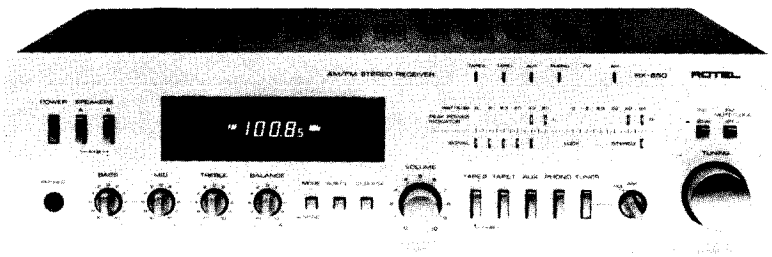
ROTEL®

Technical Manual



AM/FM STEREO RECEIVER

RX-550

MW/LW/FM STEREO RECEIVER

RX-550L

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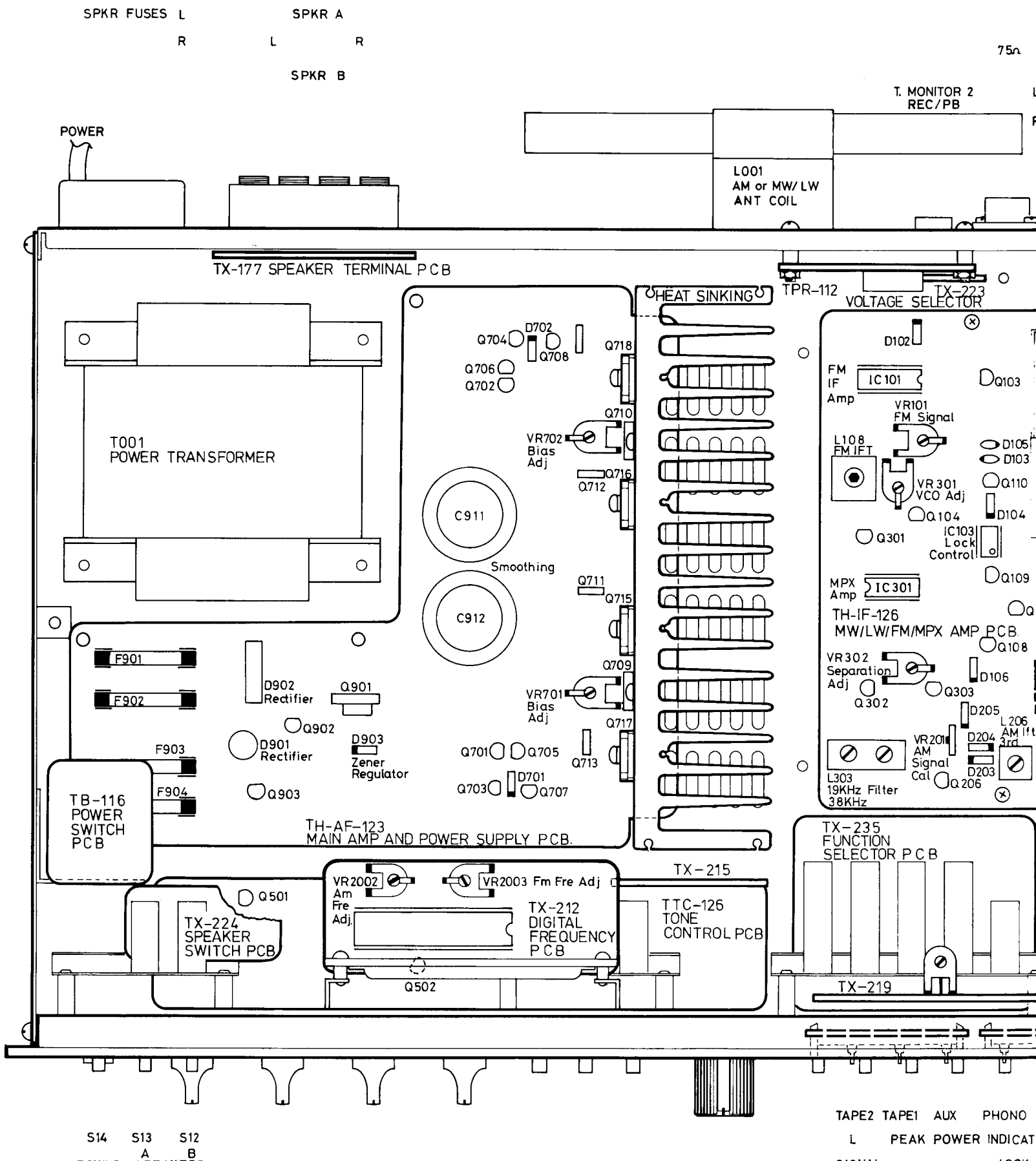
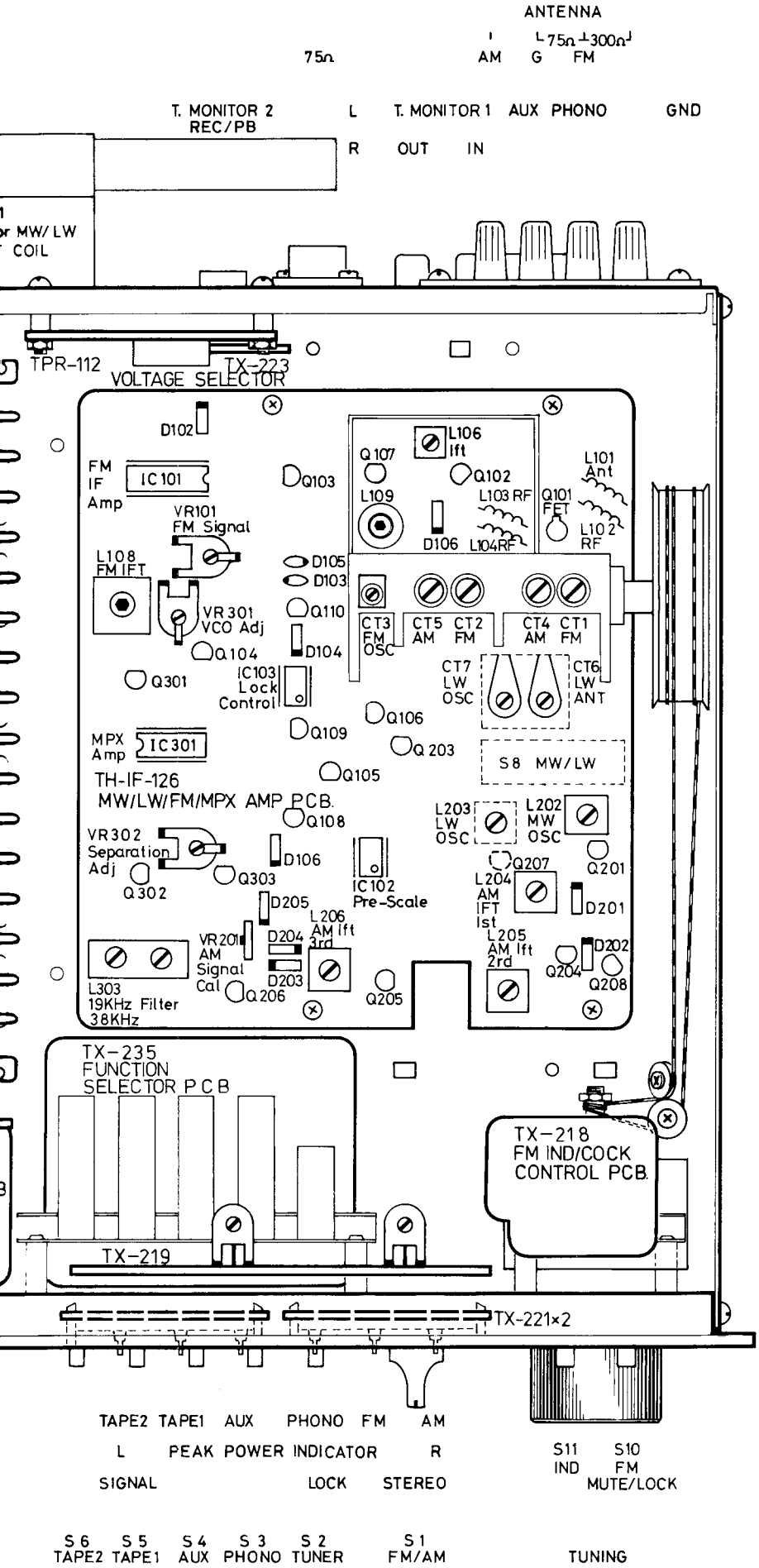
Chassis Layout/Chassis-Anordnung/Installation de Châssi




ANTENNA
75Ω
AM G FM
T. MONITOR 2 REC/PB
L
R
T. MONITOR 1 OUT
AUX IN
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SIGNAL LOCK STEREO
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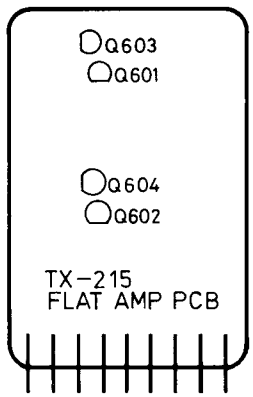
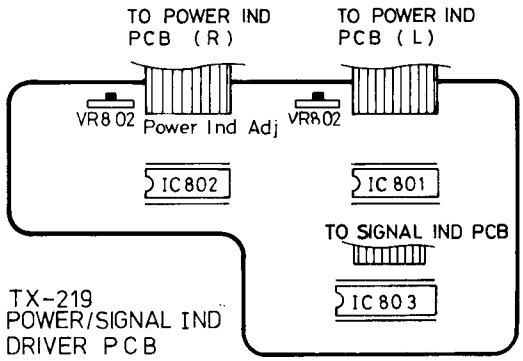
S10 FM MUTE/LOCK
S6 TAPE2
S5 TAPE1
S4 AUX
S3 PHONO
S2 TUNER
S1 FM/AM
TUNING


Q603
Q601
Q604
Q602
TX-215
FLAT AMP PCB


TO POWER IND PCB (R)
TO POWER IND PCB (L)
VR802
Power Ind Adj
VR802
IC802
IC801
TO SIGNAL IND PCB
IC803
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POWER/SIGNAL IND
DRIVER PCB

RX-550

AM IF and RF Alignment/ Signal Indicator Calibration

Instruments: AM Signal Generator (400Hz 30% Modulated), AC VTVM and Oscilloscope

AM IF Alignment (AM/FM, MW/LW/FM)

Step	Generator		AVC Setting	Adjust	Adjust for
	Coupling	Frequency			
1	Pin No. 7 (on IF Board) through a 0.01 mfd. Capacitor	455KHz	VC Maximum	L204, 205 and L206,(on IF Board)	Maximum reading on AC VTVM.

MW RF/Frequency Dsiplay Alignment (AM/FM, MW/LW/FM)

Step	Generator		AVC Setting	Adjust	Adjust for
	Coupling	Frequency			
1	Test Loop readiate signal into ferrite loop-stick antenna.	1000KHz	Interfering	VR2002	Frequency Display indicates 1000KHz.
2			VC Maximum	L202 (OSC)	Frequency Display indicates 515KHz.
3			VC Minimum	CT5 (OSC)	Frequency Display indicates 1630KHz.
4		600KHz	600KHz (on Frequency Display)	L001 9ant0 lead line side	Maximum reading on AC VTVM.
5		1400KHz	1400KHz	CT4 (ANT)	
6	(Input 100mV)	1000KHz	1000KHz	VR201	5 LEDs just light up. (Signal stregth indicator).

LW RF Alignment (MW/LW/FM only)

Step	Generator		AVC Setting	Adjust	Adjust for
	Coupling	Frequency			
1	Test Loop radiate signal into ferrite loop-stick antenna.		VC Maximum	L203 (OSC)	Frequency Display indicates 140KHz.
2			VC Minimum	CT7 (OSC)	Frequency Display indicates 360KHz.
3		160KHz	160KHz	L001 (ANT) against the lead line side	Maximum reading on AC VTVM.
4		330KHz	330KHz	CT6 (ANT)	

FM IF and RF Alignment/ Tuning and Signal Indicator Calibration

Instruments: FM Signal Generator (400Hz 100% Modulated), H.D. Analyzer, Oscilloscope AC VTVM and Tuning Meter.

Step	Generator		AVC Setting	Adjust	Adjust for
	Coupling	Frequency			
1	Antenna Terminal	98MHz	Interfering	VR2001	Frequency Display indicates 98MHz.
2			VC Maximum	L109 (OSC)	Frequency Display indicates 87.3MHz.
3			VC Minimum	CT3 (OSC)	Frequency Display indicates 108.3MHz.
4	Repeat steps 2 and 3 until no further improvement is noticed.				
5	Antenna Terminal	90MHz	90MHz (on Frequency Display	L101, 102, 103 and L104 (RF)	Maximum reading on AC VTVM.
6		106MHz	106MHz	CT1 (ANT and CT2 (RF)	
7		98MHz	98MHz	L106 (IFT)	
8	Repeat steps 5 and 6 until further improvement is noticed.				
9	Antenna Terminal (1mV Input)	98MHz	No interfering	L108 (low core)	Tuning Meter to "Center" position.
			Connect Tuning Meter to 11 and 12 (on IF Board)		
10			98MHz	L108 (upper core)	Minimum reading on H.D. Analyzer.
11			98MHz	VR101	5 LEDs just light up. (Signal strength indicator).

FM MPX Alignment

Instruments: FM Stereo Generator, AC VTVM and Oscilloscope

Step	Generator		AVC Setting	Adjust	Adjust for
	Coupling	Frequency			
1	Antenna Terminal	98MHz Pilot . . . 10% 1KHz . . . 90% Mod.	98MHz	VR301	Sereo indicator light up.
2				VR302	best separation
3	Check the stereo indicator cna be operated normally when pilot signal is reduce from 10% to 6%.				

MW-ZF und HF Einstellung/ MW-Signalstärkeanzeige-Eichung

Instrumente: MW-Messender (400Hz 30% moduliert), Wechselstrom-Roehrenvoltmeter und Oszillograph.

MW-ZF Einstellung (MW/UKW, MW/LW/UKW)

Schritt	Messender		Aufbau der Stirnseite	Abgleich	Abgleich auf
	Anschluss	Frequenz	Einstellung		
1	Steckerstift 7 (auf ZF-leiterplatte ueber 0.01 MF Kondensator)	455KHz	VC Maximum	L204, L205 und L206 (auf ZF-Leiterplatte)	Maximalanzige am Roehrenvoltmeter

MW-HF und Frequenzanzeige-Einstellung (MW/UKW, MW/LW/UKW)

Schritt	Messender		Aufbau der Stirnseite	Abgleich	Abgleich auf
	Anschluss	Frequenz	Einstellung		
1	Mess-Signal mit Schleife in Ferrit antenna einspeisen.	1000KHz	Interfenz	VR2002	Frequenzanzeige gibt 1000KHz an.
2			VC Maximum	L202 (OSZ)	Frequenzanzeige gibt 515KHz an.
3			VC Minimum	CT5 (OSZ)	Frequenzanzeige gibt 1630KHz an.
4		600Khz	600KHz (Auf Frequenzanzeige)	L001 (ANT) Lotleine- seite	Maximalanzige am Roehrenvoltmeter
5		1400KHz	1400KHz	CT4 (ANT)	
6	(Antennekl-ennenspannung 1mV)	1000KHz	1000KHz	VR201	füaf LEDS leuhtet recht auf. (Signal-stärkeanzeige)

LW-HF Einstellung (MW/LW/UKW nur)

Schritt	Messender		Aufbau der Stirnseite	Abgleich	Abgleich auf
	Anschluss	Frequenz	Einstellung		
1	Mess-Signal mit Sclheife in Ferrit antenna einspeisen		VC Maximum	L203 (OSZ)	Frequenzanzeige gibt 140KHz an.
2			VC Minimum	CT7 (OSZ)	Frequenzanzeige gibt 360KHz an.
3		160KHz	160KHz	L001 (ANT) gegen Lotleine-Seite	Maximalanzegin am Roehrenvoltmeter
4		330KHz	330KHz	CT6 (ANT)	

UKW-ZF und HF-Einstellung/Ratiomitteanzeige und Signalstärkeanzeige-Eichung

Instrumente: UKW-Messender (400Hz 100% Moduliert), Kirrfaktomesser, Oszillograph, Wechselstrom-Roehrenvoltmeter

Schritt	Messender		Aufbau der Stirnseite	Abgleich	Abgleich auf
	Anschluss	Frequenz	Einstellung		
1	Antennenkl-emmen anschliessen	98MHz	Interfenz	VR2001	Frequenzanzeige gibt 87.3MHz an.
2		98MHz	VC Maximum	L109 (OSZ)	Frequenzanzeigen. gibt 108.3MHz an.
3			VC Minimum	CT3 (OSZ)	
4	Schritt 2 und 3 weiderholen, bis kein weitere Verbesserung eintritt.				
5	Antennekl-emmen ansch-liessen	90MHz	90MHz (Auf Frequenzanzeige)	L101, L102, L103 and L104 (HF)	Maximalanzeige am Roehrenvoltemeter
6		106MHz	106MHz	CT1 (ANT) and CT2 (HF)	
7		98MHz	98MHz	L106 (IFT)	
8	Schritt 5 und 6 weiderholen, bis kein weitere Verbesserung eintritt.				
9	(Antennekl-emmen ensp-annung 1mV)	98MHz	KEINE Interferenz	L108 (low core)	Abstimmanzeiger auf "Center" stellen.
			Schliessen Sie mit Abstimmanzeiger zu 11 und 12 an. (Auf IF Brett)		
10			98MHz	L108 (upper core)	Minimalanzeige am Klirrfaktormesser
11			98MHz	VR101	fünf LEDS leuhtet recht auf. (Signal-stärkeanzeige)

UKW MPX-Einstellung

Instrumente: UKW-stereo Messender, Roehrenvoltmeter und Oszillograph.

Schritt	Messender		Aufbau der Stirnseite	Abgleich	Abgleich auf
	Anschluss	Frequenz	Einstellung		
1	Antennekl-emmen anschliessen	98MHz Pilotton.....10% 1KHz.....90% Moduliert.	98MHz	VR301	Stereoanzeige leuchtet auf.
2				VR302	beste Trennung
3	Einwandfreier Stereoanzeigebetrieb muss auch noch gewahrleistet sein, wenn der Stereopilotton von 10% auf 6% reduziert wird.				

Alignement AM IF et HF/ Indicateur de nivea de signal

Instruments: Générateur de signal AM (400Hz 30% modulé) AC VTVM et Oscilloscope.

Alignement AM IF (AM/FM, MW/LW/FM)

Point	Générateur		Extremite d'avant	Réglage	Réglage pour
	Couplage	Fréquence			
1	Brouche No. 7 (Sur IF plaquette par l'intermédiaire dún condensateur de 0.01 mfd.	455KHz	VC Maximum	L204, L205 et L206 (sur la plaquette IF)	Lecture maximum sur le voltmètre électronique AC VTVM.

Alignement MW HF et d'affichage de frequence (AM/FM, MW/LW/FM)

Point	Générateur		Extremite d'avant	Réglage	Réglage pour
	Couplage	Fréquence			
1	Boucle de mesure Envoyée le signal sur ferrite à boucle	1000KHz	Interférence	VR2002	l'affichage de frequence indique 1000KHz.
2			VC Maximum	L202 (OSC)	l'affichage de frequence indique 515KHz.
3			VC Minimum	CT5 (OSC)	l'affichage de frequence indique 630KHz.
4		600KHz	600KHz (sur l'affichage de frequence)	L001 (ANT) côté de ligne de connecion	Lecture maximum sur AC VTVM.
5		1400KHz	1400KHz	CT4 (ANT)	
6	(1mV absorbée)	1000KHz	1000KHz	VR201	5 LEDS allume seulement (Indicateur de force du signal)

Alignement LW HF (MW/LW/FM seulement)

Point	Générateur		Extremite d'avant	Réglage	Réglage pour
	Couplage	Fréquence			
1	Boucle de mesure Envoyée le signal sur ferribe à boucle		VC Maximum	L203 (OSC)	l'affichage de frequence indique 140KHz.
2			VC Minimum	CT7 (OSC)	l'affichage de frequence indique 360KHz.
3		160KHz	160KHz	L001 (ANT) contre le côté de ligne de connexion	Lecture maximum sur AC VTVM.
4		330KHz	330KHz	CT6 (ANT)	

Alignement FM IF et HF/Indicateur de synonisation et de force du signal

Instruments: (400Hz, 100% modulé) Analyseur H.D., Oscilloscope, AC VTVM et Compteur de syntonisation.

Point	Générateur		Extremite d'avant	Réglage	Réglage pour
	Couplage	Frégquence			
1	Borne d'antenne	98MHz	Interférence	VR2001	l'affichage de frequence indique 1000 KHz.
2			VC Maximum	L109 (OSC)	l'affichage de frequence indique 87.3 MHz.
3			VC Manimum	CT3 (OSC)	l'affichage de frequence indique 108.3 MHz.
4	Répéter les ponits 2 et 3 jusqu'aucun perfectionnement est marqué.				
5	Brone d'antenne	90MHz	90MHz (Sur l'affichaqe de frequence)	L101, L102, L103 et L104 (RF)	Lecture maximum sur AC VTVM.
6		106MHz	106MHz	CT1 (ANT) et CT2 (RF)	
7		98MHz	98MHz	L106 (IFT)	
8	Répéter les points 5 et 6 jusqu'aucun perfectionnement est marqué				
9	Borne d'antenne (1mV absor bée)	98MHz	non interférence	L108 (nogau bas)	Lecture de syntonisation à la position "Centrole"
			Relier le Compteur de synonisation á 11 et 12 (sur IF plaquette)		
10			98MHz	L108 (nogau haut)	Lecture maximum sur Analyseur H.D.
11			98MHz	VR101	5 LEDS allument seulement (Indicateur de force du signal)

Alignement FM MPX

Instruments: FM stéréo Générateur, AC VTVM et Oscilloscope.

Point	Générateur		Extremite d'avant	Réglage	Réglage pour
	Couplage	Fréquence			
1	Borne d'antenne	98MHz lampe témoin 10% 1KHz 90% Mod.	98MHz	VR301	Indicateur stéréo allume
2				VR302	Séparation la plus meilleure
3	Eraminer l'indicateur stéréo peut être opéré normalement lorsque le signal de lampe témoin est véduite de 10% à 6%				

Power Amplifier Bias Adjustment

Instruments: DC milli-voltmeter

Notes: Prior to Bias Adjustment, run about 5 minutes with rated output (8 ohm) and warm up Power Transistor and Heat Sink.
Set Volume Control to Minimum.

Step	Coupling		Adjust	Adjust for
	Plus Lead	Minus Lead		
1	TP2	TP1	VR701	DC milli-voltmeter reads 5.5mV.
2	TP3	TP4	VR702	

Endverstärker-Vorspannung-Einstellung

Instruments: DC-Gleichstrom-millivoltmeter

Anmerkung: Vor Einstellung der Vorspannung ist das Graet stwa 5 minuten mit nennleistung unter 8 ohm belastung zu betreiben, um die Leistung-stransistoren und Kuehlbleche warm werden zu lassen.
Lautstärkerregeler Volumenkontrolle auf Minimum stellen.

Schritt	Anschluss		Abgleich	Abgleich auf
	Pruefstift	Minuspol		
1	TP2	TP1	VR701	DC-Gleichstrom-millivoltmeter auf 5.5mV einstellen.
2	TP3	TP4	VR702	

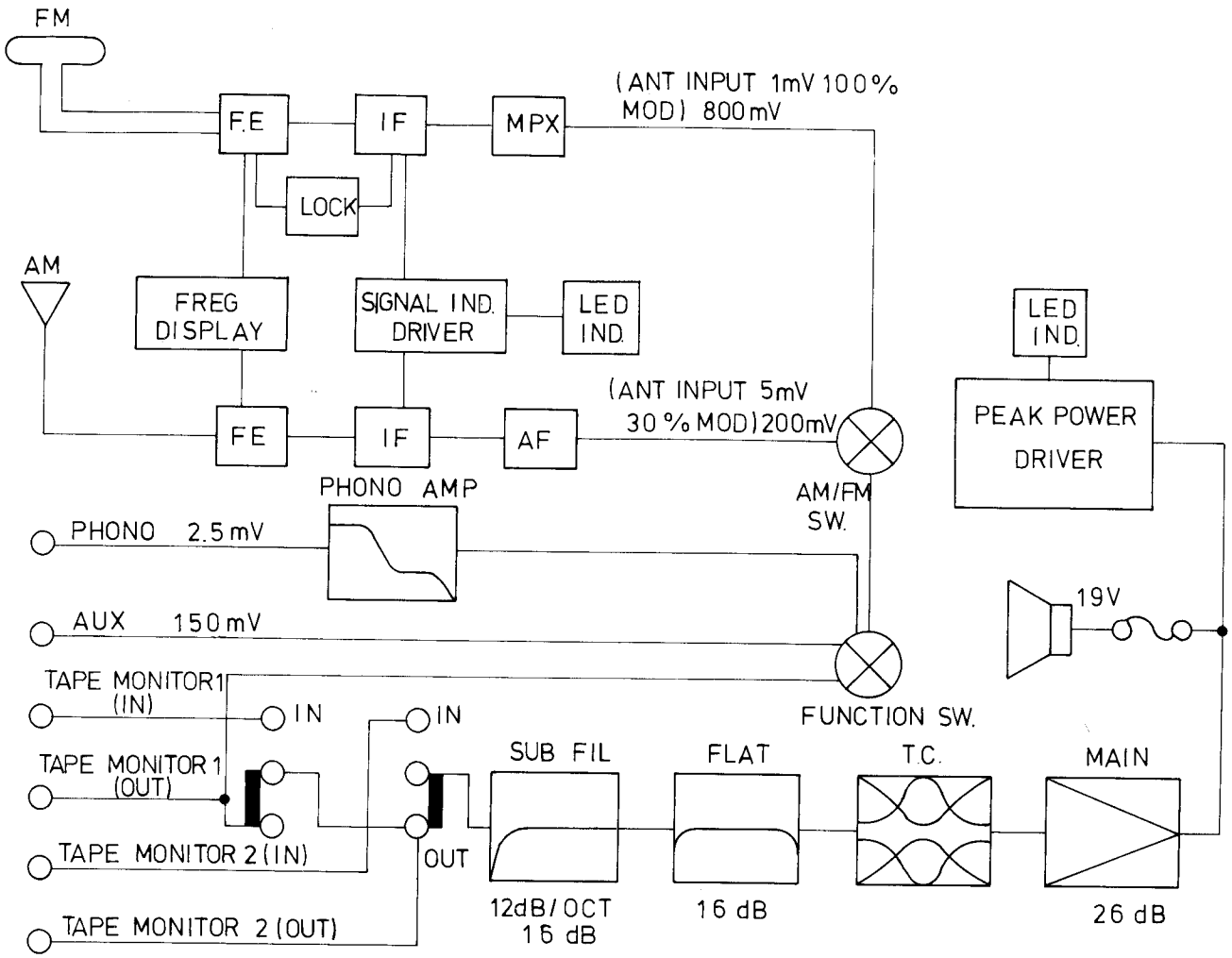
Régtage de la potarisation de l'amplificateur de puissance

Instrument: DC milli-voltmètre

Note: Avant le réglage de la polarisation, passer à peu près 5 minutes avec une proportion de la sortie du courant (8 ohm) et rèchauffer le transistor de puissance et le sink.
Mettre le contrôle de l'ètendue au minimum.

Point	Couplage		Réglage	Réglage pour
	Positif	Moins		
1	TP2	TP1	VR701	DC-millivoltmeter lit 5.5mV.
2	TP3	TP4	VR702	

Gain Diagram/Verstärkungsdiagramm/ Diagramme de gain

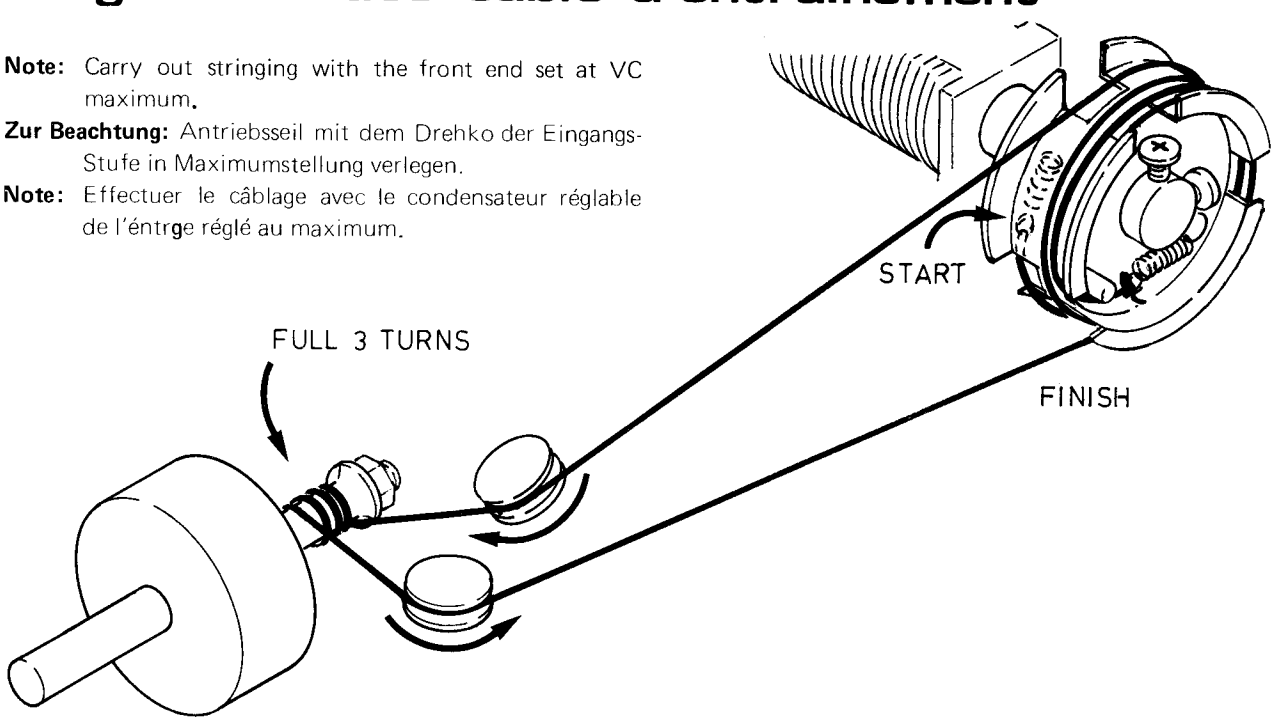


Dial Stringing Diagram
Skalenantriebsschema
Diagramme des câble d'entraînement

Note: Carry out stringing with the front end set at VC maximum.

Zur Beachtung: Antriebsseil mit dem Drehko der Eingangs-Stufe in Maximumstellung verlegen.

Note: Effectuer le câblage avec le condensateur réglable de l'éntrge réglé au maximum.



Repair Parts List/Reparaturteilliste/ Liste des pièces de rechange

TRANSISTORS, DIODES AND IC'S

Schematic Location	parts No.	Description
Q101	302001128	3SK45 (R), FM IF Amp.
Q102	301201163	2SC1674(K,L), Frequency Interface
Q103	301201117	2SC829 (C), FM IF Amp.
Q104, 301	301201115	2SC828 (R), for Switching
Q106	302001112	2SK49, Frequency Interface
Q105, 107	301201163	2SC1674 (K,L), FM MIX, OSC
Q108, 109	301201202	2SC1571 (G), Lock Control
Q110	302001113	2SK68A, Lock Control
Q201	301201117	2SC829 (C), Conversion
Q202	301201117	2SC829 (C), Conversion (MW/LW/FM only)
Q203	302001112	2SK49, Interface
Q204, 205	301201117	2SC829 (C), Audio Amp.
Q206	301201202	2SC1571 (G), Audio Amp.
Q207	301201115	2SC828 (R), for Switching (MW/LW/FM only)
Q302, 303	301201202	2SC1571 (G), Audio Amp.
Q501, 502	301201202	2SC1571 (G), Tone Amp.
Q610, 602	301001145	2SA921 (S,T), Flat Amp.
Q603, 604	301201202	2SC1571 (G), Flat Amp.
Q701-705 Q702-706	301001145	2SA921 (S,T), Deferantal Amp.
Q703, 704 Q709, 710	301901132	2SC945, Current Constent, Bias
Q707, 708	301201176	2SC1941 (K,L), Pre-driver
Q711, 712	301201150	2SC1567 (R,S) Driver
Q713, 714	301001635	2SA794 (R,S), Driver
Q715, 716	301201192	2SC2850 (R,O,Y), Power Amp.
Q717, 718	301001161	2SA1105 (K,L), Power Amp.
Q901	301201169	2SC1826 (R,S), Stabylizer
Q902	301201132	2SC1384 (R,S), Requlator
Q903	301001140	2SA684 (R,S), Requlator
D101	300616101	SD116, Variable Capacity
D102, 104	300111010	1S2472, for Switching, Bias
D103, 105	300212004	KB269, Variable Resistance
D106	300111010	1S2472, Limit
D201, 202	300111010	1S2472, AGC Detector
D203, 204	300111008	1K118, Detector
D205	300111010	1S2472, Limit
D701, 702	300111010	1S2472, Bias
D901	300313017	WZ162, Zener Requlator 16V 1/2W
D902	300919048	KBL02, Rectifier
D903	300991011	W02, Rectifier
D1201	300919026	1N4003
D1501-1502 D1601-1605	300414042	LN224RP, Power Ind. Signal Ind.
D1503-1506	300414040	LN324GP, Power Ind.
D1701-1702	300414042	LN224RP, Tape 1 and 2 Ind.
D1801		Stereo Ind.
D1703, 1802	300414040	LN324GP, Aux/Lock Ind.
D1901-1903	300414040	LN324GP, Function Ind.
IC101	303452251	HA11225, FM IF AMP.
IC102	303452203	SP8629, Pre-Scale
IC103	303452152	NJM4558DD, Lock Control
IC301	303452250	HA12003, Mpx Decorder
IC401, 402	303452192	HA1457W, Phono Amp.
IC801, 802	303452232	LB1416, Power Ind. Driver
IC803	303452188	LB1405, Signal Ind. Decorder
IC2001	303452257	LC7285, Digital Frequency Ind.

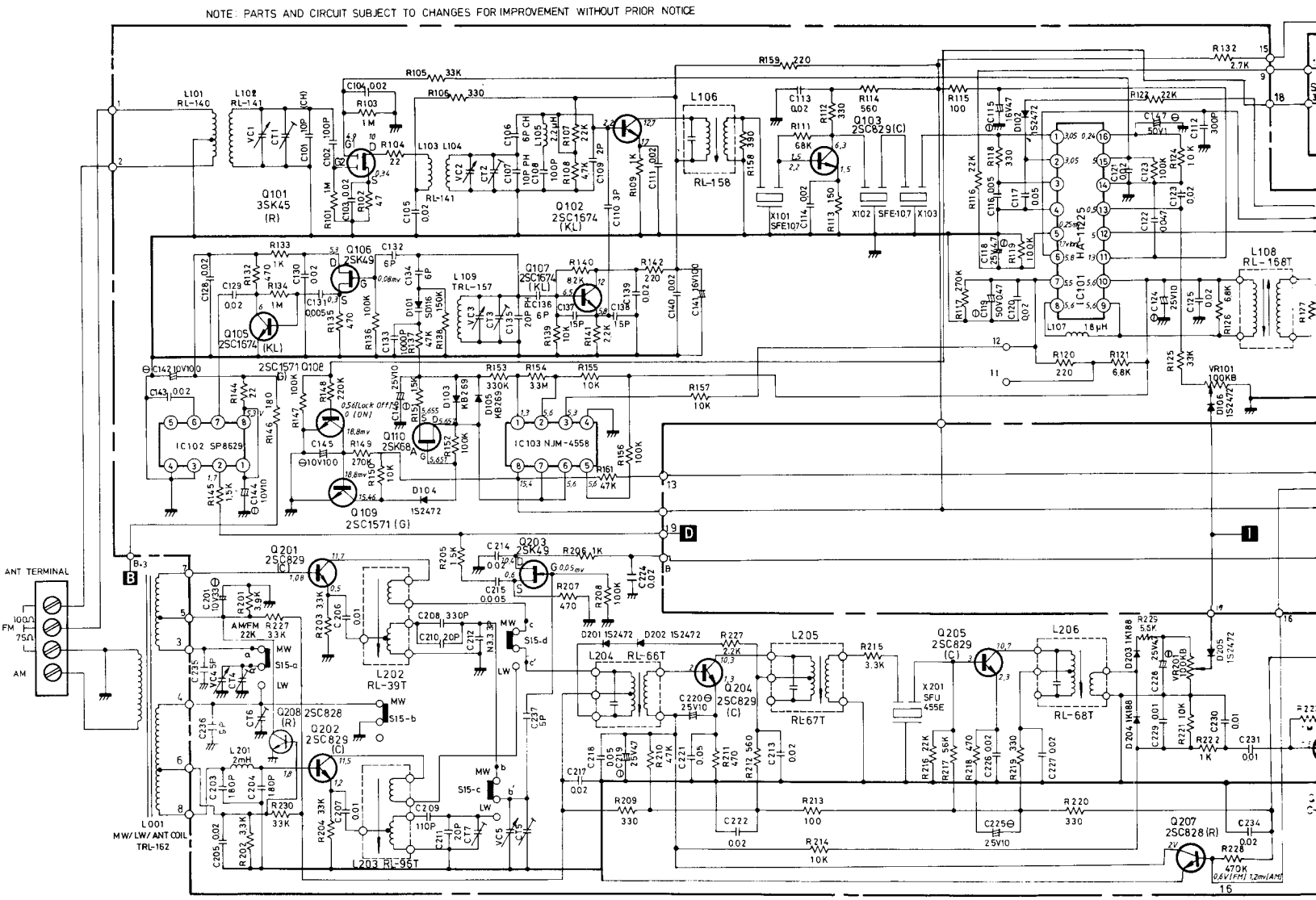
COILS AND VARIABLE RESISTORS

Schematic Location	parts No.	Description
L001	222391143	AM ANT Coil (AM/FM)
	222391152	MW/LW ANT Coil (MW/LW/FM)
L101	226501131	FM ANT Coil
L102-104	226501132	FM RF Coil
L105	226501143	2,2uH, FM IF Trap Coil
L106	225501142	FM IFT
L107	226501125	18uH, Moving Phase
L108	225501139	FM IFT Quadrature Detector
L109	226501161	FM OSC Coil
L201	226501142	2mH, LW Filter (MW/LW/FM only)
L202	223301127	MW OSC
L203	223301129	LW OSC (MW/LW/FM only)
L204	225301131	AM IFT 1st.
L205	225301132	AM IFT 2nd.
L206	225301133	AM IFT 3rd.
L301, 302	228641180	18mH, 38KHz Filter
L303	228641137	19KHz, 38KHz Filter
L901	226501127	470uH, Chocke Coil
VR101	510502195	100KB, FM Signal Ind. Adj.
VR201	510502149	10KB AM Signal Ind. Adj.
VR-301, 302	510502194	10KB, FM MPX VCO Seperation Adj.
VR2001, 2002	510502194	10KB, AM/FM Frequency Adj.
VR501	515121133	250KW, Balance Control
VR502	525121146	100KBx2, Volume Control
VR503-505	525101179	50KBx2, MID Bass Treble Control
VR701, 702	510502151	1KB, Bias Adj.
VR801, 802	510502147	10KB, Power Ind. Adj.

SWITCHES AND OTHERS

S1	601011348	Switch, AM/FM
	601011349	Switch, MW/LW/FM
S2-6 (1set)	614051026	Switch, Push 5-Key, Tuner Phono Aux Tape-1, and Tape-2
S7-9	614030845	Switch, Push 3-Key, Loudness Sub-Fil and Mode
S10-11	614020448	Switch Push 2-Key, Lock an Ind.
S12-13 (1set)	614030837	Switch, Push 2-Key Speaker A and B
S14	614010138	Switch, Power Supply (for BEAB)
	614010139	Switch, Power Supply (for UL, CSA)
S15	615212292	Switch, Slide, AM/FM (MW/LW/FM only)
QP2001	224110007	HC-18u, Cystal Oscillator
CT6, CT7 (1set)	490110113	AT-2-5, LW ANT/OSC Trimer (MW/LW/FM only)
X101-103	229101171	SFE-10.7MA8-M, Ceramic Filter
X201	229101207	SFU-455E, Filter

Schematic Diagram/Schaltungsschema/Diagramme.schém



RESISTOR

5% TOLERANCE UNLESS OTHERWISE NOTED
K KILO OHM
M MEGA OHM
COMPOSITION RESISTORS 1/2 WATT
RSU METAL OXIDE FILM RESISTORS
NON MARK LOW NOISE TYPE CABON RESISTORS

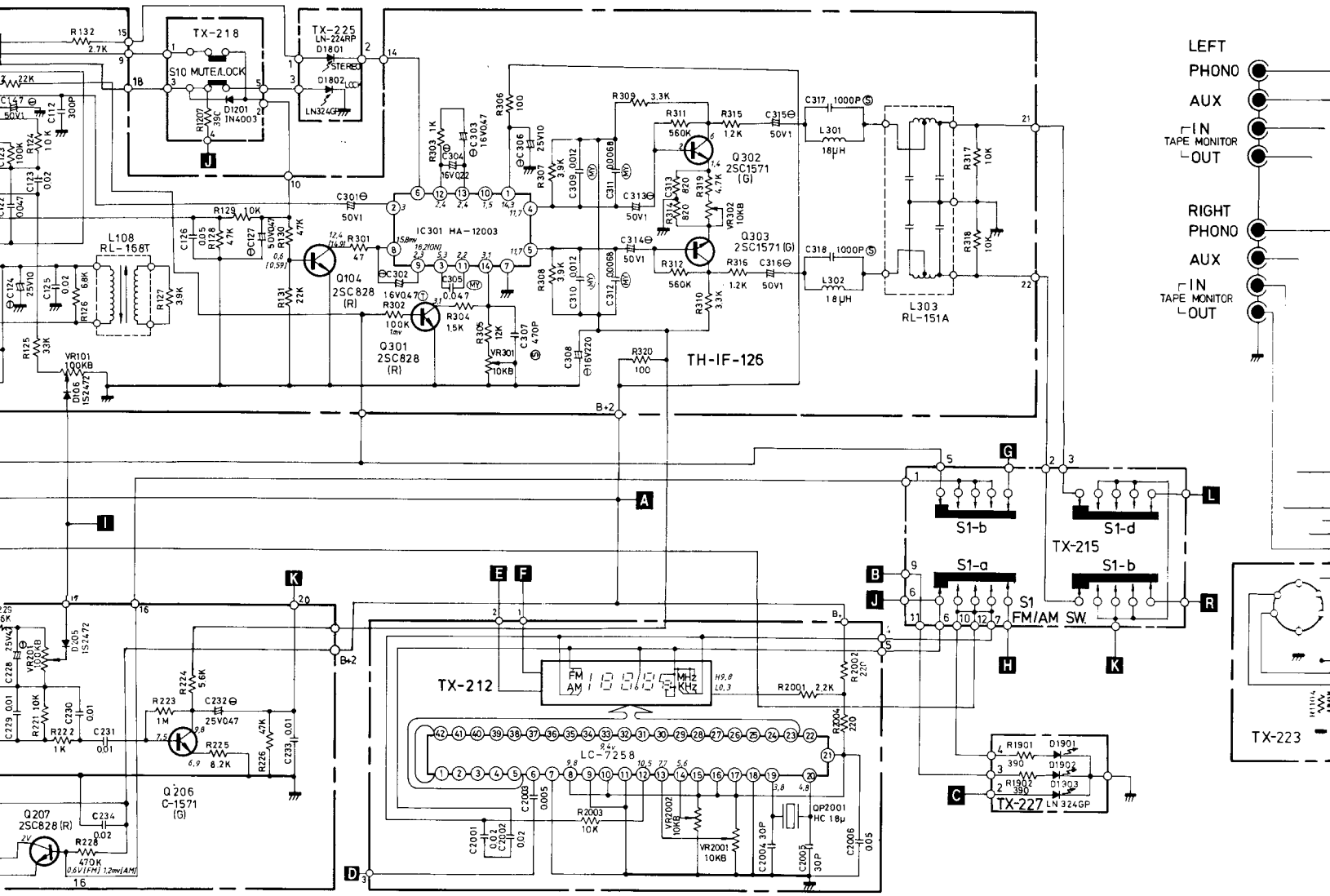
CAPACITORS

(LN)----LOW NOISE ELECTROLYTIC
(MM)----MYLAR FILM CAPACITORS
(S)----POLYSTYRENE FILM CAPACITORS
(T)----TANTALUM CAPACITORS
----ELECTROLYTIC CAPACITORS
NON MARK CERAMIC CAPACITORS
UNLESS OTHERWISE NOTED IN SCHEMATIC ALL CAPACITANCE VALUES ARE EXPRESSED IN MFD

THIS SCHEMATIC DIAGRAM IS AVAILABLE COMBINATION OF MW/LW/FM ONLY WHEN UNITS COMBINE JUST AM/FM ONLY THERE WERE MADE SOME MODIFICATION AS FOLLOW:

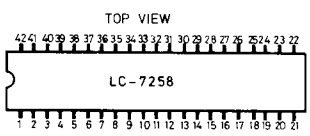
1 CHANGED MW/LW ANT COIL L001 FROM TRL-162 TO RL-72 I
2 CANCELLED SWITCH S15 a.b.c.d. SHORTED a AND a' b AND b' c AND c' d AND d'
3 CANCELLED TRANSISTORS Q202 AND Q207 COILS L201 AND L203 TRIMERS CT6 AND CT7 CAPACITORS C236. 203. 204. 205. 207. 209. AND C211 RESISTORS R202 AND R204

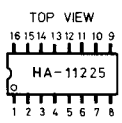
ITEM	SCHEMATIC LOCATION (LAST)	
FM IF AMP	R161	C146
LW MW IF AMP	R230	C236
FM MPX AMP	R320	C318
EQUALIZER	R418	C420
TONE CONTROL	R538	C526
FLAT AMP	R620	C616
MAIN AMP	R738	C730
IND. DRIVER	R817	C808
POWER SUPPLY	R910	C917

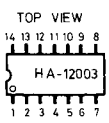


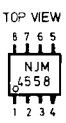
ITEM	SCHEMATIC LOCATION (LAST)	
AMP	R161	C146
IF AMP	R230	C236
X AMP	R320	C318
ZER	R418	C420
CONTROL	R538	C526
AMP	R620	C616
AMP	R738	C730
RIVER	R817	C808
SUPPLY	R910	C917

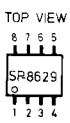
ITEM	SCHEMATIC LOCATION (LAST)	
FUNCTION SW.	R1007	
INTPUT/OUTPUT TERMINAL	R1104	
CONTROL	R1207	
SPKR TERMINAL	R1302	C1302
SPKR SW.	R1402	
FUNCTION IND.	R1902	
IND. DRIVER	R2004	C2006
POWER SW.		C001

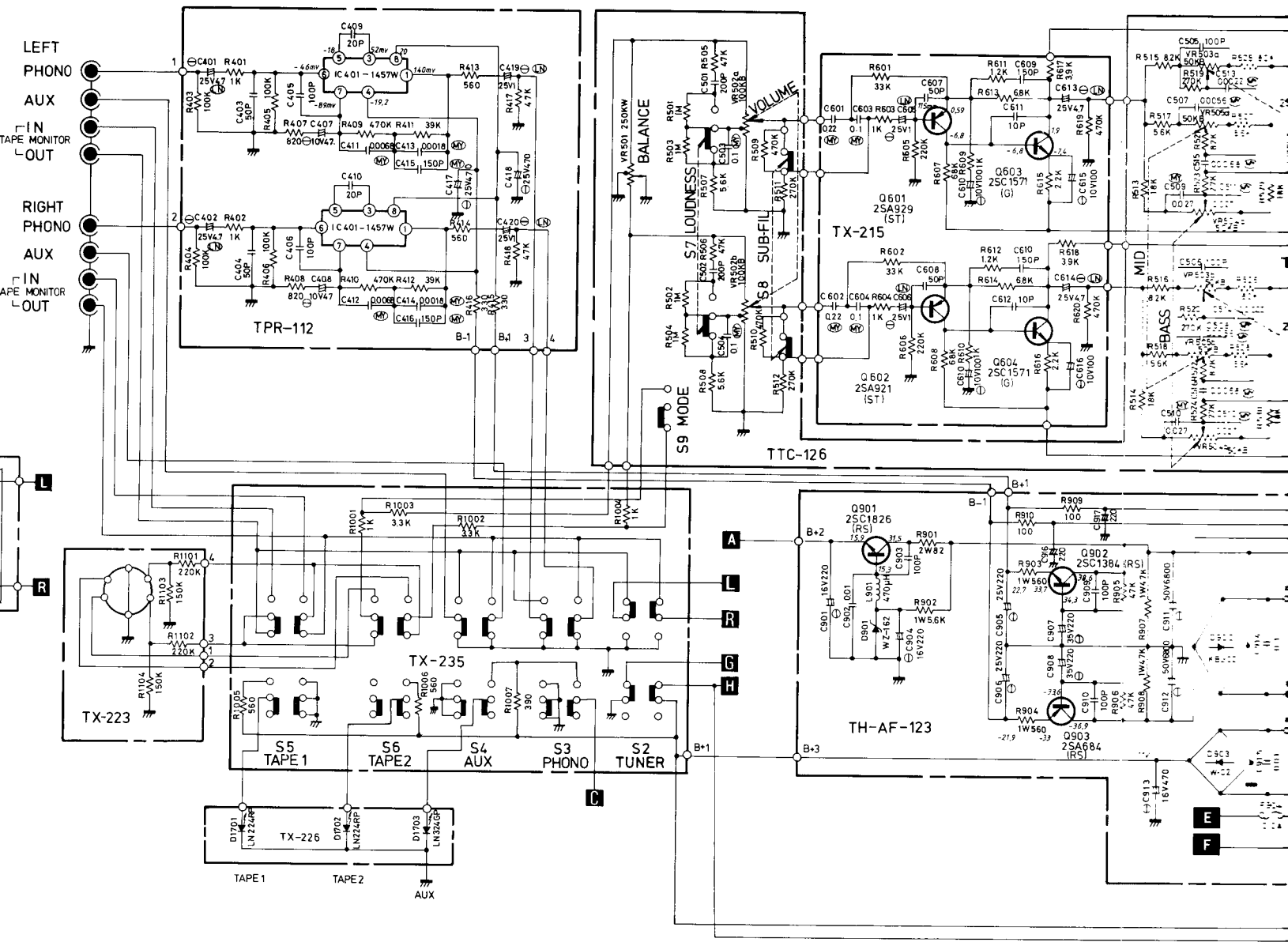


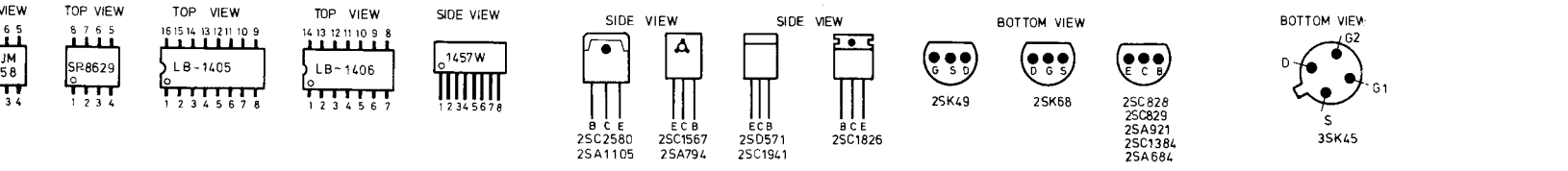


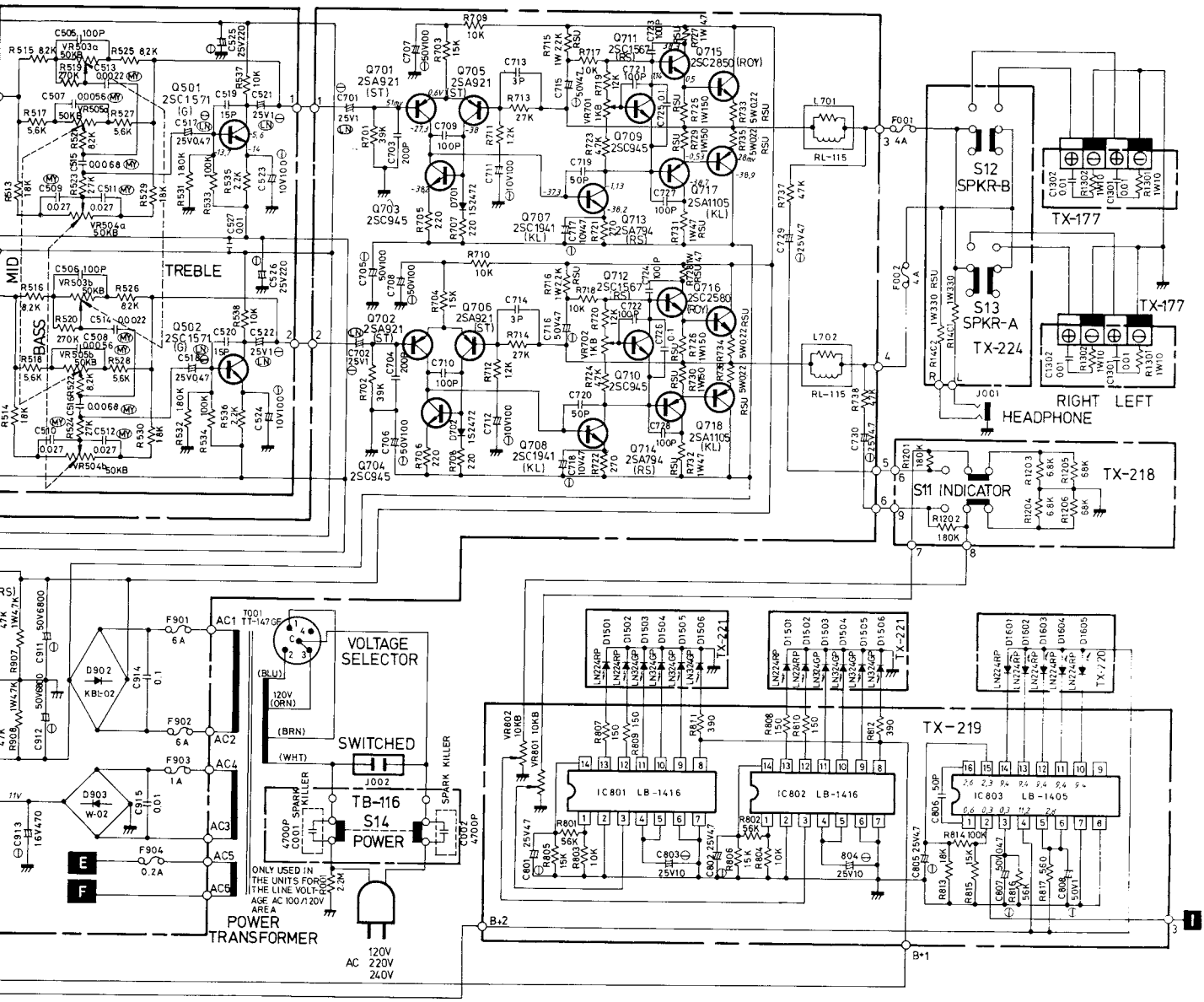




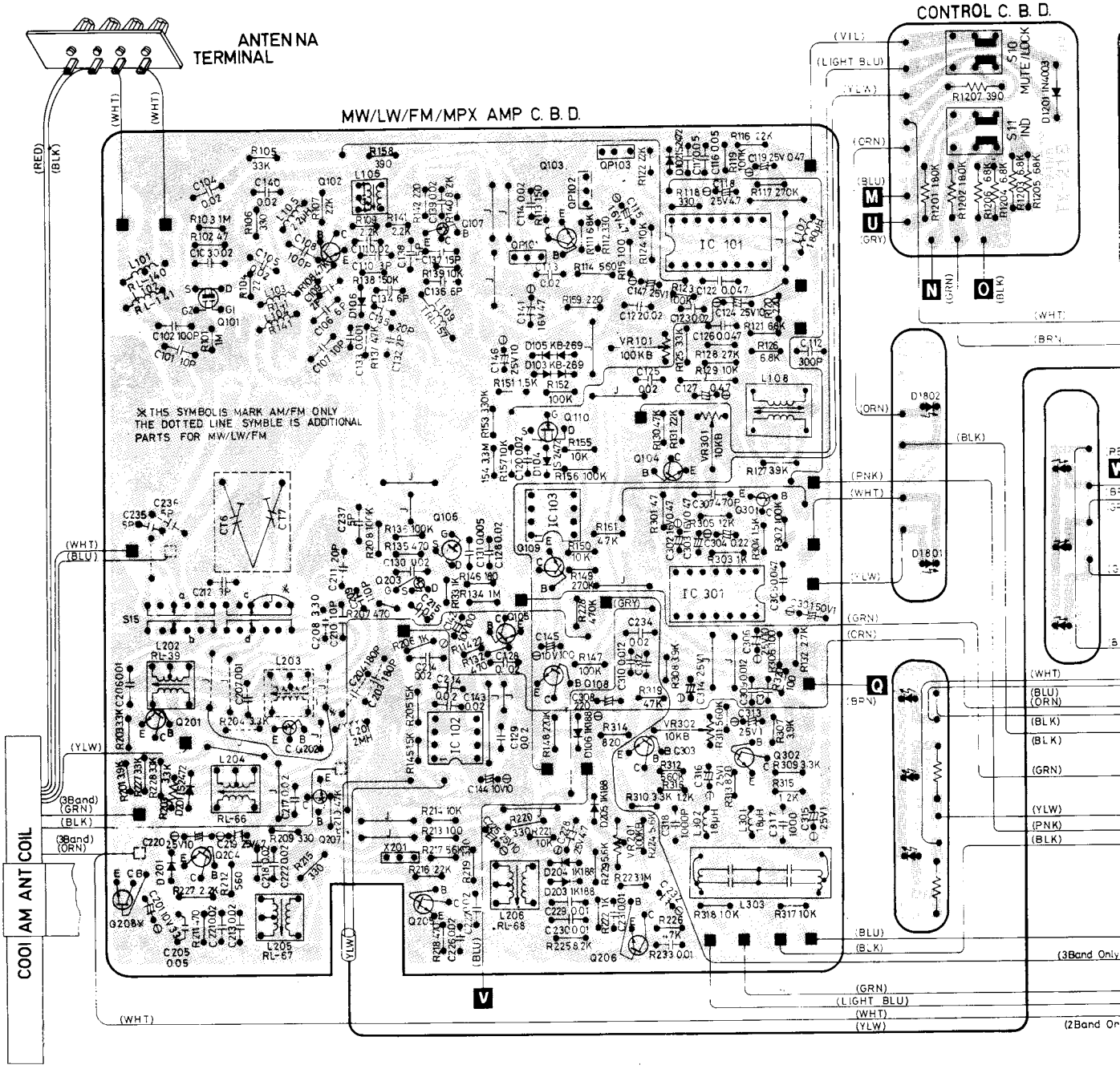



LEFT
PHONO
AUX
IN
TAPE MONITOR
OUT
RIGHT
PHONO
AUX
IN
TAPE MONITOR
OUT
TPR-112
IC401-1457W
IC410
TTC-126
BALANCE
VOLUME
LOUDNESS
SUB-FIL
S9 MODE
TX-215
Q601 2SA929 (ST)
Q602 2SA921 (ST)
Q603 2SC1571 (G)
Q604 2SC1571 (G)
TX-235
TX-223
TX-226
TH-AF-123
Q901 2SC1826 (RS)
Q902 2SC1384 (RS)
Q903 2SA684 (RS)
S5 TAPE 1
S6 TAPE2
S4 AUX
S3 PHONO
S2 TUNER
TAPE 1
TAPE2
AUX
TREBLE
MID
BASS

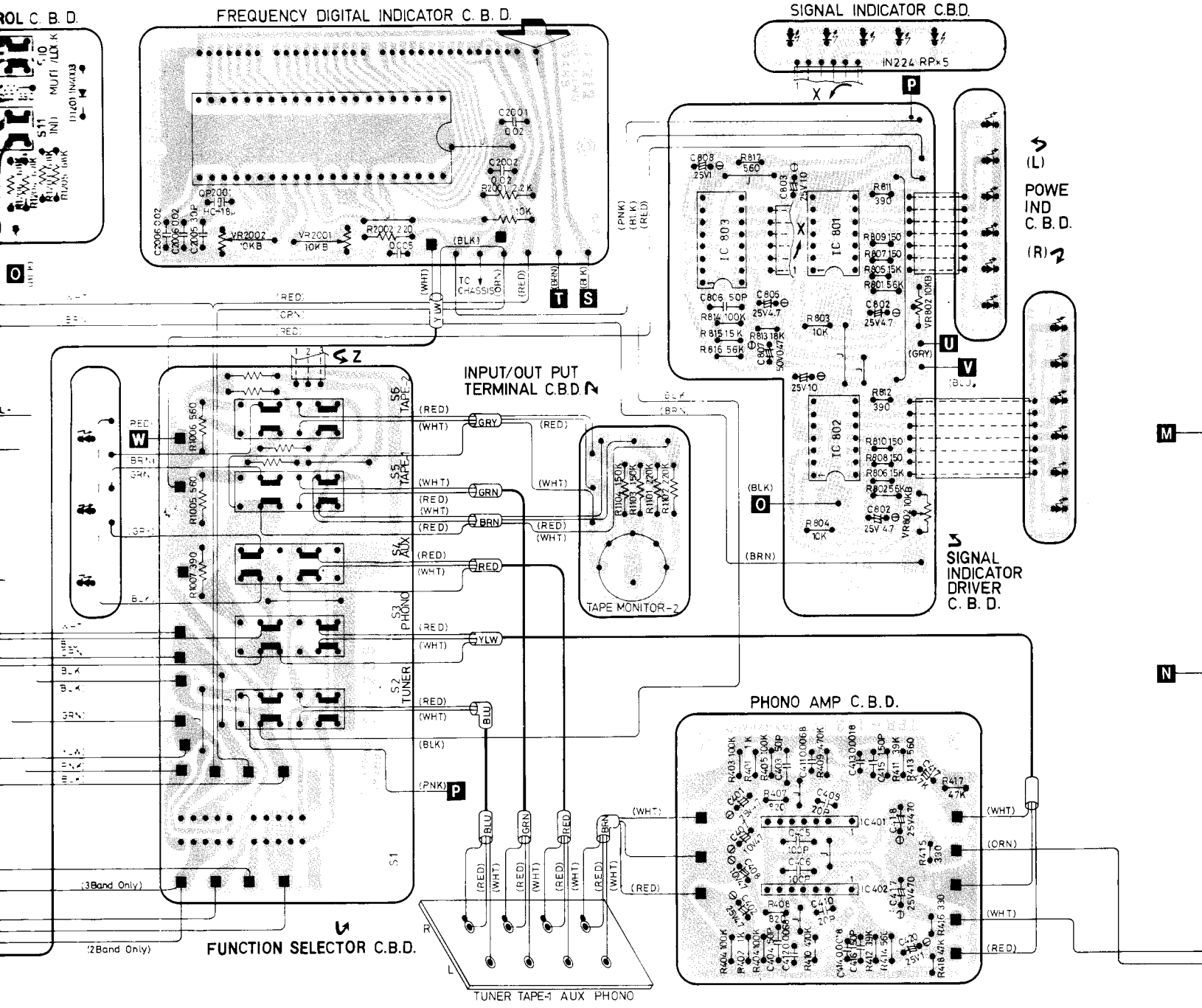

TOP VIEW
SP-8629
TOP VIEW
LB-1405
TOP VIEW
LB-1406
SIDE VIEW
1457W
SIDE VIEW
2SC2580
2SA1105
2SC1567
2SA794
SIDE VIEW
2SD571
2SC1941
2SC1826
BOTTOM VIEW
2SK49
BOTTOM VIEW
2SK68
2SC828
2SC829
2SA921
2SC1384
2SA684
BOTTOM VIEW
3SK45

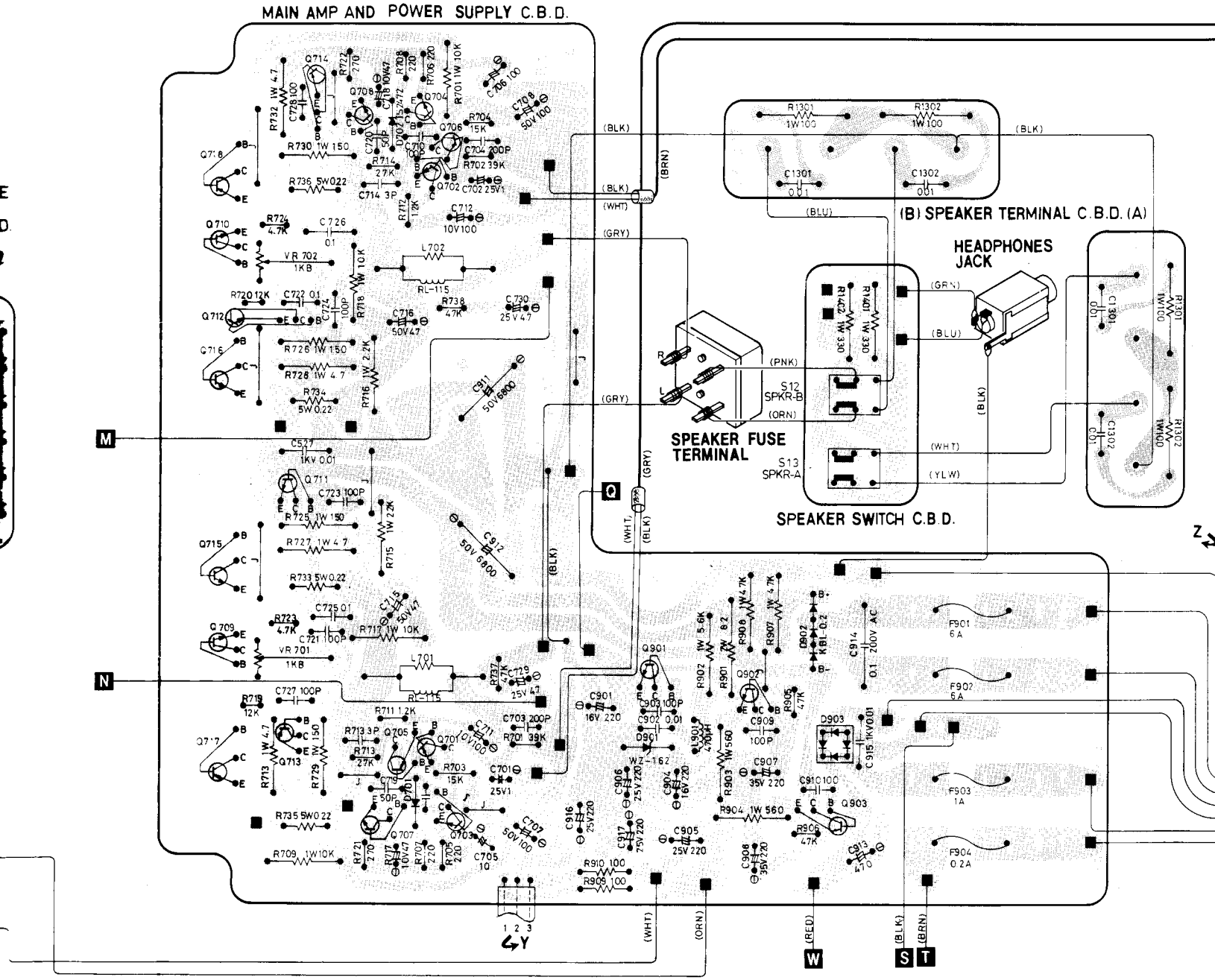

TREBLE
MID
BASS
Q501 2SC1571 (G)
Q502 2SC1571 (G)
Q701 2SA921 (ST)
Q705 2SA921 (ST)
Q702 2SA921 (ST)
Q706 2SA921 (ST)
Q703 2SC945
Q704 2SC945
Q707 2SC1941 (KL)
Q708 2SC1941 (KL)
Q709 2SC945
Q710 2SC945
Q711 2SC1567 (RS)
Q712 2SC1567 (RS)
Q713 2SA794 (RS)
Q714 2SA794 (RS)
Q715 2SC2850 (ROY)
Q716 2SC2580 (ROY)
Q717 2SA1105 (KL)
Q718 2SA1105 (KL)
L701
L702
RL-115
F001 3 4A
F002 4A
S12 SPKR-B
S13 SPKR-A
TX-224
TX-177
RIGHT LEFT
HEADPHONE
S11 INDICATOR
TX-218
TX-221
TX-220
TX-219
IC801 LB-1416
IC802 LB-1416
IC803 LB-1405
T001 TT-147GF
VOLTAGE SELECTOR
120V (ORN)
(BLU)
(BRN)
(WHT)
SWITCHED
TB-116
S14 POWER
SPARK KILLER
ONLY USED IN THE UNITS FOR THE LINE VOLT-AGE AC 100/120V AREA
POWER TRANSFORMER
120V AC 220V 240V
D902 KBL-02
D903 W-02
F901 6A
F902 6A
F903 1A
F904 0.2A
AC1
AC2
AC3
AC4
AC5
AC6
B+2
B+1

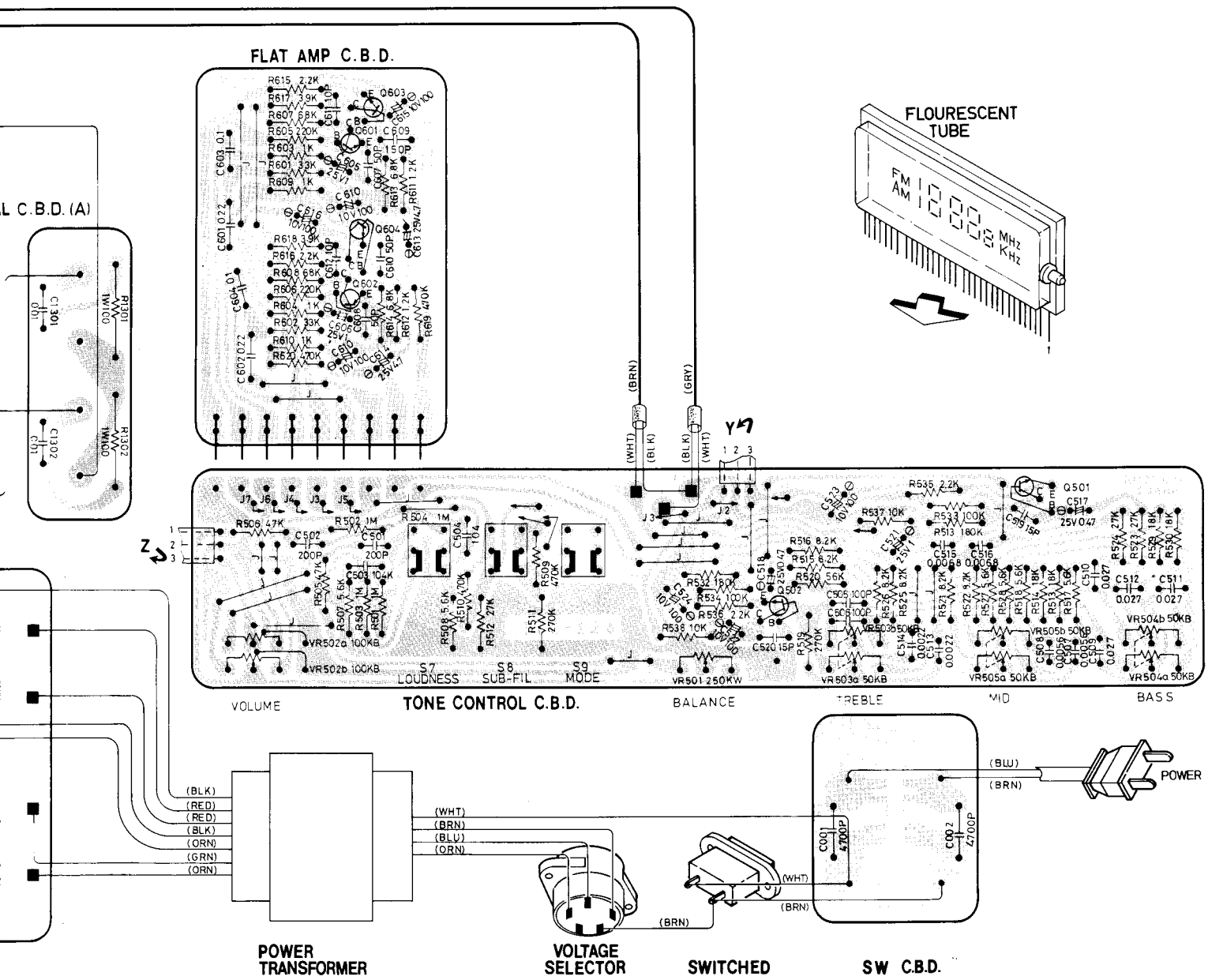
Wiring Diagram/Drahtleitung Diagramm/Diagramm



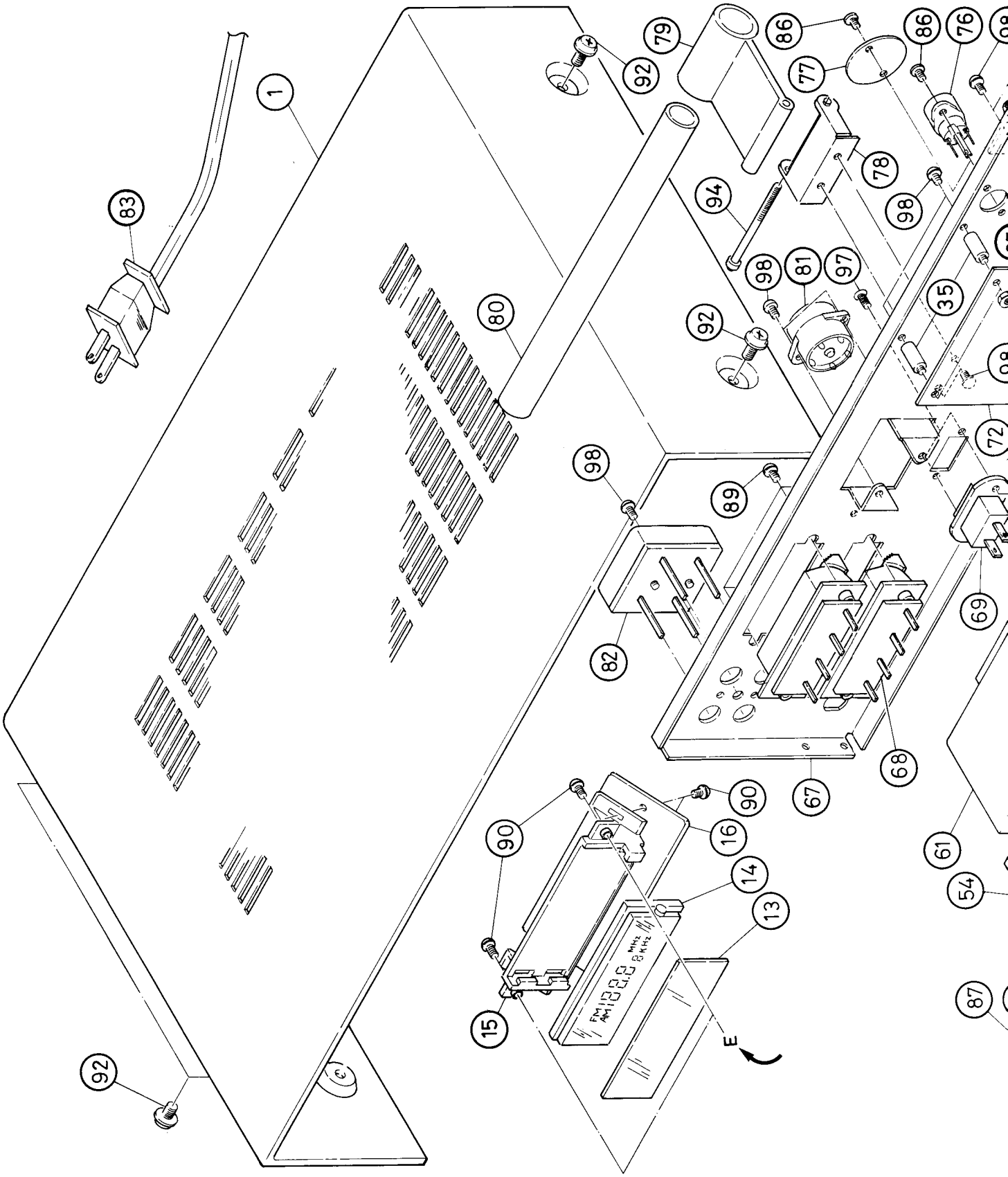
agramme de connexion



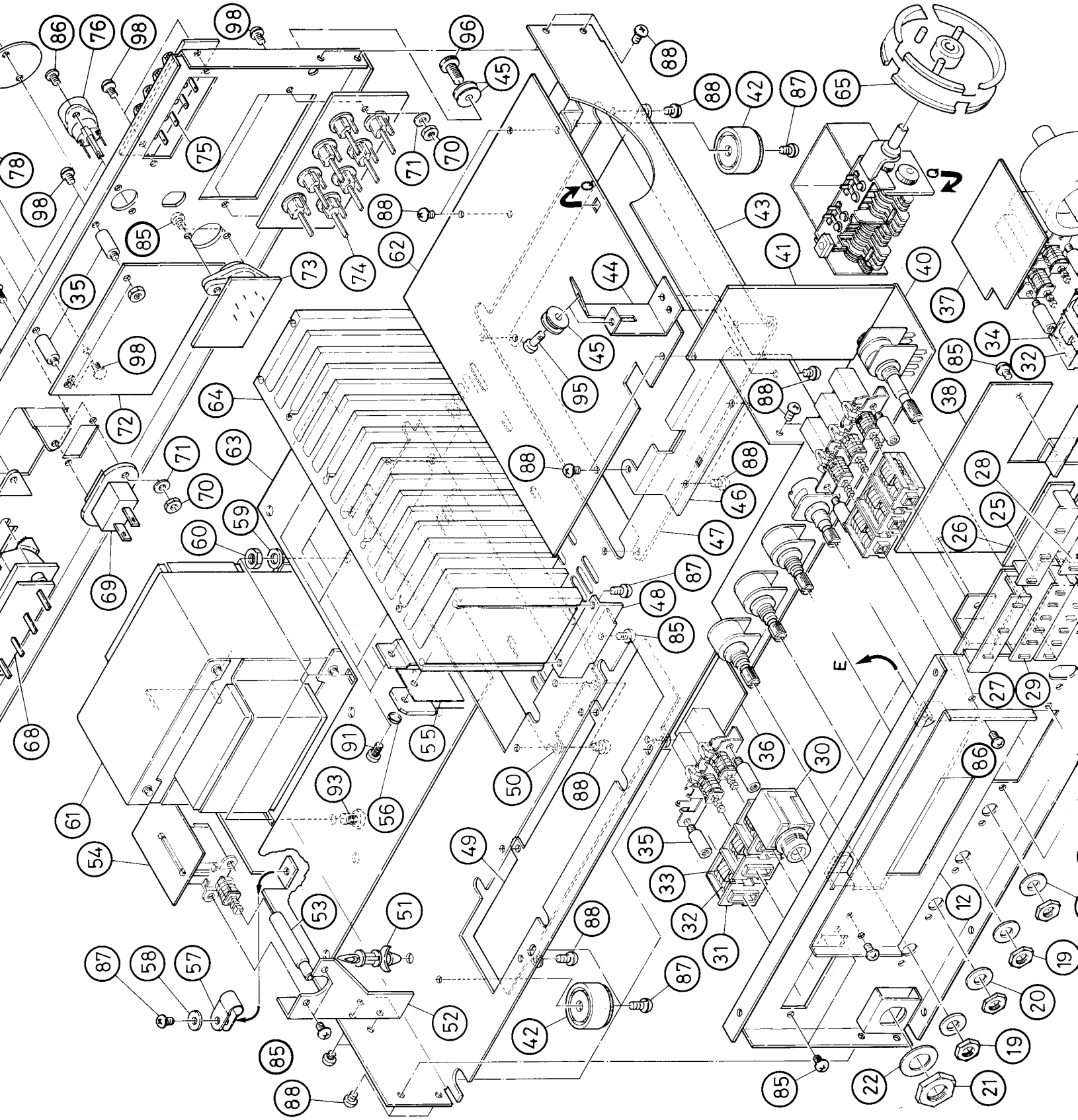

MAIN AMP AND POWER SUPPLY C.B.D.
(B) SPEAKER TERMINAL C.B.D. (A)
HEADPHONES JACK
SPEAKER FUSE TERMINAL
SPEAKER SWITCH C.B.D.
S12 SPKR-B
S13 SPKR-A
(BLK)
(WHT)
(GRY)
(BRN)
(BLU)
(PNK)
(ORN)
(GRN)
(YLW)
(RED)
M
N
Q
Y
W
S
T
Z

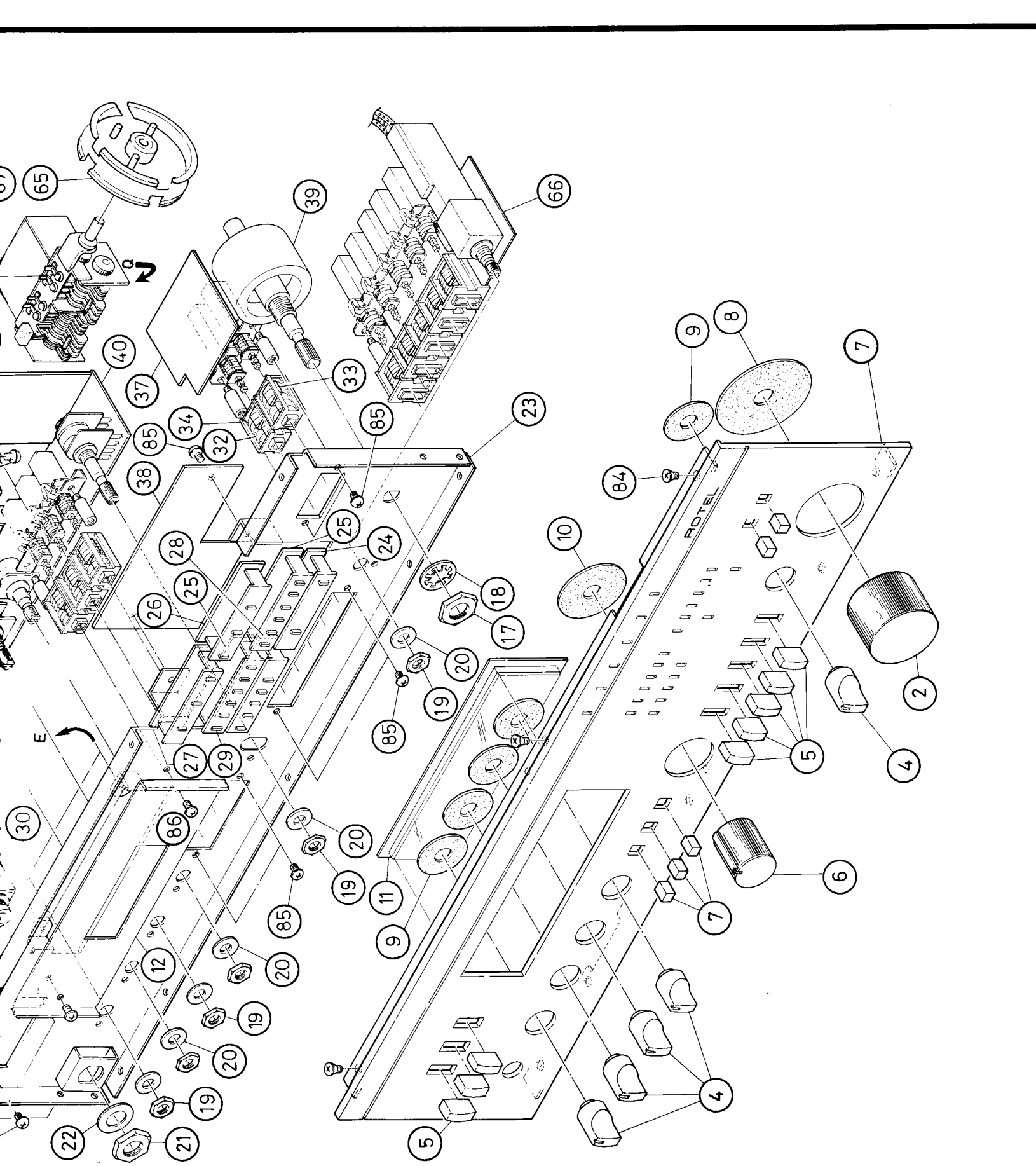

FLAT AMP C.B.D.
FLOURESCENT TUBE
L C.B.D. (A)
(BRN)
(GRY)
(WHT)
(BLK)
(BLK)
(WHT)
VOLUME
TONE CONTROL C.B.D.
BALANCE
TREBLE
MID
BASS
LOUDNESS
SUB-FIL
MODE
(BLK)
(RED)
(RED)
(BLK)
(ORN)
(GRN)
(ORN)
(WHT)
(BRN)
(BLU)
(ORN)
(BLU)
(BRN)
POWER
(WHT)
(BRN)
POWER TRANSFORMER
VOLTAGE SELECTOR
SWITCHED
SW C.B.D.

Disassembly Diagram/Illustration des Auseinaderbau



naderbaus/ Schéma de démontage




ROTEL
E

Key No.	Parts No.	Description
1.	138011309	Upper Cover
2.	116310307	Knob, 33ϕ, Tuning
3.	116310305	Knob, 20ϕ, Volume
4.	116310304	Knob, 13ϕ, Bass Treble and Balance
5.	116210074	Push Button, Muting and Lock
6.	116210073	Push Button, Function
7.	111911535	Front Panel (AM/FM)
	111911536	Front Panel (MW/LW/FM)
8.	990201330	Felt
9.	990201328	Felt
10.	990201329	Felt
11.	114902343	Dial Window
12.	120012985	Ornamental Board, Frequency Display
13.	114902337	Filter Board
14.	360201114	Frequency Display
15.	114902338	Holder, Frequency Display
16.	141811090	Digital Frequency PCB Ass'y
17.	770402207	Nut, M9
18.	770500008	Washer, 9.5ϕ
19.	770402205	Nut, M7
20.	770500006	Washer, 7.5ϕ
21.	770402209	Nut, M12
22.	770500009	Washer, 12.5ϕ
23.	122011421	Front Chassis
24.	141811098	Stereo/Lock Ind. PCB Ass'Y
25.	141811095	Power Ind. PCB Ass'y
26.	141811100	Func. Ind. PCB Ass'y
27.	141811099	Tape Ind. PCB Ass'y
28.	141811094	Signal Ind. PCB Ass'y
29.	114902322	Holder, Led PCB
30.	626110035	Jack, Headphone
31.	114902318	Frame, Push Button
32.	658601130	Spring, Frame
33.	114902320	Shaft, Frame
34.	114902319	Frame, Push Button
35.	770911263	Cylinder Bush, Inner Screw
36.	141811097	Speaker Switching PCB Ass'y
37.	141811091	Control PCB Ass'y
38.	141811093	Power Ind. Driver PCB Ass'y
39.	654911289	Tuning Shaft
40.	141710334	Tone Control PCB Ass'y
41.	141811092	Flat Amp PCB Ass'y
42.	673402055	Plastic Foot
43.	121011355	Chassis Body
44.	120012988	Pulley Support
45.	651110019	Pulley
46.	120012936	Support PCB
47.	120012947	Chassis Body Mask A
48.	120012987	Heat Sinker Support
49.	120012990	Chassis Body Mask C
50.	120012989	Chassis Body Mask B
51.	672200831	Plastic PCB Support
52.	120012986	Power Switch Support
53.	654101154	Power Switch Lever
54.	141811067	Power Switch PCB (for RUK)
	141811068	Power Switch PCB (for KR)
55.	120012788	Varistor Support
56.		Washer, 3.2ϕ
57.	672200836	Power Clamp

Key No.	Parts No.	Description
58.	770500003	Washer, 3.2ϕ
59.	770500004	Spring Washer, M4
60.	770402201	Nut, M4
61.	207001518	Power Transformer
62.	141311398	AM/FM/MPX Amp PCB Ass'y (for 50uS, 2 Band)
	141311399	AM/FM/MPX Amp PCB Ass'y (for 50uS, 3 Band)
	141311400	AM/FM/MPX Amp PCB Ass'y (for 75uS)
63.	141610344	Main Amp/Power Supply PCB Ass'y (with Long Size Fuse)
	141610345	Main Amp/Power Supply PCB Ass'y (with Mini Size Fuse)
	141610346	Main Amp/Power Supply PCB Ass'y (with Mini "S" Mark)
64.	127012257	Heat Sinker
65.	651300015	Dial Pulley
66.	141811101	Function PCB Ass'y (AM/FM)
	141811102	Function PCB Ass'y (MW/LW/FM)
67.	123011551	Printed Rear Chassis
	123011553	Printed Rear Chassis (for CSA only)
68.	141810939	Speaker Terminal PCB Ass'y
69.	648211116	AC Outlet Socket
70.	770402201	Nut, M3
71.	770500003	Wsher, 3.2ϕ
72.	141510179	Phono Amp. PCG Ass'y
73.	141811096	5P Din Jack PCB Ass'y
74.	624200208	Terminal, 8P, RCA Type
75.	649201115	Terminal, 4P, Screw
76.	625001119	Terminal, 5P, DIN Type
77.	120012958	CC Mask
78.	120012201	Holder, Bar Ant. Coil
79.	648211111	Holder, Bar Ant. Coil
80.	222391143	Bar Ant. Coil (AM/FM)
	222391153	Bar Ant. Coil (MW/LW/FM)
81.	648211247	Voltage Selector
82.	341221400	Speaker Fuse (Long Size Fuse)
	345222400	Speaker Fuse (Mini Size Fuse)
	345252400	Speaker Fuse (Mini "S" Mark)
83.	796301115	Line Cord (for CSA)
	796301138	Line Cord (forBEAB)
	796301149	Line Cord (for Europe)
	796301125	Line Cord (for Austria)
84.	701203006	Screw, +M3x6 SMF
85.	766203006	Screw, +M3x6 STV
86.	726223008	Screw, +M3x8 BTV BK
87.	726203008	Screw, +M3x8 BTV
88.	726203006	Screw, +M3x6 BTV
89.	726223010	Screw, +M3x10 BTV BK
90.	766203008	Screw, +M3x8 STV
91.	703213008	Screw, +M3x8 Pan Head
92.	705220408	Screw, +M4x8
93.	765204018	Screw, +M4x10 CTB
94.	705223045	Screw, +M3x45 BK
95.	770911264	Screw, +M3x10
96.	770911126	Screw, -M4x8
97.	77091113	Screw, -M3x10 BK
98.	766223008	Screw, +M3x8 STV BK

THE ROTEL CO., LTD. 1-36-8 OHOKAYAMA, MEGURO-KU, TOKYO 152, JAPAN
ROTEL ELECTRONICS CO., LTD. 2ND FLOOR, EVERGLORY BLDG., NO. 305, SECTION 3, NANKING E. ROAD, TAIPEI, TAIWAN, REPUBLIC OF CHINA
ROTEL OF AMERICA, INC. 13518 SO. NORMANDIE, GARDENA, CALIF. 90249, U.S.A.

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