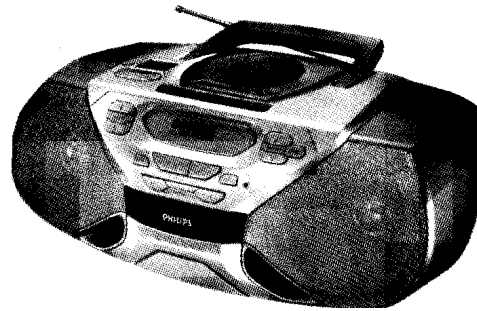


Service  
Service  
Service

AZ1040  
AZ1045  
all versions



# Service Manual

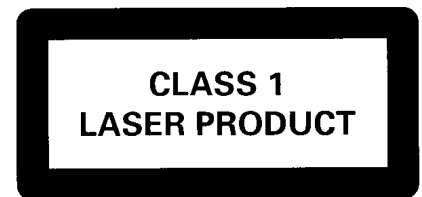


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Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

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## TECHNICAL SPECIFICATIONS

### GENERAL

Mains voltage	-/00/05/14 : 230 V
	-/17 : 120 V
Mains frequency	-/00/05/14 : 50 Hz
	-/17 : 60 Hz
Battery	mains : 9 V (R20 x 6)
	remote : 3V (R6 x 2)
Power consumption	: 5 W
Dimension (W x H x D)	: 435 x 262 x 174 mm
Weight	: 3.6 Kg

### AMPLIFIER

Output power	mains : 2 x 1.4 W
	battery : 2 x 2 W
Speaker impedance	: 2 x 4 ohm
Frequency response	: 100 Hz - 10 kHz ( $\pm 3$ dB)

### TUNER - FM SECTION

Tuning range	: 87.5 - 108 MHz
IF frequency	: 10.7 MHz $\pm$ 0.2 MHz
Sensitivity	: 14 dBf at 26dB S/N
Selectivity	: 55 dB at 300kHz
IF rejection	: 65 dB
Image rejection	: 26 dB

### SERVICE TOOLS

TORX T10 screwdriver with shaftlength 150mm.....	4822 395 50423
TORX screwdriver set SBC 163.....	4822 295 50145
Audio signal disc SBC 429.....	4822 397 30184
Playability test disc SBC 444.....	4822 397 30245
Test disc 5 (disc without errors) +	
Test disc 5A (disc with dropout errors, black spots and fingerprints)	
SBC 426/426A.....	4822 397 30096
Burn in test disc (65 min. 1kHz signal at -30 dB level without "pause").....	4822 397 30155
Universal test cassette Fe SBC 420.....	4822 397 30071

### TUNER - AM SECTION

Tuning range	MW : 531 - 1602 kHz
	-/17 : 530 - 1700 kHz
	LW : 153 - 279 kHz
IF frequency	: 468 kHz $\pm$ 3 kHz
Sensitivity	MW : 1500 $\mu$ V/m at 26dB S/N
	LW : 5500 $\mu$ V/m at 26dB S/N
Selectivity	MW : 20 dB
	LW : 29 dB
IF rejection	MW : 60 dB
	LW : 60 dB
Image rejection	MW : 32 dB
	LW : 38 dB

### AUDIO CASSETTE RECORDER

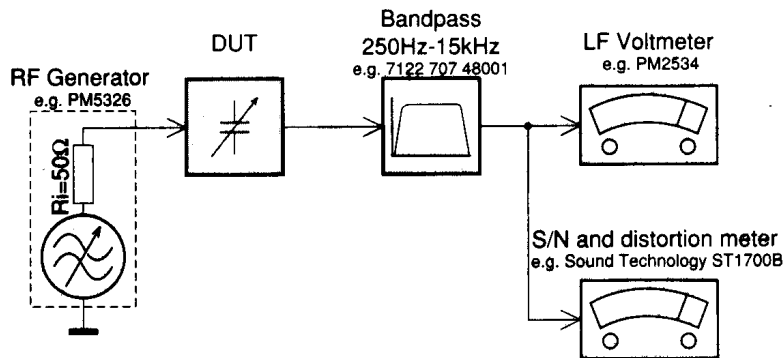
Number of tracks	: 1 stereo
Tape speed	: 4.76 cm/sec $\pm$ 3%
Wow & flutter	: < 0.48 JIS UWTD
Fast wind/rewind C60	: < 110 sec.
Frequency response	P/B : 125 - 8000 Hz
S/N ratio	: 45 dB

### COMPACT DISC

Frequency response	: 100 Hz - 10 kHz
S/N ratio	: 60 dB
Channel difference	1 kHz : 2 dB
Channel crosstalk	1 kHz : 40 dB
Laser wavelength	: 780 $\pm$ 20 nm
Laser light power	: < 0.5 mW

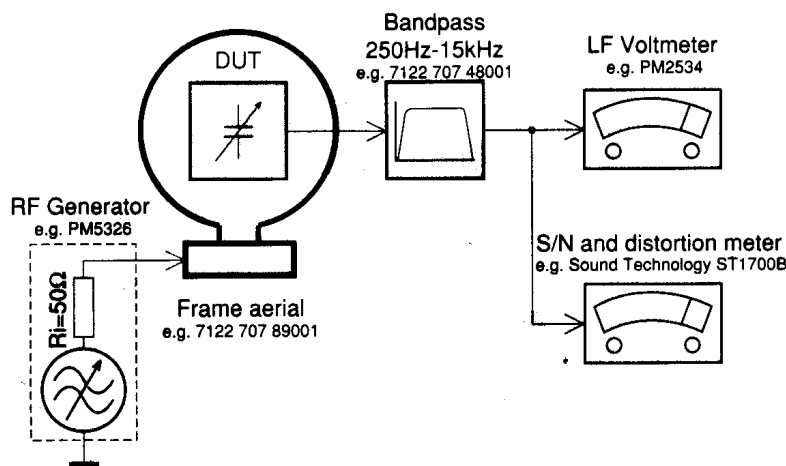
# SERVICE MEASUREMENTS

## Tuner FM



Use a bandpass filter to eliminate hum (50Hz, 100Hz) and disturbance from the pilotone (19kHz, 38kHz).

## Tuner AM (MW,LW)



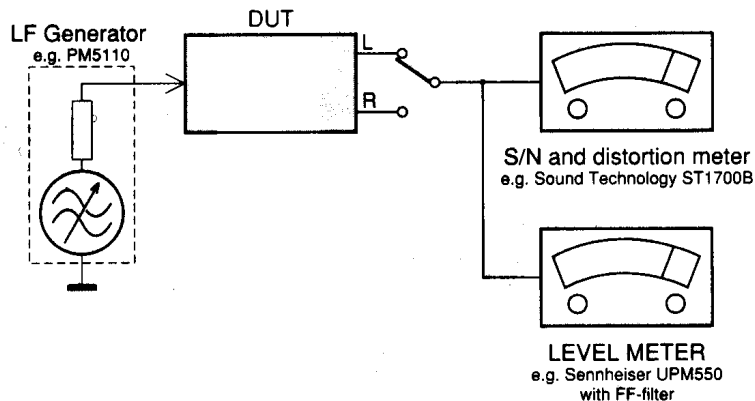
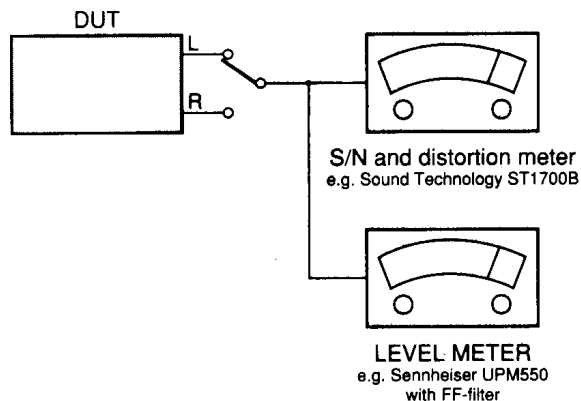
To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday's cage. Use a bandpass filter (or at least a high pass filter with 250Hz) to eliminate hum (50Hz, 100Hz).

## CD

Use Audio Signal Disc SBC429 4822 397 30184 (replaces test disc 3)

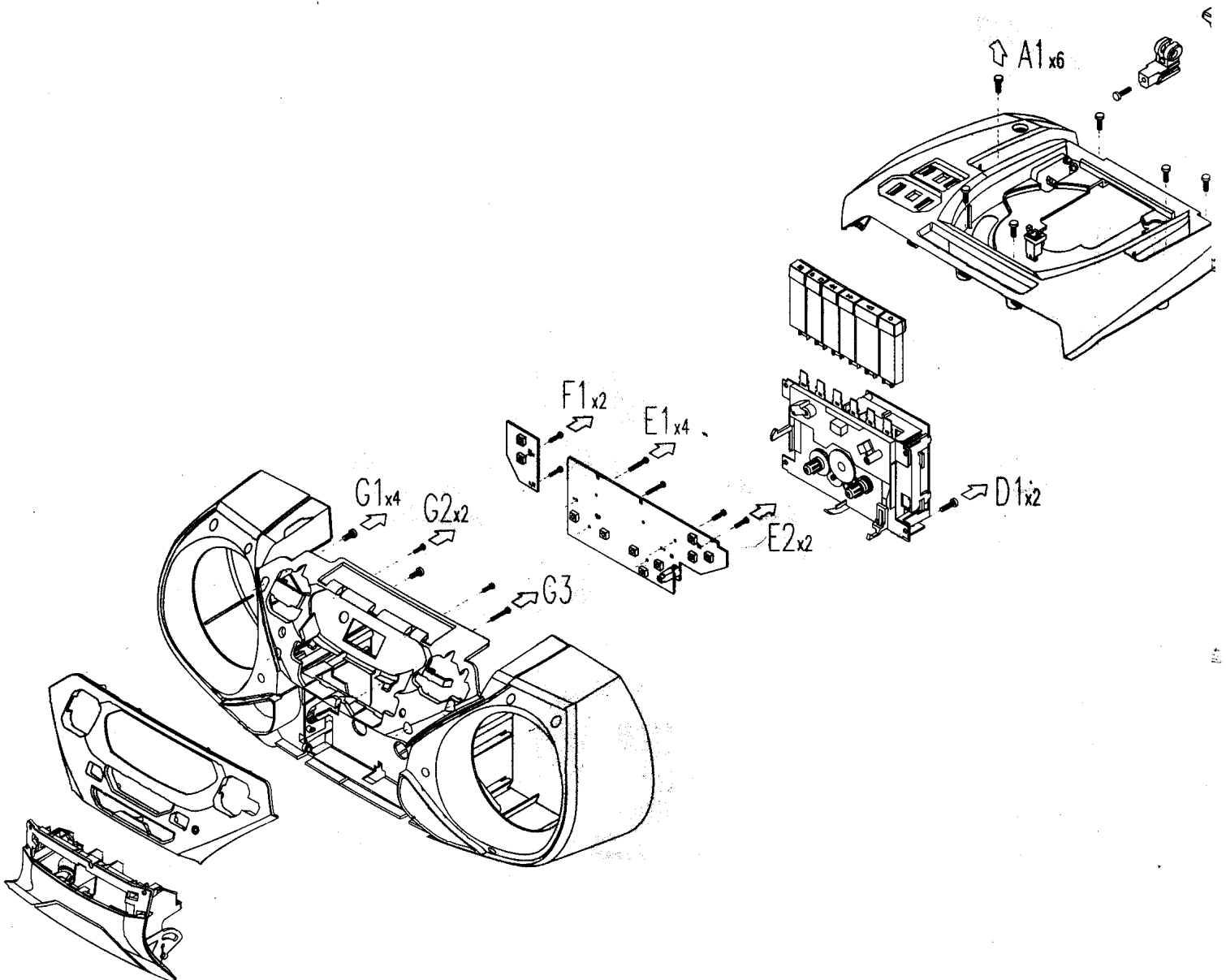
## RECORDER

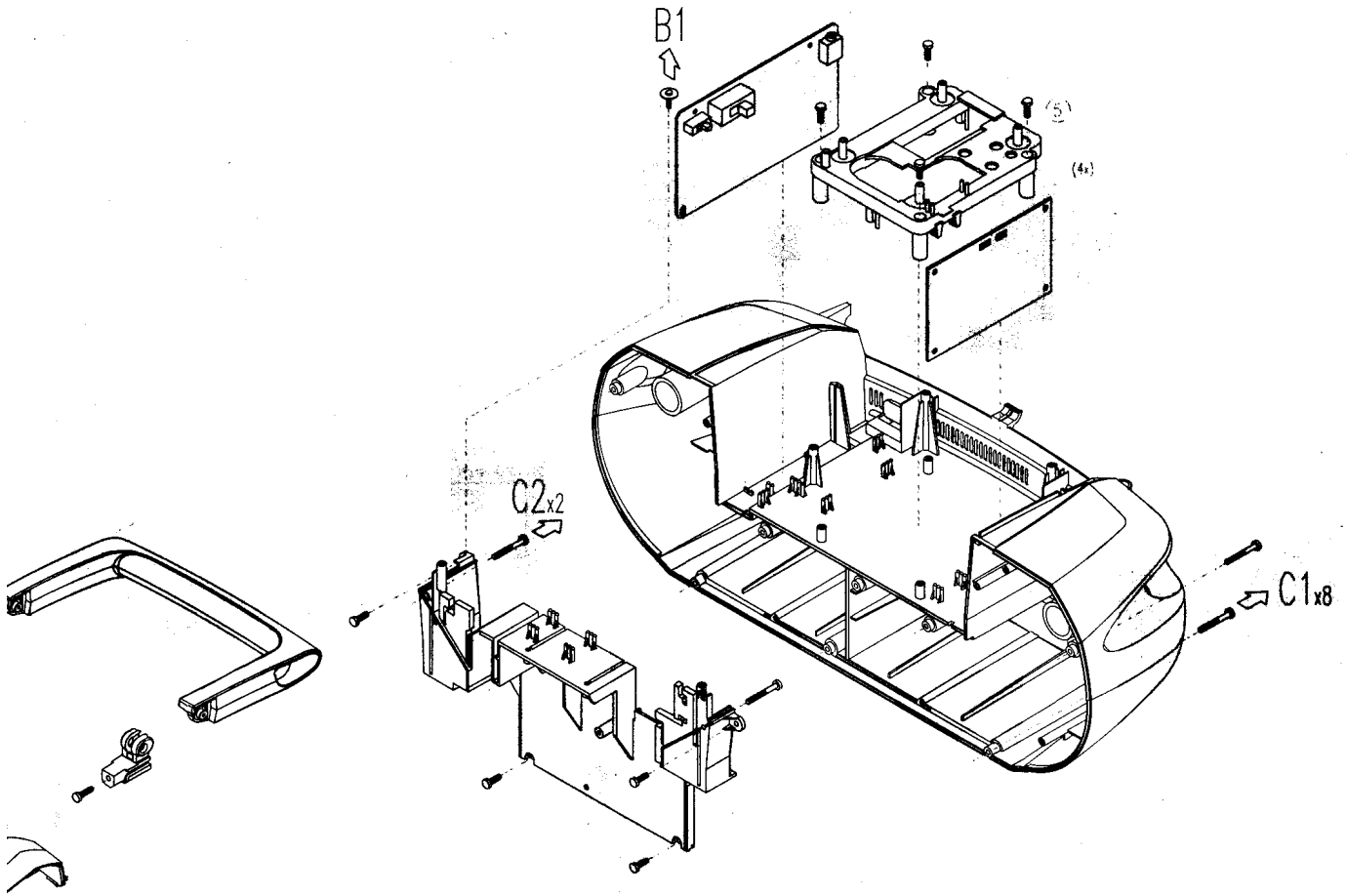
Use Universal Test Cassette Fe SBC420 4822 397 30071



## DISASSEMBLY DIAGRAM

- A. To remove Top Cabinet Assy
- B. To remove AF Board
- C. To Remove Rear Cabinet
- D. To remove Tape Deck
- E. To remove Front Board
- F. To remove Volume Board
- G. To remove Front Panel





- STOP button pressed in any step returns to begin of Service Testprogram.
- To leave Service Testprogram switch mode switch to off-position.
- Door switch is ignored CD door can be opened.
- Volume up/down buttons function independently of the service testprogram.

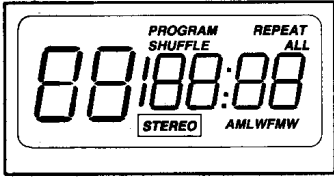
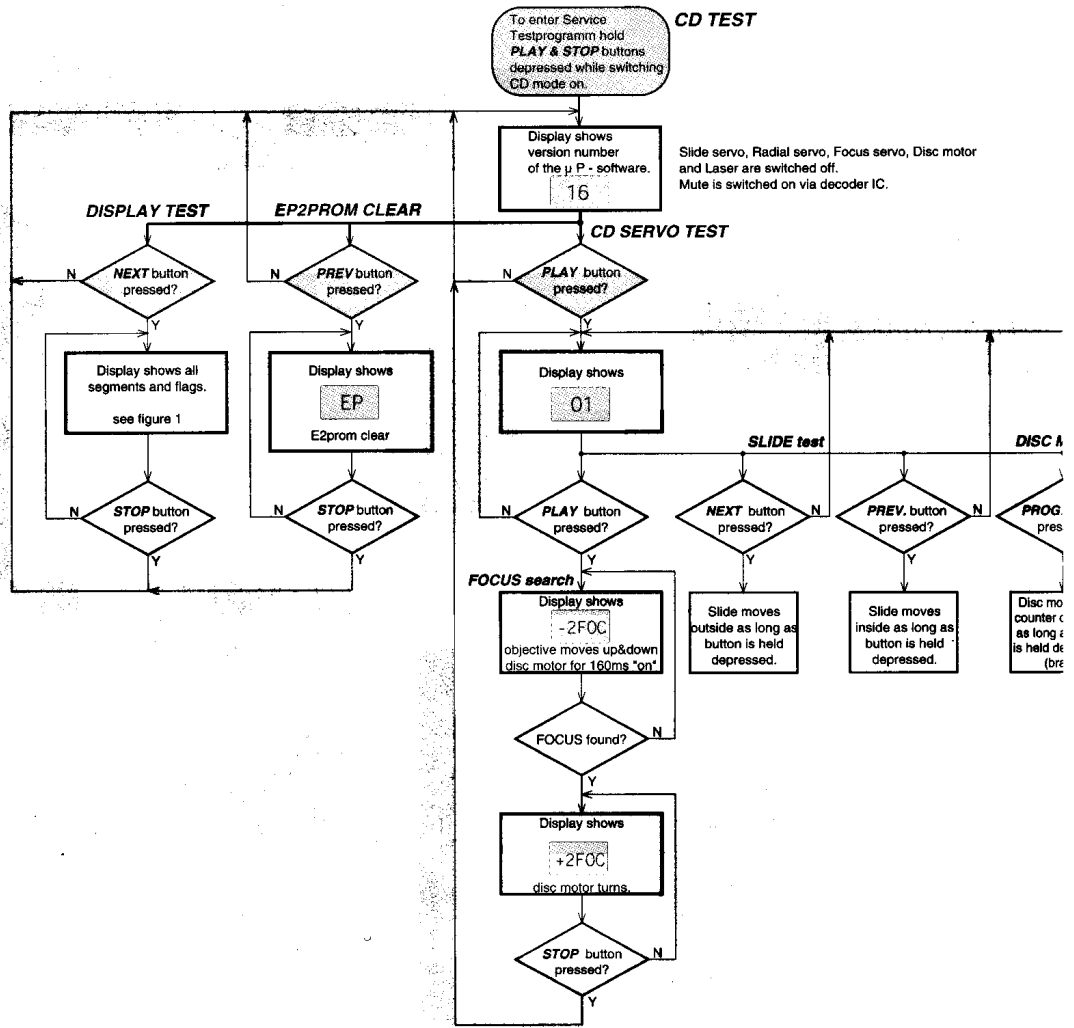


fig. 1



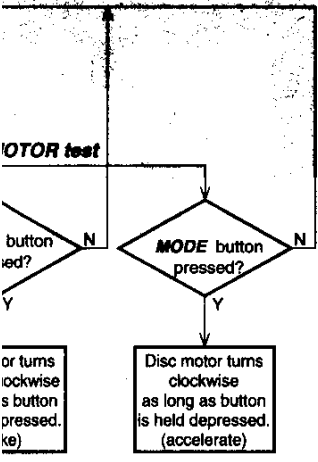
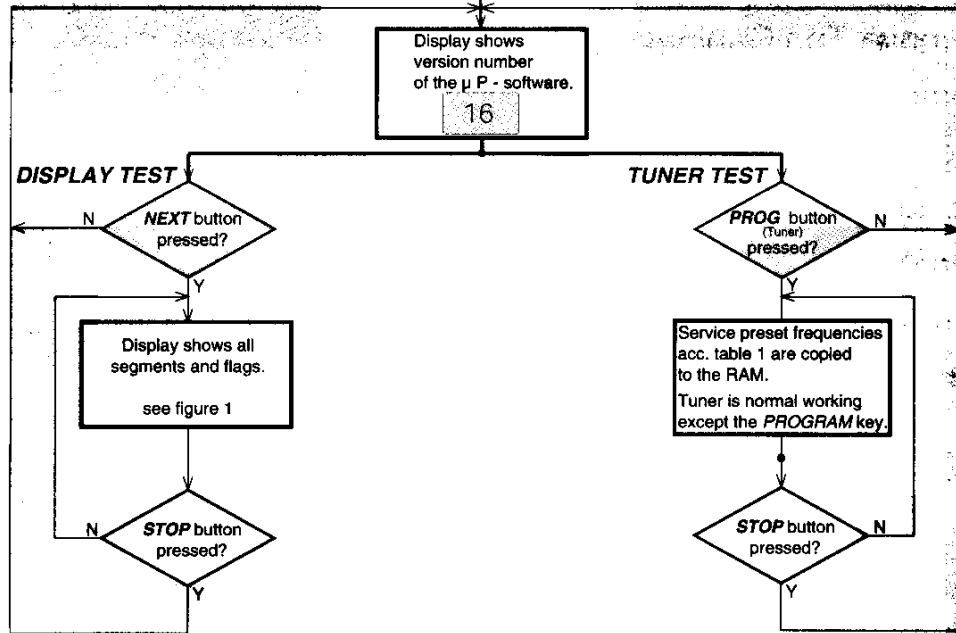
### SERVICE PRESET FREQUENCIES

REGION	EUROPE FM/MW/LW	EUROPE2B FM/MW	OVERSEAS FM/MW <small><sup>1)</sup> Grid switchable 10-100kHz/9-50kHz</small>	EAST-EUROPE FM/MW	USA FM/MW
PRESET	/00/05/20/25	/00	/01/21	/14	/14/37
1	87.5 MHz	87.5 MHz	87.5 MHz	65.81 MHz	87.5 MHz
2	108 MHz	108 MHz	108 MHz	108 MHz	108 MHz
3	531 kHz	531 kHz	531/530 kHz	74 MHz	530 kHz
4	1602 kHz	1602 kHz	1602/1700 kHz	87.5 MHz	1700 kHz
5	558 kHz	558 kHz	558/560 kHz	531 kHz	560 kHz
6	1494 kHz	1494 kHz	1494/1500 kHz	1602 kHz	1500 kHz
7	153 kHz	-	-	558 kHz	-
8	279 kHz	-	-	1494 kHz	-
9	198 kHz	-	-	-	-
10	-	-	-	-	-
11	-	-	-	-	-
12	-	-	-	-	-
13	-	-	-	-	-

table 1

**TUNER TEST**

To enter Service Testprogramm hold **PLAY & STOP** buttons depressed while switching **TUNER** mode on.



1) How to set frequency grid:

**AM - 9 kHz / FM - 50 kHz** : Hold **MODE KEY** with the **TUNING UP KEY** simultaneously and then switch to **TUNER**.

**AM - 10 kHz / FM - 100 kHz** : Hold **MODE KEY** with the **PROGRAM KEY** simultaneously and then switch to **TUNER**.

Selected frequency grid is stored in the EEPROM.

## Abbreviations and Pin-description of CD Ics

### SERVO PROCESSOR SAA7325H

SYMBOL	PIN	DESCRIPTION
HFREF	1	comparator common mode input
HFIN	2	comparator signal input
ISLICE	3	current feedback output from data slicer
$V_{SSA1}$	4 <sup>(1)</sup>	analog ground 1
$V_{DDA1}$	5 <sup>(1)</sup>	analog supply voltage 1
$I_{ref}$	6	reference current output pin
$V_{RIN}$	7	reference voltage for servo ADC's
D1	8	unipolar current input (central diode signal input)
D2	9	unipolar current input (central diode signal input)
D3	10	unipolar current input (central diode signal input)
D4	11	unipolar current input (central diode signal input)
R1	12	unipolar current input (satellite diode signal input)
R2	13	unipolar current input (satellite diode signal input)
$V_{SSA2}$	14 <sup>(1)</sup>	analog ground 2
CROUT	15	crystal/resonator output
CRIN	16	crystal/resonator input
$V_{DDA2}$	17 <sup>(1)</sup>	analog supply voltage 2
LN	18	DAC left channel differential output - negative
LP	19	DAC left channel differential output - positive
$V_{neg}$	20	DAC negative reference input
$V_{pos}$	21	DAC positive reference input
RN	22	DAC right channel differential output - negative
RP	23	DAC right channel differential output - positive
SELPLL	24	selects whether internal clock multiplier PLL is used
TEST1	25	test control input 1; this pin should be tied LOW
CL16	26	16.9344 MHz system clock output
DATA	27	serial d4(1)ata output (3-state)
WCLK	28	word clock output (3-state)
SCLK	29	serial bit clock output (3-state)
EF	30	C2 error flag output (3-state)
TEST2	31	test control input 2; this pin should be tied LOW
KILL	32	kill output (programmable; open-drain)
$V_{SSD1}$	33 <sup>(1)</sup>	digital ground 2
V2/V3	34	versatile I/O: input versatile pin 2 or output versatile pin 3 (open-drain)
WCLI	35	word clock input (for data loopback to DAC)
SDI	36	serial data input (for data loopback to DAC)
SCLI	37	serial bit clock input (for data loopback to DAC)
$\overline{\text{RESET}}$	38	power-on reset input (active LOW)
SDA	39	microcontroller interface data I/O line (open-drain output)
SCL	40	microcontroller interface clock line input



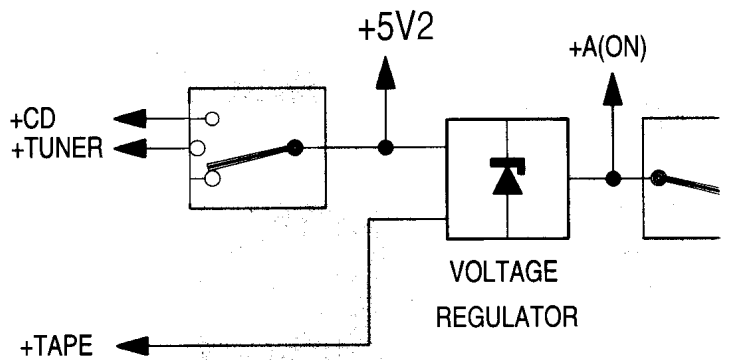
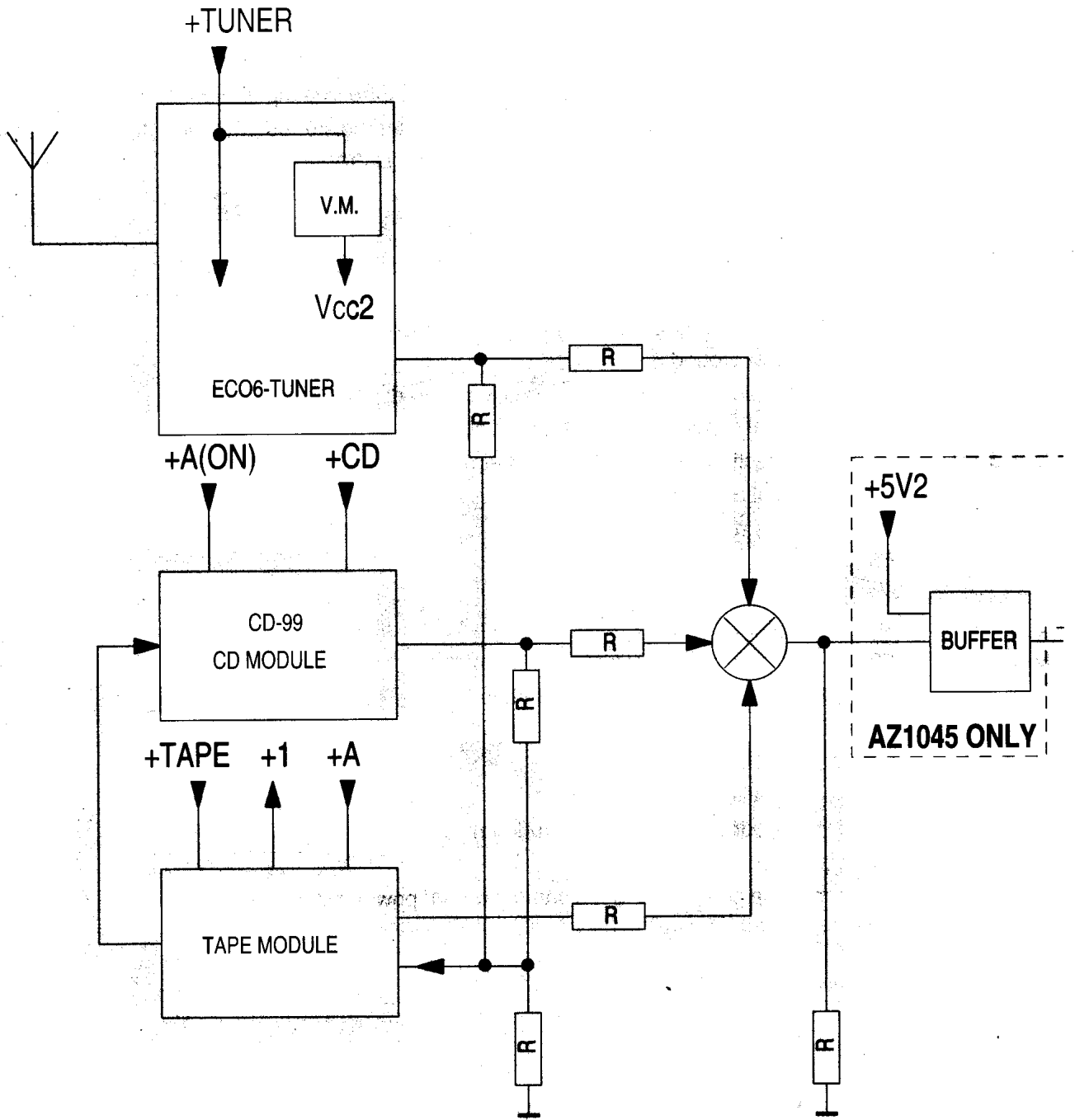
## Abbreviations and Pin-description of CD Ics

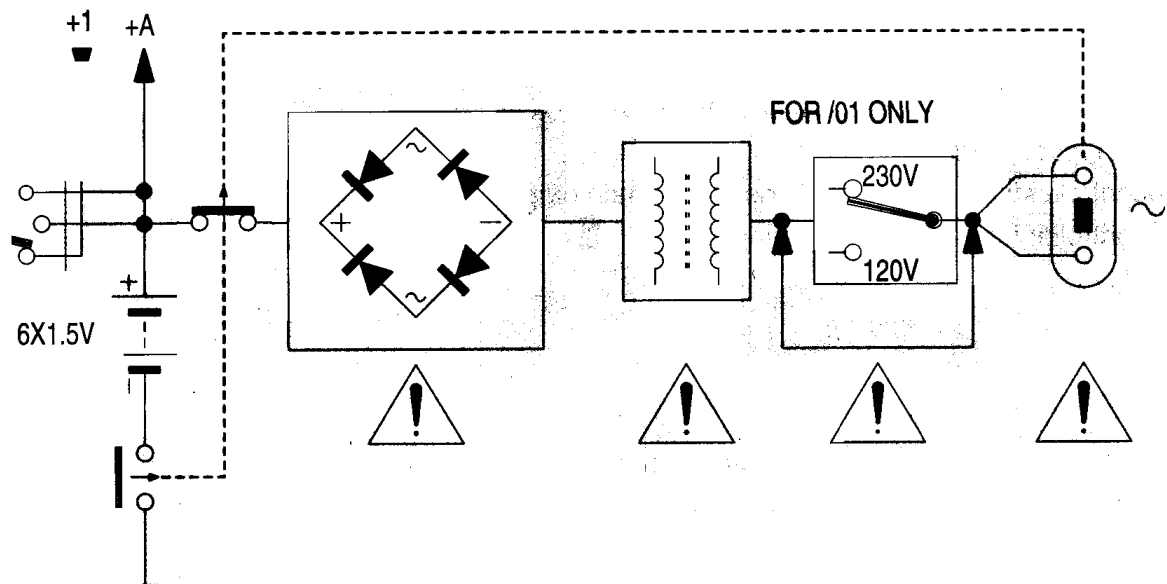
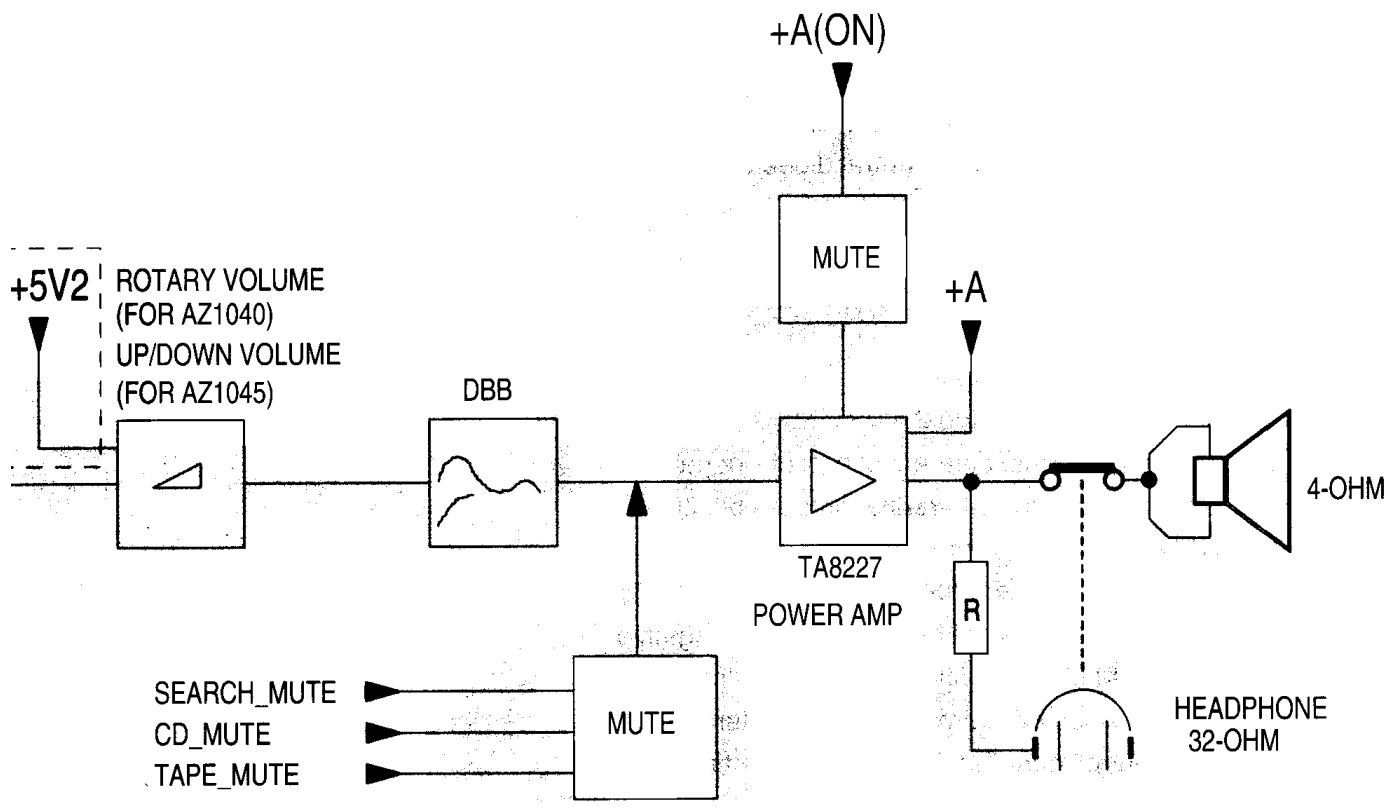
### SERVO PROCESSOR SAA7325H

SYMBOL	PIN	DESCRIPTION
RAB	41	microcontroller interface $\overline{R/W}$ and load control line input (4-wire bus mode)
SILD	42	microcontroller interface $\overline{R/W}$ and load control line input (4-wire bus mode)
STATUS	43	servo interrupt request line/decoder status register output (open-drain)
TEST3	44	test control input 3; this pin should be tied LOW
RCK	45	subcode clock input
SUB	46	P-to-W subcode bits output (3-state)
SFSY	47	subcode frame sync output (3-state)
SBSY	48	subcode block sync output (3-state)
CL11/4	49	11.2896 MHz or 4.2336 MHz (for microcontroller) clock output
V <sub>SSD2</sub>	50 <sup>(1)</sup>	digital ground 3
DOBM	51	bi-phase mark output (externally buffered; 3-state)
V <sub>DDD1(P)</sub>	52 <sup>(1)</sup>	digital supply voltage 2 for periphery
CFLG	53	correction flag output (open-drain)
RA	54	radial actuator output
FO	55	focus actuator output
SL	56	sledge control output
V <sub>DDD2(C)</sub>	57 <sup>(1)</sup>	digital supply voltage 3 for core
V <sub>SSD3</sub>	58 <sup>(1)</sup>	digital ground 4
MOTO1	59	motor output 1; versatile (3-state)
MOTO2	60	motor output 2; versatile (3-state)
V4	61	versatile output pin 4
V5	62	versatile output pin 5
V1	63	versatile input pin 1
LDON	64	laser drive on output (open-drain)

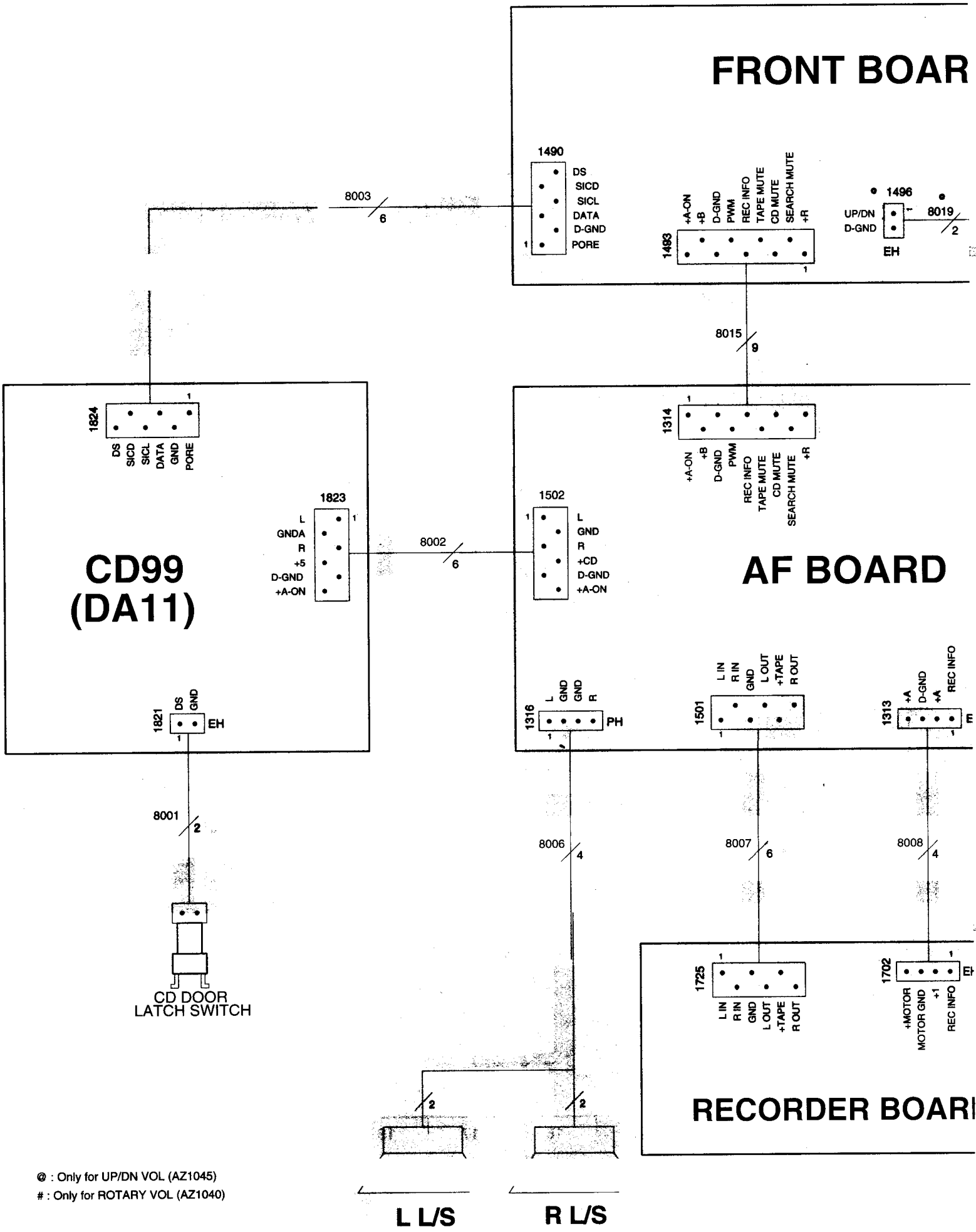
Note : All supply pins must be connected to the same external power supply voltage.

BLOCK DIAGRAM

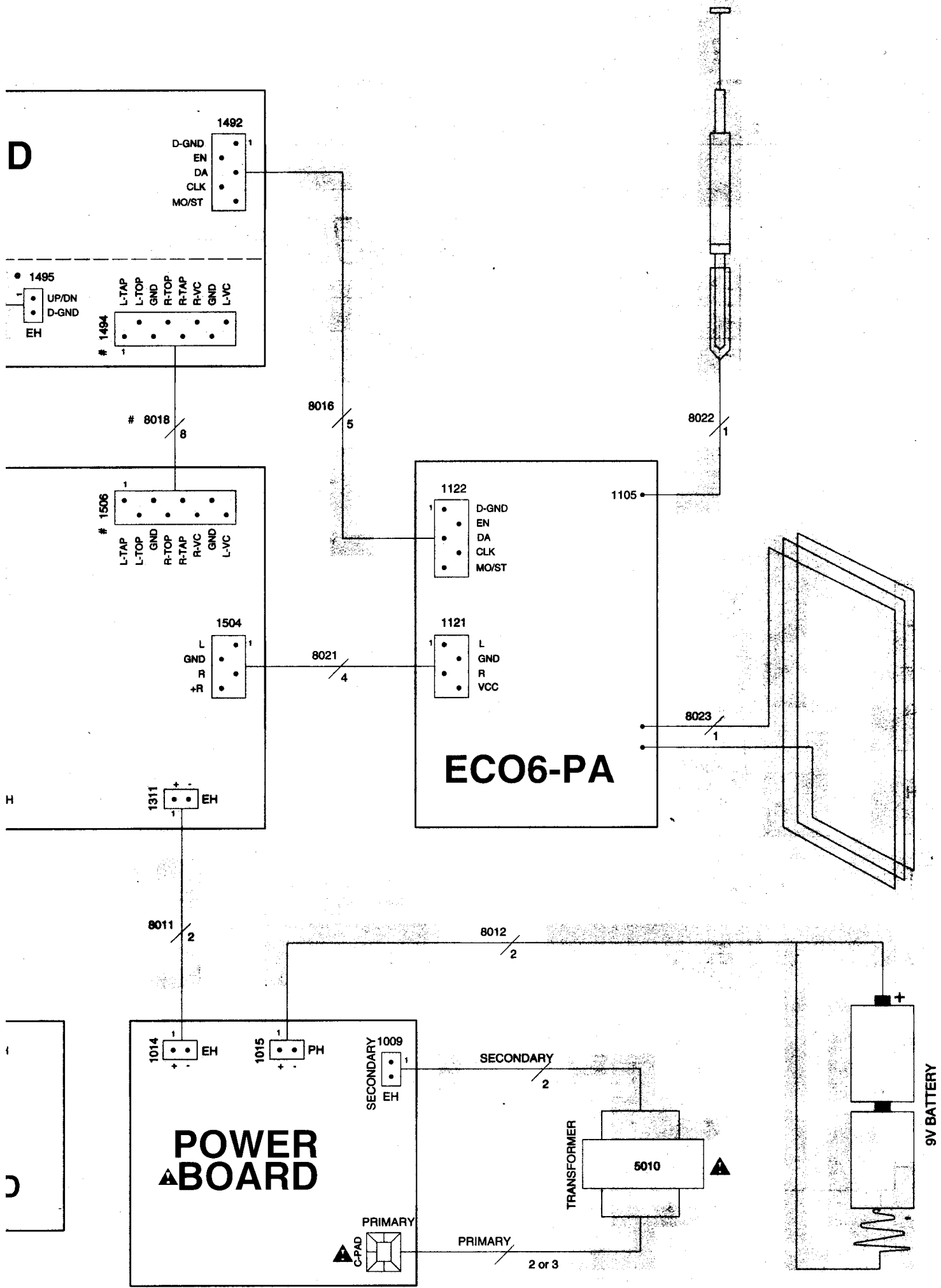




WIRING DIAGRAM

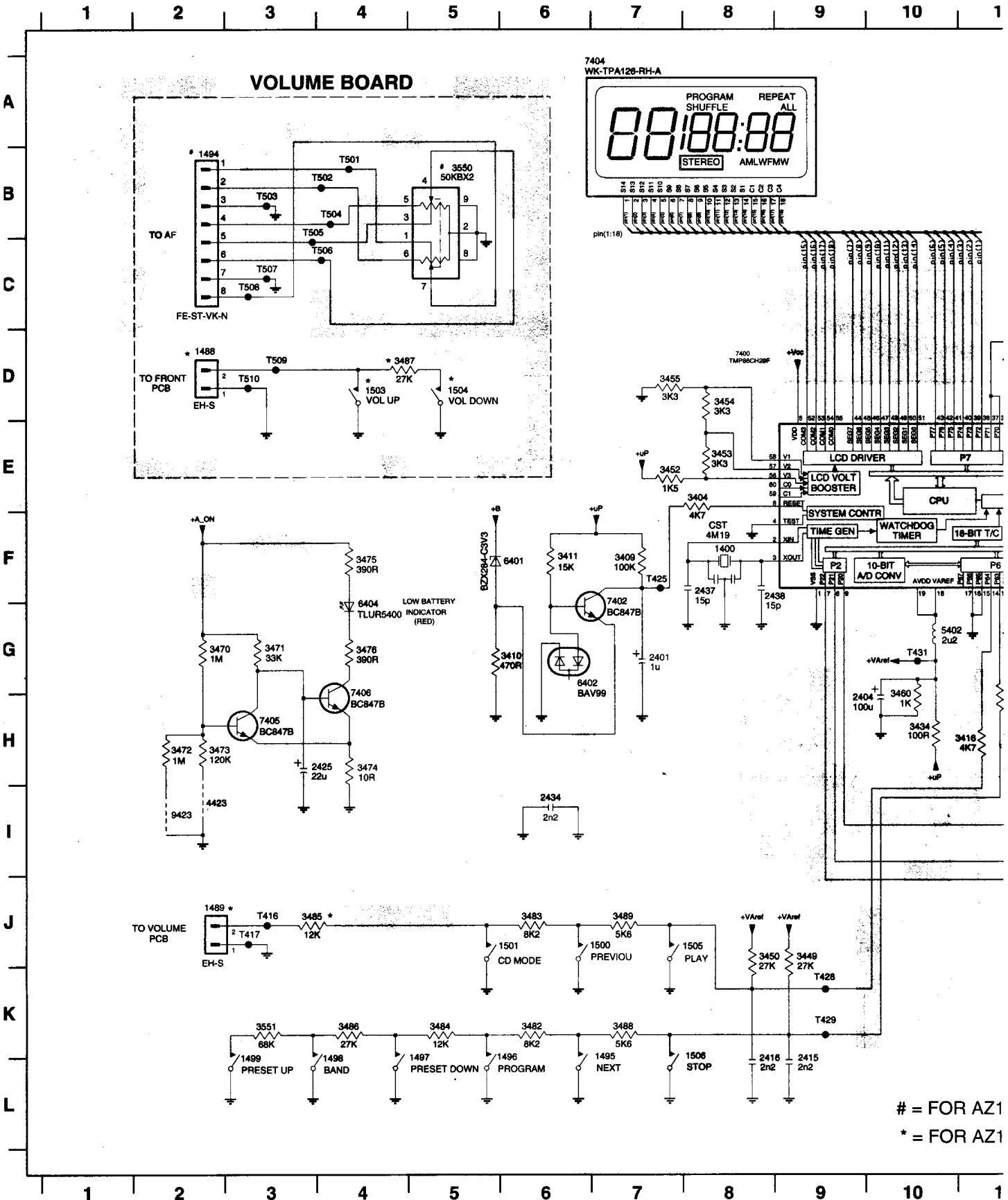


Ⓢ : Only for UP/DN VOL (AZ1045)  
 # : Only for ROTARY VOL (AZ1040)



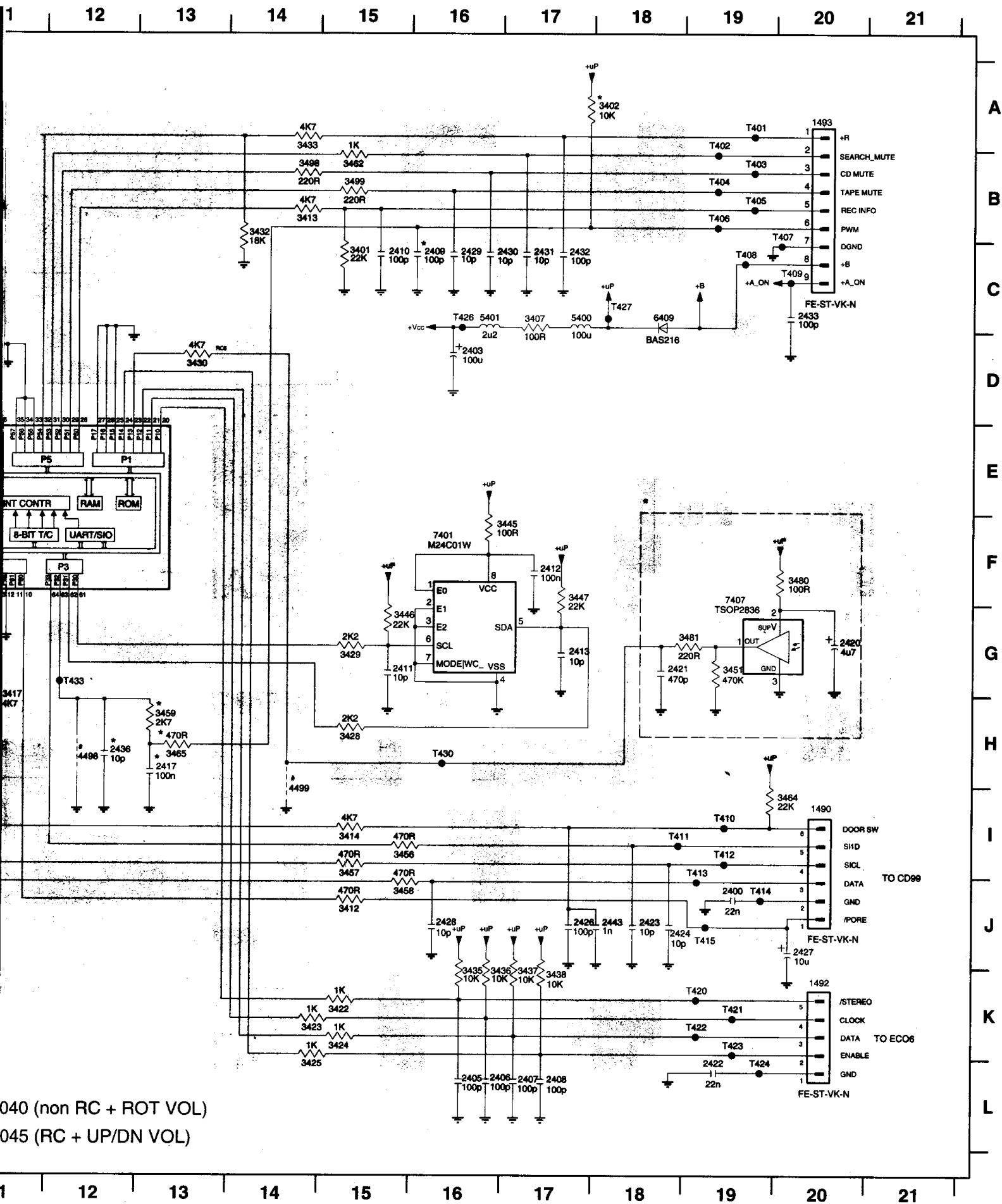
# FRONT BOARD - CIRCUIT DIAGRAM

1400 F8	1493 A20	1498 K4	1504 D5	2403 D16	2408 L17	2413 G17	2421 G18	2426 J17	2431 C17	2437 F8	3404 E8	3412 J15	3422 K15	3429 G15	3435 K16	3446 G15	3452 E7
1488 D2	1494 B2	1499 K3	1505 J8	2404 H9	2409 C16	2415 K9	2422 L19	2427 J20	2432 C17	2438 F9	3407 C17	3413 B14	3423 K14	3430 D13	3436 K17	3447 F17	3453 E8
1489 J2	1495 K7	1500 J7	1506 K8	2405 L16	2410 C15	2416 K8	2423 J18	2428 J16	2433 C20	2443 J18	3409 F7	3414 I15	3424 K15	3432 B14	3437 K17	3449 J9	3454 D8
1490 I20	1496 K6	1501 J6	2400 J19	2406 L17	2411 G15	2417 H13	2424 J18	2429 C16	2434 I6	3401 C15	3410 G6	3416 H11	3425 L14	3433 A14	3438 K17	3450 J8	3455 D7
1492 K20	1497 K5	1503 D4	2401 G7	2407 L17	2412 F17	2420 G20	2425 H4	2430 C17	2436 H12	3402 A18	3411 F6	3417 G11	3428 H15	3434 H10	3445 F17	3451 G19	3456 I15



# = FOR AZ1  
\* = FOR AZ1

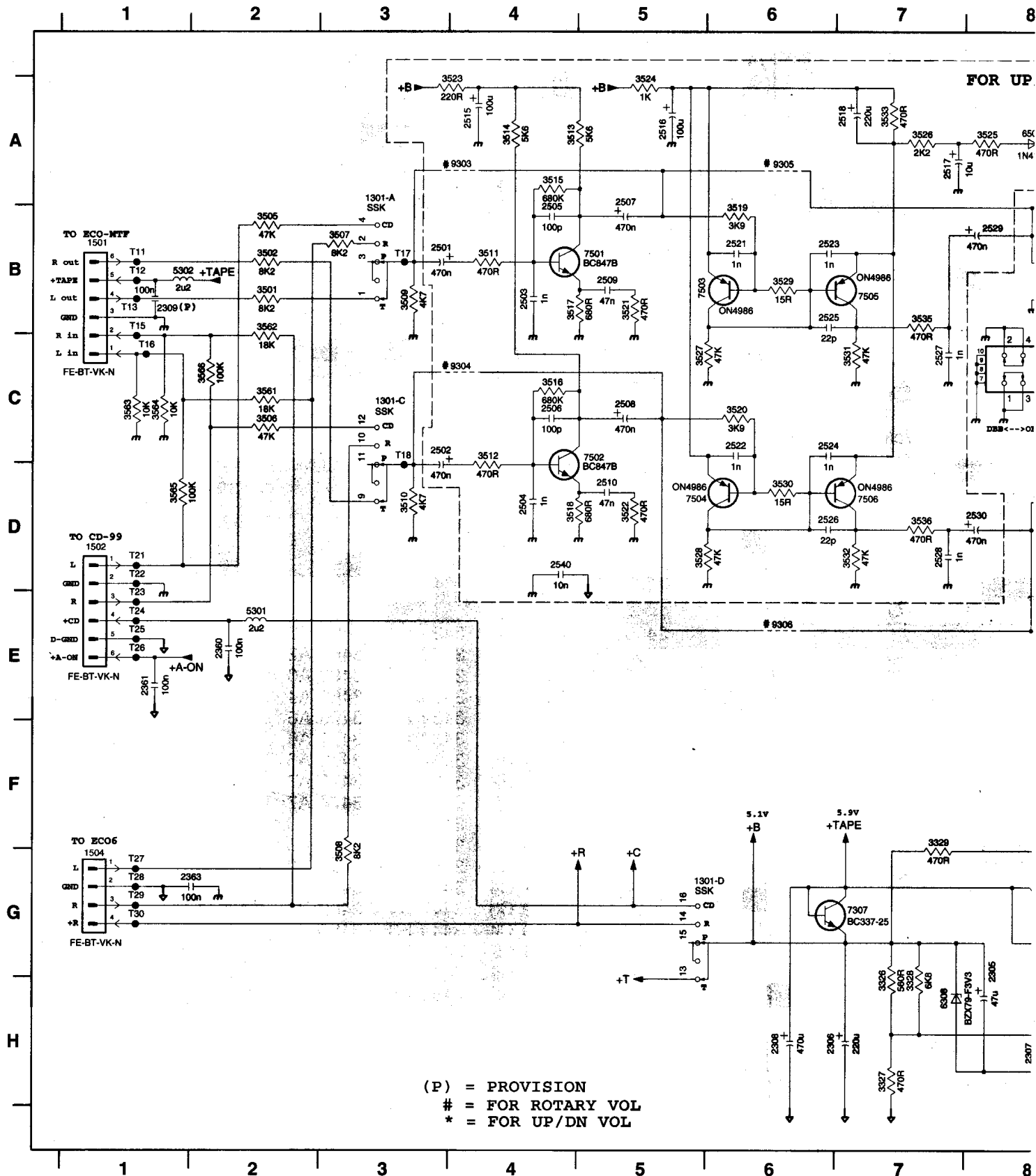
3457 H15	3464 I20	3473 H2	3481 G19	3486 K4	3499 B15	4499 I14	6402 G6	7402 G7	9423 I2	T405 B19	T410 I19	T415 J19	T422 K19	T427 C18	T433 G12	T505 B3	T510 D3
3458 J15	3465 H13	3474 H4	3482 K6	3487 D4	3550 B5	5400 C17	6404 G4	7404 A6	T401 A19	T406 B19	T411 I18	T416 J3	T423 K19	T428 K9	T501 B4	T506 C4	
3459 H13	3470 G2	3475 F4	3483 J6	3488 K7	3551 K3	5401 C16	6409 C18	7405 H3	T402 A19	T407 B20	T412 I19	T417 J3	T424 L19	T429 K9	T502 B4	T507 C3	
3460 H10	3471 G3	3476 G4	3484 K5	3489 J7	4423 I2	5402 G10	7400 D8	7406 H4	T403 B19	T408 C19	T413 I19	T420 K19	T425 F7	T430 H16	T503 B3	T508 C3	
3462 B15	3472 H2	3480 F20	3485 J3	3498 B14	4498 H12	6401 F6	7401 F16	7407 F19	T404 B19	T409 C20	T414 J19	T421 K19	T426 C16	T431 G10	T504 B4	T509 D3	



040 (non RC + ROT VOL)  
 045 (RC + UP/DN VOL)

# AF BOARD (AZ1040) - CIRCUIT DIAGRAM

T11 B1	T22 D1	T30 G1	T42 E13	T51 F13	T59 D13	T76 C10	1301-D G5	1502 D1	2309 B1	2345 B12	2353 D11	2363 G2	2508 C5	2522 I
T12 B1	T23 E1	T31 B14	T43 E13	T52 G13	T64 C12	T77 C9	1301-E H11	1504 G1	2337 B10	2346 C12	2355 B13	2501 B3	2509 B5	2523 I
T13 B1	T24 E1	T32 C14	T44 E13	T53 G13	T65 B13	T78 D10	1303 B15	1506 B9	2338 D10	2347 B12	2356 D12	2502 C3	2510 D5	2524 I
T15 B1	T25 E1	T33 C15	T45 E13	T54 G13	T71 B9	1001 D15	1311 H13	1510 C8	2340 C13	2348 D12	2357 C10	2503 B4	2515 A4	2525 I
T16 C1	T26 E1	T34 D15	T46 E13	T55 H13	T72 C9	1002 E15	1313 F13	2305 G8	2341 C13	2349 B13	2358 D10	2504 D4	2516 A5	2526 I
T17 B3	T27 G1	T36 E15	T47 F13	T56 H13	T73 C9	1301-A A3	1314 E13	2306 H6	2342 C12	2350 D12	2359 E10	2505 B4	2517 A7	2527 I
T18 C3	T28 G1	T37 D15	T48 F13	T57 C13	T74 C9	1301-B G11	1316 D15	2307 H8	2343 B11	2351 B13	2360 E2	2506 C4	2518 A7	2528 I
T21 D1	T29 G1	T41 E13	T49 F13	T58 D13	T75 C9	1301-C C3	1501 B1	2308 H6	2344 C11	2352 D13	2361 E1	2507 A5	2519 B6	2529 I



(P) = PROVISION  
 # = FOR ROTARY VOL  
 \* = FOR UP/DN VOL



2530 D8	3303 B11	3314 C10	3329 F7	3502 B2	3512 C4	3520 C6	3528 D5	3537 B9	3561 C2	6308 H7	7306 H8	7504 D6	9306 E6
2531 B8	3304 C11	3321 G9	3331 F10	3505 B2	3513 A4	3521 B5	3529 B6	3538 C9	3562 B2	6311 E11	7307 G7	7505 B7	9307 C9
2532 D8	3305 C11	3322 G9	3332 F11	3506 C2	3514 A4	3522 D5	3530 D6	3541 B9	3563 C1	6316 C13	7312 C13	7506 D7	
2533 B8	3306 C11	3323 H9	3333 F11	3507 B3	3515 A4	3523 A4	3531 C7	3542 C9	3564 C1	6501 A8	7313 C11	7507 B9	
2534 C8	3307 C13	3325 H8	3334 E10	3508 G3	3516 C4	3524 A5	3532 D7	3543 B9	3565 D1	7301 C12	7314 D11	7508 D9	
2540 D4	3311 B14	3326 H7	3335 E11	3509 B3	3517 B4	3525 A8	3533 A7	3544 D9	3566 C2	7303 G8	7501 B5	7509 A4	
3301 B10	3312 C14	3327 H7	3337 E9	3510 D3	3518 D4	3526 A7	3535 B7	3545 B8	5301 E2	7304 G8	7502 C5	9304 C4	
3302 D10	3313 B10	3328 H7	3501 B2	3511 B4	3519 B6	3527 C5	3536 D7	3546 D8	5302 B1	7305 H9	7503 B5	9305 A6	

9

10

11

12

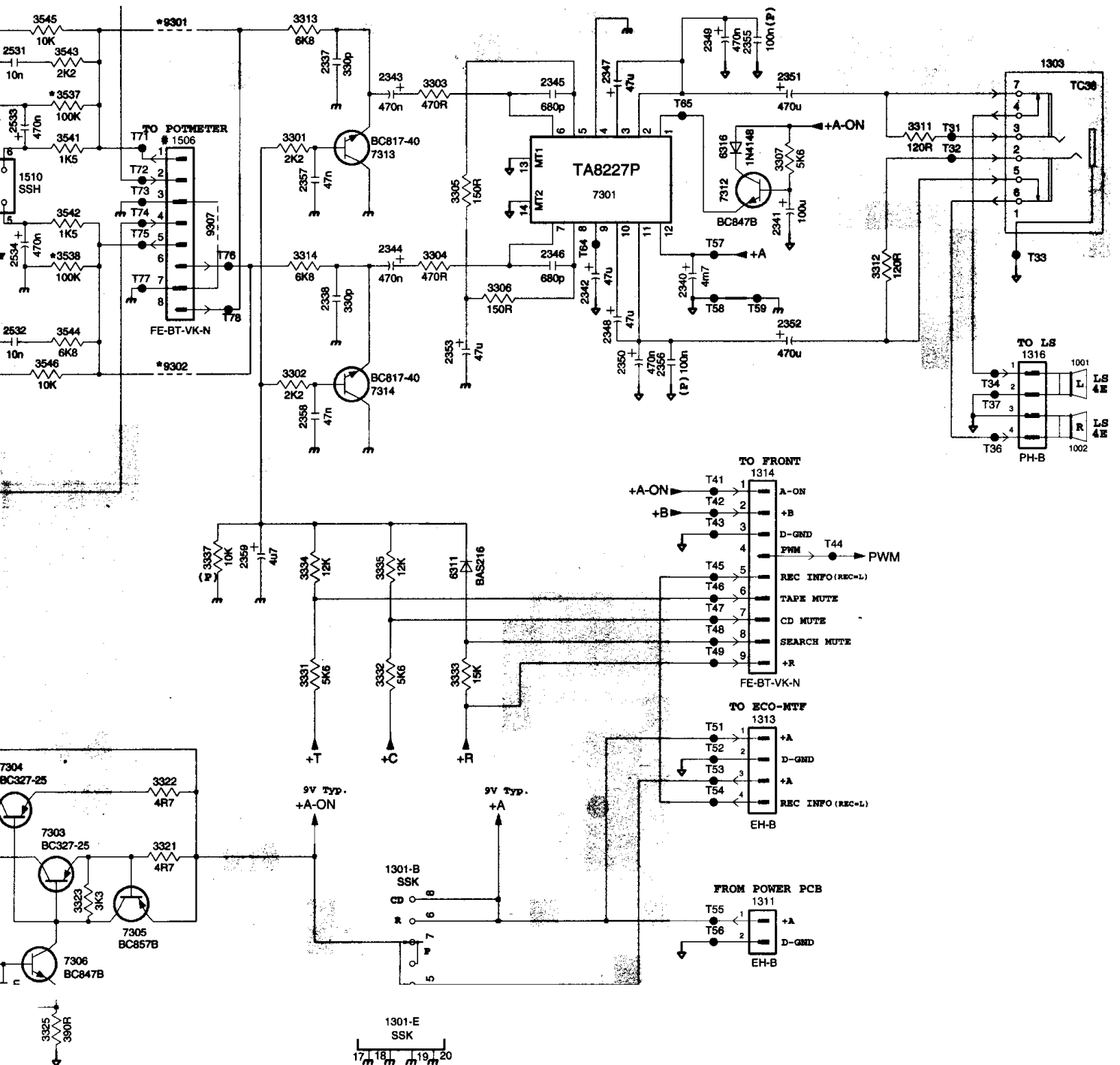
13

14

15

VOL

PWM



9

10

11

12

13

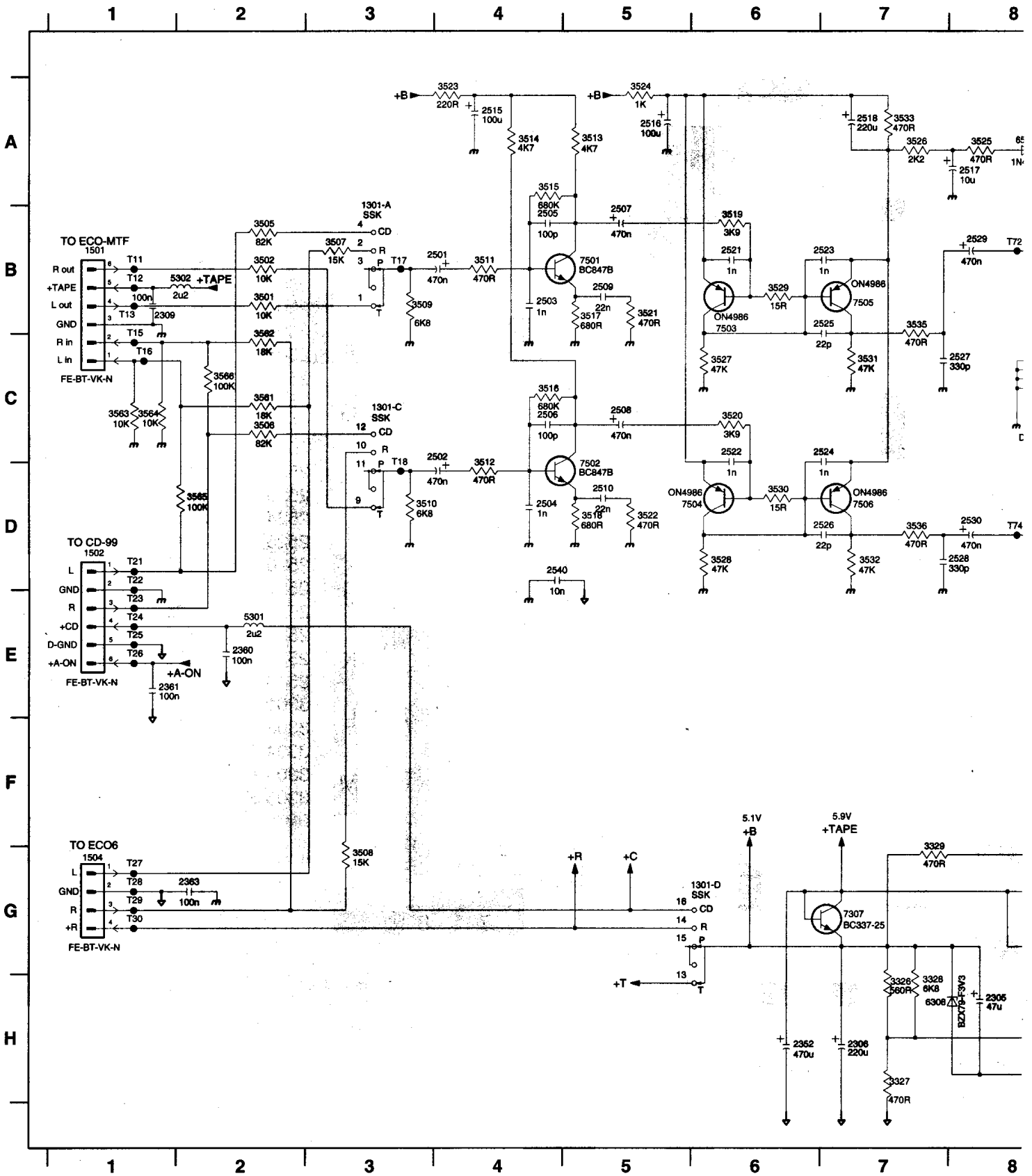
14

15

A  
B  
C  
D  
E  
F  
G  
H

# AF BOARD (AZ1045) - CIRCUIT DIAGRAM

T11 B1	T22 D1	T30 G1	T42 E13	T51 F13	T59 D13	T76 C10	1301-D G5	1502 D1	2338 D10	2347 B12	2357 C10	2503 B4	2515 A4	2525 B:
T12 B1	T23 E1	T31 B14	T43 E13	T52 G13	T64 C12	T77 C10	1301-E H11	1504 G1	2340 C13	2348 D12	2358 D10	2504 D4	2516 A5	2526 D:
T13 B1	T24 E1	T32 C14	T44 E14	T53 G13	T65 B13	T78 B10	1303 B15	1510 C9	2341 C13	2349 B13	2359 E10	2505 B4	2517 A7	2527 C:
T15 C1	T25 E1	T33 C15	T45 E13	T54 G13	T71 B9	1001 D15	1311 H13	2305 H8	2342 D12	2350 D12	2360 E2	2506 C4	2518 A7	2528 D:
T16 C1	T26 E1	T34 D15	T46 F13	T55 H13	T72 B8	1002 E15	1313 F13	2306 H7	2343 B11	2351 B13	2361 E1	2507 B5	2521 B6	2529 B:
T17 B3	T27 G1	T36 E15	T47 F13	T56 H13	T73 C9	1301-A A3	1314 E13	2307 H8	2344 C11	2352 D13	2363 G2	2508 C5	2522 C6	2530 D:
T18 D3	T28 G1	T37 D15	T48 F13	T57 C13	T74 D8	1301-B G11	1318 D15	2309 B1	2345 B12	2352 H6	2501 B4	2509 B5	2523 B7	2531 B:
T21 D1	T29 G1	T41 E13	T49 F13	T58 D13	T75 D9	1301-C C3	1601 B1	2337 B10	2346 C12	2353 D11	2502 C4	2510 D5	2524 C7	2532 D:



2533 B9	3306 D11	3323 H9	3333 F11	3508 G3	3516 C4	3524 A5	3532 D7	3543 B9	3565 D1	7301 C12	7314 D11	9302 D9
2534 C9	3307 C13	3325 H8	3334 E10	3509 B3	3517 B5	3525 A8	3533 A7	3544 D9	3566 C2	7303 G8	7501 B5	9307 C9
2540 D4	3311 B14	3326 H7	3335 E11	3510 D3	3518 D5	3526 A7	3535 B7	3545 B8	5301 E2	7304 G8	7502 D5	
3301 C10	3312 C14	3327 H7	3501 B2	3511 B4	3519 B6	3527 C6	3536 D7	3546 D8	5302 B2	7305 H9	7503 B6	
3302 D10	3313 B10	3328 H7	3502 B2	3512 D4	3520 C6	3528 D6	3537 B9	3561 C2	6308 H7	7306 H9	7504 D6	
3303 B11	3314 C10	3329 G7	3505 B2	3513 A5	3521 B5	3529 B6	3538 D9	3562 C2	6311 E11	7307 G7	7505 B7	
3304 C11	3321 G9	3331 F10	3506 C2	3514 A4	3522 D5	3530 D6	3541 B9	3563 C1	6316 C13	7312 C13	7506 D7	
3305 C11	3322 G9	3332 F11	3507 B3	3515 A4	3523 A4	3531 C7	3542 D9	3564 C1	6501 A8	7313 C11	9301 B9	

9

10

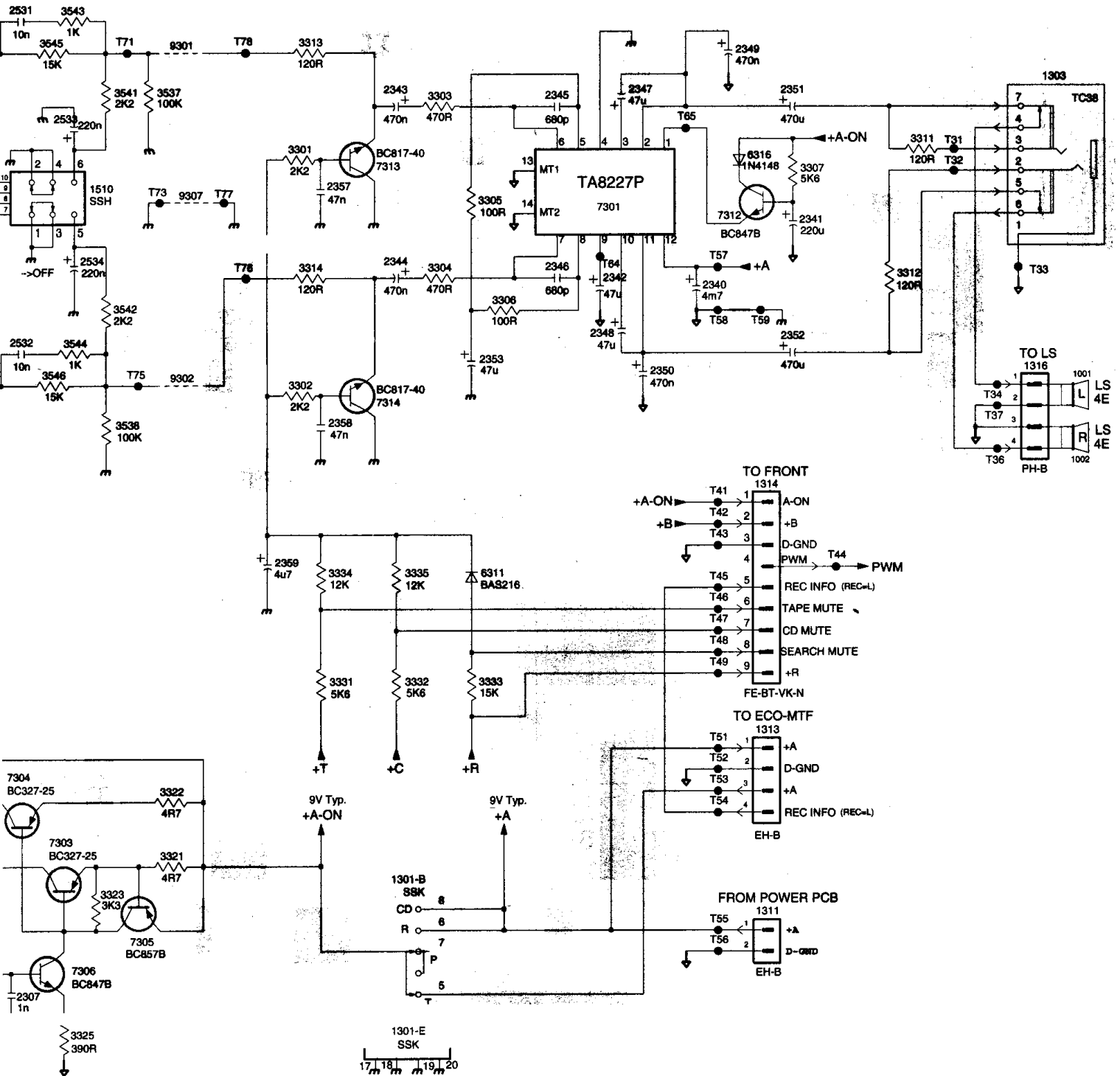
11

12

13

14

15



9

10

11

12

13

14

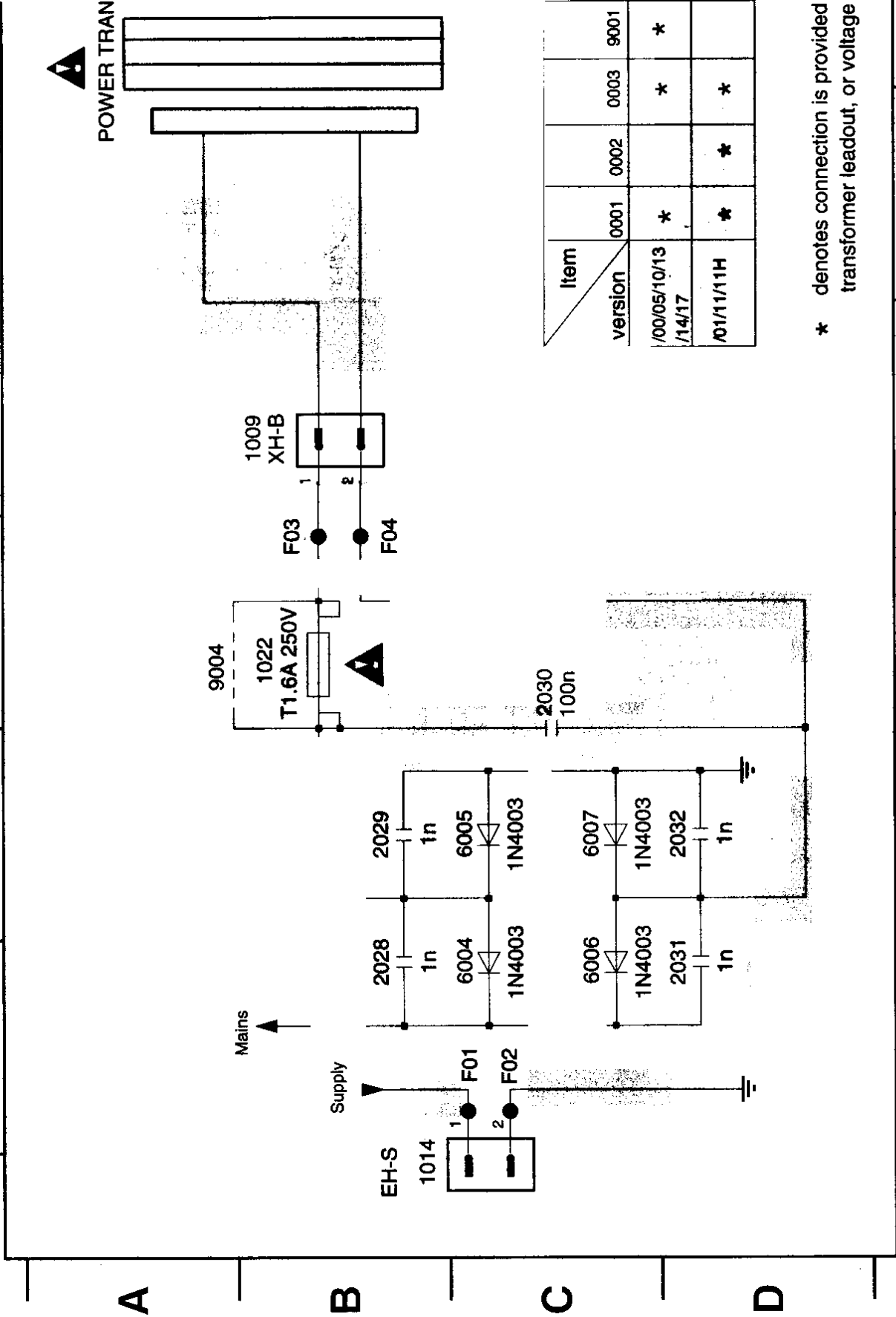
15

A  
B  
C  
D  
E  
F  
G  
H

# POWER BOARD - CIRCUIT & LAYOUT DIAGRAM

8-1

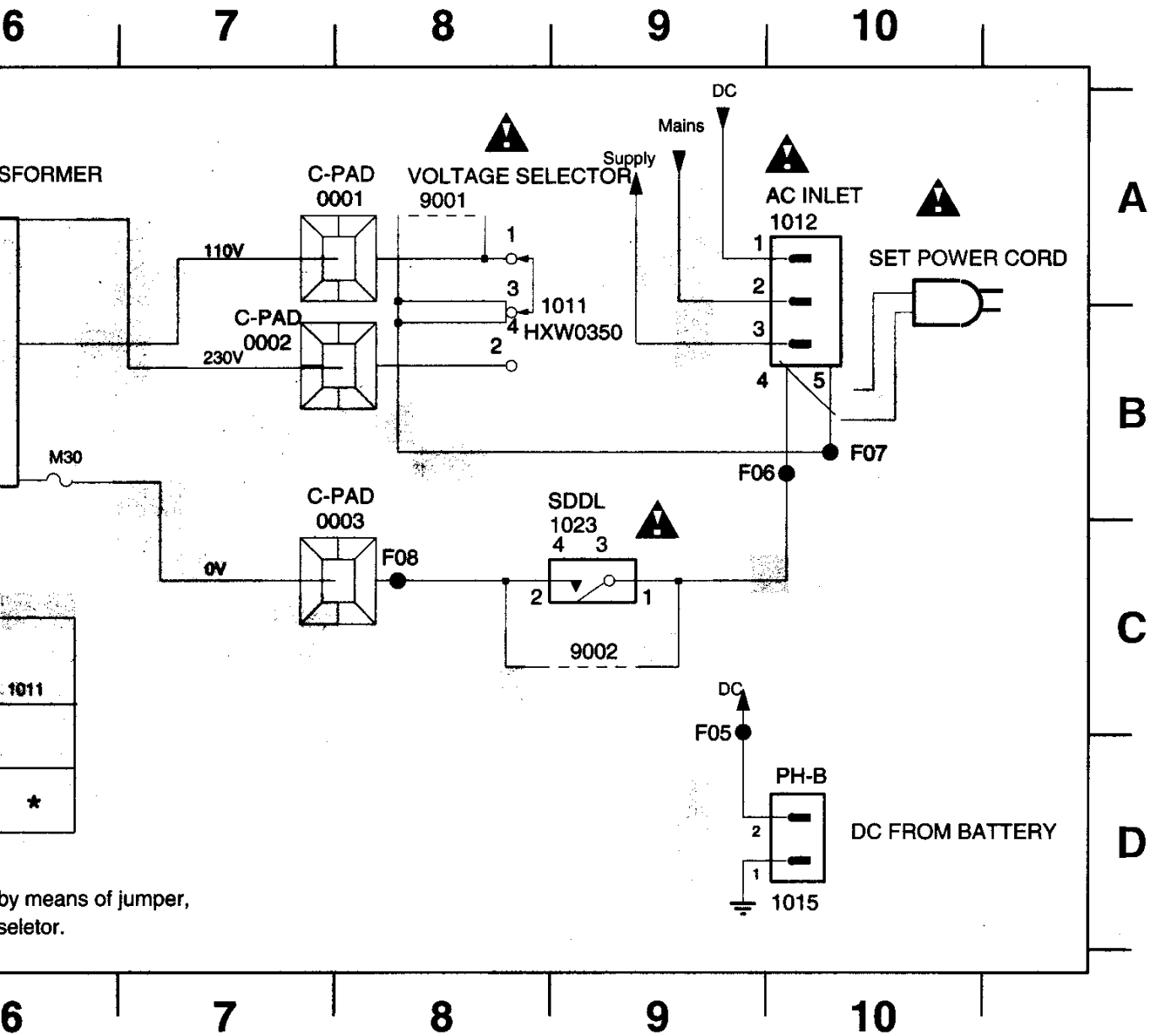
1 2 3 4 5



Item	0001	0002	0003	9001
version				
/00/05/10/13	*		*	*
/14/17				
/01/11/11H	*	*	*	

\* denotes connection is provided transformer leadout, or voltage

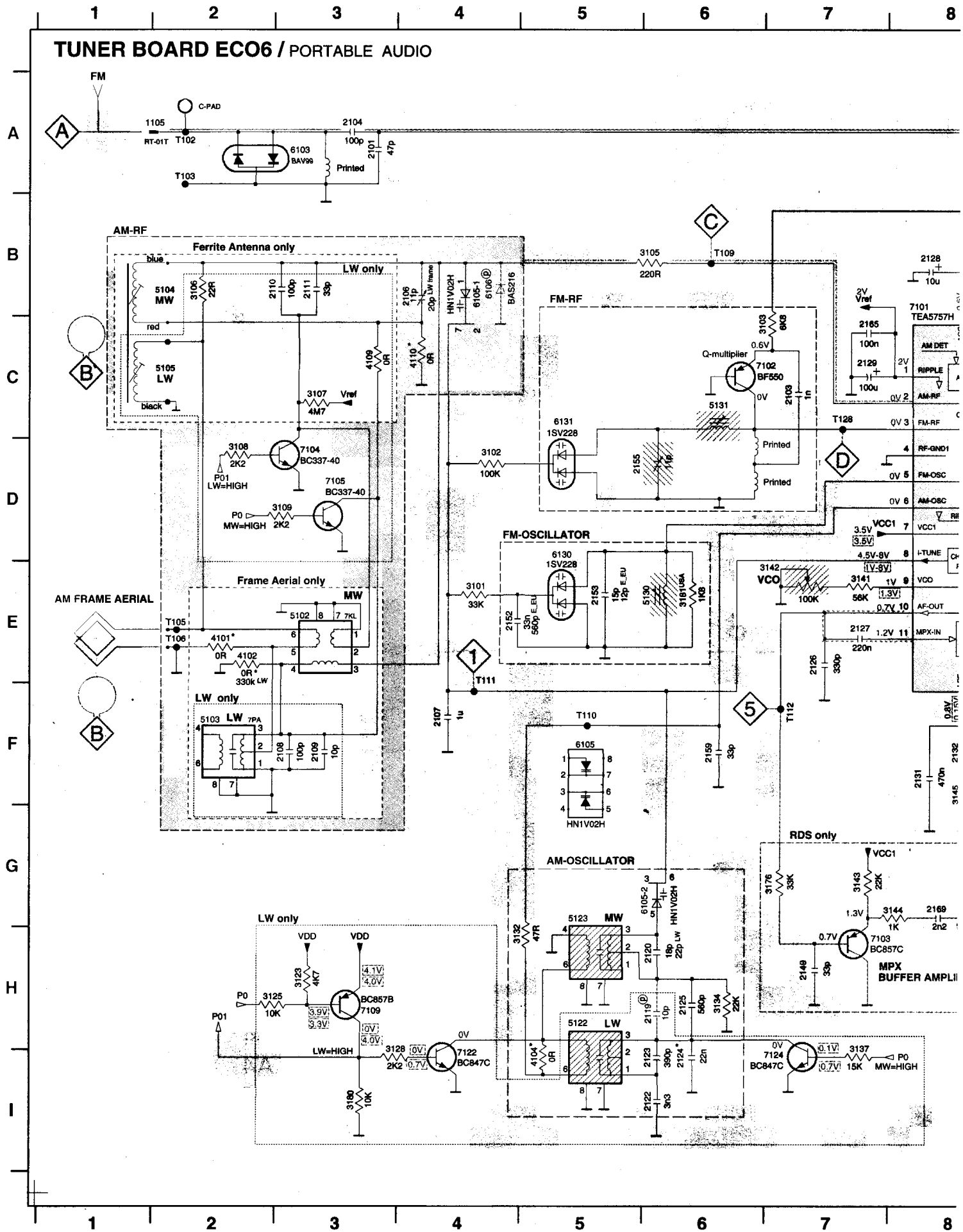
1 2 3 4 5



- F01 C1
- F02 C1
- F03 B3
- F04 B3
- F05 D9
- F06 B9
- F07 B10
- F08 C8
- 0001 A7
- 0002 B7
- 0003 C7
- 1009 B4
- 1011 A9
- 1012 A10
- 1014 B1
- 1015 D10
- 1022 B3
- 1023 B9
- 2028 B1
- 2029 B2
- 2030 C3
- 2031 D1
- 2032 D2
- 6004 C1
- 6005 C2
- 6006 C1
- 6007 C2
- 9001 A8
- 9002 C9
- 9004 A3

by means of jumper,  
selector.

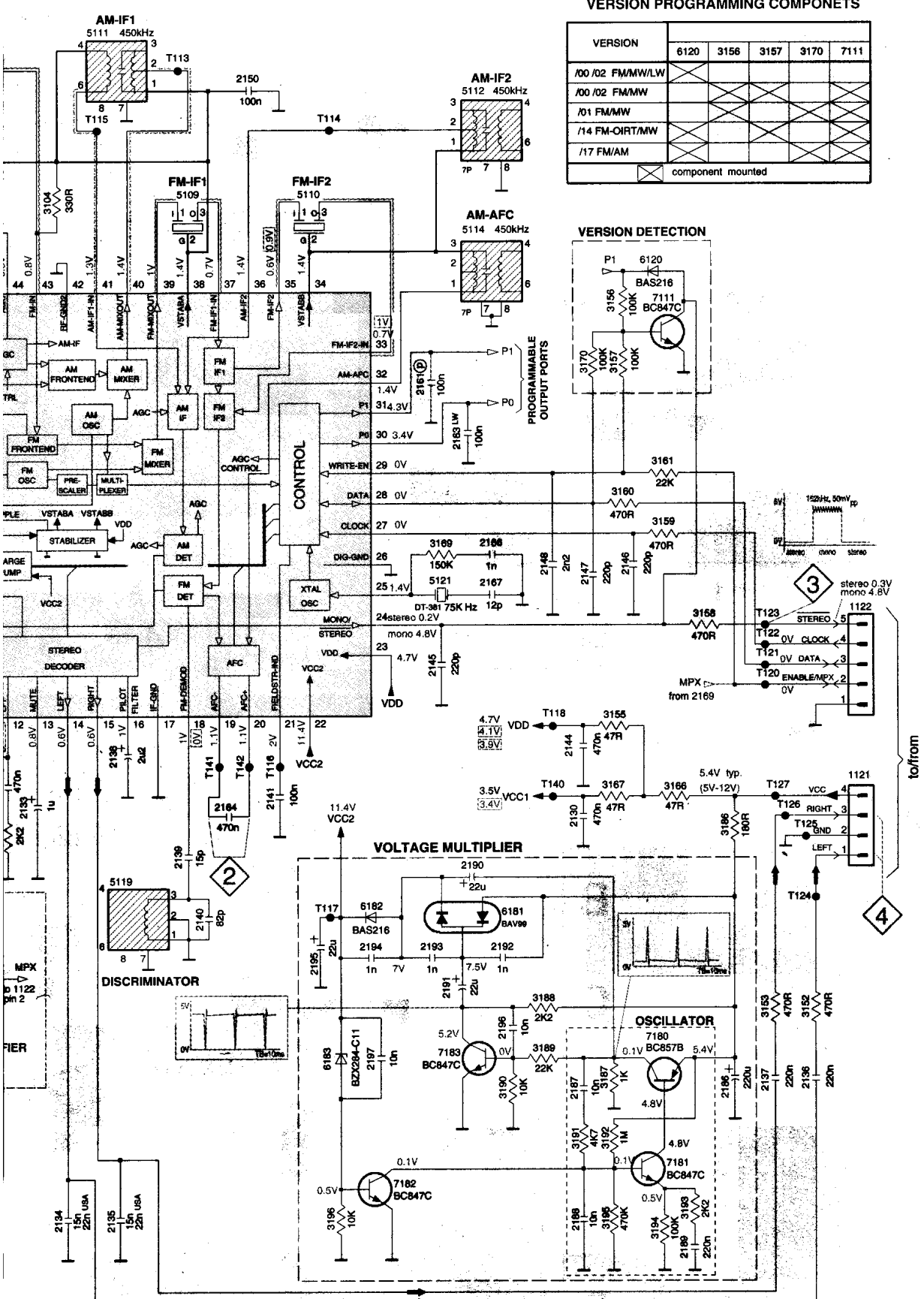
# TUNER BOARD ECO6 - CIRCUIT DIAGRAM



**LEGEND**

- \* ... only assembled in FM/AM-version
- Ⓟ... for provision only
- USA ... for USA version only
- LW ... for LW version only
- LW frame ... for LW version with frame aerial only
- E\_EU ... for East European version only
- SMD jumper
- 41xx OR
- EVM

9 10 11 12 13 14

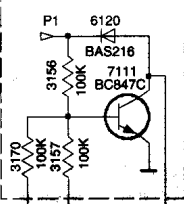


VERSION PROGRAMMING COMPONENTS

VERSION	6120	3156	3157	3170	7111
/00 /02 FM/MW/LW					
/00 /02 FM/MW					
/01 FM/MW					
/14 FM-OIRT/MW					
/17 FM/AM					

component mounted

VERSION DETECTION

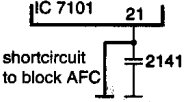
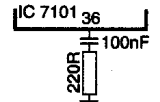
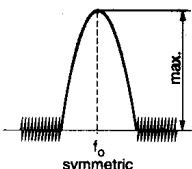
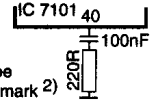
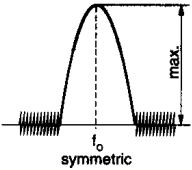
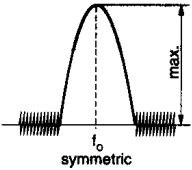


- A 1105 A1 5123 G5
- 1121 F14 5130 E6
- 1122 E14 5131 C6
- 2101 A3 6103 A3
- 2103 C7 6105-1 B4
- 2104 A3 6105-2 B6
- 2106 B4 6106 B4
- 2107 F4 6120 B13
- 2108 F3 6130 D5
- 2109 F3 6131 C5
- 2110 B2 6181 G12
- 2111 B3 6182 G11
- 2119 H6 6183 H10
- 2120 H6 7101 B8
- 2122 I6 7102 C7
- 2123 I6 7103 H7
- 2124 I6 7104 D3
- 2125 H6 7105 D3
- 2126 E7 7109 H3
- 2127 E7 7111 C13
- 2128 B8 7122 I4
- 2129 C7 7124 I7
- 2130 F12 7180 H13
- 2131 F8 7181 H3
- 2132 F8 7182 I11
- 2133 F8 7183 H11
- 2134 I9 7102 A2
- 2135 I9 7103 A2
- 2136 H14 7105 E2
- 2137 H13 7106 E2
- 2138 F9 7108 B6
- 2139 G9 7109 E4
- 2140 G10 7111 F4
- 2141 F10 7112 F7
- 2144 F12 7113 A9
- 2145 E11 7114 A10
- 2147 E12 7115 A9
- 2148 D12 7116 F10
- 2149 H7 7118 F12
- 2150 A10 7120 E14
- 2152 E4 7121 E14
- 2153 E5 7122 E14
- 2155 D5 7123 E14
- 2159 F6 7124 G14
- 2161 C11 7125 F14
- 2163 D11 7126 F14
- 2164 F10 7127 F14
- 2165 C7 7128 C7
- 2166 D12 7140 F12
- 2167 E12 7141 F10
- 2169 G8 7142 F10
- 2166 H13
- 2167 H12
- 2168 I12
- 2169 I13
- 2190 G11
- 2191 G11
- 2192 G12
- 2193 G11
- 2194 G11
- 2195 G10
- 2196 H12
- 2197 H11
- 3101 E4
- 3102 D4
- 3103 C8
- 3104 B8
- 3105 B6
- 3106 B2
- 3107 C3
- 3108 D2
- 3109 D3
- 3123 H3
- 3125 H2
- 3128 I3
- 3132 H4
- 3134 H6
- 3137 I7
- 3141 E7
- 3142 E7
- 3143 G7
- 3144 G8
- 3145 F8
- 3152 H14
- 3153 H14
- 3155 F12
- 3156 C12
- 3157 C12
- 3158 E13
- 3159 D13
- 3160 D12
- 3161 D13
- 3166 F13
- 3167 F12
- 3169 D11
- 3170 C12
- 3176 G7
- 3180 I3
- 3181 E6
- 3186 F13
- 3187 H13
- 3188 H12
- 3189 H12
- 3190 H12
- 3191 I12
- 3192 I12
- 3193 I13
- 3194 I13
- 3195 I12
- 3196 I10
- 4101 E2
- 4102 E2
- 4104 I5
- 4109 C3
- 4110 C4
- 5102 E3
- 5103 F2
- 5109 B9
- 5110 B10
- 5111 A9
- 5112 A11
- 5114 B11
- 5119 G9
- 5121 E11
- 5122 H5

.V FM mode stereo  
 .V MW mode  
 .V LW mode  
 Pages measured while  
 is tuned to a strong transmitter

**Signal path**  
 — FM  
 — AM  
 — MPX (Audio Frequency)  
 → AF - left/right

**TUNER ADJUSTMENT TABLE ( ECO6 FM/MW- and FM/MW/LW - versions with AM-frame aerial )**

Waverange	Input frequency	Input	Tuned to	Adjust	Output	Scope/Voltmeter
<b>VARICAP ALIGNMENT</b>						
<b>FM</b> 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)			108MHz	5130	◇ 1	8V ±0.2V
			87.5MHz (65.81MHz)	check		4.3V ±0.5V (1.2V ±0.5V)
<b>MW</b> FM/AM-version, 10kHz grid 530 - 1700kHz			1700kHz	5123	◇ 1	8V ±0.2V
			530kHz	check		1.1V ±0.4V
FM/MW-version, 9kHz grid 531 - 1602kHz			1602kHz	5123	◇ 1	6.9V ±0.2V
			531kHz	check		1.1V ±0.4V
<b>LW</b>  153 - 279kHz			279kHz	5122	◇ 1	8V ±0.2V
			153kHz	check		1.1V ±0.4V
<b>MW</b> FM/MW/LW- version, 9kHz grid 531 - 1602kHz			1602kHz	5123	◇ 1	8V ±0.2V
			531kHz	check		1.1V ±0.4V
<b>FM IF</b>						
<b>FM</b>	10.7MHz, 45mV continuous wave	◇ D		5119	◇ 2	0 ± 3 mV DC
<b>FM RF</b>						
<b>FM</b> 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)	108MHz	◇ A mod=1kHz f=±22.5kHz	108MHz	2155	◇ 4	MAX
	87.5MHz (65.81MHz)		87.5MHz (65.81MHz)	5131		
<b>VCO</b>						
<b>FM</b>	98MHz, 1mV continuous wave	◇ A	98MHz	3142	◇ 3	152kHz ±1kHz <sup>1)</sup>
<b>AM IF</b>						
<b>MW</b>	450kHz  connect pin 6 of IC 7101 (AM Osc.) with 3.3k to Vcc	◇ C f=±10kHz V <sub>RF</sub> = 0.5mV (as low as possible)		5111	◇ 5	
				5112		
<b>AM AFC</b> <b>MW</b>		◇ C continuous wave V <sub>RF</sub> = 2mV		5114	◇ 2	0 ± 2 mV DC
<b>AM RF <sup>3)</sup></b>						
<b>MW <sup>4)</sup></b> FM/MW/LW- and FM/MW-version (9kHz grid) 531 - 1602kHz	1494kHz	◇ B	1494kHz	2106	◇ 5	
	558kHz		558kHz	5102		
<b>LW</b>	198kHz	◇ C	198kHz	5103	◇ 5	
<b>MW</b> FM/AM-version, 10kHz grid 530 - 1700kHz	1500kHz	f = ±30kHz V <sub>RF</sub> as low as possible	1500kHz	2106		
	560kHz		560kHz	5102		

ECO6, Sys + PA with frame aerial, 070799

Use Service Testprogram. By selecting the TUNER TEST test frequencies will be stored as preset frequencies automatically.

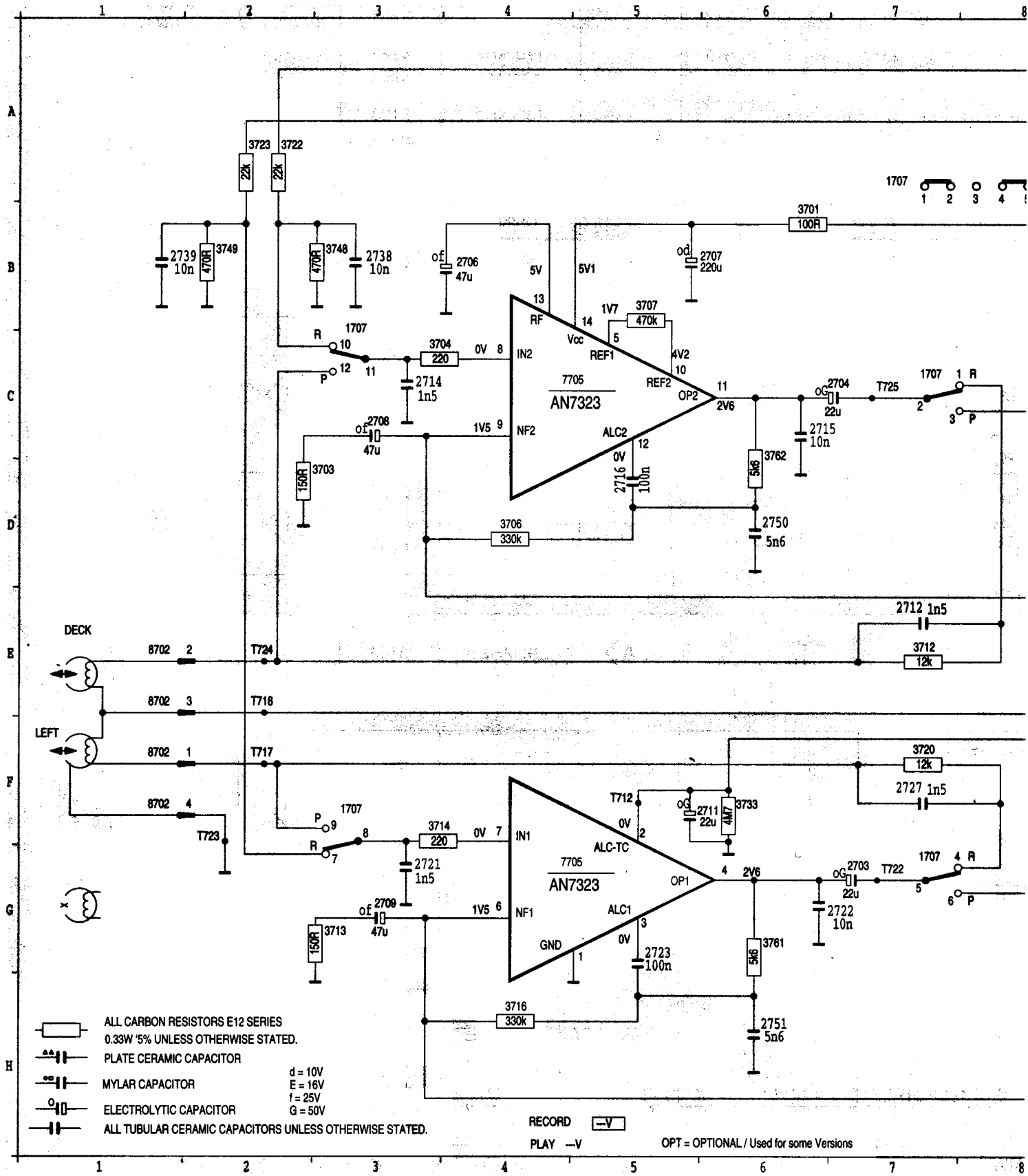
<sup>1)</sup> If sensitivity of frequency counter is too low adjust to max. channel separation (input signal: stereo left 90% + 9%, adjust output on right channel to minimum)<sup>2)</sup> RC network serves for damping the IF-filter while adjusting the other one.<sup>3)</sup> For AM RF adjustments the original frame antenna has to be used !<sup>4)</sup> MW has to be aligned before LW.

Repeat

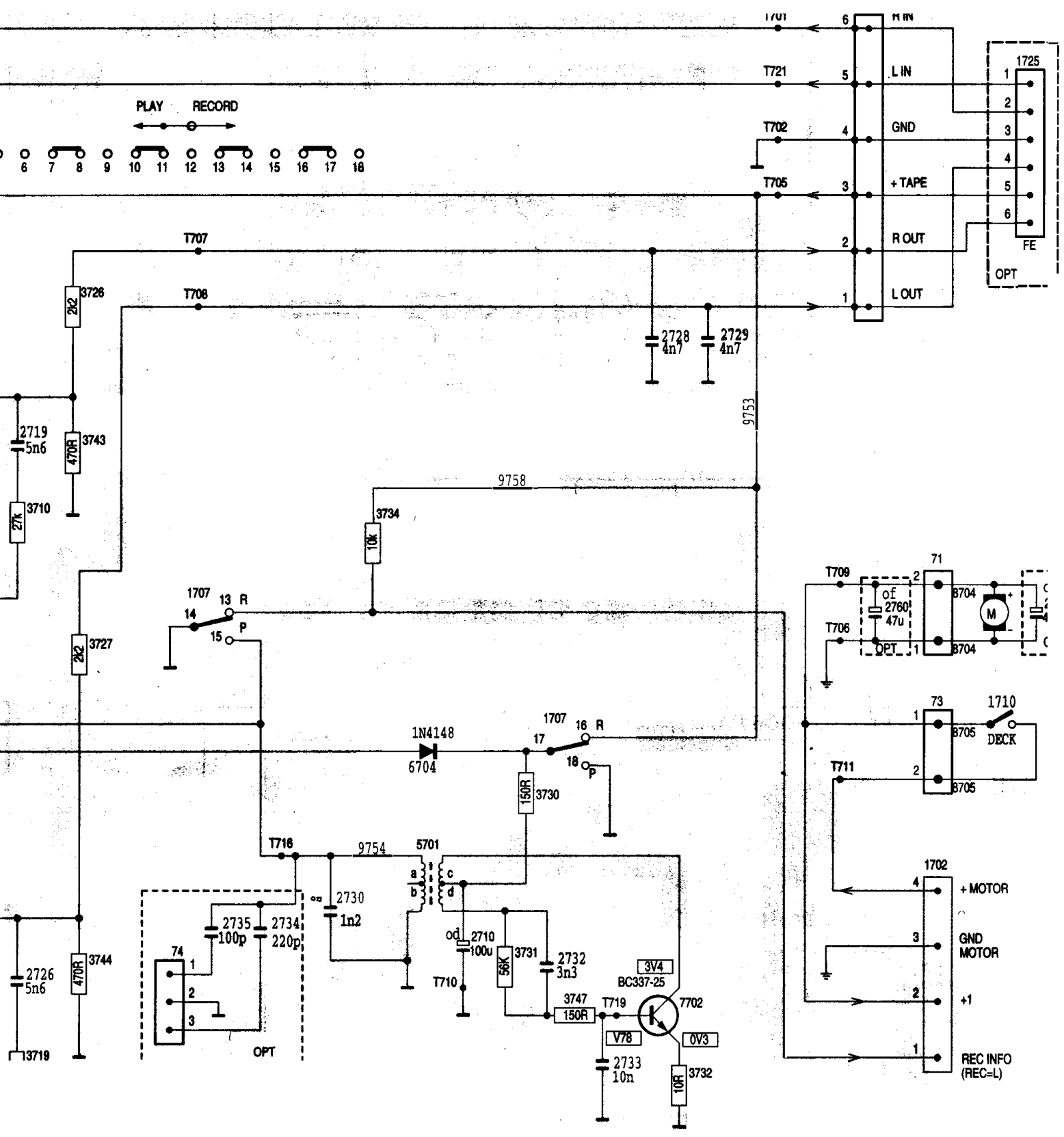


# RECORDER BOARD - CIRCUIT DIAGRAM

71	D15	1707	C 3	1709	A14	2706	B 4	2711	F 6	2719	C 8	2727	F 7	2733	H13	2750	D 6	3703	D 3	3712	E 7	3720	F 7
73	E15	1707	G 7	1710	E15	2707	B 6	2712	E 7	2721	G 3	2728	C13	2734	G10	2751	H 6	3704	C 3	3713	G 3	3722	A 2
74	G 9	1707	C 7	1725	A15	2708	C 3	2714	C 3	2722	G 7	2729	C13	2735	G10	2760	E14	3706	D 4	3714	F 3	3723	A 2
1702	G15	1707	E 9	2703	G 7	2709	G 3	2715	C 6	2723	G 5	2730	G11	2738	B 3	2799	E15	3707	B 5	3716	F 4	3726	B 9
1707	F 3	1707	E12	2704	C 7	2710	G12	2716	D 5	2726	G 8	2732	G12	2739	B 1	3701	B 6	3710	D 8	3719	H 8	3727	E 9



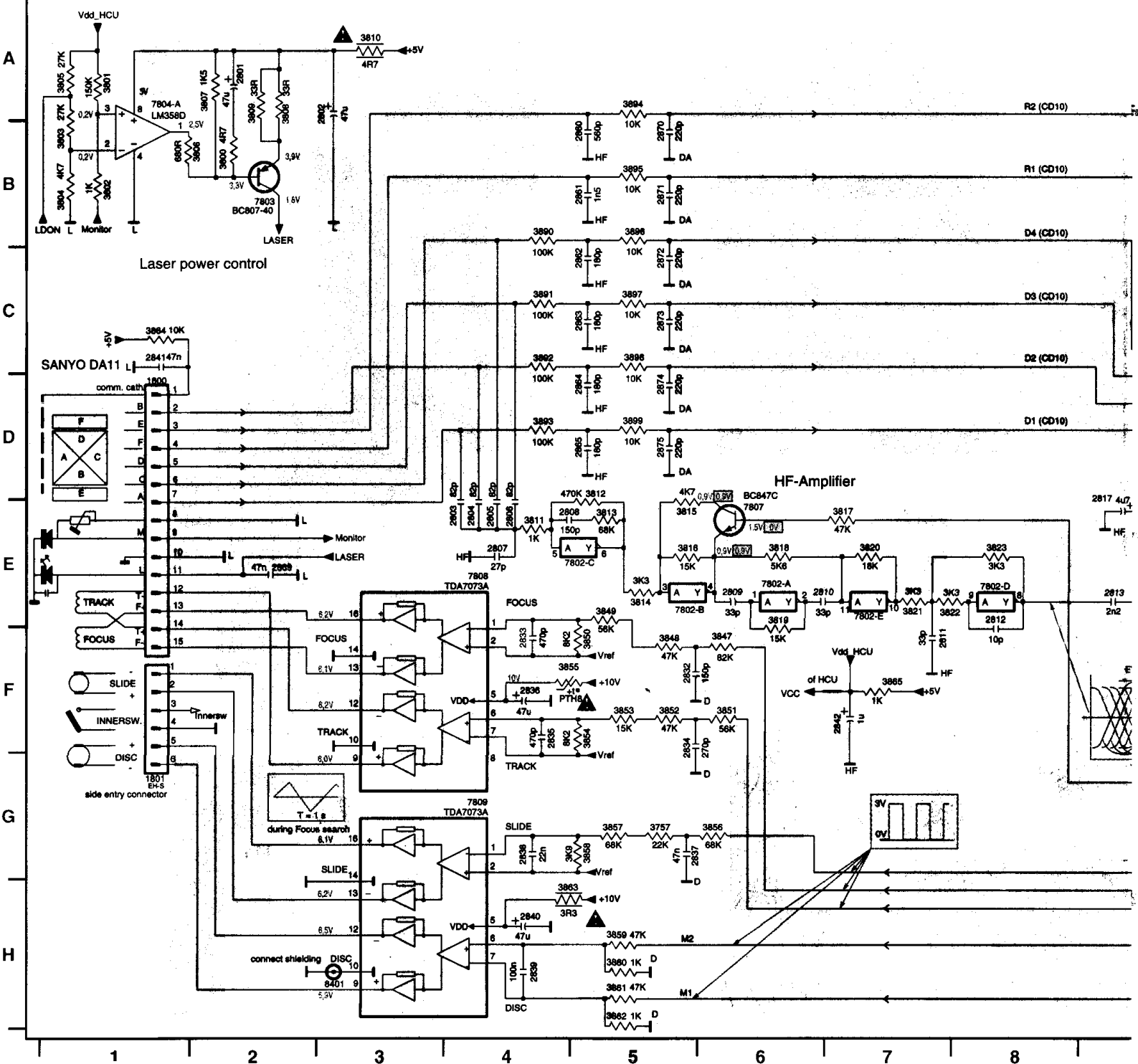
3730	F12	3743	C 9	3761	7705	G 4	8702	9753	T705	T110	T718
3731	G12	3744	G 9	3762	7705	G C 4	8704	9754	T706	T711	T719
3732	H13	3747	H 1	5701	8702	F 1	8704	9758	T707	T712	T721
3733		3748	B 3	6704	8702		8705	T701	T708	T716	T722
3734		3749	B 2	7702	8702		8705	T702	T709	T717	T723



CD99 DA11 - CIRCUIT DIAGRAM

1800 D1	2806 E4	2813 E9	2820 B10	2827 C14	2834 F5	2841 C1	2865 D5	2875 D5	3801 A1	3808 A2	3815 E5	3822 E7	3829 A11	3838 D14	3845 G12
1801 G1	2807 E4	2814 E9	2821 B11	2828 C14	2835 F4	2842 F7	2869 E2	3728 A10	3802 B1	3809 A2	3816 E5	3823 E8	3830 B12	3839 D14	3846 F10
2801 A2	2808 E4	2815 E10	2822 B11	2829 G14	2836 F4	2860 B5	2870 B5	3745 G12	3803 B1	3810 A3	3817 E7	3824 E9	3831 B14	3840 D15	3847 F6
2802 A3	2809 E6	2816 F10	2823 B11	2830 F13	2837 G5	2861 B5	2871 B5	3750 G11	3804 B1	3811 E4	3818 E6	3825 E9	3832 B14	3841 E14	3848 F5
2803 E4	2810 E6	2817 D9	2824 B11	2831 G12	2838 G4	2862 C5	2872 C5	3751 G11	3805 A1	3812 D5	3819 E6	3826 D10	3834 B14	3842 G14	3849 E5
2804 E4	2811 F7	2818 D9	2825 B12	2832 F5	2839 H4	2863 C5	2873 C5	3757 G5	3806 B2	3813 E5	3820 E7	3827 D9	3835 C14	3843 G14	3850 F5
2805 E4	2812 E8	2819 B10	2826 A13	2833 F4	2840 H4	2864 D5	2874 D5	3800 B2	3807 A2	3814 E5	3821 E7	3828 A10	3837 C14	3844 G13	3851 F6

CD Part (sheet 1)



- 3852 F5
- 3853 F5
- 3854 F5
- 3855 F4
- 3856 G6
- 3857 G5
- 3858 G5
- 3859 H5
- 3860 H5
- 3861 H5
- 3862 H5
- 3863 H4
- 3864 C1
- 3865 F7
- 3890 B4
- 3891 C4
- 3892 C4
- 3893 D4
- 3894 A5
- 3895 B5
- 3896 B5
- 3897 C5
- 3898 C5
- 3899 D5
- 7800 D12
- 7802-A E6
- 7802-B E5
- 7802-C E5
- 7802-D E8
- 7802-E E7
- 7802-F F8
- 7803 B2
- 7804-A A1
- 7804-B C3
- 7807 E6
- 7808 E4
- 7809 G4
- 8401 H3

- 1821 D10
- 1822 E4
- 1823 B10
- 1824 D10
- 1824 E2
- 2702 E2
- 2703 E4
- 2704 E3
- 2843 A5
- 2844 A5
- 2845 A6
- 2846 A7
- 2847 A8
- 2848 C5
- 2849 C5
- 2850
- 2851
- 2852
- 2853
- 2854

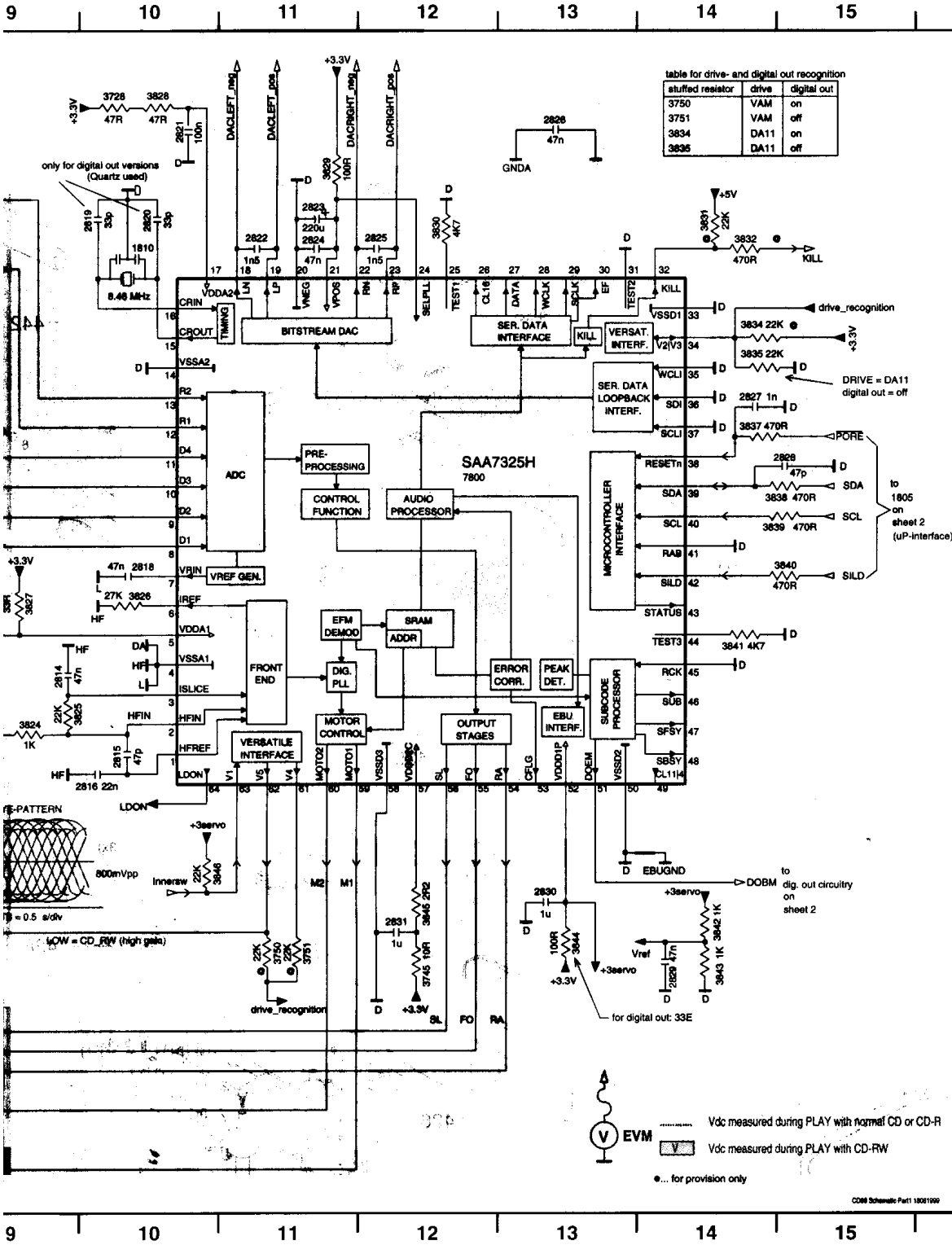


table for drive- and digital out recognition

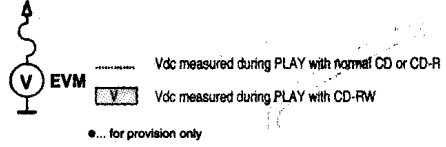
stuffed resistor	drive	digital out
3750	VAM	on
3751	VAM	off
3834	DA11	on
3835	DA11	off

CD Part (sheet 2)

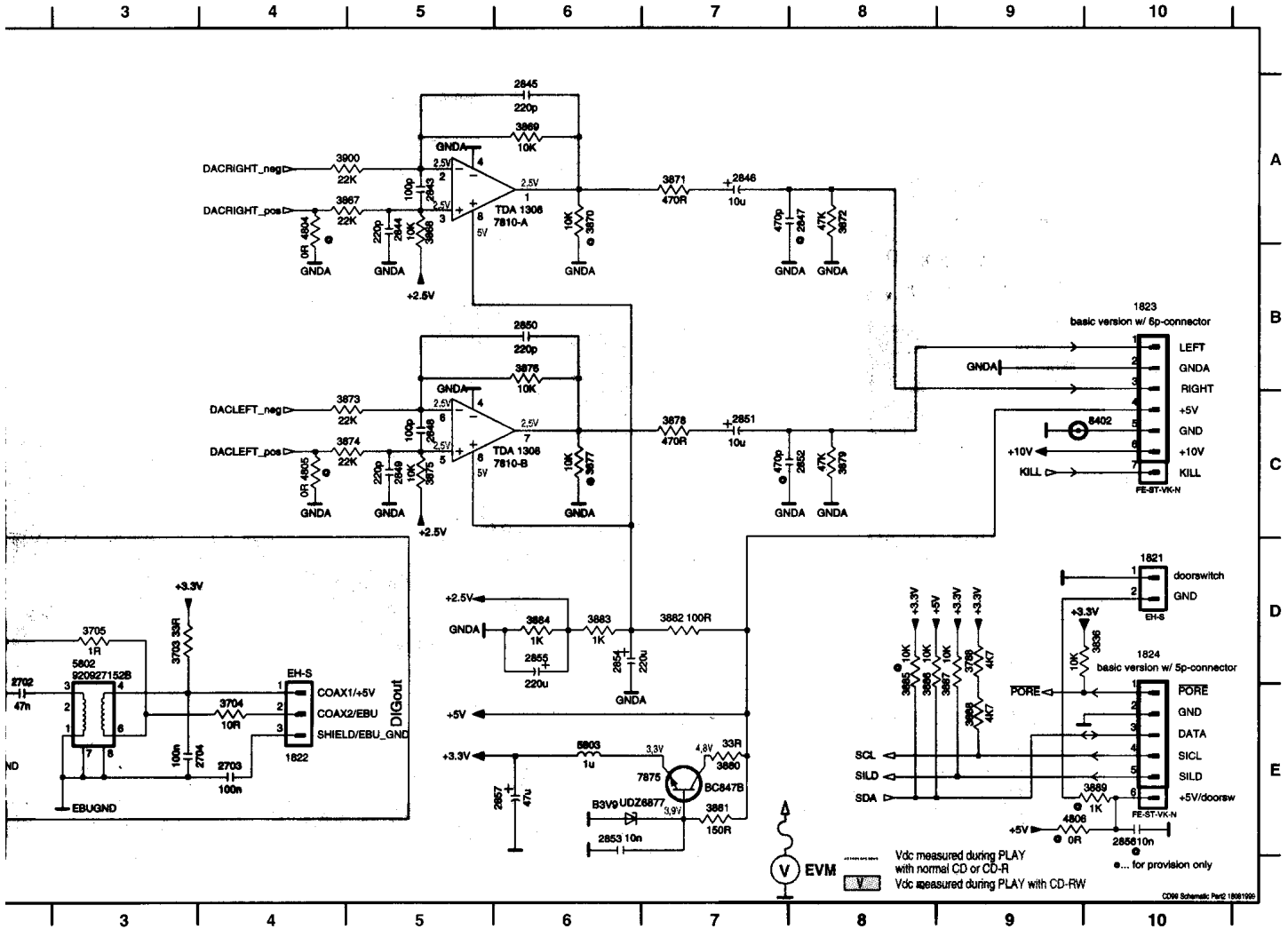
	optical out	COAX out
2701	47p	22p
2702	not stuffed	47n
2703	Jumper	100n
2704	not stuffed	100n
5802	not stuffed	stuffed
3701	100R	270R
3702	not stuffed	470R
3703	33R	not stuffed
3705	1R	not stuffed

from 7800 on sheet1

digital out circuitry (not for all versions)



B6	2855 D6	3703 D3	3867 A5	3872 A8	3877 C6	3882 D7	3887 E9	4805 C4	7810-A A5
C7	2856 E10	3704 E4	3868 A5	3873 C5	3878 C7	3883 D6	3888 E9	4806 E9	7810-B C5
C8	2857 E6	3705 D3	3869 A6	3874 C5	3879 C8	3884 D6	3889 E10	5802 D3	7875 E7
E6	3701 E1	3788 E9	3870 A6	3875 C5	3880 E7	3885 E8	3900 A5	5803 E6	8402 C9
D6	3702 E2	3836 D10	3871 A7	3876 B6	3881 E7	3886 E8	4804 A4	6877 E7	



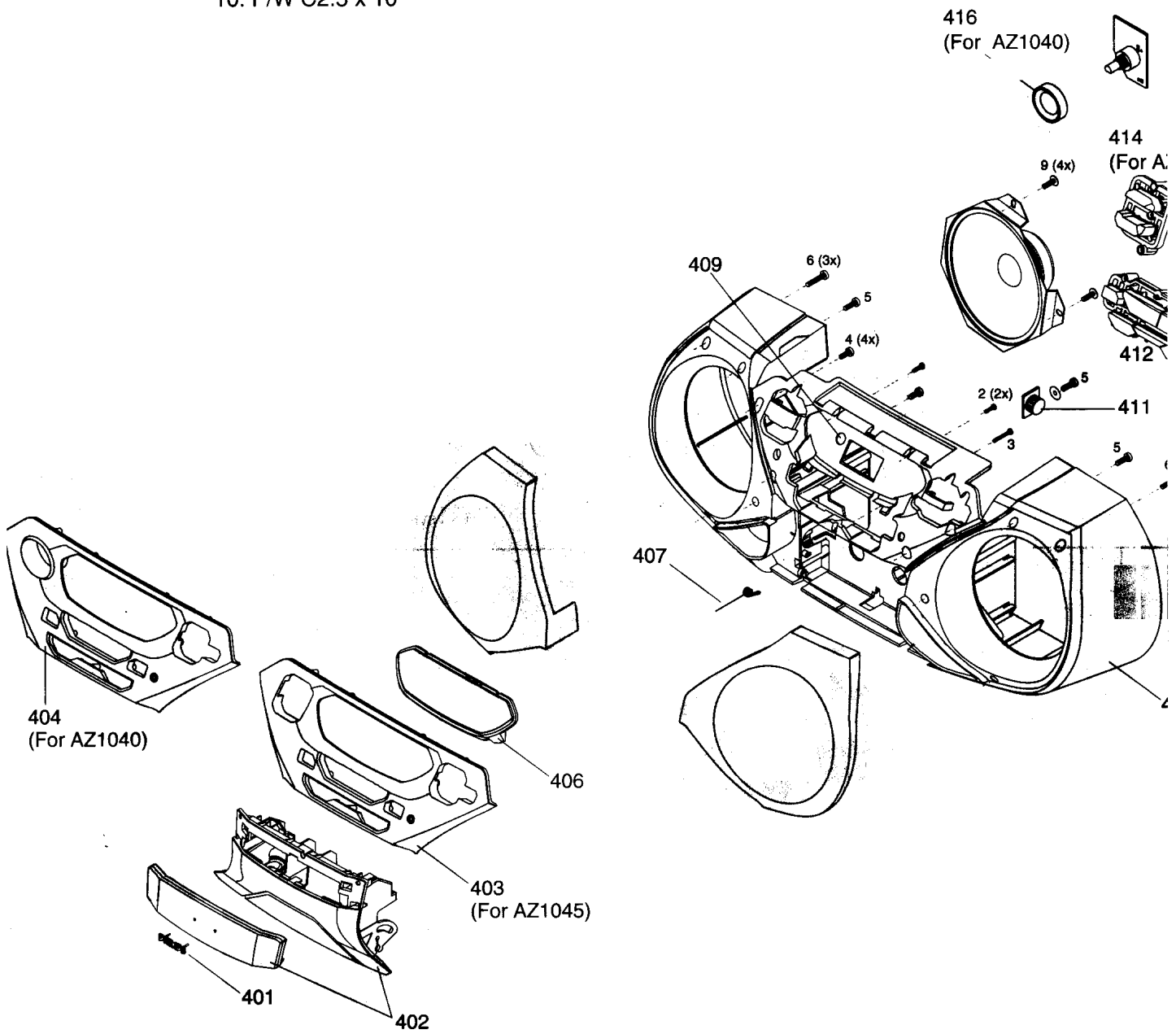
CD98 Schematic Part2 1/08/10/05

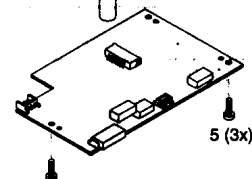
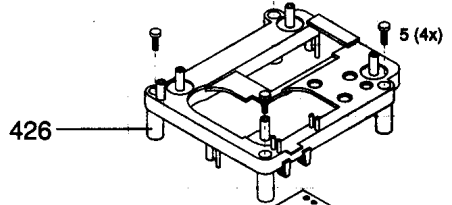
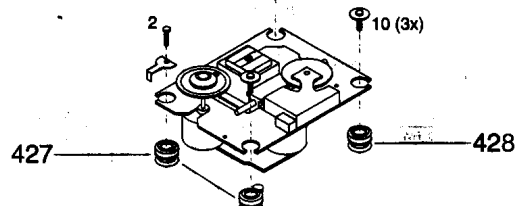
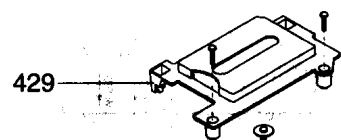
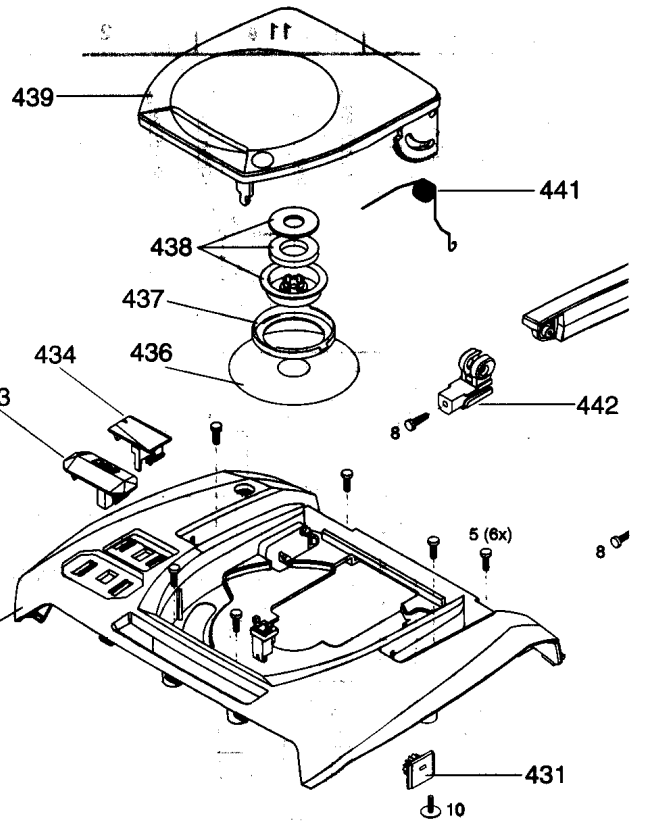
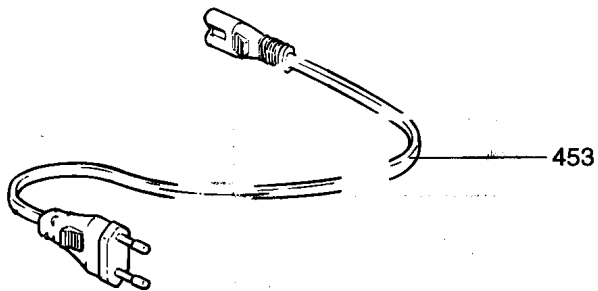
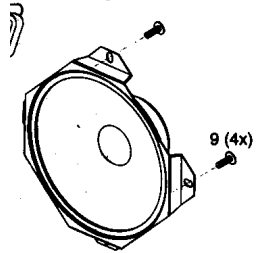
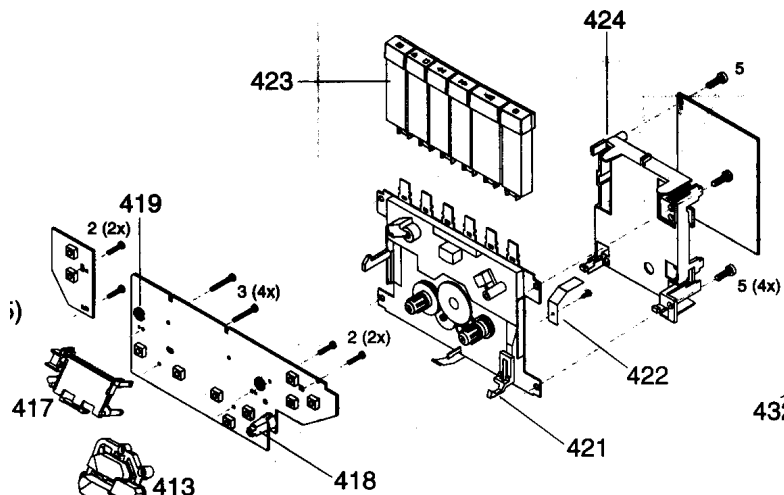
# EXPLODED VIEW DIAGRAM - CABINET

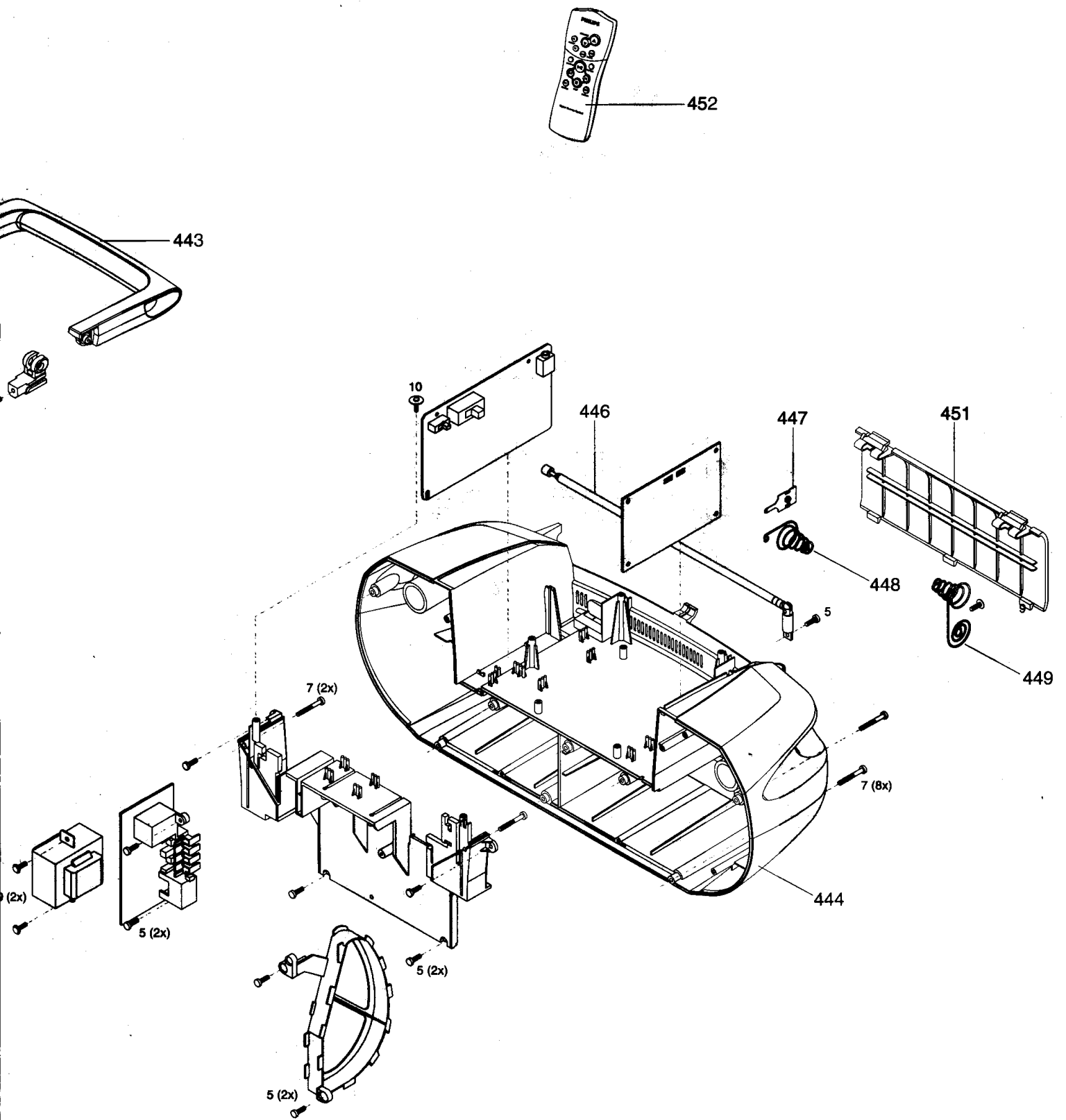
12-1

## SCREW LIST

- 1. T2 x 8
- 2. T2 x x10
- 3. T2 x 16
- 4. T3 x 8
- 5. T3 x 10
- 6. T3 x 16
- 7. T3 x 25
- 8. C4 x 13.5
- 9. P/W T3 x 10
- 10. P/W C2.5 x 10









**MECHANICAL PARTSLIST - CABINET**

401	3140 110 00130	Badge Philips	439	3140 114 32950	Door CD
402	3140 117 59540	Door Cass Assy (For AZ1040)	441	3140 111 00750	Spring CD
402	3140 117 59550	Door Cass Assy (For AZ1045)	442	4822 402 10724	Bracket Handle
403	3140 114 31190	Front Panel (For AZ1040)	443	3140 114 29770	Handle
404	3140 114 31100	Front Panel (For AZ1045)	444	3140 114 31010	Cabinet Rear
406	3140 113 22130	Lens CD	446	3140 118 71570	Antenna
407	4822 492 11776	Spring Cass Door	447	3140 111 21320	Contact Plate
408	3140 117 58920	Front Cab Assy Grill (For AZ1040/00/05/14)	448	4822 492 51961	Spring Compression
408	3140 117 59510	Front Cab Assy Grill (For AZ1040/17)	449	4822 492 51733	Spring Compression
408	3140 117 59530	Front Cab Assy Grill (For AZ1045/00/05)	451	4822 219 10699	Remote RC331401/01 (For AZ1045)
408	3140 117 59520	Front Cab Assy Grill (For AZ1045/17)	452	3140 114 28710	Battery Door
409	3140 114 30181	Lens Remote (For AZ1045)	453	4822 321 10249	Mains Cord (For AZ1040/00/14)
411	4822 529 10322	Damper Assy	453	4822 321 10886	Mains Cord (For AZ1040/05)
412	3140 114 31080	Keyset CD	453	4822 321 10249	Mains Cord (For AZ1045/00)
413	3140 114 31090	Keyset Tuner	453	4822 321 11466	Mains Cord (For -/17)
414	3140 114 31130	Keyset Up Down Volume (For AZ1045)	3140 115 27190	Instr manual (For AZ1040/00/05/14)	
416	3140 114 31220	Rotary Volume Knob (For AZ1040)	3140 115 27200	Instr manual (For AZ1040/17)	
417	3140 114 31050	Bracket Digital LCD	3140 115 27040	Instr manual (For AZ1045/00/05)	
418	3140 114 31060	LED Holder	3140 115 27210	Instr manual (For AZ1045/17)	
419	3140 114 31320	Lens LED Holder			
421	4822 691 10612	Tape Deck			
422	3140 111 20800	Spring Recording			
423	3140 114 31070	Keyset Cass			
424	3140 114 20430	Bracket Recording			
426	3140 114 31230	CD Mounting Frame			
427	4822 529 10387	Damper Rubber (40 DEG)			
428	4822 529 10386	Damper Rubber (30 DEG)			
429	4822 442 01096	CD Drive Cover			
431	4822 529 10322	Damper Assy			
432	3140 117 58950	Top Cabinet Assy			
433	3140 114 31110	Knob DBB			
434	3140 114 31120	Knob Mode			
436	4822 535 60096	Disc			
437	4822 532 13153	Ring (CD Lid)			
438	4822 532 12798	Pressure Ring			

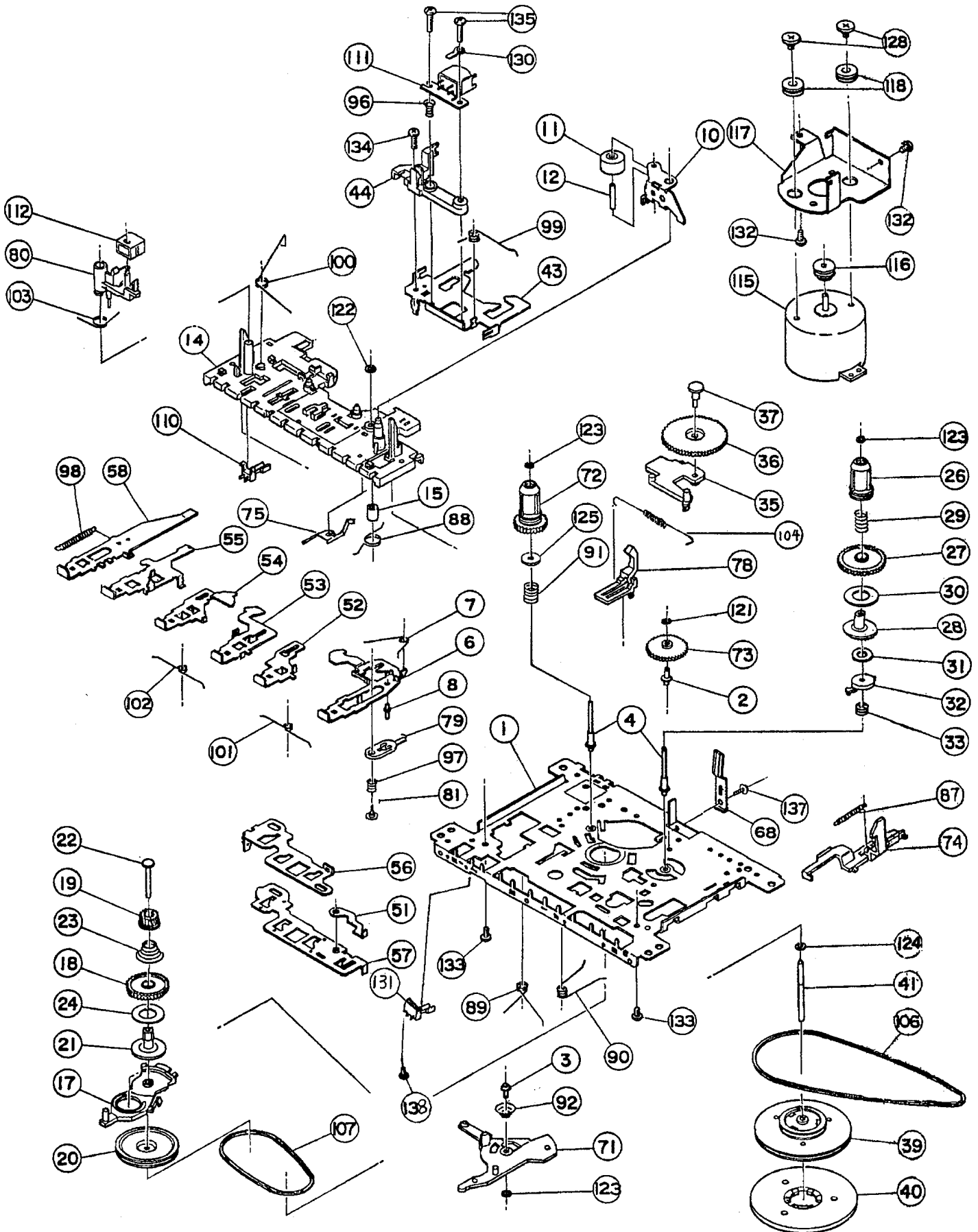
**Note: Only these parts mentioned in the list are normal service parts.**

**MECHANICAL PARTSLIST - TAPE DECK**

10	4822 528 70849	Pinch Roller Arm (B)	110	4822 278 90721	Leaf Switch
11	4822 528 70695	Pinch Roller Assy	111	4822 249 30218	MS18R-AKONI
74	4822 403 70968	Eject Hook (A)	112	4822 249 40306	E. Head
106	4822 358 31325	Main Belt 45.2 x 1.2	115	4822 361 21565	Motor EG-530AD-9B
107	4822 358 31124	Sub Belt 44.7 x 1.2	116	4822 528 81497	Motor Pulley

**Note Only these parts mentioned in the list are normal service parts.**

# XPLODED VIEW DIAGRAM - TAPE DECK



## ELECTRICAL PARTSLIST - FRONT BOARD (AZ1040)

**- CAPACITORS -**

2400	5322 122 32654	22nF 10% X7R 63V
2401	4822 124 22651	1,0µF 20% 50V
2403	4822 124 23432	100µF 20% 10V
2404	4822 124 23432	100µF 20% 10V
2405	5322 122 32531	100pF 5% NP0 50V
2406	5322 122 32531	100pF 5% NP0 50V
2407	5322 122 32531	100pF 5% NP0 50V
2408	5322 122 32531	100pF 5% NP0 50V
2409	5322 122 32531	100pF 5% NP0 50V
2410	5322 122 32531	100pF 5% NP0 50V
2411	5322 122 32448	10pF 5% NP0 63V
2412	4822 126 13838	100nF Y5V +80-20 50V
2413	5322 122 32448	10pF 5% NP0 63V
2415	4822 122 33127	2,2nF 10% X7R 63V
2416	4822 122 33127	2,2nF 10% X7R 63V
2422	5322 122 32654	22nF 10% X7R 63V
2423	5322 122 32448	10pF 5% NP0 63V
2424	5322 122 32448	10pF 5% NP0 63V
2425	4822 124 81151	22µF 50V
2426	5322 122 32531	100pF 5% NP0 50V
2427	4822 124 40248	10µF 20% 63V
2428	5322 122 32448	10pF 5% NP0 63V
2429	5322 122 32448	10pF 5% NP0 63V
2430	5322 122 32448	10pF 5% NP0 63V
2431	5322 122 32448	10pF 5% NP0 63V
2432	5322 122 32531	100pF 5% NP0 50V
2433	5322 122 32531	100pF 5% NP0 50V
2434	4822 122 33127	2,2nF 10% X7R 63V
2435	5322 122 32531	100pF 5% NP0 50V
2437	4822 126 13486	15pF 2% NP0 63V
2438	4822 126 13486	15pF 2% NP0 63V
2442	5322 122 31647	1nF 10% X7R 63V
2443	5322 122 31647	1nF 10% X7R 63V

**- RESISTORS -**

3401	4822 051 20223	22K 5% 0,1W
3404	4822 051 20472	4K7 5% 0,1W
3407	4822 051 20101	100R 5% 0,1W
3409	4822 117 10837	100K 1% 0,1W
3410	4822 051 20471	470R 5% 0,1W
3411	4822 116 83933	15K 1% 0,1W
3412	4822 051 20471	470R 5% 0,1W
3413	4822 051 20472	4K7 5% 0,1W
3414	4822 051 20472	4K7 5% 0,1W
3416	4822 051 20472	4K7 5% 0,1W
3417	4822 051 20472	4K7 5% 0,1W
3422	4822 051 10102	1K 2% 0,25W
3423	4822 051 10102	1K 2% 0,25W
3424	4822 051 10102	1K 2% 0,25W
3425	4822 051 10102	1K 2% 0,25W

**- RESISTORS -**

3428	4822 117 11449	2K2 1% 0,1W
3429	4822 117 11449	2K2 1% 0,1W
3430	4822 051 20472	4K7 5% 0,1W
3432	4822 117 10965	18K 1% 0,1W
3433	4822 051 20472	4K7 5% 0,1W
3434	4822 051 20101	100R 5% 0,1W
3435	4822 117 10833	10K 1% 0,1W
3436	4822 117 10833	10K 1% 0,1W
3437	4822 117 10833	10K 1% 0,1W
3438	4822 117 10833	10K 1% 0,1W
3445	4822 051 20101	100R 5% 0,1W
3446	4822 051 20223	22K 5% 0,1W
3447	4822 051 20223	22K 5% 0,1W
3449	4822 051 20273	27K 5% 0,1W
3450	4822 051 20273	27K 5% 0,1W
3452	4822 051 20332	3K3 5% 0,1W
3453	4822 051 20332	3K3 5% 0,1W
3454	4822 051 20332	3K3 5% 0,1W
3455	4822 051 20332	3K3 5% 0,1W
3456	4822 051 20471	470R 5% 0,1W
3457	4822 051 20471	470R 5% 0,1W
3458	4822 051 20471	470R 5% 0,1W
3460	4822 051 10102	1K 2% 0,25W
3462	4822 051 10102	1K 2% 0,25W
3464	4822 051 20223	22K 5% 0,1W
3470	4822 051 20105	1M 5% 0,1W
3471	4822 051 20333	33K 5% 0,1W
3472	4822 051 20105	1M 5% 0,1W
3473	4822 051 20124	120K 5% 0,1W
3474	4822 051 20109	10R 5% 0,1W
3475	4822 117 11454	820R 1% 0,1W
3482	4822 051 20822	8K2 5% 0,1W
3483	4822 051 20822	8K2 5% 0,1W
3484	4822 117 11383	12K 1% 0,1W
3486	4822 051 20273	27K 5% 0,1W
3488	4822 051 20562	5K6 5% 0,1W
3489	4822 051 20562	5K6 5% 0,1W
3490	4822 117 11448	180R 1% 0,1W
3491	4822 117 11448	180R 1% 0,1W
3496	4822 051 20333	33K 5% 0,1W
3497	4822 051 20333	33K 5% 0,1W
3498	4822 117 11503	220R 1% 0,1W
3499	4822 117 11503	220R 1% 0,1W
3550	4822 102 10447	Var Resistor 50K
3551	4822 051 20683	68K 5% 0,1W
4401	4822 051 20008	Jumper
4402	4822 051 20008	Jumper
4403	4822 051 20008	Jumper
4404	4822 051 20008	Jumper
4405	4822 051 20008	Jumper

**ELECTRICAL PARTSLIST - FRONT BOARD (AZ1040)****- RESISTORS -**

4406	4822 051 20008	Jumper
4407	4822 051 20008	Jumper
4426	4822 051 20008	Jumper
4497	4822 051 20008	Jumper
4498	4822 051 20008	Jumper
4499	4822 051 20008	Jumper

**- COILS & FILTER -**

1400	4822 242 73769	Filter CST4,19MGW
5400	2422 535 94279	Ind Fxd 100µH 5%
5401	4822 157 11823	Coil 2,2µH 5%
5402	4822 157 11823	Coil 2,2µH 5%

**- DIODES -**

6401	4822 130 11411	Diode BZX284-C3V3
6402	5322 130 34337	Diode BAV99
6404	4822 130 83059	LED TLUR4400
6406	9322 150 66682	LED VS LTL-2P3KSK
6407	9322 150 66682	LED VS LTL-2P3KSK
6409	4822 130 83757	Diode BAS216

**- IC & TRANSISTORS -**

7400	3140 110 50580	IC MUP TMP86CH29F
7401	9322 131 04668	IC SM M24C01-WMN6
7402	4822 130 60511	Trans BC847B
7405	4822 130 60511	Trans BC847B
7406	4822 130 60511	Trans BC847B
7408	4822 130 60511	Trans BC847B
7409	4822 130 60511	Trans BC847B

**- MISCELLANEOUS -**

1490	4822 265 11207	Connector 6P
1492	4822 267 10958	Connector 5P
1493	4822 265 11531	Connector 9P
1494	4822 265 11535	Connector 8P
1495	4822 276 13114	Push Switch
1496	4822 276 13114	Push Switch
1497	4822 276 13114	Push Switch
1498	4822 276 13114	Push Switch
1499	4822 276 13114	Push Switch
1500	4822 276 13114	Push Switch
1501	4822 276 13114	Push Switch
1505	4822 276 13114	Push Switch
1506	4822 276 13114	Push Switch
7404	2722 171 07185	LCD Disply

Note: Only these parts mentioned in the list are normal service parts.

## ELECTRICAL PARTSLIST - FRONT BOARD (AZ1045)

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**- CAPACITORS -**

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2400	5322 122 32654	22nF 10% X7R 63V
2401	4822 124 22651	1,0µF 20% 50V
2403	4822 124 23432	100µF 20% 10V
2404	4822 124 23432	100µF 20% 10V
2405	5322 122 32531	100pF 5% NP0 50V
2406	5322 122 32531	100pF 5% NP0 50V
2407	5322 122 32531	100pF 5% NP0 50V
2408	5322 122 32531	100pF 5% NP0 50V
2409	5322 122 32531	100pF 5% NP0 50V
2410	5322 122 32531	100pF 5% NP0 50V
2411	5322 122 32448	10pF 5% NP0 63V
2412	4822 126 13838	100nF 80/20% Y5V 50V
2413	5322 122 32448	10pF 5% NP0 63V
2415	4822 122 33127	2,2nF 10% X7R 63V
2416	4822 122 33127	2,2nF 10% X7R 63V
2417	4822 126 13838	100nF 80/20% Y5V 50V
2420	4822 124 22726	4,7µF 35V
2421	5322 122 34099	470pF 10% X7R 63V
2422	5322 122 32654	22nF 10% X7R 63V
2423	5322 122 32448	10pF 5% NP0 63V
2424	5322 122 32448	10pF 5% NP0 63V
2425	4822 124 81151	22µF 50V
2426	5322 122 32531	100pF 5% NP0 50V
2427	4822 124 40248	10µF 20% 63V
2428	5322 122 32448	10pF 5% NP0 63V
2429	5322 122 32448	10pF 5% NP0 63V
2430	5322 122 32448	10pF 5% NP0 63V
2431	5322 122 32448	10pF 5% NP0 63V
2432	5322 122 32531	100pF 5% NP0 50V
2433	5322 122 32531	100pF 5% NP0 50V
2434	4822 122 33127	2,2nF 10% X7R 63V
2435	5322 122 32531	100pF 5% NP0 50V
2436	5322 122 32531	100pF 5% NP0 50V
2437	4822 126 13486	15pF 2% NP0 63V
2438	4822 126 13486	15pF 2% NP0 63V
2442	5322 122 31647	1nF 10% X7R 63V
2443	5322 122 31647	1nF 10% X7R 63V

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**- RESISTORS -**

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3401	4822 051 20223	22K 5% 0,1W
3402	4822 117 10833	10K 1% 0,1W
3404	4822 051 20472	4K7 5% 0,1W
3407	4822 051 20101	100R 5% 0,1W
3409	4822 117 10837	100K 1% 0,1W
3410	4822 051 20471	470R 5% 0,1W
3411	4822 116 83933	15K 1% 0,1W
3412	4822 051 20471	470R 5% 0,1W
3413	4822 051 20472	4K7 5% 0,1W
3414	4822 051 20472	4K7 5% 0,1W

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**- RESISTORS -**

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3416	4822 051 20472	4K7 5% 0,1W
3417	4822 051 20472	4K7 5% 0,1W
3422	4822 051 10102	1K 2% 0,25W
3423	4822 051 10102	1K 2% 0,25W
3424	4822 051 10102	1K 2% 0,25W
3425	4822 051 10102	1K 2% 0,25W
3428	4822 117 11449	2K2 1% 0,1W
3429	4822 117 11449	2K2 1% 0,1W
3430	4822 051 20472	4K7 5% 0,1W
3432	4822 117 10965	18K 1% 0,1W
3433	4822 051 20472	4K7 5% 0,1W
3434	4822 051 20101	100R 5% 0,1W
3435	4822 117 10833	10K 1% 0,1W
3436	4822 117 10833	10K 1% 0,1W
3437	4822 117 10833	10K 1% 0,1W
3438	4822 117 10833	10K 1% 0,1W
3445	4822 051 20101	100R 5% 0,1W
3446	4822 051 20223	22K 5% 0,1W
3447	4822 051 20223	22K 5% 0,1W
3449	4822 051 20273	27K 5% 0,1W
3450	4822 051 20273	27K 5% 0,1W
3451	4822 051 20474	470K 5% 0,1W
3452	4822 051 20332	3K3 5% 0,1W
3453	4822 051 20332	3K3 5% 0,1W
3454	4822 051 20332	3K3 5% 0,1W
3455	4822 051 20332	3K3 5% 0,1W
3456	4822 051 20471	470R 5% 0,1W
3457	4822 051 20471	470R 5% 0,1W
3458	4822 051 20471	470R 5% 0,1W
3459	4822 117 12955	2K7 1% 0,1W
3460	4822 051 10102	1K 2% 0,25W
3462	4822 051 10102	1K 2% 0,25W
3464	4822 051 20223	22K 5% 0,1W
3465	4822 051 20471	470R 5% 0,1W
3470	4822 051 20105	1M 5% 0,1W
3471	4822 051 20333	33K 5% 0,1W
3472	4822 051 20105	1M 5% 0,1W
3473	4822 051 20124	120K 5% 0,1W
3474	4822 051 20109	10R 5% 0,1W
3475	4822 117 11454	820R 1% 0,1W
3480	4822 051 20101	100R 5% 0,1W
3481	4822 117 11503	220R 1% 0,1W
3482	4822 051 20822	8K2 5% 0,1W
3483	4822 051 20822	8K2 5% 0,1W
3484	4822 117 11383	12K 1% 0,1W

**ELECTRICAL PARTSLIST - FRONT BOARD (AZ1045)****- RESISTORS -**

3485	4822 117 11383	12K	1%	0,1W
3486	4822 051 20273	27K	5%	0,1W
3487	4822 051 20273	27K	5%	0,1W
3488	4822 051 20562	5K6	5%	0,1W
3489	4822 051 20562	5K6	5%	0,1W
3490	4822 117 11448	180R	1%	0,1W
3491	4822 117 11448	180R	1%	0,1W
3496	4822 051 20333	33K	5%	0,1W
3497	4822 051 20333	33K	5%	0,1W
3498	4822 117 11503	220R	1%	0,1W
3499	4822 117 11503	220R	1%	0,1W
3551	4822 051 20683	68K	5%	0,1W
4401	4822 051 20008	Jumper		
4402	4822 051 20008	Jumper		
4403	4822 051 20008	Jumper		
4404	4822 051 20008	Jumper		
4405	4822 051 20008	Jumper		
4406	4822 051 20008	Jumper		
4407	4822 051 20008	Jumper		
4426	4822 051 20008	Jumper		
4496	4822 051 20008	Jumper		

**- COILS & FILTER -**

1400	4822 242 73769	Filter CST4,19MGW
5400	2422 535 94279	Ind Fxd 100µH 5%
5401	4822 157 11823	Coil 2,2µH 5%
5402	4822 157 11823	Coil 2,2µH 5%

**- DIODES -**

6401	4822 130 11411	Diode BZX284-C3V3
6402	5322 130 34337	Diode BAV99
6404	4822 130 83059	LED TLUR4400
6406	9322 150 66682	LED VS LTL-2P3KSK
6407	9322 150 66682	LED VS LTL-2P3KSK
6409	4822 130 83757	Diode BAS216

**- IC & TRANSISTORS -**

7400	3140 110 50580	IC MUP TMP86CH29F
7401	9322 131 04668	IC SM M24C01-WMN6
7402	4822 130 60511	Trans BC847B
7405	4822 130 60511	Trans BC847B
7406	4822 130 60511	Trans BC847B
7408	4822 130 60511	Trans BC847B
7409	4822 130 60511	Trans BC847B

**- MISCELLANEOUS -**

1490	4822 265 11207	Connector 6P
1492	4822 267 10958	Connector 5P
1493	4822 265 11531	Connector 9P
1495	4822 276 13114	Push Switch
1496	4822 276 13114	Push Switch
1497	4822 276 13114	Push Switch
1498	4822 276 13114	Push Switch
1499	4822 276 13114	Push Switch
1500	4822 276 13114	Push Switch
1501	4822 276 13114	Push Switch
1503	4822 276 13114	Push Switch
1504	4822 276 13114	Push Switch
1505	4822 276 13114	Push Switch
1506	4822 276 13114	Push Switch
7404	2722 171 07185	LCD Display
7407	9322 139 51667	IR Receiver TSOP2836

**Note: Only these parts mentioned in the list are normal service parts.**

## ELECTRICAL PARTSLIST - AF BOARD

**- CAPACITORS -**

2305	4822 124 80483	47µF 20% 6,3V
2306	4822 124 12052	220µF 20% 6,3V
2307	5322 122 31647	1nF 10% X7R 63V
2308	4822 124 80791	470µF 16V 20%
2309	4822 126 14585	100nF 10% X7R 50V
2337	5322 122 31863	330pF 5% NP0 63V
2338	5322 122 31863	330pF 5% NP0 63V
2340	4822 124 11878	4700µF 16V
2341	4822 124 40196	220µF 20% 16V
2342	4822 124 40433	47µF 20% 25V
2343	4822 124 41407	0,47µF 20% 63V
2344	4822 124 41407	0,47µF 20% 63V
2345	4822 122 32535	680pF 10% X7R 63V
2346	4822 122 32535	680pF 10% X7R 63V
2347	4822 124 40433	47µF 20% 25V
2348	4822 124 40433	47µF 20% 25V
2349	4822 124 41407	0,47µF 20% 63V
2350	4822 124 41407	0,47µF 20% 63V
2351	4822 124 80791	470µF 20% 16V
2352	4822 124 80791	470µF 20% 16V
2353	4822 124 40433	47µF 20% 25V
2357	4822 126 13751	47nF 10% X7R 63V
2358	4822 126 13751	47nF 10% X7R 63V
2359	4822 124 40769	4,7µF 20% 100V
2360	4822 126 14585	100nF 10% X7R 50V
2361	4822 126 14585	100nF 10% X7R 50V
2363	4822 126 14585	100nF 10% X7R 50V
2531	4822 122 33177	10nF 20% X7R 50V
2532	4822 122 33177	10nF 20% X7R 50V
2533	4822 124 41407	0,47µF 20% 63V
2534	4822 124 41407	0,47µF 20% 63V

**- RESISTORS -**

3301	4822 117 11449	2K2 1% 0,1W
3302	4822 116 52256	2K2 5% 0,5W
3303	4822 051 20471	470R 5% 0,1W
3304	4822 051 20471	470R 5% 0,1W
3305	4822 117 10353	150R 1% 0,1W
3306	4822 117 10353	150R 1% 0,1W
3307	4822 051 20562	5K6 5% 0,1W
3311	4822 116 52206	120R 5% 0,5W
3312	4822 116 52206	120R 5% 0,5W
3313	4822 117 11507	6K8 1% 0,1W
3314	4822 117 11507	6K8 1% 0,1W
3321	4822 050 24708	4R70 1% 0,6W
3322	4822 050 24708	4R70 1% 0,6W
3323	4822 051 20332	3K30 5% 0,1W
3325	4822 051 20391	390R 5% 0,1W

**- RESISTORS -**

3326	4822 051 20561	560R 5% 0,1W
3327	4822 051 20471	470R 5% 0,1W
3328	4822 117 11507	6K8 1% 0,1W
3329	4822 116 83883	470R 5% 0,5W
3331	4822 116 52289	5K6 5% 0,5W
3332	4822 116 52289	5K6 5% 0,5W
3333	4822 116 83933	15K 1% 0,1W
3334	4822 117 11383	12K 1% 0,1W
3335	4822 117 11383	12K 1% 0,1W
3501	4822 051 20822	8K20 5% 0,1W
3502	4822 051 20822	8K20 5% 0,1W
3505	4822 116 83884	47K 5% 0,5W
3506	4822 116 83884	47K 5% 0,5W
3507	4822 051 20822	8K2 5% 0,1W
3508	4822 051 20822	8K2 5% 0,1W
3509	4822 051 20472	4K7 5% 0,1W
3510	4822 051 20472	4K7 5% 0,1W
3541	4822 117 11139	1K5 1% 0,1W
3542	4822 117 11139	1K5 1% 0,1W
3543	4822 117 11449	2K2 1% 0,1W
3544	4822 117 11449	2K2 1% 0,1W
3545	4822 117 10833	10K 1% 0,1W
3546	4822 117 10833	10K 1% 0,1W
3561	4822 117 10965	18K 1% 0,1W
3562	4822 117 10965	18K 1% 0,1W
3563	4822 117 10833	10K 1% 0,1W
3564	4822 117 10833	10K 1% 0,1W
3565	4822 117 10837	100K 1% 0,1W
3566	4822 117 10837	100K 1% 0,1W
9331	4822 051 20008	Jumper
9332	4822 051 20008	Jumper
9333	4822 051 20008	Jumper
9521	4822 051 20008	Jumper
9522	4822 051 20008	Jumper

**- COILS -**

5301	4822 157 11823	Coil 2,2µH 5%
5302	4822 157 62552	Coil 2,2µH

**- DIODES -**

6308	3198 010 53380	Diode BZX79-B3V3
6311	4822 130 83757	Diode BAS216
6316	4822 130 30621	Diode 1N4148

# ELECTRICAL PARTSLIST - AF BOARD

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## - IC & TRANSISTORS -

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7301	4822 209 31544	IC TA8227P
7303	4822 130 41246	Trans BC327-25
7304	4822 130 41246	Trans BC327-25
7305	4822 130 60373	Trans BC856B
7306	4822 130 60511	Trans BC847B
7307	4822 130 40981	Trans BC337-25
7312	4822 130 60511	Trans BC847B
7313	4822 130 42615	Trans BC817-40
7314	4822 130 42615	Trans BC817-40

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## - MISCELLANEOUS -

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1301	4822 277 11846	Slide Switch
1303	2422 026 05076	Headphone Socket
1314	4822 265 11532	Connector 9P
1501	4822 267 10731	Connector 6P
1502	4822 267 10731	Connector 6P
1504	4822 267 10733	Connector 4P
1506	4822 265 11515	Connector 8P
1510	4822 277 11786	Slide Switch

**Note: Only these parts mentioned in the list are normal service parts.**



## ELECTRICAL PARTSLIST - TUNER BOARD ECO6

**- CAPACTORS -**

2101	4822 126 13692	47pF 1% NP0 63V
2103	5322 122 31647	1nF 10% X7R 63V
2104	5322 122 32531	100pF 5% NP0 50V
2106	2020 800 00204	Var Cap 4,2pF-20pF 100V
2107	4822 121 51319	1µF 10% 63V
2108	5322 122 32531	100pF 5% NP0 50V
2109	5322 122 32448	10pF 5% NP0 63V
2120	5322 122 32658	22pF 5% 50V
2122	4822 122 33891	3,3nF 10% X7R 63V
2123	2238 861 18391	390pF 1% NP0 50V
2125	2020 552 96199	560pF 1% 50V
2126	5322 122 31863	330pF 5% NP0 63V
2127	4822 126 14076	220nF 80/20% 25V
2128	4822 124 40248	10µF 20% 63V
2129	4822 124 41584	100µF 20% 10V
2130	4822 126 13482	470nF 80/20% 16V
2131	4822 126 13482	470nF 80/20% 16V
2132	4822 126 13482	470nF 80/20% 16V
2133	4822 124 21913	1µF 20% 63V
2134	4822 126 13188	15nF 5% X7R 63V
2135	4822 126 13188	15nF 5% X7R 63V
2136	4822 126 14076	220nF 80/20% 25V
2137	4822 126 14076	220nF 80/20% 25V
2138	4822 124 22652	2,2µF 20% 50V
2139	4822 126 14236	15pF 5% 50V
2140	4822 126 13695	82pF 1% NP0 63V
2141	4822 126 13838	100nF 80/20% Y5V 50V
2144	4822 126 13482	470nF 80/20% 16V
2145	4822 122 33575	220pF 5% NP0 63V
2146	4822 122 33575	220pF 5% NP0 63V
2147	4822 122 33575	220pF 5% NP0 63V
2148	4822 122 33127	2,2nF 10% X7R 63V
2150	4822 126 13838	100nF 80/20% Y5V 50V
2152	4822 126 12105	33nF 5% X7R 50V
2153	4822 126 13486	15pF 2% NP0 63V
2155	2020 800 00191	Var Cap 3pF-11pF 100V
2159	5322 122 32659	33pF 5% 50V
2163	4822 126 13838	100nF 80/20% Y5V 50V
2164	4822 126 13482	470nF 80/20% 16V
2165	4822 126 13838	100nF 80/20% Y5V 50V
2166	5322 122 31647	1nF 10% X7R 63V
2167	4822 122 33926	12pF 50V
2186	4822 124 40196	220µF 20% 16V
2187	4822 122 33177	10nF 20% X7R 50V
2188	4822 122 33177	10nF 20% X7R 50V
2189	4822 126 14076	220nF 80/20% 25V
2190	4822 124 81151	Electrolytic 22µF 50V
2191	4822 124 81151	Electrolytic 22µF 50V
2192	5322 122 31647	1nF 10% X7R 63V
2193	5322 122 31647	1nF 10% X7R 63V

**- CAPACTORS -**

2194	5322 122 31647	1nF 10% X7R 63V
2195	4822 124 81151	22µF 50V
2196	4822 122 33177	10nF 20% X7R 50V
2197	4822 122 33177	10nF 20% X7R 50V

**- RESISTORS -**

3101	4822 051 20333	33K 5% 0,1W
3102	4822 117 10837	100K 1% 0.1W
3103	4822 051 20822	8K2 5% 0,1W
3104	4822 117 13577	330R 1% 1,25W
3105	4822 117 11503	220R 1% 0.1W
3108	4822 117 11449	2K2 1% 0,1W
3109	4822 117 11449	2K2 1% 0,1W
3123	4822 051 20472	4K7 5% 0,1W
3125	4822 117 10833	10K 1% 0,1W
3128	4822 117 11449	2K2 1% 0,1W
3132	4822 051 20479	47R 5% 0,1W
3134	4822 051 20223	22K 5% 0,1W
3137	4822 116 83933	15K 1% 0,1W
3141	4822 117 11148	56K 1% 0,1W
3142	4822 100 12159	100K 30%
3145	4822 117 11449	2K2 1% 0,1W
3152	4822 051 20471	470R 5% 0,1W
3153	4822 051 20471	470R 5% 0,1W
3155	4822 051 20479	47R 5% 0,1W
3158	4822 051 20471	470R 5% 0,1W
3159	4822 051 20471	470R 5% 0,1W
3160	4822 051 20471	470R 5% 0,1W
3161	4822 051 20223	22K 5% 0,1W
3166	4822 051 20479	47R 5% 0,1W
3167	4822 051 20479	47R 5% 0,1W
3169	4822 051 20154	150K 5% 0,1W
3180	4822 117 10833	10K 1% 0,1W
3186	4822 117 11448	180R 1% 0,1W
3187	4822 051 10102	1K 2% 0,25W
3188	4822 117 11449	2K2 1% 0,1W
3189	4822 051 20223	22K 5% 0,1W
3190	4822 117 10833	10K 1% 0,1W
3191	4822 051 20472	4K7 5% 0,1W
3192	4822 051 20105	1M 5% 0,1W
3193	4822 117 11449	2K2 1% 0,1W
3194	4822 117 10837	100K 1% 0.1W
3195	4822 051 20474	470K 5% 0,1W
3196	4822 117 10833	10K 1% 0,1W
4102	4822 051 20334	330K 5% 0,1W
4105	4822 051 20008	Jumper
4107	4822 051 20008	Jumper
4108	4822 051 20008	Jumper
4110	4822 051 20008	Jumper

**ELECTRICAL PARTSLIST - TUNER BOARD ECO6****- COILS & FILTERS -**

5102	4822 157 71634	MW Aerial
5103	2422 549 44107	Ind Var 252kHz
5109	4822 242 70665	Filter SFE10,7MS3-A
5110	4822 242 70665	Filter SFE10,7MS3-A
5111	2422 549 44023	Ind Var 450kHz
5112	4822 157 70302	Coil F7MCS-12216N
5114	4822 157 70302	Coil F7MCS-12216N
5119	4822 157 11443	Coil 2,4µH
5121	4822 242 10261	CrystalT 75kHz
5122	2422 549 44108	Ind Var 796kHz
5123	2422 549 44108	Ind Var 796kHz
5130	4822 157 11843	Coil MD7B-01F
5131	4822 157 11843	Coil MD7B-01F

**- DIODES -**

6103	5322 130 34337	Diode BAV99
6105	4822 130 83075	Diode HN1V02H-B
6120	4822 130 83757	Diode BAS216
6130	4822 130 82833	Diode1SV228
6131	4822 130 82833	Diode1SV228
6181	5322 130 34337	Diode BAV99
6182	4822 130 83757	Diode BAS216
6183	9340 386 90115	Diode BZX284-C11

**- IC & TRANSISTORS -**

7101	9351 740 80557	IC SM TEA5757H/V1
7102	4822 130 42131	Trans BF550
7104	4822 130 40855	Trans BC337
7105	4822 130 40855	Trans BC337
7109	4822 130 60373	Trans BC856B
7122	5322 130 42755	Trans BC847C
7124	5322 130 42755	Trans BC847C
7180	4822 130 60373	Trans BC856B
7181	5322 130 42755	Trans BC847C
7182	5322 130 42755	Trans BC847C
7183	5322 130 42755	Trans BC847C

**- MISCELLANEOUS -**

1121	4822 267 10733	Connector 4P
1122	4822 267 10954	Connector 5P

**Note: Only these parts mentioned in the list are normal service parts.**

## ELECTRICAL PARTSLIST - CD99 DA11

**- CAPACITORS -**

2801	482212441751	47µF 20% 50V
2802	482212441751	47µF 20% 50V
2803	482212613695	82pF 1% NP0 63V
2804	482212613695	82pF 1% NP0 63V
2805	482212613695	82pF 1% NP0 63V
2806	482212613695	82pF 1% NP0 63V
2807	482212613691	27pF 1% NP0 63V
2808	532212233538	150pF 2% NP0 63V
2809	482212613691	27pF 1% NP0 63V
2810	482212613691	27pF 1% NP0 63V
2811	532212232659	33pF 5% 50V
2812	532212232448	10pF 5% NP0 63V
2813	482212233127	2,2nF 10% X7R 63V
2814	482212613751	47nF 10% X7R 63V
2815	482212613692	47pF 1% NP0 63V
2816	532212232654	22nF 10% X7R 63V
2817	482212440769	4,7µF 20% 100V
2818	482212613751	47nF 10% X7R 63V
2821	482212614585	100nF 10% X7R 50V
2822	482212613344	1,5nF 5% 63V
2823	482212442383	220µF 20% 4V
2824	482212613751	47nF 10% X7R 63V
2825	482212613344	1,5nF 5% 63V
2826	482212613751	47nF 10% X7R 63V
2827	532212231647	1nF 10% X7R 63V
2828	482212613692	47pF 1% NP0 63V
2829	482212613751	47nF 10% X7R 63V
2830	482212614043	1µF +80-20% Y5V 16V
2831	482212614043	1µF +80-20% Y5V 16V
2832	532212233538	150pF 2% NP0 63V
2833	532212232268	470pF 10% 50V
2834	482212233216	270pF 5% NP0 50V
2835	532212232268	470pF 10% 50V
2836	482212441751	47µF 20% 50V
2837	482212613751	47nF 10% X7R 63V
2838	532212232654	22nF 10% X7R 63V
2839	482212614585	100nF 10% X7R 50V
2840	482212441751	47µF 20% 50V
2841	482212613751	47nF 10% X7R 63V
2842	482212421913	1µF 20% 63V
2843	532212232531	100pF 5% NP0 50V
2844	482212233575	220pF 5% NP0 63V
2845	482212233575	220pF 5% NP0 63V
2846	482212440248	10µF 20% 63V
2848	532212232531	100pF 5% NP0 50V
2849	482212233575	220pF 5% NP0 63V
2850	482212233575	220pF 5% NP0 63V
2851	482212440248	10µF 20% 63V
2853	482212233177	10nF 20% X7R 50V
2854	482212411912	220µF 20% 6,3V

**- CAPACITORS -**

2855	482212411912	220µF 20% 6,3V
2857	482212412362	47µF 4V 20%
2860	532211680853	560pF 5% NP0 63V
2861	532212231865	1,5nF 10% X7R 63V
2862	482212610326	180pF 5%NP0 63V
2863	482212610326	180pF 5%NP0 63V
2864	482212610326	180pF 5%NP0 63V
2865	482212610326	180pF 5%NP0 63V
2869	482212613751	47nF 10% X7R 63V
2870	482212233575	220pF 5% NP0 63V
2871	482212233575	220pF 5% NP0 63V
2872	482212233575	220pF 5% NP0 63V
2873	482212233575	220pF 5% NP0 63V
2874	482212233575	220pF 5% NP0 63V
2875	482212233575	220pF 5% NP0 63V

**- RESISTORS -**

3728	482205120479	47R 5% 0,1W
3745	482205120109	10R 5% 0,1W
3757	482205120223	22K 5% 0,1W
3788	482205120472	4K7 5% 0,1W
3800	482205120478	4R70 5% 0,1W
3801	482205120154	150K 5% 0,1W
3802	482205110102	1K 2% 0,25W
3803	482205120273	27K 5% 0,1W
3804	482205120472	4K7 5% 0,1W
3805	482205120273	27K 5% 0,1W
3806	482211710361	680R 1% 0,1W
3807	482211711139	1K5 1% 0,1W
3808	482205120339	33R 5% 0,1W
3809	482205120339	33R 5% 0,1W
3810	482205210478	4R7 5% 0,33W
3811	482205110102	1K 2% 0,25W
3812	482205120474	470K 5% 0,1W
3813	482205120683	68K 5% 0,1W
3814	482205120332	3K3 5% 0,1W
3815	482205120472	4K7 5% 0,1W
3816	482211683933	15K 1% 0,1W
3817	482211710834	47K 1% 0,1W
3818	482205120562	5K6 5% 0,1W
3819	482211683933	15K 1% 0,1W
3820	482211710965	18K 1% 0,1W
3821	482205120332	3K3 5% 0,1W
3822	482205120332	3K3 5% 0,1W
3823	482205120332	3K3 5% 0,1W
3824	482205110102	1K 2% 0,25W
3825	482205120223	22K 5% 0,1W

## ELECTRICAL PARTSLIST - CD99 DA11

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**- RESISTORS -**

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3826	482205120273	27K	5%	0,1W
3827	482205120339	33R	5%	0,1W
3828	482205120479	47R	5%	0,1W
3829	482205120101	100R	5%	0,1W
3830	482205120472	4K7	5%	0,1W
3835	482205120223	22K	5%	0,1W
3836	482211710833	10K	1%	0,1W
3837	482205120471	470R	5%	0,1W
3838	482205120471	470R	5%	0,1W
3839	482205120471	470R	5%	0,1W
3840	482205120471	470R	5%	0,1W
3841	482205120472	4K7	5%	0,1W
3842	482205110102	1K	2%	0,25W
3843	482205110102	1K	2%	0,25W
3844	482205120101	100R	5%	0,1W
3845	482205120228	2R2	5%	0,1W
3846	482205120223	22K	5%	0,1W
3847	482211711149	82K	1%	0,1W
3848	482211710834	47K	1%	0,1W
3849	482211711148	56K	1%	0,1W
3850	482205120822	8K2	5%	0,1W
3851	482211711148	56K	1%	0,1W
3852	482211710834	47K	1%	0,1W
3853	482211683933	15K	1%	0,1W
3854	482205120822	8K2	5%	0,1W
3855	482211640227	4R6	25%	12V
3856	482205120683	68K	5%	0,1W
3857	482205120683	68K	5%	0,1W
3858	482205120392	3K9	5%	0,1W
3859	482211710834	47K	1%	0,1W
3860	482205110102	1K	2%	0,25W
3861	482211710834	47K	1%	0,1W
3862	482205110102	1K	2%	0,25W
3863	482205210338	3R3	5%	0,33W
3864	482211710833	10K	1%	0,1W
3865	482205110102	1K	2%	0,25W
3867	482205120223	22K	5%	0,1W
3868	482211710833	10K	1%	0,1W
3869	482211710833	10K	1%	0,1W
3871	482205120471	470R	5%	0,1W
3872	482211710834	47K	1%	0,1W
3873	482205120223	22K	5%	0,1W
3874	482205120223	22K	5%	0,1W
3875	482211710833	10K	1%	0,1W
3876	482211710833	10K	1%	0,1W
3878	482205120471	470R	5%	0,1W
3879	482211710834	47K	1%	0,1W
3880	482205120339	33R	5%	0,1W
3881	482211710353	150R	1%	0,1W
3882	482205120101	100R	5%	0,1W

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**- RESISTORS -**

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3883	482205110102	1K	2%	0,25W
3884	482205110102	1K	2%	0,25W
3886	482211710833	10K	1%	0,1W
3887	482211710833	10K	1%	0,1W
3888	482205120472	4K7	5%	0,1W
3889	482205110102	1K	2%	0,25W
3890	482211710837	100K	1%	0,1W
3891	482211710837	100K	1%	0,1W
3892	482211710837	100K	1%	0,1W
3893	482211710837	100K	1%	0,1W
3894	48221 710833	10K	1%	0,1W
3895	48221 710833	10K	1%	0,1W
3896	48221 710833	10K	1%	0,1W
3897	48221 710833	10K	1%	0,1W
3898	48221 710833	10K	1%	0,1W
3899	482211710833	10K	1%	0,1W
3900	482205120223	22K	5%	0,1W
4801	482205120008	Jumper		
4802	482205120008	Jumper		
4807	482205120008	Jumper		
4808	482205120008	Jumper		
4809	482205120008	Jumper		
4810	482205120008	Jumper		
4812	482205120008	Jumper		
4813	482205120008	Jumper		
4814	482205120008	Jumper		
4815	482205120008	Jumper		
4823	482205120008	Jumper		
4824	482205120008	Jumper		
4828	482205120008	Jumper		
4831	482205120008	Jumper		
4832	482205120008	Jumper		
4838	482205120008	Jumper		
4845	482205120008	Jumper		
4847	482205120008	Jumper		
4848	482205120008	Jumper		
4850	482205120008	Jumper		
4853	482205120008	Jumper		
4856	482205120008	Jumper		
4857	482205120008	Jumper		
4859	4822051 20008	Jumper		
4863	4822051 20008	Jumper		
4865	4822051 20008	Jumper		
4866	4822051 20008	Jumper		
4872	4822051 20008	Jumper		
4877	4822051 20008	Jumper		
4881	4822051 20008	Jumper		
4884	4822051 20008	Jumper		
4885	4822051 20008	Jumper		
4886	4822051 20008	Jumper		

**ELECTRICAL PARTSLIST - CD99 DA11**

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**- RESISTORS -**

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4888	482205120008	Jumper
4889	482205120008	Jumper

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**- COILS & FILTERS -**

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1810	482224273557	Filter CST8,46MTW-TF01
5803	482215711231	Coil LAN02TB1R0J

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**- DIODES -**

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6877	482213011564	Diode UDZ3.9B
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**- IC & TRANSISTORS -**

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7800	482220917324	IC SAA7325H
7802	532220911517	IC PC74HCU04T
7803	532213060123	Trans BC807-40
7804	532220982941	IC LM358D
7807	532213042755	Trans BC847C
7808	482220932852	IC TDA7073A/N2
7809	482220932852	IC TDA7073A/N2
7810	482220933165	IC TDA1308T/N1
7875	482213060511	Trans BC847B

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**- MISCELLANEOUS -**

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1800	482226510925	Connector 15P
1823	482226511207	Connector 6P
1824	482226511207	Connector 6P
8000	482232012178	Flexible Foil 15P

**Note :** Only these parts mentioned in the list are normal service parts.

**ELECTRICAL PARTSLIST - RECORDER BOARD****- CAPACITORS -**

2703	482212481151	22µF	50V
2704	482212481151	22µF	50V
2706	482212440433	47µF	20% 25V
2707	482212440196	220µF	20% 16V
2708	482212440433	47µF	20% 25V
2709	482212440433	47µF	20% 25V
2710	482212441584	100µF	20% 10V
2711	482212481151	22µF	50V
2712	482212612878	1,5nF	10% 16V
2714	482212612878	1,5nF	10% 16V
2715	482212151387	10nF	20% 16V
2716	482212612882	100nF	+80-20% 50V
2719	482212613098	5,6nF	20% 16V
2721	482212612878	1,5nF	10% 16V
2722	482212151387	10nF	20% 16V
2723	482212612882	100nF	+80-20% 50V
2726	482212613098	5,6nF	20% 16V
2727	482212612878	1,5nF	10% 16V
2728	482212611714	4,7nF	20%
2729	482212611714	4,7nF	20%
2730	202030090561	1,2nF	10%
2732	482212210577	3,3nF	10% 16V
2733	482212151387	10nF	20% 16V
2738	482212151387	10nF	20% 16V
2739	482212151387	10nF	20% 16V
2750	482212613098	5,6nF	20% 16V
2751	482212613098	5,6nF	20% 16V

**- RESISTORS -**

3701	482211652175	100R	5%	0,5W
3703	482211683868	150R	5%	0,5W
3704	482211683872	220R	5%	0,5W
3706	482211652272	330K	5%	0,5W
3707	482211652285	470K	5%	0,5W
3710	482211652264	27K	5%	0,5W
3712	482211652238	12K	5%	0,5W
3713	482211683868	150R	5%	0,5W
3714	482211683872	220R	5%	0,5W
3716	482211652272	330K	5%	0,5W
3719	482211652264	27K	5%	0,5W
3720	482211652238	12K	5%	0,5W
3722	482211652257	22K	5%	0,5W
3723	482211652257	22K	5%	0,5W
3726	482211652256	2K2	5%	0,5W

**- RESISTORS -**

3727	482211652256	2K2	5%	0,5W
3730	482211683868	150R	5%	0,5W
3731	482211652291	56K	5%	0,5W
3732	482211652176	10R	5%	0,5W
3733	482211130893	4M7	5%	0,2W
3734	482205021003	10K	1%	0,6W
3743	482211683883	470R	5%	0,5W
3744	482211683883	470R	5%	0,5W
3747	482211683868	150R	5%	0,5W
3748	482211683883	470R	5%	0,5W
3749	482211683883	470R	5%	0,5W
3761	482211652289	5K6	5%	0,5W
3762	482211652289	5K6	5%	0,5W

**- COIL -**

5701	482215710371	Coil 100kHz
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**- DIODE -**

6704	482213030621	Diode 1N4148
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**- IC & TRANSISTORS -**

7702	482213040981	Trans BC337-25
7705	482220917498	IC AN7323
1707	482227711504	Push Switch

**- MISCELLANEOUS -**

1725	482226511207	Connector 6P
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Note Only these parts mentioned in the list are normal service parts.

**ELECTRICAL PARTSLIST - POWER BOARD****- CAPACITORS -**

2028	4822 126 12882	100nF +80-20% 50V
2029	4822 126 12882	100nF +80-20% 50V
2030	5322 121 42386	100nF 5% 63V
2031	4822 126 12882	100nF +80-20% 50V
2032	4822 126 12882	100nF +80-20% 50V

**- DIODES -**

6004	4822 130 31878	Diode 1N4003G
6005	4822 130 31878	Diode 1N4003G
6006	4822 130 31878	Diode 1N4003G
6007	4822 130 31878	Diode 1N4003G

**- MISCELLANEOUS -**

1012	4822 265 20287	Socket Mains
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**Note:** Only these parts mentioned in the list are normal service parts.

**ELECTRICAL PARTSLIST - MISCELLANEOUS****- MISCELLANEOUS -**

1007	8240 005 52210	Loudspeaker 4 Ohm 3W
1008	8240 005 52210	Loudspeaker 4 Ohm 3W
1011	4822 276 13963	CD Door Switch
5001	⚠ 3140 118 32530	Transformer (For AZ1040/00/05/14)
5001	⚠ 3140 118 32530	Transformer (For AZ1045/00/05)
5001	⚠ 3140 118 32540	Transformer (For -/17)
8002	3139 110 34660	FFC Foil 6P
8003	4822 320 12243	Flex Cable 6P
8007	4822 320 12243	Flex Cable 6P
8015	3139 110 34870	FFC Foil 9P
8016	3139 110 34850	FFC Foil 5P
8018	3139 110 34840	FFC Foil 8P
8021	3139 110 34860	FFC Foil 4P

**Note:** Only these parts mentioned in the list are normal service parts.