

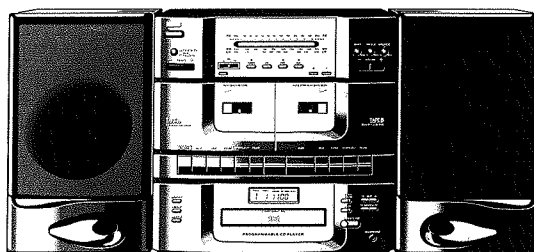
P 1550

CD Mini System SC1060/06/19/28

CS1600/18

Service
Service
Service

'44510424



'44510425

Service Manual

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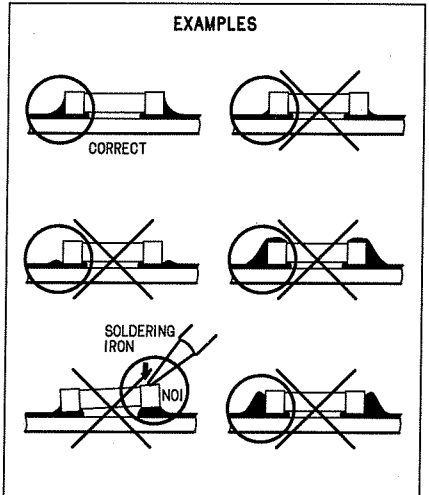
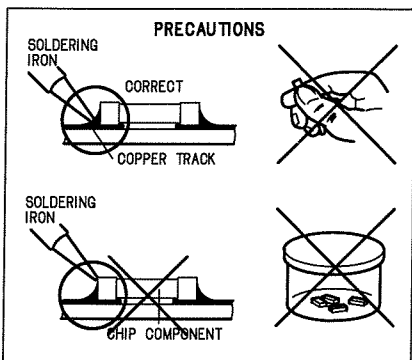
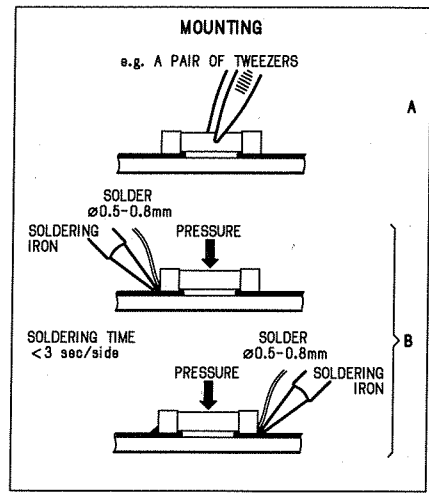
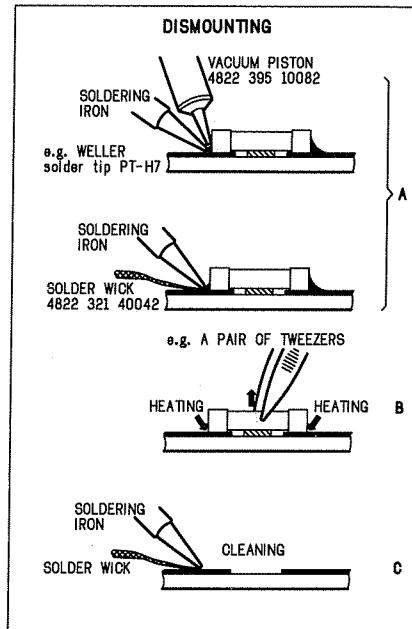
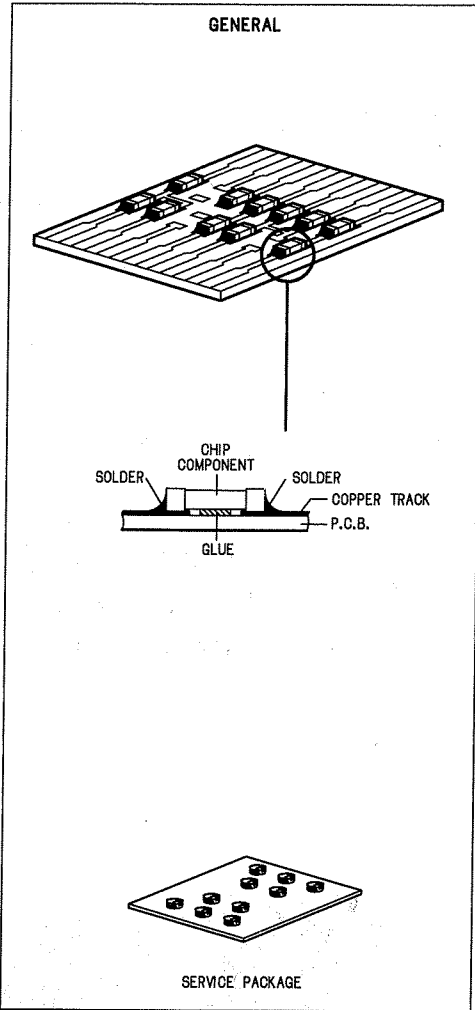
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**CLASS 1
LASER PRODUCT**

HANDLING CHIP COMPONENTS



(GB) WARNING
 All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
 When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools at this potential.

(F) ATTENTION
 Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.
 Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le braceleterti d'une résistance de sécurité.
 Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

(GB)
 Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

(D)
 Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Gerätes darf nicht verändert werden. Für Reparaturen sind Originalersatzteile zu verwenden.

(S) Varning !
 Osynlig laserstrålning när apparaten är öppnad och spårren är urkopplad. Betrakta ej strålen.

(F)
 "Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".



(D) WARNUNG
 Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unsorgfältige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren.
 Sorgen Sie dafür, daß sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind.
 Halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

(I)
 Le norme di sicurezza estigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

(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.

(DK) Advarsel !
 Usynlig laserstrålning ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for strålning.

(NL) WAARSCHUWING
 Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD).
 Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
 Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

(I) AVVERTIMENTO
 Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).
 La loro longevità potrebbe essere fortemente ridotta in caso di non osservazione della più grande cauzione alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialeto a resistenza. Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

(NL)
 Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

(SF) Varoitus !
 Avatussa laitteessa ja suojalukituksen ohitettaessa olet alltiina näkymättömälle laserisäteilylle. Älä katso säteeseen !

SPECIFICATIONS

GENERAL

Mains voltage	:	230V
Mains frequency	:	50Hz
Power consumption	:	25W
Output power	:	2 x 5W
Speaker impedance	:	2 x 4 ohm
Treble control	100Hz :	± 8 dB
Bass control	10KHz :	± 8 dB
AUX input sensitivity	:	400mV
Mic sensitivity	:	-55dB

CASSETTE

Tape speed	:	4.76cm/s ± 3%
Wow & flutter	:	< 0.6 (DIN/W)
Fast-wind time (C60)	:	< 130 sec.
Frequency response	:	125 - 8000Hz
High speed dubbing	:	125 - 6000Hz
Distortion	P/B :	< 2%
	R/P :	< 3%
S/N ratio	:	> 40dB
High speed dubbing	:	> 40dB
Erase ratio	:	> 50dB (w/BPF)
Erase frequency	:	72KHz ± 5KHz

COMPACT DISC

Frequency response	:	40 - 18KHz ± 3dB
Distortion	:	< 0.9%
S/N ratio	:	> 60dB
Channel separation	:	> 40dB
Laser wavelength	:	780 ± 20nm
Laser light power	:	< 0.5mW

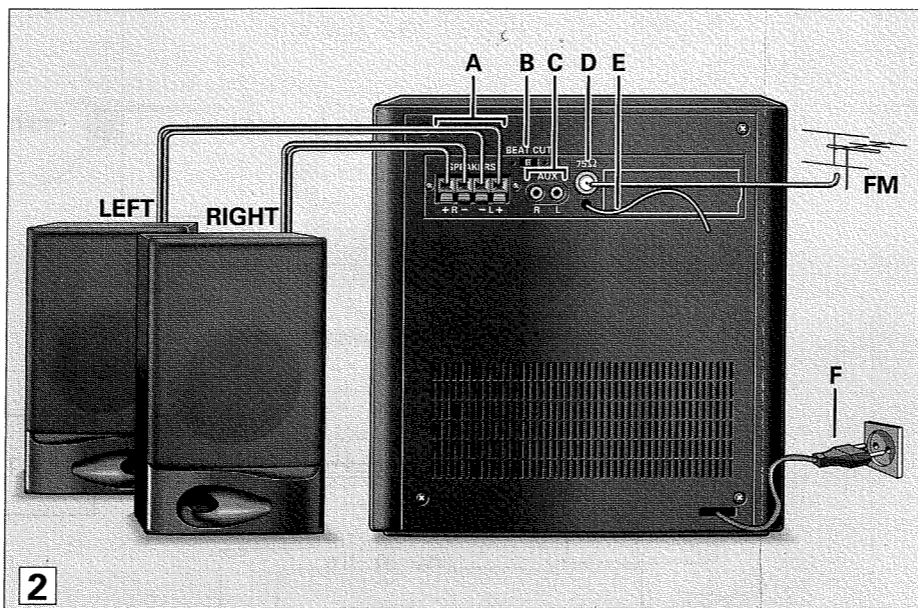
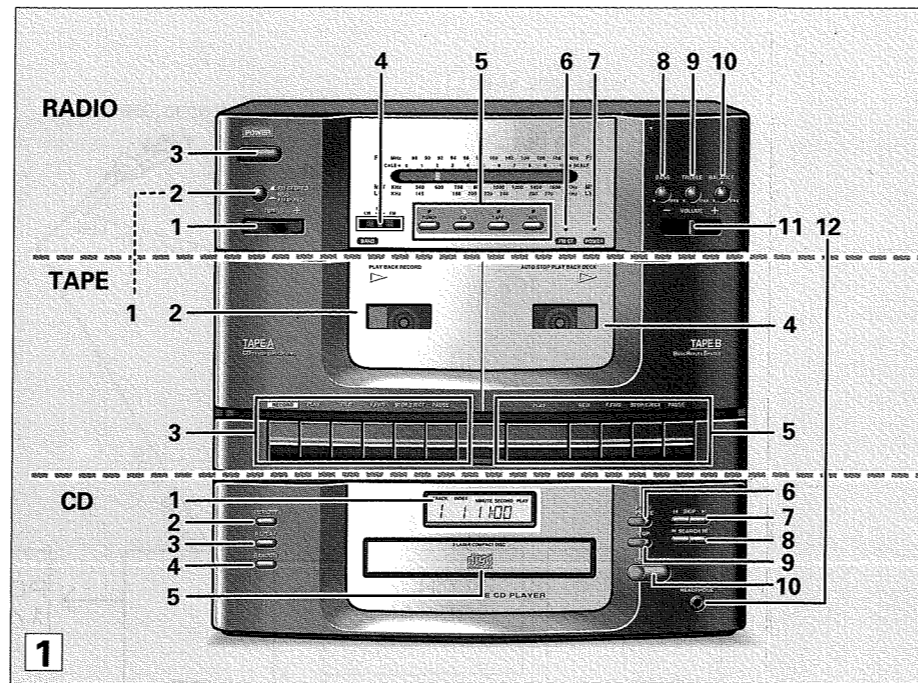
TUNER - FM section

Tuning range	:	87.5 - 108MHz
IF frequency	:	10.7MHz
Sensitivity	:	< 8µV at 30dB S/N
Selectivity	:	> 22dB at 600KHz B.W.
IF rejection	:	> 60dB
Image rejection	:	> 25dB
MPX separation	1KHz :	> 30dB

TUNER - AM section

Tuning range	MW :	523 - 1610KHz
	LW :	153 - 270KHz
IF frequency	:	468 ± 5KHz
Sensitivity	MW :	< 1000µV/m 20dB S/N
	LW :	< 1259µV/m
Selectivity	MW :	> 20dB
IF rejection	MW :	> 40dB
	LW :	> 30dB
Image rejection	MW :	> 25dB
	LW :	> 23dB

CONNECTIONS AND CONTROLS



CASSETTE ADJUSTMENT

Adjustment	Cassette	Recorder position			Measure on	Read on	Adjust with	Adjust to
		SK	Deck 1	Deck 2				
Head Azimuth	8KHz SBC420*	Tape	Play	--	Speaker	mV meter	Left screw of P. head on Deck 1	max. output L = R
		Tape	--	Play	Speaker	mV meter	Left screw of P. head on Deck 2	
Tape Speed	3150Hz SBC420*	Tape /Nor. speed	--	Play	Speaker	Wow and flutter meter	SVR1	**a
		Tape /High speed	--	Play	Speaker	Wow and flutter meter	--	F = 4.8KHz -5.3KHz

RADIO

- TUNING knob** - to tune to radio stations
- FM STEREO/FM MONO selector** (released) for FM STEREO reception (press) for FM MONO reception
- POWER button** - To switch the system on and off.
- BAND** - wave band selector
- Source selector buttons with indicators** TUNER, CD, TAPE or AUX
- FM STEREO indicator** - lights up when receiving an FM stereo station
- POWER ON indicator** - lights up when the system is switched on
- BASS** - to adjust the bass sound
- TREBLE** - to adjust the treble sound
- BALANCE** - to adjust the stereo balance
- VOLUME** - to adjust the volume
- PHONES** - socket for headphones with a 6.3 mm plug. Inserting the plug will disconnect the speakers.

TAPE

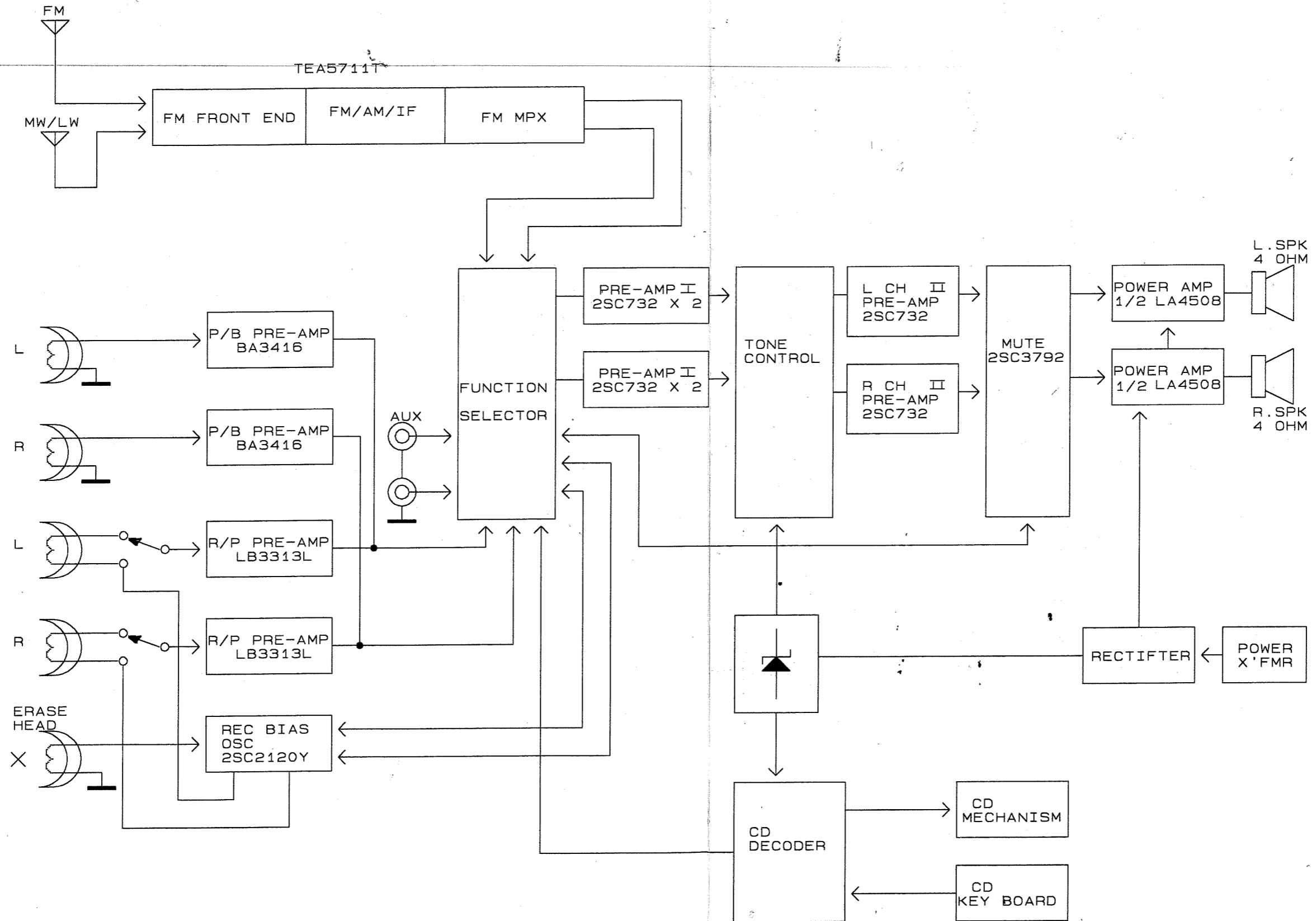
- dubbing speed selector** (released) for normal speed dubbing (pressed) for high speed dubbing
- deck A cassette holder**
- deck A buttons (recording and playback)** PAUSE - pause button STOP/EJECT - stop/eject button F.FWD - fast forward winding REW - fast rewinding PLAY - playback button RECORD - recording and CD SYNCHRO button
- deck B cassette holder**
- deck B buttons (playback only)** PAUSE - pause button STOP/EJECT - stop/eject button F.FWD - fast forward winding REW - fast rewinding PLAY - playback button

CD

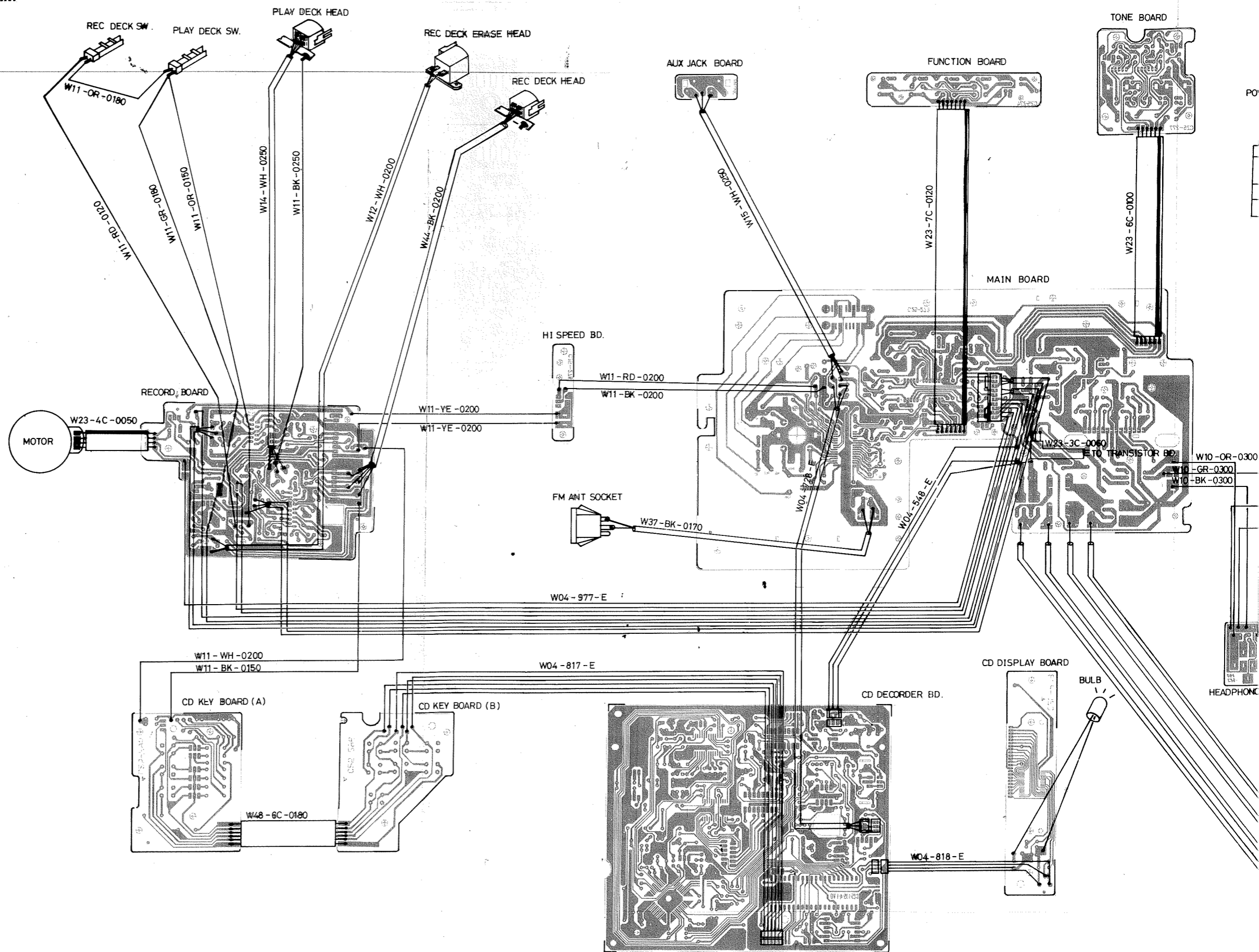
- CD display** TRACK - indicates either the total number of tracks and index numbers on a CD or the track number that is playing MIN / SEC - the elapsed playing time of the running track PROGRAM - lights up when a program is being played ▷ - lights up during play; flashed when play is interrupted (PAUSE) RANDOM - lights up when the RANDOM function is active REPEAT ONE or ALL - lights when the REPEAT function is active
- MEMORY** - to program track numbers
- REPEAT** - to repeat a track or an entire CD
- RANDOM** - to play an entire CD or a CD program in a random order
- CD tray** - for 8 cm and 12 cm CDs
- PLAY/PAUSE** - play and pause button
- SKIP** - to return to the start of a track or to select the next track
- SEARCH** - to search for a particular passage within a track
- STOP** - stop button
- OPEN/CLOSE** - to open and close the CD tray

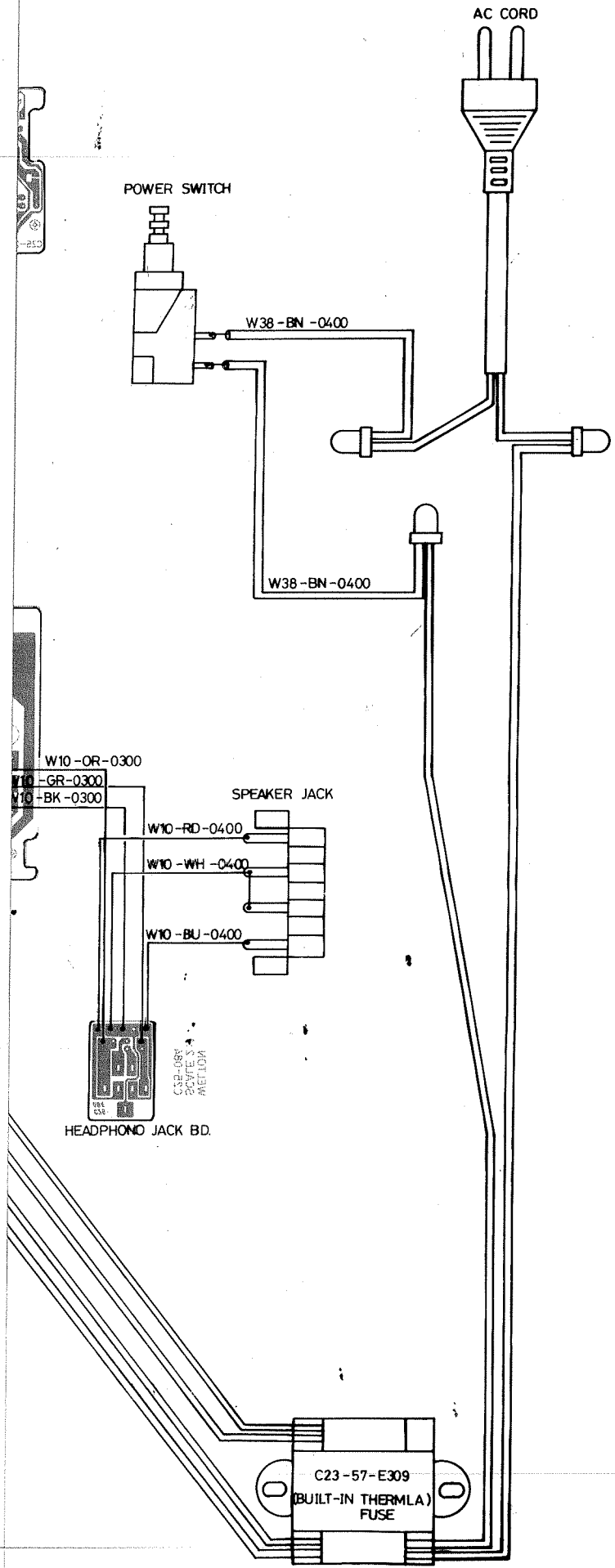
- A SPEAKERS
B BEAT CUT
C AUX
D FM AERIAL 75Ω (not on all versions)
E FM wire antenna (not on all versions)
F MAINS LEAD

BLOCK DIAGRAM

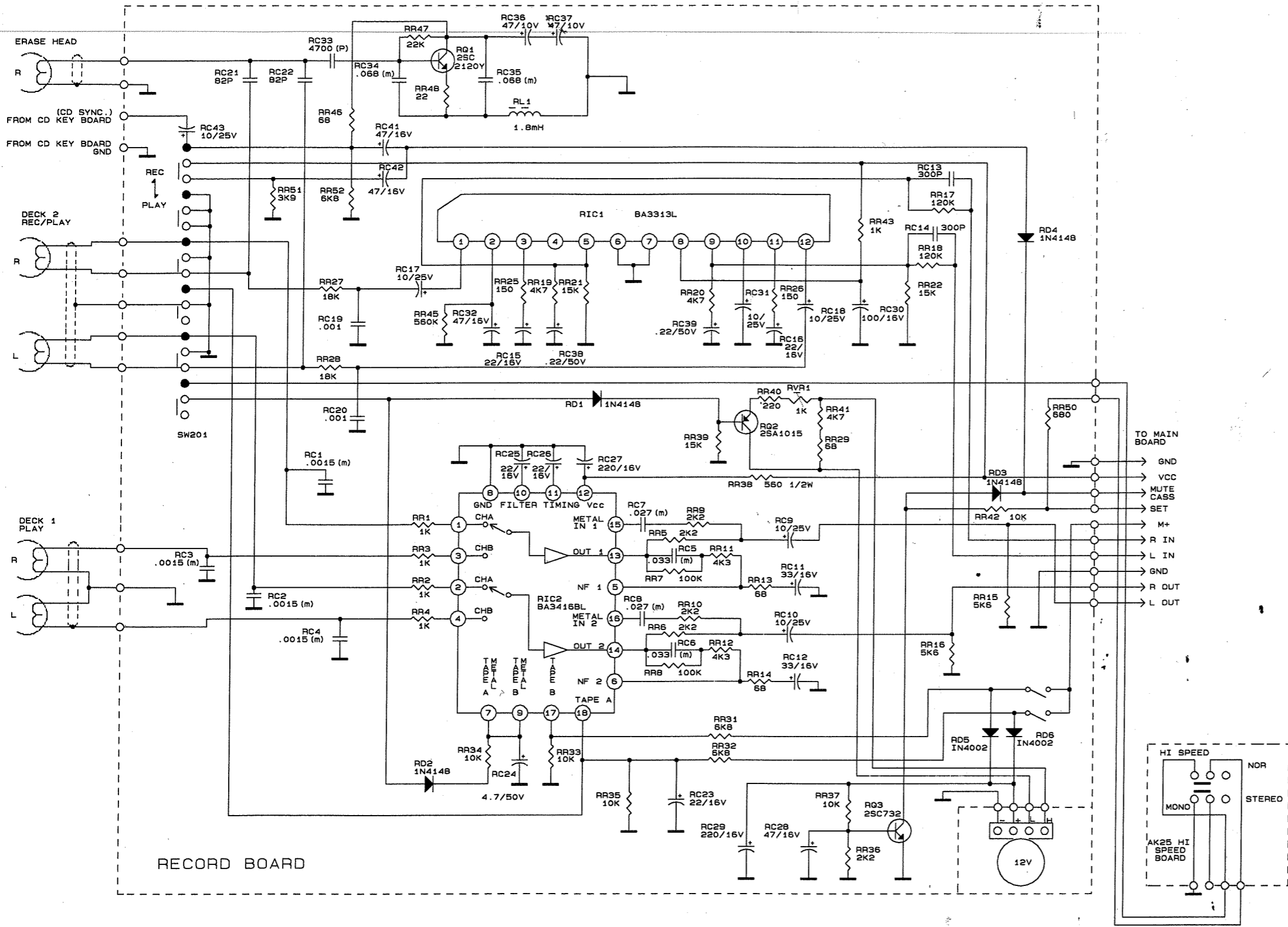


WIRING DIAGRAM

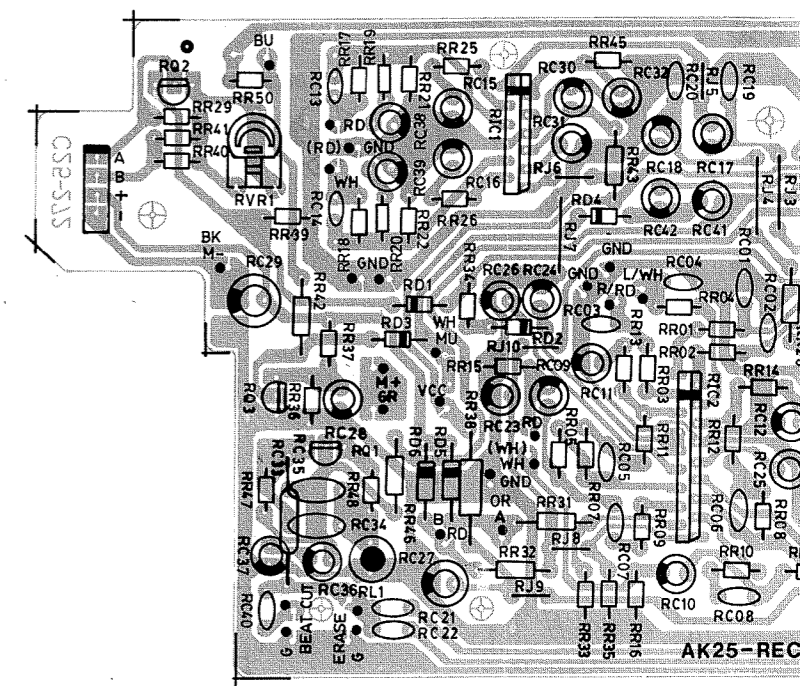




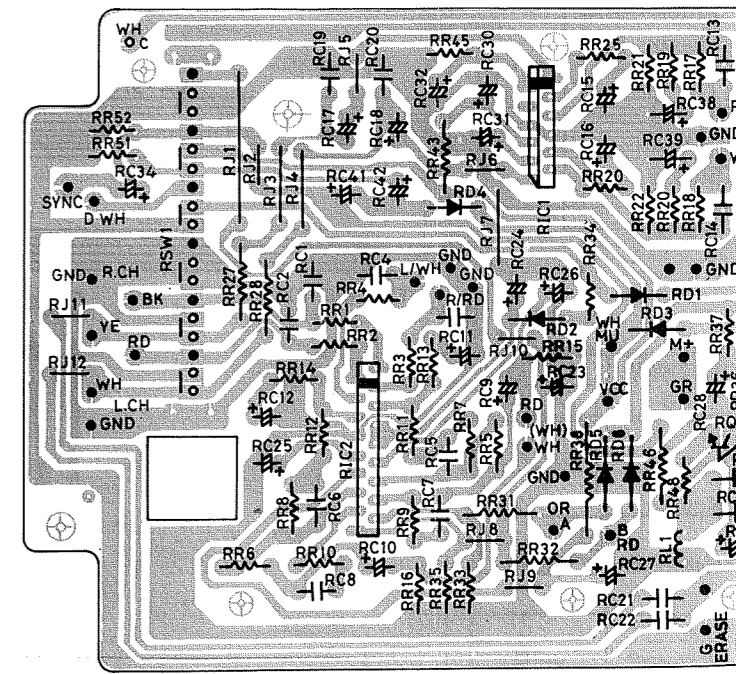
SCHEMATIC DIAGRAM - TAPE DECK



RECORD BOARD (TOP SIDE)

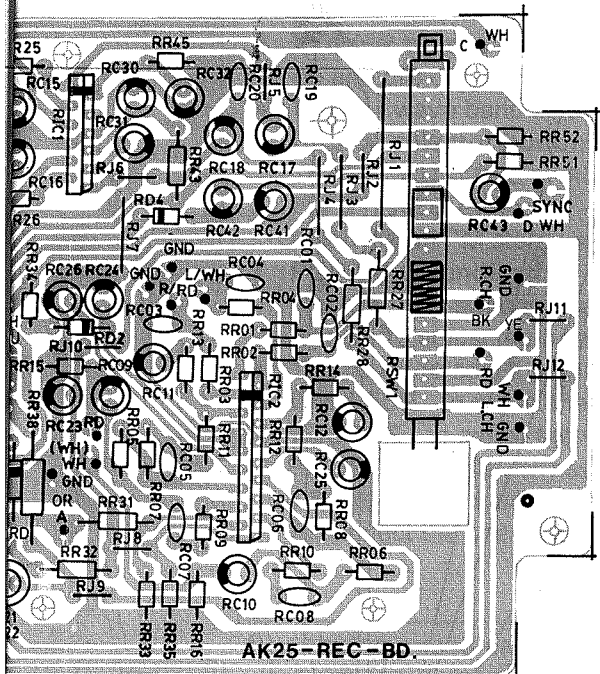


RECORD BOARD (BOTTOM SIDE)



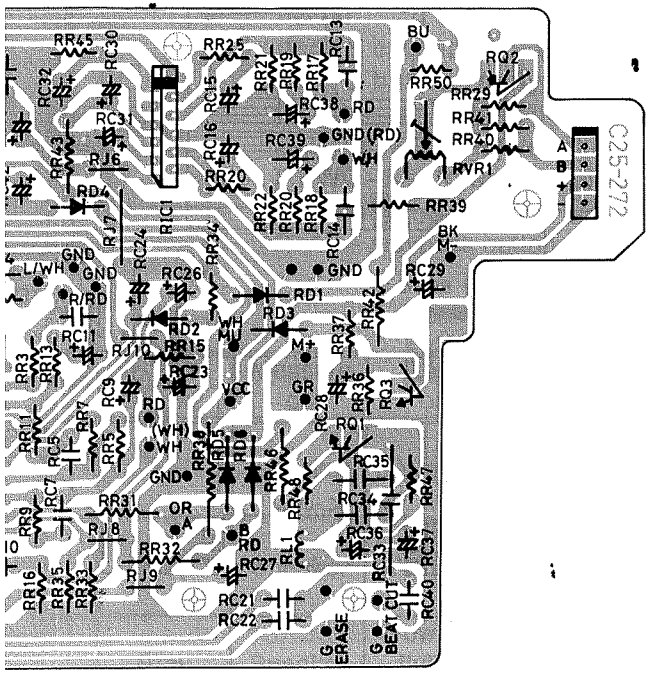
DE)

VOLTAGE TABLES



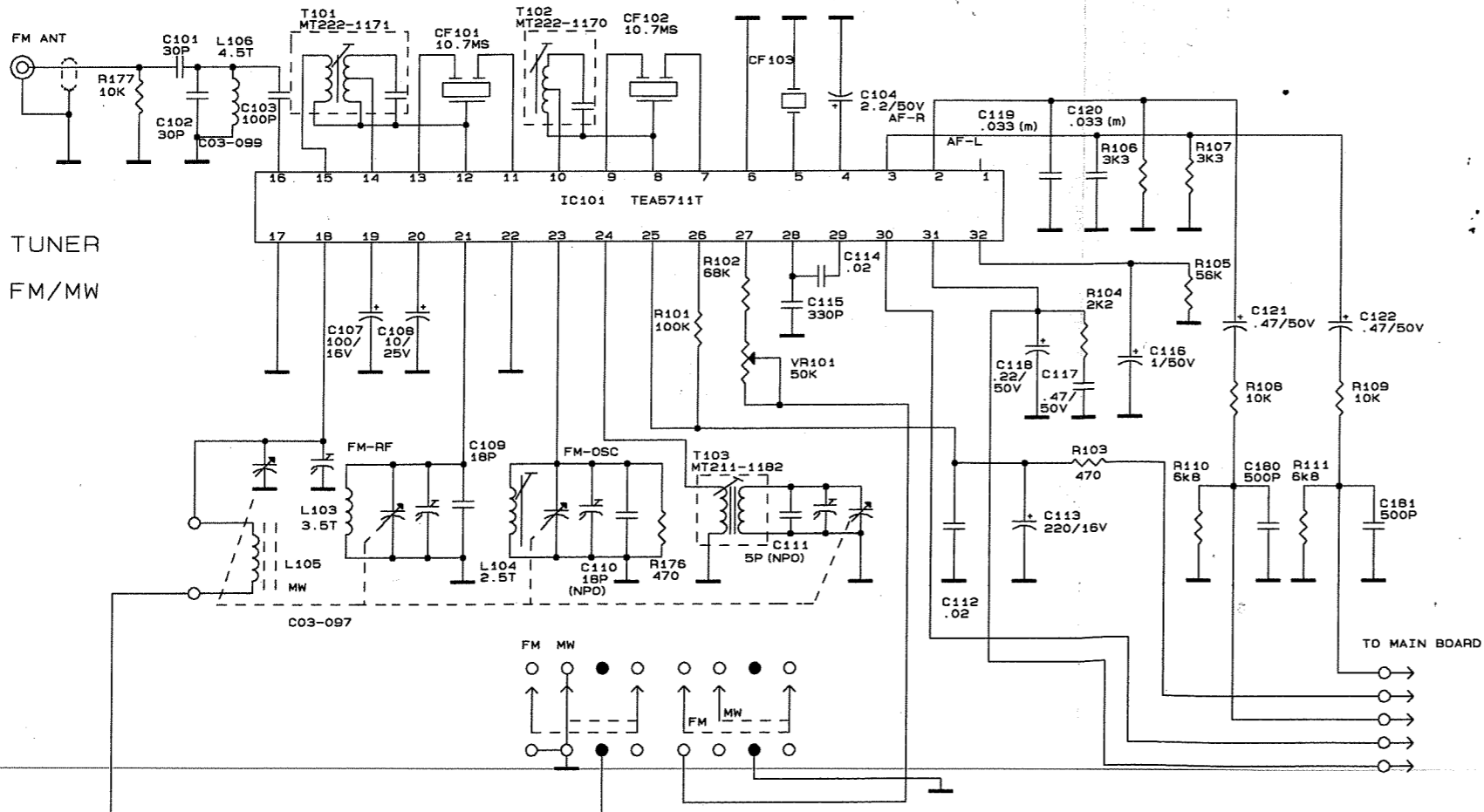
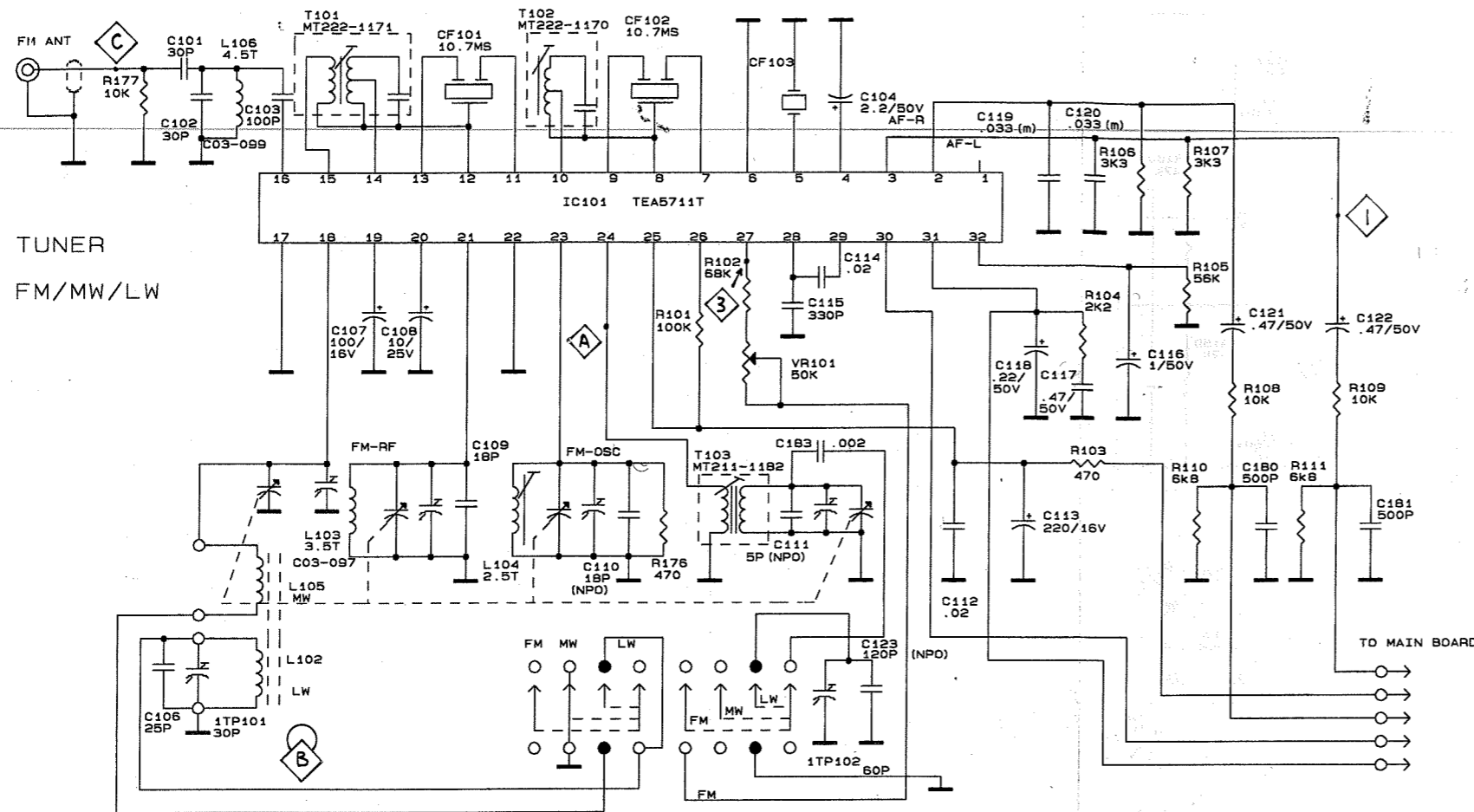
PIN	RIC1	RIC2	IC101	IC102	IC103
	BA3313L	BA3416BL	TEA5711T	LC7818	LA4508
1	4.39	0	0	-0.08	16.9
2	0.15	0	0.28	0	0.015
3	0.6	0	0.29	-0.03	1.17
4	0	0	0.98	0	9.05
5	0	0.62	1.01	0	0.59
6	0	0.62	0.002	0	16.28
7	0	0.07	0.71	0	0
8	9.75	0	1.39	0	17.6
9	0	0.07	0.67	0	16.2
10	9.68	10.4	0	0.15	0.59
11	0.6	0.71	0.69	12.96	8.98
12	4.43	10.8	1.37	12.96	1.18
13		4.96	1.02	12.95	0.012
14		4.97	1.37	0.29	0
15		0	1.37	0	
16		0	0.7	0	
17		3.24	0	12.43	
18		0.01	0	12.2	
19			2.07	7.32	
20			0.65	0	
21			0	0	
22			0	12.45	
23			0	0	
24			0	0	
25			4.95	0	
26			4.92	0	
27			0.98	0	
28			0.67	-0.04	
29			1.23	0	
30			11.61	0.17	
31			0		
32			0		

M SIDE)



TR	B	C	E
Q101	12.13	12.87	12.95
Q102	12.9	0.003	12.93
Q103	12.87	0.003	6.49
Q104	1.62	4.69	1.03
Q105	1.62	4.78	1.03
Q106	13.63	17.61	12.95
Q107	1.26	2.44	0.62
Q108	1.26	2.36	0.63
Q109	0.002	0.002	0.002
Q110	0.002	0.002	0.002
Q201	0.65	5.95	0.024
Q202	0.65	5.99	0.024
RQ1	0.002	0.002	0.002
RQ2	9.17	9.85	9.84
RQ3	0.71	0.012	0.002

SCHEMATIC DIAGRAM - TUNER



RADIO ALIGNMENT

AM IF							
MW *	468KHz		min.	T101			max.
				T102			
AM RF							
MW *	515KHz		max.	T103			max.
	1630KHz		min.	TC1			
	600KHz			T105			
	1400KHz			TC2			
LW *			max.	Check only			max.
(not for /28)	275KHz		min.	1TP102			
	160KHz			L102			
	260KHz			1TP101			
FM IF							
FM #	10.7MHz		min.				
FM RF							
FM #	87.3MHz		max.	L104			max.
	108.3MHz		min.	FC 1			
	90MHz			L103			
	106MHz			FC 2			
STEREO DECODER							
FM #	98MHz		98MHz	SVR101			152

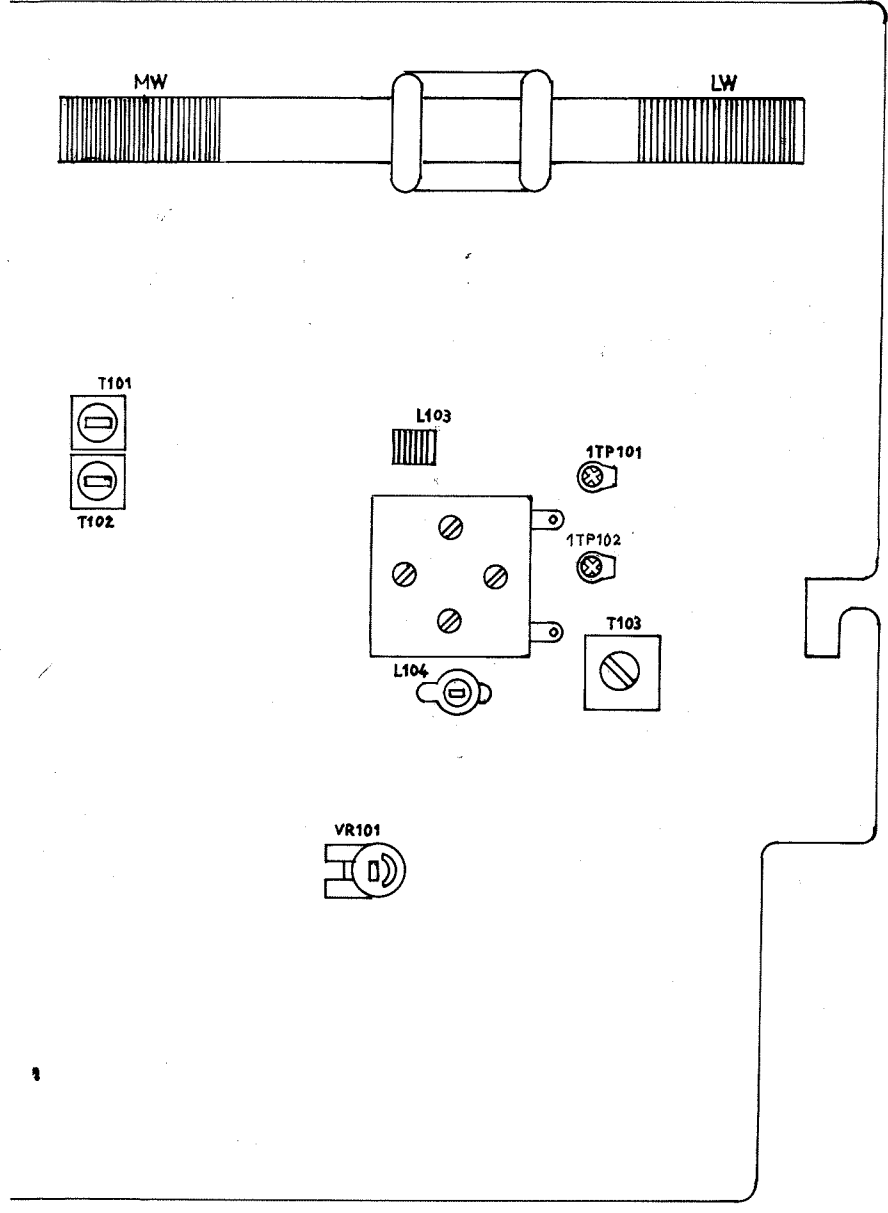
* Mod. 400Hz 30%
10nF + 15E

"Bei notwendigem Abgleich ist das Gerät auf die gesetzlich vorgeschriebenen Eckfrequenzen abzugleichen".

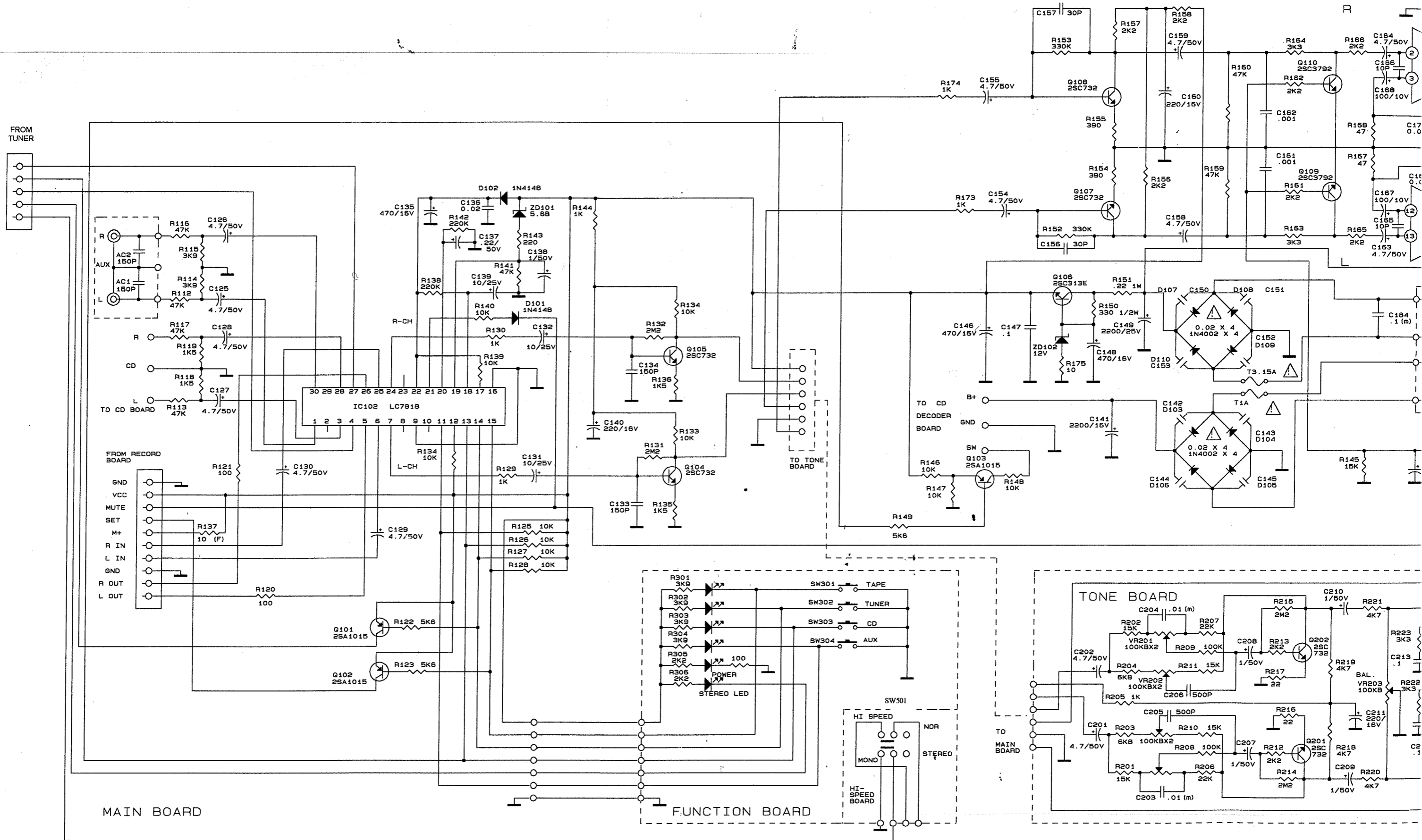
Repe

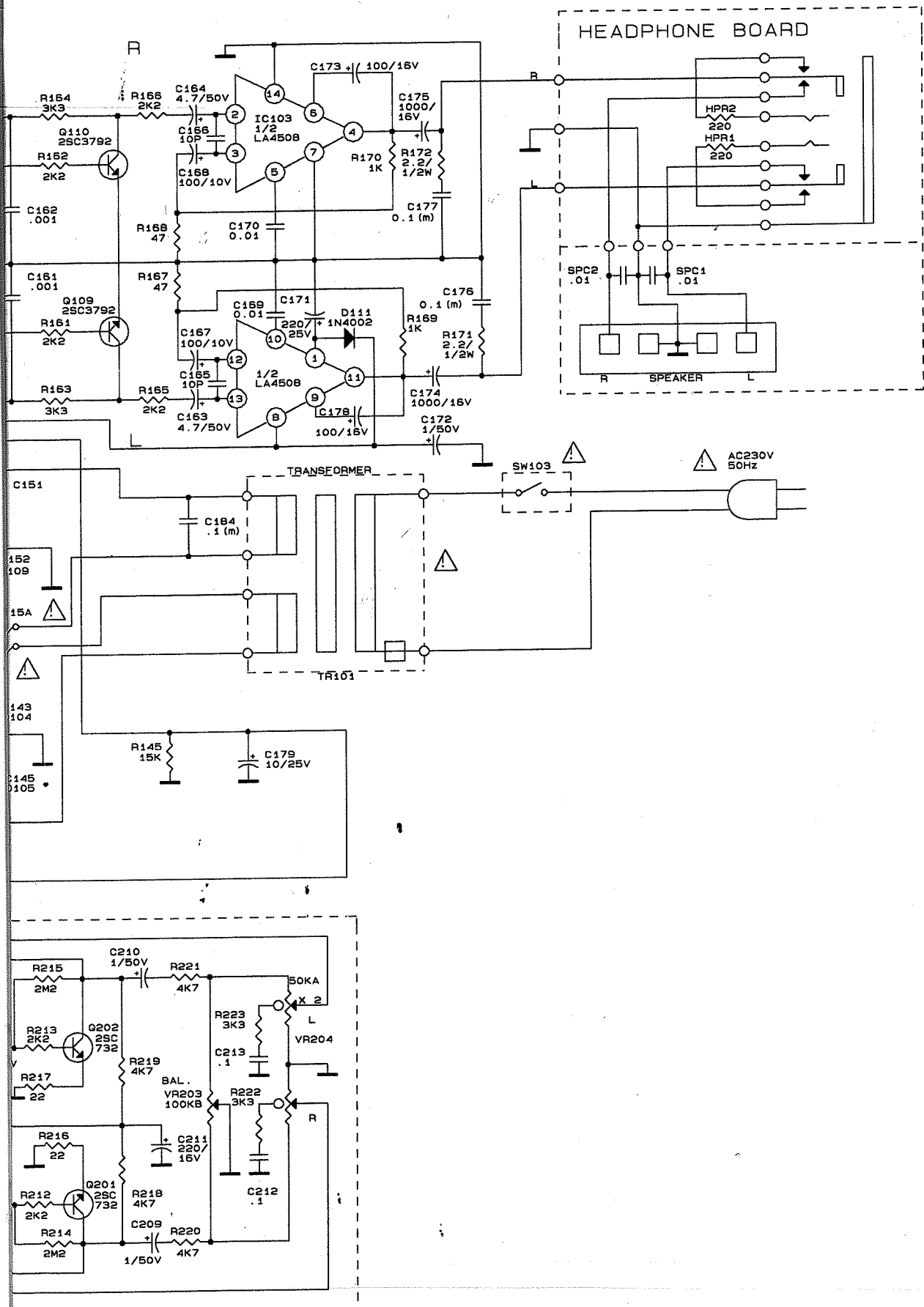
	max.	symm.
	max.	
	max.	
		symm. max. lin.
	max.	
	152 ± 1KHz	

↑ Repeat



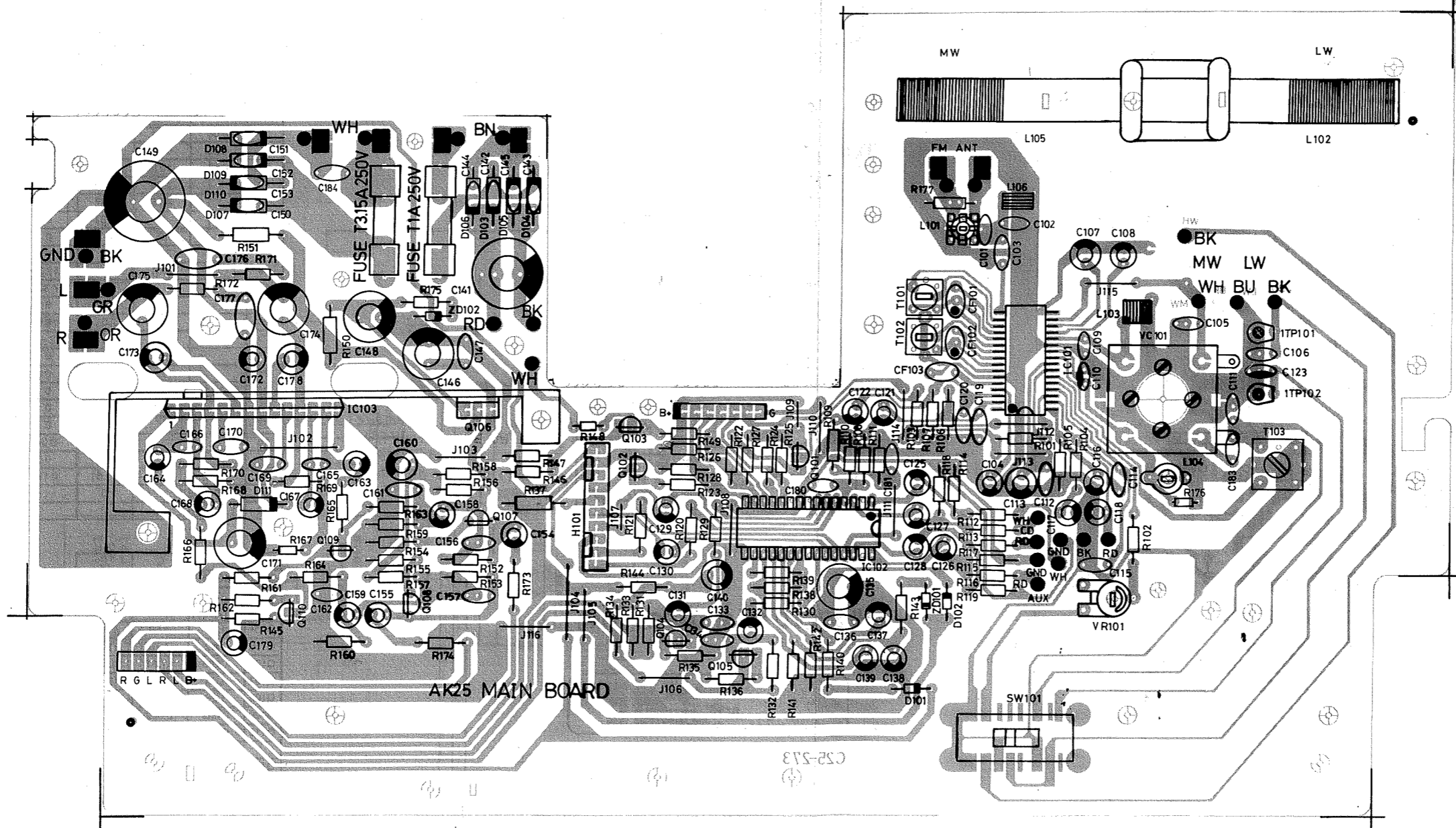
SCHEMATIC DIAGRAM - MAIN



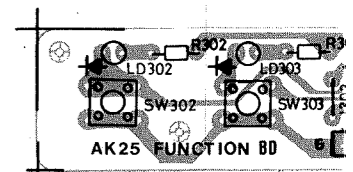


LAYOUT DIAGRAM

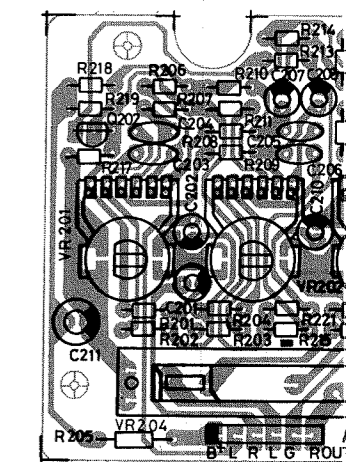
MAIN BOARD (TOP)



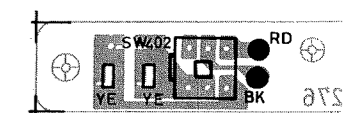
FUNCTION BOARD (TOP)



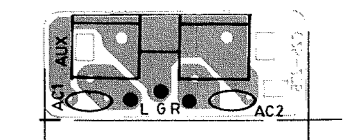
TONE CONTROL BOARD



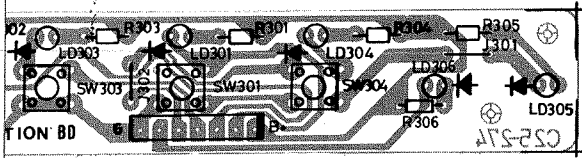
HI SPEED BOARD (TOP)



AUX BOARD (TOP)



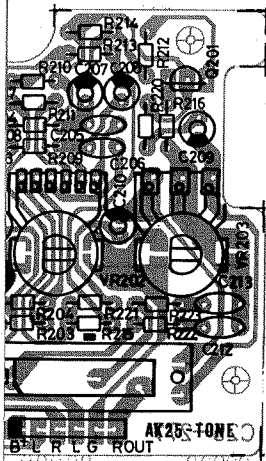
BOARD(TOP)



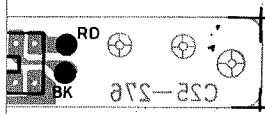
VOLTAGE TABLES

PIN	RIC1	RIC2	IC101	IC102	IC103
	BA3313L	BA3416BL	TEA5711T	LC7818	LA4508
1	4.39	0	0	-0.08	16.9
2	0.15	0	0.28	0	0.015
3	0.6	0	0.29	-0.03	1.17
4	0	0	0.98	0	9.05
5	0	0.62	1.01	0	0.59
6	0	0.62	0.002	0	16.28
7	0	0.07	0.71	0	0
8	9.75	0	1.39	0	17.6
9	0	0.07	0.67	0	16.2
10	9.68	10.4	0	0.15	0.59
11	0.6	0.71	0.69	12.96	8.98
12	4.43	10.8	1.37	12.96	1.18
13		4.96	1.02	12.95	0.012
14		4.97	1.37	0.29	0
15		0	1.37	0	
16		0	0.7	0	
17		3.24	0	12.43	
18		0.01	0	12.2	
19			2.07	7.32	
20			0.65	0	
21			0	0	
22			0	12.45	
23			0	0	
24			0	0	
25			4.95	0	
26			4.92	0	
27			0.98	0	
28			0.67	-0.04	
29			1.23	0	
30			11.61	0.17	
31			0		
32			0		

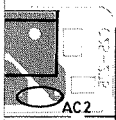
ROL BOARD (TOP)



BOARD (TOP)



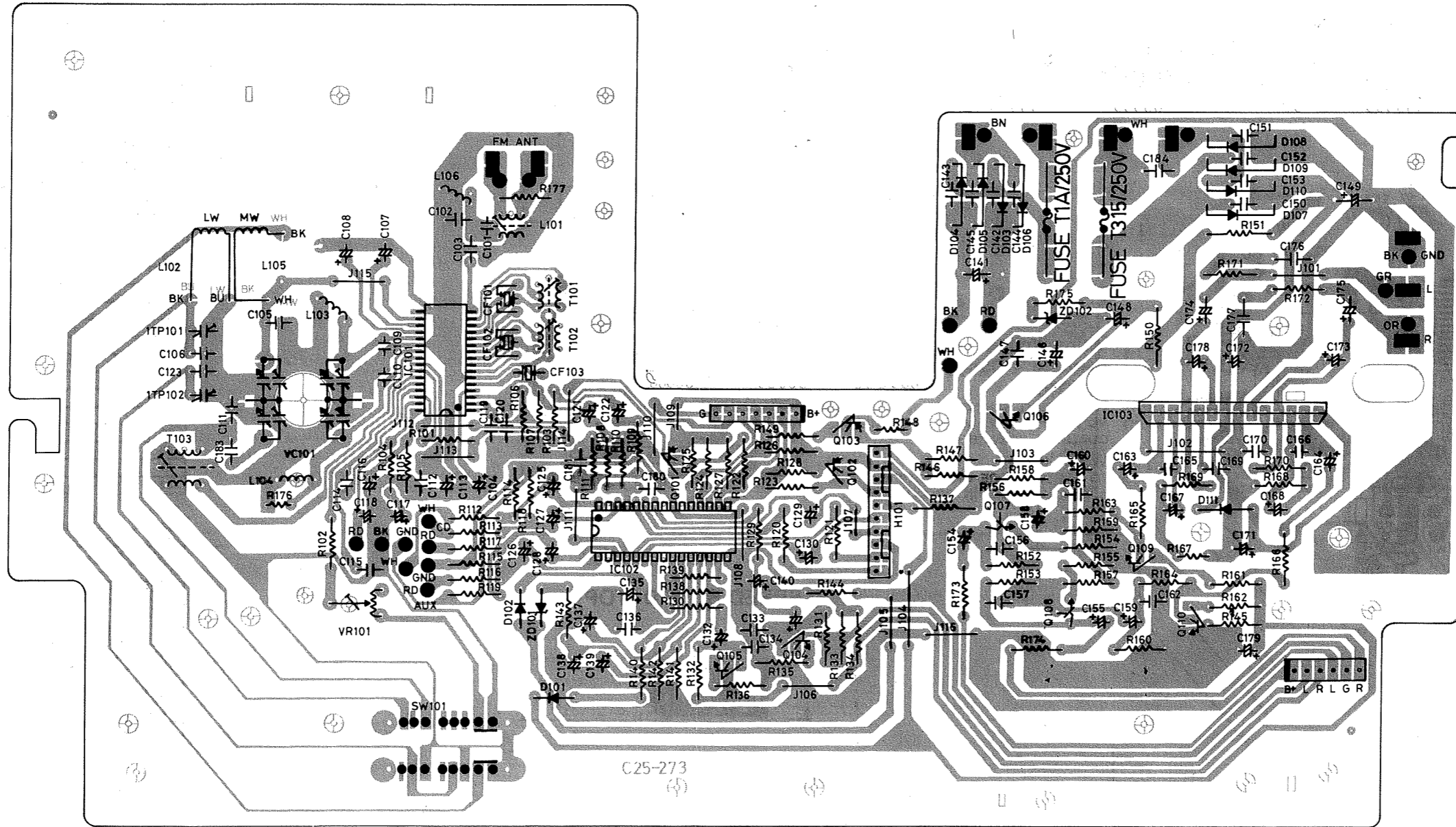
(TOP)



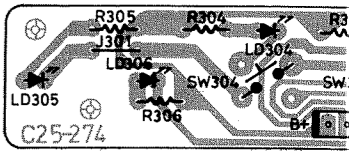
TR	B	C	E
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Q106	13.63	17.61	12.95
Q107	1.26	2.44	0.62
Q108	1.26	2.36	0.63
Q109	0.002	0.002	0.002
Q110	0.002	0.002	0.002
Q201	0.65	5.95	0.024
Q202	0.65	5.99	0.024
RQ1	0.002	0.002	0.002
RQ2	9.17	9.85	9.84
RQ3	0.71	0.012	0.002

LAYOUT DIAGRAM

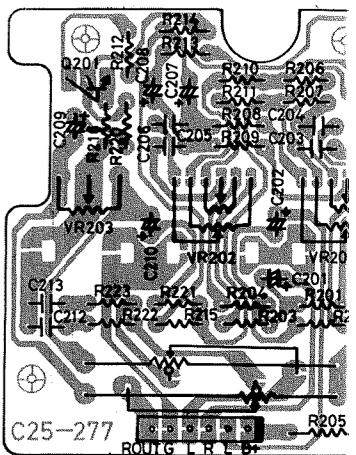
MAIN BOARD (BOTTOM)



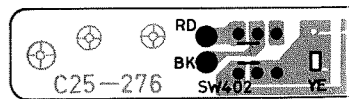
FUNCTION BOARD (BOT)



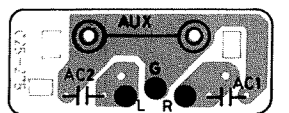
TONE CONTROL BOARD



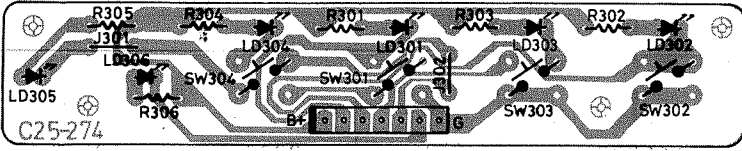
HI SPEED BOARD (BOT)



AUX BOARD (BOTTOM)



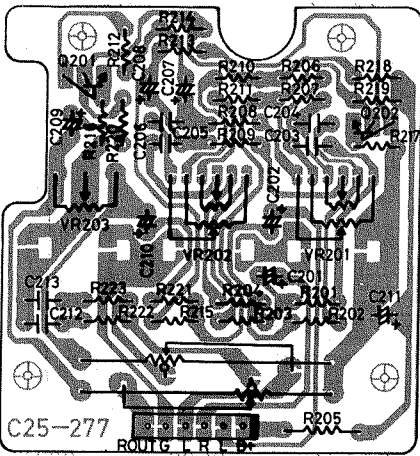
FUNCTION BOARD (BOTTOM)



VOLTAGE TABLES

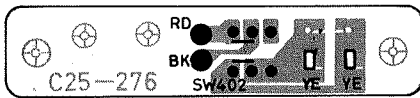
PIN	RIC1	RIC2	IC101	IC102	IC103
	BA3313L	BA3416BL	TEA5711T	LC7818	LA4508
1	4.39	0	0	-0.08	16.9
2	0.15	0	0.28	0	0.015
3	0.6	0	0.29	-0.03	1.17
4	0	0	0.98	0	9.05
5	0	0.62	1.01	0	0.59
6	0	0.62	0.002	0	16.28
7	0	0.07	0.71	0	0
8	9.75	0	1.39	0	17.6
9	0	0.07	0.67	0	16.2
10	9.68	10.4	0	0.15	0.59
11	0.6	0.71	0.69	12.96	8.98
12	4.43	10.8	1.37	12.96	1.18
13		4.96	1.02	12.95	0.012
14		4.97	1.37	0.29	0
15		0	1.37	0	
16		0	0.7	0	
17		3.24	0	12.43	
18		0.01	0	12.2	
19			2.07	7.32	
20			0.65	0	
21			0	0	
22			0	12.45	
23			0	0	
24			0	0	
25			4.95	0	
26			4.92	0	
27			0.98	0	
28			0.67	-0.04	
29			1.23	0	
30			11.61	0.17	
31			0		
32			0		

TONE CONTROL BOARD (BOTTOM)

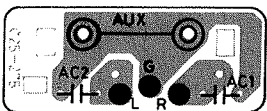


TR	B	C	E
Q101	12.13	12.87	12.95
Q102	12.9	0.003	12.93
Q103	12.87	0.003	6.49
Q104	1.62	4.69	1.03
Q105	1.62	4.78	1.03
Q106	13.63	17.61	12.95
Q107	1.26	2.44	0.62
Q108	1.26	2.36	0.63
Q109	0.002	0.002	0.002
Q110	0.002	0.002	0.002
Q201	0.65	5.95	0.024
Q202	0.65	5.99	0.024
RQ1	0.002	0.002	0.002
RQ2	9.17	9.85	9.84
RQ3	0.71	0.012	0.002

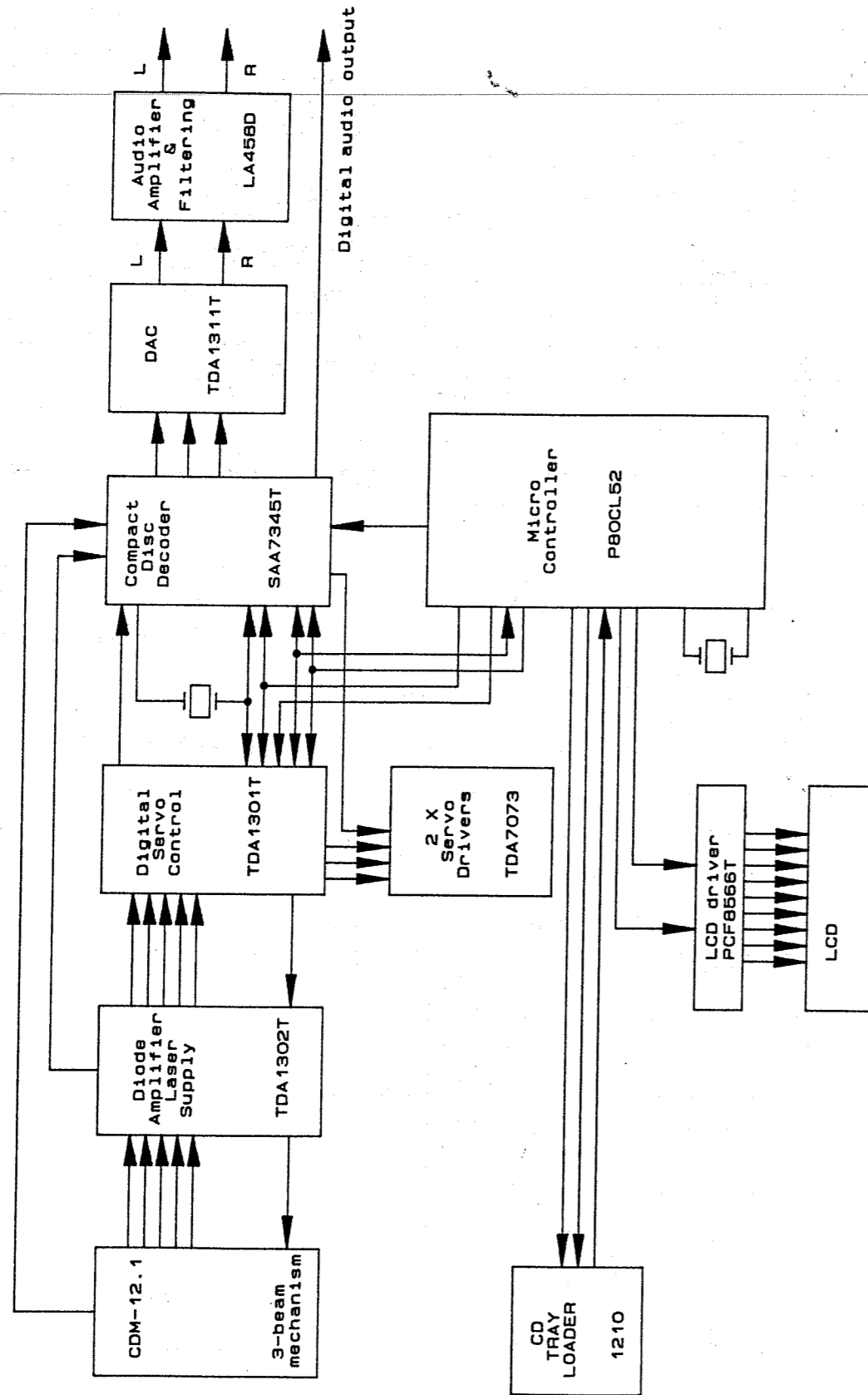
HI SPEED BOARD (BOTTOM)



AUX BOARD (BOTTOM)



CD BLOCK DIAGRAM

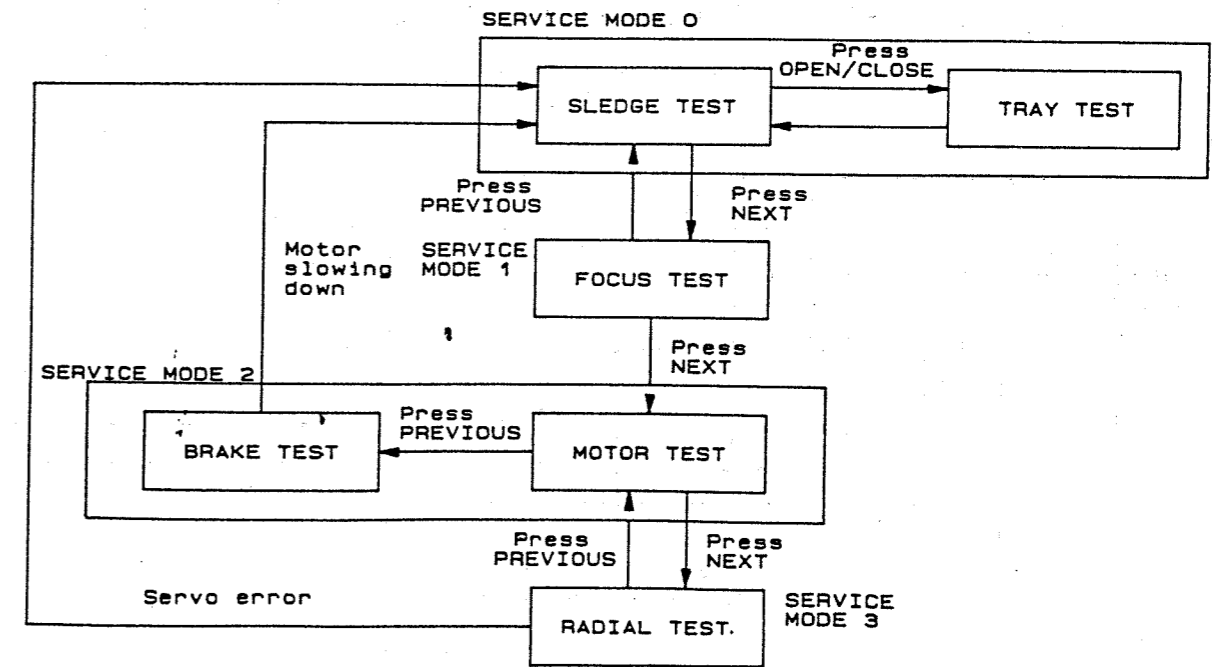


CD TEST PROCEDURE & SERVICE CODE

1. Check CD Decoder Board working voltage
 10V-12V on R104 cross Q103 "E" with ground
 +5V +/-0.3V on C112 with ground
2. Check the CD Decoder Board oscilation frequency
 12MHz +/-5KHz on IC101 pin 18 with ground
 16.934MHz +/-5KHz on IC103 pin 16 with ground
3. Check the fitter voltage output on R114 cross C124 over 1Vp-p
4. SERVICE Mode
 To enter SERVICE mode, any TWO of the following keys should be pressed during the system power on sequence:

NEXT, PREVIOUS, PLAY/REPLAY, STOP/CM

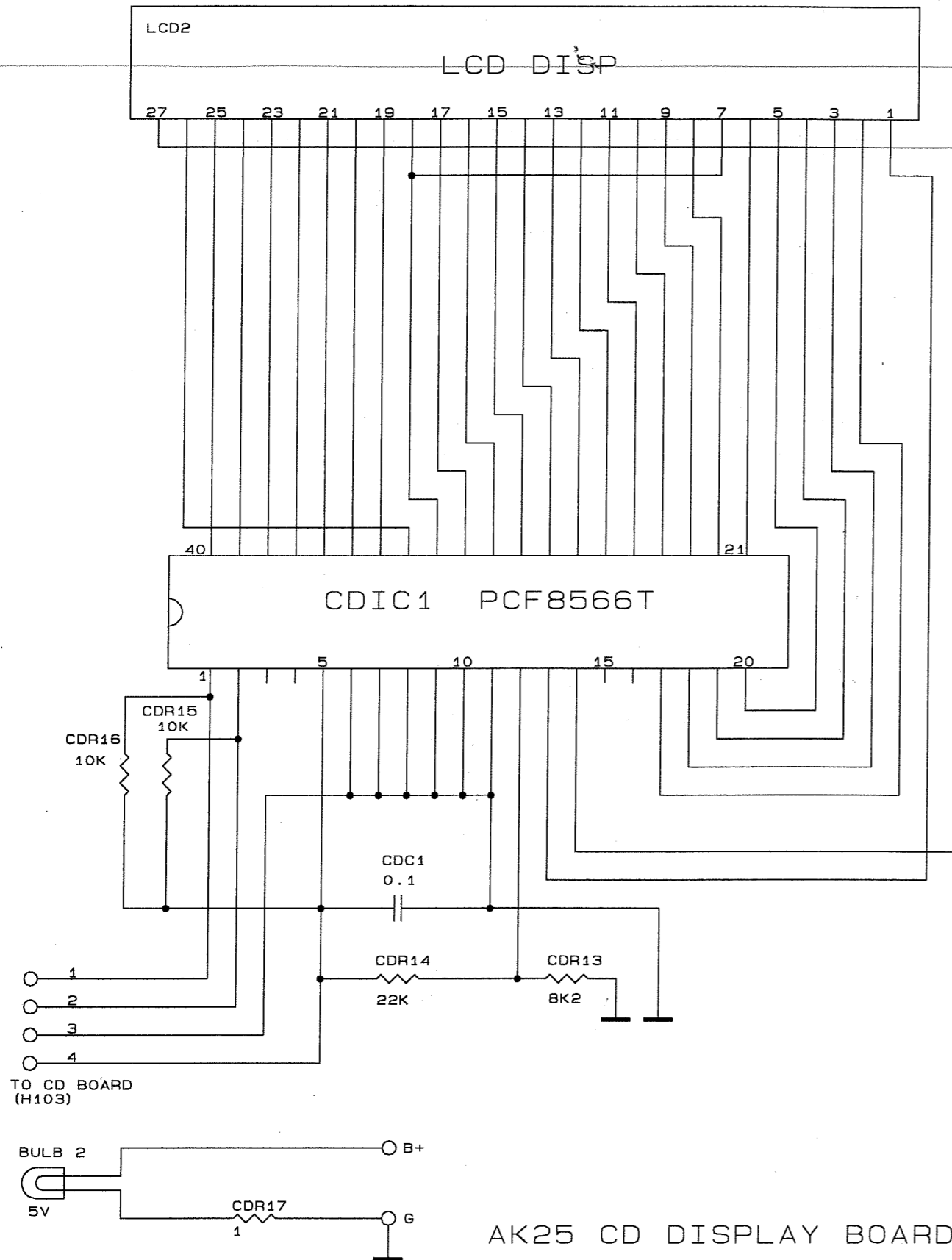
Figure 2 shows the SERVICE mode states.



If PLAY/REPLAY is pressed in service state 0, TOC is read, SERVICE mode is cleared and STOP mode entered.

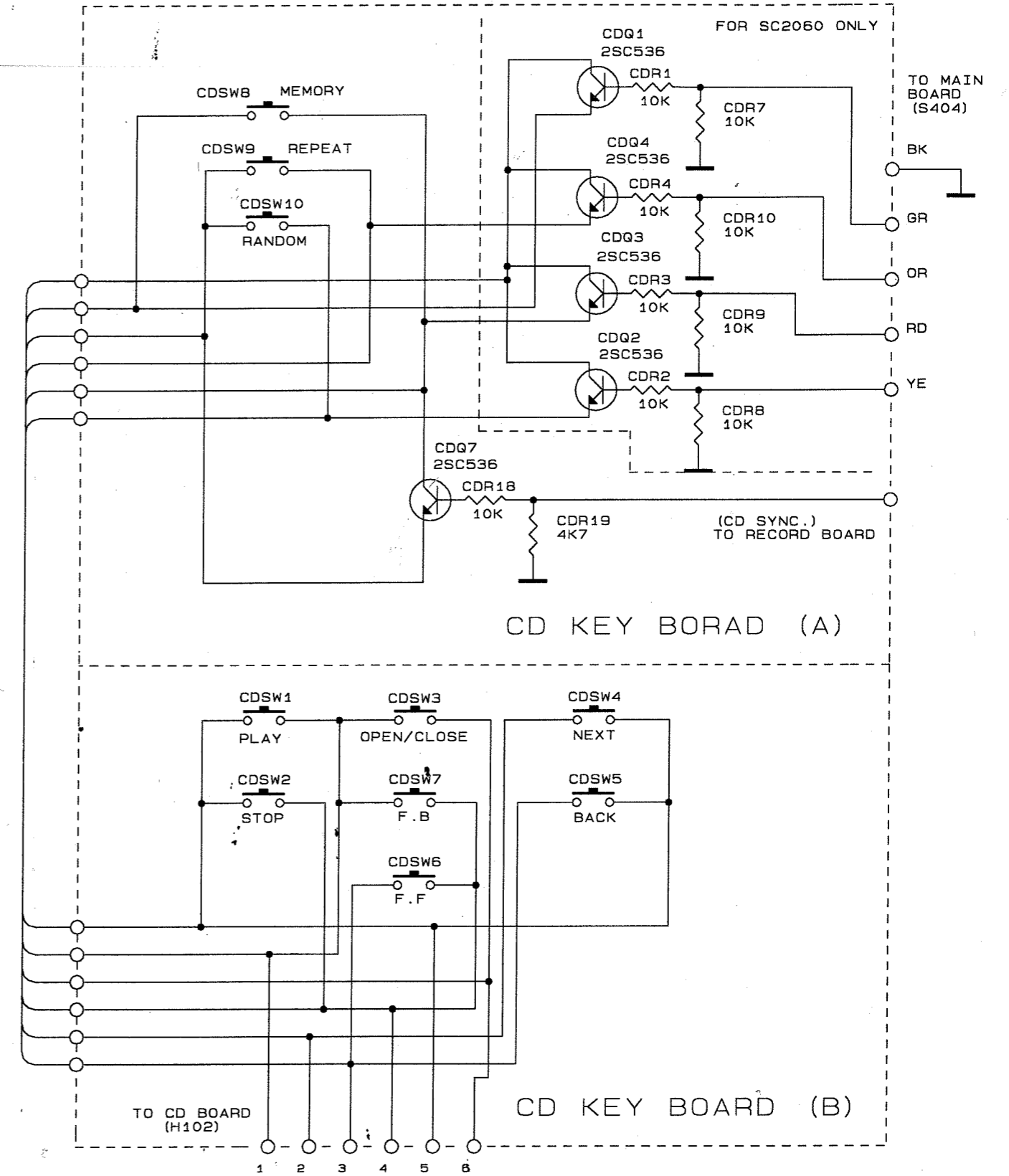
5. Invalid Key Press
 If an invalid key is pressed at any time, "ERR" is displayed on the LCD for 2 seconds.

CD DISPLAY BOARD



AK25 CD DISPLAY BOARD

CD KEY BOARD

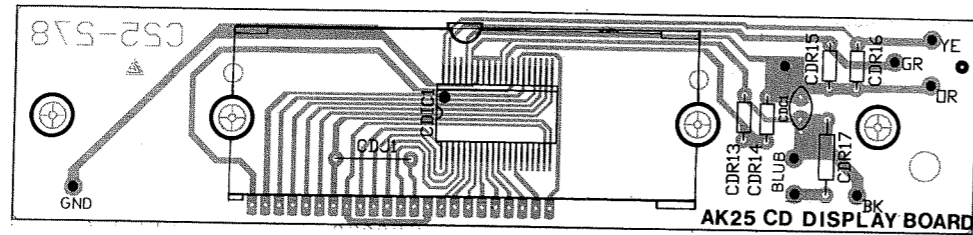


CD KEY BOARD (A)

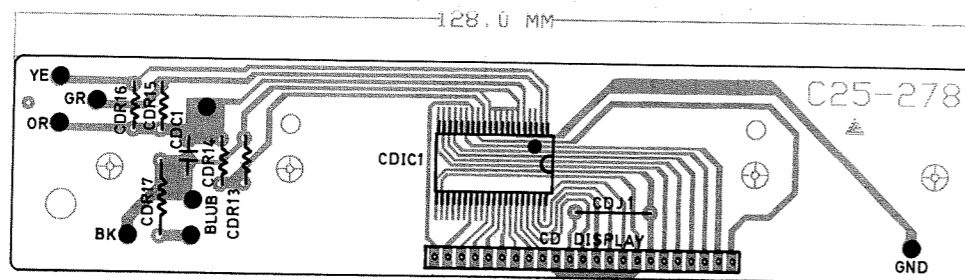
CD KEY BOARD (B)

LAYOUT DIAGRAM - CD DISPLAY BOARD

CD DISPLAY BOARD (TOP)

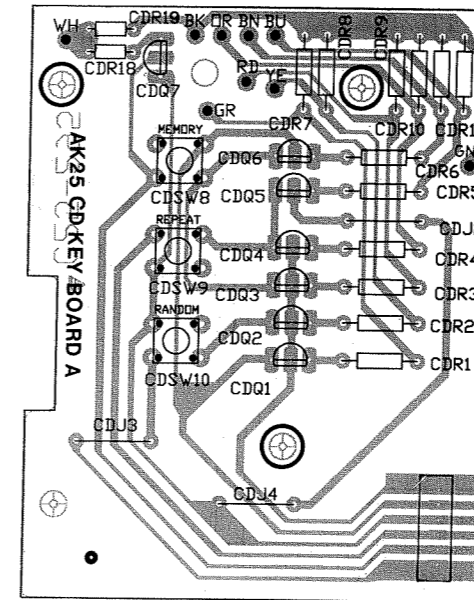


CD DISPLAY BOARD (BOTTOM)

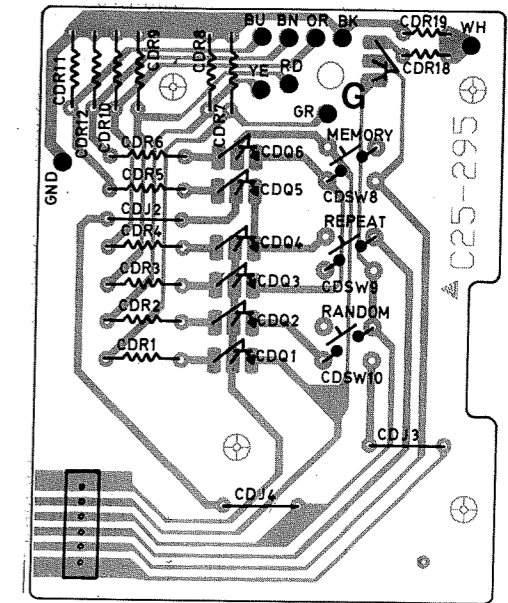


LAYOUT DIAGRAM - CD KEY BOARD

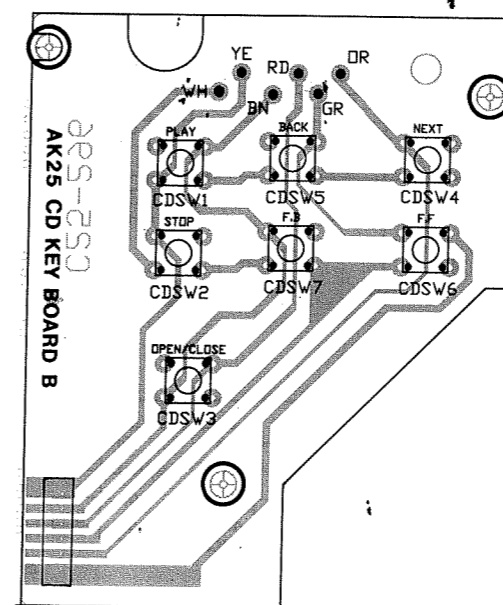
CD KEY BOARD A (TOP)



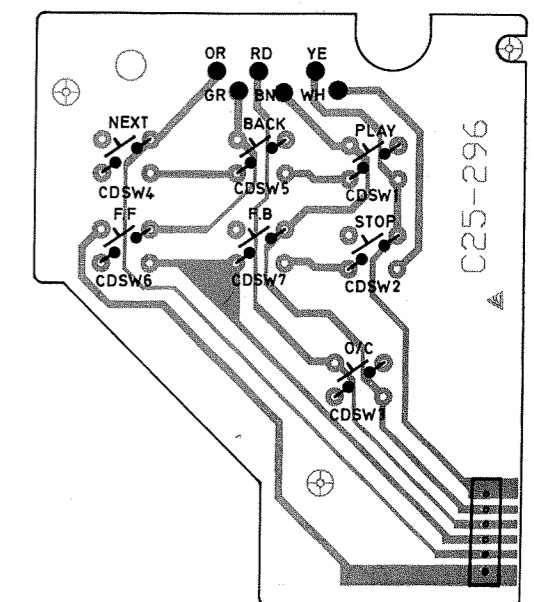
CD KEY BOARD A (BOTTOM)



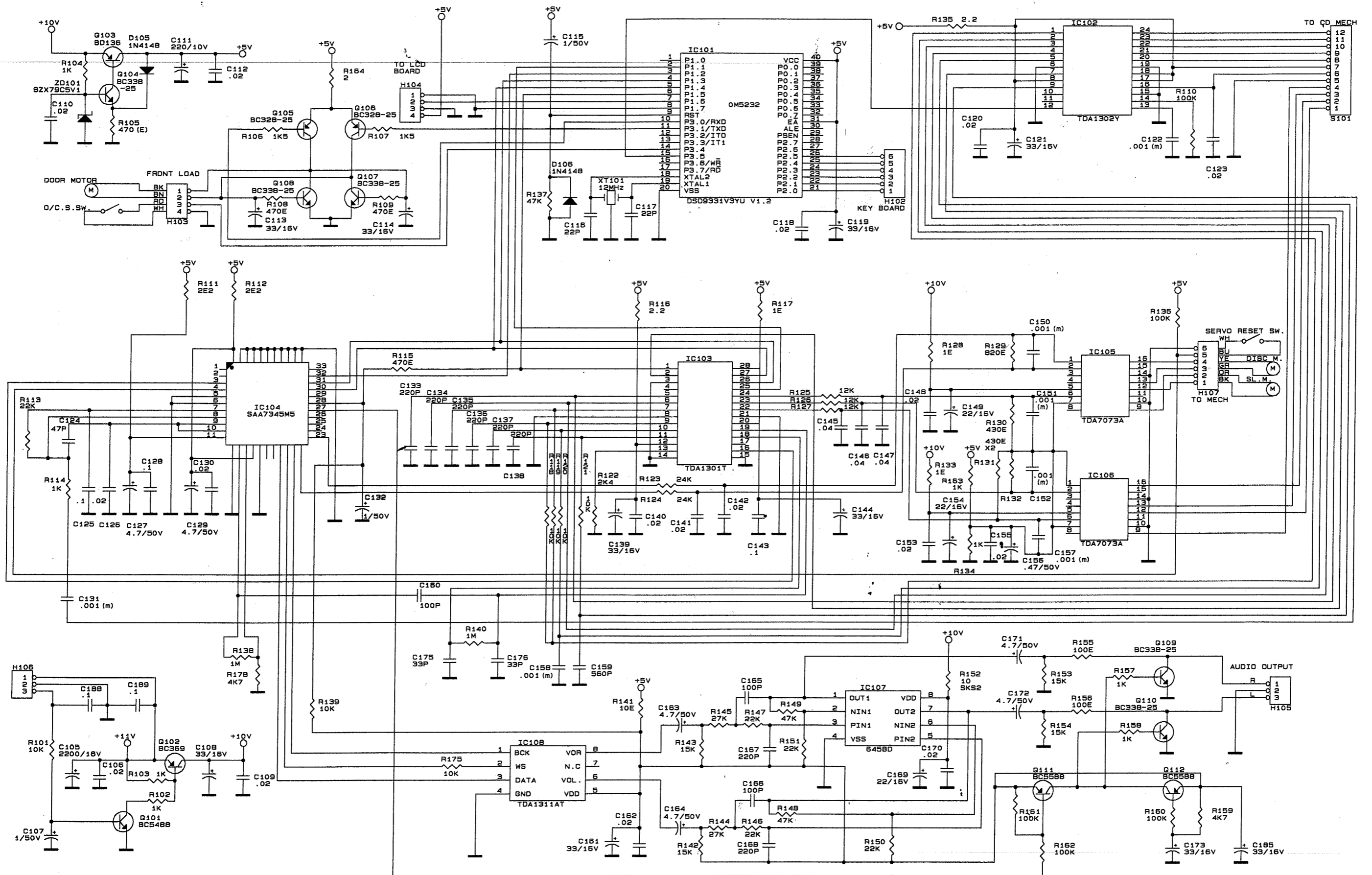
CD KEY BOARD B (TOP)



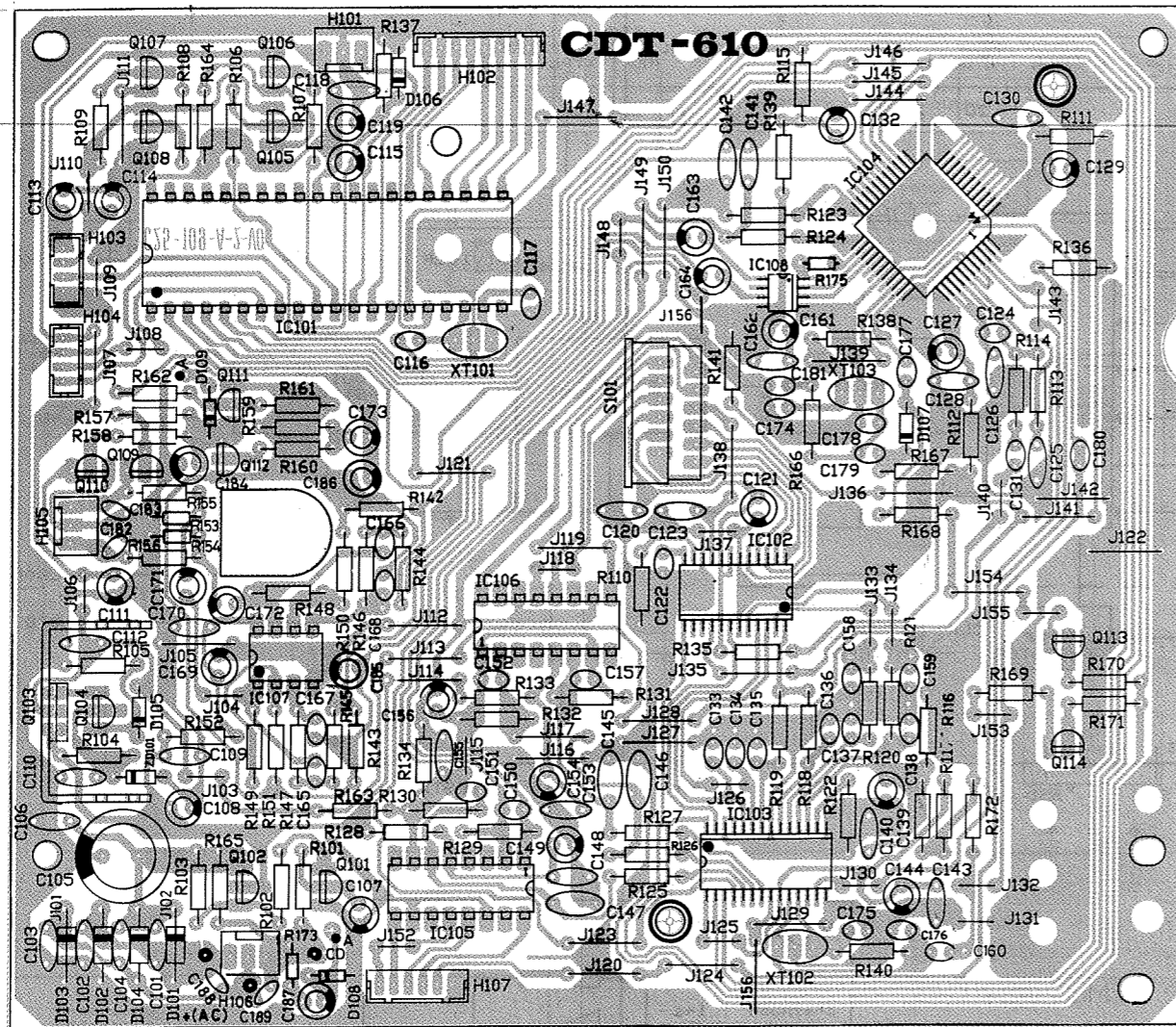
CD KEY BOARD B (BOTTOM)



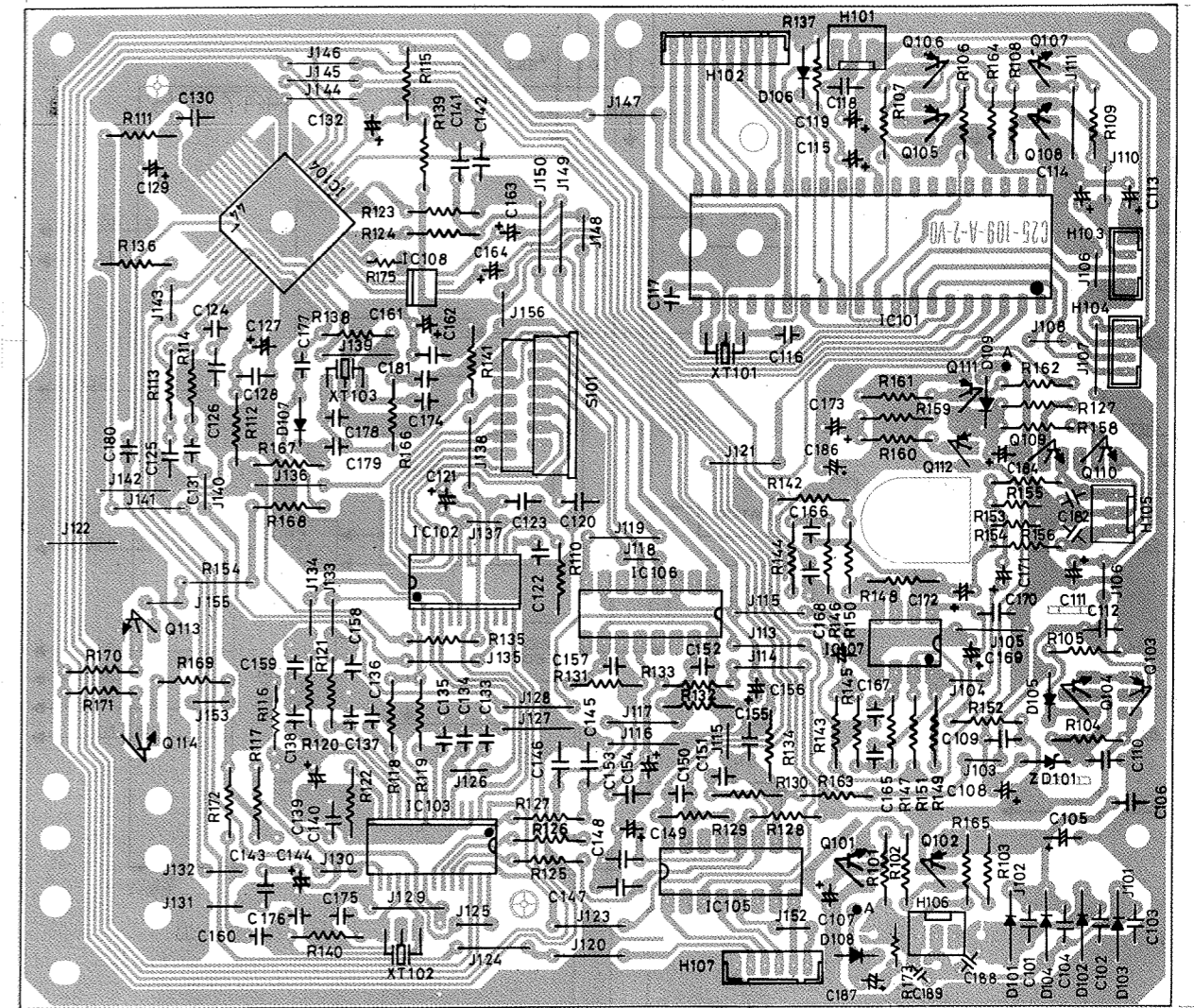
SCHEMATIC DIAGRAM - CD MAIN PCB



CD MAIN BOARD (TOP SIDE)



CD MAIN BOARD (BOTTOM SIDE)



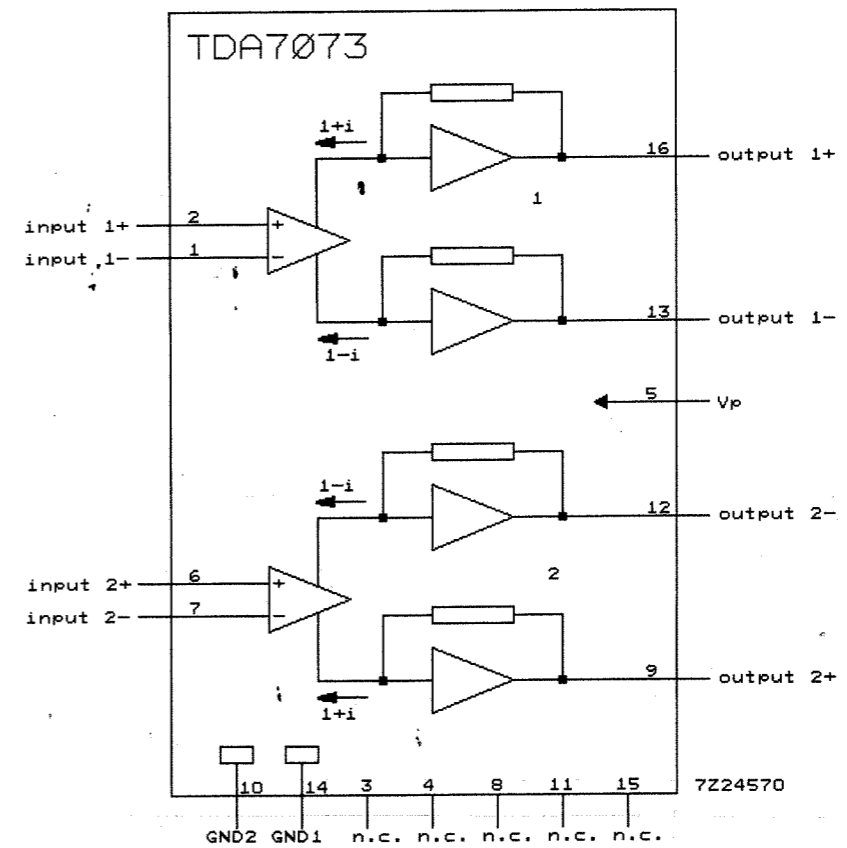
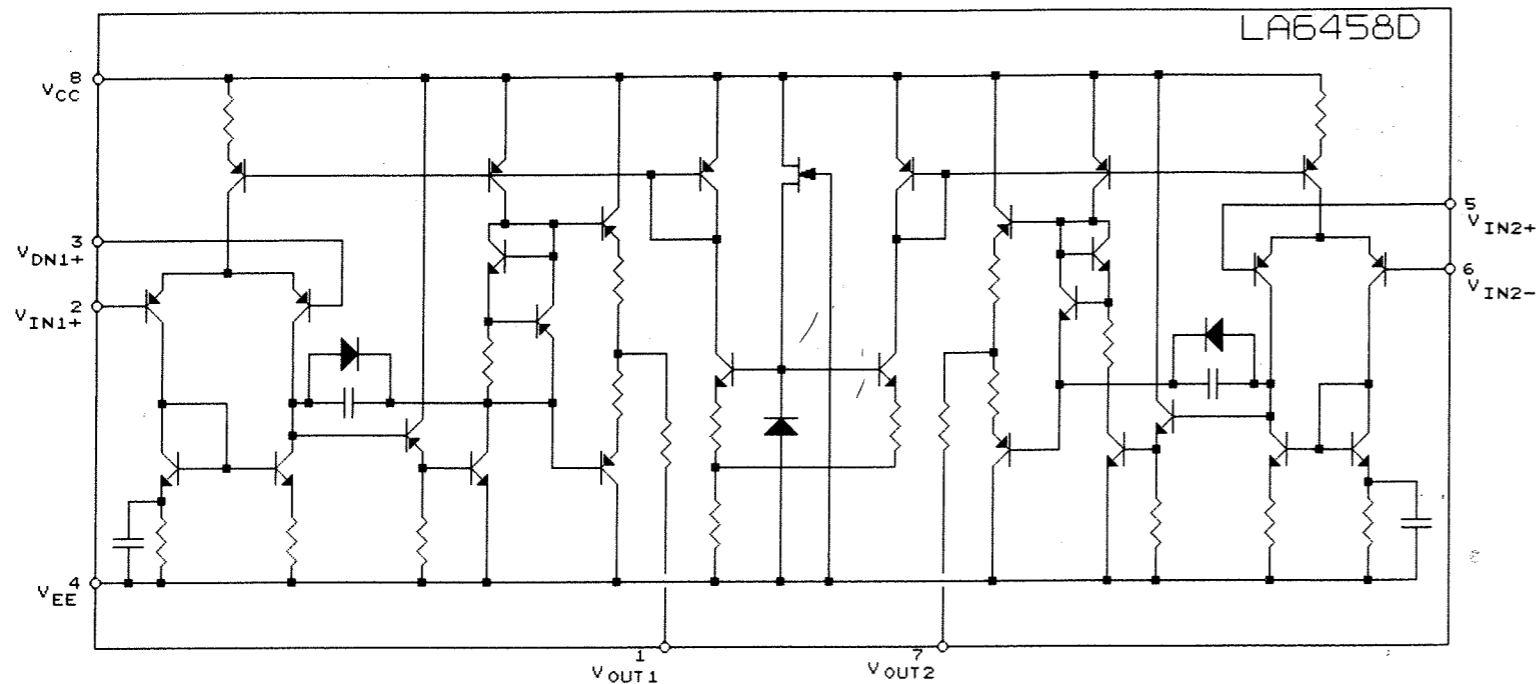
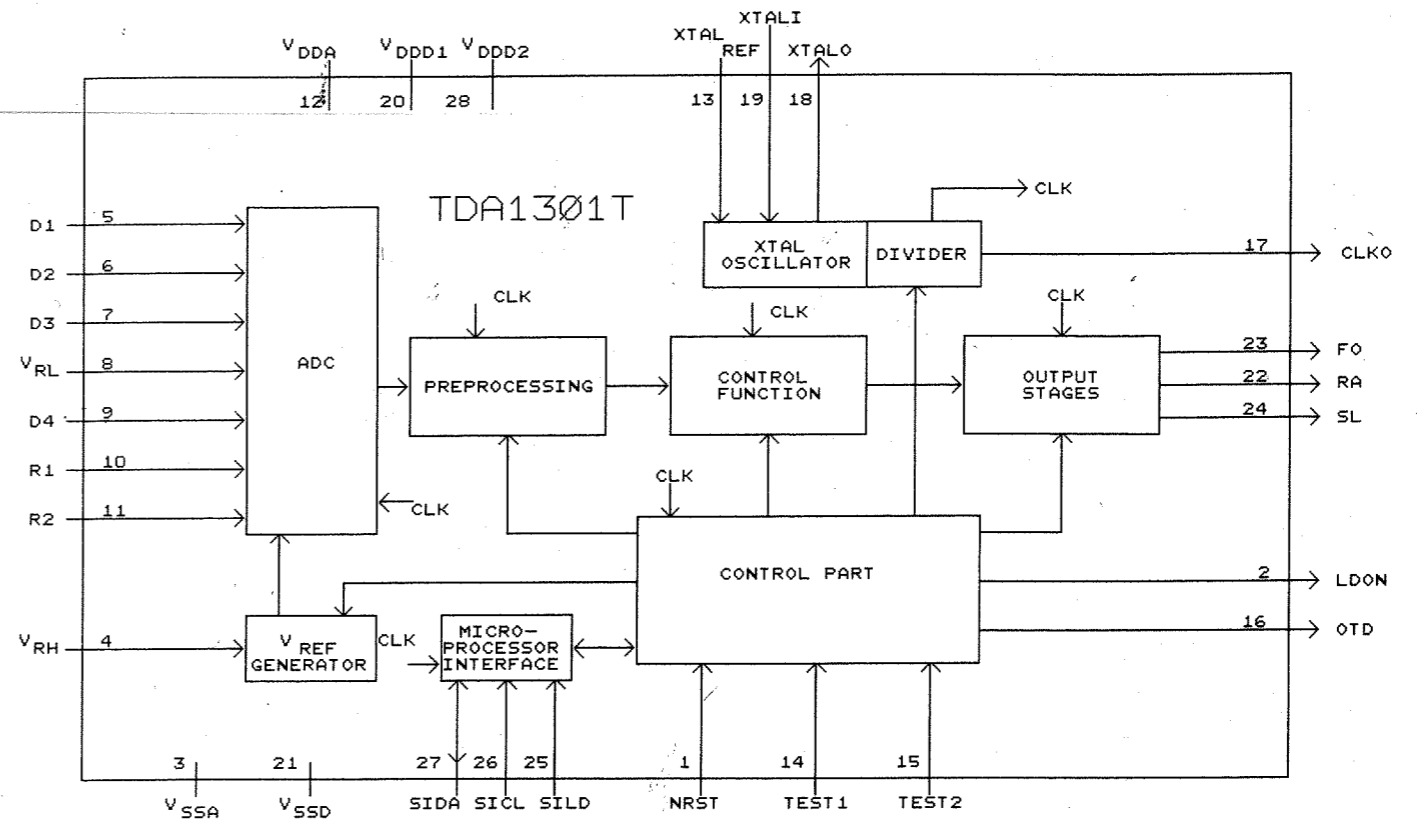
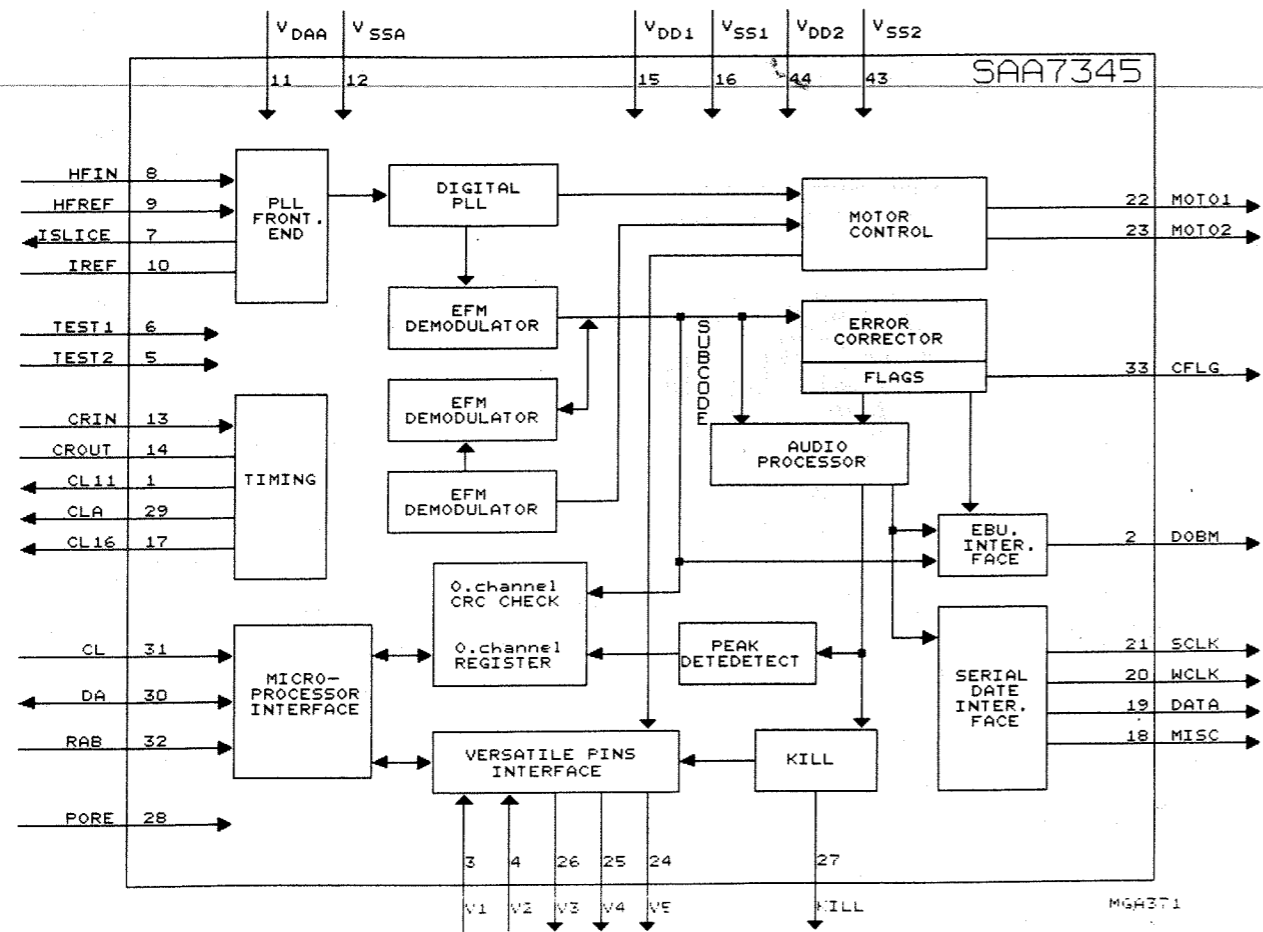
VOLTAGE TABLES

PIN	IC101	IC102	IC103	IC104	PIN	IC101	IC102	IC103	IC104
	OM5232	TDA1302Y	TDA1301T	SAA7345		OM5232	TDA1302Y	TDA1301T	SAA7345
1	0	-0.05	5.22	0.13	23	5.27	1.26	2.63	1.55
2	5.28	-0.05	0.01	0.42	24	5.28	0.01	2.64	5.24
3	1.28	-0.04	0	0.02	25	5.28		5.28	5.24
4	5.36	-0.06	1.14	5.24	26	5.29		5.26	0.01
5	5.24	-0.06	-0.06	0	27	5.29		5.25	0.01
6	5.22	0	-0.04		28	5.29		5.27	5.23
7	4.75	0.01	-0.03	2.64	29	5.29			2.63
8	4.78	5.23	0	2.64	30	1.77			5.25
9	0.01	0.35	-0.03	2.65	31	5.29			1.27
10	5.27	0.24	-0.04	2.65	32	0.6			1.27
11	5.27	5.21	-0.04	5.29	33	0.6			0
12	5.27	5.26	5.28	0	34	0.6			0
13	0.01	0.01	0.1	2.48	35	0.46			0
14	5.26	1.26	0	2.49	36	0.61			0
15	5.26	0	0	5.24	37	5.26			0
16	0.01	0.04	0.02	0	38	0.74			0
17	5.26	5.23	2.62	2.63	39	0.7			0
18	5.26	5.23	0.82	0.12	40	5.29			0
19	2.48	0	0.82	0.11	41				0
20	0	0.24	5.27	0.09	42				0
21	0.08	0.25	0	0.09	43				0
22	2.11	0	2.63	1.55	44				5.24

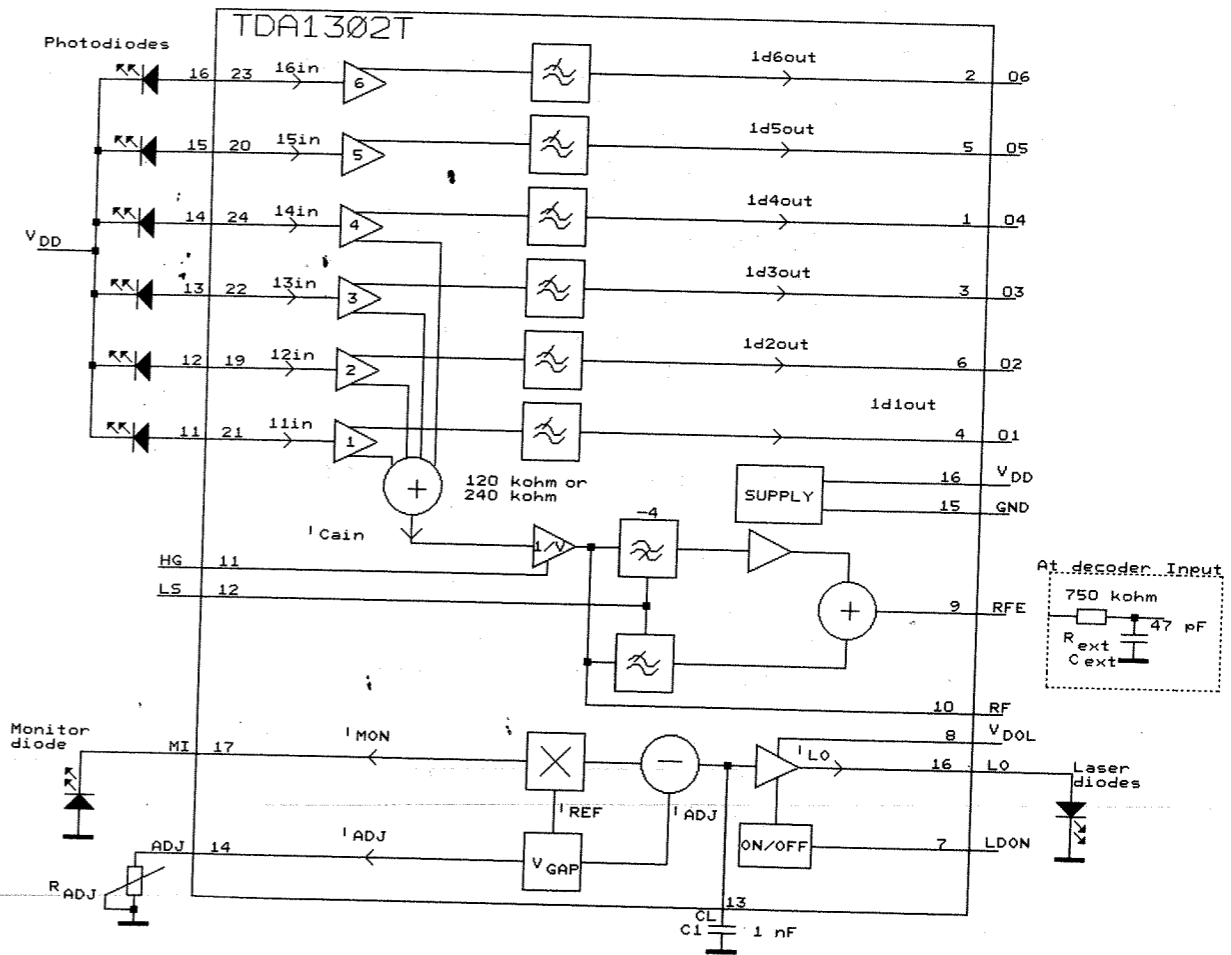
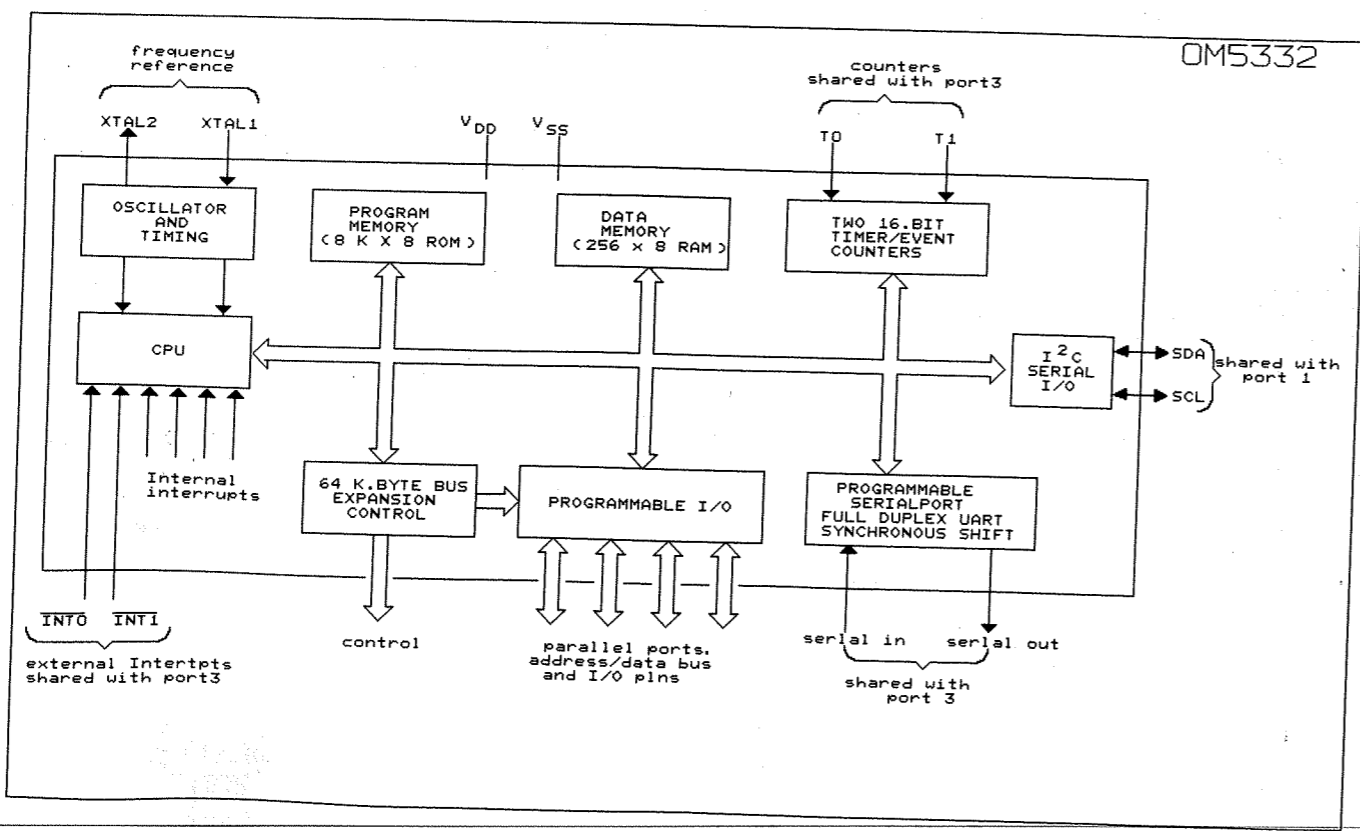
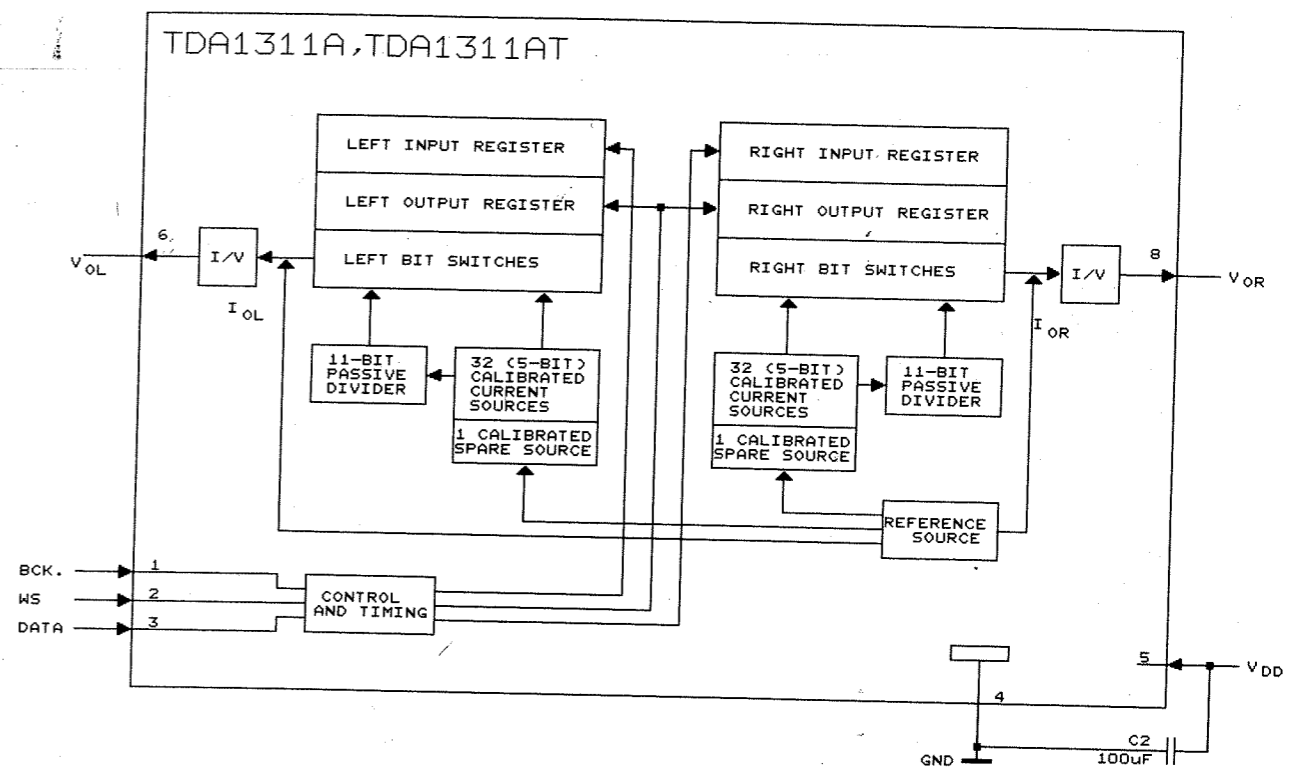
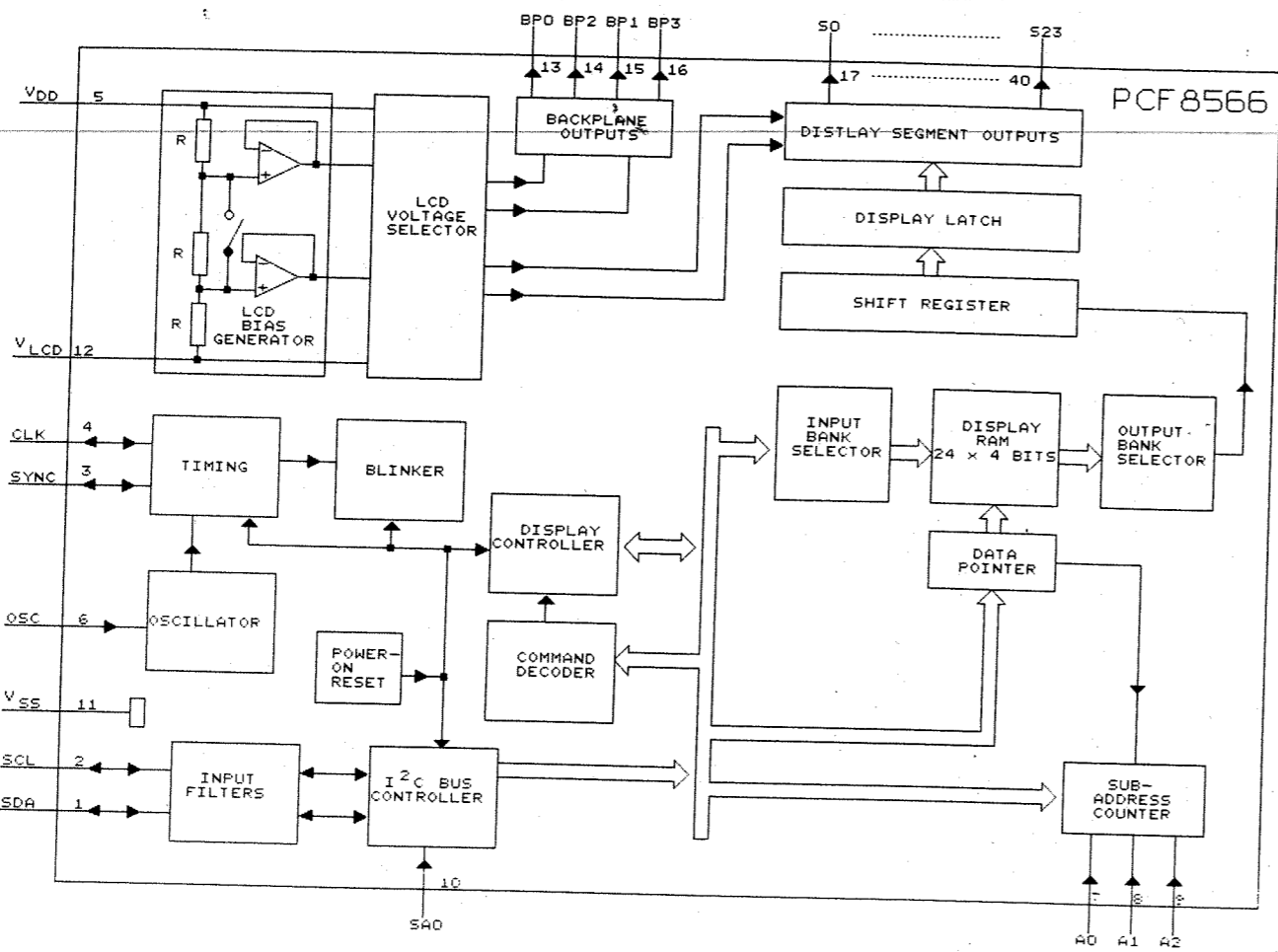
PIN	IC105	IC106	IC107	IC108
	TDA7073A	TDA7073A	LA6458D	TDA1311AT
1	1.55	2.65	5.16	0.18
2	1.54	2.65	5.16	0.26
3	0	0	5.13	0.29
4	0	0	0	0
5	10.4	10.4	5.12	3.71
6	2.65	2.65	5.12	0
7	2.65	2.65	5.12	3.71
8	0	0	10.39	5.16
9	5.03	4.98		
10	0	0		
11	0	0		
12	5.1	5.08		
13	4.98	5.01		
14	0	0		
15	0	0		
16	4.93	5.05		

TR	B	C	E
Q101	0.02	0.71	0
Q102	10.49	9.72	10.42
Q103	5.31	9.22	10
Q104	9.22	5.18	4.6
Q105	0.29	5.27	5.3
Q106	0.29	5.27	5.3
Q107	0.03	0.03	0.01
Q108	0.03	0.03	0.01
Q109	0.01	0.74	0
Q110	0.01	0.74	0
Q111	5.03	4.5	5.16
Q112	5.05	5.11	5.16

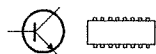
CD IC CONTRUCTION



CD IC CONSTRUCTION



ELECTRICAL PARTSLIST - CD



IC101	4822 209 33989	IC OM5232
IC102	4822 209 33992	IC TDA1302T
IC103	4822 209 32763	IC TDA1301T
IC104	4822 209 33991	IC SAA7345-M5
IC105	4822 209 61073	IC TDA7073A

IC106	4822 209 61073	IC TDA7073A
IC107	4822 209 32591	IC LA6458D
IC108	4822 209 33993	IC TDA1311AT
CDIC1	4822 209 72893	IC PCF8566T
Q101	4822 130 40937	Trans. BC548B

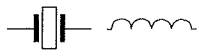
Q102	5322 130 44593	Trans. BC369
Q103	4822 130 40824	Trans. BD136
Q104	4822 130 40958	Trans. BC338-25
Q105	4822 130 40988	Trans. BC328-25
Q106	4822 130 40988	Trans. BC328-25

Q107	4822 130 40958	Trans. BC328-25
Q108	4822 130 40958	Trans. BC328-25
Q109	4822 130 40958	Trans. BC328-25
Q110	4822 130 40958	Trans. BC328-25
Q111	4822 130 44197	Trans. BC558B

Q112	4822 130 44197	Trans. BC558B
CDQ7	4822 130 63014	Trans. 2SC536G



D105	4822 130 30621	Diode 1N4148
D106	4822 130 30621	Diode 1N4148
ZD101	4822 130 83818	Zener MTZJ5P1C



XT102	4822 242 81693	Crystal 16.9344MHZ
X1T01	4822 242 81963	Crystal 12MHz



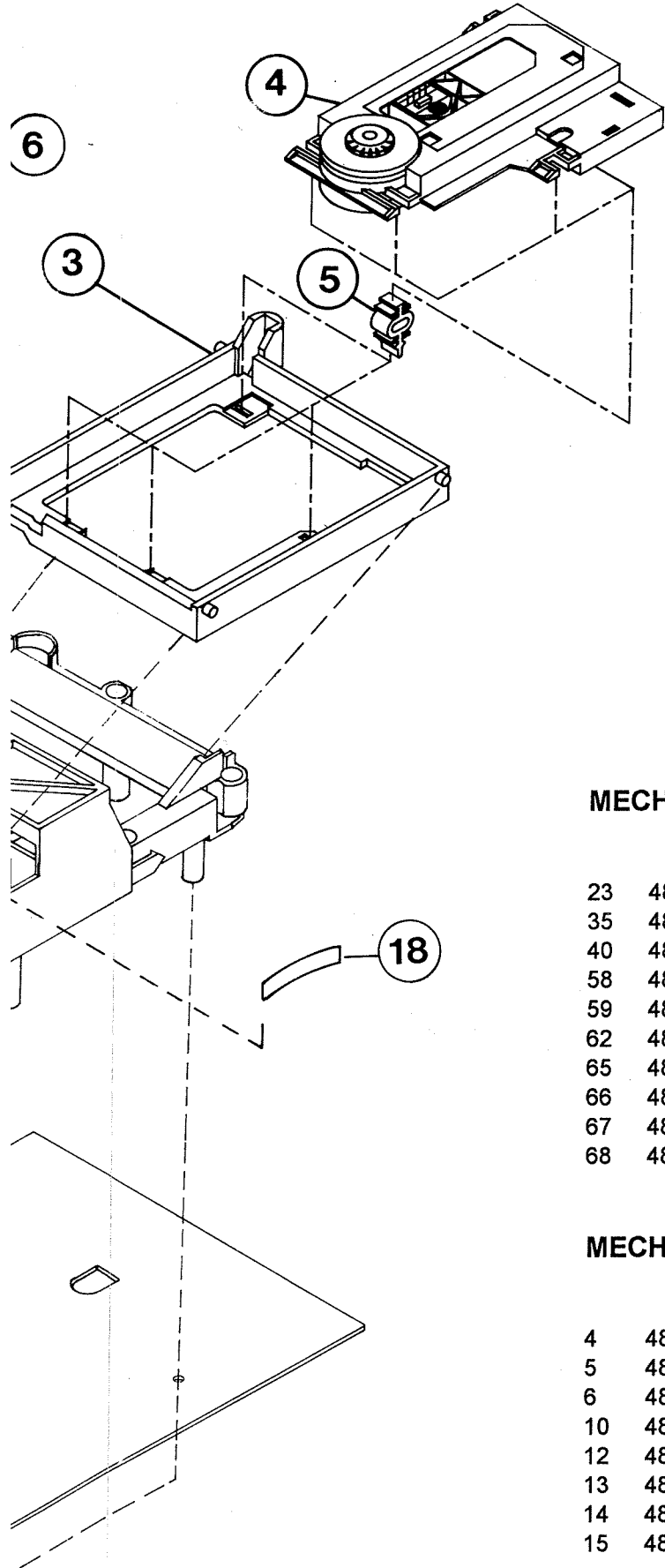
R152	4822 116 82969	Fusible Rst 10 Ohm
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- MISCELLANEOUS -

CDSW1	4822 276 13582	Tact Switch
CDSW2	4822 276 13582	Tact Switch
CDSW3	4822 276 13582	Tact Switch
CDSW4	4822 276 13582	Tact Switch
CDSW5	4822 276 13582	Tact Switch

CDSW6	4822 276 13582	Tact Switch
CDSW7	4822 276 13582	Tact Switch
CDSW8	4822 276 13582	Tact Switch
CDSW9	4822 276 13582	Tact Switch
CDSW10	4822 276 13582	Tact Switch

BULB 2	4822 134 41172	Bulb 5.8V/200mA
LCD 2	4822 130 91445	LCD



Tape Deck

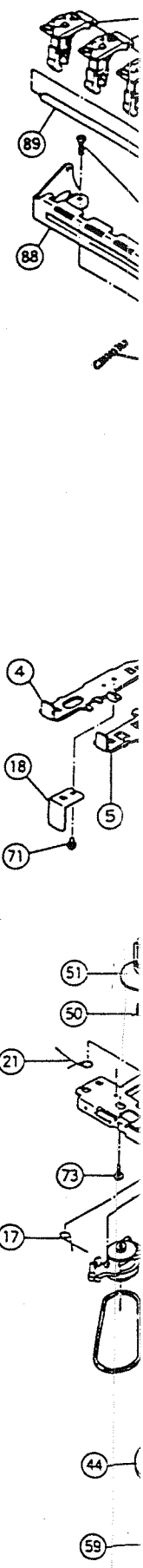
MECHANICAL PARTSLIST - CD MECH

23	4822 278 90596	Leaf Sw MSW-1541T
35	4822 403 20244	Roller Arm Assy
40	4822 358 31323	FF Belt
58	4822 528 81546	Motor Pulley
59	4822 358 31322	Main Belt
62	4822 403 71219	Eject Slider
65	4822 249 30218	P Head
66	4822 249 30218	R.P Head
67	4822 249 40322	E Head
68	4822 361 21657	Motor

CD MECH

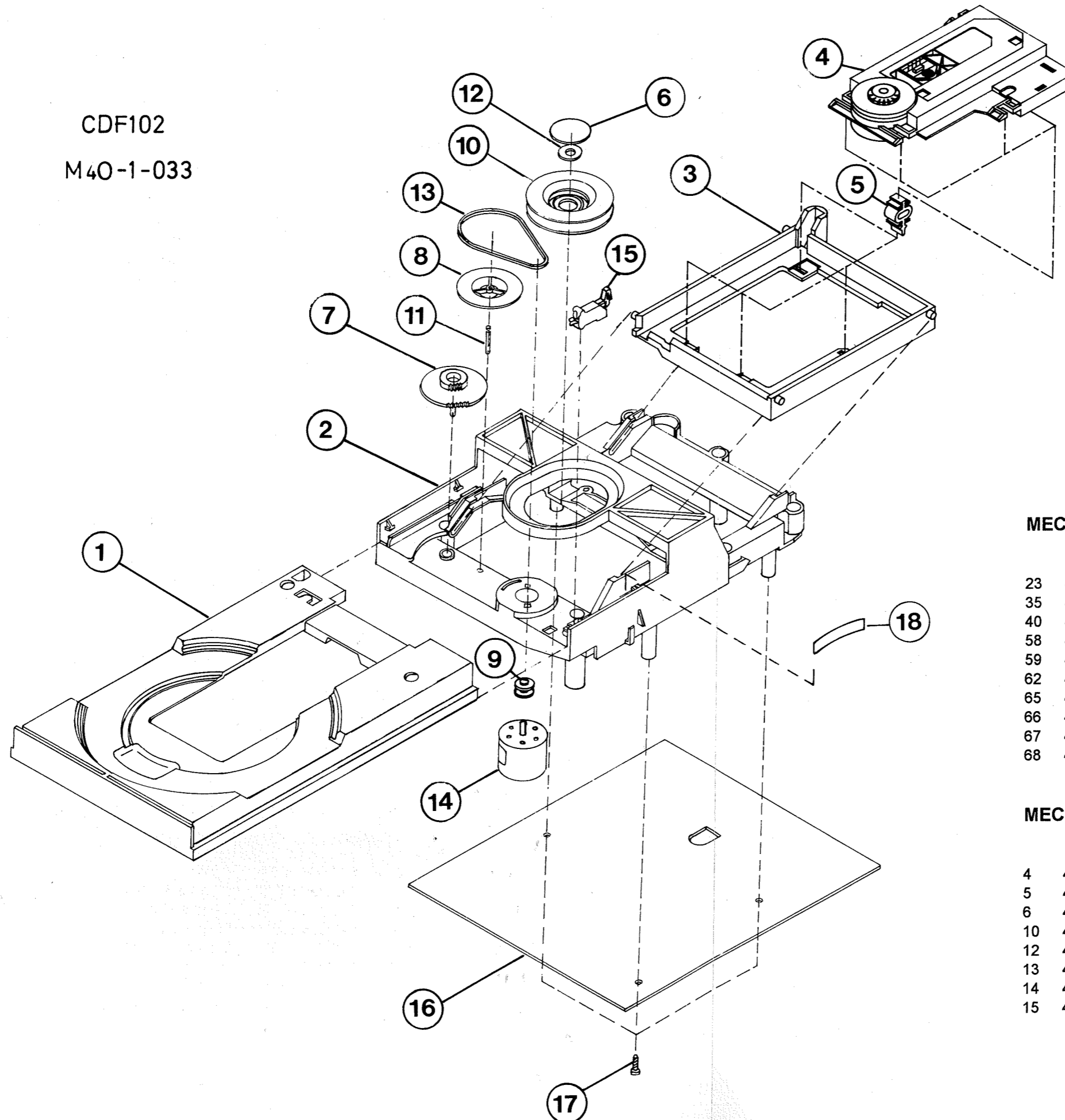
MECHANICAL PARTSLIST - TAPE DECK

4	4822 691 30278	CDM12.1
5	4822 325 50215	Silicone Rubber
6	4822 466 83168	Magnet Plate
10	4822 526 20221	Magnet Dim. 11.8 x 1
12	4822 535 20091	Magnet Ring
13	4822 358 31321	CD Belt
14	4822 361 21751	CD Motor
15	4822 276 13222	Leaf Sw QAS-1229-9



EXPLODED VIEW DIAGRAM - CD MECH

CDF102
M40-1-033



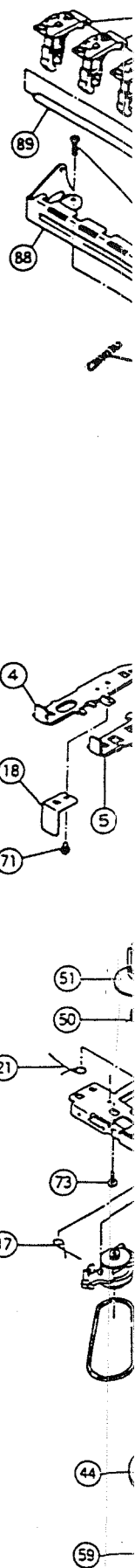
TAPE DECK
~~MECHANICAL PARTSLIST - CD MECH~~

23	4822 278 90596	Leaf Sw MSW-1541T
35	4822 403 20244	Roller Arm Assy
40	4822 358 31323	FF Belt
58	4822 528 81546	Motor Pulley
59	4822 358 31322	Main Belt
62	4822 403 71219	Eject Slider
65	4822 249 30218	P Head
66	4822 249 30218	R.P Head
67	4822 249 40322	E Head
68	4822 361 21657	Motor

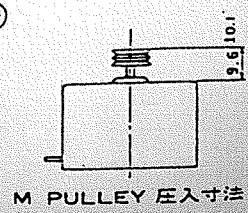
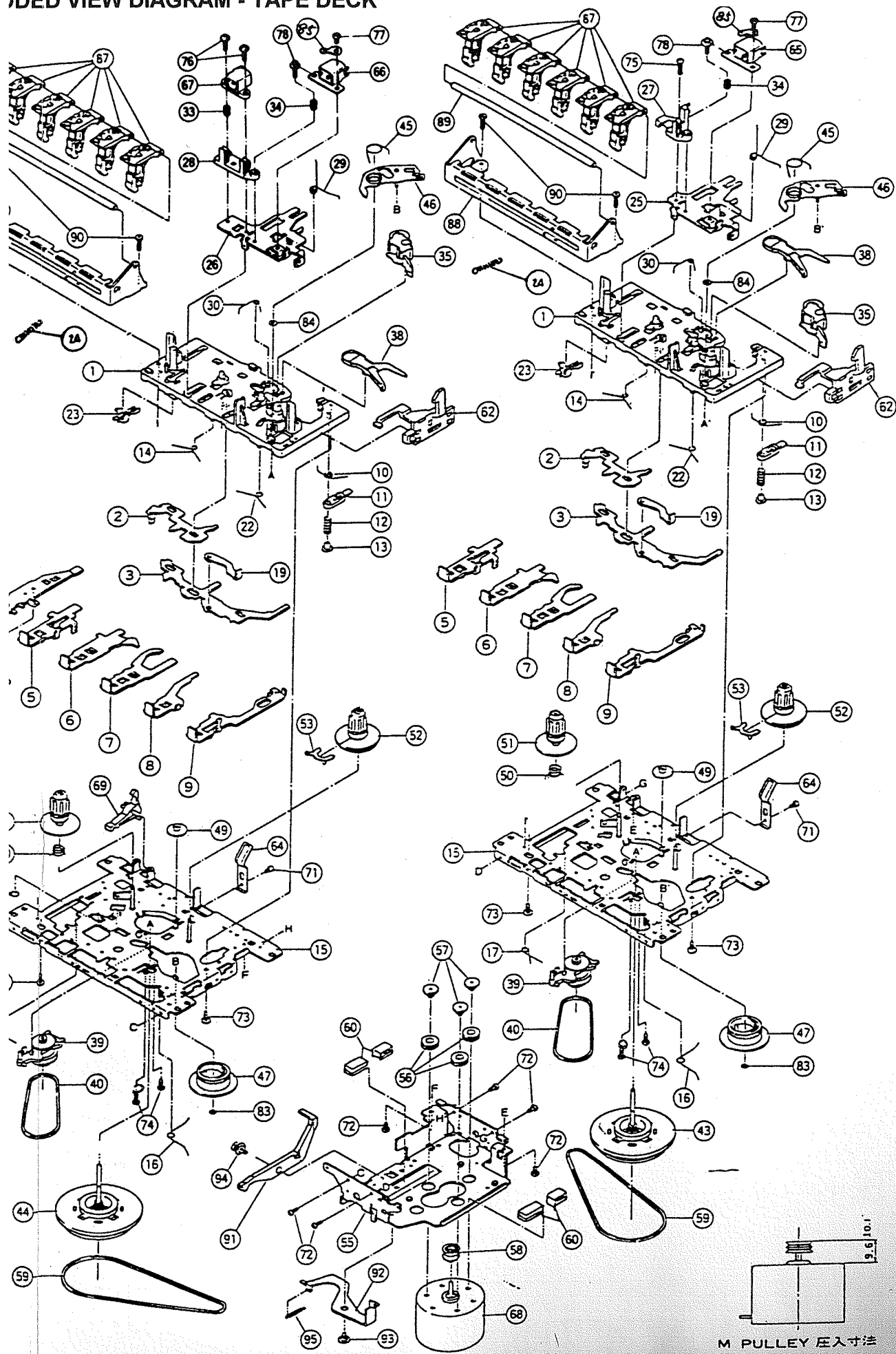
CD MECH
~~MECHANICAL PARTSLIST - TAPE DECK~~

4	4822 691 30278	CDM12.1
5	4822 325 50215	Silicone Rubber
6	4822 466 83168	Magnet Plate
10	4822 526 20221	Magnet Dim. 11.8 x 1
12	4822 535 20091	Magnet Ring
13	4822 358 31321	CD Belt
14	4822 361 21751	CD Motor
15	4822 276 13222	Leaf Sw QAS-1229-9

EXPLODE



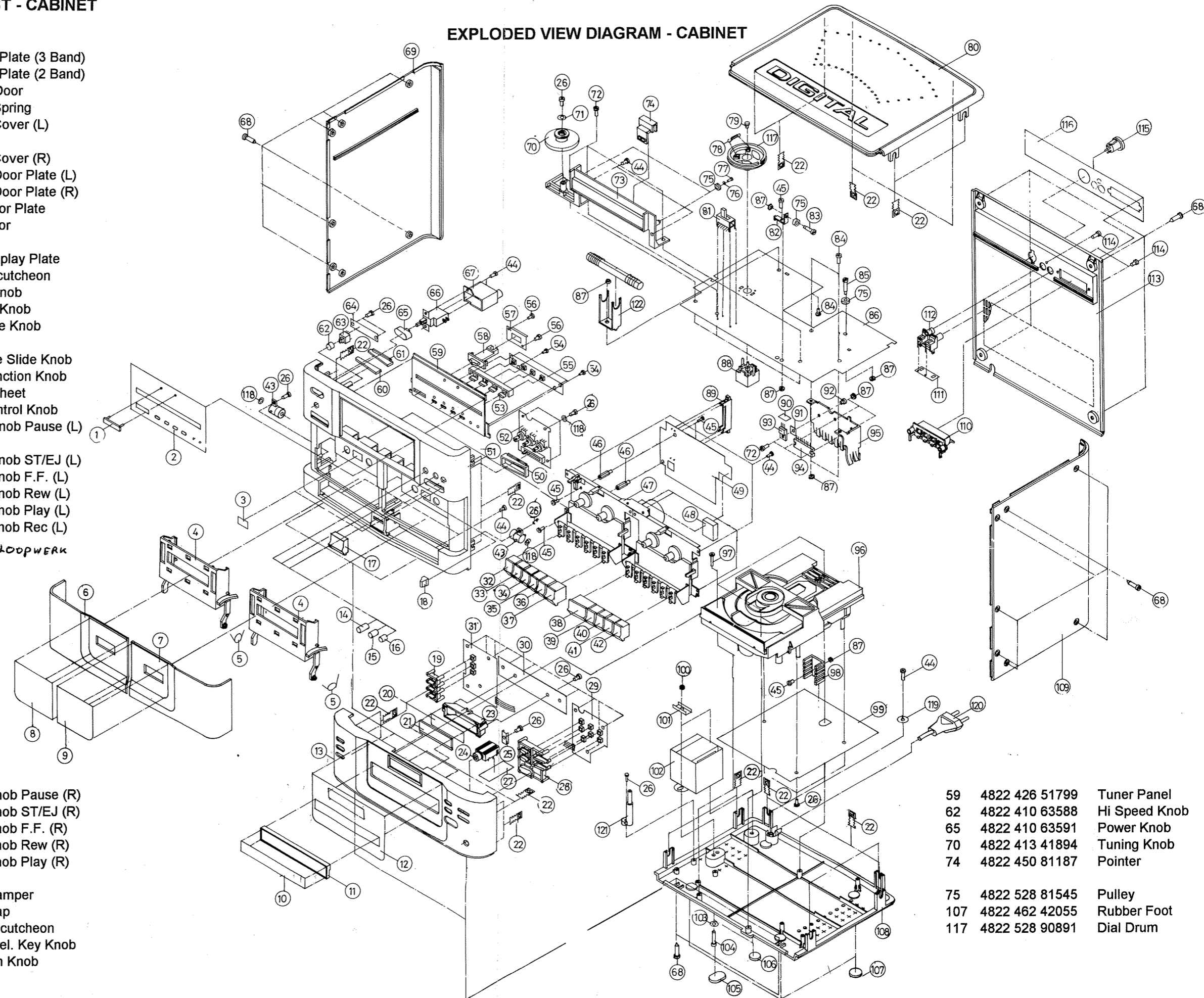
EXPLODED VIEW DIAGRAM - TAPE DECK



MECHANICAL PARTSLIST - CABINET

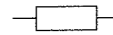
- | | | |
|----|----------------|----------------------|
| 2 | 4822 426 51804 | Tuner Plate (3 Band) |
| 2 | 4822 426 51803 | Tuner Plate (2 Band) |
| 4 | 4822 443 64373 | Cass Door |
| 5 | 4822 492 42541 | Door Spring |
| 6 | 4822 443 64376 | Door Cover (L) |
| 7 | 4822 443 64377 | Door Cover (R) |
| 8 | 4822 443 64374 | Cass Door Plate (L) |
| 9 | 4822 443 64375 | Cass Door Plate (R) |
| 10 | 4822 444 61034 | CD Door Plate |
| 11 | 4822 444 61033 | CD Door |
| 12 | 4822 454 12958 | CD Display Plate |
| 13 | 4822 444 40809 | CD Escutcheon |
| 14 | 4822 413 31834 | Bass Knob |
| 15 | 4822 413 31835 | Treble Knob |
| 16 | 4822 413 31836 | Balance Knob |
| 18 | 4822 411 61998 | Volume Slide Knob |
| 19 | 4822 410 63592 | CD Function Knob |
| 20 | 4822 466 30467 | Filter Sheet |
| 28 | 4822 410 63587 | CD Control Knob |
| 32 | 4822 410 63593 | Cass Knob Pause (L) |
| 33 | 4822 410 63594 | Cass Knob ST/EJ (L) |
| 34 | 4822 410 63595 | Cass Knob F.F. (L) |
| 35 | 4822 410 63596 | Cass Knob Rew (L) |
| 36 | 4822 410 63597 | Cass Knob Play (L) |
| 37 | 4822 410 63598 | Cass Knob Rec (L) |
| 47 | 4822 69110453 | CASS LOOPWRENCH |
| 38 | 4822 410 63599 | Cass Knob Pause (R) |
| 39 | 4822 410 63601 | Cass Knob ST/EJ (R) |
| 40 | 4822 410 63602 | Cass Knob F.F. (R) |
| 41 | 4822 410 63603 | Cass Knob Rew (R) |
| 42 | 4822 410 63604 | Cass Knob Play (R) |
| 43 | 4822 522 33535 | Gear Damper |
| 43 | 4822 462 72084 | Gear Cap |
| 51 | 4822 426 51798 | Main Escutcheon |
| 53 | 4822 410 63589 | Tuner Sel. Key Knob |
| 58 | 4822 410 63586 | Function Knob |

EXPLODED VIEW DIAGRAM - CABINET

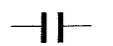


- | | | |
|-----|----------------|---------------|
| 59 | 4822 426 51799 | Tuner Panel |
| 62 | 4822 410 63588 | Hi Speed Knob |
| 65 | 4822 410 63591 | Power Knob |
| 70 | 4822 413 41894 | Tuning Knob |
| 74 | 4822 450 81187 | Pointer |
| 75 | 4822 528 81545 | Pulley |
| 107 | 4822 462 42055 | Rubber Foot |
| 117 | 4822 528 90891 | Dial Drum |

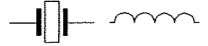
ELECTRICAL PARTSLIST




VR201	4822 101 21258	Rotary VR 100KB x 2
VR202	4822 101 21258	Rotary VR 100KB x 2
VR203	4822 101 21259	Rotary 100KB x 1
VR204	4822 105 11148	Slide VR 50KA x 2
RVR1	4822 101 11336	Semi-fixed VR 1K
VR101	4822 101 11337	Semi-fixed VR 50K




1TP101	* 4822 125 50677	Trim Cap CVN630
1TP102	* 4822 125 50678	Trim CapTZ03P600E
VC101	4822 125 40055	PVC 2LHT-LD5



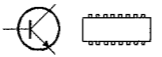
L102	* 4822 157 71446	LW Coil Antenna
L103	4822 157 71444	Coil 3.5T 4.5MM
L104	4822 157 71447	Coil MT-10 2.5T FA
L105	4822 157 71445	AM Coil Antenna
L106	4822 157 70147	Coil 4.5T 4.8MM
RL1	4822 157 63197	Coil 1.8MH
CF101	4822 242 70665	Filter SFE 10.7MS3-A
CF102	4822 242 70665	Filter SFE 10.7MS3-A
CF103	4822 242 81362	Filter CDA10.7MC40-A
T101	4822 157 71449	IFT MT222-1170
T102	4822 157 71451	IFT MT222-1171
T103	4822 157 71448	IFT MT211-1182



RD1	4822 130 30621	Diode 1N4148
RD2	4822 130 30621	Diode 1N4148
RD3	4822 130 30621	Diode 1N4148
RD4	4822 130 30621	Diode 1N4148
D101	4822 130 30621	Diode 1N4148
D102	4822 130 30621	Diode 1N4148
RD5	5322 130 30684	Diode 1N4002
RD6	5322 130 30684	Diode 1N4002
D103	5322 130 30684	Diode 1N4002
D104	5322 130 30684	Diode 1N4002



D105	5322 130 30684	Diode 1N4002
D106	5322 130 30684	Diode 1N4002
D107	5322 130 30684	Diode 1N4002
D108	5322 130 30684	Diode 1N4002
D109	5322 130 30684	Diode 1N4002
D110	5322 130 30684	Diode 1N4002
D111	5322 130 30684	Diode 1N4002
ZD101	4822 130 33948	Zener MTZJ5.6B
ZD102	4822 130 83514	Zener MTZJ12C
LD301	4822 130 82338	LED SLR34UR3F
LD302	4822 130 82338	LED SLR34UR3F
LD303	4822 130 82338	LED SLR34UR3F
LD304	4822 130 82338	LED SLR34UR3F
LD305	4822 130 82338	LED SLR34UR3F
LD306	4822 130 82338	LED SLR34UR3F



Q101	4822 130 41505	Trans. 2SA1015Y
Q102	4822 130 41505	Trans. 2SA1015Y
Q103	4822 130 41505	Trans. 2SA1015Y
Q104	4822 130 62698	Trans. 2SC732TM
Q105	4822 130 62698	Trans. 2SC732TM
Q106	4822 130 41768	Trans. 2SD313E
Q107	4822 130 62698	Trans. 2SC732TM
Q108	4822 130 62698	Trans. 2SC732TM
Q109	4822 130 63723	Trans. 2SC3792
Q110	4822 130 63723	Trans. 2SC3792
RQ1	4822 130 42292	Trans. 2SC2120Y
RQ2	4822 130 41505	Trans. 2SA11015Y
RQ3	4822 130 62698	Trans. 2SC732TM
Q201	4822 130 62698	Trans. 2SC732TM
Q202	4822 130 62698	Trans. 2SC732TM
IC101	4822 209 32746	IC TEA5711T
IC102	4822 209 83315	IC LC7818
IC103	4822 209 30471	IC LA4508
RIC1	4822 209 33988	IC BA3313L
RIC2	4822 209 71951	IC BA3416BL

ELECTRICAL PARTSLIST

- MISCELLANEOUS -

RSW1	4822 276 13086	Push Switch 6P-2T
SW301	4822 276 13582	Tact Switch
SW302	4822 276 13582	Tact Switch
SW303	4822 276 13582	Tact Switch
SW304	4822 276 13582	Tact Switch
SW101	* 4822 277 30966	Slide SwitchSS-43D07
SW101	4822 277 21778	Slide SwitchSS-42D07
SW501	4822 276 13317	Push Switch 2P-2T
AUX1	4822 267 31873	Jack HSP-212V-02BK
	4822 267 31342	H.P Jack HTJ-064-04A
	△ 4822 146 31444	Power Transformer
SW103	△ 4822 276 13316	Power Switch 4A/250V
	4822 158 60614	Ant. Bar D10X100F

* For 3 band versions only