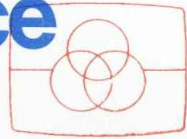


Mini System FW41/20/21/22/25/30/34/37

Service
Service
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Service Manual

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

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4822 725 24455

CLASS 1
LASER PRODUCT

PHILIPS

SPECIFICATIONS

GENERAL

Mains voltage/setting	:	120V - 220V - 240V
		Serviceable
		Set at 120V for -/37
		Set at 220V for -/20/22/28
		Set at 240V for -/25/30
	:	120V - 230V
		Switchable, set at 230V for -/21/34
	:	110V - 220V
		Switchable, set at 220V for -/33
Mains frequency	:	50Hz - 60Hz
Clock Accuracy	:	< 4 seconds/day
Mains breakdown backup	:	< 10 minutes
Power consumption	:	162W max.
Dimension centre unit	:	555 x 306 x 301mm

TUNER : FM SECTION

Tuning range

IF frequency
Aerial inputSensitivity at 26dB S/N
Selectivity at 600kHz bandwidth
IF rejection
Image rejection

TUNER 92

87.5MHz - 108MHz
65.81MHz - 108MHz for -/34
10.7MHz
75Ω coaxial
300Ω screw type adaptor for -/37
< 3.5μV
> 45dB
> 60dB
> 25dB

ECO4 *

< 7μV
> 30dB
> 60dB
> 25dB

TUNER : AM SECTION

Tuning range

IF frequency

Sensitivity at 26dB S/N

Selectivity at 18kHz bandwidth

IF rejection

Image rejection

MW : 522kHz - 1611kHz
MW : 530kHz - 1710kHz for -/21/37
LW : 153kHz - 279kHz
450kHz
MW : < 3.0mV/M
LW : < 6.0mV/M
MW : > 24dB
LW : > 28dB
MW : > 35dB
LW : > 40dB
MW : > 27dB
LW : > 40dB< 1.3mV/M
< 4.5mV/M
> 20dB
> 24dB
> 24dB
> 26dB
> 28dB
> 30dB

AMPLIFIER

Output power at 10% distortion
Speaker impedance
Frequency response within -3dB
Equalizer control
Dynamic bass boost
Headphone output at 32Ω
Input sensitivityAux/TV : 400mV at 47kΩ
Mic : 1.5mV at 600Ω
Phono : 2.7mV

CASSETTE RECORDER

Number of track

Tape speed

Wow and flutter

Fast-wind time C60

Bias system

Recording playback frequency response within -7dB

Signal to noise ratio

Recording : > 50dB (IEC I)
> 54dB (IEC II)
Dubbing : > 48dB
8.5dB

Dolby B factor

COMPACT DISC

Frequency response within ± 2dB

Signal/Hiss ratio

Distortion at 1kHz

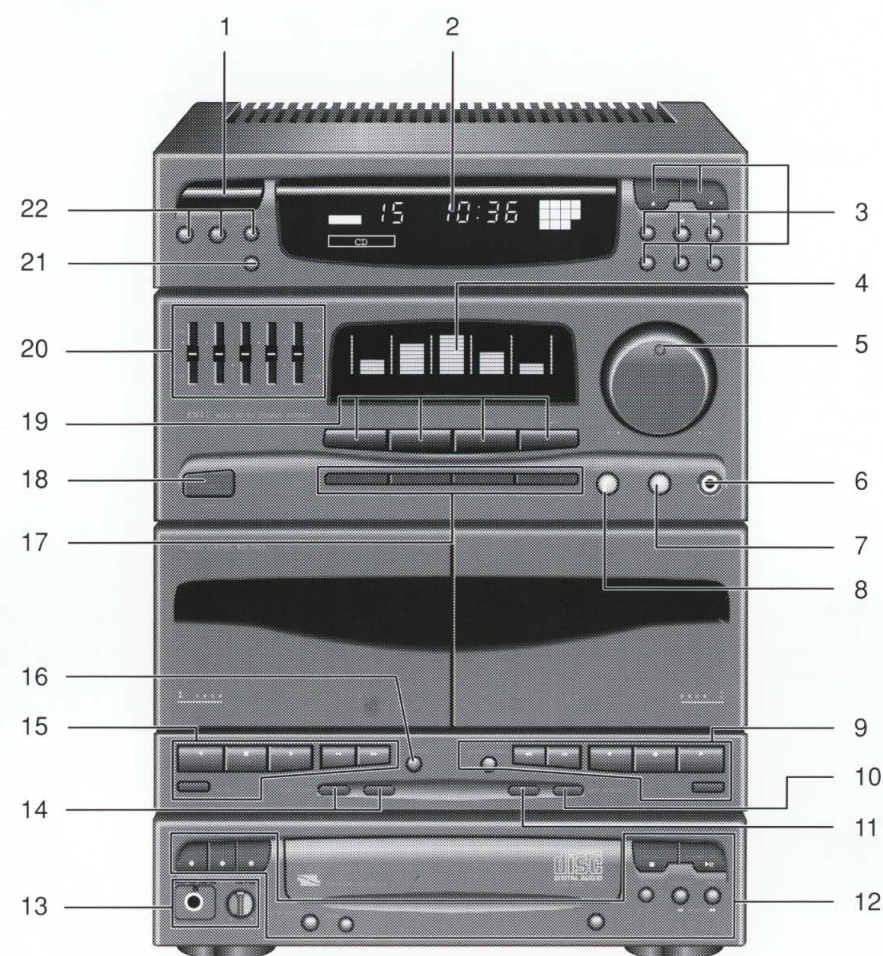
Channel difference at 1kHz

Channel crosstalk at 1kHz

De-emphasis

20Hz - 20kHz
> 75dB
< 0.03%
< 2dB
> 60dB
0 or 15/50 μS (Switched by subcode on the disc)

* Unless otherwise stated will refer to Tuner 92 specifications

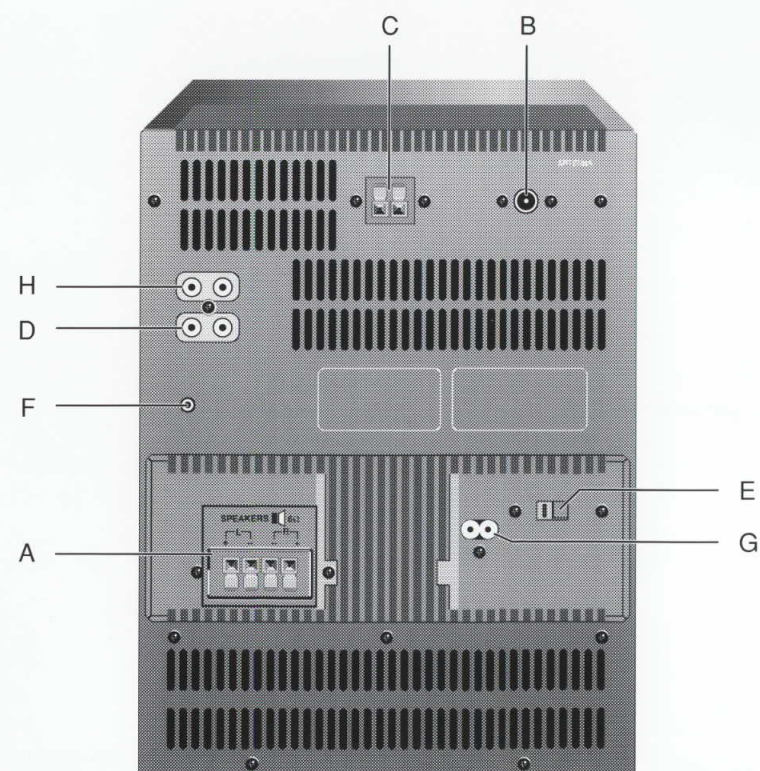
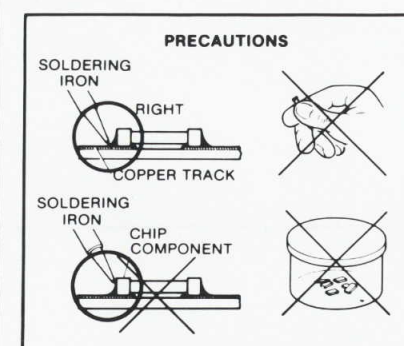
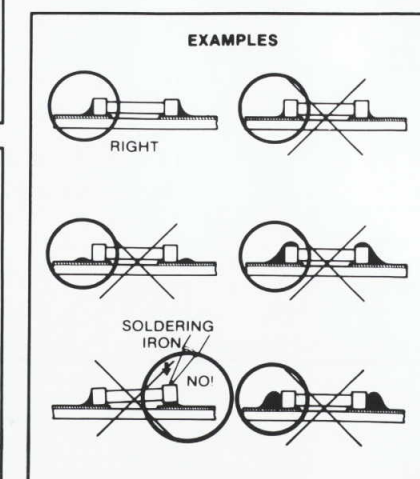
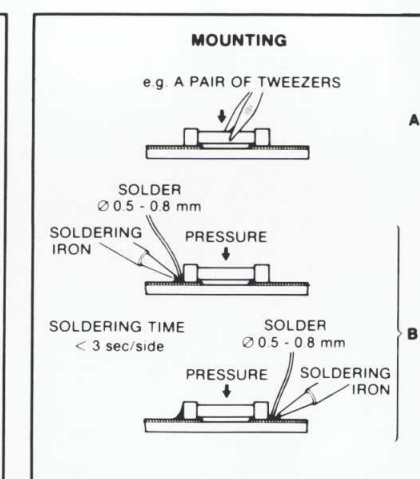
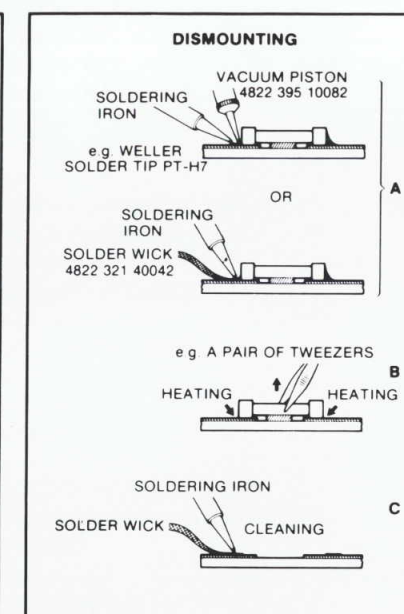
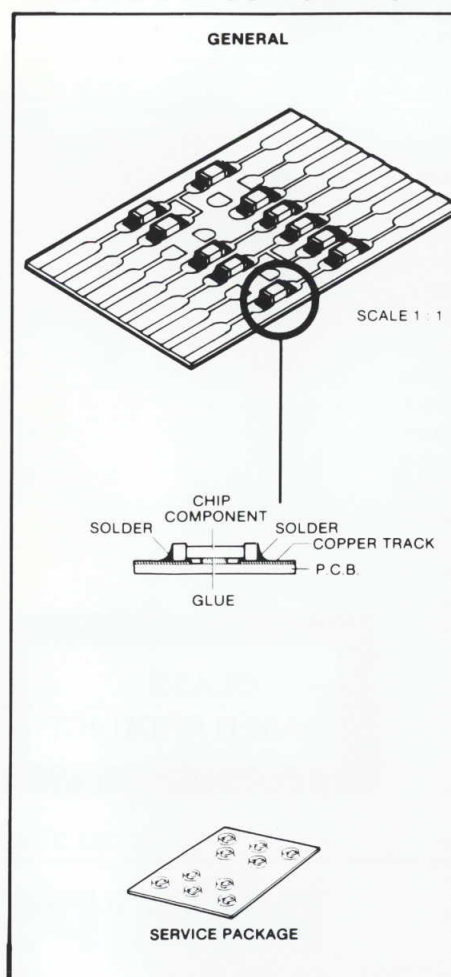


CONNECTIONS AND CONTROLS

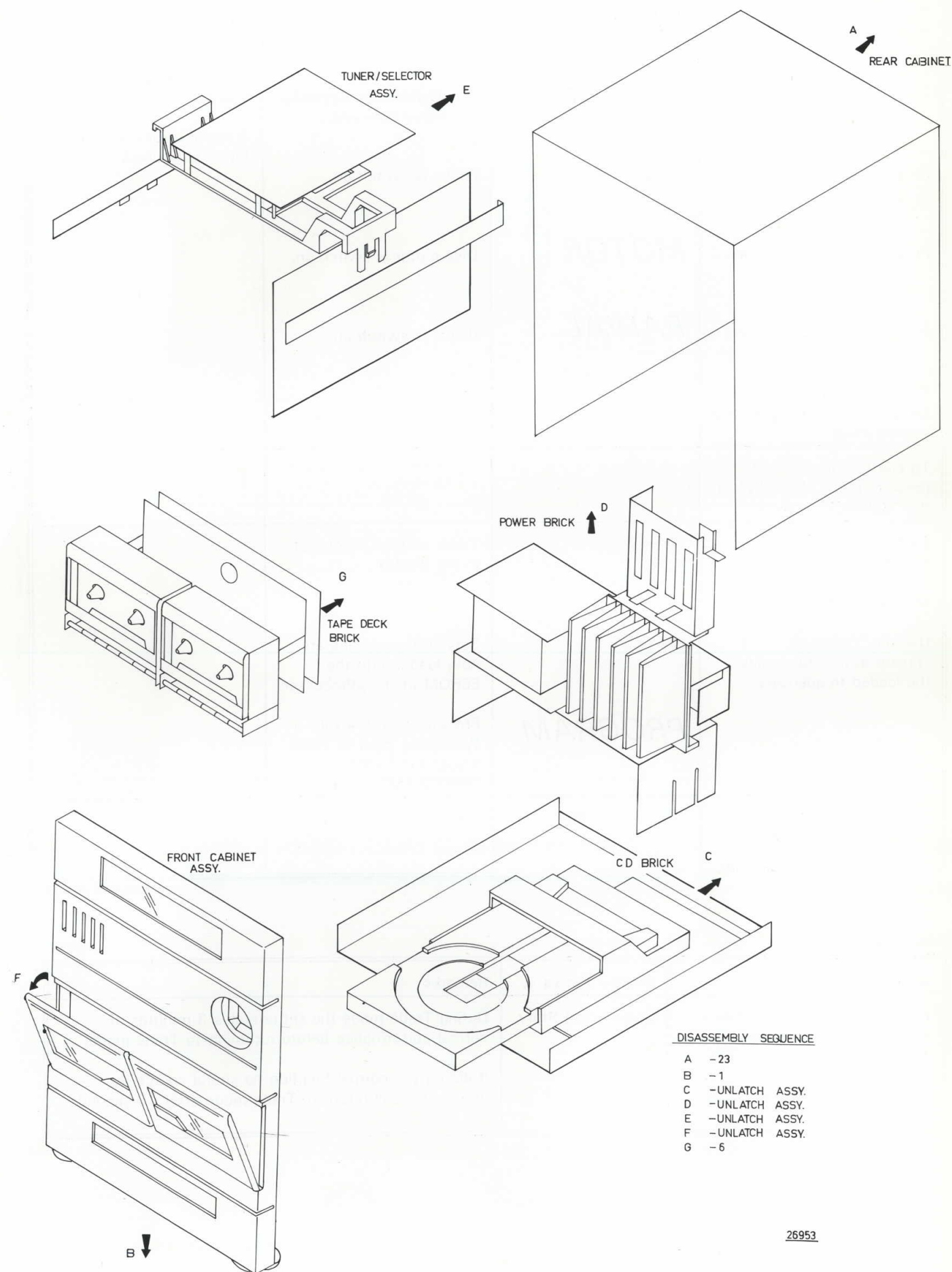
1	IR sensor	6405	13	Mic mixer (Karaoke)	Mic socket *)	1502
2	FTD display	1401			Mixer control *)	3507
3	Tuner controls	Preset up/down 1419, 1420	14	Dubbing speed	High	1905
		Tuning up/down 1426, 1427			Normal	1910
		Band 1418	15	Play deck	Play reverse	1923
		Mono 1421			Stop	1903
		Autoprogram 1429			Play forward	1925
		Program 1428			Fast rewind	1909
					Fast forward	1907
4	GE Display	1402	16	CD synchro		1911
5	Volume control	3534	17	Digital sound control	Jazz	1410
6	Headphone socket	1510			Pop	1411
7	Spatial sound	1432			Classic	1412
8	Dynamic bass boost	1433			Flat	1413
9	Record/playback deck	Record/pause 1900	18	Power on/off (Standby)		1431
		Fast rewind 1908	19	Function controls	CD	1414
		Fast forward 1906			Tuner	1415
		Play reverse 1924			Tape	1416
		Stop 1902			Aux/TV	1417
		Play forward 1926	20	Graphic equalizer		3507 - 3511
		Eject	21	Clock set		1422
10	Auto reverse	1904	22	Timer/News control	Timer	1425
11	Dolby B NR	1901			News	1424
12	CD controls	Repeat 1914			Timer/News set	1423
		Scan 1913				
		Shuffle 1912	A	Speaker output socket		1260
		Program/review 1915	B	FM Aerial socket		1110
		Clear 1916	C	AM Aerial socket		1111
		Edit 1917	D	Aux/TV input socket		1554
		Stop 1922	E	Voltage selector *)		1262
		Play/pause 1921	F	System reset switch		1558
		Tray open/close 1918	G	AC supply socket		1261
		Previous 1919	H	Phono input socket		1554
		Next 1920				

*) For /21/34/39 only

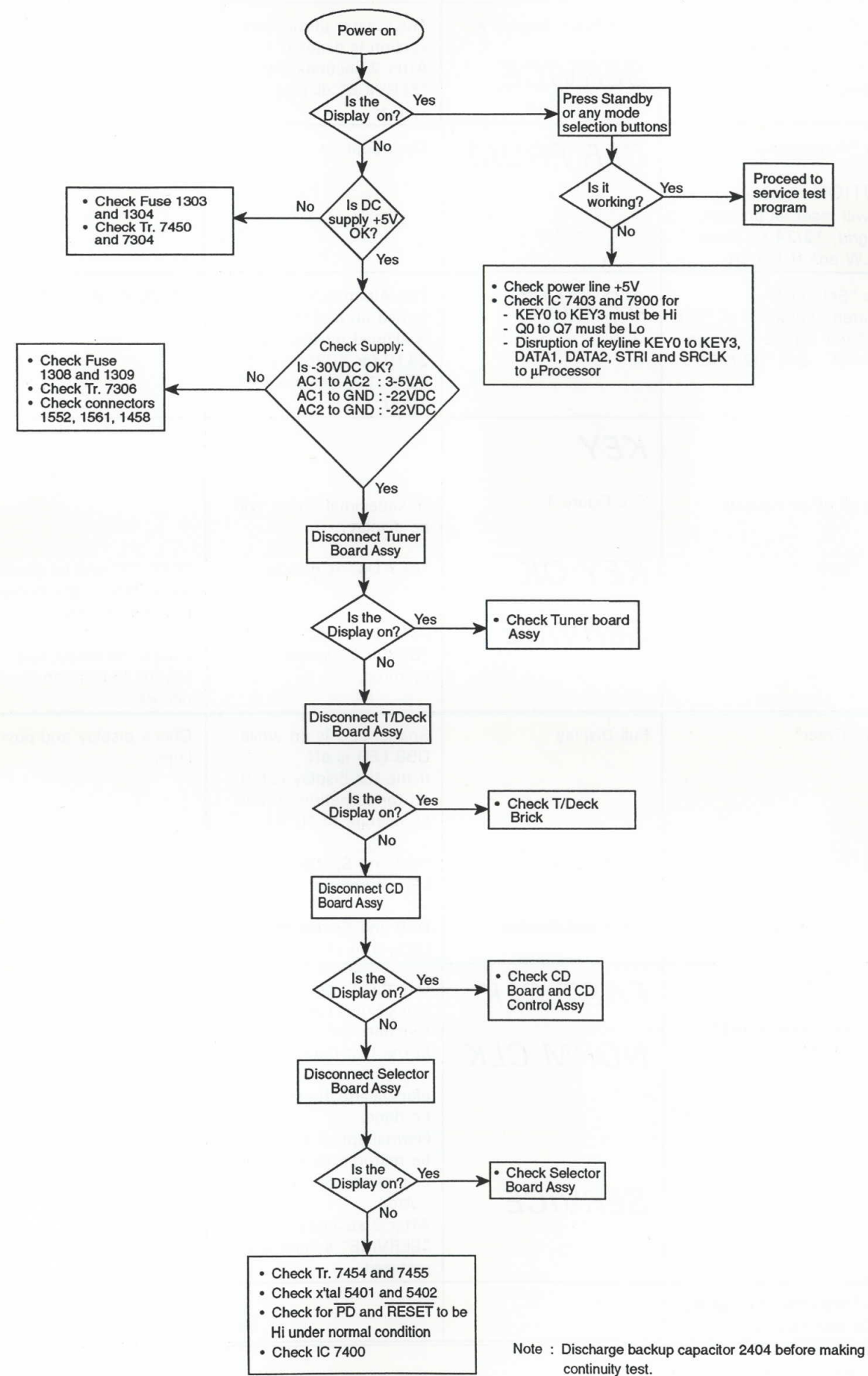
HANDLING CHIP COMPONENTS



DISASSEMBLY DRAWING



REPAIR CHART



SERVICE TEST PROGRAM 1

Operating sequence	Display shows	Remarks	In case of problems check
Hold "Program" and "Preset Up" button down while Power on to enter Service test program.	μ Processor version # SERVICE	The master μ Processor version is display. After 2 seconds the "SERVICE" display appear.	
Press "Autoprogram" CAUTION: Activating this test will reset all presets, MW grid, 12/24 Hr clock and LW on/off feature.	CLR PROM	Clear Eeprom	
Press "Set clock" Repeated activation of "Set clock" will toggle between "SERVICE" and "32 KHZ".	32 KHZ	The Alarm buzzer is turned on and the clock is aligned by trimmer 2410 for 4096Hz at pin 10 of 1457 or pin 4 of 7400.	Check X'tal 5402.
Press "News" Press all other buttons Press "News"	KEY See Figure 1 KEY OK SERVICE	Hexadecimal codes will be display. "KEY OK" is display. After 2 seconds the "SERVICE" screen is restored.	"KEY ***" will be display when failure or incomplete key test is done. Check the respective keyline in case an error occurs.
Press "Timer" Press "Preset Up" Press "Preset Up"	Full Display Half Display Other half Display	Spatial LED is on while DBB LED is off. If the full display is left on for sometime, it will be change to "0"s. DBB and Spatial sound LEDs turns on. DBB and Spatial sound LEDs turn off.	Check display and power lines.
Press "BAND" Repeated activation will toggle between "FAST" and "NORM" clock.	FAST CLK NORM CLK SERVICE	Use this to change the clock/timer speed function. In the fast mode quick customer check in the clock/alarm function can be done. Normal speed clock will be restored by Power off or activating reset button. After 2 seconds the "SERVICE" screen will be restored.	
Press "Standby" to end the service test program.			

SERVICE TEST PROGRAM 2

Operating sequence	Display shows	Remarks	In case of problems check
To perform CD test press "CD" at the "SERVICE" screen. Press "Stop" - Service pos 0 Press "Next" - Service pos 1 Press "Next" - Service pos 2 Press "Next" - Service pos 3 Pressing "Previous" will bring the set to the previous service mode.	SERVO YY SLEDGE FOCUS MOTOR RADIAL	The CD servo version is display. YY = version number During this test the sledge will move outward. Focus is switch on. Disc motor is switch on. Radial is switch on.	Pressing the "Play" key at the "SERVICE" screen will enter into normal CD mode except error codes are display. A list of error codes are found in figure 3.
To end the Service test program press "Standby" at the "SERVICE" screen.			
To perform Tuner test ensure no disc is in the CD tray and press "Tuner" at the "SERVICE" screen. Use the "Preset Up" and "Preset down" to display the loaded frequencies. ¹	Tuner version See figure 2 PROGRAM	Tuner version is scrolled in the display. Service frequencies are now loaded into the EEROM of the μ Processor. FM auto-search level: With input level at 15 μ V adjust 3125 until "PROGRAM" just appear.	
Use Power off or Reset button to exit the Service program			

TRADE MODE

Operating sequence	Display shows	Remarks
Hold "Aux" and "Tape" down while Power on to enter the Trade mode. To exit Trade mode press the "Reset" button.	Commercial Story	During Trade mode the set provides 3 minutes of normal performance before returning to Trade mode. If during the normal function no sound source is detected it will return to Trade mode after 10 seconds.

Note: FW** xx - OTP version
FW** x - Maskversion
where FW** refers to the Type No.
xx or x refers to the version.

SERVICE KEY TEST TABLE

Timer/News/Tuner	Display	Function	Display	Tape deck	Display	C D	Display
Timer	18	Standby	1E	CD Sync	3A	Repeat	29
Timer/News set	16	Dolby B NR	33	Auto-rev	34	Scan	2A
Clock set	15	HS dubbing	32	PB Deck		Shuffle	2B
Presets Down	12	NS dubbing	31	Play Rev	38	Prog/Review	25
Presets Up	13	DBB	20	Stop	37	Clear	27
Band	11	Spatial sound	1F	Play Fwd	36	Edit	26
Tuning Down	19	CD	0D	Fast Rew	35	Stop	24
Tuning Up	1A	Tuner	0E	Fast Fwd	39	Play/Pause	28
Mono	14	Tape	0F	R/P Deck		Open/close	21
Autoprogram	1C	Aux/TV	10	Record/pause	3B	Previous	22
Prog -	1B	Jazz	09	Fast Rew	3C	Next	23
		Pop	0A	Fast Fwd	30		
		Classic	0B	Play Rev	2D		
		Flat	0C	Stop	2E		
				Play Fwd	2F		

Figure 1

CD ERROR CODES TABLE

Error codes	Check area	Remarks
ERR 1002	ICs 7000, 7060 and 7080	Focus error, no disc
ERR 1007	CDM 12 and Disc	Subcode error, no valid subcode
ERR 1008	Bad Disc and Lens	TOC error, out of lead-in area while reading TOC
ERR 1009	IC 7101 and 7102	CD decoder error
ERR 1010	IC 7000 and 7080	Radial error
ERR 1012	ICs 7000 and 7660	Fatal sledge error
ERR 1013	ICs 7102, 7140, 7141 and 7660	Turntable motor error
ERR 1030	CDM 12 and IC 7000	Too many grooves to jump
ERR 1031	CDM 12 and IC 7000	Search timeout
ERR 1032	CDM 12 and IC 7000	Search binary error
ERR 1033	CDM 12 and IC 7000	Search index error
ERR 1034	CDM 12 and IC 7000	Search time error
ERR 1037	CDM 12 and IC 7000	Selection error
ERR 1050	Operating error	Edit calculation error
ERR 1051	Operating error	Edit track count error
ERR 1052	Operating error	Edit optimal error

Figure 3

TUNER SERVICE TEST FREQUENCIES

PRESET	Eur	East	USA	Jap	Osea	Osea + SW
1	87.50 MHz	65.81 MHz	87.5 MHz	76.0 MHz	87.50 MHz	87.50 MHz
2	98.00 MHz	74.00 MHz	98.0 MHz	90.0 MHz	98.00 MHz	98.00 MHz
3	108.00 MHz	87.50 MHz	108.0 MHz	522 kHz	108.00 MHz	108.00 MHz
4	522 kHz	98.00 MHz	530 kHz	558 kHz	530 kHz	530 kHz
5	558 kHz	108.00 MHz	560 kHz	999 kHz	560 kHz	560 kHz
6	999 kHz	522 kHz	1000 kHz	1494 kHz	1000 kHz	1000 kHz
7	1494 kHz	558 kHz	1600 kHz	1611 kHz	1600 kHz	1600 kHz
8	1611 kHz	999 kHz	1710 kHz		1710 kHz	1710 kHz
9	153 kHz	1494 kHz				3.900 MHz
10	156 kHz	1611 kHz				4.250 MHz
11	198 kHz	153 kHz				8.000 MHz
12	270 kHz	156 kHz				11.900 MHz
13	279 kHz	198 kHz				12.100 MHz
14		270 kHz				
15		279 kHz				

Figure 2

GB WARNING

All ICs and many other semi-conductors 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 also 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 enfilez le bracelet serti d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

ESD**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.

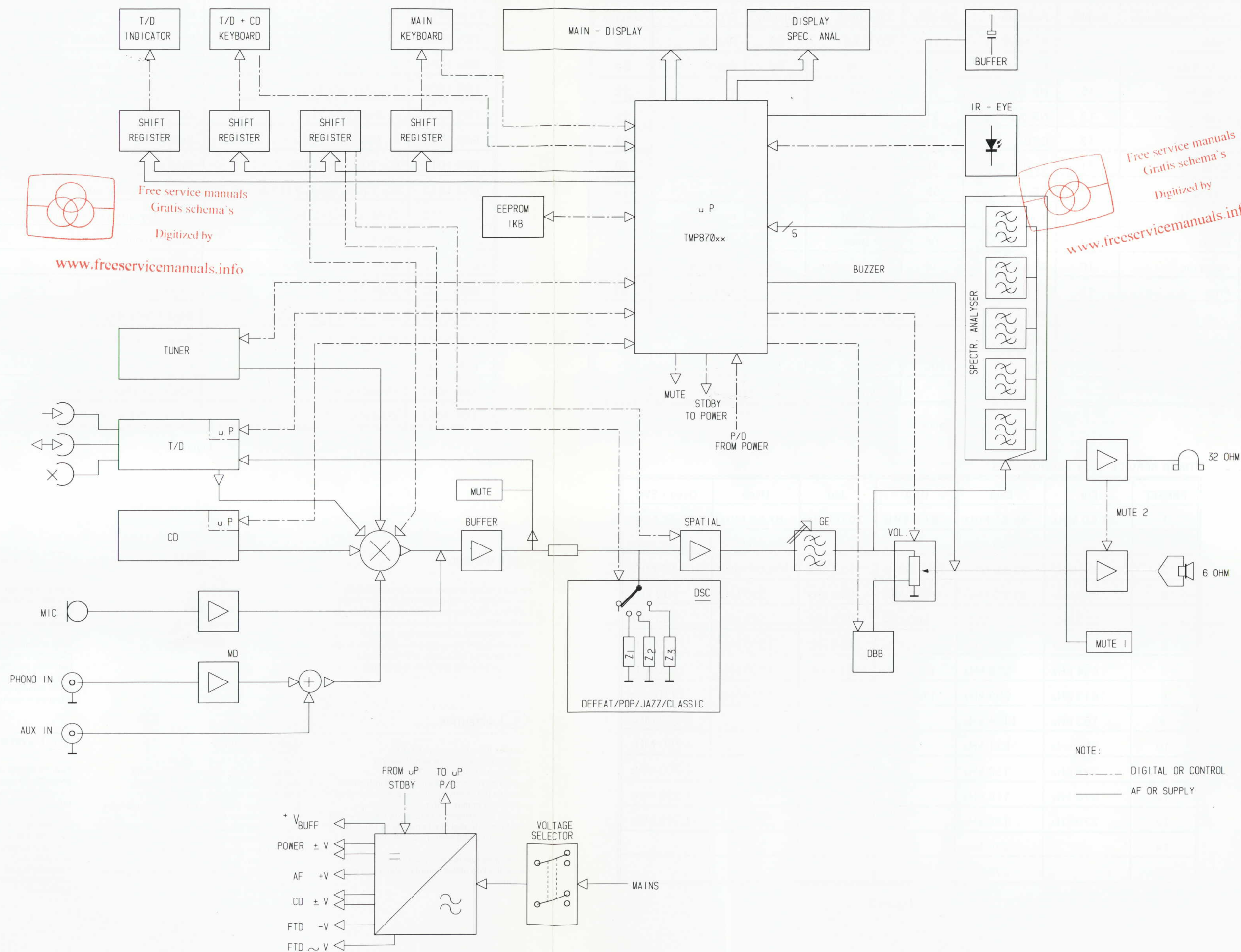
I AVVERTIMENTO

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 braccialetto a resistenza. Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

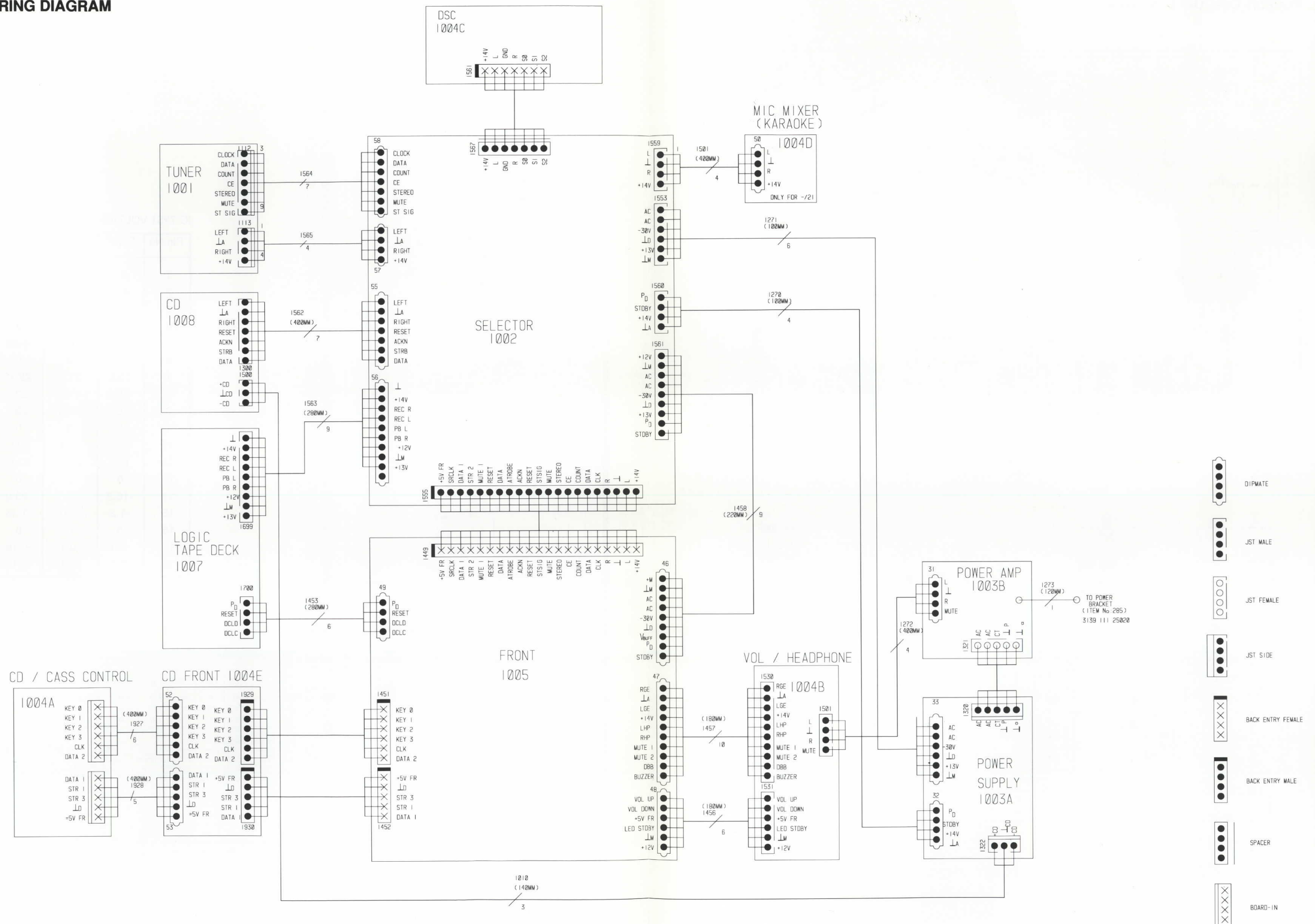
D WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unsorgfältige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes. Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

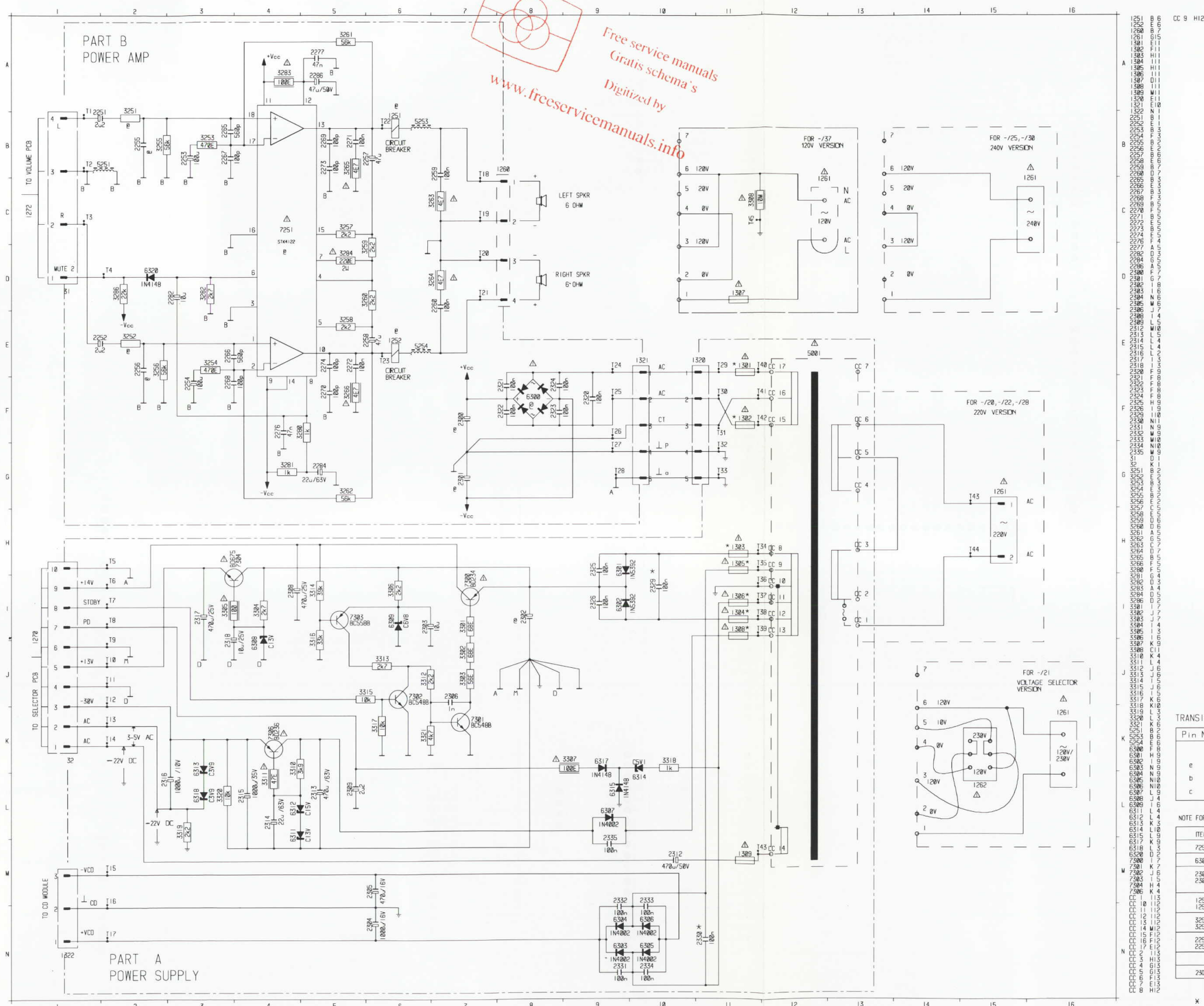
BLOCK DIAGRAM



WIRING DIAGRAM



POWER CIRCUIT DIAGRAM



IC 7251 VOLTAGES (V)

Pin No	FW20	FW30	FW40
1	-0.1	-0.1	-0.18
2	-0.1	-0.1	-0.18
3	0	0	0
4	-13.4	-18.5	-19.3
5	-1.2	-1.0	-1.36
6	0	0	0
7	15.5	21.3	-22.13
8	-16.0	-22.0	-22.8
9	-16.2	-22.1	-23.0
10	0	0	0
11	16.4	22.1	23.0
12	15.3	21.0	21.8
13	0	0	0
14	-16.2	-22.1	-23.0
15	-1.2	-1.0	-1.36
16	0	0	0
17	-0.1	-0.1	-0.18
18	-0.1	-0.1	-0.18

TRANSISTOR VOLTAGE

Pin No	ITEM NO	7300	7301	7302	7303	7304	7306
e		21.5V	0V	0V	6.7V	13.0V	+30.0V
b		20.0V	0.6V	0V	6.2V	12.3V	-29.2V
c		14.0V	20.6V	0.9V	1.3V	21.5V	-47.2V

NOTE FOR ITEMS MARKED @

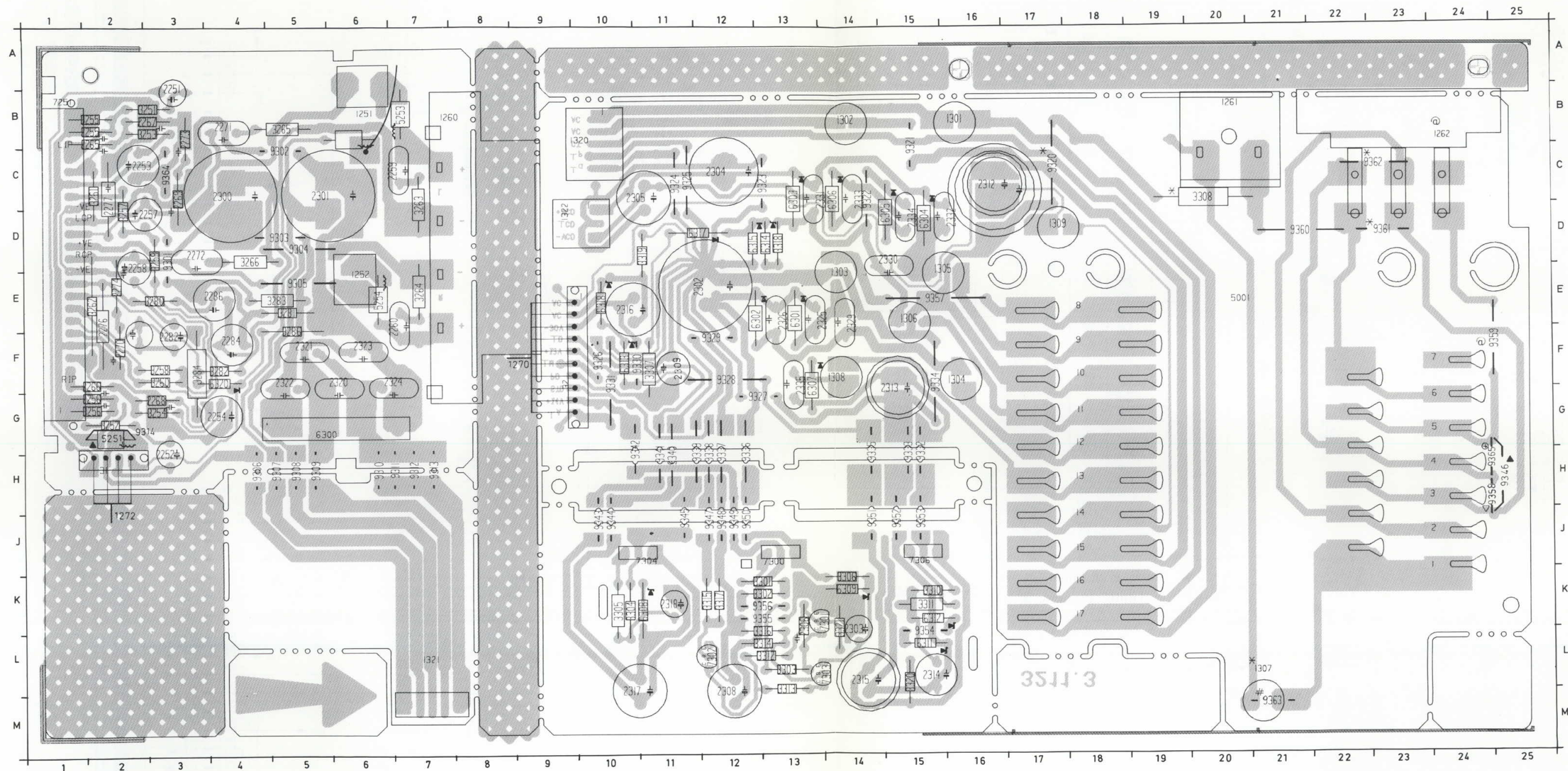
ITEMS	FW20	FW30	FW40
7251	STK4112	STK4112	STK4132
6300	D35B	D55B	D55B
2300	3300u/25V	3300u/35V	
1251	1.75A	2.0A	2.5A
3251	22k	10k	3k3
2255	100pF	270pF	680pF
2302		2200uF	3300uF

Item Marked	FW20	FW30	FW40
1301	2A	3.15A	3.15A
1303	1A	1.25A	1A
1304	1A	1.25A	1A
1305	0.63A	1.25A	0.63A
1306	0.63A	1.25A	0.63A
1307	2A	2A	1.6A
1308	0.63A	1.25A	0.63A
1309	0.63A	1.25A	0.63A

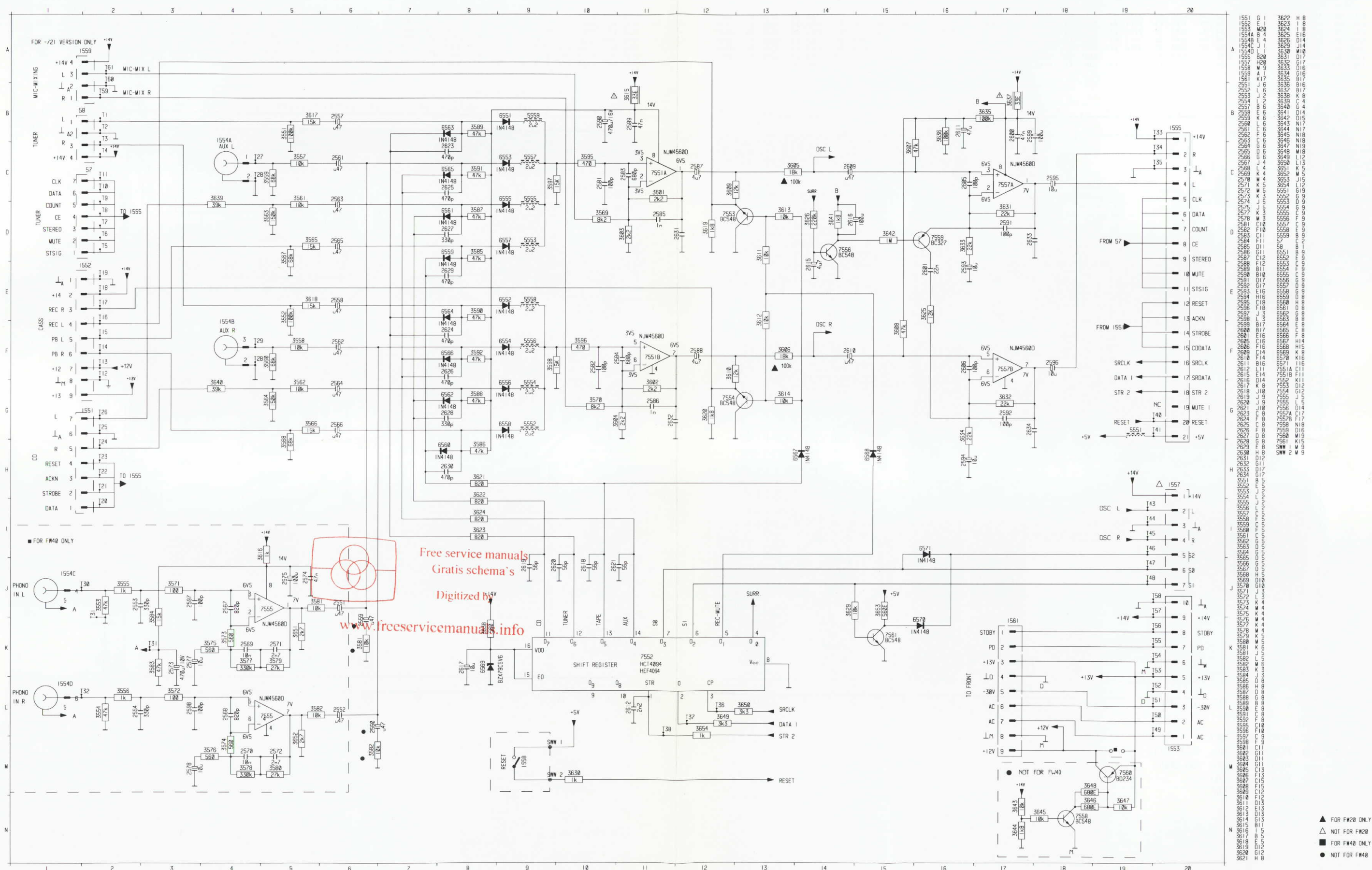
* NOT FOR /37

POWER BOARD COMPONENT LAYOUT

031	H2	1262	B24	1307	L21	2252	G3	2259	C7	2270	F2	2277	C3	2303	K14	2313	F15	2321	F5	2330	D15	3252	G2	3259	D3	3266	D4	3286	E5	3307	F11	3314	L13	6300	G5	6307	F13	6315	D12	7303	L14	9305	E5	9312	H7	9324	C11	9331	F10	9338	G12	9345	J11	9352	J15	9359	F2E	1270	F8	
032	G9	1301	B16	1308	F14	2253	C2	2260	E7	2271	B4	2282	F3	2304	C12	2314	L15	2322	F5	2331	C13	3253	B3	3260	F3	3280	E3	3301	K13	3308	C20	3315	K12	6301	E13	6308	K11	6317	D12	7304	J11	9306	H4	9313	H7	9325	C11	9332	G15	9339	G11	9346	H25	9353	J15	9360	D21	1272	J2	
033	F9	1302	B14	1309	D17	2254	G4	2265	B2	2272	D3	2284	F4	2305	C11	2315	L14	2323	F6	2332	D16	3254	G3	3261	C2	3281	E5	3302	K13			3316	L13	6302	E12	6309	K14	6318	E10	7306	J15	9307	H5	9314	G2	9326	F10	9333	G15	9340	G11	9347	J12	9354	K15	9361	D23	1273	A7	
1251	B6	1303	E14	1320	B10	2255	B2	2266	G2	2273	B3	2286	E4	2306	K13	2316	E10	2324	F7	2333	C14	3255	B2	3262	E2	3282	F4	3303	L13	3310	K15	3318	D13	6303	C13	6311	L15	7251	B1	9301	D3	9308	H5	9320	C17	9327	G12	9334	F15	9341	G11	9348	J12	9355	K13	9362	C23			
1252	E6	1304	F16	1321	L7	2256	G2	2267	B3	2274	E2	2300	C4	2308	L12	2317	K10	2325	E13	2334	D15	3256	G2	3263	C7	3283	E5	3304	K10	3311	K15	3319	D11	6304	D15	6312	K15	7300	J13	9302	C5	9309	H5	9321	C15	9328	F12	9335	H14	9342	G11	9349	J12	9356	K13	9363	M21	3317	K12	
1260	B7	1305	E15	1322	D9	2257	D2	2268	G3			2301	C5	2309	F11	2318	K11	2326	E13	2335	F13	3257	D2	3264	E7	3284	E3	3305	K10	3312	L13	5001	E20	6305	D15	6313	F10	7301	K14	9303	D5	9310	H6	9322	C14	9329	F12	9336	G12	9343	J10	9350	J12	9357	E15	9364	C2	3320	L15	
1261	B20	1306	E15	2251	A3	2258	E2	2269	C3	2276	E2	2302	E12	2312	C16	2320	F6	2329	E14	2351	B3	3258	F3	3265	B5			3306	K14	3313	L13	5251	G2	6306	C14	6314	D13	7302	L12	9304	D5	9311	H7	9323	C12	9330	F11	9337	G12	9344	J10	9351	J14	9358	H25	9365	H24	3321	L13	

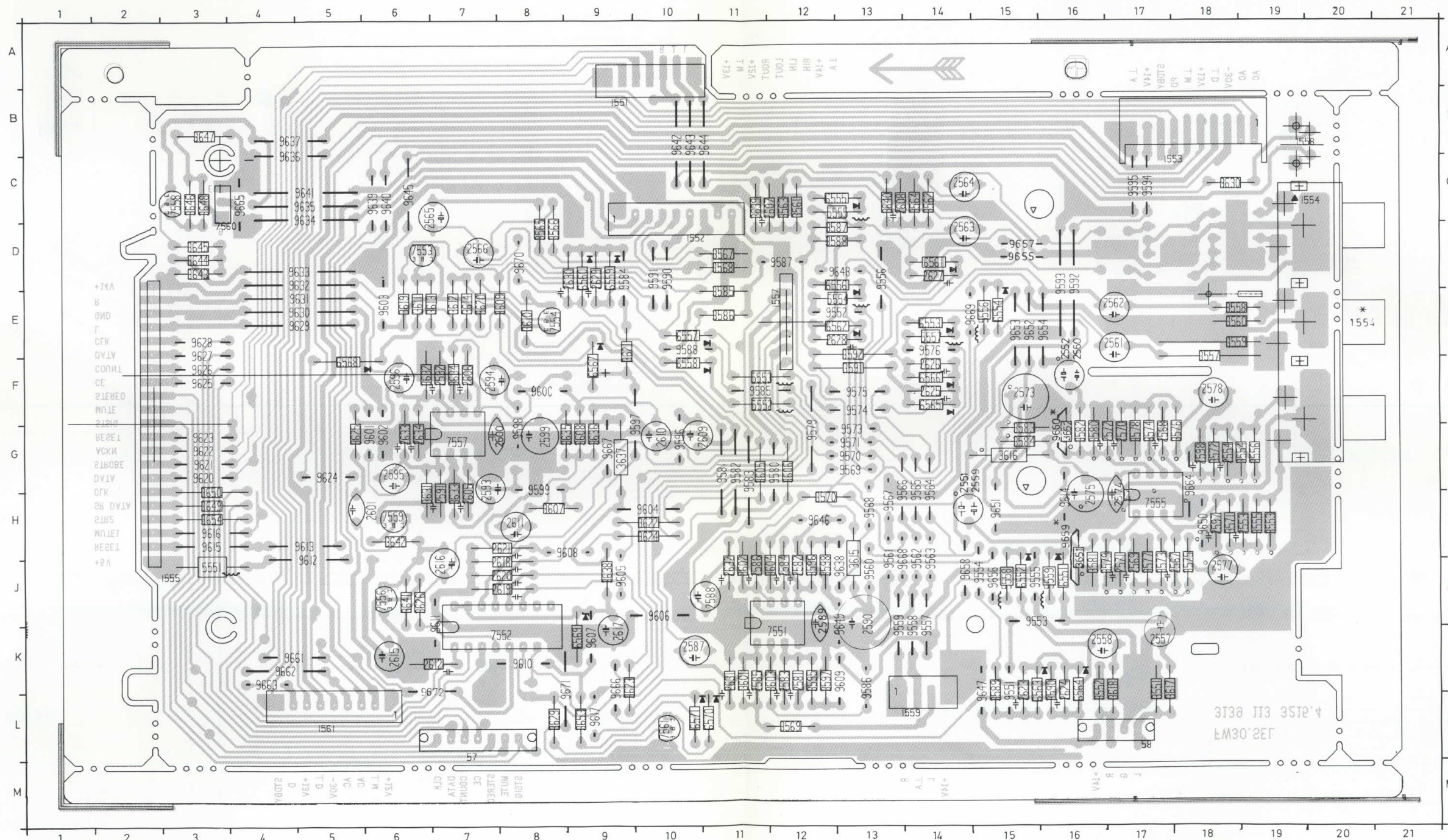


SELECTOR CIRCUIT DIAGRAM



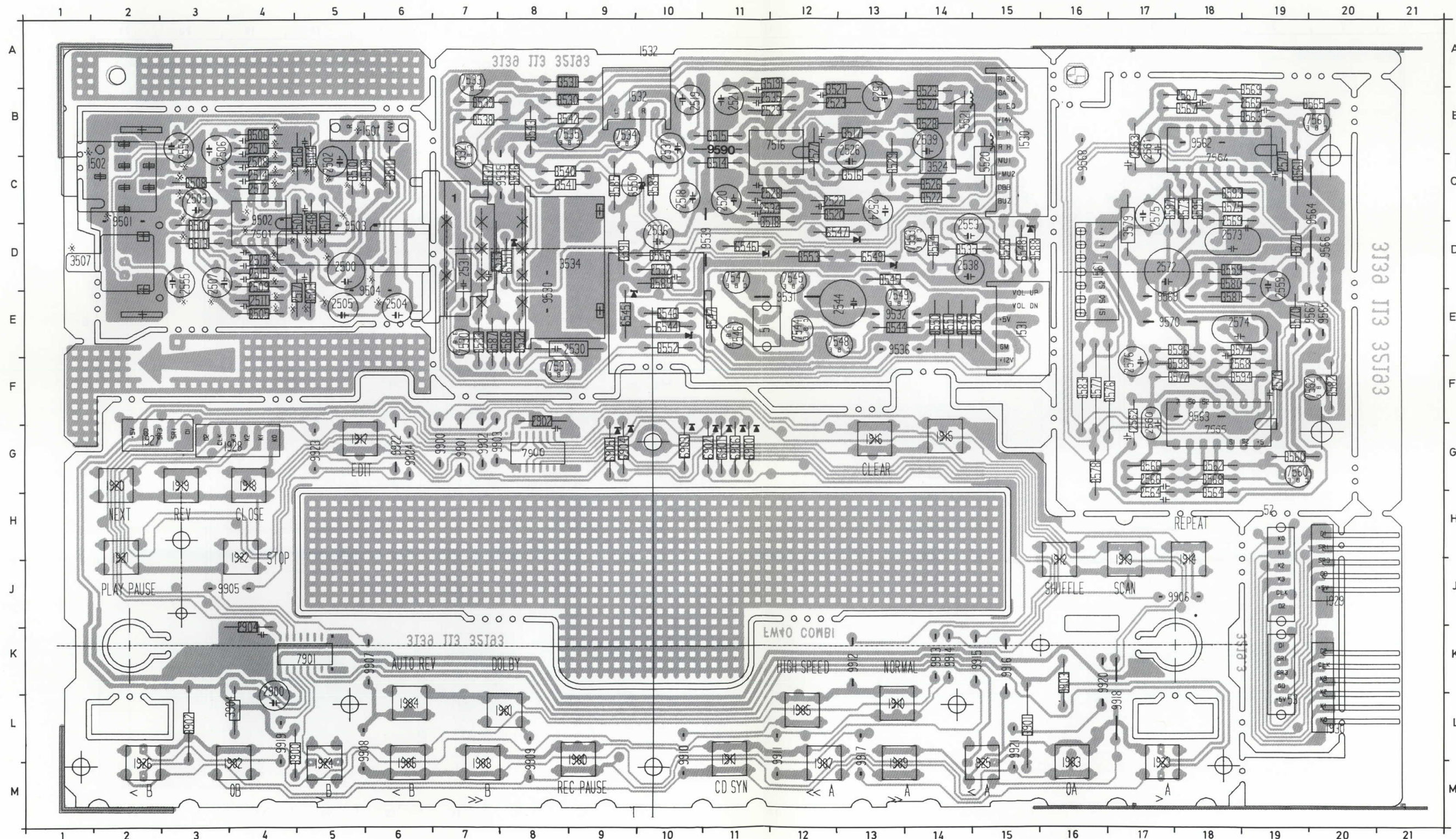
SELECTOR BOARD COMPONENT LAYOUT

057	L16	2554	G18	2571	J17	2589	K12	2607	C12	2625	F14	3556	G19	3573	J17	3588	D13	3607	H8	3622	H10	3637	G9	5552	F11	6558	E10	7553	D6	9558	E10	9574	F13	9592	D16	9607	K9	9624	G5	9639	C6	9654	E16	3569	L12
058	L17	2557	G17	2572	G17	2590	K13	2608	D12	2626	D14	3557	E18	3574	G17	3589	L15	3608	G9	3623	K9	3638	J9	5553	F11	6559	D9	7554	E9	9559	K13	9575	F13	9593	D16	9608	H9	9625	F3	9640	C6	9656	J15	3570	H12
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1554	E20	2561	E17	2577	J18	2594	F7	2612	K7	2630	D9	3561	C12	3578	J17	3593	K12	3612	E7			3642	H6	5557	E14	6563	L15	7558	C3	9563	J14	9581	G11	9597	G10	9612	H5	9629	E5	9644	B11	9661	K4		
1554	G19	2562	E17	2578	F18	2595	G6	2615	K6	2631	K11	3562	C12	3579	J16	3594	J12	3613	E7			3643	D3	5558	J16	6564	L16	7559	H6	9564	H14	9582	G11	9598	G8	9613	H5	9630	E5	9645	C6	9662	K4	6570	L10
1556	J3	2563	D14	2581	K12	2596	F6	2616	J7	2632	J11	3563	C12	3580	G16	3597	K12	3614	E7	3629	L8	3644	D3	5559	J16	6565	F14	7560	C3	9565	H14	9583	G11	9599	G8	9614	H16	9631	E5	9646	H12	9663	K4	6571	L10
1557	E12	2564	C14	2582	J12	2597	H18	2617	K9	2633	G6	3564	C14	3581	J16	3598	J12	3615	J13	3630	C18	3645	D3	5561	J16	6566	F14	9551	L15	9566	H14	9584	D9	9600	F8	9615	H3	9632	D5	9647	K15	9664	H18	7561	L10
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2553	H19	2570	G17	2588	J11	2606	F7	2624	L16	3555	H19	3572	G18	3587	D13	3606	G12	3621	F9	3636	G9	5551	J3	5557	E10	7552	K8	9557	K14	9573	F13	9591	D10	9606	J10	9623	G3	9638	J13	9653	E15	9671	K8		



COMBI BOARD COMPONENT LAYOUT

051	E11	1904	L6	1918	G4	2501	C4	2515	D4	2529	B12	2555	D3	2572	D17	3511	C6	3525	A14	3540	C8	3554	D14	3570	E19	3584	C10	3598	E17	6550	C9	7533	A7	7565	F18	9904	G6	9918	K17		
052	H19	1905	L12	1919	G3	2502	C5	2516	C4	2530	E8	2559	D19	2573	D18	3512	C5	3526	C14	3541	C8	3555	D15	3571	D19	3585	C9	3900	L4	6551	D8	7534	B9	7900	G8	9562	B18	9905	J3	9919	L4
053	L19	1906	M6	1920	G2	2503	C3	2517	E4	2531	D7	2560	F17	2574	E18	3513	D3	3527	B14	3542	B9	3556	D10	3572	F17	3586	E8	3901	L15	6900	G11	7535	B9	7901	K5	9563	F18	9906	J18	9920	K17
1501	B6	1907	M12	1921	H2	2504	E6	2518	C10	2532	D10	2561	B17	2575	C17	3514	B11	3528	B14	3543	B8	3559	D18	3573	C18	3587	E7	3902	K3	6901	G11	7544	E12	9501	C2	9564	C19	9907	K9	9921	L15
1502	B2	1908	M7	1922	H4	2505	E5	2519	B10	2533	D8	2562	F17	2576	E17	3515	B11	3529	D13	3544	E13	3560	G19	3574	E18	3588	D15	3903	K16	6902	G11	7545	D12	9502	C4	9565	E20	9908	L5	9922	G6
1530	B15	1909	M13	1923	L17	2506	B3	2520	C11	2534	C12	2563	B17	2900	K4	3516	C13	3530	B9	3545	D13	3561	C19	3575	C18	3589	D10	3904	L4	6903	G10	7546	E11	9503	C5	9566	D20	9909	M8	9923	G5
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1532	A9	1911	M11	1925	L15	2508	B4	2522	C13	2536	C10	2565	B19	3504	B5	3518	C12	3532	E8	3547	E11	3563	B19	3577	E17	3591	D9	5521	B14	6905	G9	7548	E13	9530	E8	9568	C16	9911	L12	2902	F8
1561	C17	1912	H16	1926	L2	2509	D4	2523	B12	2537	B10	2566	G17	3505	E4	3519	A12	3533	E7	3548	C5	3564	G18	3578	G18	3592	E15	6544	E10	6906	G11	7549	D13	9531	E12	9569	D17	9912	K13	2904	J4
1561	D16	1913	H17	1927	G2	2510	B4	2524	C13	2538	D14	2567	B18	3506	B4	3520	C13	3534	D8	3549	E14	3565	A20	3579	D17	3593	C18	6545	E9	7501	D4	7553	D14	9532	E13	9570	E17	9913	K14		
1900	M9	1914	H18	1928	G8	2511	E4	2525	B13	2539	B14	2568	F19	3507	D1	3521	A12	3536	C8	3550	E14	3566	G17	3580	D18	3594	F18	6546	D11	7516	B12	7560	G19	9535	C8	9900	G7	9914	K14		
1901	L8	1915	G14	1929	J20	2512	C4	2526	B13	2544	E13	2569	C18	3508	C3	3522	C14	3537	C7	3551	E14	3567	B18	3581	D18	3595	C18	6547	C13	7530	E7	7561	B20	9536	E13	9901	G7	9915	K15		
1902	M4	1916	G13	1930	L20	2513	D4	2527	B12	2553	C14	2570	F19	3509	C5	3523	A14	3538	B7	3552	E10	3568	G18	3582	F20	3596	E17	6548	D15	7531	F8	7562	E20	9539	D11	9902	G7	9916	K15		
1903	L16	1917	G5	2500	D5	2514	C4	2528	C12	2554	B3	2571	B19	3510	C5	3524	C14	3539	B7	3553	D12	3569	B19	3583	F16	3597	C17	6549	D13	7532	B7	7564	B18			9903	G7	9917	M13		

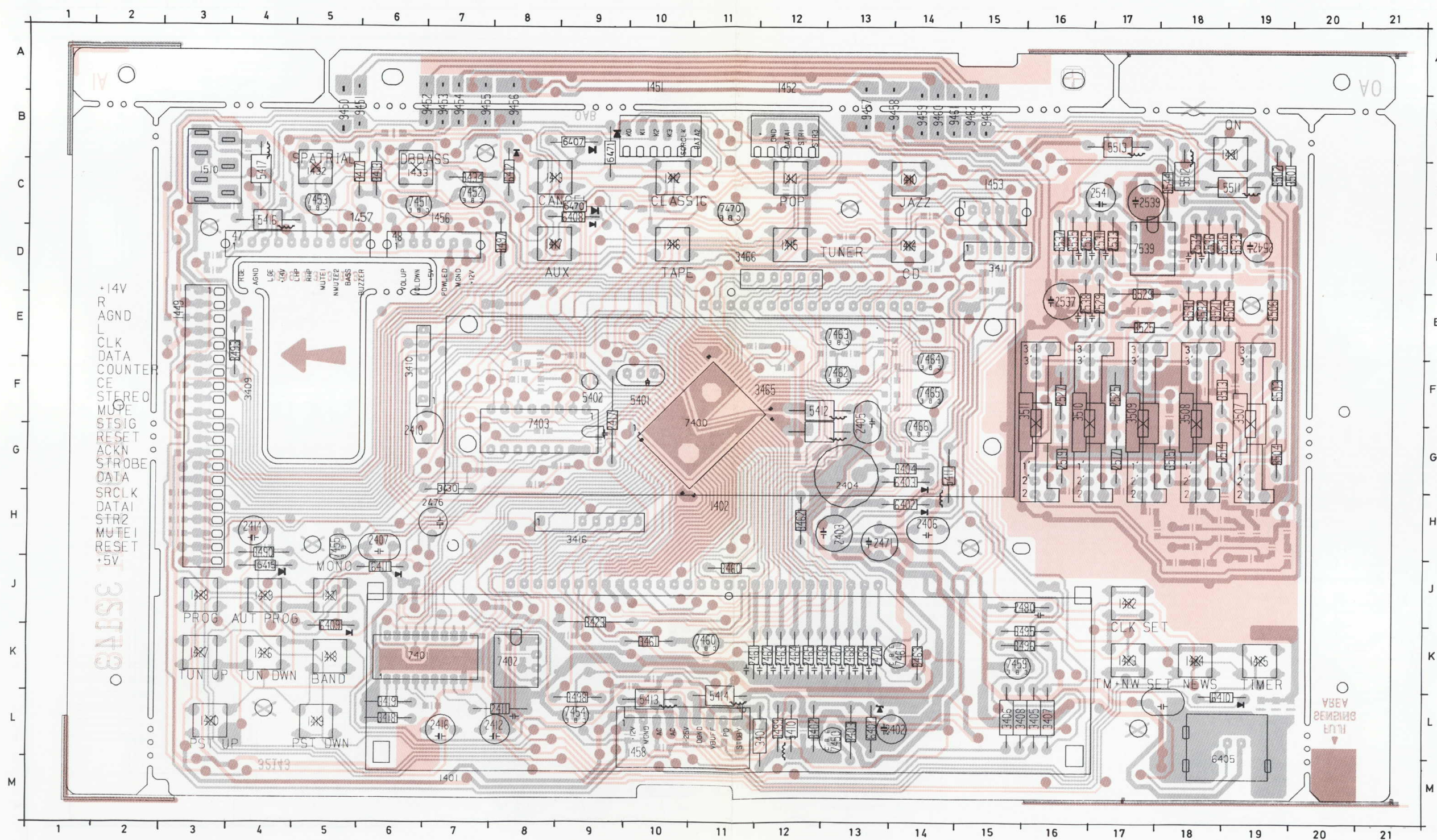


NOTE

-X- FOR -/21 ONLY

FRONT COMPONENT LAYOUT

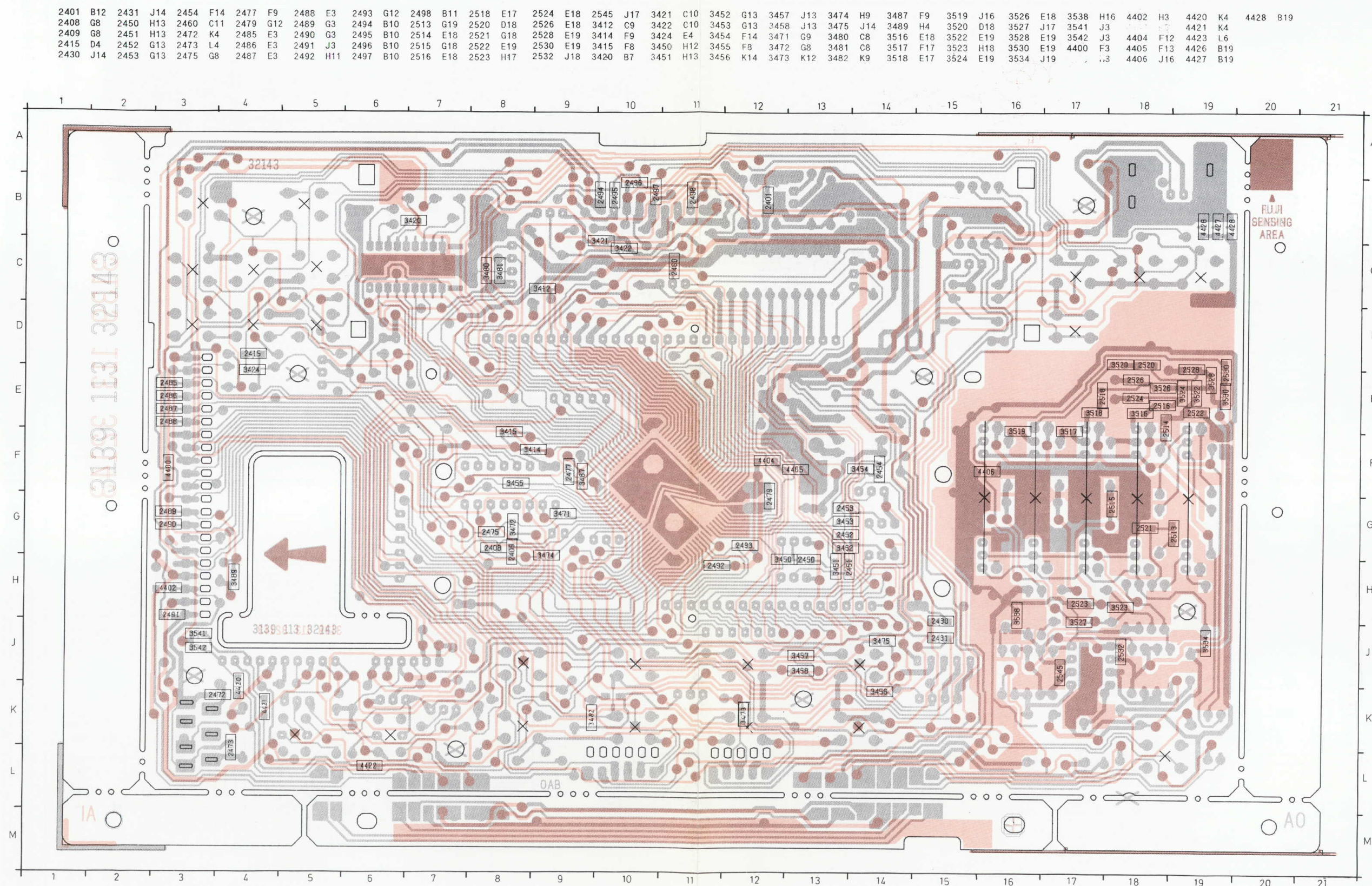
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047	D4	1416	D10	1426	K4	1456	C7	2407	H6	2461	K11	2471	H13	2534	D18	3403	L13	3416	H9	3462	H12	3501	C19	3511	F16	3535	D16	5414	L11	6407	B9	7450	L13	7463	E13	9455	B7
048	D6	1417	D8	1427	K3	1457	C5			2462	K12	2480	J16	2535	D16	3404	G14	3417	C5	3463	K14	3502	C19	3513	F18	3536	D18	5416	C4	6408	C9	7451	C6	7464	F14	9456	B8
1401	M7	1418	K5	1428	J3	1458	L10			2463	K12			2536	D18	3405	L16	3418	L6	3465	F12	3503	F19	3514	G18	3537	D16	5417	C4	6409	K5	7452	C7	7465	F14	9457	B13
1402	H11	1419	L5	1429	J4	1490	E3	2410	G6	2464	K12	2517	G17	2537	E16	3406	L15	3419	L6	3466	D11	3504	G19	3515	G18	3544	C18	5511	C19	6410	L18	7453	C5	7466	G14	9458	B13
1410	C14	1420	L3	1431	B19	1510	C3	2411	L8	2465	K12	2519	G16	2538	E16	3407	L16	3423	J9	3493	E4	3505	E19	3521	E18	5401	F10	5512	C18	6411	J6	7454	L9	7539	D17	9459	B14
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1412	C10	1422	J17	1433	C6	2403	H13			2467	K13	2527	F16	2541	C17	3409	F4	3430	H7	3496	K16	3507	F19	3529	E17	5410	L12	6401	L13	7400	G11	7459	K15	9451	B5	9461	B14
1413	C8	1423	K17	1451	A10	2404	G13	2414	H4	2468	K13	2529	E17	2542	D19	3410	F6	3434	C7	3497	D8	3508	F18	3531	E18	5411	G14	6402	H14	7401	K6	7460	K11	9452	B6	9462	B15
1414	F14	1424	K18	1452	A12	2405	G13	2416	L7	2469	K13	2531	D17	3401	L12	3411	D15	3460	J11	3498	L9	3509	F17	3532	E18	5412	F12	6403	G14	7402	K8	7461	K14	9453	B7	9463	B15



NOTE
 * FOR FW20 ONLY
 # NOT FOR FW20 FAMILY
 @ FOR FW30 FAMILY ONLY

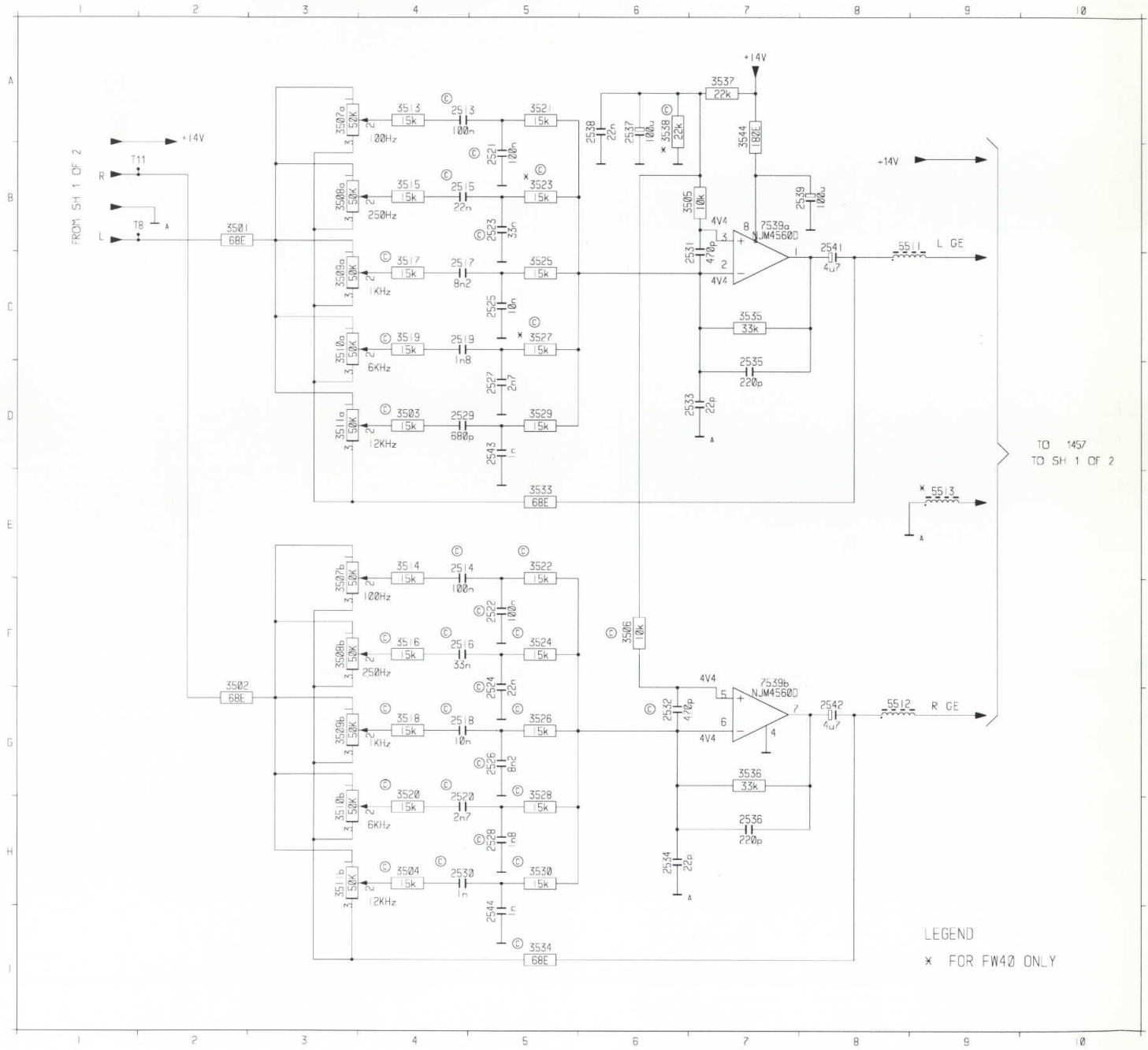
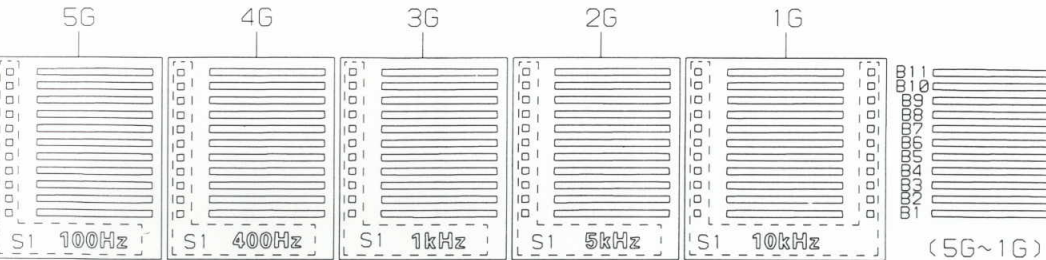
NOTE
* FOR FW20 ONLY
NOT FOR FW20 FAMILY
@ FOR FW30 FAMILY ONLY

FRONT CHIP LAYOUT

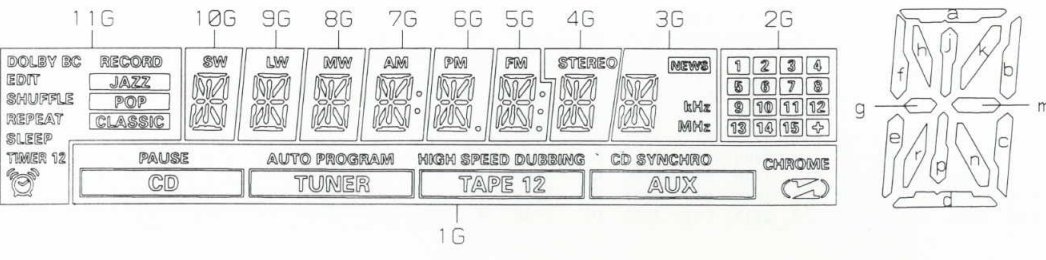


FRONT CIRCUIT II

GRID ASSIGNMENT



GRID ASSIGNMENT

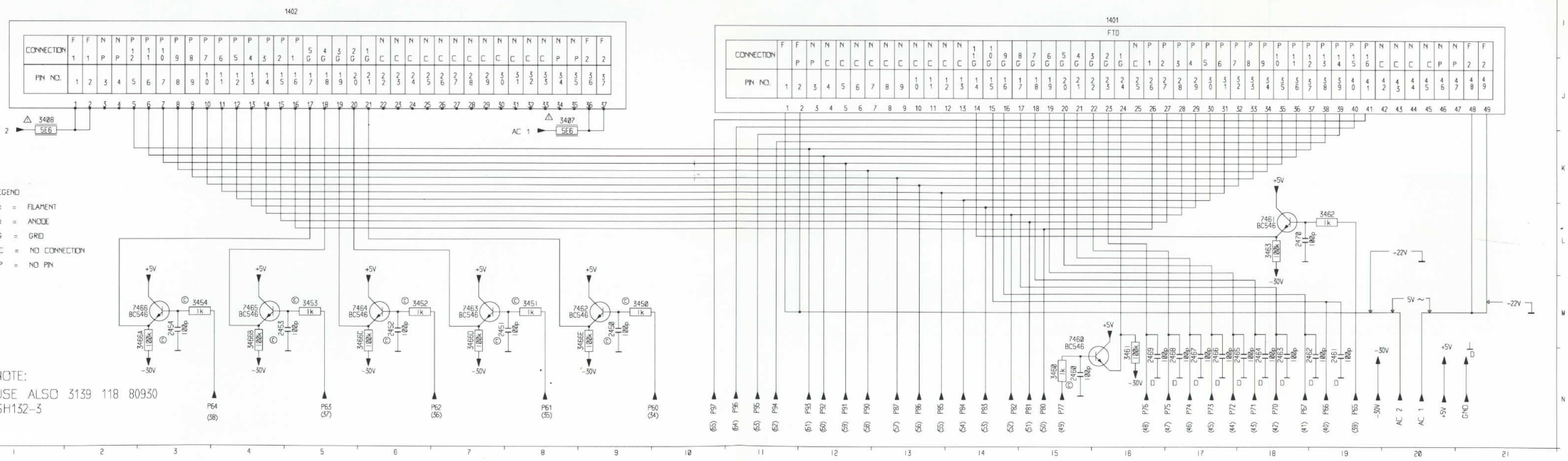


ANODE CONNECTION

	5G	4G	3G	2G	1G
P1	B1	B1	B1	B1	B1
P2	B2	B2	B2	B2	B2
P3	B3	B3	B3	B3	B3
P4	B4	B4	B4	B4	B4
P5	B5	B5	B5	B5	B5
P6	B6	B6	B6	B6	B6
P7	B7	B7	B7	B7	B7
P8	B8	B8	B8	B8	B8
P9	B9	B9	B9	B9	B9
P10	B10	B10	B10	B10	B10
P11	B11	B11	B11	B11	B11
P12	S1	S1	S1	S1	S1

ANODE CONNECTION

	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	a	a	a	a	a	a	a	a	a	1	PAUSE
P2	J.p	J.p	J.p	J.p	J.p	J.p	J.p	J.p	J.p	2	AUTO
P3	k	k	k	k	k	k	k	k	k	3	PROGRAM
P4	h	h	h	h	h	h	h	h	h	4	HIGH SPEED
P5	b	b	b	b	b	b	b	b	b	5	DUBBING
P6	f	f	f	f	f	f	f	f	f	6	CD SYNCHRO
P7	m	m	m	m	m	m	m	m	m	7	CHROME
P8	g	g	g	g	g	g	g	g	g	8	
P9	c	c	c	c	c	c	c	c	c	9	
P10	e	e	e	e	e	e	e	e	e	10	
P11	r	r	r	r	r	r	r	r	r	11	AUX
P12	n	n	n	n	n	n	n	n	n	12	TAPE
P13	d	d	d	d	d	d	d	d	d	13	1
P14	SW	LW	MW	AM	PM	FM	STEREO	NEWS		14	2
P15	-	-	-	-	-	-	-	-	-	15	TUNER
P16	-	-	-	-	-	-	-	-	-	16	CD

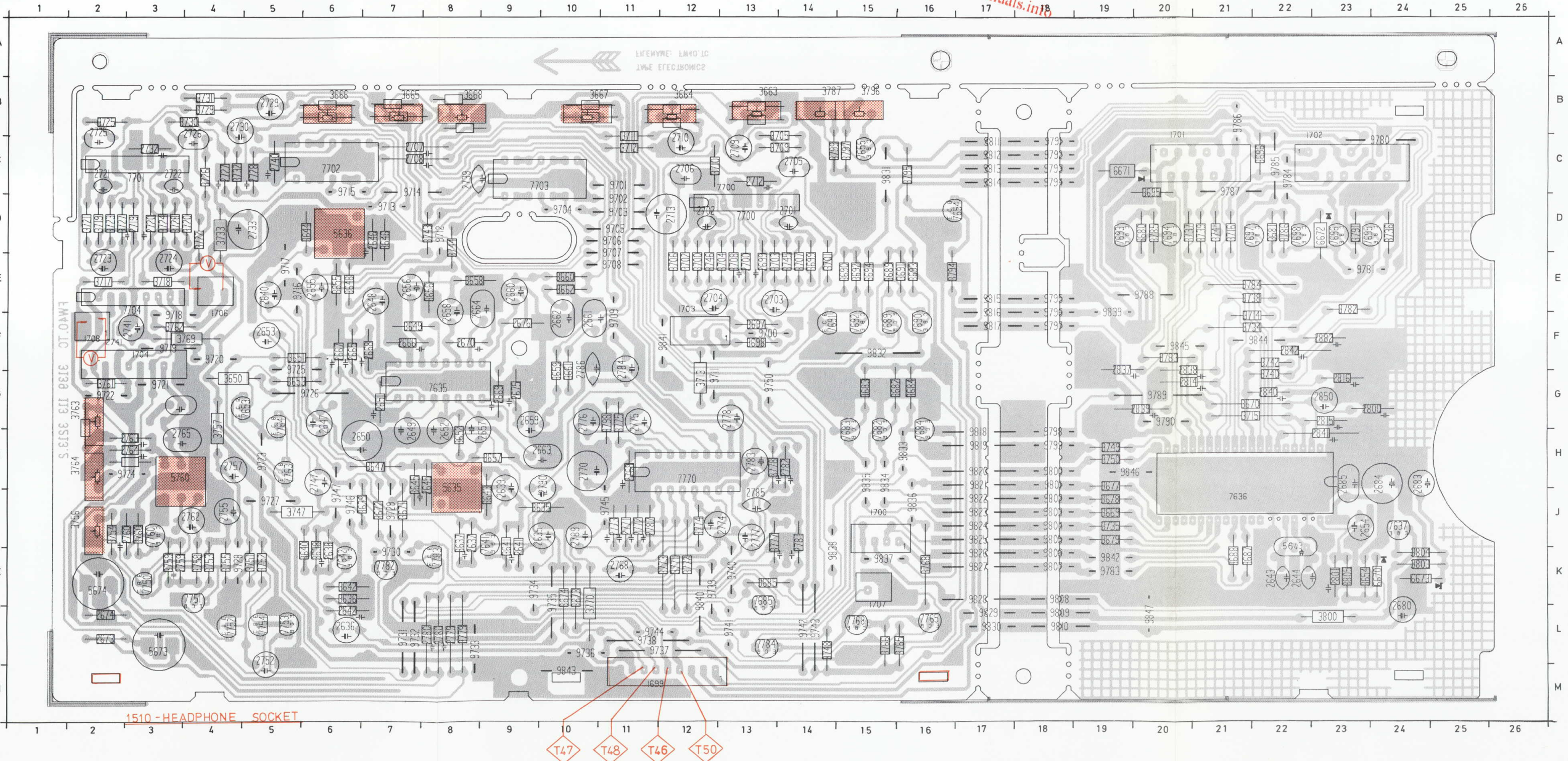


NOTE:
USE ALSO 3139 118 80930
SH132-3

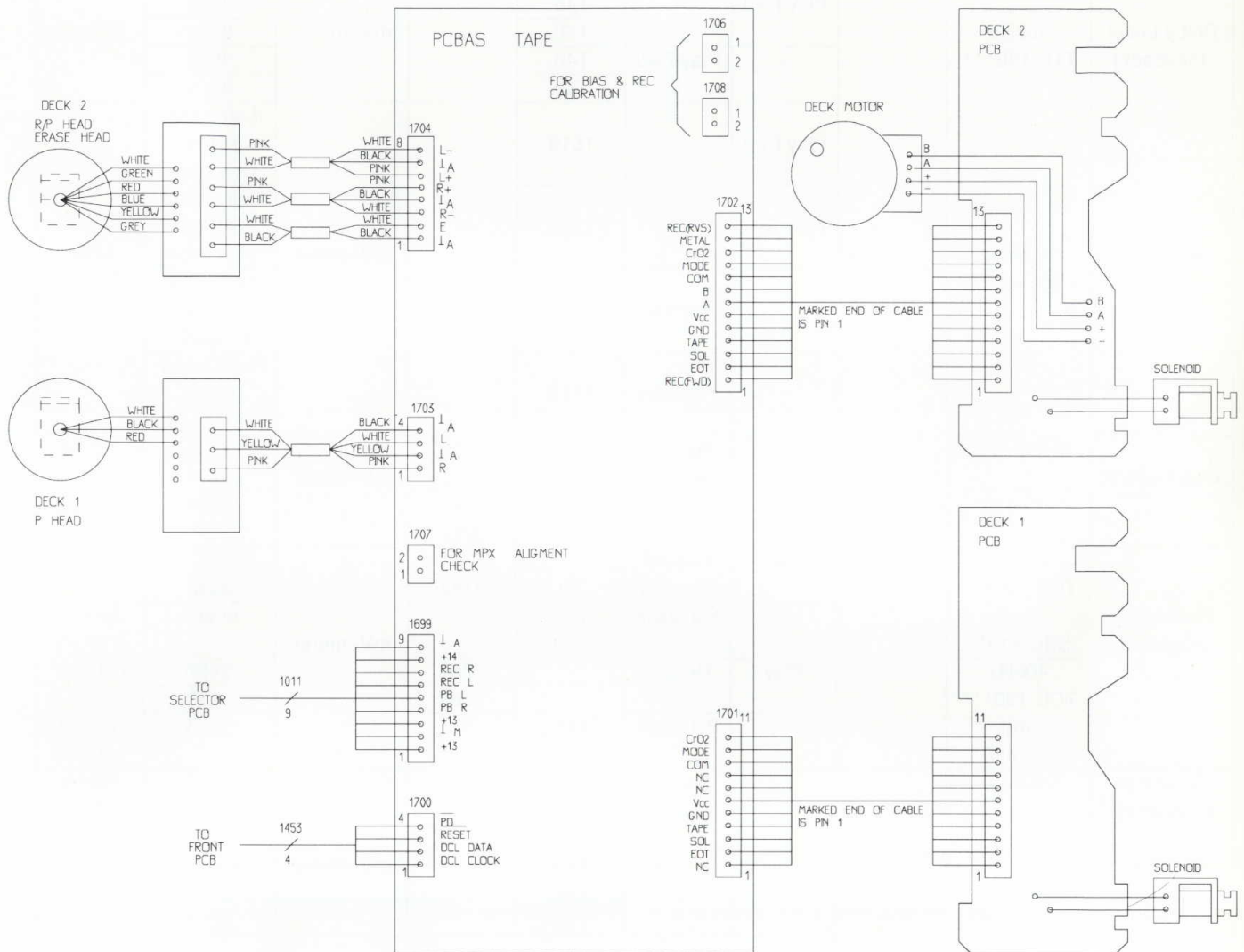
NOTE:
NUMBER IN (**) ARE PIN NUMBER OF 7400

TAPE CORE LAYOUT

1699	M11	2643	K22	2659	G9	2680	L24	2712	C13	2739	C8	2771	J11	2787	J11	3646	D7	3662	E10	3680	D20	3697	F13	3713	G12	3729	B4	3745	E14	3762	F3	3780	L8	3804	K24	7653	G5	7698	D22	7770	H12	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
1700	J15	2644	K22	2660	E9	2683	H24	2713	C12	2740	C5	2772	J11	2789	J10	3647	H7	3663	B13	3681	D22	3698	F13	3714	F21	3730	B4	3747	J5	3763	H2	3782	F23	3804	K24	7653	G5	7698	D22	7770	D13	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
1701	B20	2645	H8	2661	F10	2684	H24	2719	D3	2741	F3	2773	J11	2790	H10	3648	E6	3664	B12	3682	G16	3699	F14	3715	G21	3731	B4	3748	H4	3764	H2	3783	F20	3804	K24	7653	G5	7698	D22	7770	C3	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
1702	B22	2646	D7	2662	F10	2685	H23	2720	D3	2747	J6	2774	J13			3649	F7	3665	B7	3683	G15	3700	E12	3716	D21	3732	C4	3749	H19	3765	L15	3784	E21	3804	K24	7653	G5	7698	D22	7770	C6	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
1703	E12	2647	G6	2663	H9	2699	E13	2721	C2	2752	L5	2775	G11			3650	G5	3666	B6	3684	G16	3701	E14	3717	E2	3733	D4	3750	H19	3766	L15	3785	D20	3804	K24	7653	G5	7698	D22	7770	C9	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
1704	F3	2648	E7	2664	E8	2700	E13	2722	C3	2755	J4	2776	G10	3635	J10	3651	F6	3667	B10	3685	K13	3702	E12	3718	E3	3734	F21	3751	K5	3768	K16	3786	D22	3804	K24	7653	G5	7698	D22	7770	E3	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
1706	E4	2649	H7	2665	F6	2701	D14	2723	E2	2757	H4	2777	J13	3636	K6	3652	H8	3668	B8	3687	K21	3703	E13	3719	D2	3735	J19	3752	K5	3769	F3	3787	B14	3804	K24	7653	G5	7698	D22	7770	C9	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
1708	F2	2650	H7	2666	F7	2702	D12	2724	E3	2759	K3	2778	G13	3637	J8	3653	G6	3669	J19	3688	K21	3704	E12	3720	D4	3736	D24	3753	K4	3770	K10	3789	D23	3804	K24	7653	G5	7698	D22	7770	D11	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
2635	J10	2651	G7	2667	F6	2703	E13	2725	B2	2760	J3	2779	L8	3638	K6	3654	K23	3670	G21	3689	E15	3705	C13	3721	D2	3737	D20	3754	J2	3771	K12	3789	E16	3804	K24	7653	G5	7698	D22	7770	D10	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
2636	L6	2652	H8	2668	F7	2704	E12	2726	B4	2762	J4	2780	L8	3639	J6	3655	E6	3671	J7	3690	E15	3706	E12	3722	D4	3738	E21	3755	K4	3772	K12	3789	E16	3804	K24	7653	G5	7698	D22	7770	D11	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
2637	J8	2653	F5	2669	G9	2705	C14	2727	C4	2763	H3	2781	J14	3640	K6	3656	E8	3672	J7	3691	E16	3707	E12	3723	D2	3739	D21	3756	J2	3773	K12	3789	E16	3804	K24	7653	G5	7698	D22	7770	D11	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
2638	K6	2654	J23	2670	F8	2706	C12	2728	C5	2764	H3	2782	H14	3641	J9	3657	H9	3673	K10	3692	E15	3708	E13	3724	D3	3740	G22	3757	H4	3774	J12	3789	E16	3804	K24	7653	G5	7698	D22	7770	D11	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
2639	J9	2655	E6	2673	L2	2707	C7	2729	B5	2765	H3	2783	H13	3642	K6	3658	E8	3674	K10	3693	E16	3709	C13	3725	B2	3741	D21	3758	K4	3775	G11	3789	E16	3804	K24	7653	G5	7698	D22	7770	D11	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
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2641	J9	2657	H9	2675	G9	2709	C13	2732	B3	2769	H11	2785	J13	3644	D6	3660	E10	3678	J19	3695	C20	3711	B11	3727	D2	3743	D8	3760	J3	3778	H13	3789	E16	3804	K24	7653	G5	7698	D22	7770	D11	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24
2642	L6	2658	E8	2676	E9	2710	C12	2733	D5	2770	H10	2786	F10	3645	H7	3661	F10	3679	J19	3696	C22	3712	C11	3728	D3	3744	D8	3761	G2	3779	L8	3789	E16	3804	K24	7653	G5	7698	D22	7770	D11	9713	D7	9729	J7	9745	J11	9793	C18	9809	L18	9825	J17	9841	F11	2800	G24



TAPE WIRING



TAPE ADJUSTMENT

Adjustment	Cassette signal	Injection point	Recorder position		Measure at	Measure Across	Read on	Adjust with	Adjust to		
			PB Deck	R/P Deck							
Motor speed	3150Hz SBC 420*		High speed dubbing		1510		Wow and Flutter meter	3787	5355Hz ± 80Hz		
			Play Fwd	-	1510			3796	3150Hz ± 45Hz #1		
Dolby Level (Playback)	400Hz TTC 130***		Play Fwd	-	T46		mV-meter	3663	300mV		
					T50			3664			
			-	Play Fwd	T46			3665			
					T50			3666			
Azimuth	12.5kHz SBC 420*		Play Fwd	-	1510		mV-meter	Left hand screw play head	Max. L = R		
			Play Rev	-	1510			Right hand screw play head			
			-	Play Fwd	1510			Left hand screw R/P head			
			-	Play Rev	1510			Right hand screw R/P head			
Bias current	SBC 419**		-	Record Chrome		3761 3762	mV-meter	3763 3764	7.0mV		
	SBC 420*		-	Record		3761 or 3762		3756	4.4mV #2		
Recording playback level	400Hz TCC 130*** and SBC 419**		Play	Record Chrome		3761 3762	mV-meter	3667 3668	0.68mV #3		
			-	Playback	T46 T50			check	300mV ± 17mV		
	400Hz TCC 130*** and SBC 420*		Play	Record		3761 3762		3667 3668	0.45mV #3		
			-	Playback	T46 T50			check	300mV ± 17mV		
	Oscillator Frequency		SBC 420*		Record			3761	Frequency counter	5760	88kHz ± 4kHz
Multiplex Filter	400Hz	T48	-	Record	T46		mV-meter	Adjust Generator	300mV		
		T47			T50						
	19kHz	T48			T46			5635	min.		
		T47			T50			5636	< 3mV		

* SBC 420 : 4822 397 30071

** SBC 419 : 4822 397 30069

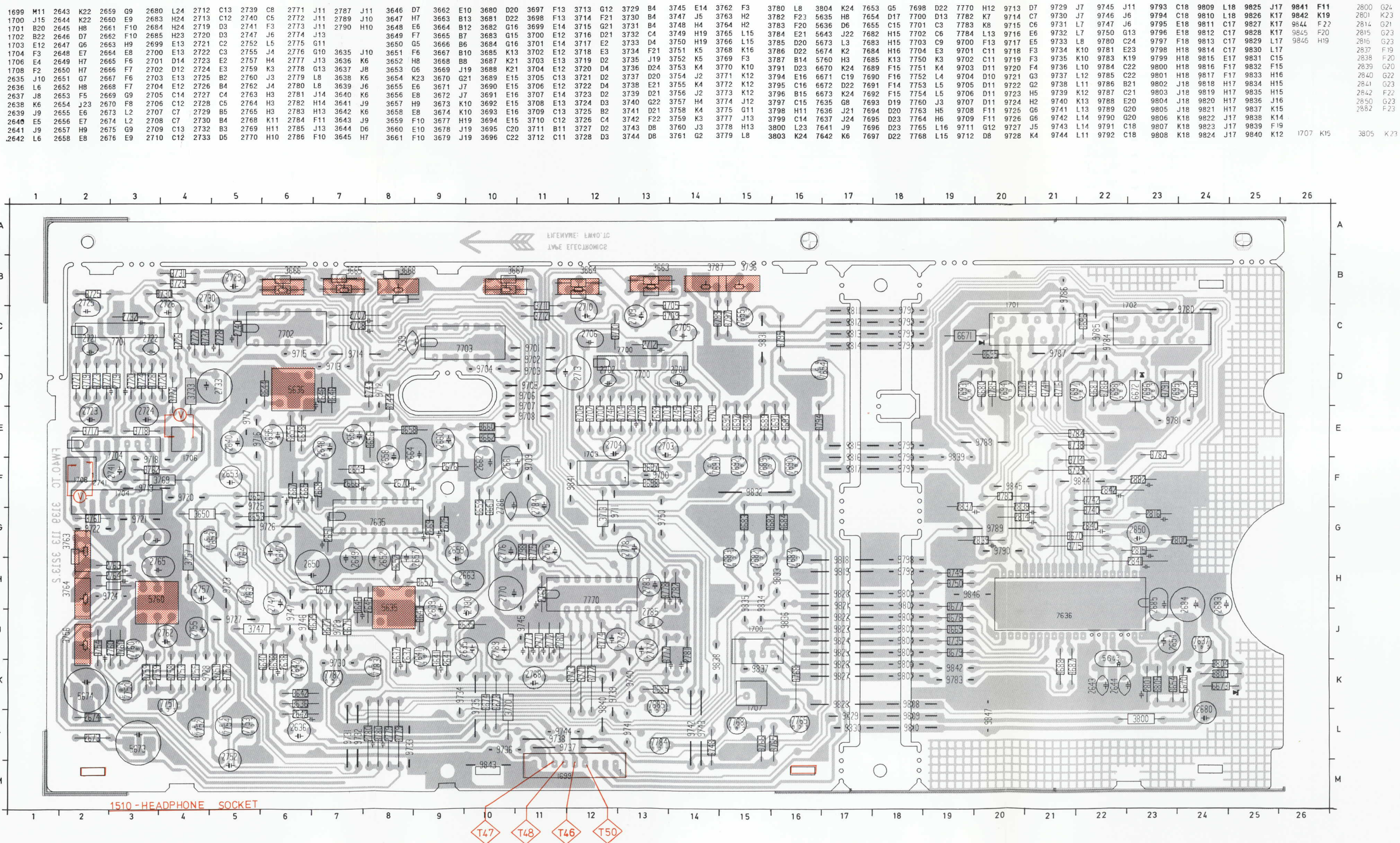
*** TCC 130 : 4822 397 30144 (dolby level adj, 200nWB/m)

#1 The wow and flutter value should not exceeds 0.4% DIN.

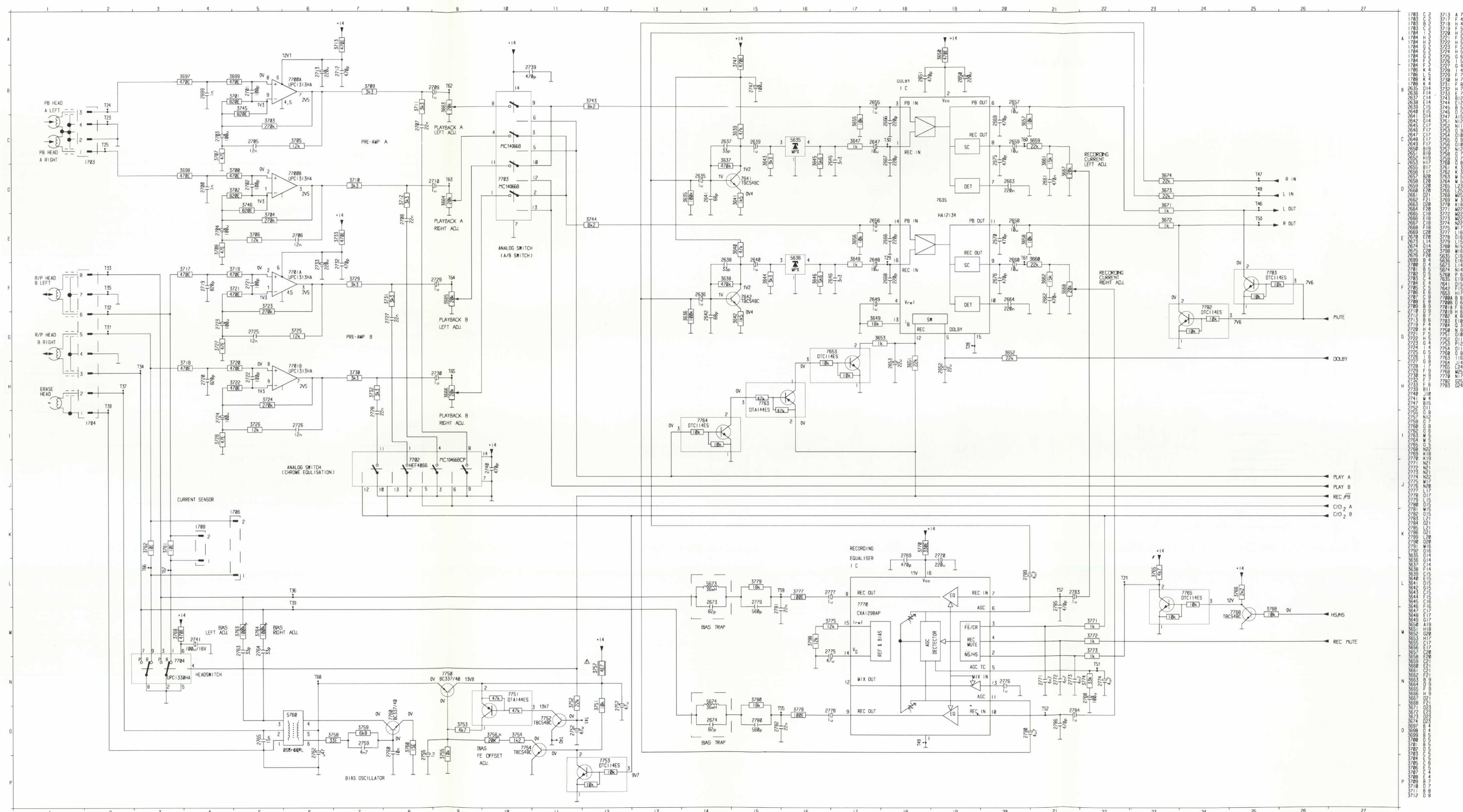
#2 Adjustment for Chrome must be done before Ferro.

#3 Repeat until Rec/Playback level is achieved.

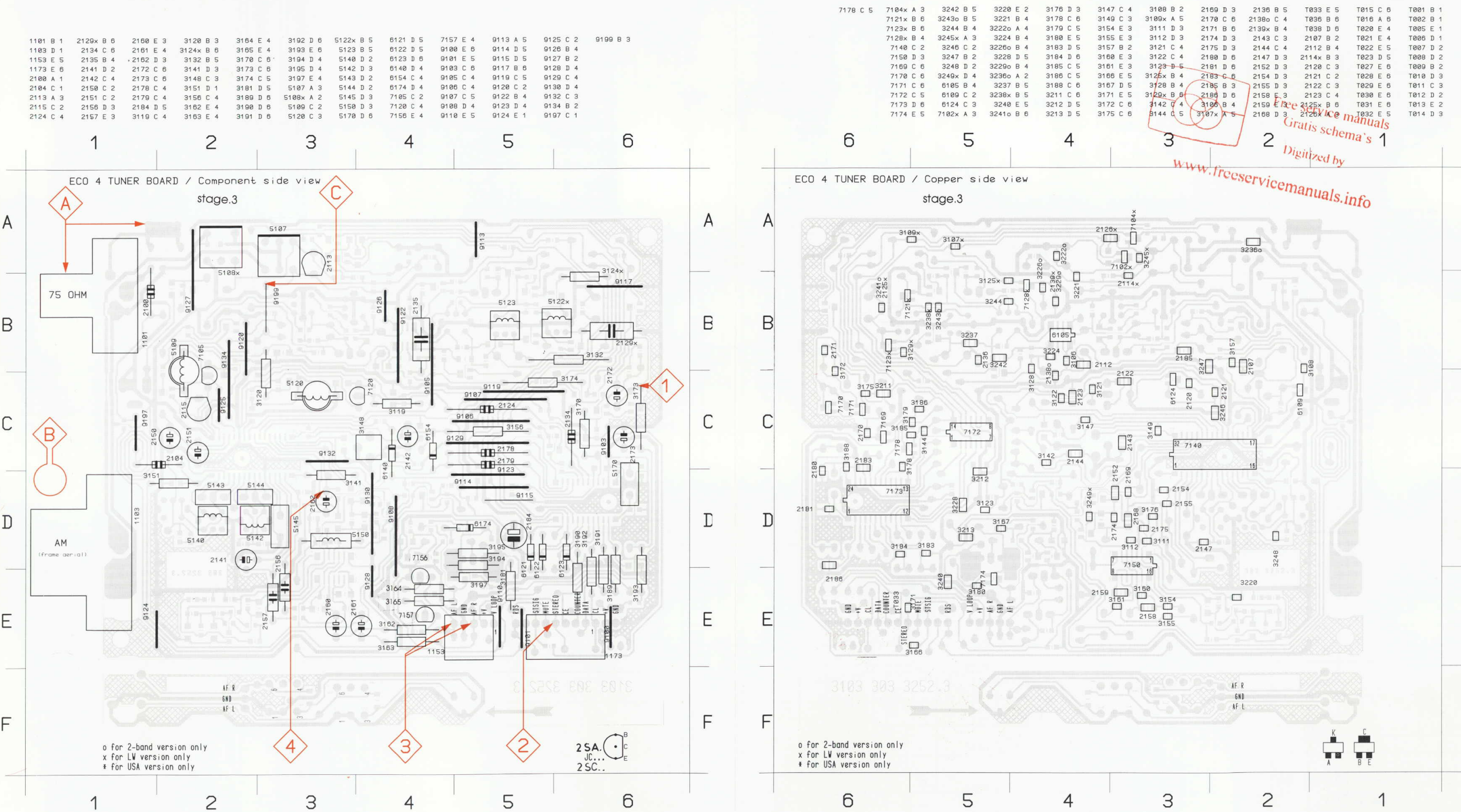
TAPE CORE LAYOUT



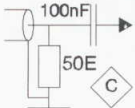
TAPE CORE CIRCUIT II



ECO4 COMPONENT AND CHIP LAYOUT - For all versions produced from wk 249 onwards except /22.



TUNER Adjustment table (ECO 4 FM/MW- and FM/MW/LW - versions)

Waverange	Input frequency	Input	Set tuned to	Adjust	Output	Scope / Voltmeter
VARICAP ALIGNMENT						
FM /00/01/05/10/17 87.5 - 108MHz			108 MHz	5120	1	8 ± 0.2V
			87.5MHz	check		4.1 ± 0.5V
FM /14 East Europe 65.81 - 108MHz			108 MHz	5120		8V ± 0.2V
			65.81 MHz	check		0.8 ± 0.4V
MW /01/17 2-band version 530 - 1710kHz			1710kHz	5123		9V ± 0.1V
			530kHz	check		1V ± 0.4V
LW /00/05/10/14 153 - 279kHz			279kHz	5122		8V ± 0.2V
			153kHz	check		1V ± 0.4V
MW /00/05/10/14 522 - 1611kHz			1611kHz	5123	8V ± 0.1V	
			522kHz	check	1V ± 0.4V	
FM - RF						
FM /00/01/05/10/17	108MHz	 mod=1kHz Δf=22.5kHz	108MHz	2115	 3	MAX 
	87.5MHz		87.5MHz	5109		
FM /14 East Europe	108MHz		108MHz	2115		
	65.81MHz		65.81MHz	5109		
VCO						
FM	98 MHz, 1mV continuous wave		98MHz	3148	 2	152 ± 1 kHz
AM - IF						
MW	540kHz Δf = 10kHz as low as possible		540kHz	5142 5140	 4	symmetrical and max height
AM - RF						
LW	198kHz	 mod=1kHz 30% AM	198kHz	5108	 4	MAX
MW /00/05/10/14 3-band version	1494kHz		1494kHz	2113		MAX 
	549kHz		549kHz	5107		
MW /01/17 2-band version	1500kHz		1500kHz	2113		
	550kHz		550kHz	5107		

* Use Service Test Program. By selecting the TUNER TEST test frequencies will be stored as preset frequ. automatically.

↑ repeat ↓

Note : Please read /00 as /20, /01 as /21, /17 as /37 etc.

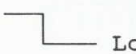
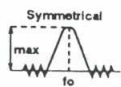
TUNER UNIT ECO4 (MINI)



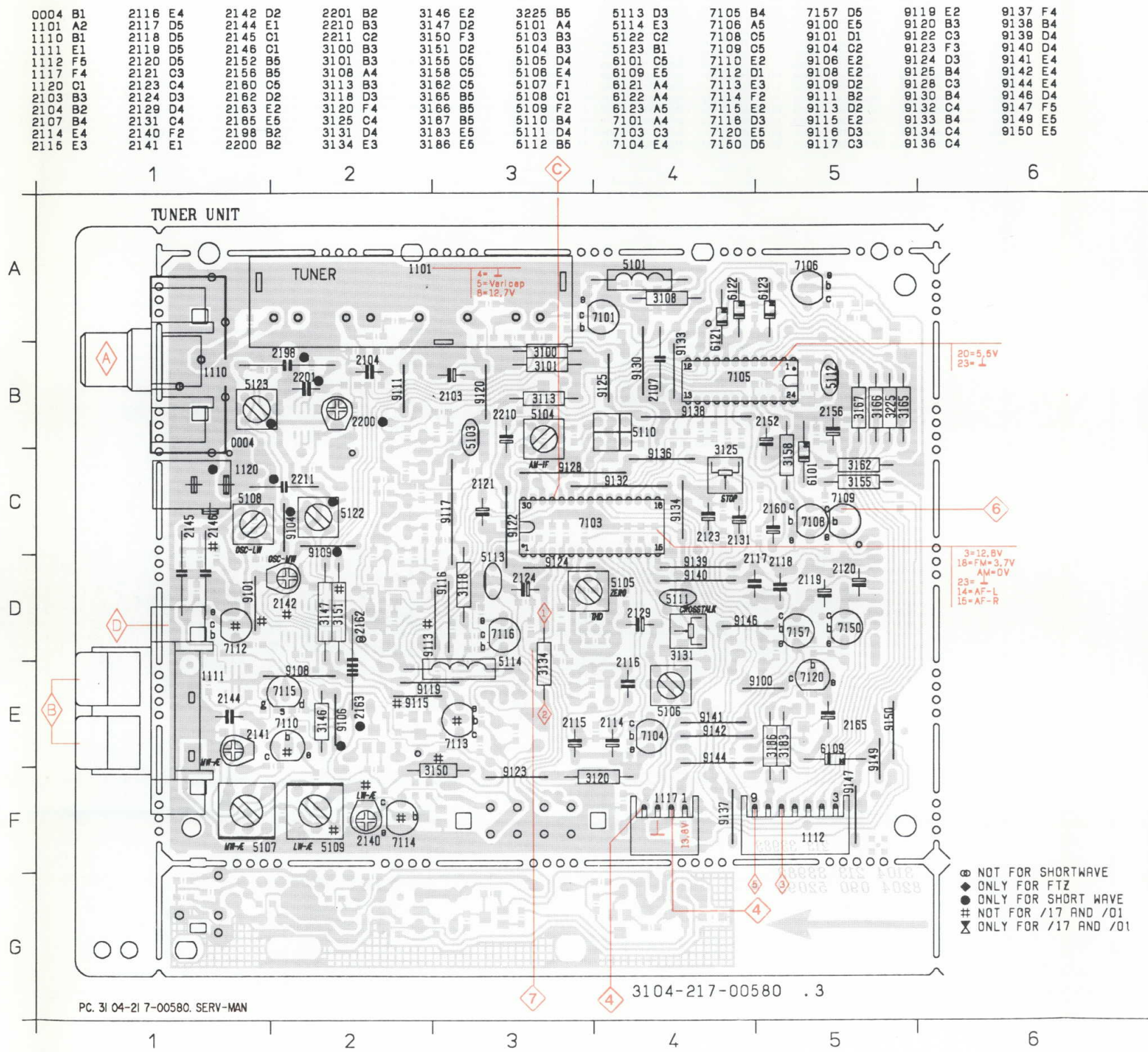
TUNER UNIT



TUNER ADJUSTMENT

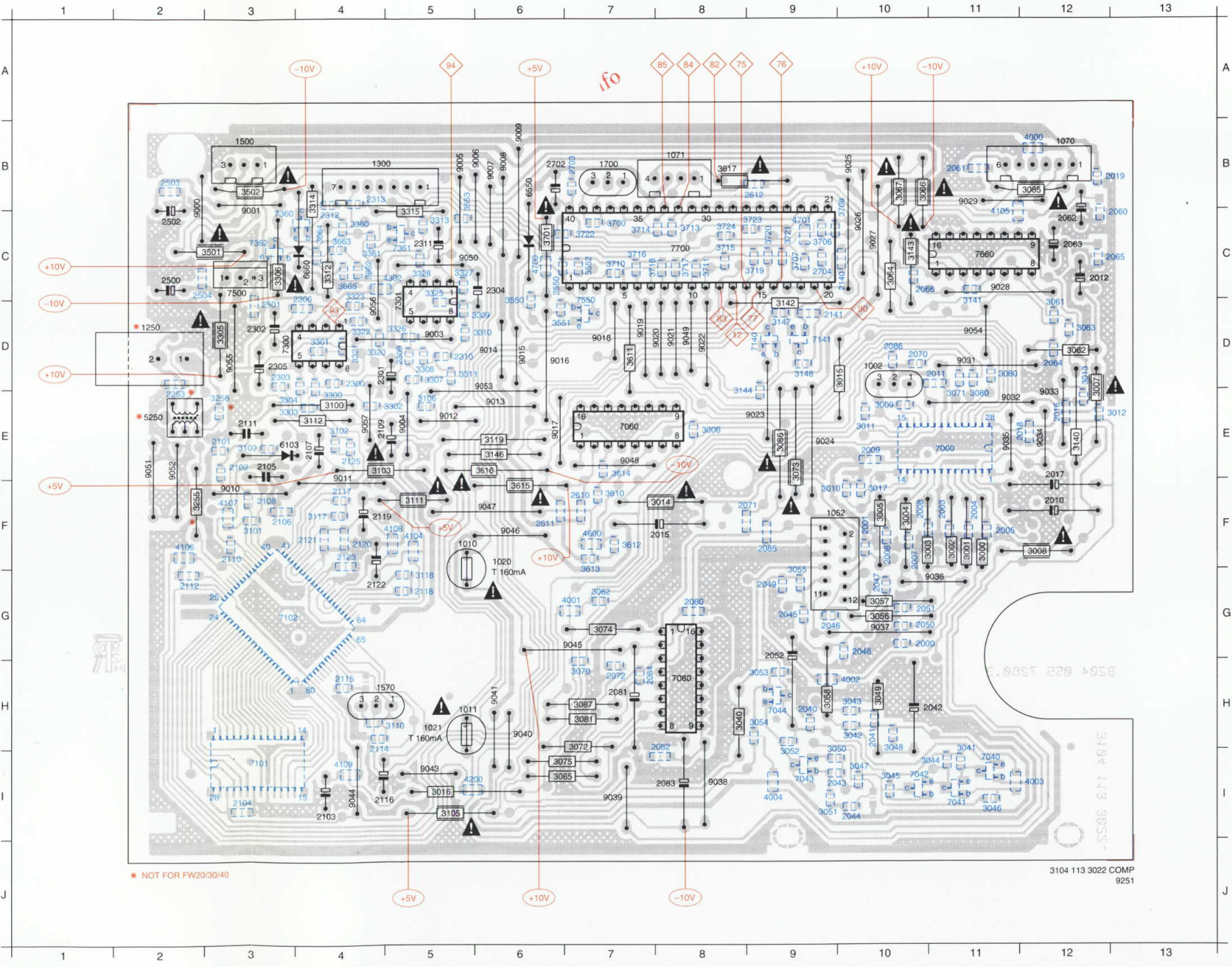
SK...	FREQUENCY	I/P	DISPLAY	ADJUST	O/P	SCOPE/METER
Varicap alignment						
FM 87.5-108MHz			108MHz 87.5MHz	check	6	8V ± 1V 1.65V ± 0.35V
FM @ 65-108MHz			108MHz 65MHz	check		8.75V ± 1.75V 2.25V ± 0.75V
LW + 153-279kHz			279kHz 153kHz	5108 check		8.5V 1V ± 0.3V
MW 522-1611kHz (530-1700kHz)			1611kHz (1710kHz)	2142 (5108)		8.5V (8.5V)
			522kHz (530kHz)	check		1.1V ± 0.3V (1.0V ± 0.3V)
FM						
FM	98MHz mod = 1kHz Δf = 75kHz 1mV	A	98MHz	5105	1-2	0V ± 0.02V
	98MHz 90% Left 9% Pilot 1mV		98MHz	3131	4 Right	min.
				check	3	Lo
	98MHz mod = 1kHz Δf = 75kHz 15μV		98MHz	3125	5	Hi  Lo
AM-IF						
MW	450kHz Δf = 10kHz 50Hz	C	1494kHz (1600kHz)	5104	7	
AM-RF						
LW *	155kHz 270kHz	B	155kHz 270kHz	5109 2140	4	max. 
MW *	558kHz (560kHz)		558kHz (560kHz)	5107		
	1494kHz (1600kHz)		1494kHz (1600kHz)	2141		

TUNER 92 COMPONENT AND CHIP LAYOUT - For /22 and other versions produced before wk 249.

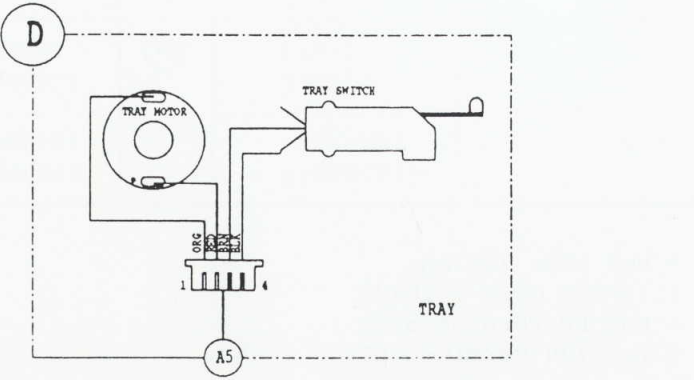
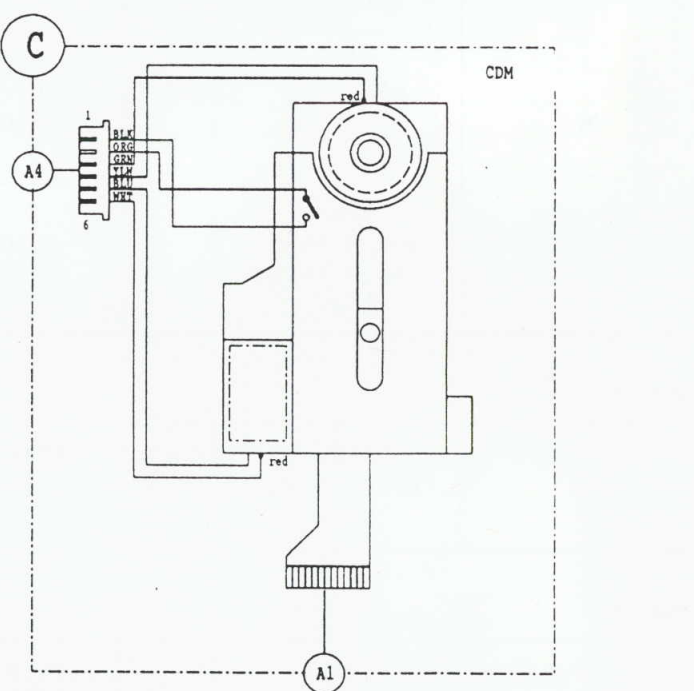
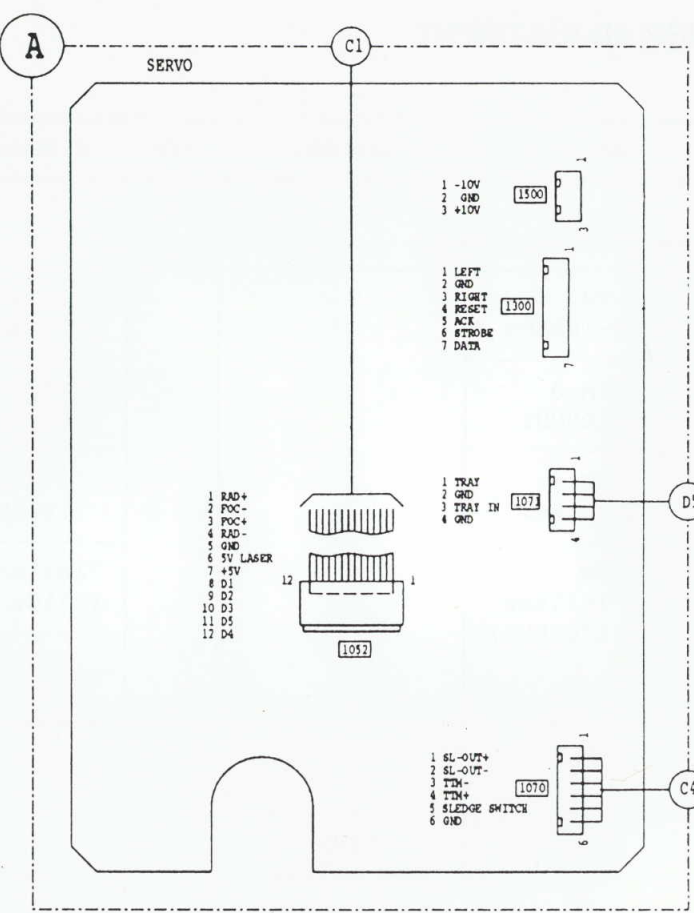
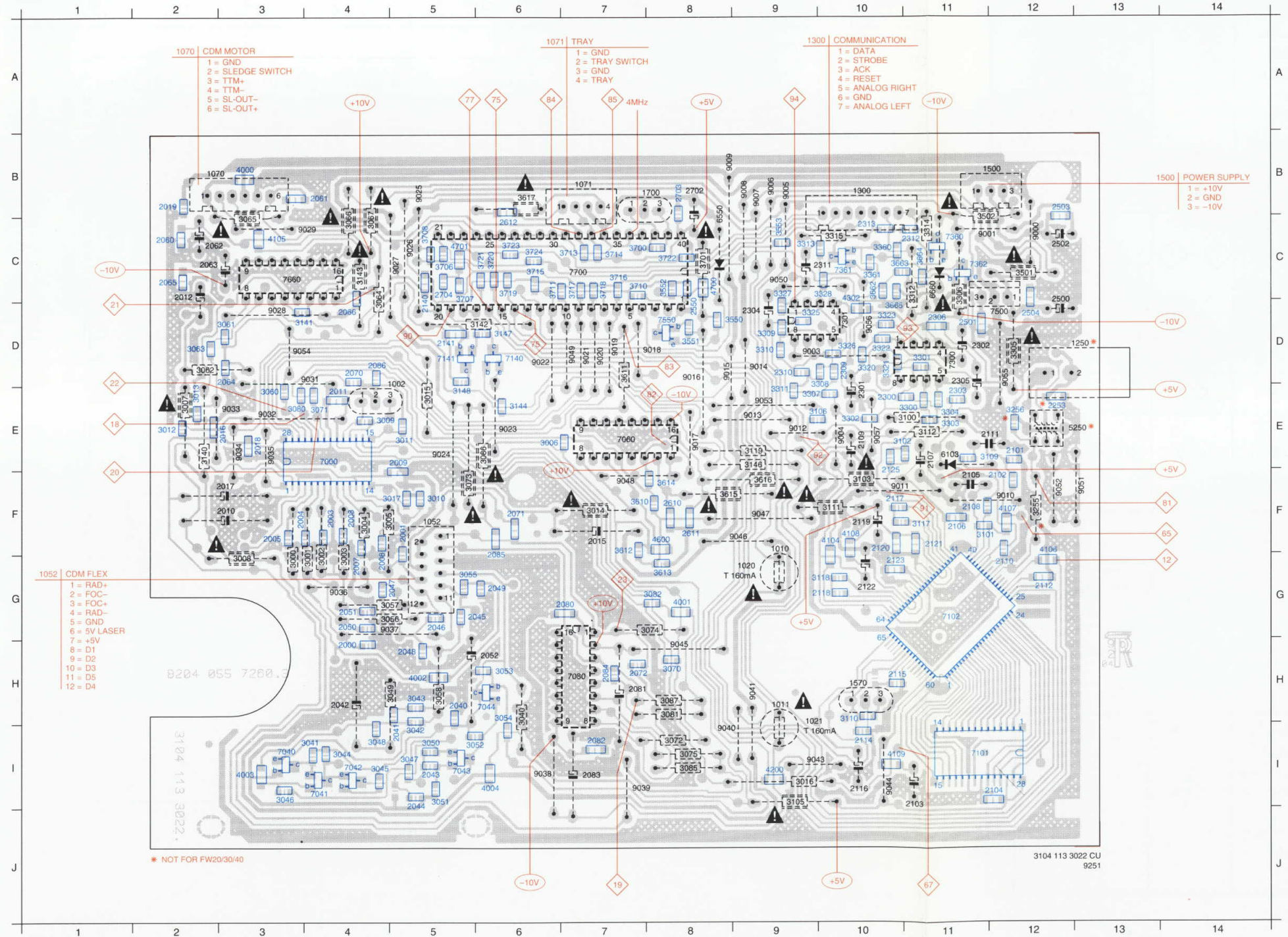


CD COMPONENT AND CHIP LAYOUT

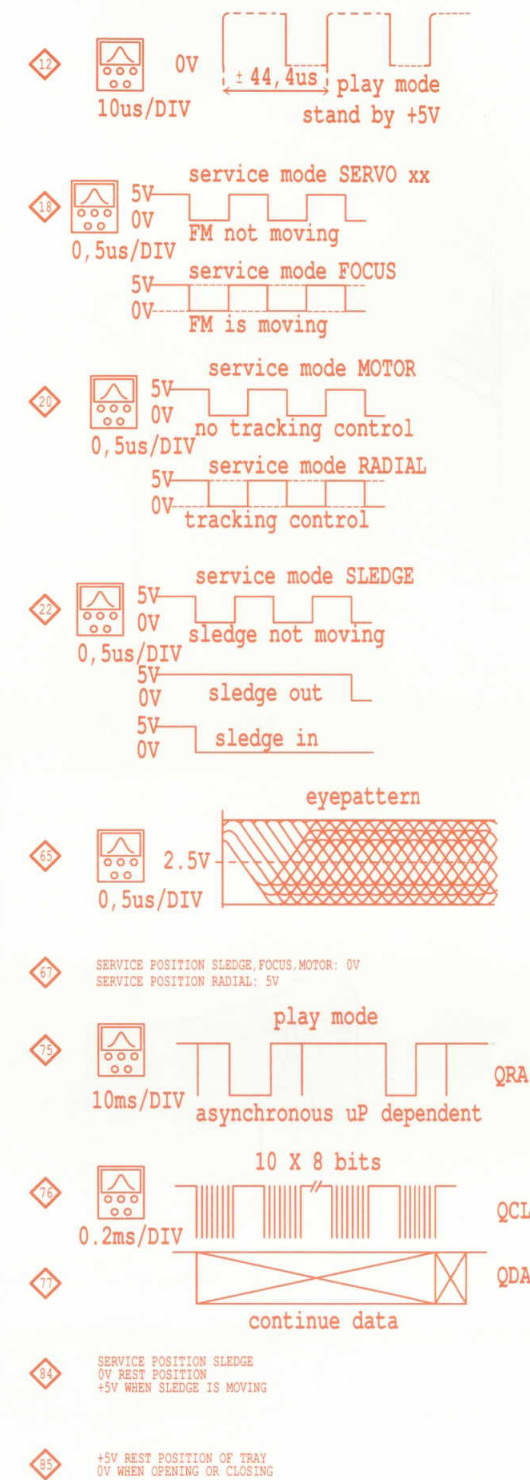
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1010	F5	2009	E10	2051	G10	2102	E3	2123	F4	2503	B2	3011	E10	3053	H9	3080	E11	3141	D11	3311	D5	3553	C5	3712	C8	4107	F3	7101	I3	9008	B6	9028	C11	9050	C5
1011	H5	2010	F12	2052	G9	2103	I4	2125	E4	2504	C2	3012	E10	3054	H9	3081	H7	3142	D9	3312	D4	3516	C7	3714	C7	4108	F4	7102	I3	9009	B6	9029	B11	9051	E2
1020	F6	2011	D10	2060	C12	2104	I3	2140	C10	2550	C6	3013	D12	3055	G9	3082	G7	3143	C10	3313	C5	3611	D7	3715	C8	4109	I4	7140	D9	9010	F3	9031	D11	9052	E2
1021	H5	2012	C12	2061	B11	2105	E3	2141	D9	2610	F7	3014	F7	3056	G10	3083	H6	3144	E8	3314	C4	3612	F7	3716	C7	4200	I5	7141	D9	9011	F4	9032	E11	9053	D5
1052	F9	2015	F7	2062	C12	2106	F3	2253	E2	2611	F6	3015	D10	3057	G10	3086	E9	3146	E6	3315	C5	3613	G7	3717	C8	4302	C4	7300	D3	9012	E5	9033	E12	9054	D11
1070	B12	2016	E12	2063	C12	2107	E4	2300	D4	2612	B8	3016	I5	3058	H9	3087	H7	3147	D9	3320	D4	3614	E7	3718	C7	4600	F7	7301	D5	9013	E6	9034	E12	9055	D3
1071	B8	2017	E12	2064	D12	2108	F3	2301	D4	2702	B6	3017	F10	3060	D11	3100	E4	3148	D9	3321	D4	3615	F6	3719	C8	4700	C6	7360	C3	9014	D6	9035	E11	9056	D4
1250	D2	2018	E12	2065	C12	2109	E4	2302	D3	2703	B7	3018	H8	3061	D12	3101	F3	3255	F2	3322	D4	3616	E8	3720	C9	4701	C9	7361	C5	9015	D6	9036	G10	9057	E4
1300	B4	2019	B12	2066	C10	2110	F3	2303	D3	2704	C9	3041	I11	3062	D12	3102	E4	3256	E3	3323	C4	3617	B8	3721	C9	5250	E2	7362	C3	9016	D6	9037	G10		
1500	B3	2040	H9	2070	D10	2111	E3	2304	C6	3000	F11	3042	H10	3063	D12	3103	E4	3300	E4	3325	C5	3662	C4	3722	C7	5251	D2	7500	C3	9017	E6	9038	I8		
1570	H4	2041	H10	2071	F8	2112	G2	2305	D3	3001	F11	3043	H10	3064	C10	3105	I5	3301	D4	3326	D5	3663	C4	3723	C8	6550	B6	7550	D7	9018	D7	9039	I7		
1700	B7	2042	H10	2072	H7	2114	I4	2306	D3	3002	F11	3044	I10	3065	D12	3106	E5	3302	E4	3327	C5	3664	C4	3724	C8	6650	C4	7650	C11	9019	D7	9040	H8		
2000	G10	2043	I9	2080	G8	2115	H4	2309	D5	3003	F11	3045	I10	3066	B10	3109	E3	3303	E3	3328	C5	3665	C4	4000	B12	7700	C8	9020	D8	9041	H6				
2001	F10	2044	I10	2081	H7	2116	I4	2310	D5	3004	F10	3046	I11	3067	B10	3110	H5	3304	E3	3360	C4	3700	C7	4001	G6	7040	I11	9000	C2	9021	D8	9043	I5		
2003	F11	2045	G9	2082	I7	2117	F4	2311	C5	3005	F10	3047	I10	3070	H7	3111	F5	3305	D3	3361	C4	3701	C6	4002	H10	7041	I11	9001	C3	9022	D8	9044	I4		
2004	F11	2046	G9	2083	I8	2118	G5	2312	C4	3006	F8	3048	I10	3071	E11	3112	E4	3306	C3	3501	C2	3706	C9	4003	I12	7042	I10	9003	D5	9023	E8	9045	G6		
2005	F11	2047	G10	2084	H7	2119	F4	2313	B4	3007	E12	3049	H10	3072	I7	3117	F4	3307	D5	3362	B3	3707	C9	4004	I9	7043	I9	9004	E5	9024	E9	9046	F6		
2007	G10	2048	G10	2085	F9	2120	F4	2500	C2	3008	F12	3050	I9	3073	F9	3118	H5	3308	D5	3550	D6	3708	C10	4104	F5	7044	H9	9005	B5	9025	B10	9047	F6		
2008	F10	2049	G9	2086	D10	2121	F4	2501	D3	3009	E10	3051	I9	3074	G7	3119	E6	3309	D5	3551	D6	3710	C7	4105	C11	7050	E7	9006	B6	9026	C10	9048	E7		



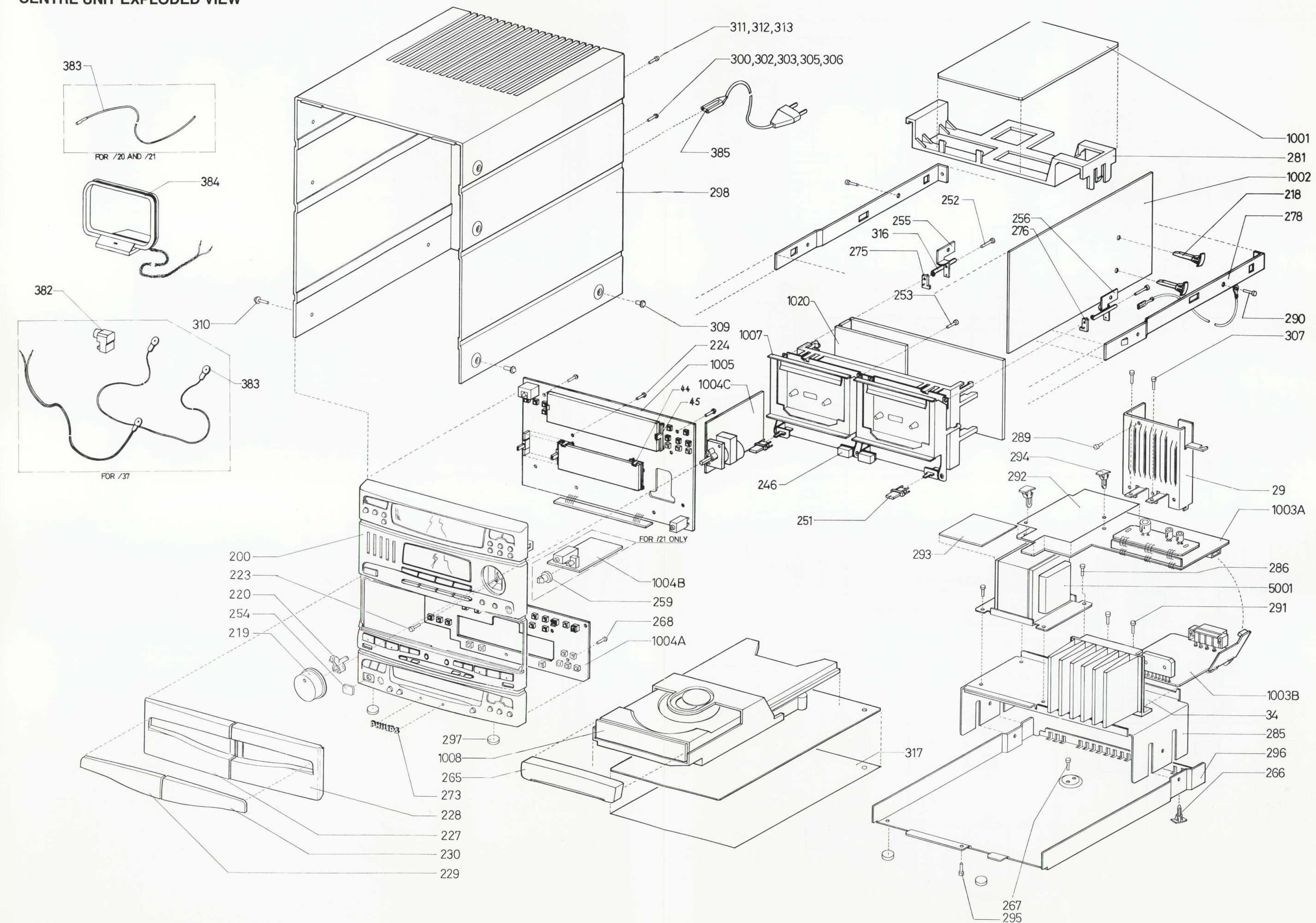
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1010	F9	2008	F4	2047	G5	2082	I7	2115	H10	2305	D11	2704	C5	3017	F4	3057	G4	3082	G7	3141	D3	3309	D9	3502	C11	3701	C8	3724	C6	6103	E11	7362	C11	9014	D9	9033	E3	9052	F12
1011	H9	2008	G4	2048	H5	2083	I7	2116	I10	2306	D11	2705	C3	3018	I6	3058	H5	3083	H8	3142	D5	3310	D9	3550	D8	3706	C5	4001	G8	6650	C11	7550	D12	9015	D8	9034	E3	9053	E9
1020	G9	2009	E5	2049	G6	2084	H7	2117	F10	2309	D10	2706	C4	3019	I3	3060	E3	3086	E6	3143	C4	3311	E9	3551	D8	3707	D5	4002	H5	7000	E4	7550	D8	9016	D8	9035	E3	9054	D3
1021	I9	2010	F2	2050	G4	2085	G6	2118	G9	2310	D9	2707	C4	3020	I5	3061	D2	3087	H8	3144	E6	3312	D11	3552	C8	3708	C5	4003	I3	7040	I3	7660	C3	9017	E8	9036	G4	9055	E10
1052	F5	2011	E4	2051	G4	2086	D4	2119	F10	2311	C9	2708	G4	3021	H5	3062	D2	3100	E10	3146	E9	3313	C9	3553	C9	3710	C7	4004	H6	7041	I4	7700	C7	9018	D7	9037	G4	9056	D10
1070	B2	2012	C2	2052	H6	2101	E12	2120	F10	2312	C10	2709	F4	3022	I4	3063	D2	3101	F11	3147	D6	3314	C11	3554	D7	3711	C6	4104	F8	7042	I4	9000	C12	9019	D7	9038	I6	9057	E12
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1250	D12	2016	F3	2051	B4	2103	I11	2122	G10	2314	D10	2711	C6	3024	I6	3065	C3	3103	F10	3255	F12	3320	D10	3556	D8	3713	C7	4106	F12	7044	H6	9003	D9	9021	D7	9040	I8		
1300	B10	2017	F2	2052	C2	2104	I11	2123	G10	2315	D11	2712	C7	3025	I7	3066	C4	3104	F9	3256	E12	3321	D10	3557	D9	3714	C7	4107	F12	7045	H7	9004	D10	9022	D8	9041	H9		
1500	B11	2018	E3	2053	C2	2105	F11	2124	F10	2316	D12	2713	C8	3026	I8	3067	C5	3105	E9	3257	E13	3322	D11	3558	D10	3715	C8	4108	F10	7046	H7	9005	B9	9023	E6	9042	I9		
1570	H10	2019	B2	2054	D2	2106	F11	2125	D5	2317	C10	2714	C9	3027	I9	3068	C6	3106	E10	3258	F13	3323	D12	3559	D11	3716	C7	4109	I10	7101	I11	9006	B9	9024	E5	9043	I10		
1700	B7	2040	H5	2065	C2	2107	E11	2141	D5	2504	D12	2715	C10	3028	I10	3069	C7	3107	E11	3259	F14	3324	D13	3560	D12	3717	C8	4200	I9	7102	G11	9007	B9	9025	B5	9044	I11		
2000	H4	2041	I5	2066	D4	2108	F11	2253	E12	2505	D8	2716	C11	3029	I11	3070	E11	3108	F12	3260	F15	3325	D14	3561	D13	3718	C9	4201	I10	7103	G12	9008	B9	9026	B5	9045	H8		
2001	F5	2042	H4	2067	D5	2109	E10	2300	E10	2506	D9	2717	C12	3030	I12	3071	E12	3109	F13	3261	F16	3326	D15	3562	D14	3719	C10	4202	I11	7104	D6	9009	B9	9027	C5	9046	F8		
2003	F4	2043	I5	2068	D6	2110	G12	2301	E10	2507	D10	2718	C13	3031	I13	3072	E13	3110	F14	3262	F17	3327	D16	3563	D15	3720	C11	4203	I12	7105	E7	9010	B9	9028	C5	9047	F9		
2004	F3	2044	J5	2069	D7	2111	H1	2302	D11	2508	D11	2719	C14	3032	I14	3073	E14	3111	F15	3263	F18	3328	D17	3564	D16	3721	C12	4204	I13	7106	F8	9011	B9	9029	C5	9048	D7		
2005	F3	2045	G5	2080	G6	2112	G12	2303	E11	2509	D12	2720	B8	3015	E5	3054	H5	3075	H8	3118	F9	3307	E9	3361	C10	3655	D10	3723	C6	5250	E12	7360	D11	9012	E9	9031	D3	9050	C9



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CENTRE UNIT EXPLODED VIEW



CENTRE UNIT

44	4822 466 93152
45	4822 466 93151
200	4822 426 51634 -/21/34
200	4822 426 51633
218	4822 466 93147
219	4822 413 51449
220	4822 466 70739
227	4822 443 63907
228	4822 443 63908
229	4822 450 62063
230	4822 450 62064
251	4822 410 62042
259	4822 413 41724 -/21/34
265	4822 444 60914 -/21/34
265	4822 444 60915
266	4822 466 93148
273	4822 459 11126 -/37
273	4822 459 11086
294	4822 466 93148
297	4822 462 40683
298	4822 426 20239
298	4822 426 20238 -/21/34
382	4822 264 30265 -/37
383	4822 320 11094 -/37
384	4822 158 60622
385	4822 321 10776 -/22
385	4822 321 10918 -/25
385	4822 321 10831 -/20/21/34
385	4822 321 10883 -/37
385	4822 321 10954 -/30

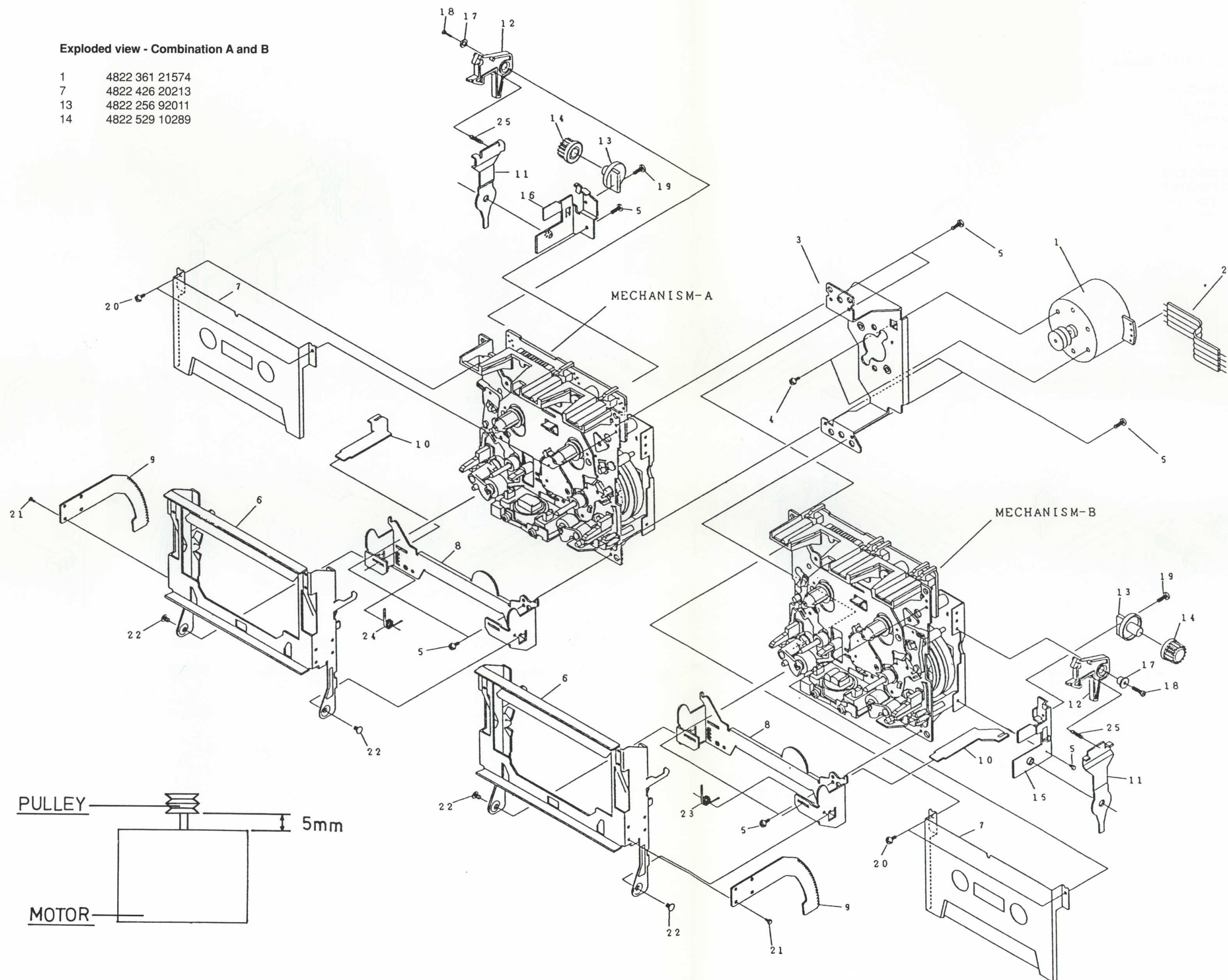
LISTS OF SCREWS

223	M3 X 6
224	D3 X 8
252	D3 X 16
253	D3 X 12
267	M3 X 6
268	D3 X 8
286	D3 X 10
289	D2.9 X 9.5
290	M3 X 6
291	M3 X 10
295	M3 X 6
300	D3 X 12
302	D3 X 12
303	D3 X 12
305	D3 X 12
306	D3 X 12
307	D3 X 8
309	D3 X 10
310	D3 X 10
311	M3 X 10
312	M3 X 10
313	M3 X 10

Note : Only the mentioned parts are normal service parts.

Exploded view - Combination A and B

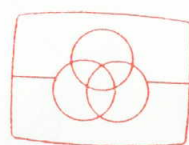
1	4822 361 21574
7	4822 426 20213
13	4822 256 92011
14	4822 529 10289



Playback exploded view (Mech A)

1 4822 249 30189
 10 4822 403 70729
 12 4822 403 70731
 18 4822 157 70155
 24 4822 358 31219

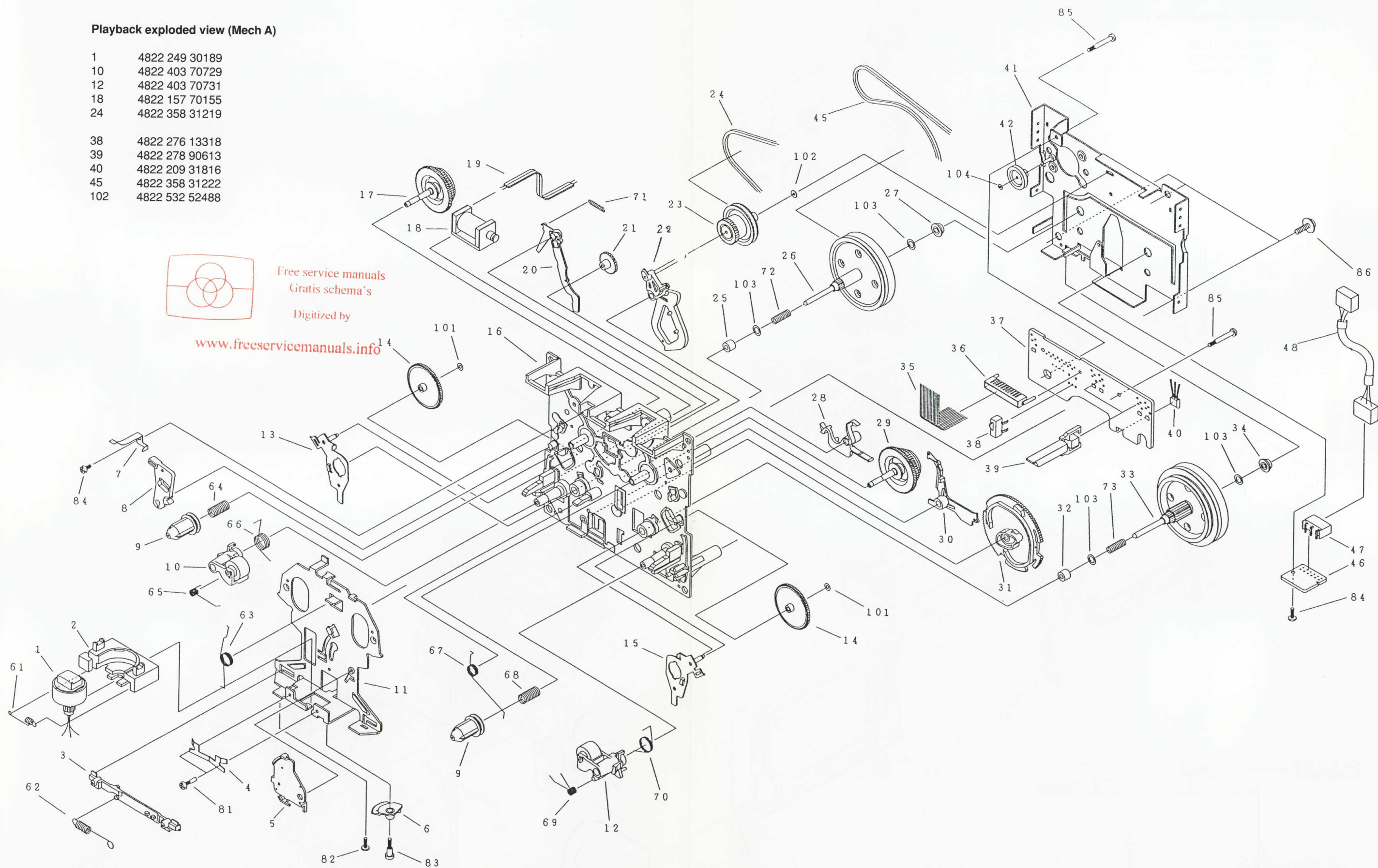
38 4822 276 13318
 39 4822 278 90613
 40 4822 209 31816
 45 4822 358 31222
 102 4822 532 52488



Free service manuals
 Gratis schema's

Digitized by

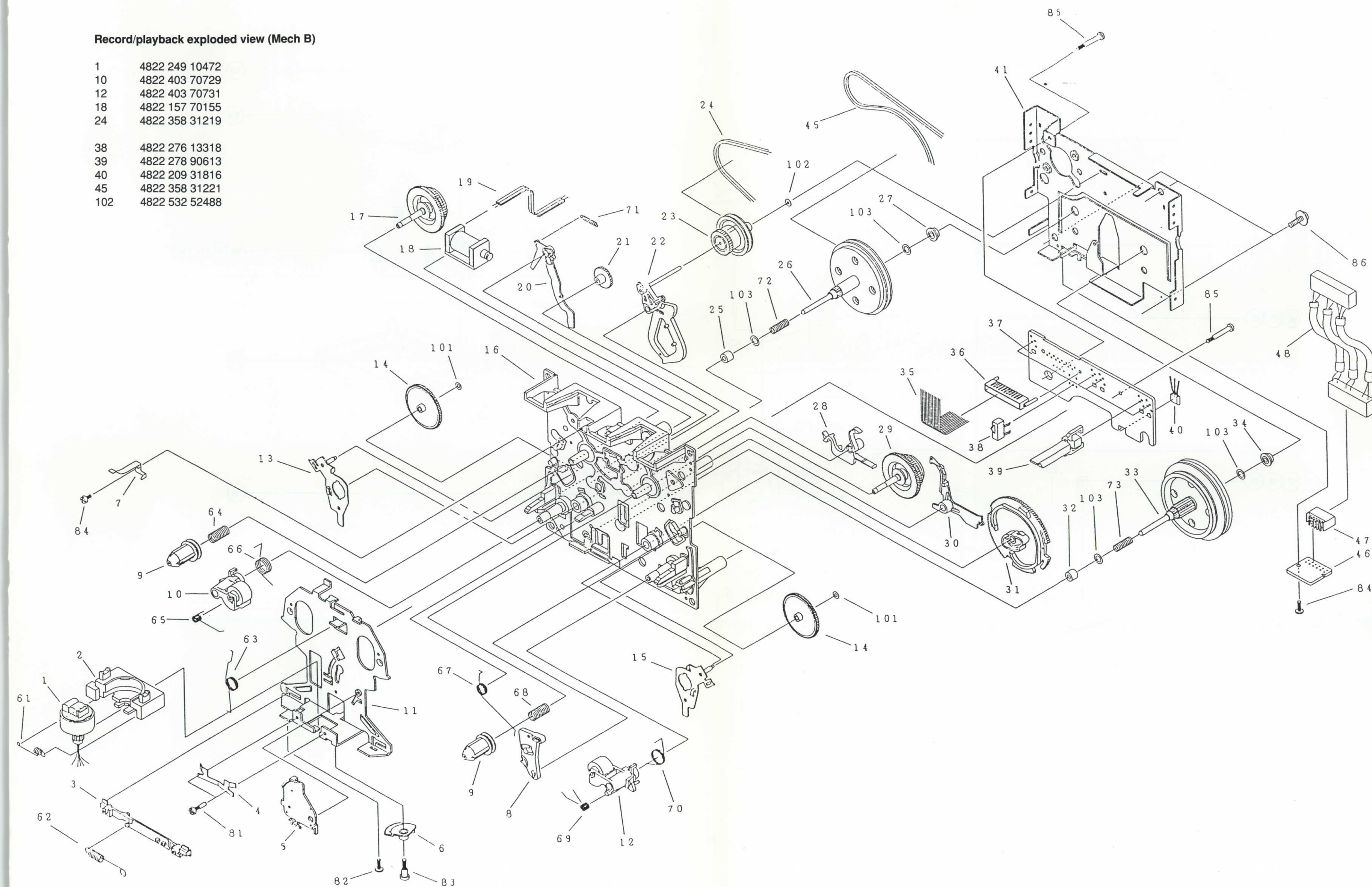
www.freesevicemanuals.info



Record/playback exploded view (Mech B)

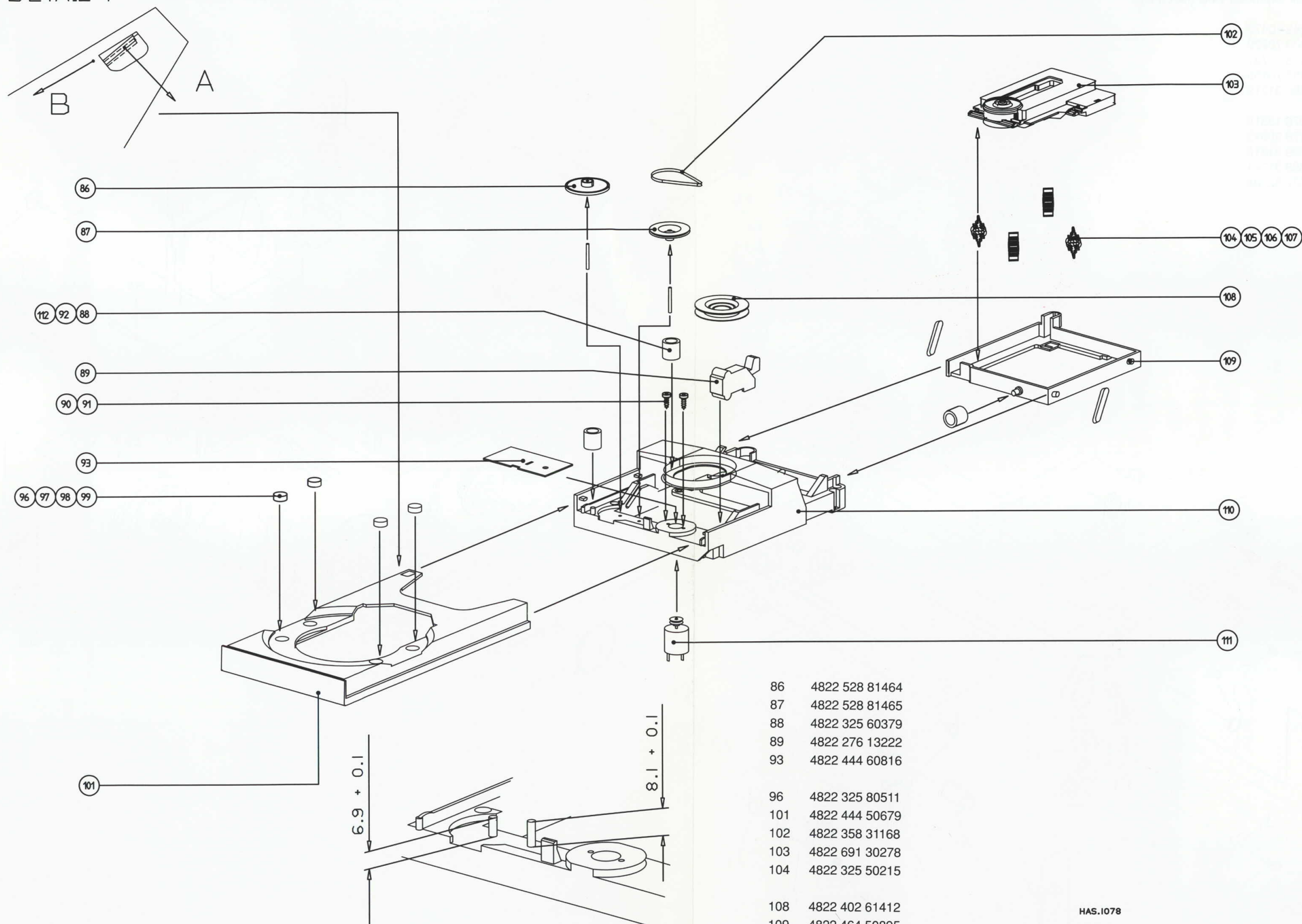
1 4822 249 10472
 10 4822 403 70729
 12 4822 403 70731
 18 4822 157 70155
 24 4822 358 31219

38 4822 276 13318
 39 4822 278 90613
 40 4822 209 31816
 45 4822 358 31221
 102 4822 532 52488



CD EXPLODED VIEW

DETAIL I



86 4822 528 81464
 87 4822 528 81465
 88 4822 325 60379
 89 4822 276 13222
 93 4822 444 60816

96 4822 325 80511
 101 4822 444 50679
 102 4822 358 31168
 103 4822 691 30278
 104 4822 325 50215

108 4822 402 61412
 109 4822 464 50895
 110 4822 444 50678
 111 4822 361 21492

HAS.1078

POWER BOARD

MISCELLANEOUS

1251	4822 252 11115	Circuit breaker 2.5A
1252	4822 252 11115	Circuit breaker 2.5A
1260	4822 267 31176	Speaker Socket
1261	4822 265 31016 Δ	Mains Socket -/37
1261	4822 265 31015 Δ	Mains Socket
1262	4822 272 10269 Δ	Voltage Selector -/21/34
1301	4822 252 51123 Δ	Fuse T6.3A 250V -/37
1301	4822 071 54002 Δ	Fuse T4A 250V
1302	4822 252 51123 Δ	Fuse T6.3A 250V -/37
1302	4822 071 54002 Δ	Fuse T4A 250V
1303	4822 253 30334 Δ	Fuse T1.25A 250V -/37
1303	4822 071 51002 Δ	Fuse T1A 250V
1304	4822 253 30334 Δ	Fuse T1.25A 250V -/37
1304	4822 071 51002 Δ	Fuse T1A 250V
1305	4822 253 30334 Δ	Fuse T1.25A 250V -/37
1305	4822 071 56301 Δ	Fuse T630mA 250V
1306	4822 253 30334 Δ	Fuse T1.25A 250V -/37
1306	4822 071 56301 Δ	Fuse T630mA 250V
1307	4822 071 51602 Δ	Fuse T1.6A 250V -/37
1307	4822 253 10128 Δ	Fuse T2A 250V
1308	4822 253 30334 Δ	Fuse T1.25A 250V -/37
1308	4822 071 56301 Δ	Fuse T630mA 250V
1309	4822 253 30334 Δ	Fuse T1.25A 250V -/37
1309	4822 071 56301 Δ	Fuse T630mA 250V



2251	4822 124 40244	2.2 μ F 20% 63V
2252	4822 124 40244	2.2 μ F 20% 63V
2253	5322 124 21189	100 μ F 20% 40V
2254	5322 124 21189	100 μ F 20% 40V
2255	4822 122 33169	680pF 10% 50V
2256	4822 122 33169	680pF 10% 50V
2257	4822 124 80196	47 μ F 20% 50V
2258	4822 124 80196	47 μ F 20% 50V
2259	4822 121 42007	100nF 10% 100V
2260	4822 121 42007	100nF 10% 100V
2265	4822 122 10459	560pF 10% 50V
2266	4822 122 10459	560pF 10% 50V
2267	4822 122 33195	100pF 10% 50V
2268	4822 122 33195	100pF 10% 50V
2269	4822 122 33195	100pF 10% 50V
2270	4822 122 33195	100pF 10% 50V
2271	4822 121 42007	100nF 10% 100V
2272	4822 121 42007	100nF 10% 100V
2273	4822 122 33195	100pF 10% 50V
2274	4822 122 33195	100pF 10% 50V
2276	4822 126 11316	47nF 50V
2277	4822 126 11316	47nF 50V
2282	4822 124 40435	10 μ F 20% 50V
2284	4822 124 42245	22 μ F 20% 63V



2286	4822 124 80196	47 μ F 20% 50V
2300	4822 124 42367	3300 μ F 20% 35V
2301	4822 124 42367	3300 μ F 20% 35V
2302	4822 124 42367	3300 μ F 20% 35V
2303	4822 124 40248	10 μ F 20% 63V
2304	4822 124 22412	2200 μ F 20% 16V
2305	4822 124 23794	470 μ F 20% 16V
2306	4822 122 33197	1nF 10% 50V
2308	4822 124 42246	470 μ F 20% 25V
2309	4822 124 40244	2.2 μ F 20% 63V
2312	4822 124 42392	470 μ F 20% 50V
2313	4822 124 42391	470 μ F 20% 63V
2314	4822 124 42245	22 μ F 20% 63V
2315	4822 124 80398	1000 μ F 20% 35V
2316	4822 124 40184	1000 μ F 20% 10V
2317	4822 124 42246	470 μ F 20% 25V
2318	4822 124 40248	10 μ F 20% 63V
2323	4822 121 42007	100nF 10% 100V
2324	4822 121 42007	100nF 10% 100V
2330	4822 121 42007	100nF 10% 100V



3251	4822 116 52269	3k3 5% 0.5W
3252	4822 116 52269	3k3 5% 0.5W
3253	4822 116 52224	470 Ω 5% 0.5W
3254	4822 116 52224	470 Ω 5% 0.5W
3255	4822 116 52291	56k 5% 0.5W
3256	4822 116 52291	56k 5% 0.5W
3257	4822 116 52256	2k2 5% 0.5W
3258	4822 116 52256	2k2 5% 0.5W
3259	4822 116 52256	2k2 5% 0.5W
3260	4822 116 52256	2k2 5% 0.5W
3261	4822 116 52291	56k 5% 0.5W
3262	4822 116 52291	56k 5% 0.5W
3263	4822 052 10478 Δ	4 Ω 7 5% 0.33W
3264	4822 052 10478 Δ	4 Ω 7 5% 0.33W
3265	4822 052 10478 Δ	4 Ω 7 5% 0.33W
3266	4822 052 10478 Δ	4 Ω 7 5% 0.33W
3280	4822 116 83863	1k 5% 0.5W
3281	4822 116 83863	1k 5% 0.5W
3282	4822 116 52263	2k7 5% 0.5W
3283	4822 052 10101 Δ	100 Ω 5% 0.33W
3284	4822 116 83932 Δ	220 Ω 5% 2W
3286	4822 116 52257	22k 5% 0.5W
3301	4822 116 83886	68 Ω 5% 0.5W
3302	4822 116 83886	68 Ω 5% 0.5W
3303	4822 116 83885	56 Ω 5% 0.5W
3304	4822 116 83877	2k7 5% 0.5W
3305	4822 052 10101 Δ	100 Ω 5% 0.33W
3306	4822 116 83873	2k2 5% 0.5W
3307	4822 052 10101 Δ	100 Ω 5% 0.33W



3308	4822 053 21106 Δ	10M 5% 0.5W -/37
3310	4822 116 52276	3k9 5% 0.5W
3311	4822 052 10479 Δ	47 Ω 5% 0.33W
3312	4822 116 52256	2k2 5% 0.5W
3313	4822 116 52263	2k7 5% 0.5W
3314	4822 116 52277	39k 5% 0.5W
3315	4822 116 52233	10k 5% 0.5W
3316	4822 051 10333	33k 2% 0.25W
3317	4822 116 52233	10k 5% 0.5W
3318	4822 050 11002	1k 1% 0.4W
3319	4822 116 83873	2k2 5% 0.5W
3320	4822 116 52233	10k 5% 0.5W
3321	4822 116 52283	4k7 5% 0.5W



5001	4822 146 31157 Δ	Mains Transformer -/21/30/34
5001	4822 146 31127 Δ	Mains Transformer -/20/22/25/37
5251	4822 157 53447	Bead Inductor -/20/22/37
5253	4822 157 53447	Bead Inductor
5254	4822 157 53447	Bead Inductor



6300	4822 130 82078 Δ	D5SBA20
6301	5322 130 80686	1N5392
6302	5322 130 80686	1N5392
6303	5322 130 30684	1N4002
6304	5322 130 30684	1N4002
6305	5322 130 30684	1N4002
6306	5322 130 30684	1N4002
6307	5322 130 30684	1N4002
6308	4822 130 34195	BZX79-C13
6309	4822 130 34278	BZX79-C6V8
6311	4822 130 34195	BZX79-C13
6312	4822 130 34281	BZX79-C15
6313	4822 130 31981	BZX79-C3V9
6314	4822 130 34233	BZX79-C5V1
6315	4822 130 30621	1N4148
6317	4822 130 30621	1N4148
6318	4822 130 31981	BZX79-C3V9
6320	4822 130 30621	1N4148



7251	4822 209 31514 Δ	STK4132II
7300	4822 130 61236 Δ	BD234
7301	4822 130 40937	BC548B



7302	4822 130 40937	BC548B
7303	4822 130 44197	BC558B
7304	5322 130 44786 Δ	BD675
7306	5322 130 60268 Δ	BD236

Note : Only the mentioned parts are normal service parts.

SELECTOR BOARD

MISCELLANEOUS

1554	4822 266 30293	Cinch Socket 4P
1555	4822 267 60328	Conn. 21P
1557	4822 267 51158	Conn. 7P
1558	4822 276 13282	Key Switch



2551	4822 124 40239	0.47μF 20% 63V
2552	4822 124 40239	0.47μF 20% 63V
2553	4822 122 33196	330pF 10% 50V
2554	4822 122 33196	330pF 10% 50V
2557	4822 124 40239	0.47μF 20% 63V
2558	4822 124 40239	0.47μF 20% 63V
2561	4822 124 40239	0.47μF 20% 63V
2562	4822 124 40239	0.47μF 20% 63V
2563	4822 124 40239	0.47μF 20% 63V
2564	4822 124 40239	0.47μF 20% 63V
2565	5322 124 41948	470nF 20% 50V
2566	5322 124 41948	470nF 20% 50V
2567	4822 126 10178	820pF 10% 50V
2568	4822 126 10178	820pF 10% 50V
2569	4822 121 51387	10nF 20% 16V
2570	4822 121 51387	10nF 20% 16V
2571	4822 126 12148	2.7nF 10%
2572	4822 126 12148	2.7nF 10%
2573	4822 124 42218	470μF 20% 10V
2574	4822 126 12145	47nF 10% 25V
2575	4822 124 41973	100μF 20% 16V
2577	4822 124 40248	10μF 20% 63V
2578	4822 124 40248	10μF 20% 63V
2581	4822 122 33195	100pF 10% 50V
2582	4822 122 33195	100pF 10% 50V
2583	4822 122 33169	680pF 10% 50V
2584	4822 122 33169	680pF 10% 50V
2585	4822 122 33197	1nF 10% 50V
2586	4822 122 33197	1nF 10% 50V
2587	4822 124 80192	4.7μF 20% 63V
2588	4822 124 80192	4.7μF 20% 63V
2589	4822 126 12145	47nF 10% 25V
2590	4822 124 23794	470μF 20% 16V
2591	4822 122 33195	100pF 10% 50V
2592	4822 122 33195	100pF 10% 50V
2593	4822 124 40248	10μF 20% 63V
2594	4822 124 40248	10μF 20% 63V
2595	4822 124 40248	10μF 20% 63V
2596	4822 124 40248	10μF 20% 63V
2597	4822 122 33195	100pF 10% 50V
2598	4822 122 33195	100pF 10% 50V
2599	4822 124 41973	100μF 20% 16V
2600	4822 126 12145	47nF 10% 25V
2601	4822 126 12147	22nF 10% 25V
2605	4822 122 33195	100pF 10% 50V
2606	4822 122 33195	100pF 10% 50V
2609	4822 124 40239	0.47μF 20% 63V



2610	4822 124 40239	0.47μF 20% 63V
2611	4822 124 40177	47μF 20% 10V
2612	4822 126 12339	2.2nF 10%
2615	4822 124 80192	4.7μF 20% 63V
2616	4822 124 41973	100μF 20% 16V
2617	4822 124 40248	10μF 20% 63V
2618	4822 122 10573	56pF 5% 50V
2619	4822 122 10573	56pF 5% 50V
2620	4822 122 10573	56pF 5% 50V
2621	4822 122 10573	56pF 5% 50V
2623	4822 122 33519	470pF 10% 50V
2624	4822 122 33519	470pF 10% 50V
2625	4822 122 33519	470pF 10% 50V
2626	4822 122 33519	470pF 10% 50V
2627	4822 122 33196	330pF 10% 50V
2628	4822 122 33196	330pF 10% 50V
2629	4822 122 33519	470pF 10% 50V
2630	4822 122 33519	470pF 10% 50V



3551	4822 116 52234	100k 5% 0.5W
3552	4822 116 52234	100k 5% 0.5W
3553	4822 116 52284	47k 5% 0.5W
3554	4822 116 52284	47k 5% 0.5W
3555	4822 050 11002	1k 1% 0.4W
3556	4822 050 11002	1k 1% 0.4W
3557	4822 116 52233	10k 5% 0.5W
3558	4822 116 52233	10k 5% 0.5W
3559	4822 116 52297	68k 5% 0.5W
3560	4822 116 52297	68k 5% 0.5W
3561	4822 116 52233	10k 5% 0.5W
3562	4822 116 52233	10k 5% 0.5W
3563	4822 116 52245	150k 5% 0.5W
3564	4822 116 52245	150k 5% 0.5W
3565	4822 116 52244	15k 5% 0.5W
3566	4822 116 52244	15k 5% 0.5W
3567	4822 116 52297	68k 5% 0.5W
3568	4822 116 52297	68k 5% 0.5W
3569	4822 116 52303	8k2 5% 0.5W
3570	4822 116 52303	8k2 5% 0.5W
3571	4822 116 52175	100Ω 5% 0.5W
3572	4822 116 52175	100Ω 5% 0.5W
3573	4822 116 52226	560Ω 5% 0.5W
3574	4822 116 52226	560Ω 5% 0.5W
3575	4822 116 52226	560Ω 5% 0.5W
3576	4822 116 52226	560Ω 5% 0.5W
3577	4822 116 52272	330k 5% 0.5W
3578	4822 116 52272	330k 5% 0.5W
3579	4822 116 52264	27k 5% 0.5W
3580	4822 116 52264	27k 5% 0.5W
3581	4822 116 52233	10k 5% 0.5W
3582	4822 116 52233	10k 5% 0.5W
3583	4822 116 52284	47k 5% 0.5W



3584	4822 116 52244	15k 5% 0.5W
3585	4822 116 52284	47k 5% 0.5W
3586	4822 116 52284	47k 5% 0.5W
3587	4822 116 52284	47k 5% 0.5W
3588	4822 116 52284	47k 5% 0.5W
3589	4822 116 52284	47k 5% 0.5W
3590	4822 116 52284	47k 5% 0.5W
3591	4822 116 52284	47k 5% 0.5W
3592	4822 116 52284	47k 5% 0.5W
3595	4822 116 52224	470Ω 5% 0.5W
3596	4822 116 52224	470Ω 5% 0.5W
3597	4822 116 52244	15k 5% 0.5W
3598	4822 116 52244	15k 5% 0.5W
3601	4822 116 52256	2k2 5% 0.5W
3602	4822 116 52256	2k2 5% 0.5W
3603	4822 116 52256	2k2 5% 0.5W
3604	4822 116 52256	2k2 5% 0.5W
3605	4822 116 52251	18k 5% 0.5W
3606	4822 116 52251	18k 5% 0.5W
3607	4822 116 52284	47k 5% 0.5W
3608	4822 116 52284	47k 5% 0.5W
3609	4822 116 52238	12k 5% 0.5W
3610	4822 116 52238	12k 5% 0.5W
3611	4822 116 52233	10k 5% 0.5W
3612	4822 116 52233	10k 5% 0.5W
3613	4822 116 52233	10k 5% 0.5W
3614	4822 116 52233	10k 5% 0.5W
3615	4822 052 10339 Δ	33Ω 5% 0.33W
3616	4822 050 11002	1k 1% 0.4W
3617	4822 116 52244	15k 5% 0.5W
3618	4822 116 52244	15k 5% 0.5W
3619	4822 116 52249	1k8 5% 0.5W
3620	4822 116 52249	1k8 5% 0.5W
3621	4822 116 52231	820Ω 5% 0.5W
3622	4822 116 52231	820Ω 5% 0.5W
3623	4822 116 52231	820Ω 5% 0.5W
3624	4822 116 52231	820Ω 5% 0.5W
3625	4822 116 52238	12k 5% 0.5W
3626	4822 116 52258	220k 5% 0.5W
3629	4822 116 52233	10k 5% 0.5W
3630	4822 050 11002	1k 1% 0.4W
3631	4822 116 52257	22k 5% 0.5W
3632	4822 116 52257	22k 5% 0.5W
3633	4822 116 52257	22k 5% 0.5W
3634	4822 116 52257	22k 5% 0.5W
3635	4822 116 52234	100k 5% 0.5W
3636	4822 116 52234	100k 5% 0.5W
3637	4822 052 10339 Δ	33Ω 5% 0.33W
3638	4822 116 52226	560Ω 5% 0.5W
3639	4822 116 52277	39k 5% 0.5W
3640	4822 116 52277	39k 5% 0.5W
3641	4822 116 52249	1k8 5% 0.5W
3642	4822 116 52235	1M 5% 0.5W
3649	4822 116 52269	3k3 5% 0.5W



3650	4822 116 52269	3k3 5% 0.5W
3651	4822 116 52263	2k7 5% 0.5W
3652	4822 116 52263	2k7 5% 0.5W
3653	4822 116 52226	560Ω 5% 0.5W
3654	4822 050 11002	1k 1% 0.4W



5551	4822 157 53447	Bread Inductor
5552	4822 157 62552	Coil 2.2μH 20%
5553	4822 157 62552	Coil 2.2μH 20%
5554	4822 157 62552	Coil 2.2μH 20%
5555	4822 157 62552	Coil 2.2μH 20%
5556	4822 157 62552	Coil 2.2μH 20%
5557	4822 157 62552	Coil 2.2μH 20%
5558	4822 157 62552	Coil 2.2μH 20%
5559	4822 157 62552	Coil 2.2μH 20%



6551	4822 130 30621	1N4148
6552	4822 130 30621	1N4148
6553	4822 130 30621	1N4148
6554	4822 130 30621	1N4148
6555	4822 130 30621	1N4148
6556	4822 130 30621	1N4148
6557	4822 130 30621	1N4148
6558	4822 130 30621	1N4148
6559	4822 130 30621	1N4148
6560	4822 130 30621	1N4148
6561	4822 130 30621	1N4148
6562	4822 130 30621	1N4148
6563	4822 130 30621	1N4148
6564	4822 130 30621	1N4148
6565	4822 130 30621	1N4148
6566	4822 130 30621	1N4148
6567	4822 130 30621	1N4148
6568	4822 130 30621	1N4148
6569	4822 130 34173	BZX79-C5V6
6570	4822 130 30621	1N4148
6571	4822 130 30621	1N4148



7551	4822 209 83274	NJM4560D
7552	5322 209 10421	HEF4094BP
7553	4822 130 44196	BC548C
7554	4822 130 44196	BC548C
7555	4822 209 83274	NJM4560D
7556	4822 130 44196	BC548C
7557	4822 209 83274	NJM4560D
7559	4822 130 41327	BC327-40
7561	4822 130 44196	BC548C

Note : Only the mentioned parts are normal service parts.

TAPECORE BOARD

MISCELLANEOUS

2635	4822 124 41398	1μF 20% 63V
2636	4822 124 41398	1μF 20% 63V
2637	4822 122 33069	33pF 5% 50V
2638	4822 122 33069	33pF 5% 50V
2639	4822 124 41398	1μF 20% 63V
2640	4822 124 41398	1μF 20% 63V
2641	4822 126 10329	68pF 5%
2642	4822 126 10329	68pF 5%
2643	4822 126 12187	22pF 5% 50V
2644	4822 126 12187	22pF 5% 50V
2645	4822 122 10577	3.3nF 10% 16V
2646	4822 122 10577	3.3nF 10% 16V
2647	4822 124 40248	10μF 20% 63V
2648	4822 124 40248	10μF 20% 63V
2649	4822 124 41398	1μF 20% 63V
2650	4822 124 40196	220μF 20% 16V
2651	4822 122 33519	470pF 10% 50V
2652	5322 124 41431	22μF 20% 35V
2653	5322 124 41431	22μF 20% 35V
2654	4822 124 40248	10μF 20% 63V
2655	4822 124 41398	1μF 20% 63V
2656	4822 124 41398	1μF 20% 63V
2657	4822 124 40248	10μF 20% 63V
2658	4822 124 40248	10μF 20% 63V
2659	4822 124 40248	10μF 20% 63V
2660	4822 124 40248	10μF 20% 63V
2661	4822 121 51252	470nF 5% 63V
2662	4822 121 51252	470nF 5% 63V
2663	4822 121 42408	220nF 5% 63V
2664	4822 121 42408	220nF 5% 63V
2665	4822 122 10466	220pF 10% 50V
2666	4822 122 10466	220pF 10% 50V
2667	4822 122 10466	220pF 10% 50V
2668	4822 122 10466	220pF 10% 50V
2669	4822 122 33519	470pF 10% 50V
2670	4822 122 33519	470pF 10% 50V
2673	4822 122 10458	82pF 10% 50V
2674	4822 122 10458	82pF 10% 50V
2675	4822 122 33519	470pF 10% 50V
2676	4822 122 33519	470pF 10% 50V
2680	4822 124 41397	47μF 20% 25V
2683	4822 124 40248	10μF 20% 63V
2684	4822 124 40196	220μF 20% 16V
2685	5322 121 42498	680nF 5% 63V
2699	4822 122 33197	1nF 10% 50V
2700	4822 122 33197	1nF 10% 50V
2701	4822 126 10777	100pF 50V
2702	4822 126 10777	100pF 50V
2703	4822 124 41973	100μF 20% 16V
2704	4822 124 41973	100μF 20% 16V
2705	4822 121 41935	12nF 5% 250V
2706	4822 121 41935	12nF 5% 250V



2707	4822 126 11585	22nF +80-20% 25V
2708	4822 126 11585	22nF +80-20% 25V
2709	4822 124 41398	1μF 20% 63V
2710	4822 124 41398	1μF 20% 63V
2712	4822 122 33519	470pF 10% 50V
2713	4822 124 40196	220μF 20% 16V
2719	4822 126 10178	820pF 10% 50V
2720	4822 126 10178	820pF 10% 50V
2721	4822 126 10777	100pF 50V
2722	4822 126 10777	100pF 50V
2723	4822 124 41973	100μF 20% 16V
2724	4822 124 41973	100μF 20% 16V
2725	4822 121 41935	12nF 5% 250V
2726	4822 121 41935	12nF 5% 250V
2727	4822 126 11585	22nF +80-20% 25V
2728	4822 126 11585	22nF +80-20% 25V
2729	4822 124 41398	1μF 20% 63V
2730	4822 124 41398	1μF 20% 63V
2732	4822 122 33519	470pF 10% 50V
2733	4822 124 40196	220μF 20% 16V
2739	4822 126 10781	470pF 50V
2740	4822 122 33519	470pF 10% 50V
2741	4822 124 41973	100μF 20% 16V
2747	4822 124 41973	100μF 20% 16V
2752	4822 124 40433	47μF 20% 25V
2755	4822 124 41398	1μF 20% 63V
2757	4822 124 40433	47μF 20% 25V
2759	4822 126 11714	4.7nF 20%
2760	4822 121 51387	10nF 20% 16V
2762	4822 124 40239	0.47μF 20% 63V
2763	4822 122 33069	33pF 5% 50V
2764	4822 122 33069	33pF 5% 50V
2765	4822 121 41857	10nF 5% 250V
2768	4822 124 41973	100μF 20% 16V
2769	4822 122 33519	470pF 10% 50V
2770	4822 124 40196	220μF 20% 16V
2771	4822 126 11714	4.7nF 20%
2772	4822 126 11714	4.7nF 20%
2773	4822 126 11714	4.7nF 20%
2774	4822 124 80192	4.7μF 20% 63V
2775	4822 124 40433	47μF 20% 25V
2776	4822 124 41398	1μF 20% 63V
2777	4822 124 41398	1μF 20% 63V
2778	4822 124 41398	1μF 20% 63V
2779	4822 122 10459	560pF 10% 50V
2780	4822 122 10459	560pF 10% 50V
2781	4822 126 11585	22nF +80-20% 25V
2782	4822 126 11585	22nF +80-20% 25V
2783	4822 124 41398	1μF 20% 63V
2784	4822 124 41398	1μF 20% 63V
2785	4822 126 11595	470pF 10% 50V
2786	4822 126 11595	470pF 10% 50V



2789	4822 124 42244	4.7μF 20% 63V
2790	4822 124 42244	4.7μF 20% 63V
2800	4822 121 51387	10nF 20% 16V
2801	4822 121 51387	10nF 20% 16V
2814	4822 126 12148	2.7nF 10%
2815	4822 126 12148	2.7nF 10%
2816	4822 126 12148	2.7nF 10%
2837	4822 126 12148	2.7nF 10%
2838	4822 126 12148	2.7nF 10%
2839	4822 126 12148	2.7nF 10%
2840	4822 126 12148	2.7nF 10%
2841	4822 126 12148	2.7nF 10%
2842	4822 126 12148	2.7nF 10%
2882	4822 126 12148	2.7nF 10%



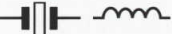
3635	4822 116 52234	100k 5% 0.5W
3636	4822 116 52234	100k 5% 0.5W
3637	4822 116 52285	470k 5% 0.5W
3638	4822 116 52285	470k 5% 0.5W
3639	4822 116 52284	47k 5% 0.5W
3640	4822 116 52284	47k 5% 0.5W
3641	4822 116 52243	1k5 5% 0.5W
3642	4822 116 52243	1k5 5% 0.5W
3643	4822 116 52269	3k3 5% 0.5W
3644	4822 116 52269	3k3 5% 0.5W
3645	4822 116 52289	5k6 5% 0.5W
3646	4822 116 52289	5k6 5% 0.5W
3647	4822 050 11002	1k 1% 0.4W
3648	4822 050 11002	1k 1% 0.4W
3649	4822 116 52251	18k 5% 0.5W
3650	4822 116 52224	470Ω 5% 0.5W
3651	4822 116 52257	22k 5% 0.5W
3652	4822 116 52257	22k 5% 0.5W
3653	4822 050 11002	1k 1% 0.4W
3654	4822 116 52233	10k 5% 0.5W
3655	4822 116 52233	10k 5% 0.5W
3656	4822 116 52233	10k 5% 0.5W
3657	4822 116 52233	10k 5% 0.5W
3658	4822 116 52233	10k 5% 0.5W
3659	4822 116 52257	22k 5% 0.5W
3660	4822 116 52257	22k 5% 0.5W
3661	4822 116 52244	15k 5% 0.5W
3662	4822 116 52244	15k 5% 0.5W
3663	4822 100 11771	20k 30%lin 0.1W
3664	4822 100 11771	20k 30%lin 0.1W
3665	4822 100 11771	20k 30%lin 0.1W
3666	4822 100 11771	20k 30%lin 0.1W
3667	4822 100 11771	20k 30%lin 0.1W
3668	4822 100 11771	20k 30%lin 0.1W
3669	4822 050 11002	1k 1% 0.4W



3670	4822 116 52233	10k 5% 0.5W
3671	4822 050 11002	1k 1% 0.4W
3672	4822 050 11002	1k 1% 0.4W
3673	4822 116 52257	22k 5% 0.5W
3674	4822 116 52257	22k 5% 0.5W
3677	4822 050 11002	1k 1% 0.4W
3678	4822 050 11002	1k 1% 0.4W
3679	4822 050 11002	1k 1% 0.4W
3680	4822 050 11002	1k 1% 0.4W
3681	4822 050 11002	1k 1% 0.4W
3682	4822 116 52283	4k7 5% 0.5W
3683	4822 116 52283	4k7 5% 0.5W
3684	4822 116 52283	4k7 5% 0.5W
3685	4822 116 52283	4k7 5% 0.5W
3687	4822 050 11002	1k 1% 0.4W
3688	4822 050 11002	1k 1% 0.4W
3689	4822 116 52283	4k7 5% 0.5W
3690	4822 116 52283	4k7 5% 0.5W
3691	4822 116 52233	10k 5% 0.5W
3692	4822 116 52233	10k 5% 0.5W
3693	4822 116 52304	82k 5% 0.5W
3694	4822 116 52304	82k 5% 0.5W
3695	4822 116 52251	18k 5% 0.5W
3696	4822 116 52251	18k 5% 0.5W
3697	4822 116 52224	470Ω 5% 0.5W
3698	4822 116 52224	470Ω 5% 0.5W
3699	4822 116 52224	470Ω 5% 0.5W
3700	4822 116 52224	470Ω 5% 0.5W
3701	4822 116 52231	820Ω 5% 0.5W
3702	4822 116 52231	820Ω 5% 0.5W
3703	4822 116 52265	270k 5% 0.5W
3704	4822 116 52265	270k 5% 0.5W
3705	4822 116 52238	12k 5% 0.5W
3706	4822 116 52238	12k 5% 0.5W
3707	4822 116 52195	47Ω 5% 0.5W
3708	4822 116 52195	47Ω 5% 0.5W
3709	4822 116 52269	3k3 5% 0.5W
3710	4822 116 52269	3k3 5% 0.5W
3711	4822 116 52269	3k3 5% 0.5W
3712	4822 116 52269	3k3 5% 0.5W
3713	4822 116 52224	470Ω 5% 0.5W
3714	4822 116 52269	3k3 5% 0.5W
3715	4822 116 52269	3k3 5% 0.5W
3716	4822 116 52269	3k3 5% 0.5W
3717	4822 116 52224	470Ω 5% 0.5W
3718	4822 116 52224	470Ω 5% 0.5W
3719	4822 116 52224	470Ω 5% 0.5W
3720	4822 116 52224	470Ω 5% 0.5W
3721	4822 116 52224	470Ω 5% 0.5W
3722	4822 116 52224	470Ω 5% 0.5W
3723	4822 116 52265	270k 5% 0.5W
3724	4822 116 52265	270k 5% 0.5W

TAPECORE BOARD

		
3725	4822 116 52238	12k 5% 0.5W
3726	4822 116 52238	12k 5% 0.5W
3727	4822 116 52195	47Ω 5% 0.5W
3728	4822 116 52195	47Ω 5% 0.5W
3729	4822 116 52269	3k3 5% 0.5W
3730	4822 116 52269	3k3 5% 0.5W
3731	4822 116 52269	3k3 5% 0.5W
3732	4822 116 52269	3k3 5% 0.5W
3733	4822 116 52224	470Ω 5% 0.5W
3734	4822 116 52284	47k 5% 0.5W
3735	4822 050 11002	1k 1% 0.4W
3736	4822 116 52234	100k 5% 0.5W
3737	4822 116 52269	3k3 5% 0.5W
3738	4822 116 52269	3k3 5% 0.5W
3739	4822 116 52269	3k3 5% 0.5W
3740	4822 116 52269	3k3 5% 0.5W
3741	4822 116 52269	3k3 5% 0.5W
3742	4822 116 52269	3k3 5% 0.5W
3743	4822 116 52303	8k2 5% 0.5W
3744	4822 116 52303	8k2 5% 0.5W
3745	4822 116 52231	820Ω 5% 0.5W
3746	4822 116 52231	820Ω 5% 0.5W
3747	4822 116 52224	470Ω 5% 0.5W
3748	4822 116 52283	4k7 5% 0.5W
3749	4822 050 11002	1k 1% 0.4W
3750	4822 050 11002	1k 1% 0.4W
3751	4822 116 52233	10k 5% 0.5W
3752	4822 116 52257	22k 5% 0.5W
3753	4822 116 52283	4k7 5% 0.5W
3754	4822 116 52207	1k2 5% 0.5W
3755	4822 116 52233	10k 5% 0.5W
3756	4822 100 11771	20k 30%lin 0.1W
3757	4822 052 10478 	4Ω7 5% 0.33W
3758	4822 116 52191	33Ω 5% 0.5W
3759	4822 116 52296	6k8 5% 0.5W
3760	4822 116 52182	15Ω 5% 0.5W
3761	4822 116 52176	10Ω 5% 0.5W
3762	4822 116 52176	10Ω 5% 0.5W
3763	5322 100 11539	100k 30%lin 0.1W
3764	5322 100 11539	100k 30%lin 0.1W
3765	4822 116 52283	4k7 5% 0.5W
3766	4822 116 52256	2k2 5% 0.5W
3768	4822 116 52233	10k 5% 0.5W
3769	4822 116 52224	470Ω 5% 0.5W
3770	4822 116 52219	330Ω 5% 0.5W
3771	4822 050 11002	1k 1% 0.4W
3772	4822 050 11002	1k 1% 0.4W
3773	4822 050 11002	1k 1% 0.4W
3774	4822 051 10333	33k 2% 0.25W
3775	4822 116 52238	12k 5% 0.5W
3777	4822 116 52175	100Ω 5% 0.5W

		
3778	4822 116 52175	100Ω 5% 0.5W
3779	4822 116 52251	18k 5% 0.5W
3780	4822 116 52251	18k 5% 0.5W
3782	4822 116 52269	3k3 5% 0.5W
3783	4822 116 52284	47k 5% 0.5W
3784	4822 116 52284	47k 5% 0.5W
3785	4822 116 52234	100k 5% 0.5W
3786	4822 116 52234	100k 5% 0.5W
3787	5322 100 11542	4k7 30%lin 0.1W
3791	4822 050 11002	1k 1% 0.4W
3794	4822 116 52283	4k7 5% 0.5W
3795	4822 116 52283	4k7 5% 0.5W
3796	5322 100 11542	4k7 30%lin 0.1W
3797	4822 116 52296	6k8 5% 0.5W
3798	4822 116 52238	12k 5% 0.5W
3799	4822 116 52303	8k2 5% 0.5W
3800	4822 052 10159 	15Ω 5% 0.33W
3803	4822 116 52283	4k7 5% 0.5W
3804	4822 116 52215	220Ω 5% 0.5W
3805	4822 050 11002	1k 1% 0.4W
		
5635	4822 242 73768	Low Pass Filter
5636	4822 242 73768	Low Pass Filter
5643	4822 242 70831	Resonator 4MHz
5673	4822 156 20811	Coil 36μH 5%
5674	4822 156 20811	Coil 36μH 5%
5760	4822 156 20946	Osc Coil 100kHz
		
6670	4822 130 30621	1N4148
6671	5322 130 30684	1N4002
6672	5322 130 30684	1N4002
6673	4822 130 34173	BZX79-C5V6
		
7635	4822 209 30498	HA12134A
7636	4822 209 31518	MN15542LD
7637	5322 130 44779	BC338-40
7641	4822 130 44196	BC548C
7642	4822 130 44196	BC548C
7653	4822 130 60588	DTC114ES
7654	4822 130 60588	DTC114ES
7655	4822 130 41327	BC327-40
7682	4822 130 60588	DTC114ES
7683	4822 130 60588	DTC114ES
7684	4822 130 60588	DTC114ES

		
7685	4822 130 60588	DTC114ES
7689	4822 130 60588	DTC114ES
7690	4822 130 44196	BC548C
7691	4822 130 60588	DTC114ES
7692	4822 130 44196	BC548C
7693	4822 130 44196	BC548C
7694	4822 130 41327	BC327-40
7695	4822 130 44196	BC548C
7696	4822 130 41327	BC327-40
7697	4822 130 44196	BC548C
7698	4822 130 41327	BC327-40
7700	4822 209 70288	μPC1313HA
7701	4822 209 70288	μPC1313HA
7702	5322 209 14865	MC14066BCP
7703	5322 209 14865	MC14066BCP
7704	4822 209 61667	μPC1330HA
7750	4822 130 41344	BC337-40
7751	4822 130 42682	DTA144ES
7752	4822 130 44196	BC548C
7753	4822 130 60588	DTC114ES
7754	4822 130 44196	BC548C
7760	4822 130 41344	BC337-40
7763	4822 130 42682	DTA144ES
7764	4822 130 60588	DTC114ES
7765	4822 130 60588	DTC114ES
7768	4822 130 44196	BC548C
7770	4822 209 31505	CXA1298AP
7782	4822 130 60588	DTC114ES
7783	4822 130 60588	DTC114ES
7784	4822 130 60588	DTC114ES

Note : Only the mentioned parts are normal service parts.

ECO4 TUNER - ALL VERSIONS EXCEPT /22

MISCELLANEOUS		
1101	4822 265 20598	FM Aerial Socket -/37
1101	4822 267 10283	FM Aerial Socket
1103	4822 267 31505	AM Aerial Socket
		
2100	4822 122 33195	100pF 10% 50V
2104	4822 122 33195	100pF 10% 50V
2107	4822 122 31746	1000pF 2% 63V
2112	4822 122 33496	100nF 10% 63V
2113	4822 125 60101	3P0-11pF N45 100V
2114 +	5322 122 32531	100pF 5% 50V
2115	4822 125 60101	3P0-11pF N45 100V
2120	5322 122 32268	470pF 10% 50V
2121	5322 122 32481	15pF 5% 50V
2122	4822 122 31746	1000pF 2% 63V
2123	4822 122 31746	1000pF 2% 63V
2124	4822 121 51387	10nF 20% 16V
2125 +	5322 122 31946	27pF 10% 50V
2126 +	4822 122 33496	100nF 10% 63V
2129 +	4822 121 43705	390pF 1% 160V
2134	4822 122 33197	1nF 10% 50V
2135	4822 121 70245	560pF 1% 160V
2136	5322 122 31946	27pF 10% 50V
2138	5322 122 32658	22pF 5% 50V
2139 +	4822 122 33175	2.2nF 20% 50V
2141	4822 124 40244	2.2μF 20% 63V
2142	4822 124 40242	1μF 20% 63V
2143	4822 122 33325	470nF 16V
2144	4822 122 33325	470nF 16V
2147	4822 122 33177	10nF 20% 50V
2150	4822 124 40435	10μF 20% 50V
2151	4822 124 40435	10μF 20% 50V
2152	4822 122 33496	100nF 10% 63V
2154	4822 122 33175	2.2nF 20% 50V
2155	4822 122 33175	2.2nF 20% 50V
2156	5322 126 10181	100nF 25V
2157	5322 126 10181	100nF 25V
2158	4822 122 31746	1000pF 2% 63V -/37
2158	4822 122 31775	680pF 2% 63V
2159	4822 122 31775	680pF 2% 63V
2159	4822 122 31746	1000pF 2% 63V -/37
2160	4822 124 40242	1μF 20% 63V
2161	4822 124 40242	1μF 20% 63V
2162	4822 124 40242	1μF 20% 63V
2168	4822 122 33481	1.8nF 5%
2169	5322 122 31863	330pF 5% 50V
2170	5322 126 10223	4.7nF 10% 63V
2171	5322 126 10223	4.7nF 10% 63V
2172	4822 124 41631	1.5μF 50V
2173	4822 124 40433	47μF 20% 25V

		
2174	5322 116 80853	560pF 5%
2175	5322 122 32531	100pF 5%
2178	4822 122 33197	1nF 10% 50V
2179	4822 122 33195	100pF 10% 50V
2180	5322 122 31946	27pF 10% 50V
2181	4822 122 32139	12pF 2% 63V
2183	4822 122 33496	100nF 10% 63V
2184	4822 124 41584	100μF 20% 10V
2185	4822 122 33496	100nF 10% 63V
2186	4822 122 31746	1000pF 2% 63V
		
3106	4822 051 20104	100k 5% 0.1W
3107 +	4822 051 20222	2k2 5% 0.1W
3108	4822 051 20104	100k 5% 0.1W
3109 +	4822 051 20222	2k2 5% 0.1W
3111	4822 051 20153	15k 5% 0.1W
3112	4822 051 20273	27k 5% 0.1W
3119	4822 116 52224	470Ω 5% 0.5W
3120	4822 050 15602	5k6 1% 0.4W
3121	4822 051 20104	100k 5% 0.1W
3122	4822 051 20471	470Ω 5% 0.1W
3123	4822 051 20223	22k 5% 0.1W
3124 +	4822 050 22202	2k2 1% 0.6W
3125 +	4822 051 20472	4k7 5% 0.1W
3128	4822 051 20222	2k2 5% 0.1W
3129 +	4822 051 20472	4k7 5% 0.1W
3132	4822 050 24702	4k7 1% 0.6W
3141	4822 050 22201	220Ω 1% 0.6W
3142	4822 051 20222	2k2 5% 0.1W
3144	4822 051 20473	47k 5% 0.1W
3147	4822 051 20184	180k 5% 0.1W
3148	4822 100 11682	47k 30%LIN 0.2W
3149	4822 051 20823	82k 5% 0.1W
3151	4822 050 21502	1k5 1% 0.6W
3154	4822 051 20333	33k 5% 0.1W
3155	4822 051 20333	33k 5% 0.1W
3156	4822 050 21003	10k 1% 0.6W
3157	4822 051 20473	47k 5% 0.1W
3159	4822 051 20103	10k 5% 0.1W
3160	4822 051 20823	82k 5% 0.1W
3161	4822 051 20823	82k 5% 0.1W
3162	4822 050 21002	1k 1% 0.6W
3163	4822 050 21002	1k 1% 0.6W
3164	4822 050 24702	4k7 1% 0.6W
3165	4822 050 24702	4k7 1% 0.6W
3166	4822 051 20101	100Ω 5% 0.1W
3167	4822 051 20008	0Ω 5% 0.1W
3170	4822 050 24702	4k7 1% 0.6W
3171	4822 051 20101	100Ω 5% 0.1W
3172	4822 051 20472	4k7 5% 0.1W

		
3173	4822 116 52244	15k 5% 0.5W
3174	4822 050 21003	10k 1% 0.6W
3175	4822 051 20104	100k 5% 0.1W
3176	4822 051 20104	100k 5% 0.1W
3178	4822 051 20104	100k 5% 0.1W
3179	4822 051 20223	22k 5% 0.1W
3180	4822 051 20104	100k 5% 0.1W
3181	4822 116 52234	100k 5% 0.5W
3183	4822 051 20223	22k 5% 0.1W
3184	4822 051 20223	22k 5% 0.1W
3185	4822 051 20104	100k 5% 0.1W
3186	4822 051 20473	47k 5% 0.1W
3188	4822 051 10102	1k 2% 0.25W
3189	4822 050 21802	1k8 1% 0.6W
3190	4822 050 21802	1k8 1% 0.6W
3191	4822 050 21802	1k8 1% 0.6W
3192	4822 050 21802	1k8 1% 0.6W
3193	4822 116 52224	470Ω 5% 0.5W
3194	4822 050 24701	470Ω MRS25
3195	4822 050 24701	470Ω MRS25
3197	4822 050 24701	470Ω MRS25
3211	4822 051 10008	0Ω 5% 0.25W
3212	4822 051 10008	0Ω 5% 0.25W
3213	4822 051 10008	0Ω 5% 0.25W
3220	4822 051 20008	0Ω 5% 0.1W
3221	4822 051 20008	0Ω 5% 0.1W
3222	4822 051 20008	0Ω 5% 0.1W
3222	4822 051 20008	0Ω 5% 0.1W -/21/37
3224	4822 051 20008	0Ω 5% 0.1W
3226	4822 051 20008	0Ω 5% 0.1W
3228	4822 051 10008	0Ω 5% 0.25W
3229	4822 051 20008	0Ω 5% 0.1W -/21/37
3236	4822 051 10008	0Ω 5% 0.25W -/20/20S/37
3237	4822 051 10008	0Ω 5% 0.25W
3238 +	4822 051 20008	0Ω 5% 0.1W
3240	4822 051 10008	0Ω 5% 0.25W
3241	4822 051 20008	0Ω 5% 0.1W -/21/37
3242	4822 051 10008	0Ω 5% 0.25W
3243	4822 051 20008	0Ω 5% 0.1W -/21/37
3244	4822 051 20008	0Ω 5% 0.1W
3245 +	4822 051 20008	0Ω 5% 0.1W
3246	4822 051 10008	0Ω 5% 0.25W
3247	4822 051 10008	0Ω 5% 0.25W
3248	4822 051 20008	0Ω 5% 0.1W
3249	4822 051 20821	820Ω 5% 0.1W
		
5107	4822 157 63835	MW Aerial Coil -/21/37
5107 +	4822 157 63799	MW Aerial Coil
5108 +	4822 157 63801	LW Aerial Coil
5109	4822 156 30947	RF Coil 1.5T

		
5120	4822 156 30947	RF Coil 1.5T
5122 +	4822 157 60517	Coil 110μH 8%
5123	4822 157 60517	Coil 110μH 8%
5140	4822 158 60511	AM-IF Coil
5142	4822 157 70302	AM-IF Coil
5143	4822 242 70665	Ceram Filter 10.7MHz
5144	4822 242 70665	Ceram Filter 10.7MHz
5145	4822 242 81362	Cer Discriminator
5150	4822 157 50975	Coil 1MH 10%
5170	4822 242 72976	Cer. Res. 7.2MHz
		
6105	4822 130 83075	HN1V02H
6109	4822 130 82833	1SV228
6121	4822 130 30621	1N4148 -/34/37
6122	4822 130 30621	1N4148 -/21/34
6123	4822 130 30621	1N4148 -/34/37
6124	4822 130 82833	1SV228
6140	4822 130 30621	1N4148
6154	4822 130 30621	1N4148
6155	4822 130 30621	1N4148
6174	4822 130 34233	BZX79-F5V1
		
7102 +	4822 130 42615	BC817-40
7104 +	5322 130 42136	BC848C
7105	4822 130 60093	2SA838B
7120	4822 130 60163	2SC1047
7121 +	5322 130 42136	BC848C
7123 +	5322 130 42136	BC848C
7128 +	5322 130 42136	BC848C
7140	4822 209 32011	TEA5712T/N1 (RF-IC)
7150	5322 209 14482	HEF4069UBT Inverter
7156	4822 130 41344	BC337-40
7157	4822 130 41344	BC337-40
7169	5322 130 41983	BC858B
7170	5322 130 42136	BC848C
7171	5322 130 42136	BC848C
7172	4822 209 30606	MM74HCU04M Inverter
7173	4822 209 31998	LC7218M Synthesizer
7174	5322 130 41983	BC858B
7178	5322 130 41983	BC858B

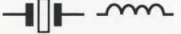
+ For -/20/20S/25/30/34 only

Note : Only the mentioned parts are normal service parts.

TUNER 92 BOARD - FOR /22 ONLY

MISCELLANEOUS		
1101	4822 210 10492	Tuner Unit FE415-G11
1110	4822 267 10283	FM Antenna Socket
1111	4822 267 31505	AM Antenna Socket
		
2101	5322 122 34099	470pF 10% 63V
2102	5322 122 32268	470pF 10% 50V
2103	4822 124 40433	47µF 20% 25V
2104	4822 121 42408	220nF 5% 63V
2105	5322 122 32965	18pF 5% 50V
2107	4822 122 31385	22pF 50V
2108	5322 122 32654	22nF 10% 63V
2109	5322 122 32654	22nF 10% 63V
2110	5322 122 32654	22nF 10% 63V
2112	5322 122 32654	22nF 10% 63V
2113	5322 122 32661	56pF 5% 50V
2114	5322 124 41431	22µF 20% 35V
2115	4822 124 40239	0.47µF 20% 63V
2116	5322 121 42386	100nF 5% 63V
2117	4822 121 41935	12nF 5% 250V
2118	4822 121 41935	12nF 5% 250V
2119	4822 124 40244	2.2µF 20% 63V
2120	4822 124 40244	2.2µF 20% 63V
2121	4822 124 40196	220µF 20% 16V
2123	4822 124 40246	4.7µF 20% 63V
2124	4822 124 40246	4.7µF 20% 63V
2125	4822 122 33177	10nF 20% 50V
2126	4822 122 31782	15000pF 10% 50V
2129	4822 124 40242	1µF 20% 63V
2131	4822 124 40435	10µF 20% 50V
2140	4822 125 60102	Trimmer 30pF
2141	4822 125 60101	Trimmer 10pF
2142	4822 125 60102	Trimmer 30pF
2143	5322 122 32269	6.8pF 5% 50V
2144	4822 121 42408	220nF 5% 63V
2145	4822 121 51263	510pF 1% 400V
2146	4822 121 70082	430pF 1% 400V
2147	5322 122 32654	22nF 10% 63V
2148	5322 122 32452	47pF 5% 63V
2149	4822 122 33177	10nF 20% 50V
2150	5322 122 32654	22nF 10% 63V
2151	5322 122 34099	470pF 10% 63V
2152	4822 124 40242	1µF 20% 63V
2153	5322 122 34099	470pF 10% 63V
2154	5322 122 32481	15pF 5% 50V
2155	5322 122 32965	18pF 5% 50V
2156	4822 124 40433	47µF 20% 25V
2158	5322 126 10223	4.7nF 10% 63V
2159	5322 126 10223	4.7nF 10% 63V
2160	4822 124 41631	1.5µF 50V

		
2161	4822 122 32927	220nF +80-20% 50V
2162	4822 122 10166	22nF 30% 16V
2165	4822 124 40433	47µF 20% 25V
2196	5322 122 32448	10pF 5% 50V
2210	4822 124 41643	100µF 20% 16V
2215	5322 122 32268	470pF 10% 50V
2216	5322 122 32268	470pF 10% 50V
2219	4822 122 32927	220nF +80-20% 50V
2221	5322 122 32268	470pF 10% 50V
2224	4822 122 32575	220pF 10% 500V
2225	4822 122 32575	220pF 10% 500V
		
3100	4822 050 21501 Δ	150Ω 1% 0.6W
3101	4822 050 21501 Δ	150Ω 1% 0.6W
3102	4822 051 20224	220k 5% 0.1W
3104	4822 051 20154	150k 5% 0.1W
3105	4822 051 20562	5k6 5% 0.1W
3106	4822 051 20829	82Ω 5% 0.1W
3107	4822 051 20104	100k 5% 0.1W
3108	4822 050 24701	470Ω 1% 0.6W
3113	4822 053 10221	220Ω 5% 1W
3114	4822 051 20472	4k7 5% 0.1W
3115	4822 051 20391	390Ω 5% 0.1W
3116	4822 051 20478	4Ω7 5% 0.1W
3117	4822 051 20331	330Ω 5% 0.1W
3118	4822 116 52215	220Ω 5% 0.5W
3120	4822 052 10339 Δ	33Ω 5% 0.33W
3121	4822 051 20272	2k7 5% 0.1W
3122	4822 051 20562	5k6 5% 0.1W
3123	4822 051 20223	22k 5% 0.1W
3124	4822 051 20103	10k 5% 0.1W
3125	4822 100 11213	Trimmer 22k 30%
3126	4822 051 20123	12k 5% 0.1W
3127	4822 051 20562	5k6 5% 0.1W
3128	4822 051 20562	5k6 5% 0.1W
3129	4822 051 20103	10k 5% 0.1W
3131	4822 100 11319	Trimmer 4k7
3132	4822 051 20183	18k 5% 0.1W
3133	4822 051 20008	0Ω 5% 0.1W
3134	4822 050 15602	5k6 1% 0.4W
3135	4822 051 10008	0Ω 5% 0.25W
3140	4822 051 20821	820Ω 5% 0.1W
3141	4822 051 20182	1k8 5% 0.1W
3142	4822 051 20472	4k7 5% 0.1W
3143	4822 051 20821	820Ω 5% 0.1W
3144	4822 051 20331	330Ω 5% 0.1W
3145	4822 051 20271	270Ω 5% 0.1W
3147	4822 050 15602	5k6 1% 0.4W
3148	4822 051 20104	100k 5% 0.1W
3149	4822 051 20472	4k7 5% 0.1W

		
3150	4822 050 25601	560Ω 1% 0.6W
3151	4822 050 24702	4k7 1% 0.6W
3152	4822 051 20103	10k 5% 0.1W
3155	4822 050 22201 Δ	220Ω 1% 0.6W
3156	4822 051 20153	15k 5% 0.1W
3157	4822 051 20472	4k7 5% 0.1W
3158	4822 050 24702	4k7 1% 0.6W
3159	4822 051 20104	100k 5% 0.1W
3160	4822 051 20104	100k 5% 0.1W
3162	4822 050 23901 Δ	390Ω 1% 0.6W
3163	4822 051 20103	10k 5% 0.1W
3164	4822 051 20473	47k 5% 0.1W
3165	4822 050 21002	1k 1% 0.6W
3166	4822 050 21002	1k 1% 0.6W
3167	4822 050 21002	1k 1% 0.6W
3170	4822 051 20223	22k 5% 0.1W
3171	4822 051 20103	10k 5% 0.1W
3172	4822 051 20472	4k7 5% 0.1W
3173	4822 051 20223	22k 5% 0.1W
3183	4822 050 21003	10k 1% 0.6W
3184	4822 051 20332	3k3 5% 0.1W
3185	4822 051 20103	10k 5% 0.1W
3186	4822 050 21003	10k 1% 0.6W
3187	4822 051 20103	10k 5% 0.1W
3190	4822 051 20479	47Ω 5% 0.1W
3194	4822 051 20472	4k7 5% 0.1W
3196	4822 051 20008	0Ω 5% 0.1W
3197	4822 051 20008	0Ω 5% 0.1W
3198	4822 051 20103	10k 5% 0.1W
3200	4822 051 20008	0Ω 5% 0.1W
3202	4822 051 20008	0Ω 5% 0.1W
3223	4822 051 20474	470k 5% 0.1W
3225	4822 050 21002	1k 1% 0.6W
3230	4822 051 20223	22k 5% 0.1W
3231	4822 051 20223	22k 5% 0.1W
3233	4822 051 10102	1k 2% 0.25W
3236	4822 051 20008	0Ω 5% 0.1W
3240	4822 051 20182	1k8 5% 0.1W
3241	4822 051 20008	0Ω 5% 0.1W
3244	5322 116 44005	PTC 250Ω 25V
		
5101	4822 157 53192	0.22µH 20%
5103	4822 242 81249	Ceram Filter 10.7MHz
5104	4822 157 63029	IFT AM
5105	4822 157 63904	Det Coil
5106	4822 157 63802	Birdy Filter
5107	4822 157 63799	MW Aerial Coil
5108	4822 157 63912	AM Osc
5109	4822 157 63801	LW Aerial Coil
5110	4822 242 71878	Ceram Filter 450kHz

		
5111	4822 242 81248	Cer Res 19kHz
5112	4822 242 72976	X'tal 7.2MHz
5113	4822 242 81249	10.7MHz Ceramic Filter
5114	4822 152 20699	560µH Inductor
		
6101	4822 130 34174	BZX79-C4V7
6102	4822 130 83075	HN1V02H
6109	4822 130 30621	1N4148
		
7101	4822 130 60163	2SC1047
7103	4822 209 31001	LA1851N
7104	5322 130 60068	BC558C
7105	4822 209 30178	LC7218
7106	5322 130 60068	BC558C
7107	5322 130 41982	BC848B
7108	4822 130 44196	BC548C
7109	4822 130 44196	BC548C
7110	5322 130 44779	BC338-40
7111	5322 130 41982	BC848B
7112	4822 130 60163	2SC1047
7113	4822 130 44196	BC548C
7114	5322 130 44779	BC338-40
7115	4822 130 41024	BF245B
7116	4822 130 60163	2SC1047
7119	5322 130 41983	BC858B
7120	4822 130 44196	BC548C
7150	5322 130 44779	BC338-40
7157	5322 130 44779	BC338-40

Note : Only the mentioned parts are normal service parts.

COMBI BOARD

MISCELLANEOUS

1502 *	4822 267 31522	Mic. Socket
1900	4822 276 12465	Tact Switch
1901	4822 276 12465	Tact Switch
1902	4822 276 12465	Tact Switch
1903	4822 276 12465	Tact Switch
1904	4822 276 12465	Tact Switch
1905	4822 276 12465	Tact Switch
1906	4822 276 12465	Tact Switch
1907	4822 276 12465	Tact Switch
1908	4822 276 12465	Tact Switch
1909	4822 276 12465	Tact Switch
1910	4822 276 12465	Tact Switch
1911	4822 276 12465	Tact Switch
1912	4822 276 12465	Tact Switch
1913	4822 276 12465	Tact Switch
1914	4822 276 12465	Tact Switch
1915	4822 276 12465	Tact Switch
1916	4822 276 12465	Tact Switch
1917	4822 276 12465	Tact Switch
1918	4822 276 12465	Tact Switch
1919	4822 276 12465	Tact Switch
1920	4822 276 12465	Tact Switch
1921	4822 276 12465	Tact Switch
1922	4822 276 12465	Tact Switch
1923	4822 276 13403	Tact Switch
1924	4822 276 13403	Tact Switch
1925	4822 276 13403	Tact Switch
1926	4822 276 13403	Tact Switch
1929	4822 267 51162	Conn. 6P
1930	4822 267 51161	Conn. 5P



2500 *	4822 124 23178	47μF 20% 16V
2501 *	4822 126 11585	22nF +80-20% 25V
2502 *	4822 124 41973	100μF 20% 16V
2503 *	4822 124 41969	1μF 20% 50V
2504 *	4822 124 40248	10μF 20% 63V
2505 *	4822 124 40248	10μF 20% 63V
2506 *	4822 124 40248	10μF 20% 63V
2507 *	4822 124 41398	1μF 20% 63V
2508 *	4822 122 33195	100pF 10% 50V
2509 *	4822 122 33195	100pF 10% 50V
2510 *	4822 122 10573	56pF 5% 50V
2511 *	4822 122 10573	56pF 5% 50V
2512 *	4822 122 10573	56pF 5% 50V
2513 *	4822 122 10573	56pF 5% 50V
2514 *	4822 122 33169	680pF 10% 50V
2515 *	4822 122 33169	680pF 10% 50V
2516 *	4822 122 10573	56pF 5% 50V
2517 *	4822 122 33196	330pF 10% 50V
2518	4822 124 41398	1μF 20% 63V



2519	4822 124 41398	1μF 20% 63V
2520	4822 124 40248	10μF 20% 63V
2521	4822 124 40248	10μF 20% 63V
2522	4822 122 33519	470pF 10% 50V
2523	4822 122 33519	470pF 10% 50V
2524	4822 124 41973	100μF 20% 16V
2525	4822 124 41973	100μF 20% 16V
2526	4822 124 40433	47μF 20% 25V
2527	4822 126 11585	22nF +80-20% 25V
2528	4822 122 33169	680pF 10% 50V
2529	4822 122 33169	680pF 10% 50V
2530	4822 122 10166	22nF 30% 16V
2531	4822 122 10166	22nF 30% 16V
2532	4822 122 33069	33pF 5% 50V
2533	4822 122 10574	1.2nF 10% 16V
2534	4822 122 33195	100pF 10% 50V
2535	4822 122 33195	100pF 10% 50V
2536	4822 124 23179	10μF 20% 16V
2537	4822 124 41973	100μF 20% 16V
2538	4822 124 40433	47μF 20% 25V
2539	4822 124 41973	100μF 20% 16V
2544	4822 124 40196	220μF 20% 16V
2553	4822 124 40248	10μF 20% 63V
2554 *	4822 124 40248	10μF 20% 63V
2555 *	4822 124 40248	10μF 20% 63V
2559	4822 124 41973	100μF 20% 16V
2560	4822 121 43144	22nF 10% 50V
2561	4822 121 43144	22nF 10% 50V
2562	4822 121 51387	10nF 20% 16V
2563	4822 121 51387	10nF 20% 16V
2564	4822 126 11714	4.7nF 20%
2565	4822 126 11714	4.7nF 20%
2566	4822 122 10575	8.2nF 20% 16V
2567	4822 122 10575	8.2nF 20% 16V
2568	4822 122 33195	100pF 10% 50V
2569	4822 122 33195	100pF 10% 50V
2570	4822 122 10574	1.2nF 10% 16V
2571	4822 122 10574	1.2nF 10% 16V
2572	4822 124 40196	220μF 20% 16V
2573	5322 121 42498	680nF 5% 63V
2574	5322 121 42498	680nF 5% 63V
2575	4822 124 40248	10μF 20% 63V
2576	4822 124 40248	10μF 20% 63V
2900	4822 124 23179	10μF 20% 16V
2902	4822 122 10574	1.2nF 10% 16V
2904	4822 122 10574	1.2nF 10% 16V



3500 *	4822 116 52195	47Ω 5% 0.5W
3503 *	4822 116 52238	12k 5% 0.5W
3504 *	4822 116 52234	100k 5% 0.5W



3505 *	4822 116 52303	8k2 5% 0.5W
3506 *	4822 116 52224	470Ω 5% 0.5W
3507 *	4822 101 21204	Potm. 20KA
3508 *	4822 116 52256	2k2 5% 0.5W
3509 *	4822 116 52233	10k 5% 0.5W
3510 *	4822 116 52238	12k 5% 0.5W
3511 *	4822 116 52224	470Ω 5% 0.5W
3512 *	4822 116 52234	100k 5% 0.5W
3513 *	4822 116 52195	47Ω 5% 0.5W
3514	4822 116 52296	6k8 5% 0.5W
3515	4822 116 52296	6k8 5% 0.5W
3516	4822 116 52251	18k 5% 0.5W
3517	4822 116 52251	18k 5% 0.5W
3518	4822 116 52249	1k8 5% 0.5W
3519	4822 116 52249	1k8 5% 0.5W
3520	4822 116 52251	18k 5% 0.5W
3521	4822 116 52251	18k 5% 0.5W
3522	4822 116 81437	5Ω6 5% 0.5W
3523	4822 116 81437	5Ω6 5% 0.5W
3524	4822 052 10478 Δ	4Ω7 5% 0.33W
3526	4822 116 52256	2k2 5% 0.5W
3527	4822 116 52256	2k2 5% 0.5W
3528	4822 116 52277	39k 5% 0.5W
3529	4822 116 52284	47k 5% 0.5W
3530	4822 116 52283	4k7 5% 0.5W
3531	4822 116 52283	4k7 5% 0.5W
3532	4822 116 52303	8k2 5% 0.5W
3533	4822 116 52303	8k2 5% 0.5W
3534	4822 101 90226	Potm 50kΩ x 2 w/motor
3535	4822 116 52233	10k 5% 0.5W
3536	4822 050 11002	1k 1% 0.4W
3537	4822 050 11002	1k 1% 0.4W
3538	4822 116 52222	390Ω 5% 0.5W
3539	4822 116 52222	390Ω 5% 0.5W
3540	4822 116 52235	1M 5% 0.5W
3541	4822 116 52235	1M 5% 0.5W
3542	4822 116 52222	390Ω 5% 0.5W
3543	4822 116 52222	390Ω 5% 0.5W
3544	4822 050 11002	1k 1% 0.4W
3545	4822 050 11002	1k 1% 0.4W
3546	4822 050 11002	1k 1% 0.4W
3547	4822 050 11002	1k 1% 0.4W
3548 *	4822 116 52234	100k 5% 0.5W
3549	4822 116 52215	220Ω 5% 0.5W
3550	4822 116 52215	220Ω 5% 0.5W
3551	4822 116 52215	220Ω 5% 0.5W
3552	4822 116 52215	220Ω 5% 0.5W
3553	4822 116 52257	22k 5% 0.5W
3554	4822 116 52257	22k 5% 0.5W
3555	4822 116 52257	22k 5% 0.5W
3556	4822 116 52269	3k3 5% 0.5W
3559	4822 116 52256	2k2 5% 0.5W



3560	4822 116 52263	2k7 5% 0.5W
3561	4822 116 52263	2k7 5% 0.5W
3562	4822 050 11002	1k 1% 0.4W
3563	4822 050 11002	1k 1% 0.4W
3564	4822 116 52265	270k 5% 0.5W
3565	4822 116 52265	270k 5% 0.5W
3566	4822 116 52285	470k 5% 0.5W
3567	4822 116 52285	470k 5% 0.5W
3568	4822 116 52285	470k 5% 0.5W
3569	4822 116 52285	470k 5% 0.5W
3570	4822 116 52197	56Ω 5% 0.5W
3571	4822 116 52197	56Ω 5% 0.5W
3572	4822 116 52285	470k 5% 0.5W
3573	4822 116 52285	470k 5% 0.5W
3574	4822 116 52238	12k 5% 0.5W
3575	4822 116 52238	12k 5% 0.5W
3576	4822 050 11002	1k 1% 0.4W
3577	4822 050 11002	1k 1% 0.4W
3578	4822 116 52284	47k 5% 0.5W
3579	4822 052 10478 Δ	4Ω7 5% 0.33W
3580	4822 116 52219	330Ω 5% 0.5W
3581	4822 116 52217	270Ω 5% 0.5W
3582	4822 116 52234	100k 5% 0.5W
3583	4822 050 11002	1k 1% 0.4W
3584	4822 050 11002	1k 1% 0.4W
3585	4822 116 52224	470Ω 5% 0.5W
3586	4822 116 52222	390Ω 5% 0.5W
3587	4822 116 52222	390Ω 5% 0.5W
3588	4822 116 52283	4k7 5% 0.5W
3589	4822 051 10333	33k 2% 0.25W
3591	4822 116 52269	3k3 5% 0.5W
3592	4822 116 52215	220Ω 5% 0.5W
3593	4822 116 52234	100k 5% 0.5W
3594	4822 116 52234	100k 5% 0.5W
3595	4822 116 52239	120k 5% 0.5W
3596	4822 116 52239	120k 5% 0.5W
3597	4822 116 52285	470k 5% 0.5W
3598	4822 116 52285	470k 5% 0.5W
3900	4822 116 52219	330Ω 5% 0.5W
3901	4822 116 52219	330Ω 5% 0.5W
3902	4822 116 52219	330Ω 5% 0.5W
3903	4822 116 52219	330Ω 5% 0.5W
3904	4822 116 52233	10k 5% 0.5W



5520	4822 157 53447	Bread Inductor
5521	4822 157 53447	Bread Inductor

* For -/21/34 only



6544	4822 130 34173	BZX79-B5V6
6545	4822 130 34173	BZX79-B5V6
6546	4822 130 30621	1N4148
6547	4822 130 30621	1N4148
6548	4822 130 34174	BZX79-C4V7
6549	4822 130 34233	BZX79-C5V1
6550	4822 130 82978	LTL-16KPE
6551	4822 130 30621	1N4148
6900	4822 130 30621	1N4148
6901	4822 130 30621	1N4148
6902	4822 130 30621	1N4148
6903	4822 130 30621	1N4148
6904	4822 130 30621	1N4148
6905	4822 130 30621	1N4148
6906	4822 130 30621	1N4148



7501 *	4822 209 83274	NJM4560D
7516	4822 209 61187	BA15218
7530	4822 130 44196	BC548C
7531	4822 130 44196	BC548C
7532	5322 130 44779	BC338-40
7533	5322 130 44779	BC338-40
7534	5322 130 44779	BC338-40
7535	5322 130 44779	BC338-40
7544	5322 130 44779	BC338-40
7545	5322 130 44779	BC338-40
7546	4822 130 41715	BC328-40
7547	4822 130 41715	BC328-40
7548	4822 130 40937	BC548B
7549	4822 130 40937	BC548B
7553	4822 130 41691	BC556B
7560	4822 130 44246	BC549C
7561	4822 130 44246	BC549C
7562	4822 130 44196	BC548C
7564	5322 209 14865	MC14066BCP
7565	5322 209 14865	MC14066BCP
7900	5322 209 12171	PC74HC4094T
7901	5322 209 12171	PC74HC4094T

* For -/21/34 only

Note : Only the mentioned parts are normal service parts.

FRONT BOARD

MISCELLANEOUS

1401	4822 130 91132	FTD Display
1402	4822 130 91135	FTD Display
1410	4822 276 12465	Tact Switch
1411	4822 276 12465	Tact Switch
1412	4822 276 12465	Tact Switch
1413	4822 276 12465	Tact Switch
1414	4822 276 12465	Tact Switch
1415	4822 276 12465	Tact Switch
1416	4822 276 12465	Tact Switch
1417	4822 276 12465	Tact Switch
1418	4822 276 12465	Tact Switch
1419	4822 276 12465	Tact Switch
1420	4822 276 12465	Tact Switch
1421	4822 276 12465	Tact Switch
1422	4822 276 12465	Tact Switch
1423	4822 276 12465	Tact Switch
1424	4822 276 12465	Tact Switch
1425	4822 276 12465	Tact Switch
1426	4822 276 12465	Tact Switch
1427	4822 276 12465	Tact Switch
1428	4822 276 12465	Tact Switch
1429	4822 276 12465	Tact Switch
1431	4822 276 12465	Tact Switch
1432	4822 276 13403	Tact Switch
1433	4822 276 13403	Tact Switch
1510	4822 267 31506	Headphone Socket



2401	5322 122 32654	22nF 10% 63V
2402	4822 124 23176	22μF 20% 16V
2403	4822 124 40184	1000μF 20% 10V
2404	4822 124 80211	22mF 20% 5.5V
2405	4822 121 51252	470nF 5% 63V
2406	4822 121 51252	470nF 5% 63V
2407	4822 121 51252	470nF 5% 63V
2408	5322 122 32658	22pF 5% 50V
2409	5322 122 32658	22pF 5% 50V
2411	4822 122 10577	3.3nF 10% 16V
2412	4822 124 23176	22μF 20% 16V
2414	4822 124 23179	10μF 20% 16V
2415	4822 122 33496	100nF 10% 63V
2416	4822 124 22403	10μF 20% 16V
2417	4822 126 11585	22nF +80-20% 25V
2450	5322 122 32531	100pF 5% 50V
2451	5322 122 32531	100pF 5% 50V
2452	5322 122 32531	100pF 5% 50V
2453	5322 122 32531	100pF 5% 50V
2454	5322 122 32531	100pF 5% 50V
2460	5322 122 32531	100pF 5% 50V
2461	4822 122 33195	100pF 10% 50V



2462	4822 122 33195	100pF 10% 50V
2463	4822 122 33195	100pF 10% 50V
2464	4822 122 33195	100pF 10% 50V
2465	4822 122 33195	100pF 10% 50V
2466	4822 122 33195	100pF 10% 50V
2467	4822 122 33195	100pF 10% 50V
2468	4822 122 33195	100pF 10% 50V
2469	4822 122 33195	100pF 10% 50V
2470	4822 122 33195	100pF 10% 50V
2471	4822 124 41584	100μF 20% 10V
2472	4822 122 33797	47nF 20% 50V
2473	4822 122 33797	47nF 20% 50V
2475	5322 122 34123	1nF 10% 50V
2476	4822 124 41584	100μF 20% 10V
2477	4822 122 33127	2.2nF 10% 63V
2479	5322 122 32654	22nF 10% 63V
2480	4822 122 33169	680pF 10% 50V
2485	5322 122 32965	18pF 5% 50V
2486	5322 122 32965	18pF 5% 50V
2487	5322 122 32965	18pF 5% 50V
2488	5322 122 32965	18pF 5% 50V
2489	5322 122 32531	100pF 5% 50V
2490	5322 122 32965	18pF 5% 50V
2491	5322 122 32965	18pF 5% 50V
2492	5322 122 32452	47pF 5% 63V
2493	5322 122 32452	47pF 5% 63V
2494	5322 122 34123	1nF 10% 50V
2495	5322 122 34123	1nF 10% 50V
2496	5322 122 34123	1nF 10% 50V
2497	5322 122 34123	1nF 10% 50V
2498	5322 122 34123	1nF 10% 50V
2513	4822 122 33496	100nF 10% 63V
2514	4822 122 33496	100nF 10% 63V
2515	4822 122 33342	33nF 10% 63V
2516	5322 122 32654	22nF 10% 63V
2517	4822 122 10575	8.2nF 20% 16V
2518	4822 126 10525	8.2nF 10% 63V
2519	4822 122 10576	1.8nF 10% 16V
2520	4822 122 32153	1.8nF 10% 63V
2521	4822 122 33496	100nF 10% 63V
2522	4822 122 33496	100nF 10% 63V
2523	5322 122 32654	22nF 10% 63V
2524	5322 122 32654	22nF 10% 63V
2525	4822 122 10575	8.2nF 20% 16V
2526	4822 126 10525	8.2nF 10% 63V
2527	4822 122 10576	1.8nF 10% 16V
2528	4822 122 32153	1.8nF 10% 63V
2529	4822 122 33169	680pF 10% 50V
2530	4822 122 32535	680pF 10% 63V
2531	4822 126 10178	820pF 10% 50V
2532	4822 122 33806	820pF 10% 63V
2533	4822 122 33195	100pF 10% 50V



2534	4822 122 33195	100pF 10% 50V
2535	4822 122 33848	47pF 5% 50V
2536	4822 122 33848	47pF 5% 50V
2537	4822 124 41973	100μF 20% 16V
2538	4822 126 11585	22nF +80-20% 25V
2539	4822 124 41973	100μF 20% 16V
2541	4822 124 80192	4.7μF 20% 63V
2542	4822 124 80192	4.7μF 20% 63V



3401	4822 052 10109	Δ 10Ω 5% 0.33W
3402	4822 050 11002	1k 1% 0.4W
3403	4822 116 52175	100Ω 5% 0.5W
3404	4822 116 52228	680Ω 5% 0.5W
3405	4822 052 10108	Δ 1Ω 5% 0.33W
3406	4822 052 10108	Δ 1Ω 5% 0.33W
3407	4822 050 15608	5Ω 1% 0.4W
3408	4822 050 15608	5Ω 1% 0.4W
3410	4822 116 90836	10Kx5(resnet)0.125W
3411	4822 116 90839	10Kx4(resnet)0.125W
3412	4822 051 20103	10k 5% 0.1W
3413	4822 116 52219	330Ω 5% 0.5W
3414	4822 051 20103	10k 5% 0.1W
3415	4822 051 20103	10k 5% 0.1W
3416	4822 116 90835	10Kx7(resnet)0.125W
3417	4822 116 52219	330Ω 5% 0.5W
3418	4822 116 52265	270k 5% 0.5W
3419	4822 116 52265	270k 5% 0.5W
3420	4822 051 20103	10k 5% 0.1W
3421	4822 051 20103	10k 5% 0.1W
3422	4822 051 20104	100k 5% 0.1W
3423	4822 116 52233	10k 5% 0.5W
3424	4822 051 20104	100k 5% 0.1W
3430	4822 116 52233	10k 5% 0.5W
3434	4822 116 52233	10k 5% 0.5W
3450	4822 051 20102	1k 5% 0.1W
3451	4822 051 20102	1k 5% 0.1W
3452	4822 051 20102	1k 5% 0.1W
3453	4822 051 20102	1k 5% 0.1W
3454	4822 051 20102	1k 5% 0.1W
3455	4822 051 20223	22k 5% 0.1W
3456	4822 051 20102	1k 5% 0.1W
3457	4822 051 20102	1k 5% 0.1W
3458	4822 051 20102	1k 5% 0.1W
3460	4822 050 11002	1k 1% 0.4W
3461	4822 116 52234	100k 5% 0.5W
3462	4822 050 11002	1k 1% 0.4W
3463	4822 116 52234	100k 5% 0.5W
3466	4822 116 90843	100Kx5(resnet)0.125W
3471	4822 051 20102	1k 5% 0.1W
3472	4822 051 20222	2k2 5% 0.1W



3473	4822 051 20152	1k5 5% 0.1W
3474	4822 051 20682	6k8 5% 0.1W
3475	4822 051 20103	10k 5% 0.1W
3480	4822 051 20103	10k 5% 0.1W
3481	4822 051 20103	10k 5% 0.1W
3487	4822 051 20103	10k 5% 0.1W
3488	4822 051 20109	10Ω 5% 0.1W
3489	4822 051 20472	4k7 5% 0.1W
3490	4822 116 52233	10k 5% 0.5W
3493	4822 116 52233	10k 5% 0.5W
3495	4822 116 52233	10k 5% 0.5W
3496	4822 116 52233	10k 5% 0.5W
3497	4822 116 52233	10k 5% 0.5W
3498	4822 050 11002	1k 1% 0.4W
3499	4822 050 15608	5Ω 1% 0.4W
3501	4822 116 52256	2k2 5% 0.5W
3502	4822 116 52256	2k2 5% 0.5W
3503	4822 116 52263	2k7 5% 0.5W
3504	4822 116 52263	2k7 5% 0.5W
3505	4822 116 52283	4k7 5% 0.5W
3506	4822 116 52283	4k7 5% 0.5W
3507	4822 105 11107	50Kx2 20%lin 0.025W
3508	4822 105 11107	50Kx2 20%lin 0.025W
3509	4822 105 11107	50Kx2 20%lin 0.025W
3510	4822 105 11107	50Kx2 20%lin 0.025W
3511	4822 105 11107	50Kx2 20%lin 0.025W
3513	4822 116 52244	15k 5% 0.5W
3514	4822 116 52244	15k 5% 0.5W
3515	4822 116 52251	18k 5% 0.5W
3516	4822 051 20183	18k 5% 0.1W
3517	4822 051 20183	18k 5% 0.1W
3518	4822 051 20183	18k 5% 0.1W
3519	4822 051 20223	22k 5% 0.1W
3520	4822 051 20223	22k 5% 0.1W
3521	4822 116 52244	15k 5% 0.5W
3522	4822 051 20153	15k 5% 0.1W
3523	4822 051 20183	18k 5% 0.1W
3524	4822 051 20183	18k 5% 0.1W
3525	4822 116 52251	18k 5% 0.5W
3526	4822 051 20183	18k 5% 0.1W
3527	4822 051 20223	22k 5% 0.1W
3528	4822 051 20223	22k 5% 0.1W
3529	4822 116 52304	82k 5% 0.5W
3530	4822 051 20823	82k 5% 0.1W
3531	4822 116 52243	1k5 5% 0.5W
3532	4822 116 52243	1k5 5% 0.5W
3533	4822 116 52243	1k5 5% 0.5W
3534	4822 051 20152	1k5 5% 0.1W
3535	4822 116 52292	560k 5% 0.5W
3536	4822 116 52292	560k 5% 0.5W
3537	4822 116 52284	47k 5% 0.5W
3538	4822 051 20223	22k 5% 0.1W



3541	4822 051 20223	22k 5% 0.1W
3542	4822 051 20223	22k 5% 0.1W
3543	4822 116 52244	15k 5% 0.5W
3544	4822 116 52213	180Ω 5% 0.5W
4400	4822 051 10008	0Ω 5% 0.25W
4402	4822 051 10008	0Ω 5% 0.25W
4404	4822 051 10008	0Ω 5% 0.25W
4405	4822 051 10008	0Ω 5% 0.25W
4406	4822 051 10008	0Ω 5% 0.25W
4420	4822 051 10008	0Ω 5% 0.25W
4421	4822 051 10008	0Ω 5% 0.25W
4422	4822 051 10008	0Ω 5% 0.25W
4425	4822 051 10008	0Ω 5% 0.25W



5401	5322 242 73697	Resonator 8MHz
5402	4822 242 70938	X'tal 8MHz
5410	4822 157 62552	Coil 2.2μH 20%
5411	4822 157 62552	Coil 2.2μH 20%
5412	4822 157 53447	Bread Inductor
5413	4822 157 53447	Bread Inductor
5414	4822 157 53447	Bread Inductor
5416	4822 157 53447	Bread Inductor
5417	4822 157 53447	Bread Inductor
5511	4822 157 53447	Bread Inductor
5512	4822 157 53447	Bread Inductor
5513	4822 157 53447	Bread Inductor



6401	4822 130 34167	BZX79-C6V2
6402	4822 130 30621	1N4148
6403	4822 130 30621	1N4148
6405	4822 214 52009	GP1U58XP
6406	4822 130 30621	1N4148
6407	4822 130 30621	1N4148
6408	4822 130 30621	1N4148
6409	4822 130 30621	1N4148
6410	4822 130 30621	1N4148
6411	4822 130 30621	1N4148
6412	4822 130 30621	1N4148
6415	4822 130 30621	1N4148
6470	5322 130 31504	BZX79-C3V3
6471	4822 130 30621	1N4148



7400	4822 209 31513	TMP87CM70F
7401	4822 209 31515	BA3830S



7402	4822 209 31508	ST24C01
7403	5322 209 10421	HEF4094BP
7450	5322 130 44779	BC338-40
7451	4822 130 60588	DTC114ES
7452	4822 130 44196	BC548C
7453	4822 130 60588	DTC114ES
7454	4822 130 44196	BC548C
7455	4822 130 44196	BC548C
7459	5322 130 60068	BC558C
7460	4822 130 44461	BC546B
7461	4822 130 44461	BC546B
7462	4822 130 44461	BC546B
7463	4822 130 44461	BC546B
7464	4822 130 44461	BC546B
7465	4822 130 44461	BC546B
7466	4822 130 44461	BC546B
7470	4822 130 42682	DTA144ES
7539	4822 209 83274	NJM4560D

Note : Only the mentioned parts are normal service parts.

CD BOARD

MISCELLANEOUS

1002	4822 242 73557	Cer Res 8.467MHz
1020	4822 071 51601 Δ	Fuse 160mA
1021	4822 071 51601 Δ	Fuse 160mA
1570	4822 242 81151	X'tal Res 16.9344kHz
1700	4822 242 72527	Cer Res 8.467MHz



2000	5322 122 31865	1.5nF 10% 63V
2001	5322 116 80853	560pF 5% 63V
2003	4822 122 32575	220pF 10% 500V
2004	4822 122 32575	220pF 10% 500V
2005	4822 122 32575	220pF 10% 500V
2006	4822 122 32575	220pF 10% 500V
2007	4822 122 32575	220pF 10% 500V
2008	4822 122 32575	220pF 10% 500V
2009	4822 122 33496	100nF 10% 63V
2010	5322 124 21643	22μF 20% 40V
2011	4822 122 33496	100nF 10% 63V
2012	4822 124 40272	33μF 20% 16V
2015	5322 124 21643	22μF 20% 40V
2016	4822 122 33496	100nF 10% 63V
2017	5322 124 21643	22μF 20% 40V
2018	4822 122 33496	100nF 10% 63V
2019	4822 122 33809	22nF 20% 50V
2040	5322 122 32654	22nF 10% 63V
2041	4822 126 10326	180pF 5% 63V
2042	5322 124 21643	22μF 20% 40V
2043	5322 122 31863	330pF 5% 50V
2044	4822 126 10326	180pF 5% 63V
2045	5322 122 32452	47pF 5% 63V
2046	5322 122 32452	47pF 5% 63V
2047	5322 122 32531	100pF 5% 50V
2048	5322 122 32965	18pF 5% 50V
2049	4822 126 10326	180pF 5% 63V
2050	4822 126 10326	180pF 5% 63V
2051	5322 122 31863	330pF 5% 50V
2052	5322 124 21643	22μF 20% 40V
2060	4822 122 33496	100nF 10% 63V
2061	4822 122 33496	100nF 10% 63V
2062	4822 124 40272	33μF 20% 16V
2063	4822 124 40272	33μF 20% 16V
2064	4822 122 33342	33nF 10% 63V
2065	4822 122 33496	100nF 10% 63V
2066	4822 122 33175	2.2nF 20% 50V
2070	4822 122 33176	2.7nF 20% 50V
2071	4822 122 33496	100nF 10% 63V
2072	4822 126 10326	180pF 5% 63V
2080	4822 122 33496	100nF 10% 63V
2081	5322 124 21643	22μF 20% 40V
2082	4822 122 33496	100nF 10% 63V



2083	5322 124 21643	22μF 20% 40V
2084	4822 126 10326	180pF 5% 63V
2085	4822 122 33496	100nF 10% 63V
2086	5322 126 10465	3.9nF 10% 63V
2101	5322 122 32452	47pF 5% 63V
2102	4822 122 33175	2.2nF 20% 50V
2103	4822 124 40849	330μF 20% 16V
2104	4822 122 33496	100nF 10% 63V
2105	5322 121 42661	330nF 5% 63V
2106	4822 122 33496	100nF 10% 63V
2107	4822 124 41584	100μF 20% 10V
2108	4822 122 33809	22nF 20% 50V
2109	4822 124 40242	1μF 20% 63V
2110	5322 122 32659	33pF 5% 50V
2111	5322 121 42386	100nF 5% 63V
2112	4822 122 33496	100nF 10% 63V
2114	5322 122 32452	47pF 5% 63V
2115	5322 122 32452	47pF 5% 63V
2116	4822 124 40242	1μF 20% 63V
2117	5322 126 10223	4.7nF 10% 63V
2118	5322 126 10223	4.7nF 10% 63V
2119	4822 124 41584	100μF 20% 10V
2120	4822 122 33496	100nF 10% 63V
2121	4822 122 33496	100nF 10% 63V
2122	4822 124 40849	330μF 20% 16V
2123	4822 122 33496	100nF 10% 63V
2125	5322 126 10223	4.7nF 10% 63V
2140	4822 122 33496	100nF 10% 63V
2141	4822 122 32542	47nF 10% 63V
2300	5322 122 31863	330pF 5% 50V
2301	4822 124 40272	33μF 20% 16V
2302	4822 124 40246	4.7μF 20% 63V
2303	4822 122 33216	270pF 5% 50V
2304	4822 124 40272	33μF 20% 16V
2305	4822 124 40246	4.7μF 20% 63V
2306	4822 122 33496	100nF 10% 63V
2309	4822 122 33216	270pF 5% 50V
2310	5322 122 31863	330pF 5% 50V
2311	4822 124 40246	4.7μF 20% 63V
2312	4822 122 33219	1.8nF 10% 50V
2313	4822 122 33219	1.8nF 10% 50V
2500	4822 124 80148	2200μF 20% 16V
2501	4822 122 33496	100nF 10% 63V
2502	4822 124 41853	1000μF 16V
2503	4822 122 33496	100nF 10% 63V
2504	4822 122 33496	100nF 10% 63V
2550	4822 122 33175	2.2nF 20% 50V
2610	4822 122 33496	100nF 10% 63V
2611	4822 122 33496	100nF 10% 63V
2612	4822 122 33496	100nF 10% 63V
2702	4822 124 40272	33μF 20% 16V
2703	4822 122 33809	22nF 20% 50V



2704	4822 122 33175	2.2nF 20% 50V
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3000	4822 050 21003	10k 1% 0.6W
3001	4822 050 21003	10k 1% 0.6W
3002	4822 050 21003	10k 1% 0.6W
3003	4822 050 21003	10k 1% 0.6W
3004	4822 050 21003	10k 1% 0.6W
3005	4822 050 21003	10k 1% 0.6W
3006	4822 051 20103	10k 5% 0.1W
3007	4822 052 10338 Δ	3Ω 5% 0.33W
3008	4822 052 10338 Δ	3Ω 5% 0.33W
3009	4822 051 20105	1M 5% 0.1W
3010	4822 051 20103	10k 5% 0.1W
3011	4822 051 20103	10k 5% 0.1W
3012	4822 051 10102	1k 2% 0.25W
3013	4822 051 10102	1k 2% 0.25W
3014	4822 052 10478 Δ	4Ω 5% 0.33W
3015	4822 050 21002	1k 1% 0.6W
3016	4822 050 21002	1k 1% 0.6W
3017	4822 051 10102	1k 2% 0.25W
3040	4822 051 10101	100Ω 2% 0.25W
3041	4822 051 20393	39k 5% 0.1W
3042	4822 051 20334	330k 5% 0.1W
3043	4822 051 20303	30k 5% 0.1W
3044	4822 051 10102	1k 2% 0.25W
3045	4822 051 20101	100Ω 5% 0.1W
3046	4822 051 10102	1k 2% 0.25W
3047	4822 051 20434	430k 5% 0.1W
3048	4822 051 20101	100Ω 5% 0.1W
3049	4822 050 24301	430Ω 1% 0.6W
3050	4822 051 20434	430k 5% 0.1W
3051	4822 051 20182	1k8 5% 0.1W
3052	4822 051 20182	1k8 5% 0.1W
3053	4822 051 20392	3k9 5% 0.1W
3054	4822 051 20101	100Ω 5% 0.1W
3055	4822 051 20124	120k 5% 0.1W
3056	4822 050 21204	120k 1% 0.6W
3057	4822 050 25603	56k 1% 0.6W
3058	4822 050 21002	1k 1% 0.6W
3060	4822 117 10036	7k5 1% 0.1W
3061	4822 051 20682	6k8 5% 0.1W
3062	4822 116 52244	15k 5% 0.5W
3063	4822 051 20103	10k 5% 0.1W
3064	4822 050 21503	15k 1% 0.125W
3065	4822 052 10229 Δ	22Ω 5% 0.33W
3066	4822 052 10108 Δ	1Ω 5% 0.33W
3067	4822 052 10108 Δ	1Ω 5% 0.33W
3070	4822 051 20153	15k 5% 0.1W
3071	4822 051 20103	10k 5% 0.1W
3072	4822 050 26802	6k8 1% 0.6W



3073	4822 052 10229 Δ	22Ω 5% 0.33W
3074	4822 116 52244	15k 5% 0.5W
3075	4822 050 21003	10k 1% 0.6W
3080	4822 051 20682	6k8 5% 0.1W
3081	4822 050 24702	4k7 1% 0.6W
3082	4822 051 20153	15k 5% 0.1W
3083	4822 052 10108	1Ω 5% 0.33W
3084	4822 052 10108	1Ω 5% 0.33W
3085	4822 050 21003	10k 1% 0.6W
3086	4822 052 10229 Δ	22Ω 5% 0.33W
3087	4822 116 52244	15k 5% 0.5W
3100	4822 050 22202	2k2 1% 0.6W
3101	4822 051 20223	22k 5% 0.1W
3102	4822 051 20223	22k 5% 0.1W
3103	4822 052 10338 Δ	3Ω 5% 0.33W
3105	4822 052 10338 Δ	3Ω 5% 0.33W
3106	4822 051 10102	1k 2% 0.25W
3109	4822 051 20222	2k2 5% 0.1W
3110	4822 051 20105	1M 5% 0.1W
3111	4822 052 10229 Δ	22Ω 5% 0.33W
3112	4822 050 22205	2M2 1% 0.6W
3117	4822 051 20182	1k8 5% 0.1W
3118	4822 051 20182	1k8 5% 0.1W
3119	4822 051 10561	560Ω 2% 0.25W
3140	4822 116 52234	100k 5% 0.5W
3141	4822 051 20104	100k 5% 0.1W
3142	4822 050 24703	47k 1% 0.6W
3143	4822 052 10229 Δ	22Ω 5% 0.33W
3144	4822 051 20223	22k 5% 0.1W
3146	4822 050 21003	10k 1% 0.6W
3147	4822 051 20392	3k9 5% 0.1W
3148	4822 051 20473	47k 5% 0.1W
3300	4822 051 20223	22k 5% 0.1W
3301	4822 051 20153	15k 5% 0.1W
3302	4822 051 20332	3k3 5% 0.1W
3303	4822 050 21803	18k 1% 0.6W
3304	4822 051 20123	12k 5% 0.1W
3305	4822 052 10229 Δ	22Ω 5% 0.33W
3306	4822 052 10229 Δ	22Ω 5% 0.33W
3307	4822 051 20332	3k3 5% 0.1W
3308	4822 051 20123	12k 5% 0.1W
3309	4822 051 20223	22k 5% 0.1W
3310	4822 051 20153	15k 5% 0.1W
3311	4822 051 20183	18k 5% 0.1W
3312	4822 050 22203	22k 1% 0.6W
3313	4822 051 20223	22k 5% 0.1W
3314	4822 050 21002	1k 1% 0.6W
3315	4822 050 21002	1k 1% 0.6W
3320	4822 116 83933	15k 1% 0.1W
3321	4822 116 83933	15k 1% 0.1W
3322	4822 116 83933	15k 1% 0.1W
3323	4822 116 83933	15k 1% 0.1W



3325	4822 116 83933	15k 1% 0.1W
3326	4822 116 83933	15k 1% 0.1W
3327	4822 116 83933	15k 1% 0.1W
3328	4822 116 83933	15k 1% 0.1W
3360	4822 051 10102	1k 2% 0.25W
3361	4822 051 10102	1k 2% 0.25W
3501	4822 052 10108 Δ	1 Ω 5% 0.33W
3502	4822 052 10108 Δ	1 Ω 5% 0.33W
3550	4822 051 20561	560 Ω 5% 0.1W
3551	4822 051 10102	1k 2% 0.25W
3552	4822 051 20223	22k 5% 0.1W
3553	4822 051 10102	1k 2% 0.25W
3610	4822 051 20123	12k 5% 0.1W
3611	4822 116 52303	8k2 5% 0.5W
3612	4822 051 20123	12k 5% 0.1W
3613	4822 051 20123	12k 5% 0.1W
3614	4822 051 20123	12k 5% 0.1W
3615	4822 052 10108 Δ	1 Ω 5% 0.33W
3616	4822 052 10108 Δ	1 Ω 5% 0.33W
3617	4822 052 10229 Δ	22 Ω 5% 0.33W
3662	4822 051 20103	10k 5% 0.1W
3663	4822 051 20103	10k 5% 0.1W
3664	4822 051 20103	10k 5% 0.1W
3665	4822 051 20561	560 Ω 5% 0.1W
3700	4822 051 20224	220k 5% 0.1W
3701	4822 052 10338 Δ	3 Ω 3 5% 0.33W
3706	4822 051 20103	10k 5% 0.1W
3707	4822 051 20103	10k 5% 0.1W
3708	4822 051 20103	10k 5% 0.1W
3710	4822 051 20103	10k 5% 0.1W
3711	4822 051 20332	3k3 5% 0.1W
3713	4822 051 20103	10k 5% 0.1W
3714	4822 051 20103	10k 5% 0.1W
3715	4822 051 20332	3k3 5% 0.1W
3716	4822 051 20103	10k 5% 0.1W
3717	4822 051 20103	10k 5% 0.1W
3718	4822 051 20103	10k 5% 0.1W
3719	4822 051 20103	10k 5% 0.1W
3720	4822 051 20103	10k 5% 0.1W
3721	4822 051 20103	10k 5% 0.1W
3722	4822 051 10102	1k 2% 0.25W
3723	4822 051 10102	1k 2% 0.25W
3724	4822 051 10102	1k 2% 0.25W
4000	4822 051 10008	0 Ω 5% 0.25W
4001	4822 051 10008	0 Ω 5% 0.25W
4002	4822 051 10008	0 Ω 5% 0.25W
4003	4822 051 10008	0 Ω 5% 0.25W
4004	4822 051 10008	0 Ω 5% 0.25W
4104	4822 051 10008	0 Ω 5% 0.25W
4105	4822 051 10008	0 Ω 5% 0.25W
4106	4822 051 10008	0 Ω 5% 0.25W
4107	4822 051 10008	0 Ω 5% 0.25W



4108	4822 051 10008	0 Ω 5% 0.25W
4109	4822 051 10008	0 Ω 5% 0.25W
4200	4822 051 10008	0 Ω 5% 0.25W
4302	4822 051 10008	0 Ω 5% 0.25W
4600	4822 051 10008	0 Ω 5% 0.25W
4700	4822 051 10008	0 Ω 5% 0.25W
4701	4822 051 10008	0 Ω 5% 0.25W



6103	4822 130 30621	1N4148
6550	4822 130 31981	BZX79-C3V9
6660	4822 130 34173	BZX79-C5V6



7000	4822 209 31064	TDA1301T/N1
7040	4822 130 60887	BF840
7041	5322 130 41982	BC848B
7042	5322 130 41983	BC858B
7043	5322 130 41982	BC848B
7044	5322 130 41982	BC848B
7060	4822 209 72587	TCA0372DP2
7080	4822 209 72587	TCA0372DP2
7101	4822 209 63925	FCB61C6-70T
7102	4822 209 30388	SAA7341GP
7140	5322 130 42012	BC858
7141	4822 130 61207	BC848
7300	4822 209 83274	NJM4560D
7301	4822 209 83274	NJM4560D
7360	4822 130 42804	BC817-25
7361	4822 130 42804	BC817-25
7362	5322 130 42012	BC858
7500	4822 209 80891 Δ	MC78M05CT
7550	5322 130 42012	BC858
7660	4822 209 72587	TCA0372DP2
7700	4822 900 10318	MC68HC05C8/SERVO-S17

Note : Only the mentioned parts are normal service parts.

MISCELLANEOUS AND ACCESSORIES

MISCELLANEOUS

1021	4822 691 20765	Tape deck CWA409-RR
	4822 445 10356	Loudspeaker
	4822 445 10357	Loudspeaker -/37

ACCESSORIES

	4822 218 10466	Remote Control
	4822 263 21071	Adaptor Fem/Fem - /25
	4822 736 21705	Instruction For Use
	4822 736 21706	Instruction For Use -/37

Note : Only the mentioned parts are normal service parts.



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



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



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.



Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.



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

"After servicing and before returning set to customer perform a leakage current measurement test from all exposed metal parts to earth ground to assure no shock hazard exist. The leakage current must not exceed 0.5mA."



Osynlig laserstrålning när apparaten är öppnad och spärren är urkopplad. Betrakta ej strålen.



Avatussa laitteessa ja suojalukituksen ohitettaessa olet alttiina näkymättömälle laserisäteilylle. Älä katso säteeseen!



Usynlig laserstråling ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.