Dual

Service-Anleitung
Service Manual
Instructions de Service

CC 5850 RC

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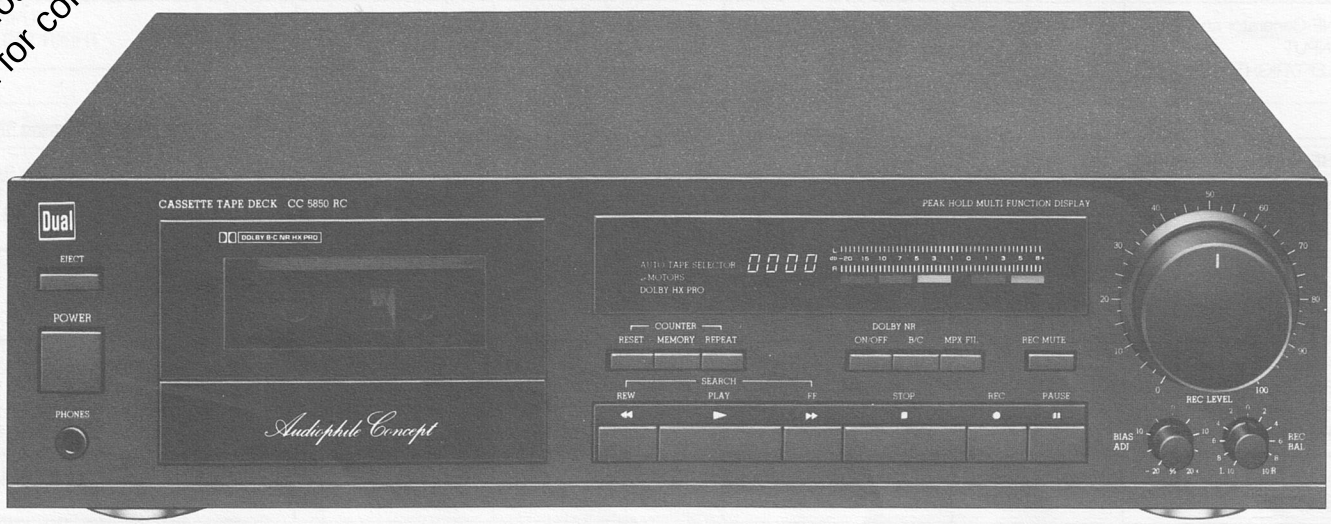

Technische Daten (typische Werte)	Specifications (typical values)	Caractéristiques techniques (valeurs types)	Dati tecnici (valori tipici)	Dual CC 5850
Bandgeschwindigkeit	**Tape speed**	**Vitesse de bande**	**Velocità del nastro**	4,75 cm/sec.
Tonhöhenschwankungen W.R.M.S. DIN-Aufnahme/Wiedergabe	**Wow and flutter** W.R.M.S. DIN record/playback	**Variations de tonalité** W.R.M.S. Enregistrement/lecture DIN	**Fluttuazioni nell'altezza del tono** W.R.M.S. secondo DIN registrazione/ riproduzione	± 0,05 % ± 0,10 %
Übertragungsbereich (bezogen auf DIN-Toleranzfeld) Fe-Band CrO_2-Band Reineisenband	**Frequency response** (referred to DIN tolerance) Fe tape CrO_2 tape Metal tape	**Plage de transmission** (par rapport à la zone de tolérance DIN) Bande Fe Bande CrO_2 Bande fer pur	**Banda di frequenza** (relativo al campo di tolleranza DIN) nastro Fe nastro CrO_2 nastro ferro puro	25–16000 Hz 25–18000 Hz 25–19000 Hz
Ruhegeräusch Spannungsabstand mit Dolby NR Fe-Band CrO_2-Band Reineisenband	**Signal/noise ratio** with Dolby NR Fe tape CrO_2 tape Metal tape	**Rapport signal/bruit pondéré** avec Dolby NR Bande Fe Bande CrO_2 Bande fer pur	**Rapporto segnale/disturbi** con Dolby NR nastro Fe nastro CrO_2 nastro ferro puro	B C 65 dB 73 dB 67 dB 75 dB 68 dB 76 dB
Übersprechdämpfung (bei 1000 Hz) zwischen zusammengehörigen Kanälen zwischen Kanälen in Gegenrichtung	**Crosstalk attenuation** (at 1000 Hz) between stereo channels in opposite direction	**Diaphonie** (à 1000 Hz) entre canaux homogènes entre canaux opposés	**Diafonia** (a 1000 Hz) con l'altra traccia stereo con la controtraccia	40 dB 75 dB
Umspulzeit (C 60-Cassetten)	**Rewind time** (C 60 cassettes)	**Durée de bobinage** (Cassettes C 60)	**Tempo di ribobinatura** (per cassette C 60)	90 sec.
Netzspannung Model Europa Model USA/Kanada Model UK	**Mains voltage** European model US/Canadian model UK model	**Tension secteur** Modèle Europe Modèle USA/Canada Modèle Royaume-Uni	**Tensione di rete** modello Europa model Stati Uniti/Canada modello GB	220 V/50 Hz 120 V/60 Hz 240 V/50 Hz
Maße (Breite × Höhe × Tiefe	**Dimensions** (width × height × depth)	**Dimensions** (largeur × hauteur × profondeur)	**Dimensioni** (larghezza × altezza × profondità)	440 × 122 × 303 mm

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921 615 0291

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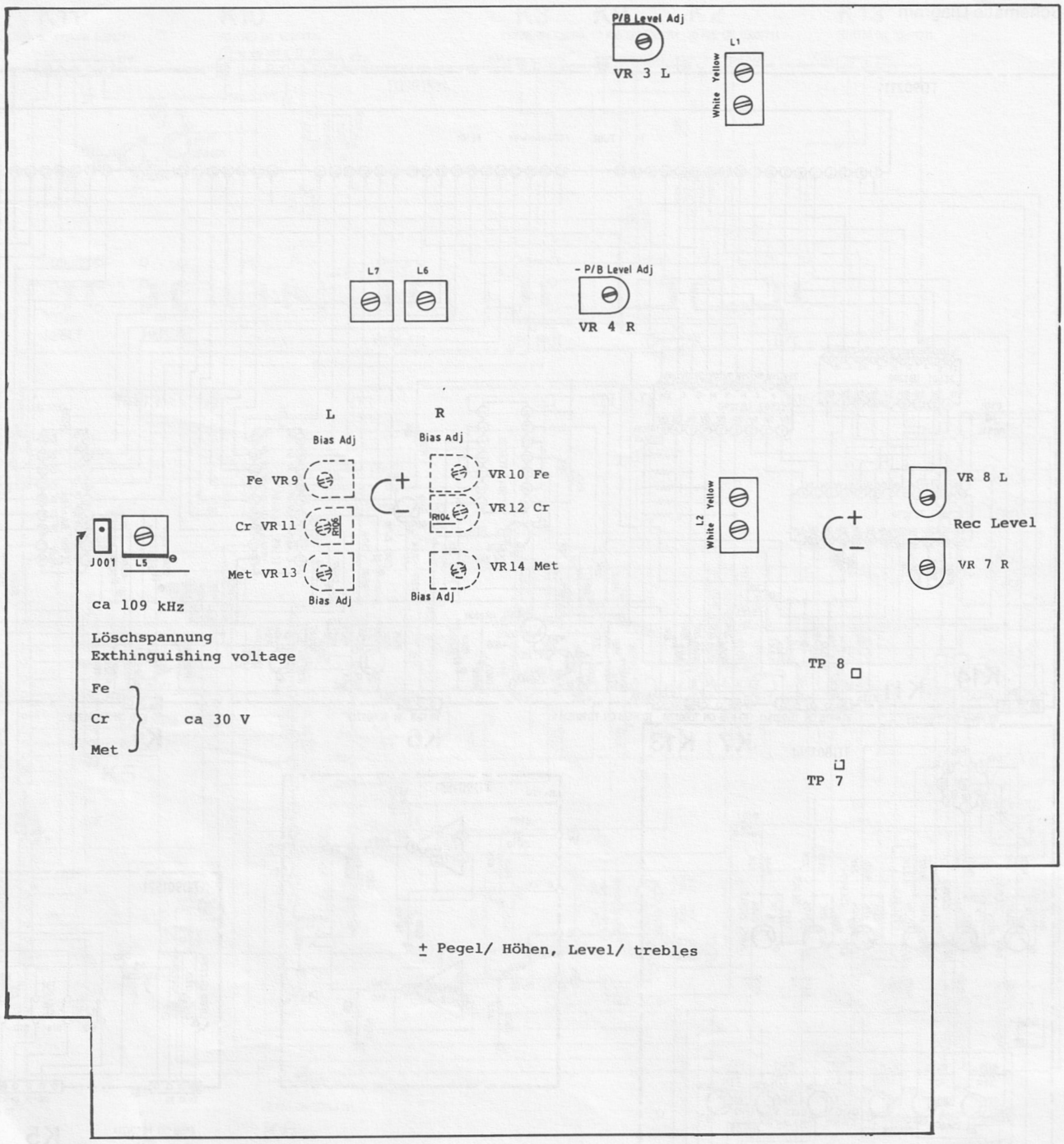
Abgleichanleitung CC 5850

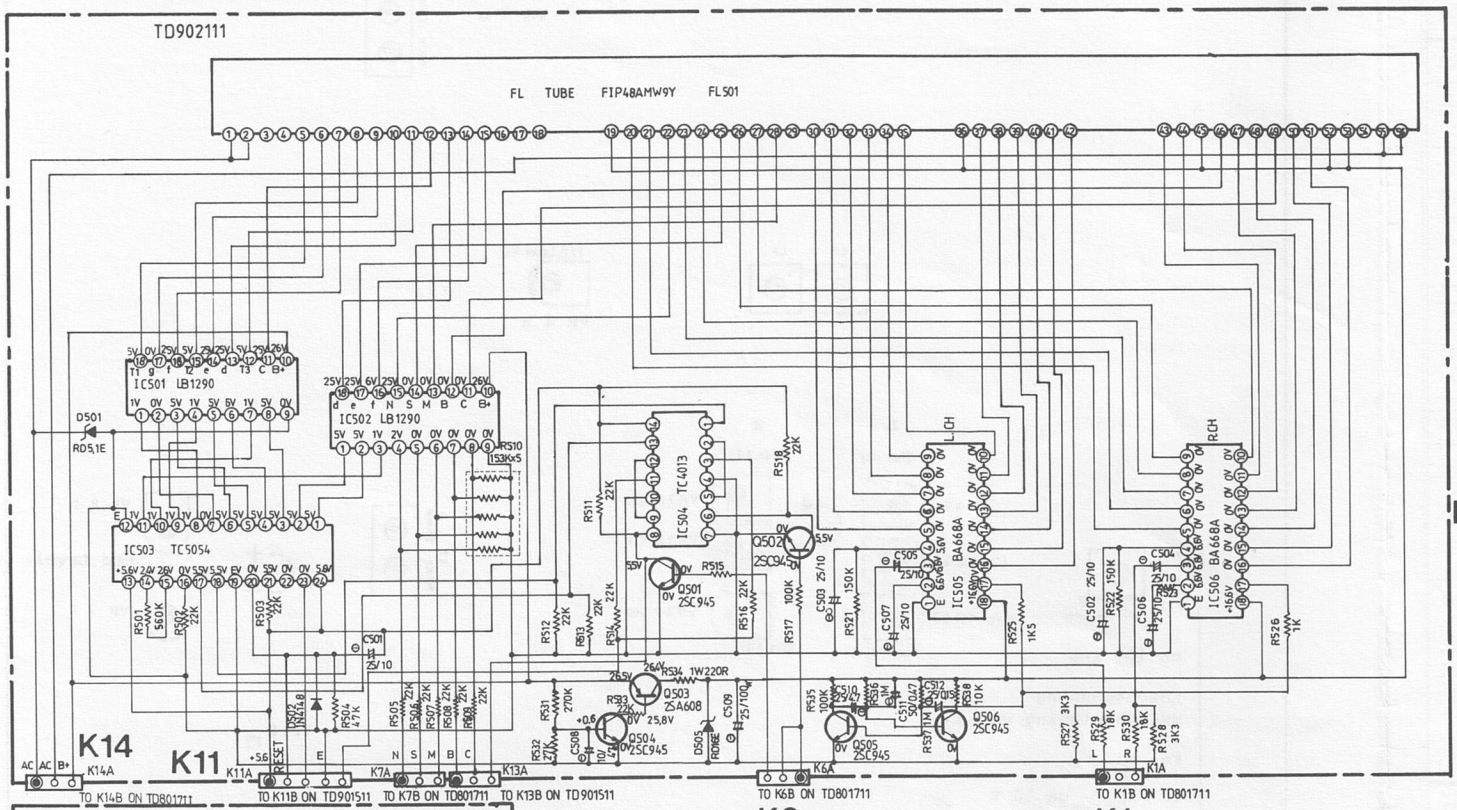
Signalquelle	Einstellung Gerät	Einstellung Signalquelle	Anzeigegerät Anschluß	Abgleichposition	Abgleich, Bemerkung
Azimut (Cassettenschachtdeckel nach oben abziehen)					
Meßcassette	Dolby: OFF	10 kHz	NF-Voltmeter an OUTPUT	Azimut-Schraube links neben dem Kopf	Maximum mit Lack sichern
Bandgeschwindigkeit					
Meßcassette	Dolby: OFF	3150 Hz	Frequenzzähler an OUTPUT	Capston-Motor Rückseite	3150 Hz
Wiedergabepegel					
Meßcassette Dolby Pegel	Dolby: OFF	400 Hz	NF-Voltmeter an OUTPUT	VR 3 L VR 4 R	710 mV
Aufnahmepegel					
NF-Generator an INPUT LEFT/RIGHT	Dolby: OFF Record: ON Cr Tape	400 Hz ca. 60 mV	NF-Voltmeter an OUTPUT	Record-Levelsteller Maximum	710 mV
				VR 7 L VR 8 R	710 mV (bei Play)
HF-Vormagnetisierung					
NF-Generator an INPUT LEFT/RIGHT	Dolby: OFF Record: ON Metal Tape CrO_2 Tape Fe Tape	12 kHz ca. 60 mV – 20 dB	NF-Voltmeter an OUTPUT	Record-Levelsteller Maximum	71 mV
				Metal VR 13 L VR 14 R CrO_2 VR 11 L VR 12 R Fe VR 9 L VR 10 R	71 mV (bei Play)
Nach dem Einstellen der Vormagnetisierung ist nochmals der Aufnahmepegel zu überprüfen. Bei Abweichung (über 1 dB) ist der Abgleich, Aufnahmepegel und HF-Vormagnetisierung nochmals zu wiederholen.					
HF-Oszillator					
Metal Cassette	Record: ON		NF-Voltmeter J 001	L 5	109 kHz
HF-Sperrkreis					
Cassette Metal	Record: ON		NF-Voltmeter an TP 7 R/TP 8 L	L 6 L L 7 R	Minimum
19 kHz Pilot-Signal-Filter					
NF-Generator an INPUT LEFT/RIGHT	Dolby: OFF Record: ON MPX: ON Fe Tape	19 kHz ca. 60 mV	NF-Voltmeter an OUTPUT	Record-Levelsteller Maximum	Minimum
				L 1 L 2	

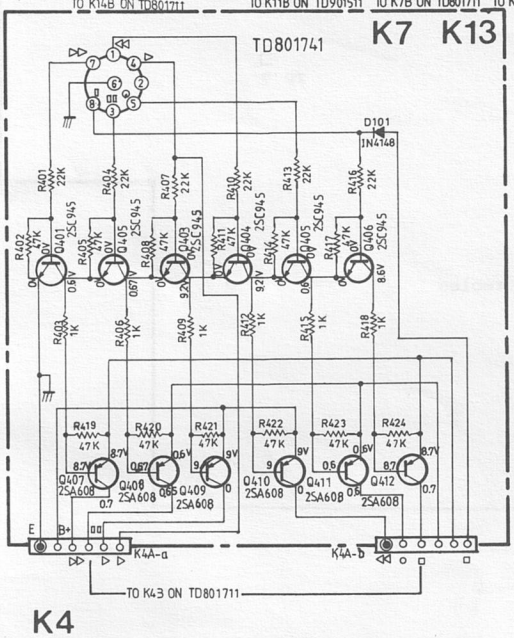
Tuning Instructions for CC 5850

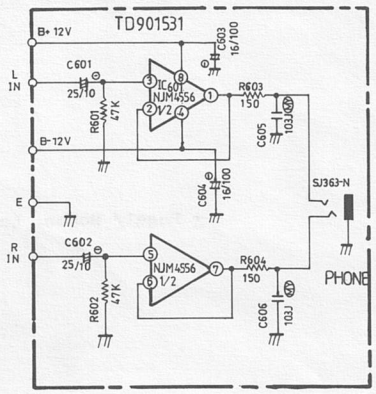
Signal source	Equipment setting	Signal source setting	Connection of measuring instrument	Item to be tuned	Tuning, Remarks
Azimuth (lift off cover over cassette slot)					
Test cassette	Dolby: OFF	10 kHz	AF voltmeter to OUTPUT	Azimuth screw to left of the head	Use lacquer to fix at maximum
Tape speed					
Test cassette	Dolby: OFF	3150 Hz	Frequency counter to OUTPUT	Capstan motor rear	3150 Hz
Playback level					
Test cassette Dolby level	Dolby: OFF	400 Hz	AF voltmeter to OUTPUT	VR 3 L VR 4 R	710 mV
Recording level					
AF generator to INPUT LEFT/RIGHT	Dolby: OFF Record: ON Cr tape	400 Hz approx. 60 mV	AF voltmeter to OUTPUT	Record level control maximum	710 mV
				VR 7 L VR 8 R	710 mV (during play)
RF premagnetization					
AF generator to INPUT LEFT/RIGHT	Dolby: OFF Record: ON Metal tape CrO_2 tape Fe tape	12 kHz approx. 60 mV -20 dB	AF voltmeter to OUTPUT	Record level control maximum	71 mV
				Metal VR 13 L VR 14 R CrO_2 VR 11 L VR 12 R Fe VR 9 L VR 10 R	71 mV (during play)
Check the recording level again after setting the premagnetization. If it deviates (by more than 1 dB), repeat tuning, recording level and RF premagnetization.					
RF oscillator					
Metal Cassette	Record: ON		AF voltmeter J 001	L5	109 kHz
RF trap					
Cassette Metal	Record: ON		AF voltmeter to TP 7 R/TP 8 L	L 6 L L7 R	Minimum
19-kHz pilot-signal filter					
AF generator to INPUT LEFT/RIGHT	Dolby: OFF Record: ON MPX: ON Fe tape	19 kHz approx. 60 mV	AF voltmeter to OUTPUT	Record level control maximum	Minimum
				L1 L2	

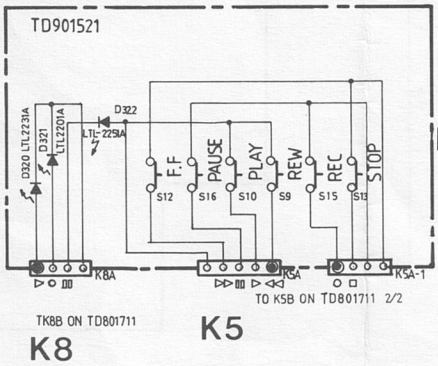

P/B Level Adj
VR 3 L
L1
White Yellow
L7
L6
- P/B Level Adj
VR 4 R
L
R
Bias Adj
Bias Adj
Fe VR9
Cr VR11
Met VR13
Bias Adj
VR10 Fe
VR12 Cr
VR14 Met
Bias Adj
J001
L5
ca 109 kHz
Löschspannung
Exthinguishing voltage
Fe
Cr
Met
ca 30 V
L2
White Yellow
VR 8 L
Rec Level
VR 7 R
TP 8
TP 7
± Pegel/ Höhen, Level/ trebles

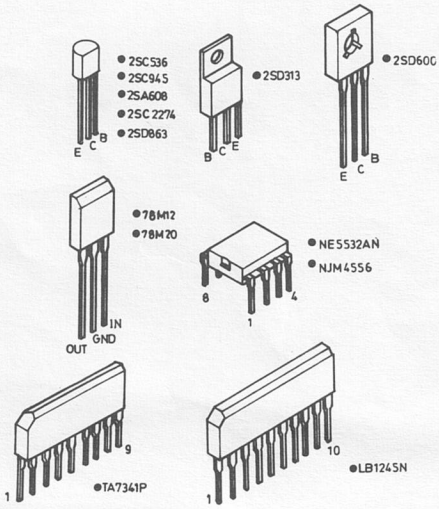
Schematic Diagram

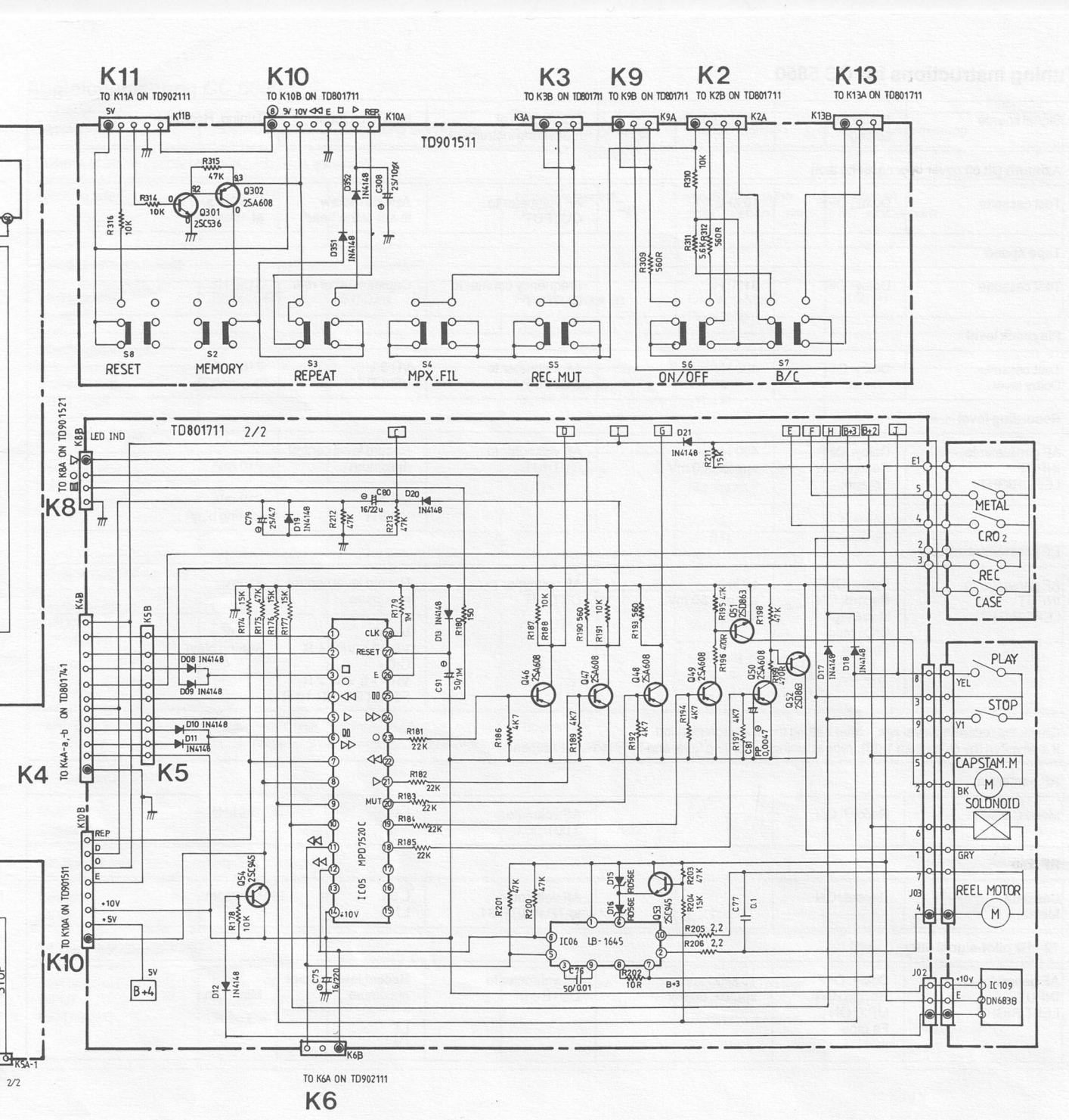


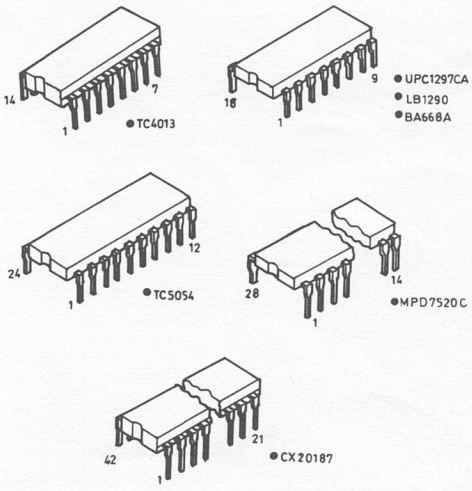


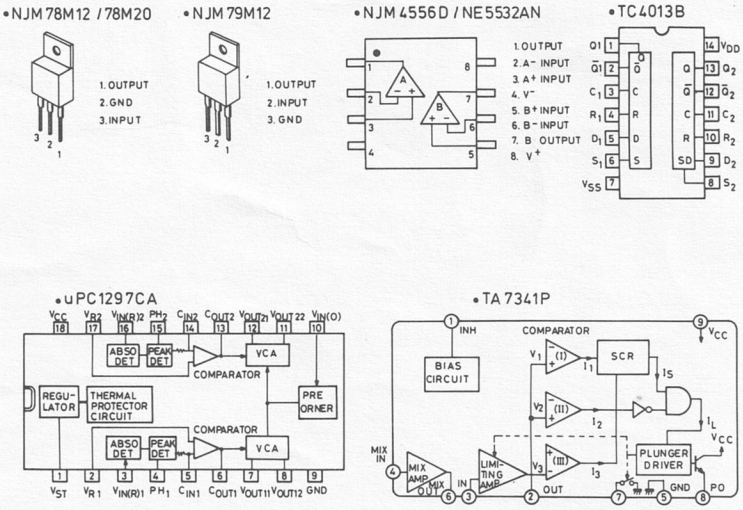


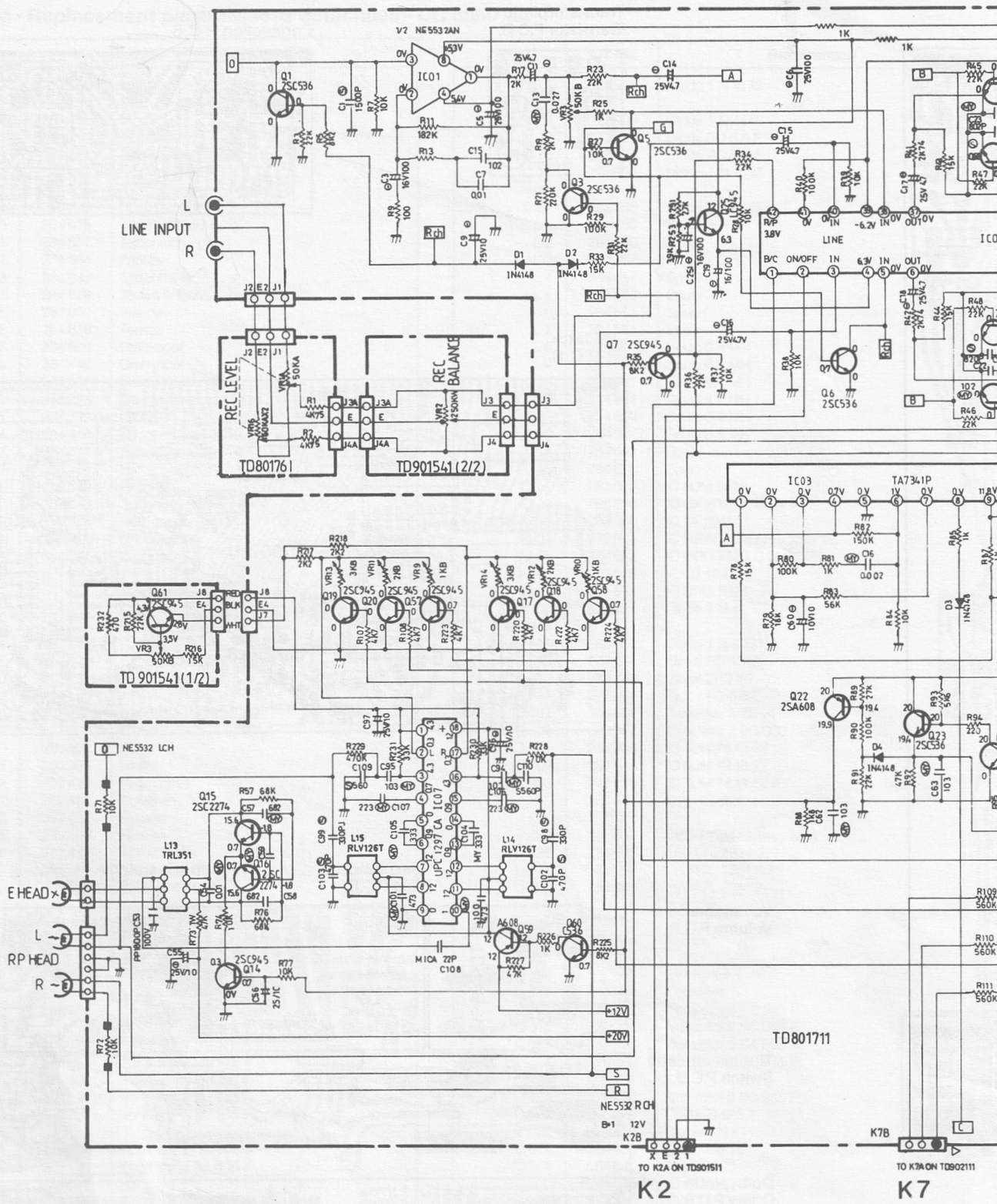




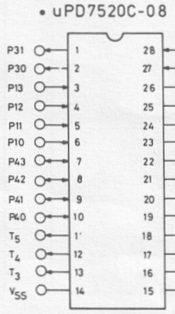

K11
TO K11A ON TD902111
K10
TO K10B ON TD801711
K3
TO K3B ON TD801711
K9
TO K9B ON TD801711
K2
TO K2B ON TD801711
K13
TO K13A ON TD801711
TD901511
RESET
MEMORY
REPEAT
MPX.FIL
REC.MUT
ON/OFF
B/C
TD801711 2/2
LED IND
TO K8A ON TD901521
K8
TO K4A-a,-b ON TD801741
K4
K5
TO K10A ON TD901511
K10
TO K6A ON TD902111
K6
ICOS MPD7520C
IC06 LB-1645
IC109 DN6838
METAL
CRO 2
REC
CASE
PLAY
STOP
CAPSTAM.M
SOLDNOID
REEL MOTOR


TC4013
UPC1297CA
LB1290
BA668A
TC5054
MPD7520C
CX20187

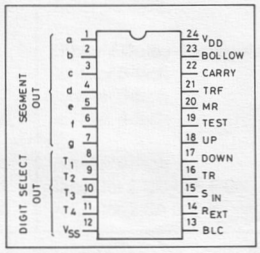

NJM 78M12 / 78M20
1. OUTPUT
2. GND
3. INPUT
NJM 79M12
1. OUTPUT
2. INPUT
3. GND
NJM 4556D / NE5532AN
1. OUTPUT
2. A- INPUT
3. A+ INPUT
4. V-
5. B+ INPUT
6. B- INPUT
7. B OUTPUT
8. V+
TC4013B
uPC1297CA
TA 7341P



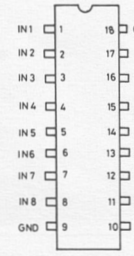
• uPD7520C-08

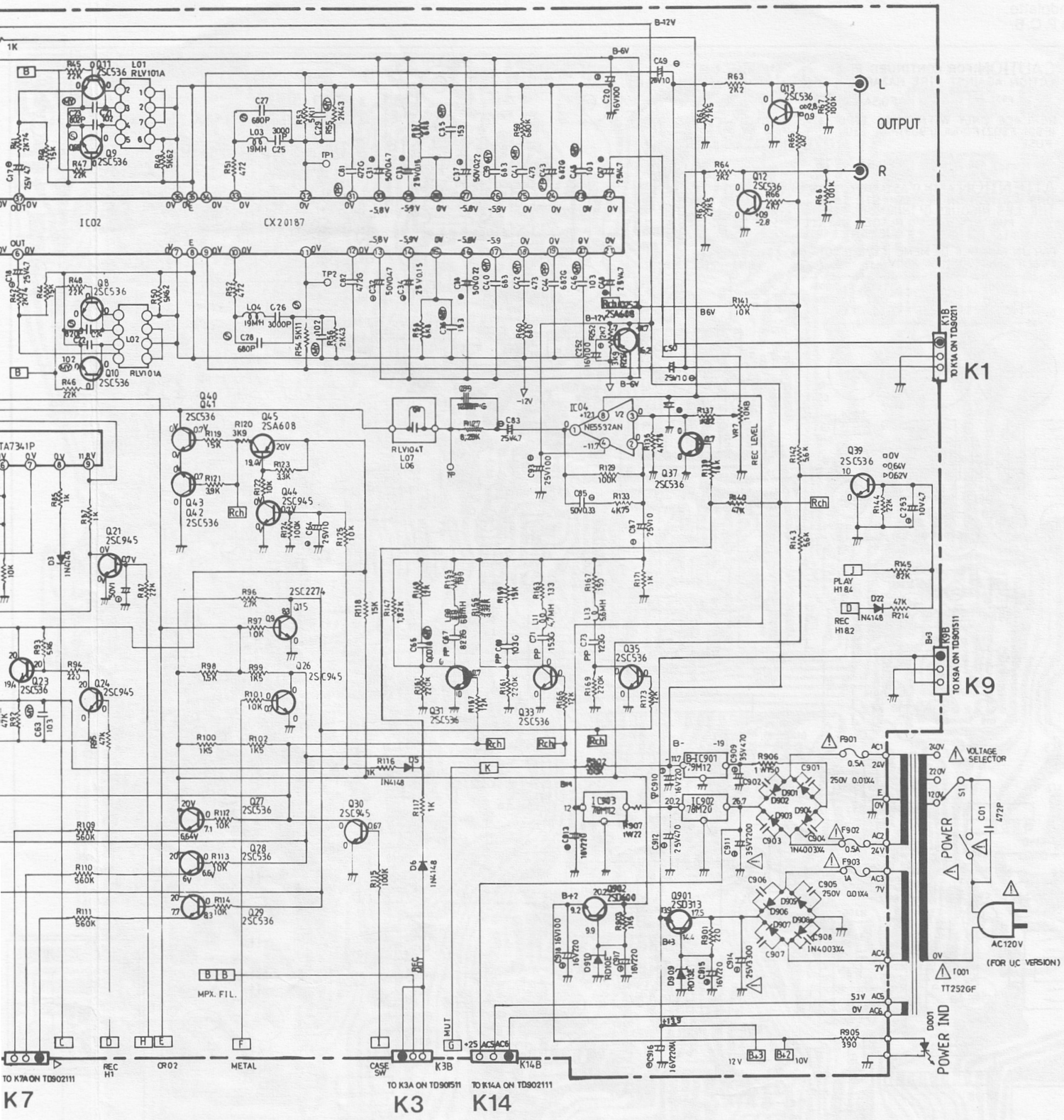


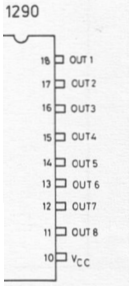
• TC5054P



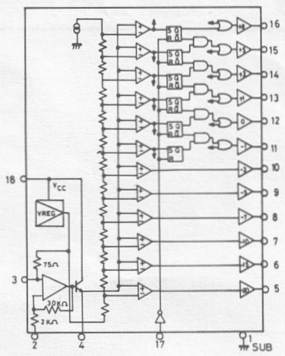
• LB1290



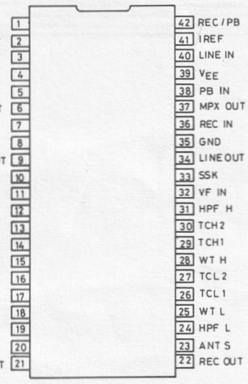


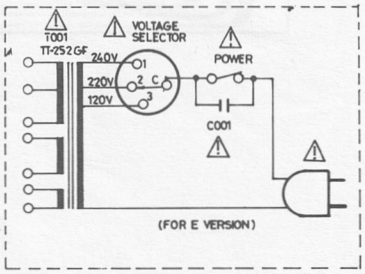


• BA 668A

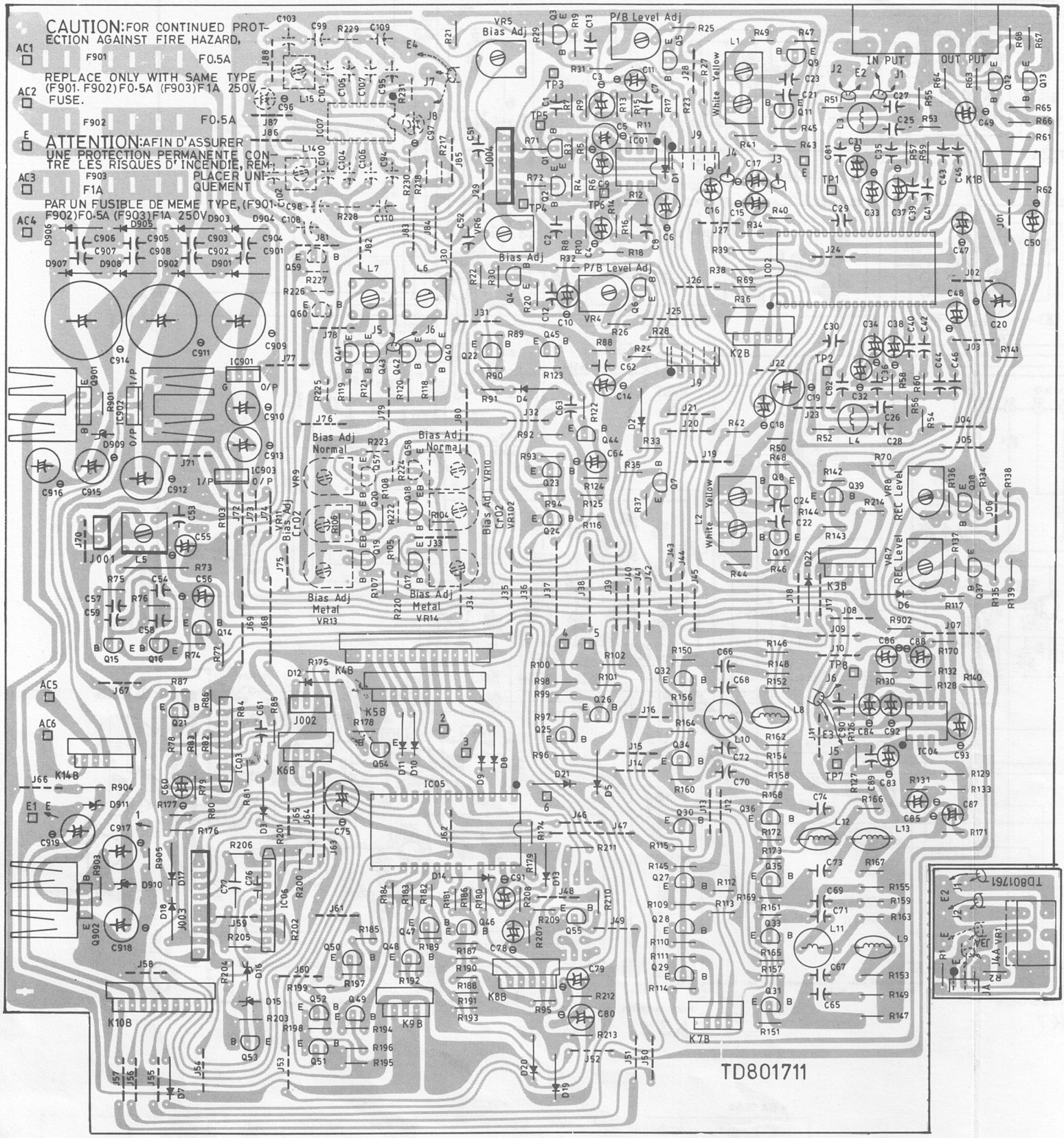


•CX 20187

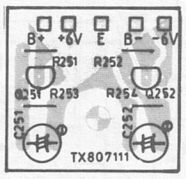




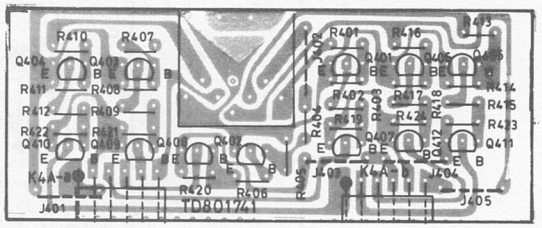
Grundplatte
Main P. C. B.



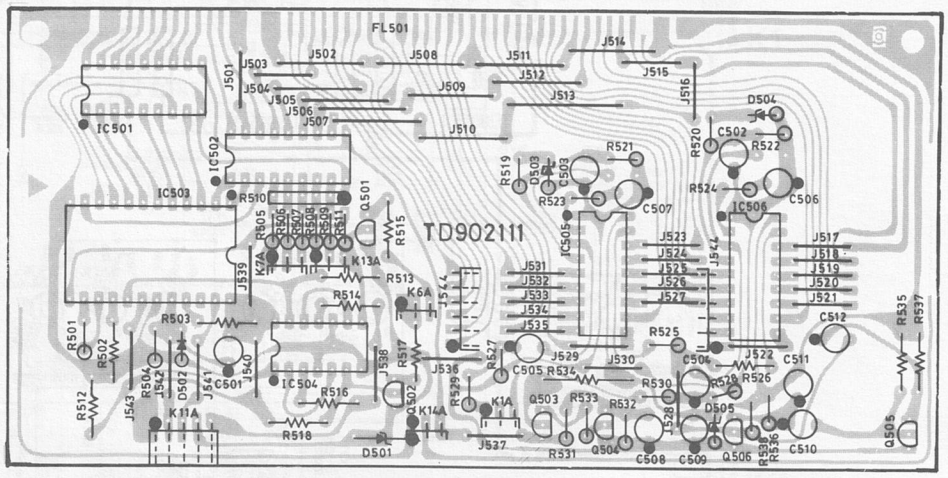
Transistorplatte
Transistor P.C.B.



Anschlußplatte
Connection-P. C. B.



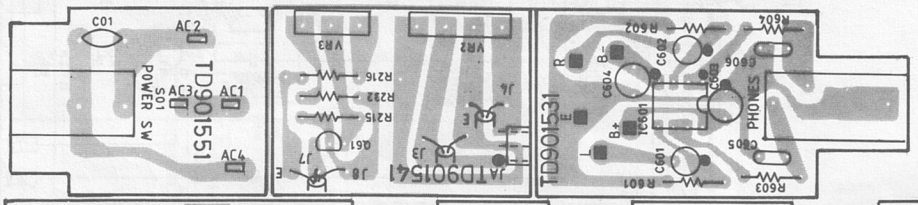
µP-Platte
µP-P. C. B.



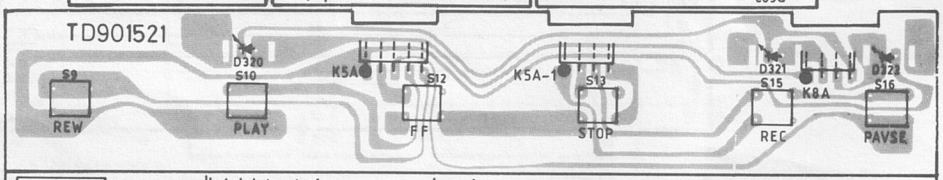
Biasplatte
Bias P.C.B.

Kopfhörerplatte
Phones P.C.B.

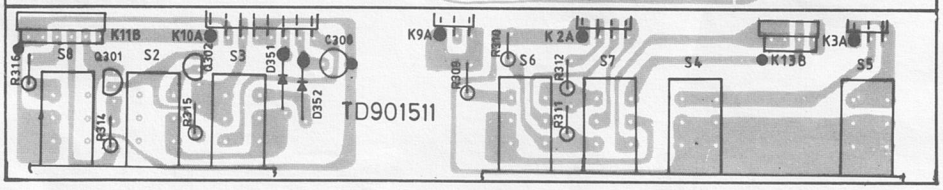
Volumeplatte
Volume P.C.B.

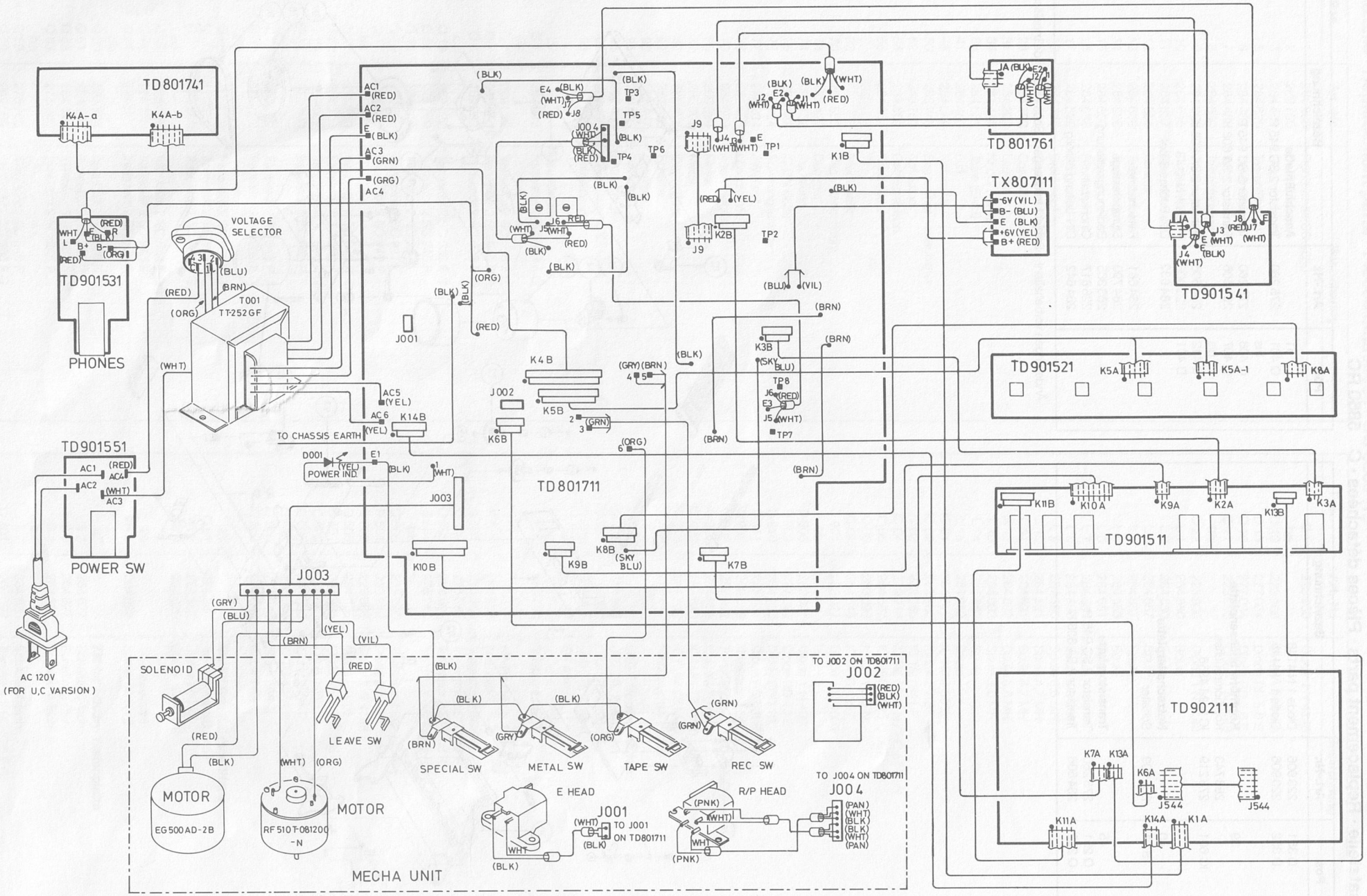


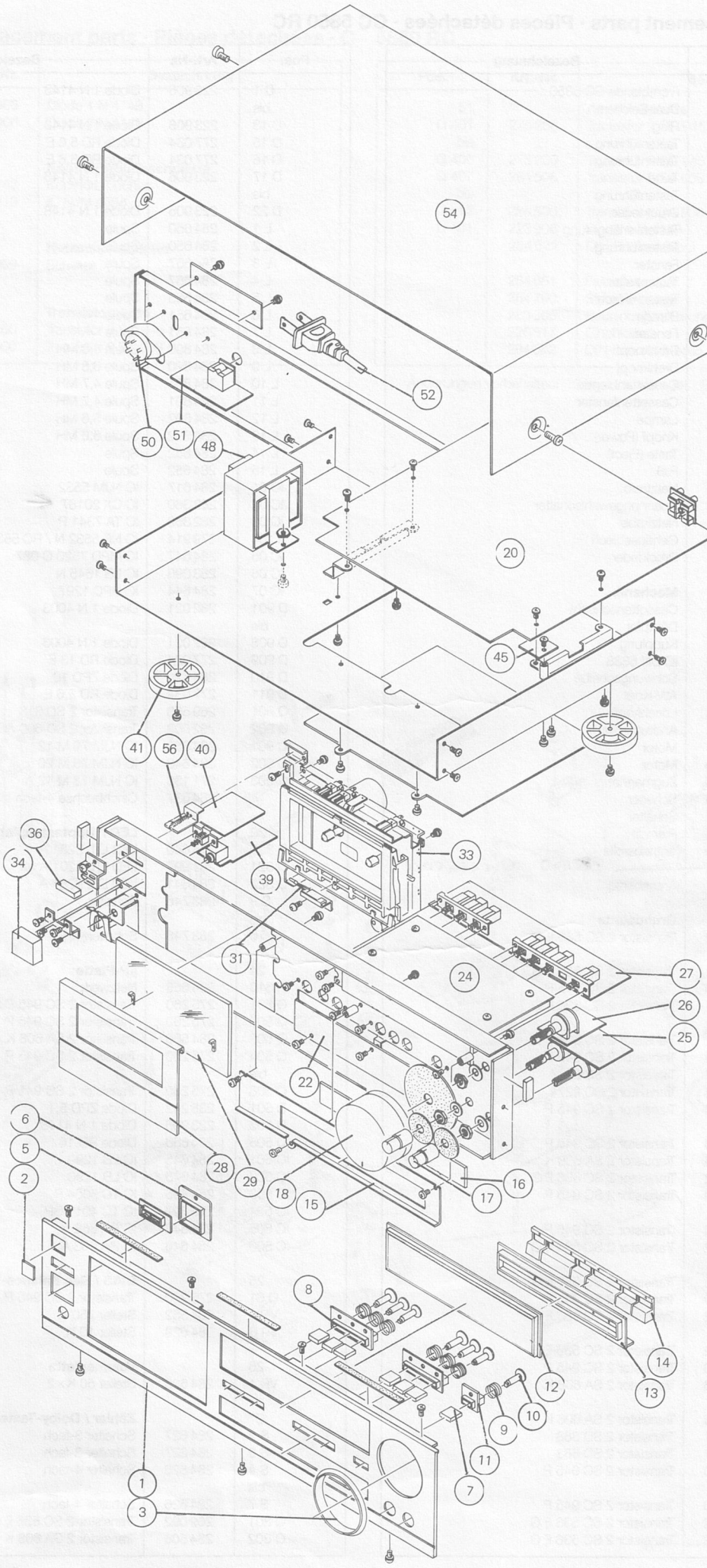
Tipptastenplatte
Switch P.C.B.



Dolbyplatte
Dolby P.C.B.




TD801741
K4A-a
K4A-b
TD901531
PHONES
VOLTAGE SELECTOR
T001
TT-252GF
J001
J002
J003
J004
K4B
K5B
K6B
K14B
TO CHASSIS EARTH
D001
POWER IND.
TD801711
TD901551
POWER SW
AC 120V
(FOR U,C VARSION)
K8B
K9B
K10B
K7B
K3B
K2B
K1B
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TX807111
-6V (VIL)
B- (BLU)
E (BLK)
+6V (YEL)
B+ (RED)
TD801761
TD901541
TD901521
K5A
K5A-1
K8A
TD901511
K11B
K10A
K9A
K2A
K13B
K3A
TD902111
K7A
K13A
K6A
J544
K11A
K14A
K1A
SOLENOID
LEAVE SW
SPECIAL SW
METAL SW
TAPE SW
REC SW
MOTOR
EG500AD-2B
RF510T-08120
-N
E HEAD
R/P HEAD
TO J002 ON TD801711
J002
TO J004 ON TD801711
J004
TO J001 ON TD801711
J001
MECHA UNIT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Ersatzteile · Replacement parts · Pièces détachées · CC 5850 RC

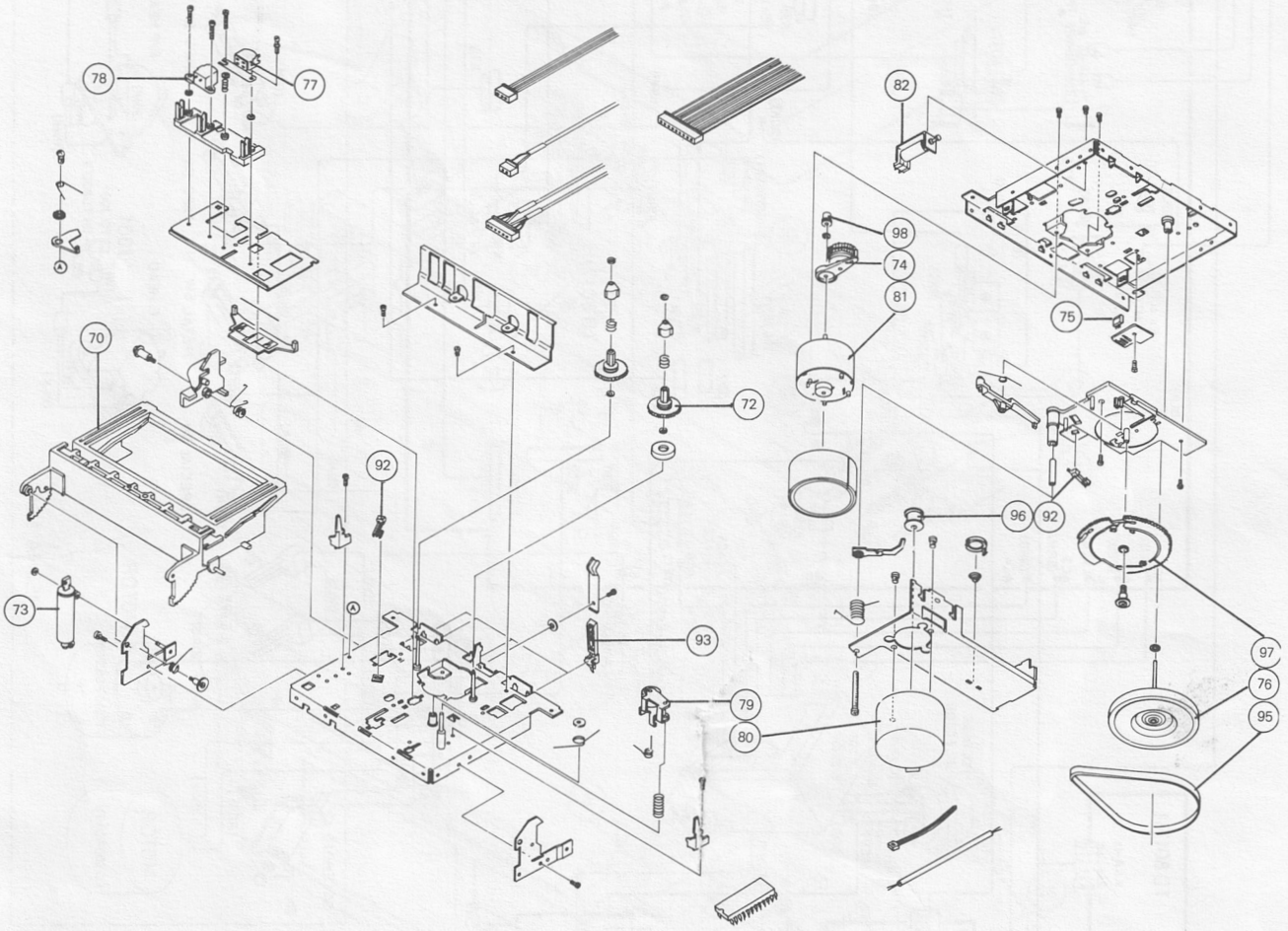
Pos.	Art.-Nr.	Bezeichnung
1	284 885	Frontblende CC 5850
2	283 750	Dual-Zeichen
3	284 452	Ring
5	284 630	Tastenführung
6	284 487	Tastenführung
7	284 488	Taste
8	284 559	Tastenführung
9	284 880	Druckfeder
10	284 515	Tastenverlängerung
11	284 557	Tastenführung
12	284 854	Fenster
13	284 633	Tastenhalter
14	284 528	Tasten 6-fach
15	284 600	Blende
16	284 638	Fenster
17	284 529	Drehknopf
18	284 446	Drehknopf
28	284 601	Cassettenblende
29	284 233	Cassettenfenster
31	284 232	Lampe
34	284 448	Knopf (Power)
36	284 631	Taste (Eject)
41	284 460	Fuß
48	284 649	Netztrafo
50	283 748	Spannungswahlschalter
52	243 750	Netzkabel
54	284 660	Gehäuseblech
56	284 654	Druckfeder
33		**Mechanik**
70	284 858	Cassettenschacht
73	282 421	Dämpfer
74	282 422	Kupplung
75	263 029	IC DN 6838
76	282 424	Schwungscheibe
77	284 234	AW-Kopf
78	282 426	Löschkopf
79	284 893	Andruckrolle
80	280 394	Motor
81	280 399	Motor
82	282 428	Zugmagnet
92	282 436	Schalter
93	282 437	Schalter
95	280 406	Riemen
96	282 439	Antriebsrolle
~~97~~	~~280 490~~	~~Riemen~~ 282440 Umwendrad
98	282 441	Antriebsrad
20		**Grundplatte**
Q 1	269 092	Transistor 2 SC 536 F, G
bis		
Q 6	269 092	Transistor 2 SC 536 F, G
Q 7	275 260	Transistor 2 SC 945 P
Q 8	269 092	Transistor 2 SC 536 F, G
bis		
Q 13	269 092	Transistor 2 SC 536 F, G
Q 14	275 260	Transistor 2 SC 945 P
Q 15	284 508	Transistor 2 SC 2274
Q 16	284 508	Transistor 2 SC 2274
Q 17	275 260	Transistor 2 SC 945 P
bis		
Q 21	275 260	Transistor 2 SC 945 P
Q 22	284 506	Transistor 2 SA 608 K
Q 23	269 092	Transistor 2 SC 536 F, G
Q 24	275 260	Transistor 2 SC 945 P
bis		
Q 26	275 260	Transistor 2 SC 945 P
Q 27	269 092	Transistor 2 SC 536 F, G
bis		
Q 29	269 092	Transistor 2 SC 536 F, G
Q 30	275 260	Transistor 2 SC 945 P
Q 31	269 092	Transistor 2 SC 536 F, G
bis		
Q 43	269 092	Transistor 2 SC 536 F, G
Q 44	275 260	Transistor 2 SC 945 P
Q 45	284 506	Transistor 2 SA 608 K
bis		
Q 50	284 506	Transistor 2 SA 608 K
Q 51	284 581	Transistor 2 SD 863
Q 52	284 581	Transistor 2 SD 863
Q 53	275 260	Transistor 2 SC 945 P
bis		
Q 58	275 260	Transistor 2 SC 945 P
Q 59	269 092	Transistor 2 SC 536 F, G
Q 60	269 092	Transistor 2 SC 536 F, G

Pos.	Art.-Nr.	Bezeichnung
D 1	223 906	Diode 1 N 4148
bis		
D 13	223 906	Diode 1 N 4148
D 15	277 034	Diode RD 5,6 E
D 16	277 034	Diode RD 5,6 E
D 17	223 906	Diode 1 N 4148
bis		
D 22	223 906	Diode 1 N 4148
L 1	284 650	Spule
L 2	284 650	Spule
L 3	284 657	Spule
L 4	284 657	Spule
L 5	284 653	Spule
L 6	284 651	Spule
L 7	284 651	Spule
L 8	284 890	Spule 6,8 MH
L 9	284 890	Spule 6,8 MH
L 10	284 891	Spule 4,7 MH
L 11	284 891	Spule 4,7 MH
L 12	284 892	Spule 5,6 MH
L 13	284 892	Spule 5,6 MH
L 14	284 652	Spule
L 15	284 652	Spule
IC 01	284 617	IC NJM 5532
IC 02	282 360	IC CX 20187
IC 03	282 360	IC TA 7341 P
IC 04	279 914	IC NE 5532 N / RC 5532 N
IC 05	284 647	IC MPD 7520 C 087
IC 06	283 098	IC LB 1645 N
IC 07	284 644	IC UPC 1297
D 901	282 021	Diode 1 N 4003
bis		
D 908	282 021	Diode 1 N 4003
D 909	277 024	Diode RD 13 E
D 910	284 723	Diode ZPD 10
D 911	277 034	Diode RD 5,6 E
Q 901	269 558	Transistor 2 SD 313
Q 902	282 002	Transistor 2 SD 600 / EGC 373
IC 901	284 889	IC NJM 79 M 12
IC 902	284 648	IC NJM 78 M 20
IC 903	271 133	IC NJM 78 M 12 A
	284 637	Cinchbuchse 4-fach
22		**LED / Tipptastenplatte**
D 320	284 640	LED LTL 2231 A
D 321	281 997	LED LTL 2201 A rot
D 322	284 641	LED LTL 2251 A
S 9	283 746	Schalter
bis		
S 16	283 746	Schalter
24		**µP-Platte**
R 510	284 658	Netzwerk
Q 501	275 260	Transistor 2 SC 945 P
Q 502	275 260	Transistor 2 SC 945 P
Q 503	284 506	Transistor 2 SA 608 K
Q 504	275 260	Transistor 2 SC 945 P
bis		
Q 506	275 260	Transistor 2 SC 945 P
D 501	238 242	Diode ZPD 5,1
D 502	223 906	Diode 1 N 4148
D 505	284 656	Diode RD 16
IC 501	284 645	IC LB 1290
IC 502	284 645	IC LB 1290
IC 503	284 455	IC TC 5054 P
IC 504	273 897	IC TC 4013 BP
IC 505	284 646	IC BA 668 A
IC 506	284 646	IC BA 668 A
25		**BIAS / Rec Balance-Platte**
Q 61	275 260	Transistor 2 SC 945 P
VR 2	284 552	Steller 250 K
VR 3	284 629	Steller 10 K
26		**Volumeplatte**
VR 1	284 628	Steller 50 K×2
27		**Zähler / Dolby-Tastenplatte**
S 2	284 627	Schalter 3-fach
S 3	284 627	Schalter 3-fach
S 4	284 626	Schalter 4-fach
bis		
S 7	284 626	Schalter 4-fach
Q 301	269 092	Transistor 2 SC 536 F, G
Q 302	284 506	Transistor 2 SA 608 K

Änderungen vorbehalten! Subject to change! Sous réserve de modification!

Ersatzteile · Replacement parts · Pièces détachées · C 5850 RC

Pos.	Art.-Nr.	Bezeichnung
D 351	223906	Diode 1 N 4148
D 352	223906	Diode 1 N 4148
39		**Kopfhörerbuchsenplatte**
	283743	Kopfhörerbuchse
IC 601	278219	IC NJM 4556
40		**Netzschalterplatte**
S 01	281999	Schalter
45		**Transistorplatte**
Q 251	275260	Transistor 2 SC 945 P
Q 252	284506	Transistor 2 SA 608 K

Pos.	Art.-Nr.	Bezeichnung
51		**Anschlußplatte**
Q 401	275260	Transistor 2 SC 945 P
bis		
Q 406	275260	Transistor 2 SC 945 P
Q 407	284506	Transistor 2 SA 608 K
bis		
Q 412	284506	Transistor 2 SA 608 K
D 401	223906	Diode 1 N 4148
	284632	DIN-Buchse 8-pol
	284661	Faltschachtel
	284790	Styroporeinlage
	283305	Bedienungsanleitung
	226817	Cinchkabel
	284642	DIN-Leitung 8-polig

Änderungen vorbehalten! Subject to change! Sous réserve de modification!