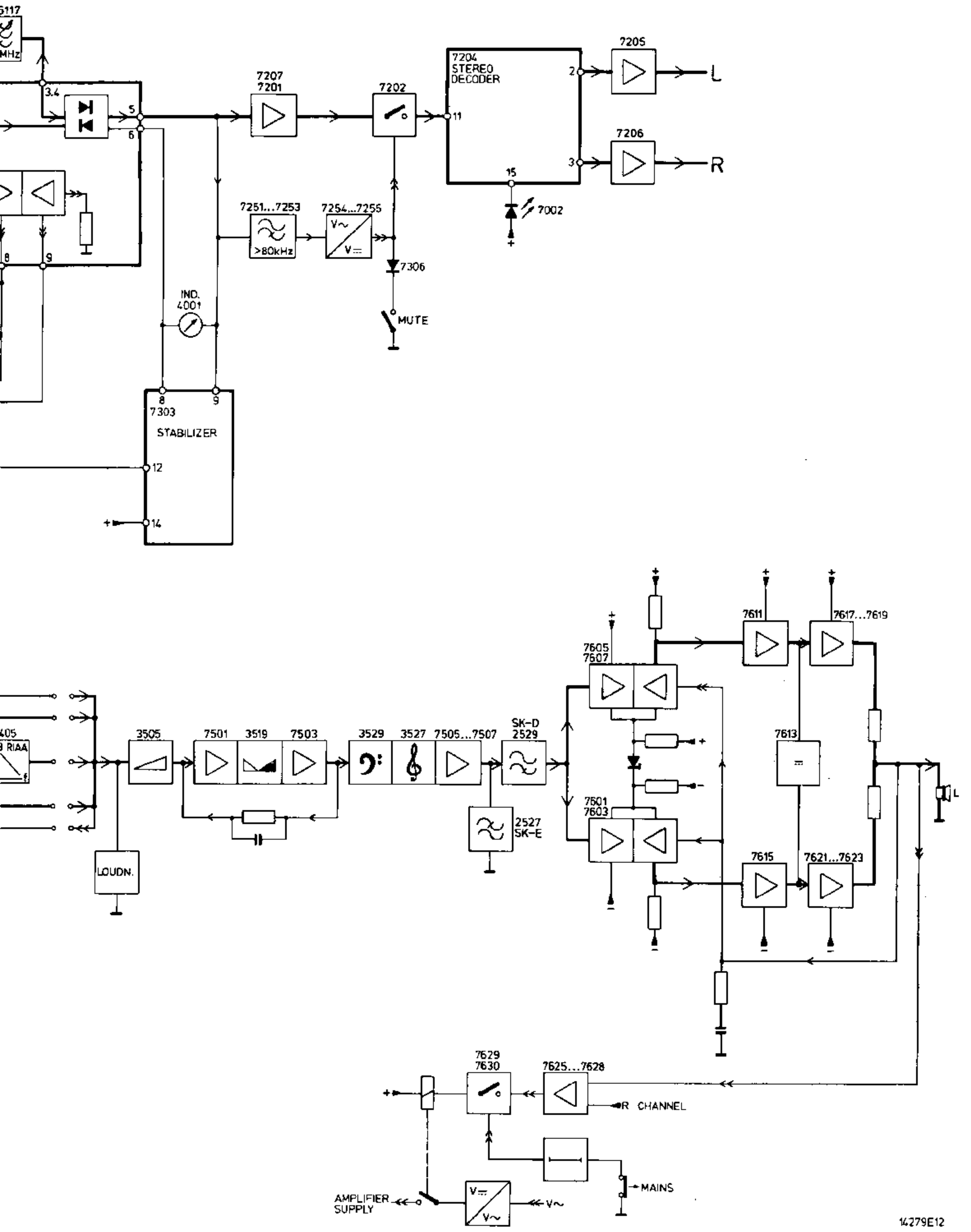
2
4
8
9
13
15
12
6
5904
2910
972...2057kHz
AC
DC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7201
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7204
STEREO
DECODER
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7206
L
R
7002
7251...7253
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7254...7255
V~
V=
7306
MUTE
IND.
4001
7303
STABILIZER
3.4
5
6
8
9
11
12
14
15
2
3
RIAA
LOUDN.
3505
7501
3519
7503
3529
3527
7505...7507
SK-D
2529
2527
SK-E
7605
7607
7611
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7613
7601
7603
7615
7621...7623
7629
7630
7625...7628
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MAINS
AMPLIFIER
SUPPLY
14279E12

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1005 7709,708,705 7704...701 1006 4601 7601,631,609,610,SK-E,SK-D SK-C SK-B SK-A
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2519,517,515,513 2514,520,518 2611...614 2528,530,617...620,601...610 2529,527 2616
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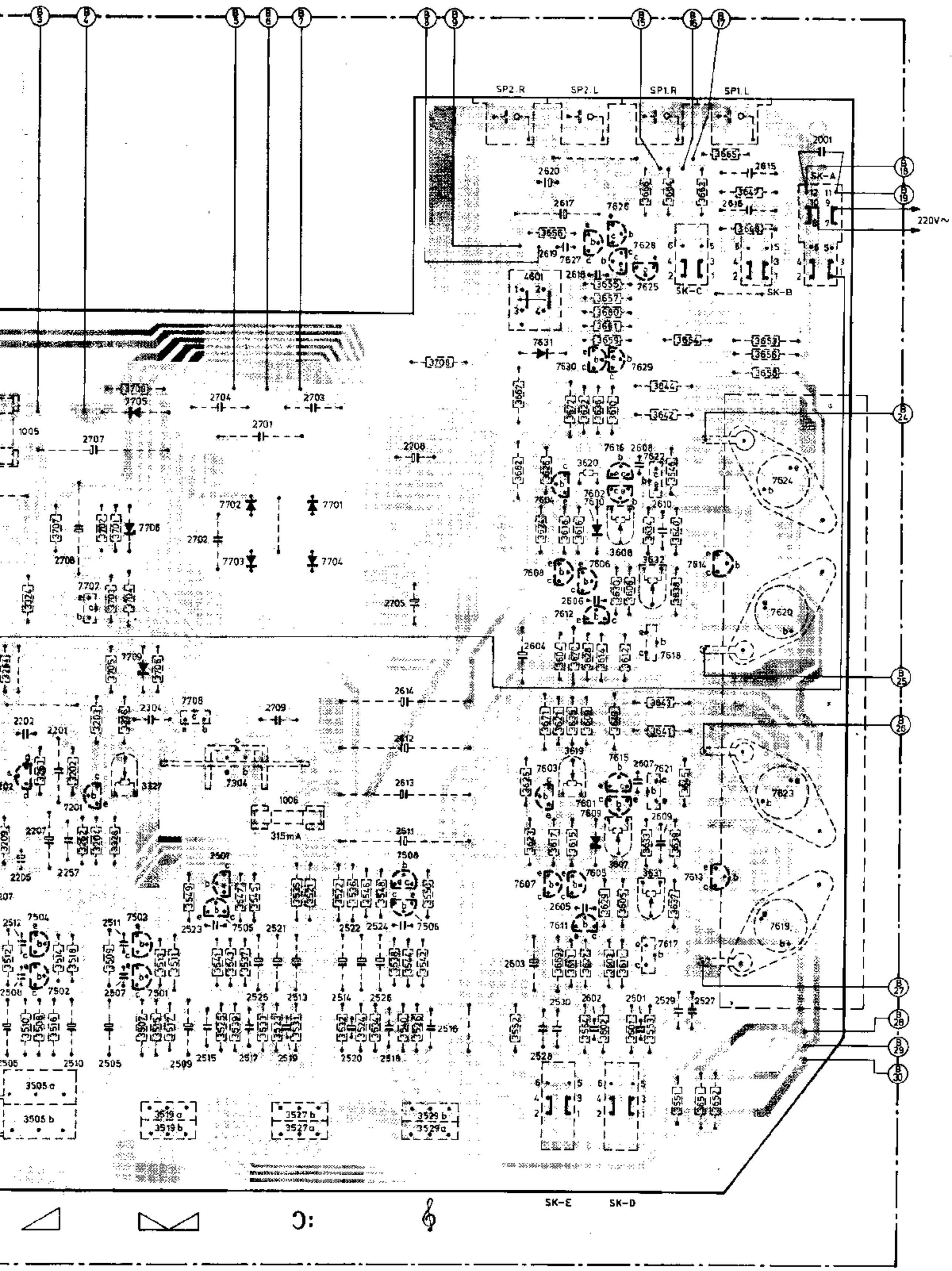

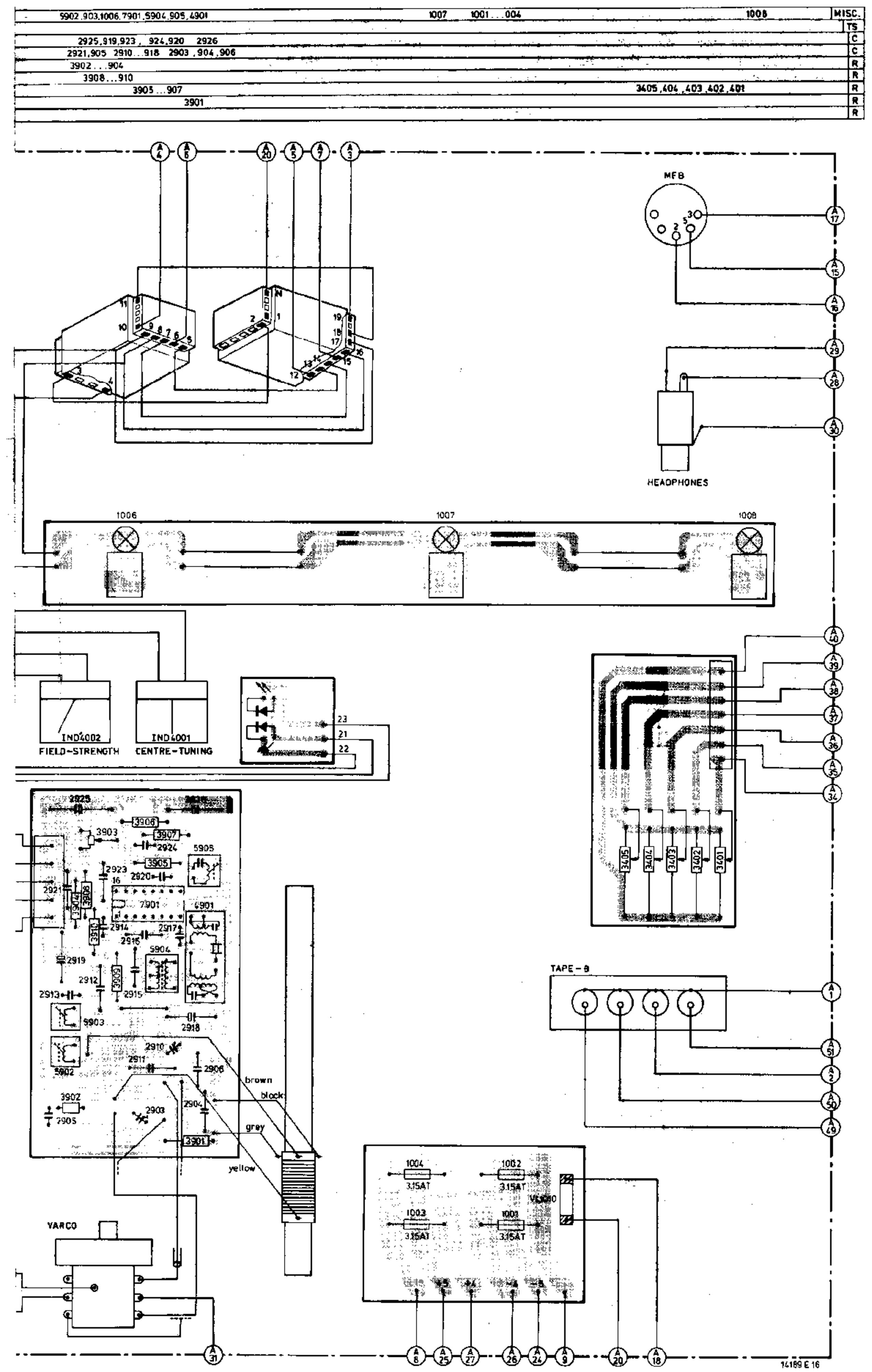
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1008
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TS
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3902...904
3908...910
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MFB
HEADPHONES
1006
1007
1008
IND4002
FIELD-STRENGTH
IND4001
CENTRE-TUNING
TAPE-B
brown
black
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yellow
VARCO
1004
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1003
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CS 60 877

MISC	7105	7101	7106. 7113	IC7901	7107.4901	7108	7102	7103	4101
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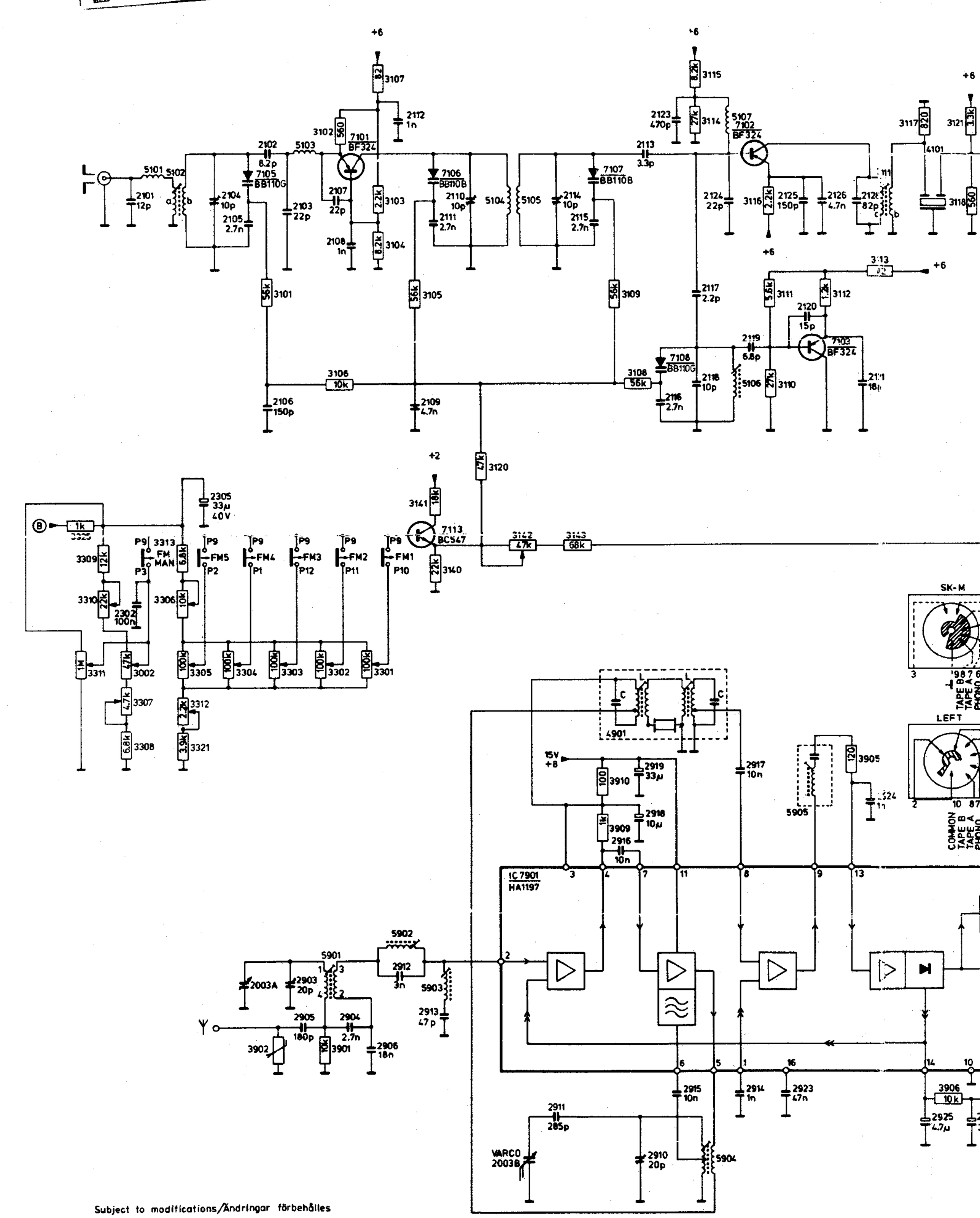

Subject to modifications/Ändringar förbehålles

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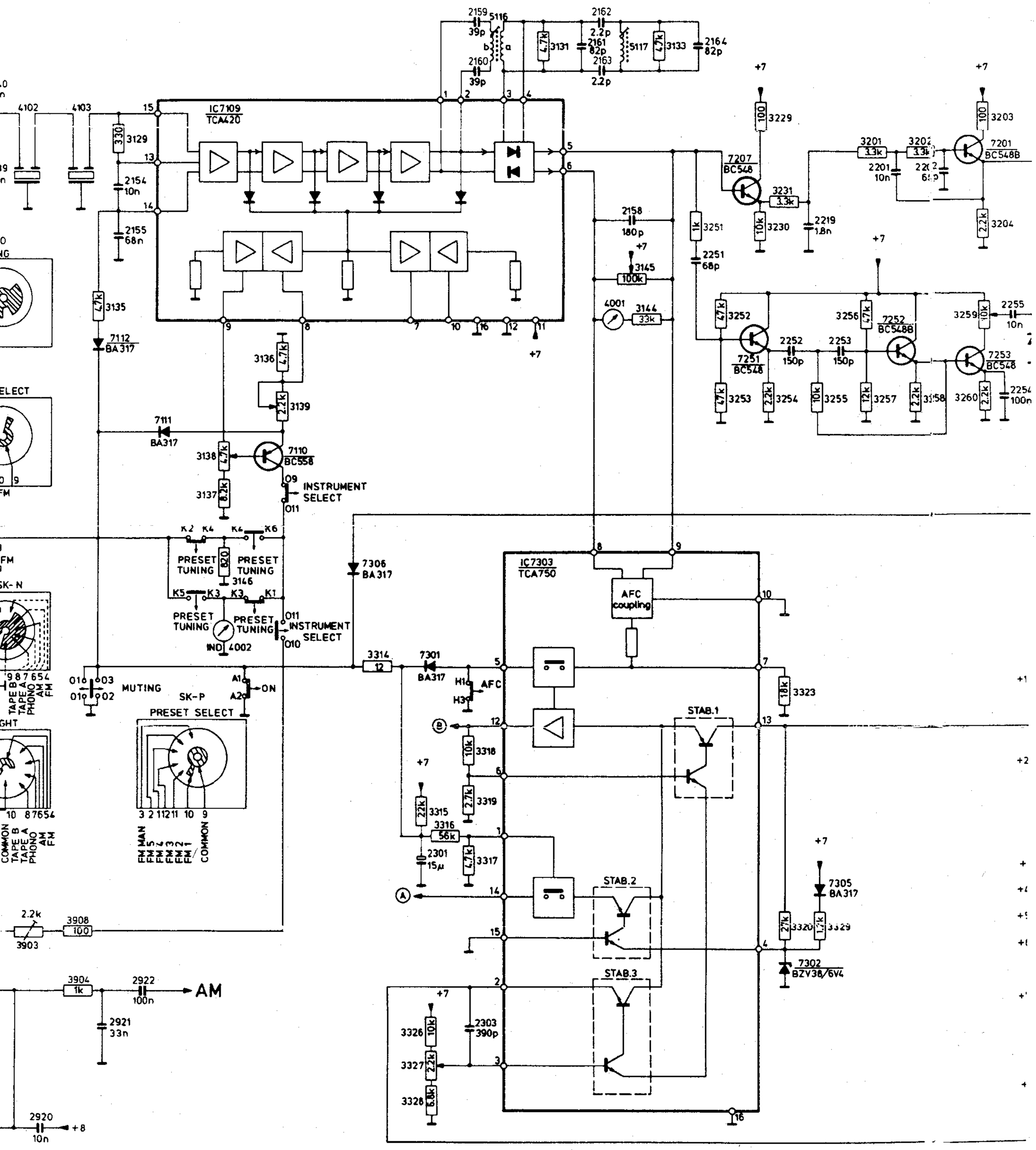
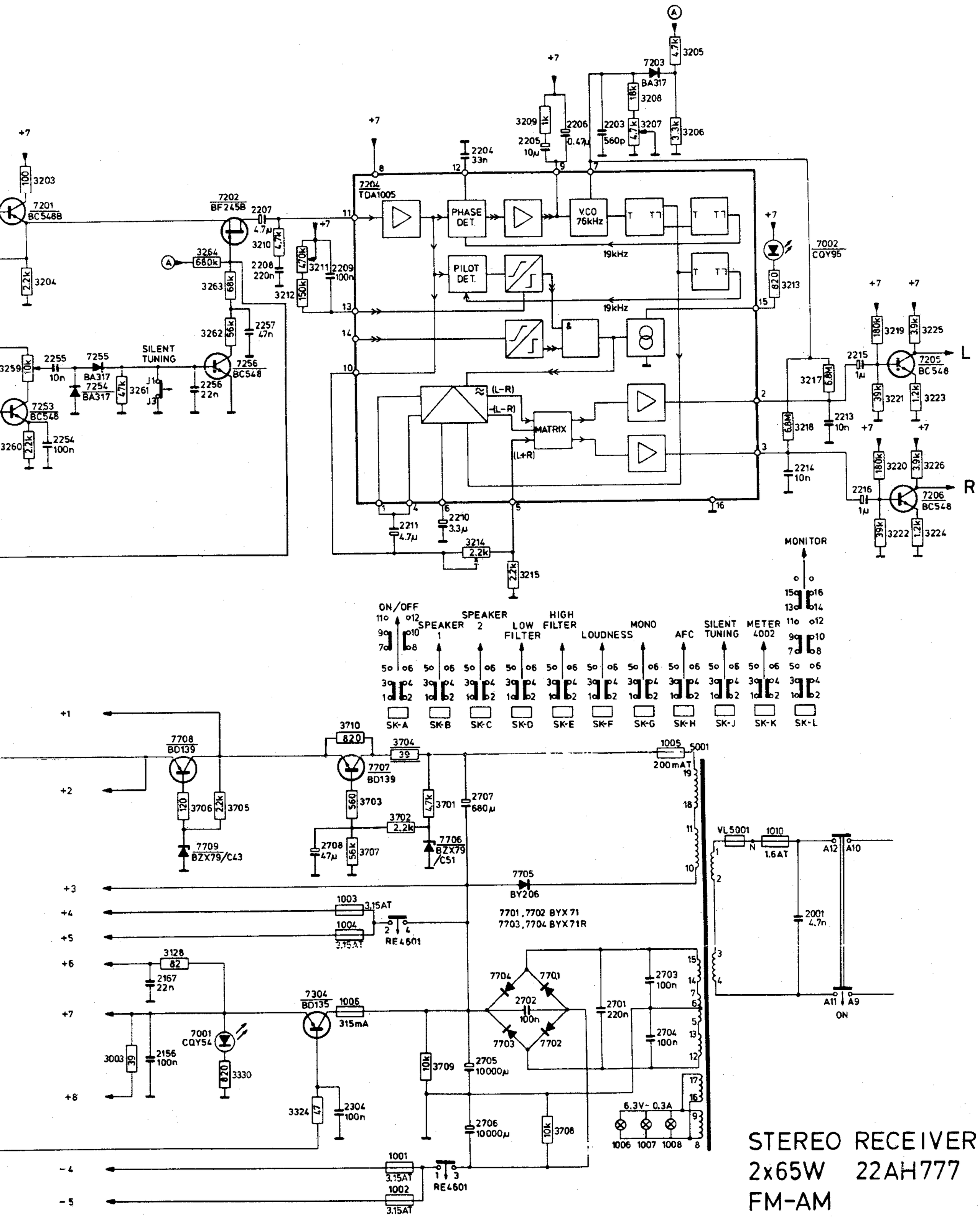
								5116	5117																
	2921.2154.2155		2922					2301.2303.2159.2160	2161.2162.2163.2158	2164	2251···2253	2219	2201	220											225
03.3904.3908.3135.3129				3136···3139	3146			3326···3328.3314···3319	3131.3145.3144.	3133	3251···3256.3323.3320.3329.3229···3231.3257···3260.3			01···3204											3003



253···7255 7709.7708.7001.7202.7256.7304. 7707.7204.1001···1004.1006.4601.7706.7701···7705 1006···1008.7203 VL5001. 1010 7002 7205.7206
5001

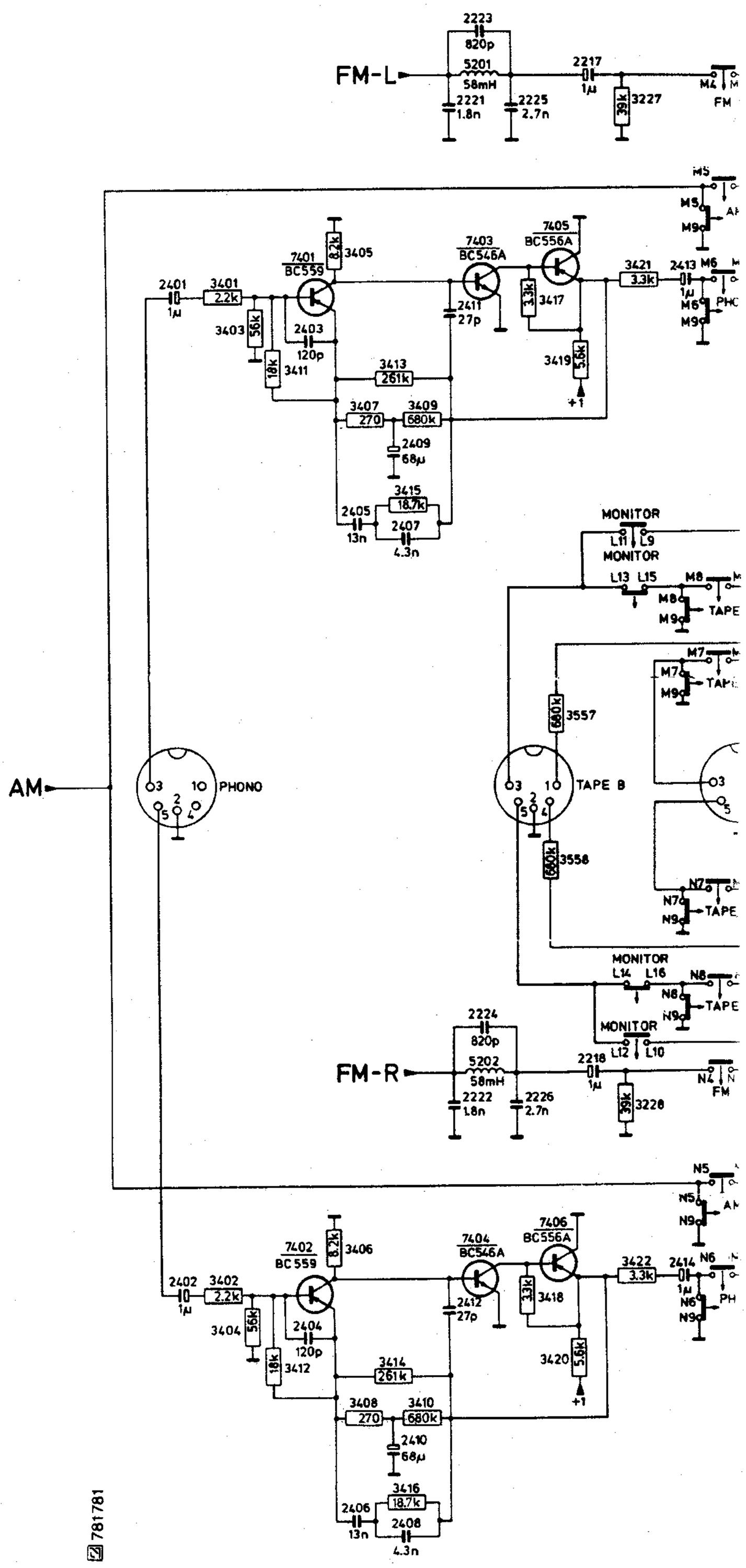
2254.2255.2167.2156.2256 2257 2207···2209 2708.2304.2211. 2210 2705···2707 2203···2206 2701.2703.2704 2001 2213···2216

204 3003 3261···3264.3128.3705.3706. 3330. 3210···3212 3324.3710.3701···3704.3709 3707 3214 3215 3708 3205···3209 3213 3217···3225

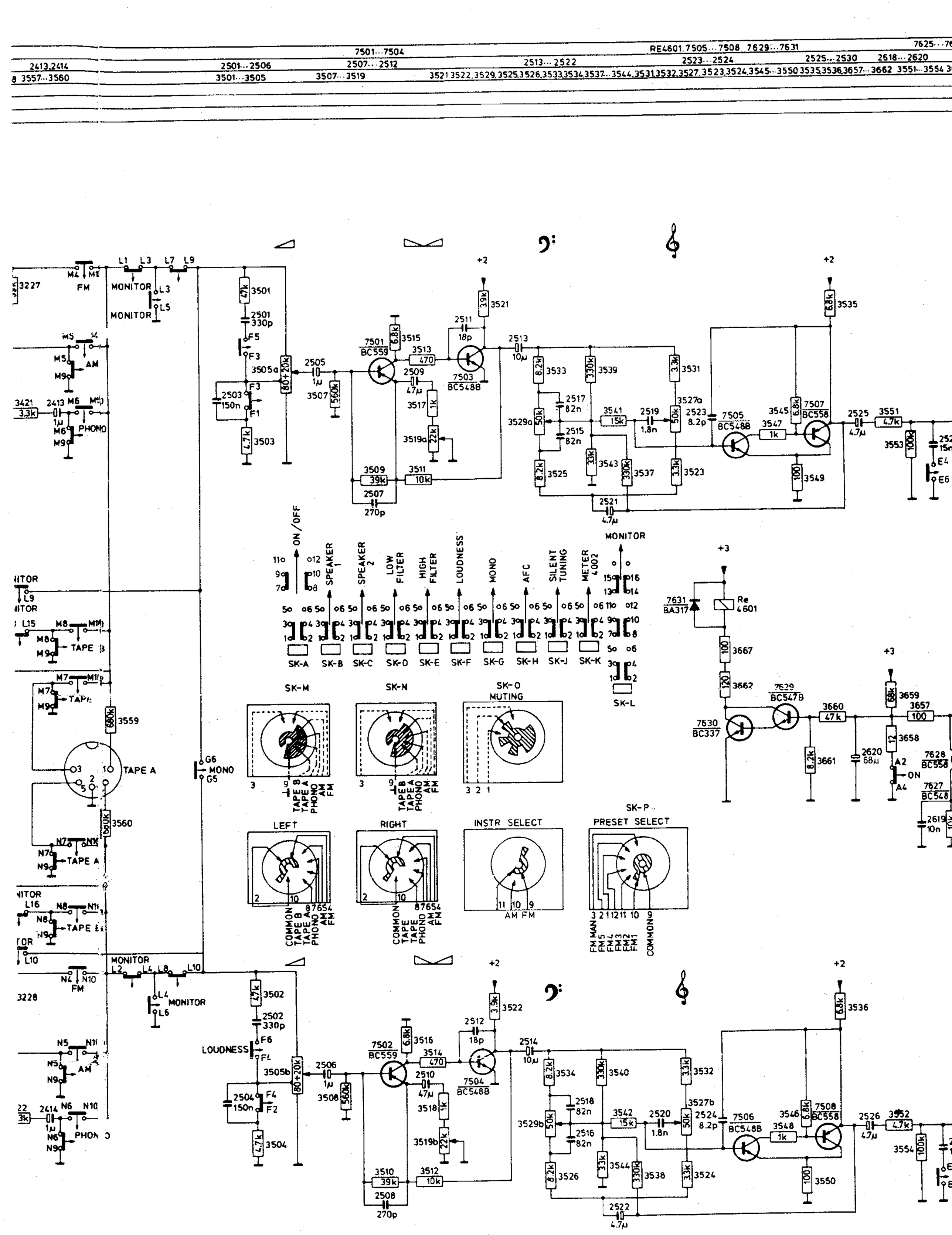


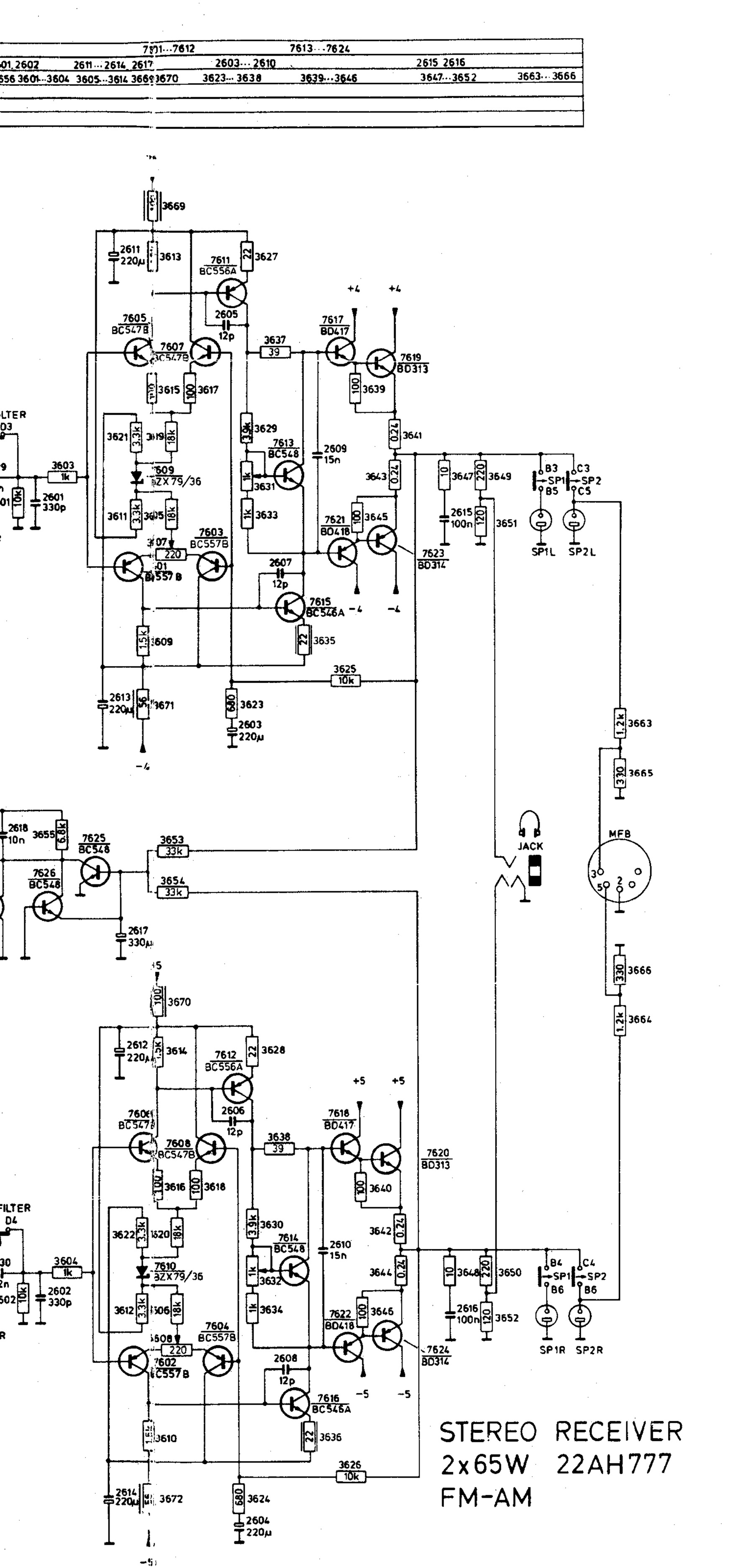
STEREO RECEIVER
2x65W 22AH777
FM-AM

MISC	7401…7406 5201 5202
C	2401…2404 2405…2412 2217…2224 2413,2414
R	3401…3406 3407…3410 3413…3416 3417…3422 3227,3228 3557…3560



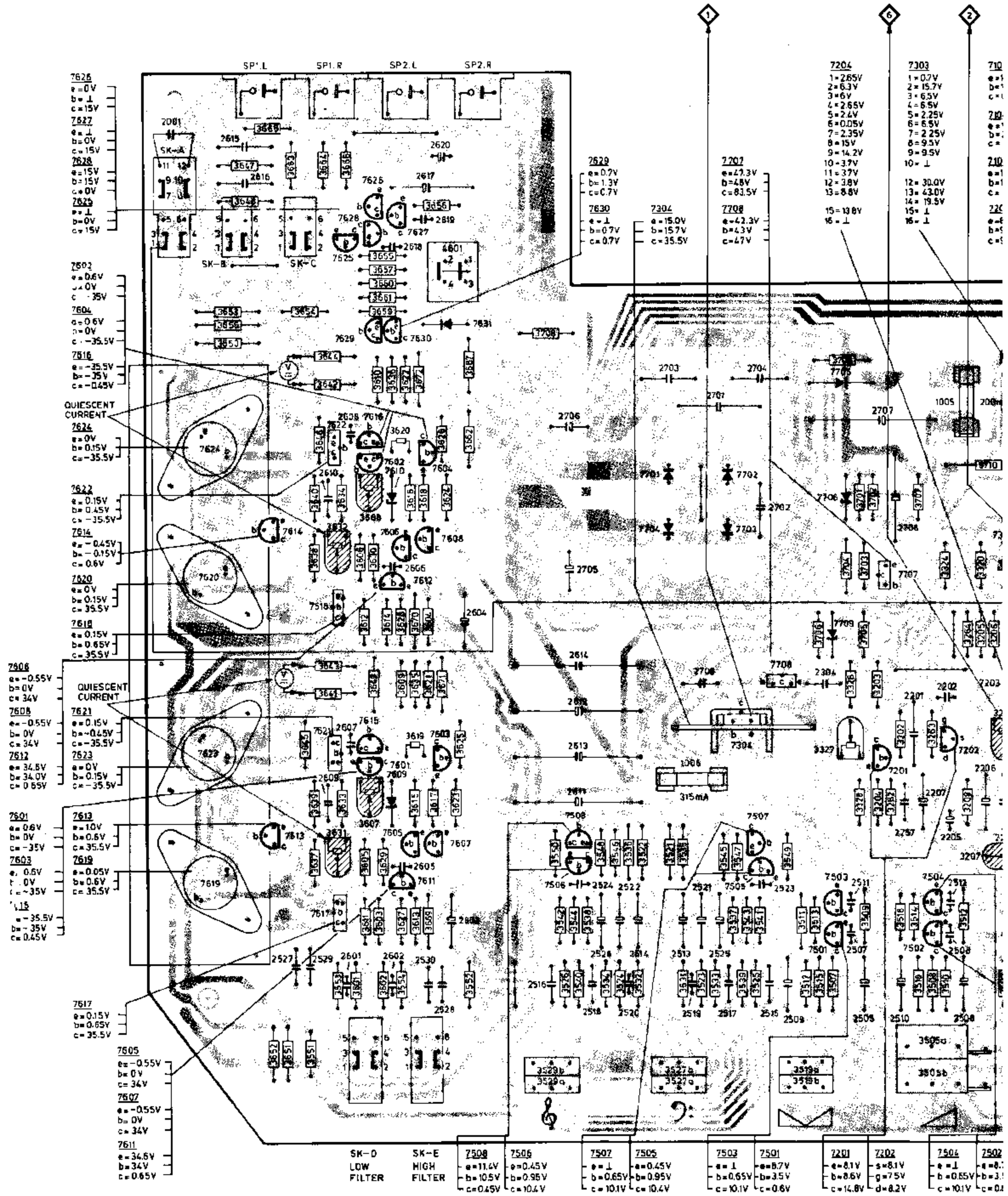
3131 136 05810/835 Subject to modifications/Ändringar förbehålles

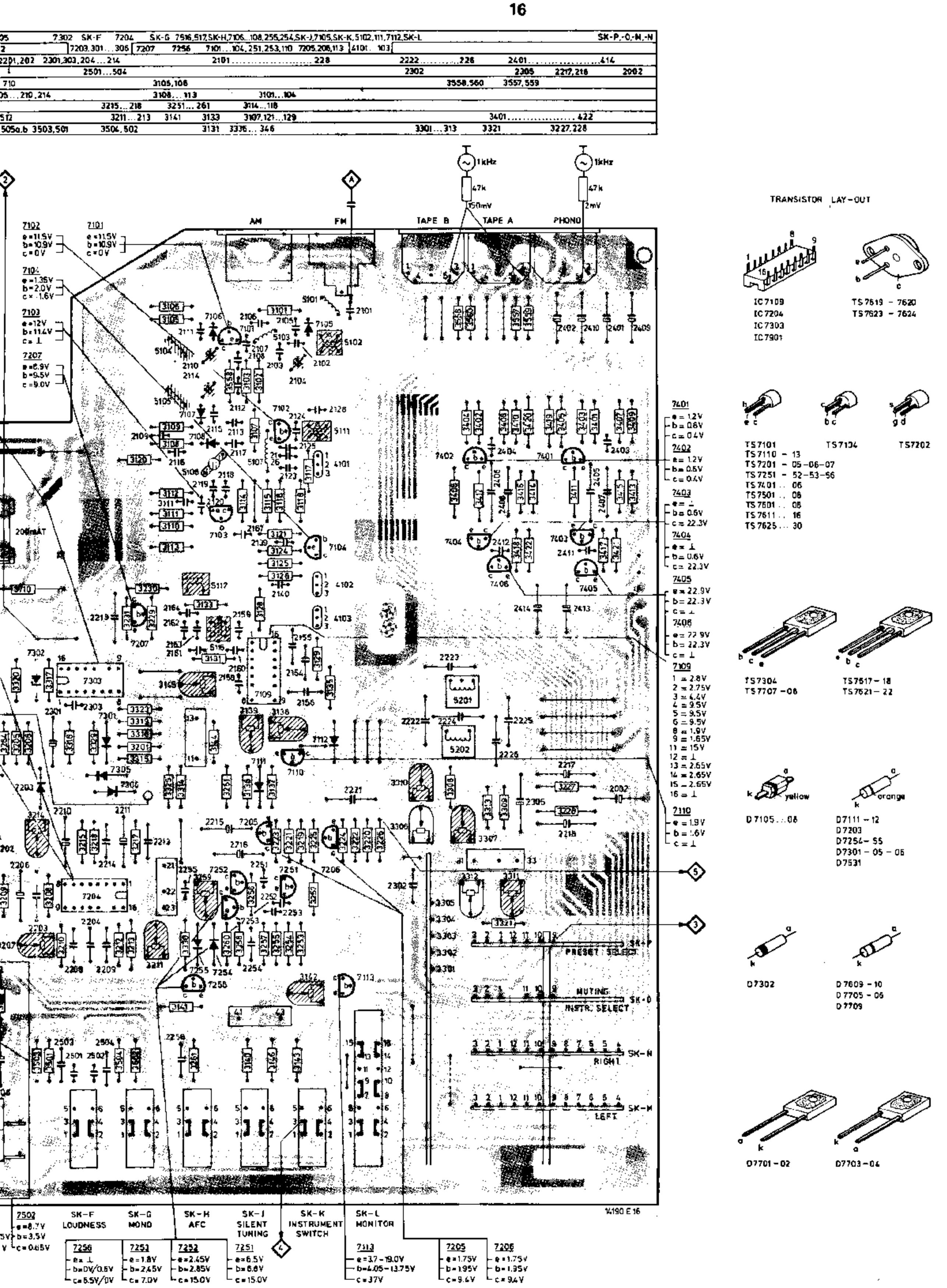

7501...7504
RE4601,7505...7508 7629...7631
7625...76
2413,2414
2501...2506
2507...2512
2513...2522
2523...2524
2525...2530
2618...2620
3557...3560
3501...3505
3507...3519
3521,3522,3529,3525,3526,3533,3534,3537...3544,3531,3532,3527,3523,3524,3545...3550
3535,3536,3657...3662
3551...3554
FM
MONITOR
AM
PHONO
TAPE
TAPE A
MONO
LOUDNESS
ON/OFF
SPEAKER 1
SPEAKER 2
LOW FILTER
HIGH FILTER
LOUDNESS
MONO
AFC
SILENT TUNING
METER 4002
MONITOR
SK-A
SK-B
SK-C
SK-D
SK-E
SK-F
SK-G
SK-H
SK-J
SK-K
SK-L
SK-M
SK-N
SK-O
MUTING
SK-P
PRESET SELECT
LEFT
RIGHT
INSTR SELECT
AM FM
COMMON
TAPE B
TAPE A
PHONO
AM
FM
FM MAN
FM5
FM4
FM3
FM2
FM1
7501 BC559
7502 BC559
7503 BC548B
7504 BC548B
7505 BC548B
7506 BC548B
7507 BC558
7508 BC558
7628 BC558
7627 BC548
7629 BC547B
7630 BC337
7631 BA317
Re 4601
3227
3228
3421 3.3k
3501 47k
3502 47k
3503 4.7k
3504 4.7k
3505a 80+20k
3505b 80+20k
3507 560k
3508 560k
3509 39k
3510 39k
3511 10k
3512 10k
3513 470
3514 470
3515 6.8k
3516 6.8k
3517 1k
3518 1k
3519a 22k
3519b 22k
3521 3.9k
3522 3.9k
3523 3.3k
3524 3.3k
3525 8.2k
3526 8.2k
3527a 50k
3527b 50k
3529a 50k
3529b 50k
3531 3.3k
3532 3.3k
3533 8.2k
3534 8.2k
3535 6.8k
3536 6.8k
3537 330k
3538 330k
3539 330k
3540 330k
3541 15k
3542 15k
3543 33k
3544 33k
3545 6.8k
3546 6.8k
3547 1k
3548 1k
3549 100
3550 100
3551 4.7k
3552 4.7k
3553 100k
3554 100k
3559 680k
3560 680k
3657 100
3658 12
3659 68k
3660 47k
3661 8.2k
3662 120
3667 100
2501 330p
2502 330p
2503 150n
2504 150n
2505 1µ
2506 1µ
2507 270p
2508 270p
2509 47µ
2510 47µ
2511 18p
2512 18p
2513 10µ
2514 10µ
2515 82n
2516 82n
2517 82n
2518 82n
2519 1.8n
2520 1.8n
2521 4.7µ
2522 4.7µ
2523 8.2p
2524 8.2p
2525 4.7µ
2526 4.7µ
2620 68µ
2619 10n
+2
+3



STEREO RECEIVER
2x65W 22AH777
FM-AM

MISC.	SK-A SK-B SK-C SK-D, SK-E, 7610, 609, 631, 601 4601 1006 7701...704 7705, 706, 709 1005
TS	7624, 620, 623, 619 7614, 613 7625...630, 601, 602, 604, 606, 608 7506, 508 7304, 507, 505 7503, 501 7201 7504, 502, 202
C	2001 2615 7618, 617, 621, 622, 616, 615, 611, 612, 619 2706, 705, 516, 524, 506, 526, 701...704, 521, 525, 523 2505...512, 304 2201, 202
C	2616 2527, 529 2601...610 2617...620, 530, 528 2611...614 2518, 520, 514 2513, 515, 517, 519
R	3647, 648 3663...666 3601...630 3667 3708 3550 3548, 546, 536, 522, 521, 535, 545, 547 3701...707 3262 3263, 264, 710
R	3650...653, 656 3654, 637, 646 3649 3669...672 3662 3542, 544, 538 3531, 523, 533, 537, 543, 541, 549 3709 3205...210,
R	3654, 553, 665, 657 3526, 540, 534, 532 3539, 525, 511, 513 3326...328, 202...204
R	3631...634 3636 3635 3529a, b 3527a, b 3517, 515, 507 3508 3518, 514 3512
R	3554, 659...661 3552 3519a, b 3516, 508, 510, 505a, b 3




AM
FM
TAPE B
TAPE A
PHONO
1kHz
47k
150mV
2mV
PRESET SELECT
MUTING
INSTR. SELECT
RIGHT
LEFT
SK-F LOUDNESS
SK-G MONO
SK-H AFC
SK-J SILENT TUNING
SK-K INSTRUMENT SWITCH
SK-L MONITOR
14190 E 16
TRANSISTOR LAY-OUT
IC 7109
IC 7204
IC 7303
IC 7901
TS 7619 - 7620
TS 7623 - 7624
TS 7101
TS 7110 - 13
TS 7201 - 05-06-07
TS 7251 - 52-53-56
TS 7401 .. 06
TS 7501 .. 08
TS 7601 .. 08
TS 7611 .. 16
TS 7625 ... 30
TS 7104
TS 7202
TS 7304
TS 7707 - 08
TS 7617 - 18
TS 7621 - 22
D 7105 ... 08
D 7111 - 12
D 7203
D 7254 - 55
D 7301 - 05 - 06
D 7531
D 7302
D 7609 - 10
D 7705 - 06
D 7709
D 7701 - 02
D 7703 - 04
7102 e=11.5V b=10.9V c=0V
7101 e=11.5V b=10.9V c=0V
7104 e=1.35V b=2.0V c=-1.6V
7103 e=12V b=11.4V c=⊥
7207 e=6.9V b=9.5V c=9.0V
7401 e=1.2V b=0.6V c=0.4V
7402 e=1.2V b=0.6V c=0.4V
7403 e=⊥ b=0.6V c=22.3V
7404 e=⊥ b=0.6V c=22.3V
7405 e=22.9V b=22.3V c=⊥
7406 e=22.9V b=22.3V c=⊥
7109 1=2.8V 2=2.75V 3=4.4V 4=9.5V 5=9.5V 6=9.5V 8=1.9V 9=1.65V 11=15V 12=⊥ 13=2.65V 14=2.65V 15=2.65V 16=⊥
7110 e=1.9V b=1.6V c=⊥
7502 e=8.7V b=3.5V c=0.65V
7256 e=⊥ b=0V/0.6V c=6.5V/0V
7253 e=1.8V b=2.45V c=7.0V
7252 e=2.45V b=2.85V c=15.0V
7251 e=6.5V b=6.8V c=15.0V
7113 e=3.7-19.0V b=4.05-13.75V c=37V
7205 e=1.75V b=1.95V c=9.4V
7206 e=1.75V b=1.95V c=9.4V

SK... Wave range	Signal to	◇	Trimming Point	Detune	Adjust		
					R3327		◇1 15 V ± 0.1 V
							◇2 IC7303 12: 30 V (± 2 V) 13: 41 V (± 2 V)
			1	C2104 C2110 C2114 R3138 R3139			
			2		R3145		3
					S5116		
88.0-103.5 MHz	103.5 MHz 1 kHz	A					◇3 13.75 V DC
					S5106		3
	88 MHz 1 kHz				S5106		3
							◇3 4.05 V DC
					S5102 S5104 S5105		◇4 max.
	103.5 MHz 1 kHz						◇3 13.75 V DC
					C2104 C2110 C2114		◇4 max.
	103.5 MHz 1 kHz Δf = 75 kHz } 1 mV				S5117 S5111	◇5 min. 1 kHz	
					R3142		4 ◇4 103.5 MHz
					R3139		5 = 4.5
	103.5 MHz 1 kHz Δf = 75 kHz } 2.5 µV				R3138		5 = 0.5
					R3207		◇6 via 10 MΩ f = 76 kHz
	103.5 MHz 19 kHz Δf = 5.6 kHz	A			R3211		till IND 7002 is lit
	103.5 MHz Δf = 90 % 400 Hz/6300 Hz				R3214		◇5 min.
	103.5 MHz 1 kHz 5 µV				R3259		6 till silent tuning SWITCH ON
	88 MHz 1 kHz				R3307		
	105 MHz 1 kHz				R3310		3
	96 MHz				R3311		

↕ Repeat

GB

1 Set the capacitors to the mechanical centres.

2 Short-circuit IC7109 points 3-4.

3 To be so adjusted that the pointer of IND4001 is in the centre.

4 Set IND4002 to "preset instrument" position.

5 Set IND4002 to "field strength" position.

6 Silent tuning switch depressed.

F

1 Placer les condensateurs en position médiane.

2 Court-circuiter les points 3-4 de l'IC7109.

3 Ajuster de façon que l'index de IND4001 se trouve au centre.

4 Placer IND4002 en position "preset instrument" (préréglage instrument).

5 Placer IND4002 en position "puissance de champ" (field strength)

6 Enfoncer le commutateur de l'accord silencieux.

I

1 Mettere i condensatori in posizione media.

2 Corto-circuitare i punti 3-4 dell'IC7109.

3 Regolare in modo che l'indice di IND4001 si trovi al centro.

4 Mettere IND4002 in posizione "preregolazione dello strumento" (preset instrument).

5 Mettere IND4002 in posizione "potenza di campo" (field strength).

6 Spingere il commutatore di sintonia silenziosa.

DK

1 Sæt kondensatorerne i mekanisk midterstilling.

2 Kortslut IC7109, punkt 3-4.

3 Juster således at viseren i IND4001 står i midterstilling.

4 Sæt IND4002 i stilling "preset instrument".

5 Sæt IND4002 i stilling "field strenght".

6 Indtryk omskifteren "silent tuning".

NL

1 De condensatoren in de mechanische middenstand zetten.

2 IC7109 punt 3-4 kortsluiten.

3 Zo instellen dat de meter van IND4001 in het midden staat.

4 IND4002 in positie "preset instrument".

5 IND4002 in positie "veldsterkte" (field strength).

6 Silent tuning schakelaar ingedrukt.

D

1 Die Kondensatoren in die mechanische Mittelstellung setzen.

2 IC7109 Punkte 3-4 kurzschliessen.

3 So einstellen, dass das Messinstrument von IND4001 in der Mitte steht.

4 IND4002 in Stellung "Preset Instrument" setzen.

5 IND4002 in Stellung "Feldstärke" setzen.

6 Stummabstimmschalter gedrückt.

S

1 Ställ kondensatorerna i sina mekaniska mittlægen.

2 Kortslut stift 3-4 på IC7109.

3 Justera så att visaren på IND4001 står i mittläge.

4 Koppla IND4002 i läge "preset instrument".

5 Koppla IND4002 i läge "signalstyrka".

6 Tryck in tangenten "silent tuning".

N

1 Innstill kondensatorene til mekanisk senter.

2 Kortslutt IC7109, punktene 3-4.

3 Juster slik at IND4001 viser står i senter.

4 Sett IND4002 i posisjon "preset instrument".

5 Sett IND4002 i posisjon "field strength".

6 Silent tuning vender inntrykket.

SF

1 Aseta kondensaattorit mekaanisiin keskiasentoihinsa.

2 Oikosulje IC7109 pisteet 3-4.

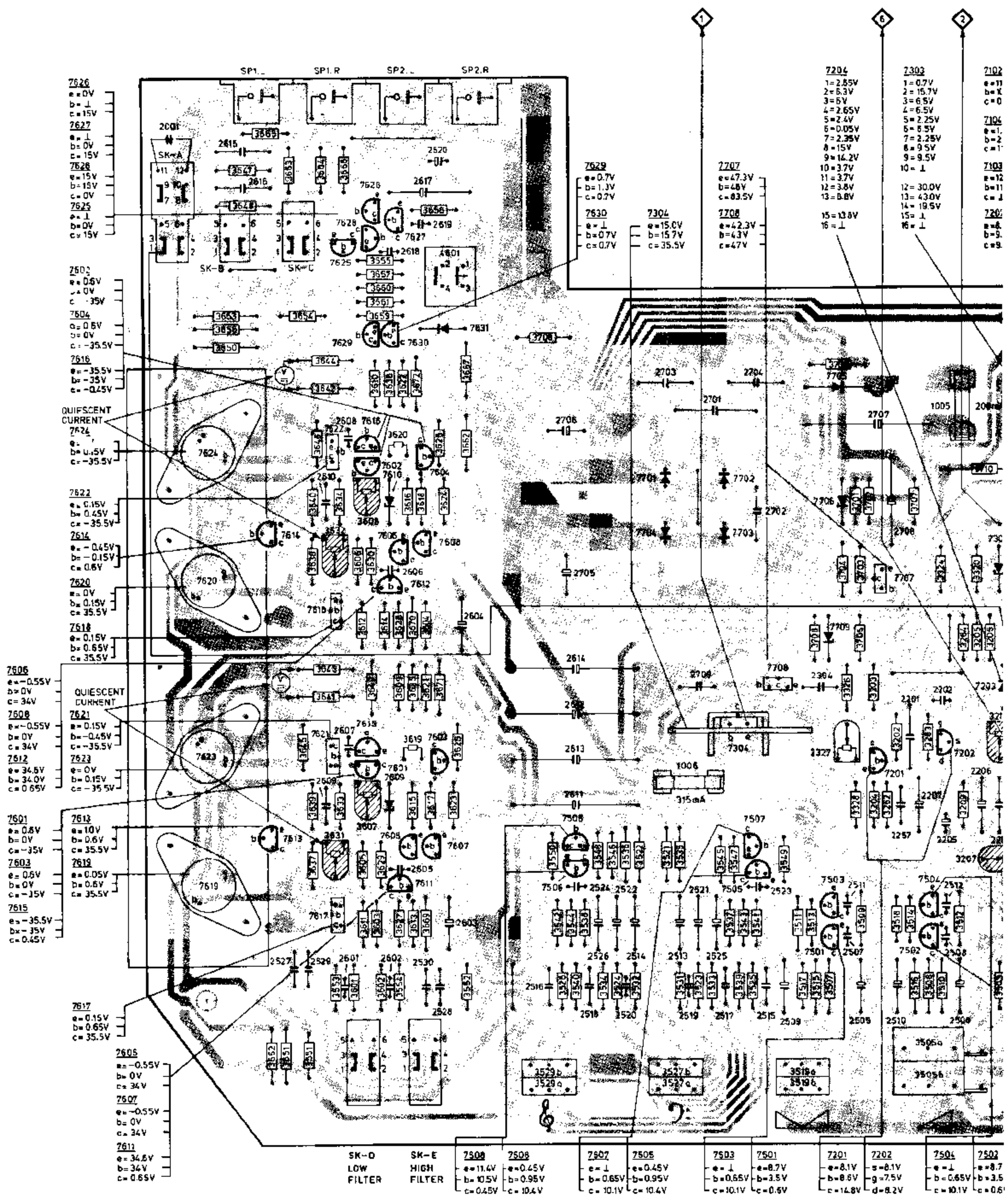
3 Säädetään siten että indikaattorin 4001 osoitin on keskellä.

4 Aseta indikaattori 4002 asentoon "preset instrument".

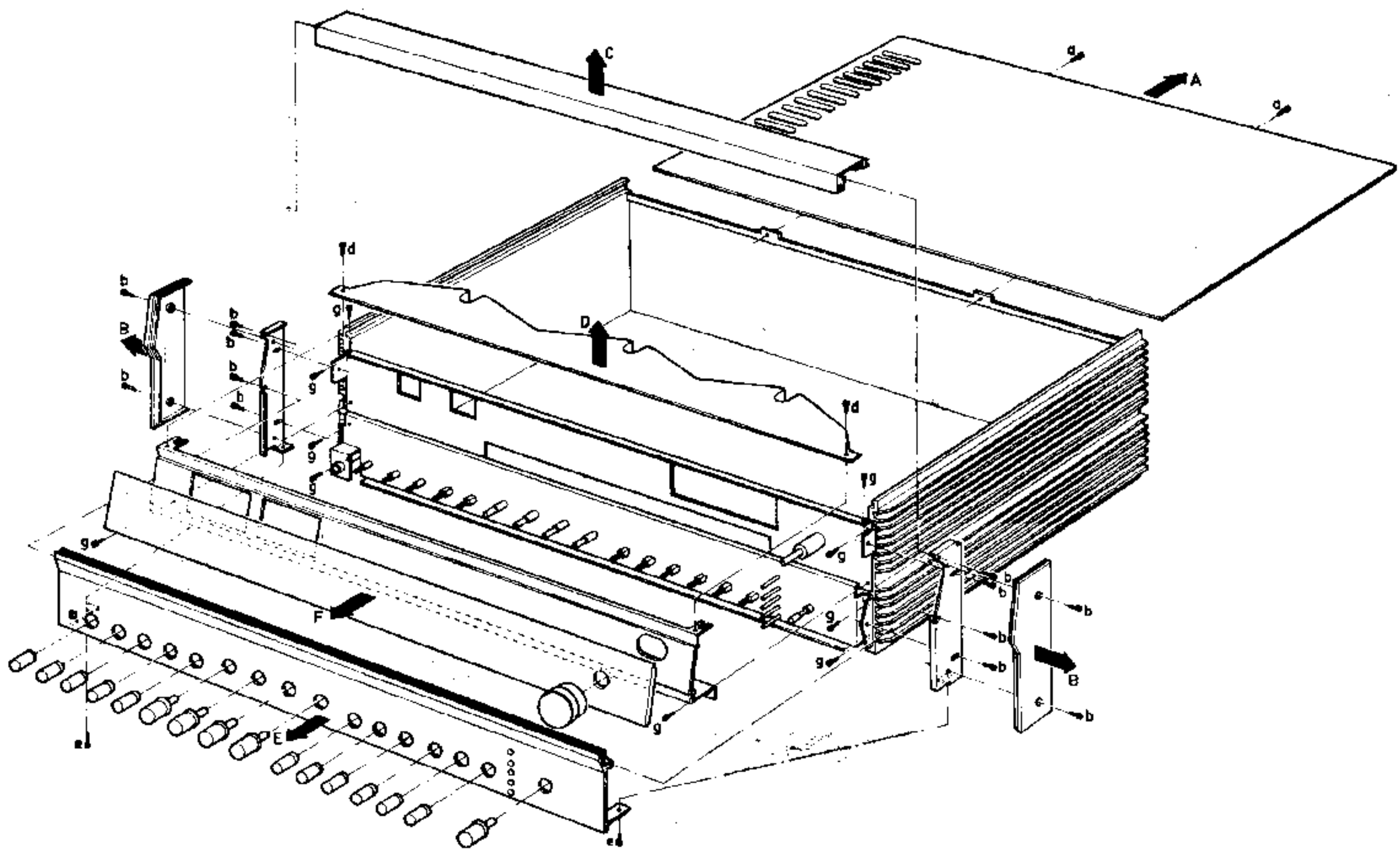
5 Aseta indikaattori 4002 asentoon "field strenght".

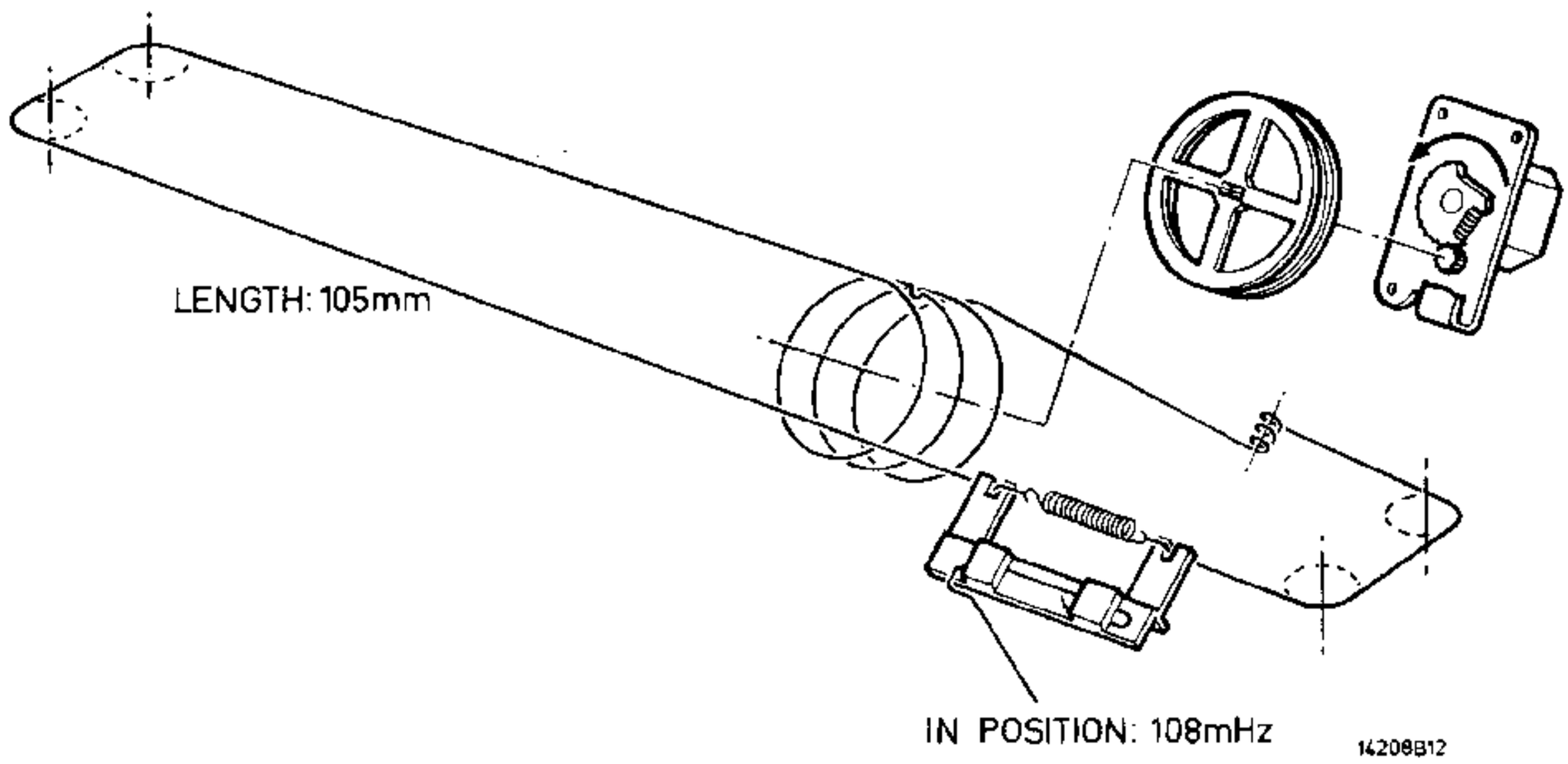
6 "Silent tuning"-kytkin alaspainettuna.

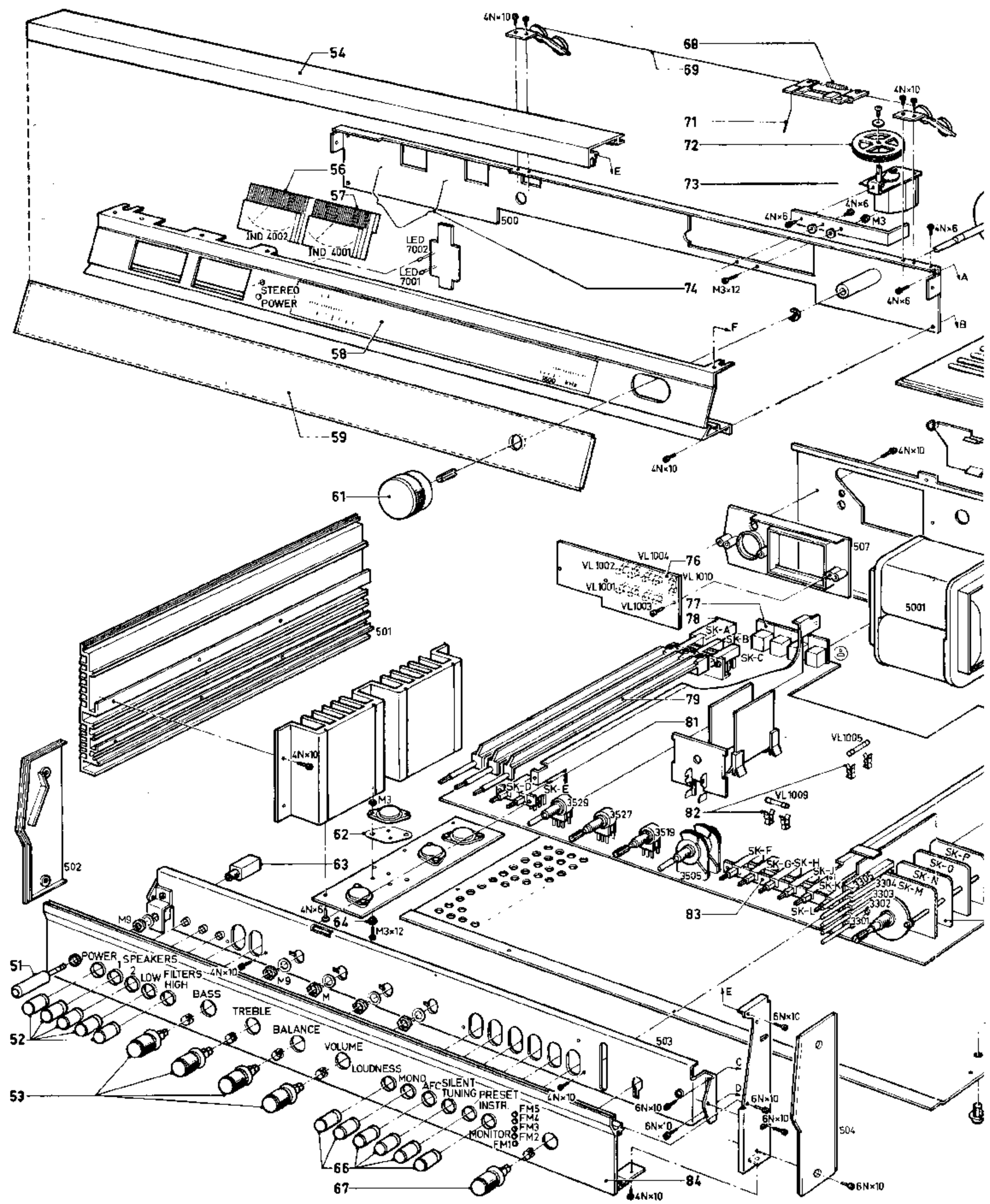
MISC.	SK-A SK-B SK-C SK-D, SK-E, 7610, 609, 631, 601 4601 1006 7701...704 7705, 706, 709 1005
TS	7624, 620, 623, 619 7614, 613 7625...630, 601, 602, 604, 606, 608 7506, 508 7304, 507, 505 7503, 501 7201 7504, 502, 202
C	2001 2615 7618, 617, 621, 622, 616, 615, 611, 612, 619 2706, 705, 516, 524, 506, 526, 701...704, 521, 525, 523 2505.. 512, 304 2201, 202
C	2616 2527, 529 2601...610 2617...620, 530, 528 2611...614 2518, 520, 514 2513, 515, 517, 519
R	3647, 648 3663...666 3601...630 3667 3708 3550 3548, 546, 536, 522, 521, 535, 545, 547 3701...707 3262 3263, 284, 710
R	3650...653, 656 3654, 637, 646 3649 3669...672 3662 3542, 544, 538 3531, 523, 533, 537, 543, 541, 549 3709 3205...210
R	3654, 553, 655...657 3526, 540, 534, 532 3539, 525, 511, 513 3326...328, 202...204
R	3631...634 3636 3635 3529a, b 3527a, b 3517, 515, 507 3509 3518, 514 3512
R	3554, 659...661 3552 3519a, b 3516, 508, 510, 505a, b 3

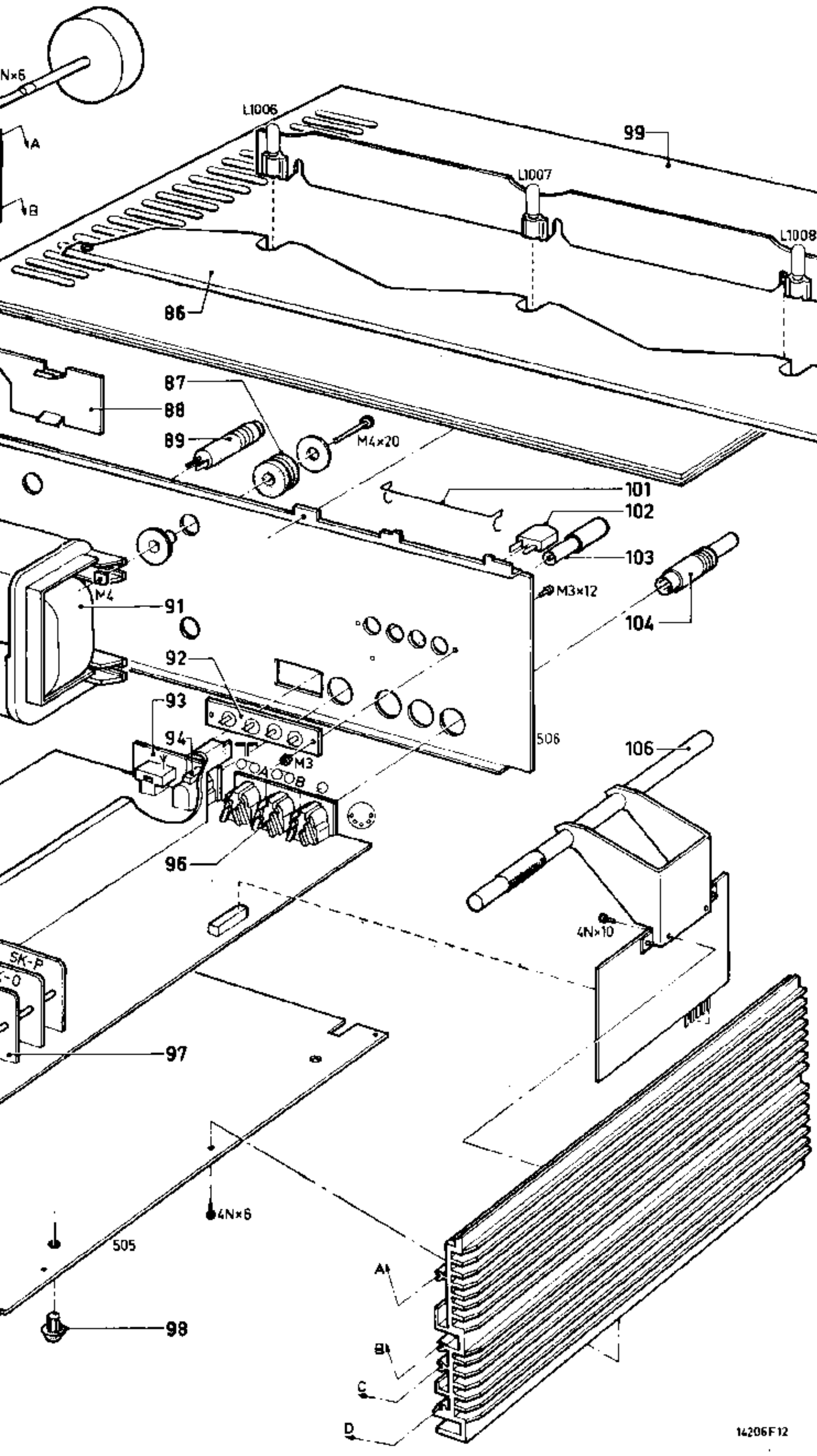


| | | |


C
A
D
B
F
E


LENGTH: 105mm
IN POSITION: 108mHz
14208B12


54
68
69
71
72
73
74
56
57
IND 4002
IND 4001
LED 7002
LED 7001
500
STEREO
POWER
58
59
61
62
63
64
M3×12
4N×10
4N×6
M3
M3×12
6N×10
507
5001
501
502
503
504
VL 1004
VL 1002
VL 1001
VL 1003
VL 1010
VL 1005
VL 1009
76
77
78
79
81
82
83
84
SK-A
SK-B
SK-C
SK-D
SK-E
SK-F
SK-G
SK-H
SK-J
SK-K
SK-L
SK-M
SK-N
SK-O
SK-P
3529
3527
3519
3505
3304
3303
3302
3301
51
52
53
66
67
POWER
SPEAKERS
1
2
LOW
FILTERS
HIGH
BASS
TREBLE
BALANCE
VOLUME
LOUDNESS
MONO
AFC
SILENT TUNING
PRESET
INSTR.
MONITOR
FM5
FM4
FM3
FM2
FM1
M9
M
A
B
C
D
E
F



51		4822 267 20172
52	/00/22/29	4822 410 21985
	/00R/22R	4822 410 21986
53	/00/22/29	4822 413 40773
	/00R/22R	4822 413 40774
54	/00/22/29	4822 426 50262
	/00R/22R	4822 426 50264
56		4822 347 10194
57		4822 347 10193
58	/00/22/29	4822 466 70325
	/00R/22R	4822 466 70326
59		4822 426 60132
61	/00/22/29	4822 413 50966
	/00R/22R	4822 413 50967
62		5322 466 90433
63		4822 267 40201
64		4822 532 51057
66	/00/22/29	4822 410 21985
	/00R/22R	4822 410 21986
67	/00/22/29	4822 413 40773
	/00R/22R	4822 413 40774
68		4822 492 30958
69		4822 321 30165
71		4822 520 80583
72		4822 528 80703
73		4822 125 20207
74		4822 492 62123
76		4822 256 30139
77		4822 267 30264
78		4822 276 30244
79		4822 404 20253
81		4822 276 20202
82		4822 256 30139
83		4822 276 60148
84	/00/22/29	4822 426 50263
	/00R/22R	4822 426 50265
86		4822 466 70328
87		4822 462 40354
88		4822 426 50229
89		4822 264 30041
91		4822 146 70035
92		4822 267 40222
93		4822 267 20173
94		5322 263 20007
96		4822 267 40209
97		4822 273 80182
98		4822 462 40296
99		4822 426 40138
101		4822 492 62124
102		4822 264 30042
103		4822 266 20064
104		4822 264 40023
106		4822 158 60376

/15 = /00
/15R = /00R

7101...7103	BF324	5322 130 44396
7104	BF240	4822 130 40902
7110	BC558	4822 130 40941
7113	BC547	4822 130 44257
7201	BC548B	4822 130 40937
7202	BF245B	4822 130 41024
7205...7207	BC548	4822 130 40938
7251...7256	BC548	4822 130 40938
7252	BC548B	4822 130 40937
7304	BD135	4822 130 40645
7401-7402	BC559	4822 130 40963
7403-7404	BC546	4822 130 41001
7405-7406	BC556	4822 130 40989
7501-7502	BC559	4822 130 40963
7503...7506	BC548B	4822 130 40937
7507-7508	BC558	4822 130 40941
7601...7604	BC557B	4822 130 44256
7605...7608	BC547	4822 130 44257
7611-7612	BC556A	5322 130 44462
7613-7614	BC548	4822 130 40938
7615-7616	BC546A	4822 130 41067
7617-7618	BD417	4822 130 41205
7619-7620	BD313	4822 130 41154
7621-7622	BD418	4822 130 41206
7623-7624	BD314	4822 130 41155
7625...7627	BC548	4822 130 40938
7628	BC558	4822 130 40941
7629	BC548	4822 130 40938
7630	BC337	4822 130 40855
7707-7708	BD139	4822 130 40823

7105-7108	BB110G	5322 130 34196
7106-7107	BB110B	4822 130 30932
7111-7112	BA317	4822 130 30847
7203	BA317	4822 130 30847
7254-7255	BA317	4822 130 30847
7301...7306	BA317	4822 130 30847
7302	BZV38	4822 130 30947
7609-7610	BZX79/C30	5322 130 34059
7631	BA317	4822 130 30847
7701-7702	BYX71	4822 130 30865
7703-7704	BYX71R	5322 130 34275
7705	BY206	4822 130 30839
7706	BZX79/C51	5322 130 34166
7709	BZX79/C43	5322 130 34329

7109	TCA420A	4822 209 80278
7204	TDA1005	4822 209 80315
7303	TCA750	4822 209 80367
7901	HA1197	4822 209 80376

4101...4103	SFE10 7MA5	4822 242 70249
5101	Choke	4822 157 50835
5102	Aerial coil	4822 157 50896
5103	Choke	4822 157 50836
5104-5105	HF-prim-sec	4822 157 50837
5106	Osc. coil	4822 157 50895
5107	Choke	4822 158 10138
5111...5117	IF-coil	4822 156 30546
5201-5202	Coil	4822 156 10444
4901	Cer. filter 452 kHz	4822 156 70037
	460 kHz	4822 156 70038
5902	Coil 7BRS-30091Z	4822 156 30582
5903	Coil 7MNS-30118Z	4822 156 30583
5904	Coil RWR-41694N	4822 156 30623
5909	Coil 7MCS-1606XB	4822 156 10445

2001	Rifa cap. 4700 pF	4822 121 40298
2104...2114	Trimmer 10 pF	4822 125 50062
2201	Micropoco 10 nF - 63 V - 2 %	5322 121 54154
2203	Micropoco 560 nF - 250 V - 2 %	4822 121 50576
2205	Tantal 10 µF - 3 V	5322 124 14084
2219...2222	Micropoco 1800 pF - 63 V - 2 %	5322 121 54044
2223-2224	Micropoco 820 pF - 125 V - 2 %	5322 121 54072
2225-2226	Micropoco 2700 pF - 63 V - 2 %	5322 121 54065
2405-2406	Micropoco 13 nF - 63 V - 2 %	4822 121 50613
2407-2408	Micropoco 4300 pF - 63 V - 2 %	5322 121 54062
2705-2706	Electrolytic 10.000 µF - 40 V	5322 124 74098
2903	Trimmer 22 pF	4822 125 50045
2904	Micropoco 2700 pF - 63 V - 2 %	5322 121 54065
2910	Trimmer 22 pF	4822 125 50045
2911	Styrol 285 pF-63 V-1 %	4822 121 50636
2912	Micropoco 2 nF - 63 V - 2 %	4822 121 50414

3138	Trimpotm. 4.7 kΩ	4822 100 10036
3139	Trimpotm. 2.2 kΩ	4822 100 10029
3142	Trimpotm. 47 kΩ	4822 100 10079
3145	Trimpotm. 100 kΩ	4822 100 10052
3207	Trimpotm. 4.7 kΩ	4822 100 10036
3211	Trimpotm. 470 kΩ	4822 100 10107
3214	Trimpotm. 2.2 kΩ	4822 100 10029
3259-3306	Trimpotm. 10 kΩ	4822 100 10035
3301...3305	Multipotm. 100 kΩ spec.	4822 101 90084
3307	Trimpotm. 2.2 kΩ	4822 100 10029
3310	Trimpotm. 22 kΩ	4822 100 10051
3311	Trimpotm. 1 MΩ	4822 100 10089
3312	Trimpotm. 4.7 kΩ	4822 100 10036
3327	Trimpotm. 2.2 kΩ	4822 100 10029
3329	Res. MR25 1.2 kΩ-1%	5322 116 54557
3403-3404	Res. MR25 56 kΩ-1%	5322 116 54676
3413-3414	Res. MR25 261 kΩ-1%	5322 116 54736
3415-3416	Res. MR25 18.7kΩ-1%	5322 116 50558
3505	Volume potm. 80+20kΩ	4822 102 30266
3519	Balance potm. 2x22 kΩ spec.	4822 102 30267
3527	Bass potm. 2x50 kΩ	4822 102 30268
3529	Treble potm. 2x50 kΩ	
3607-3608	Trimpotm. 100 kΩ	4822 100 10075
3619-3620	Trimpotm. 47 kΩ	4822 100 10079
3631-3632	Trimpotm. 1 kΩ	4822 100 10037
3641...3644	Wirewounded.res. 0.24 Ω - 5 W	4822 112 20091
3902	VDR	4822 116 20073
3903	Trimpotm. 2.2 kΩ	4822 100 10029

-Miscellaneous-

5001	Mains transformer	4822 146 70035
5001/29	Mains transformer	4822 146 70037
1001...1004	Fuse 3.15 AT	4822 253 30027
1005	Fuse 200 mAT	4822 253 30012
1009	Fuse 315 mA	4822 253 20012
1010/29	Fuse 1.6 AT	4822 253 30024
5901	Ferroceptor	4822 158 60376

Servicemededeling

PHILIPS NEDERLAND B.V. - EINDHOVEN
TECHNISCHE SERVICE

Ref. Audio 104PH Type 22AH777 Datum februari 1979

U gelieve de servicedocumentatie op onderstaande punten te wijzigen:

Pagina 10

De merktekens voor "bass" ( ) en "treble" ( ) moeten worden verwisseld.

Pagina 11

Het AM-printspoor is gewijzigd omdat C2922-100nF , wordt toegevoegd, zie figuur 1. A20 wordt nu B20 (2x).

Pagina 12

Wijzigen:

R3309 in 12 kOhm

R3312 in 4,7 kOhm, bestelnummer 4822 100 10036

R3321 in 3,3 kOhm

C2906 in 18nF, 4822 121 40314

C2910 in 22pF, 4822 125 50045

Pagina 13

Wijzigen:

R3904 in 1 kOhm

R3908 in 100 Ohm

Toegevoegd:

C2922,100nF . Een zijde is verbonden met R3908 en C2921, de andere zijde naar de AM aansluiting.

R3003, 39 Ohm .Een zijde is verbonden met C2920, de andere zijde met het +7 voedingspunt.

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Pagina 14

Wijzigen:

R3208 in 16,5 kOhm, 5322 116 54634

R3215 in 2 kOhm,

C2001 in 4,7nF, 4822 121 40289

Pagina 15

De merktekens voor "bass" ( ) en "treble" ( ) moeten worden verwisseld.

Pagina 19

Gewijzigd:

TS7403, 7404 in BC546A, 4822 130 41067

TS7405, 7406, in BC 556A, 5322 130 44462

C2503 in 220nF

R3503 in 2,2 kOhm

C2504 in 220nF

R3504 in 2,2 kOhm

C2002 is vervallen

Pagina 20

Wijzigen:

R3633 en R3634 in 1 kOhm

C2617 in 330µF od

De emissorweerstand van TS7615 heeft nummer R3635

Pagina 21

De merktekens voor "bass" ( ) en "treble" ( ) moeten worden verwisseld.

Pagina 26

Wijzigen:

Pos. 51 in 4822 264 30011

Pos. 63 in 4822 267 20172

Pos. 71 in 4822 450 80583

Pos. 91 heeft in apparaten met uitvoering 00/00R/22/22R het bestelnummer:
4822 146 70035

Voor de uitvoering 29/15/15R moet bestelnummer 4822 146 70037 worden toegevoegd.

Behoort bij mededeling Audio 104 PH.

Pagina 27

In de stuklijst wijzigen/toevoegen:

TS7403-7404 in BC546A, 4822 130 41067
TS7405-7406 in BC556A, 5322 130 44462
TS7601....7604 in BC557B, 4822 130 44568
TS7605....7608, 7629 in BC547B, 4822 130 40959
D7609-7610 in BZX79/C36, 5322 130 34098
Instelpotentiometer 3307 in 4,7 kOhm, 4822 100 10030
Treblepotentiometer in 3527 , 4822 102 30281
Basspotentiometer in 3529
Instelpotentiometer 3607-3608 in 220 Ohm, 4822 100 10019
Instelpotentiometer 3619-3620 is vervallen
C2906, flat cap. 18nF, 4822 121 40314
R3208,MR25-16,5 kOhm, 5322 116 54634

Voor 22AH777/15/15R/29
De aansluitingen voor transformator met bestelnummer
4822 146 70037 zijn in fig. 2 aangegeven.

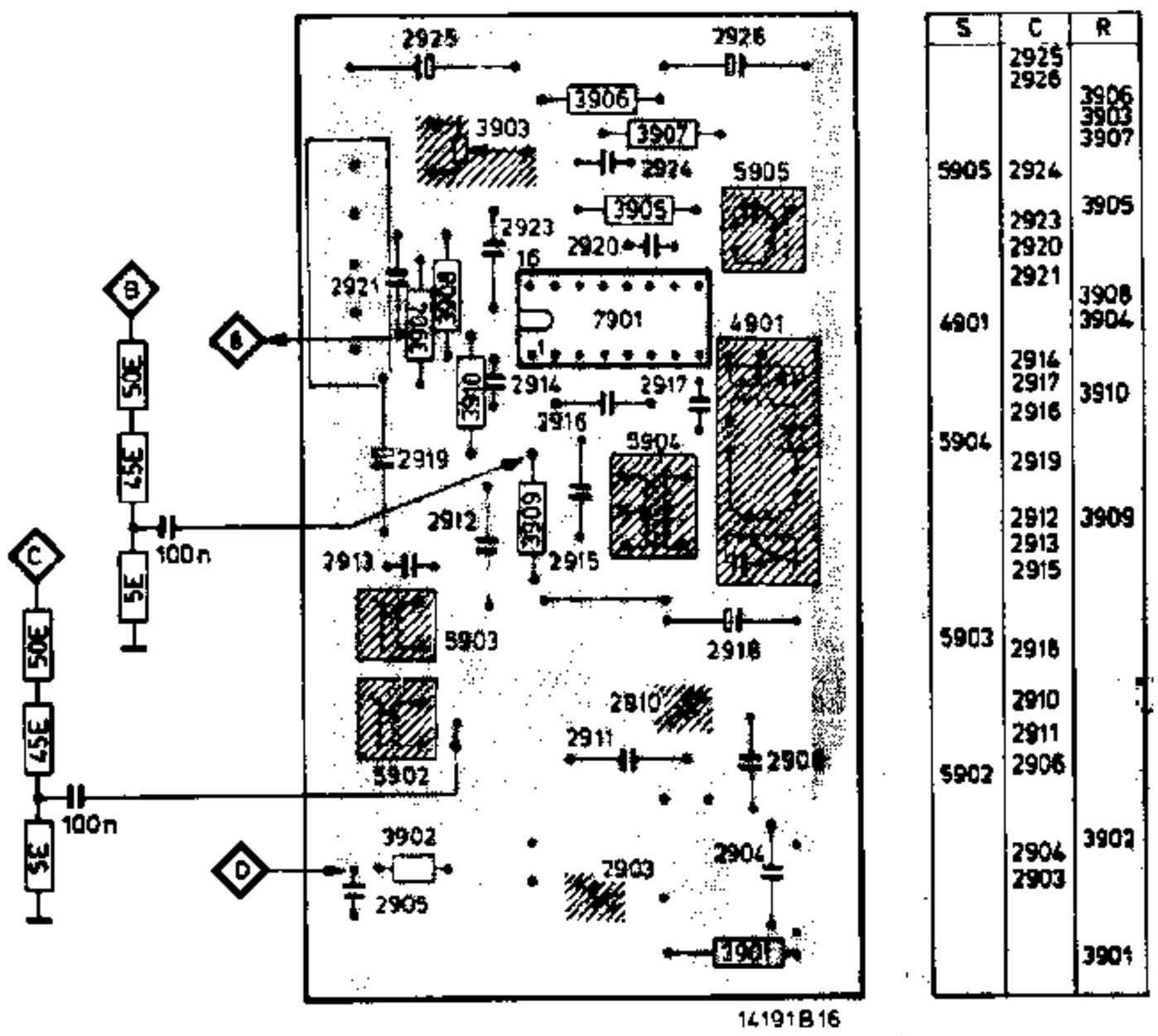
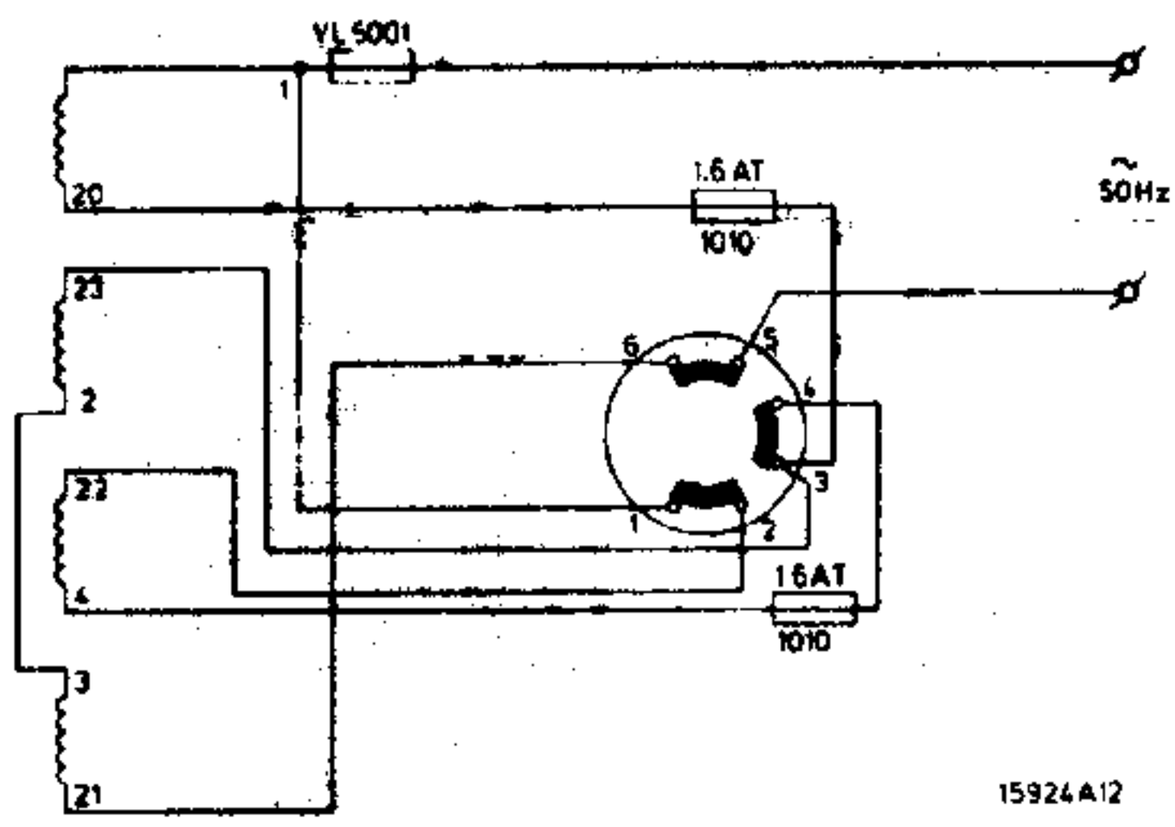

2925
2926
3906
3903
3907
2924
5905
3905
2923
2920
2921
3908
3904
7901
4901
2914
2917
3910
2916
5904
2919
2912
3909
2913
2915
5903
2918
2910
2911
5902
2906
3902
2904
2903
2905
3901
50E
45E
5E
100n
14191B16
S
C
R

Fig. 1


VL 5001
1.6 AT
1010
~
50Hz
1.6AT
1010
15924A12

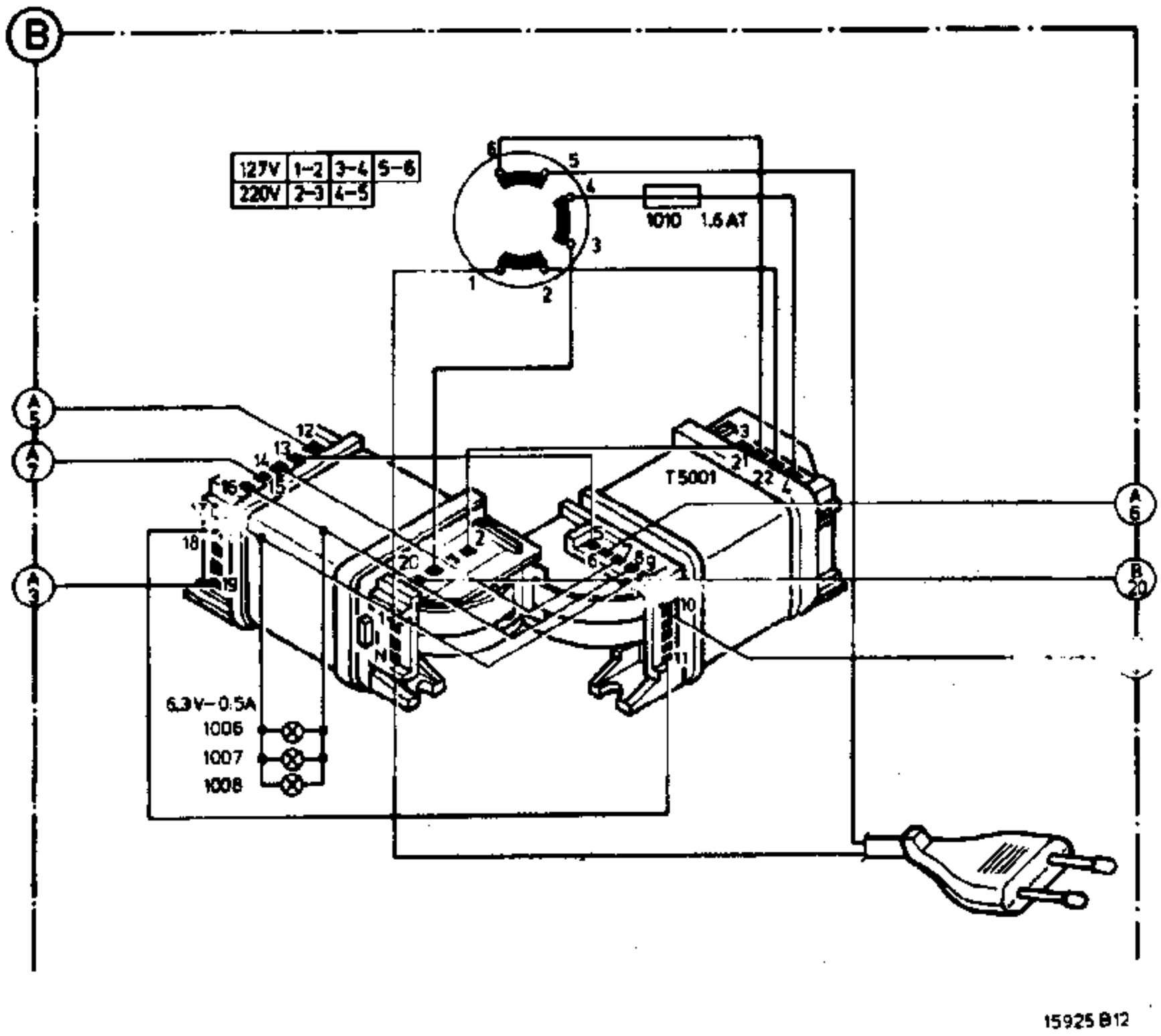

B
127V 1-2 3-4 5-6
220V 2-3 4-5
1010 1.6 AT
T 5001
6.3V-0.5A
1006
1007
1008
15925 B12

Fig. 2