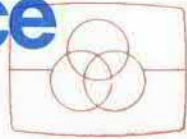


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Service Manual

TABLE OF CONTENTS

| | |
|-----|--|
| 1 | Specifications |
| 2 | Picture, connections & controls and Chip handling |
| 3 | Disassembly drawing and Repair chart |
| 4 | Service test programs, Trade mode and ESD text |
| 5 | Set Block diagram and wiring diagram |
| 6 | Power board Circuit diagram Component layout |
| 7 | Selector board Circuit diagram Component layout |
| 8 | Combi board Circuit diagram Component layout |
| 9 | Front board Component layout Circuit diagram I Chip layout Circuit diagram II |
| 10 | Tape core board Component layout and wiring diagram Tape adjustment table Circuit diagram I Component layout (repeat) Circuit diagram II |
| 11A | ECO4 Tuner board Component and chip layout Tuner adjustment table Circuit diagram |
| 11B | Tuner 92 board Circuit diagram Tuner adjustment table Component and chip layout |
| 12 | CD board Component and chip layout with wiring Circuit diagram |
| 13 | Exploded view & mech stocklist Centre unit Tape deck mechanism CD mechanism |
| 14 | Electrical and Accessories stocklist |
| 15 | Safety and Laser text |

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

**CLASS 1
LASER PRODUCT**

4822 725 24455

Published by Consumer Electronics Printed in The Netherlands © Copyright reserved Subject to modification



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 |
| Mains frequency | : 120V - 230V Switchable, set at 230V for -/21/34 |
| Clock Accuracy | : 110V - 220V Switchable, set at 220V for -/33 |
| Mains breakdown backup | : 50Hz - 60Hz |
| Power consumption | : < 4 seconds/day |
| Dimension centre unit | : < 10 minutes 162W max. 555 x 306 x 301mm |

TUNER : FM SECTION

| | |
|---------------------------------|---|
| Tuning range | : 87.5MHz - 108MHz 65.81MHz - 108MHz for -/34 |
| IF frequency | : 10.7MHz |
| Aerial input | : 75Ω coaxial 300Ω screw type adaptor for -/37 |
| Sensitivity at 26dB S/N | : < 3.5μV |
| Selectivity at 600kHz bandwidth | : > 45dB |
| IF rejection | : > 60dB |
| Image rejection | : > 25dB |

TUNER 92

| | |
|---------------------------------|---|
| Tuning range | : 87.5MHz - 108MHz 65.81MHz - 108MHz for -/34 |
| IF frequency | : 10.7MHz |
| Aerial input | : 75Ω coaxial 300Ω screw type adaptor for -/37 |
| Sensitivity at 26dB S/N | : < 3.5μV |
| Selectivity at 600kHz bandwidth | : > 45dB |
| IF rejection | : > 60dB |
| Image rejection | : > 25dB |

ECO4 *

| | |
|---------------------------------|---|
| Tuning range | : 87.5MHz - 108MHz 65.81MHz - 108MHz for -/34 |
| IF frequency | : 10.7MHz |
| Aerial input | : 75Ω coaxial 300Ω screw type adaptor for -/37 |
| Sensitivity at 26dB S/N | : < 3.5μV |
| Selectivity at 600kHz bandwidth | : > 45dB |
| IF rejection | : > 60dB |
| Image rejection | : > 25dB |

TUNER : AM SECTION

| | |
|--------------------------------|--|
| Tuning range | MW : 522kHz - 1611kHz MW : 530kHz - 1710kHz for -/21/37 LW : 153kHz - 279kHz |
| IF frequency | : 450kHz |
| Sensitivity at 26dB S/N | MW : < 3.0mV/M LW : < 6.0mV/M |
| Selectivity at 18kHz bandwidth | MW : > 24dB LW : > 28dB |
| IF rejection | MW : > 35dB LW : > 40dB |
| Image rejection | MW : > 27dB LW : > 40dB |

AMPLIFIER

| | |
|--------------------------------|--|
| Output power at 10% distortion | : 2 x 30W -1dB |
| Speaker impedance | : 2 x 6Ω |
| Frequency response within -3dB | : 63Hz - 12kHz |
| Equalizer control | : -6dB to +6dB |
| Dynamic bass boost | : +7dB at 100Hz |
| Headphone output at 32Ω | : 25mW |
| Input sensitivity | Aux/TV : 400mV at 47kΩ Mic : 1.5mV at 600Ω Phono : 2.7mV |

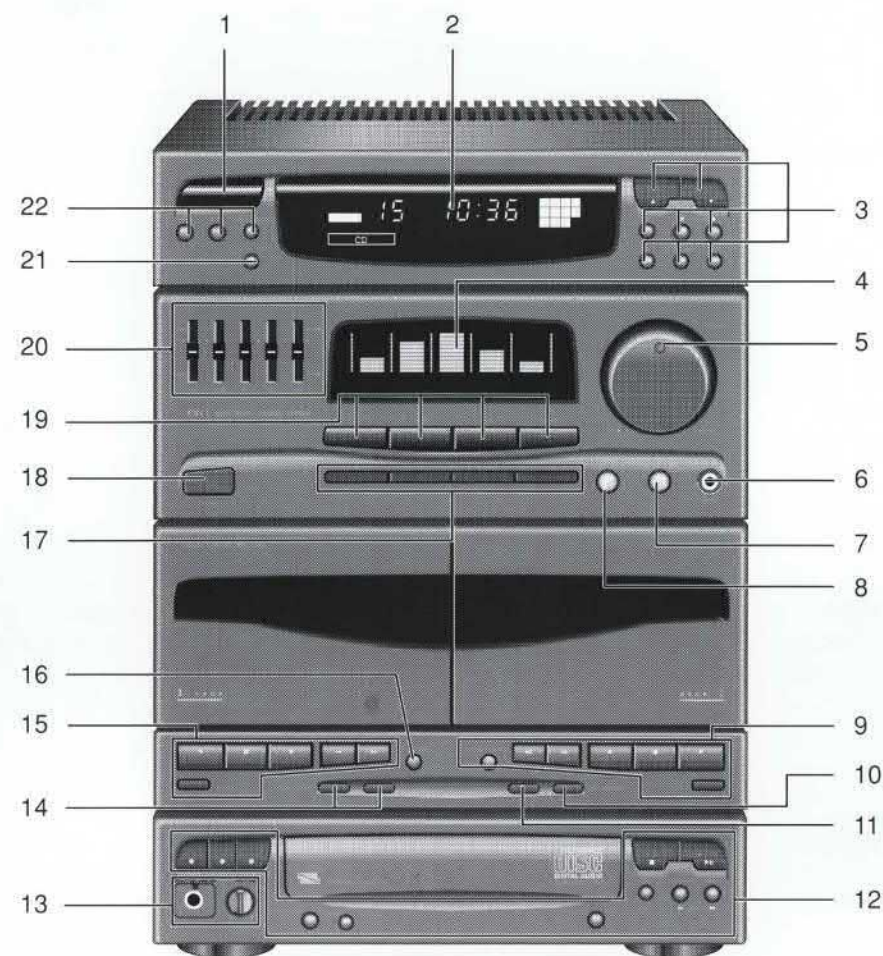
CASSETTE RECORDER

| | |
|---|--|
| Number of track | : 2 x 2 stereo |
| Tape speed | : 4.76 cm/sec ± 2% 1.7 x 4.76 cm/sec |
| Wow and flutter | : < 0.4% DIN |
| Fast-wind time C60 | : 130 sec |
| Bias system | : 88kHz ± 4kHz |
| Recording playback frequency response within -7dB | : 125Hz - 12.5kHz |
| Signal to noise ratio | Recording : > 50dB (IEC I) > 54dB (IEC II) Dubbing : > 48dB 8.5dB |
| Dolby B factor | |

COMPACT DISC

| | |
|---------------------------------|---|
| Frequency response within ± 2dB | : 20Hz - 20kHz |
| Signal/Hiss ratio | : > 75dB |
| Distortion at 1kHz | : < 0.03% |
| Channel difference at 1kHz | : < 2dB |
| Channel crosstalk at 1kHz | : > 60dB |
| De-emphasis | : 0 or 15/50 μS (Switched by subcode on the disc) |

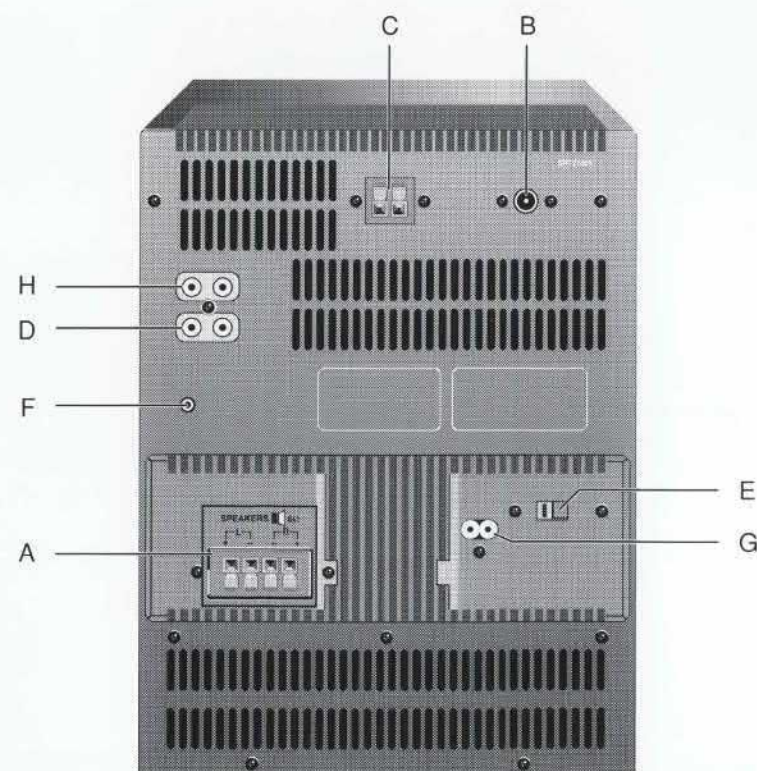
* Unless otherwise stated will refer to Tuner 92 specifications



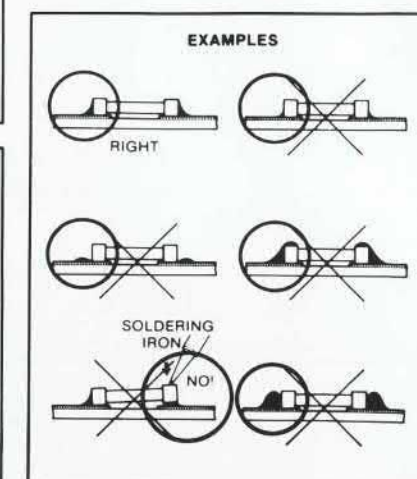
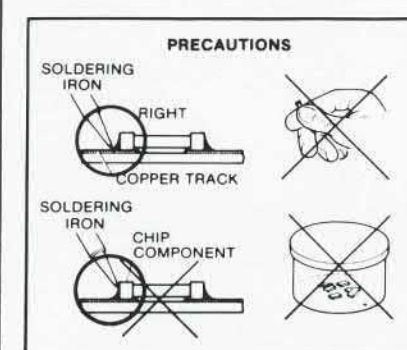
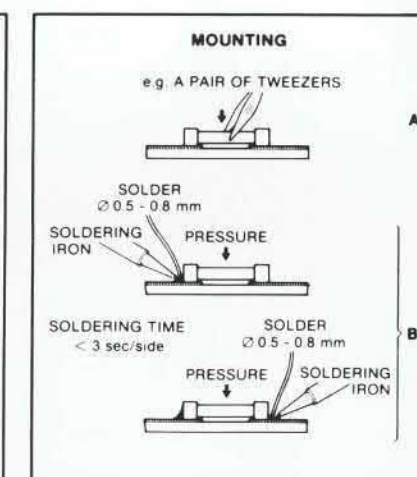
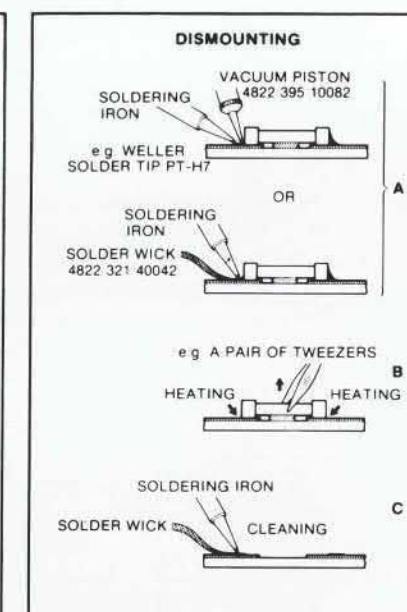
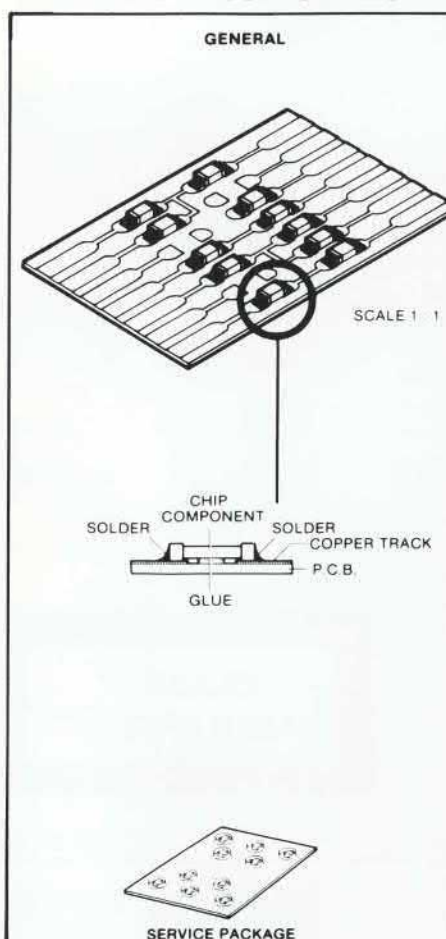
CONNECTIONS AND CONTROLS

| | | | | | | |
|----|----------------------|---------------------------|----|------------------------|------------------|-------------|
| 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 | | | | |

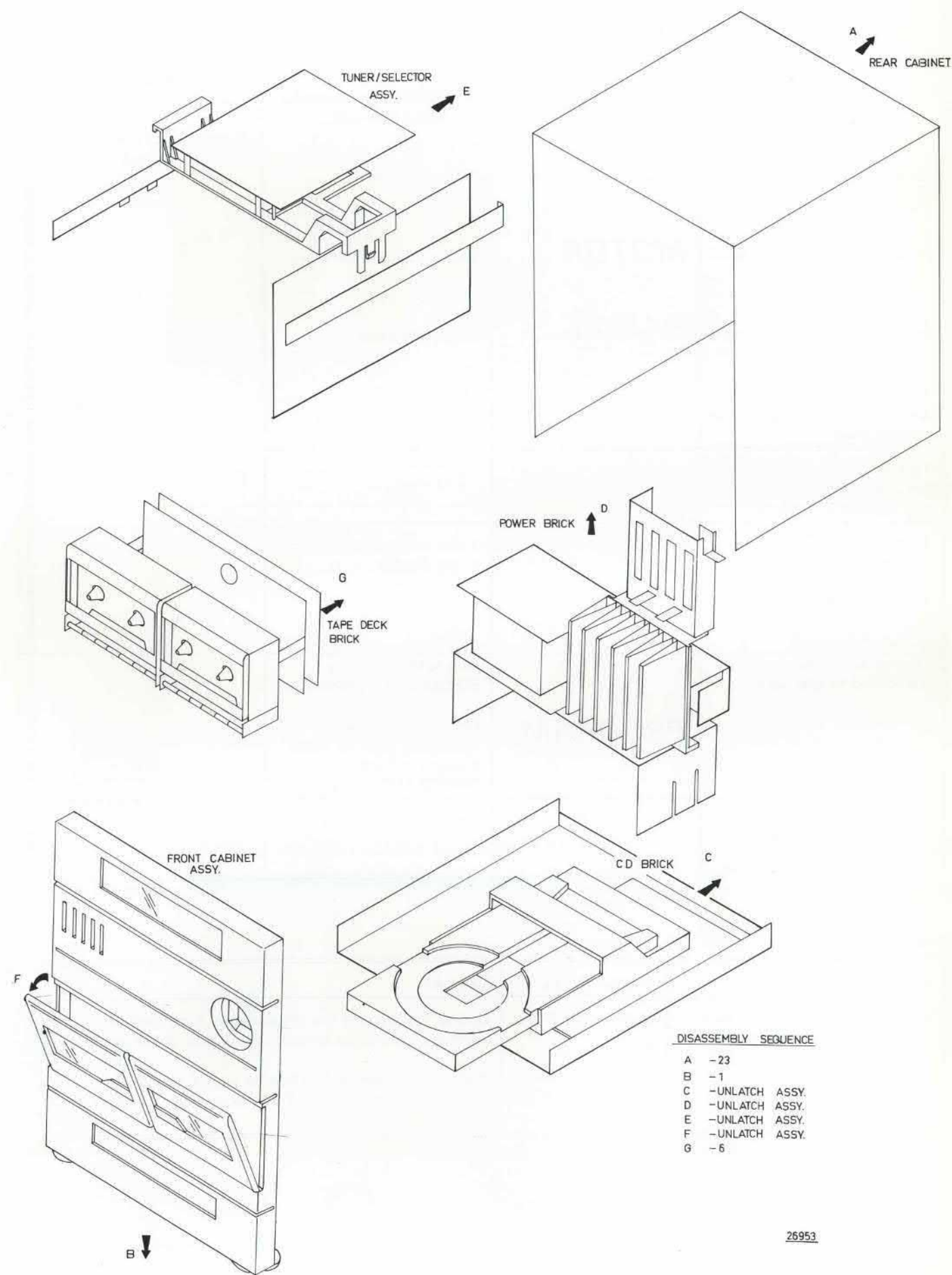
*) For /21/34/39 only



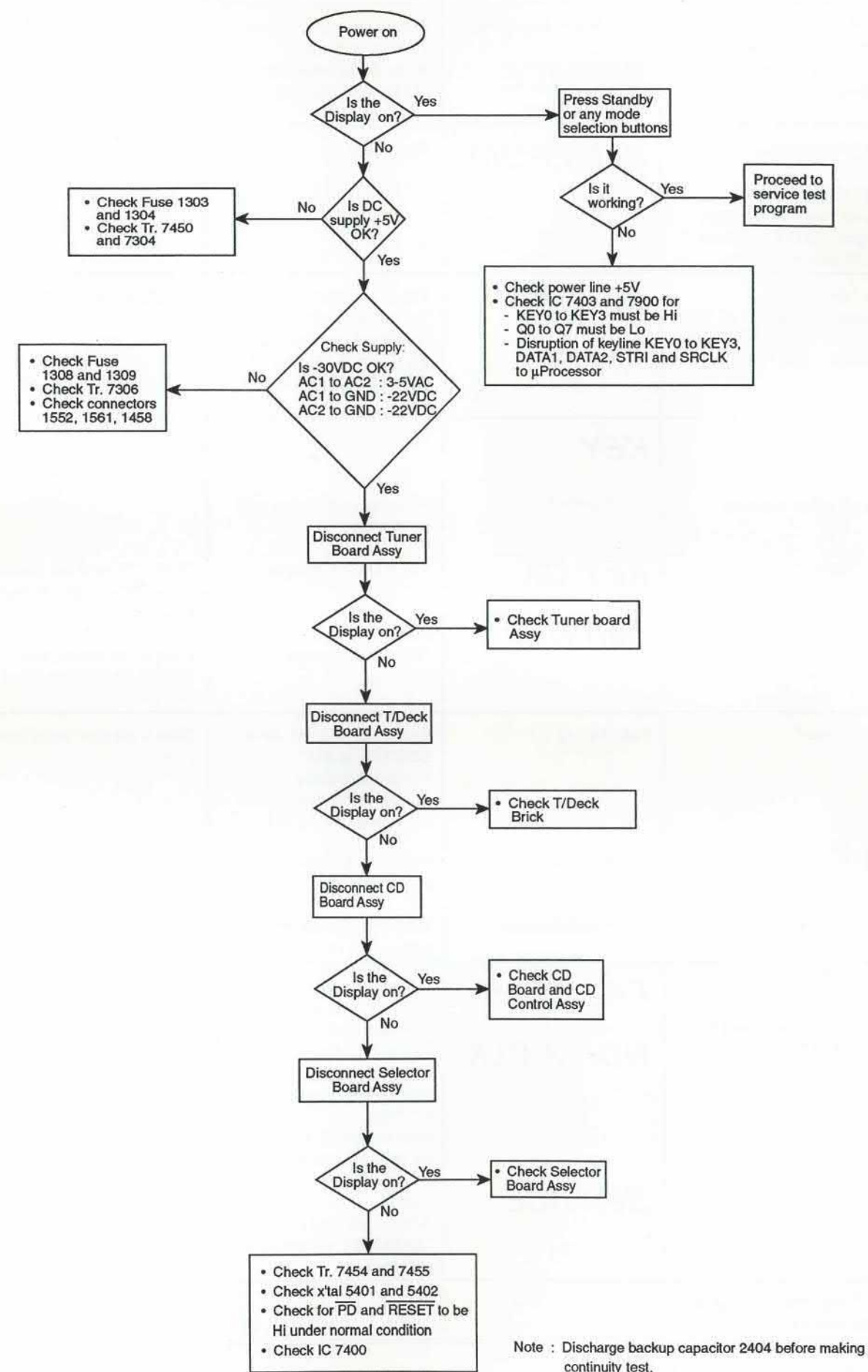
HANDLING CHIP COMPONENTS



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 enfiler 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 hetzelfde potentiaal.

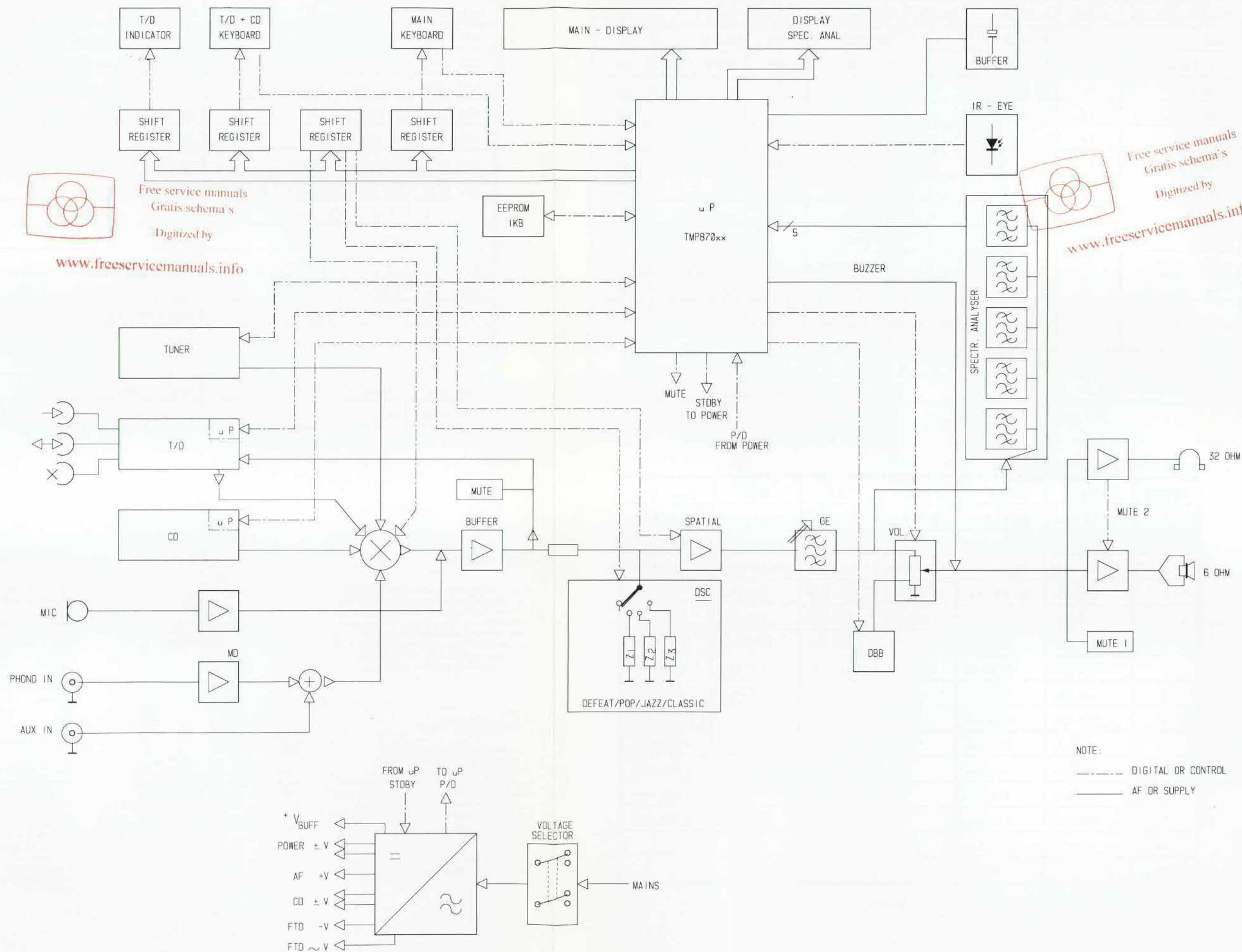
I AVVERTIMENTO

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 cautela 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.

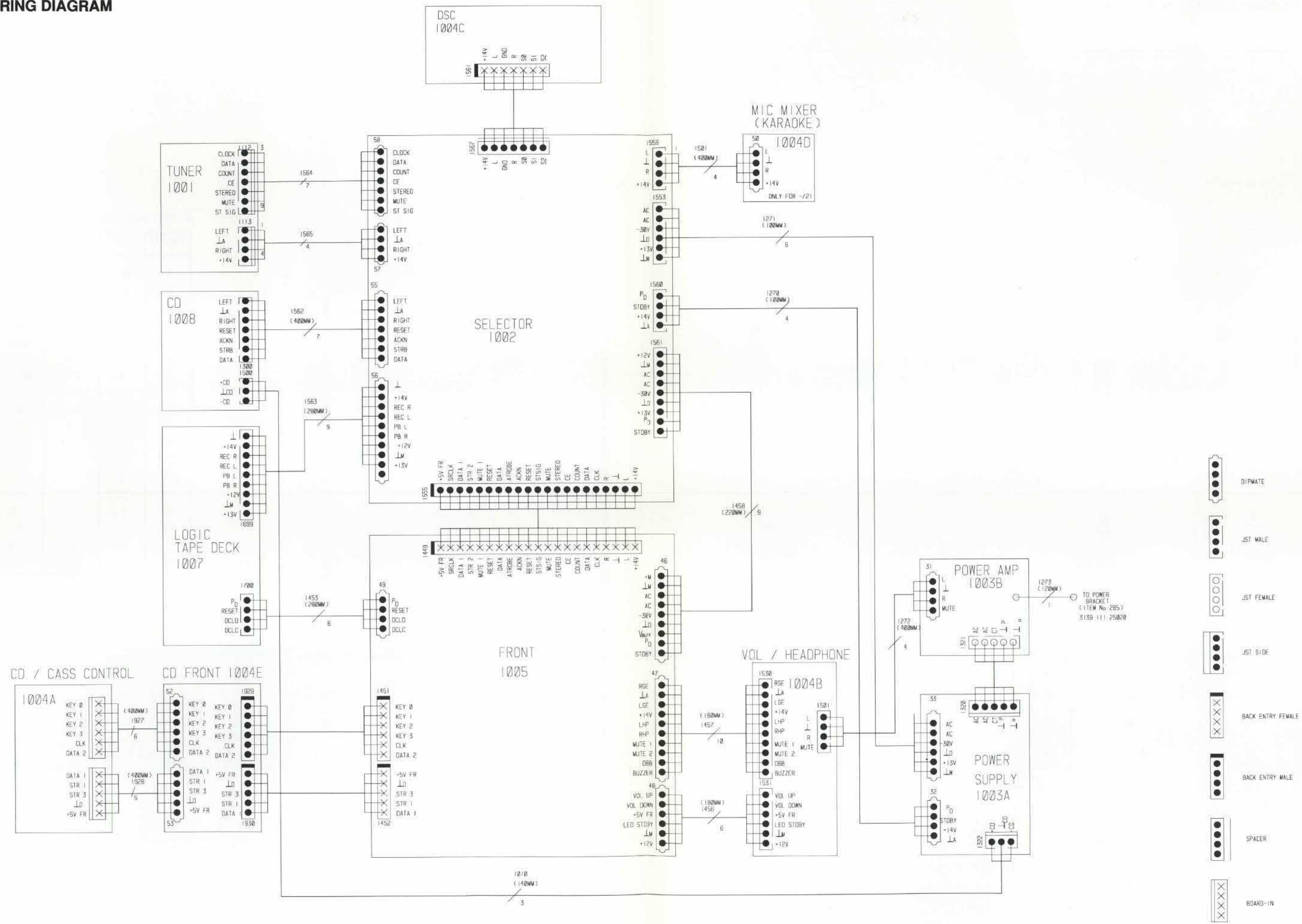
D WARNUNG

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.

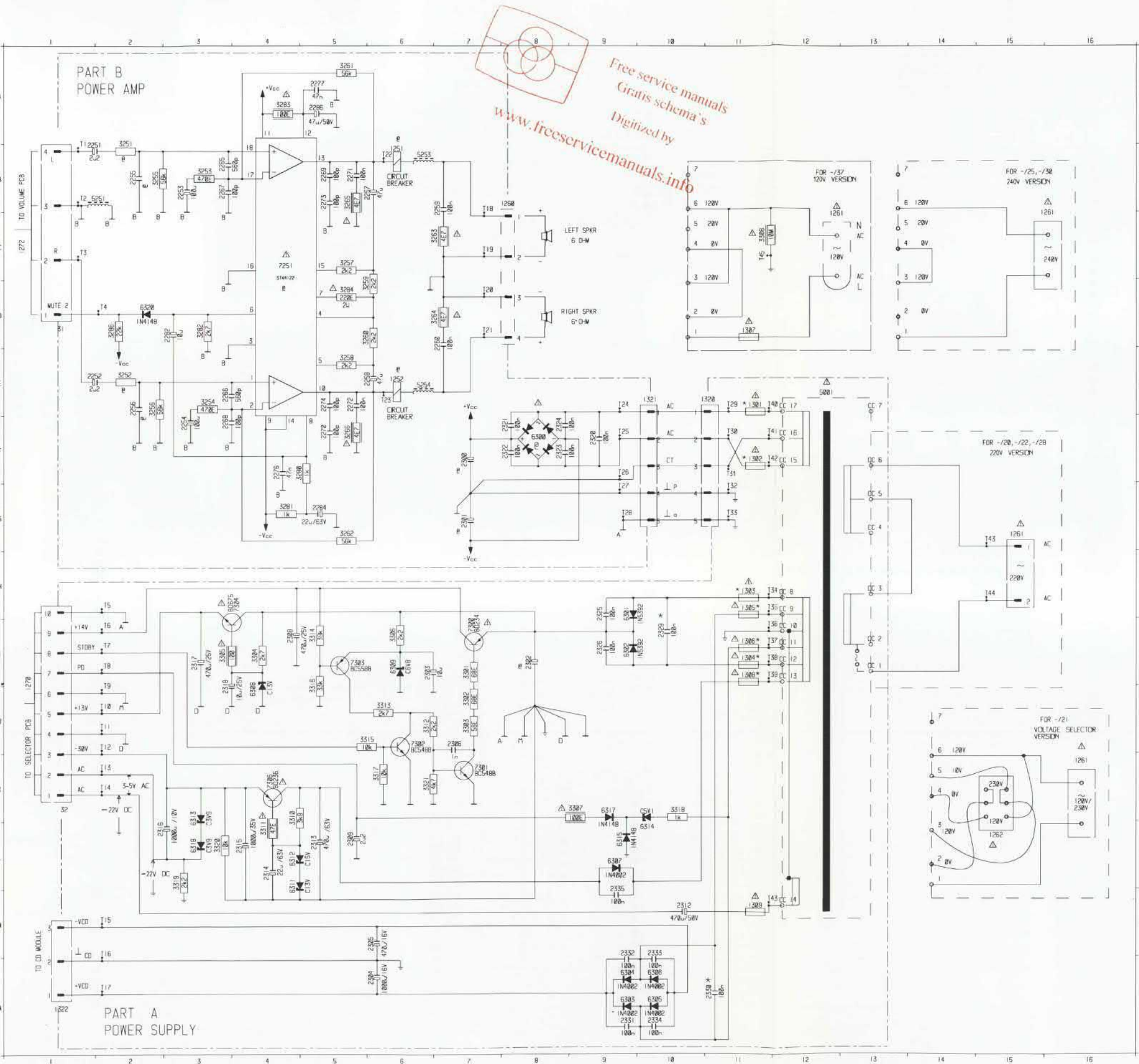
BLOCK DIAGRAM



WIRING DIAGRAM



POWER CIRCUIT DIAGRAM



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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 | 13.8V | +38.0V |
| b | | 20.8V | 0.5V | 0V | 6.2V | 12.3V | -29.2V |
| c | | 14.0V | 20.5V | 0.9V | 1.3V | 21.5V | -47.2V |

NOTE FOR ITEMS MARKED @

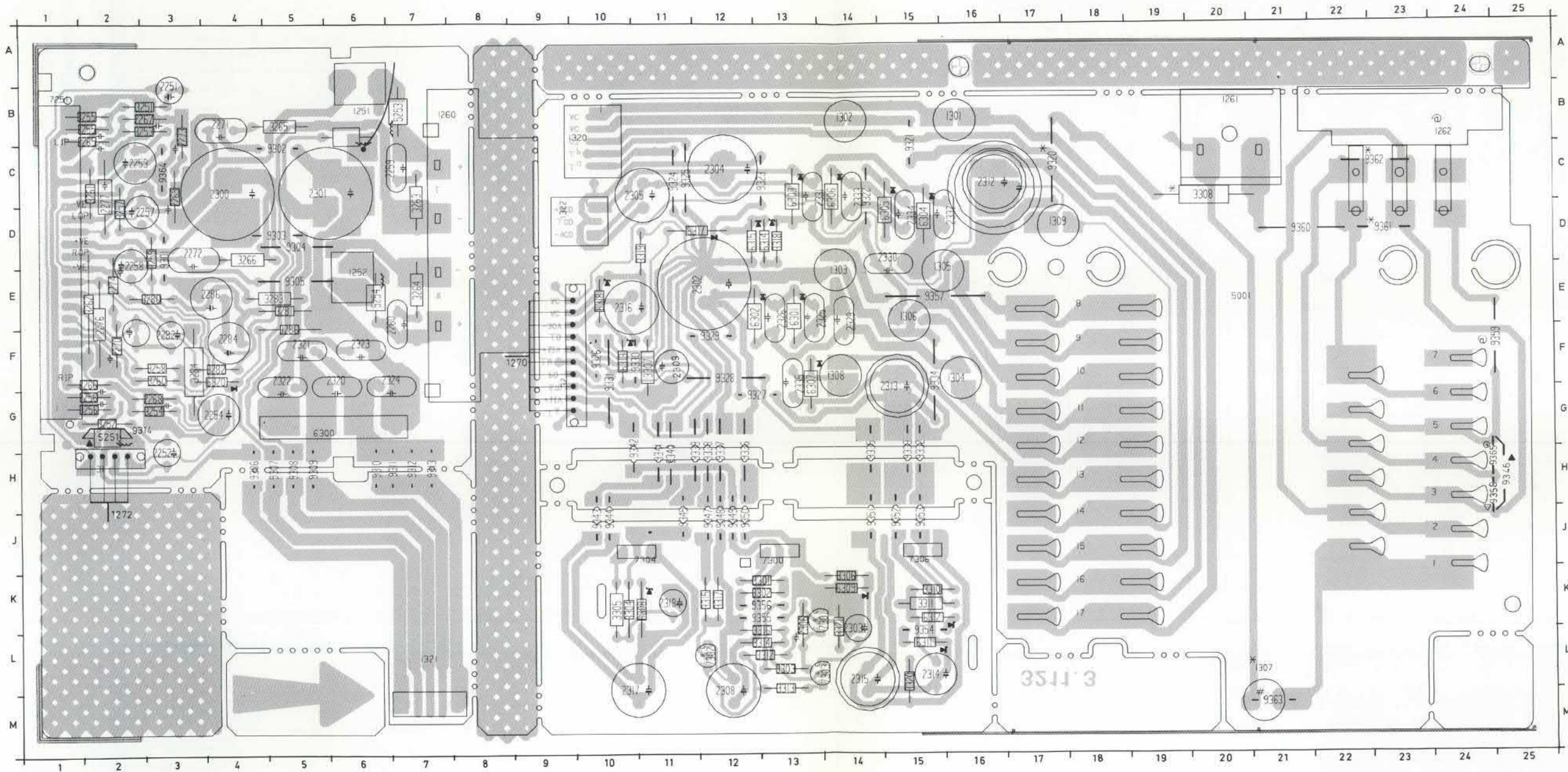
| ITEMS | FW20 | FW30 | FW40 |
|-------|---------|---------|-----------|
| 7251 | STK4112 | STK4112 | STK4132 |
| 6300 | 0359 | 0558 | 0558 |
| 2300 | 3500A | 725V | 3500A/35V |
| 2301 | | | |
| 1251 | 1.75A | 2.8A | 2.5A |
| 1252 | | | |
| 3251 | 22k | 10k | 3k3 |
| 3252 | | | |
| 2255 | 100pF | 270pF | 680pF |
| 2256 | | | |
| 2302 | | 2200F | 3300F |

| Item Marked | FW20 | FW30 | FW40 |
|-------------|-------|-------|-------|
| 1301 | 2A | 3.15A | 3.15A |
| 1302 | | | |
| 1303 | 1A | 1.25A | 1A |
| 1304 | | | |
| 1305 | 0.63A | 1.25A | 0.63A |
| 1306 | | | |
| 1307 | 2A | | 2A |
| 1308 | 0.63A | 1.25A | 0.63A |
| 1309 | | | |

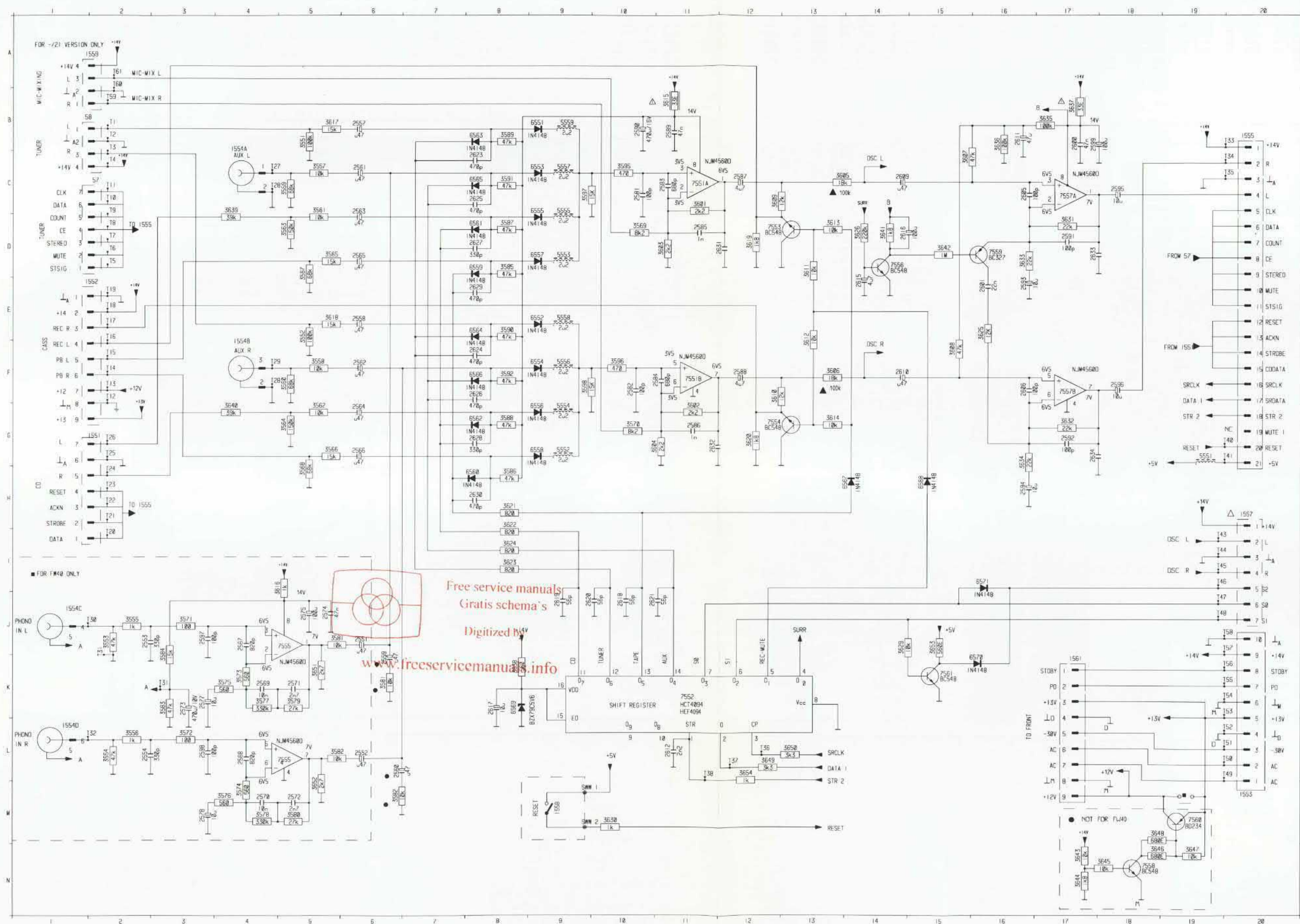
* NOT FOR /37

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 | E2 | 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

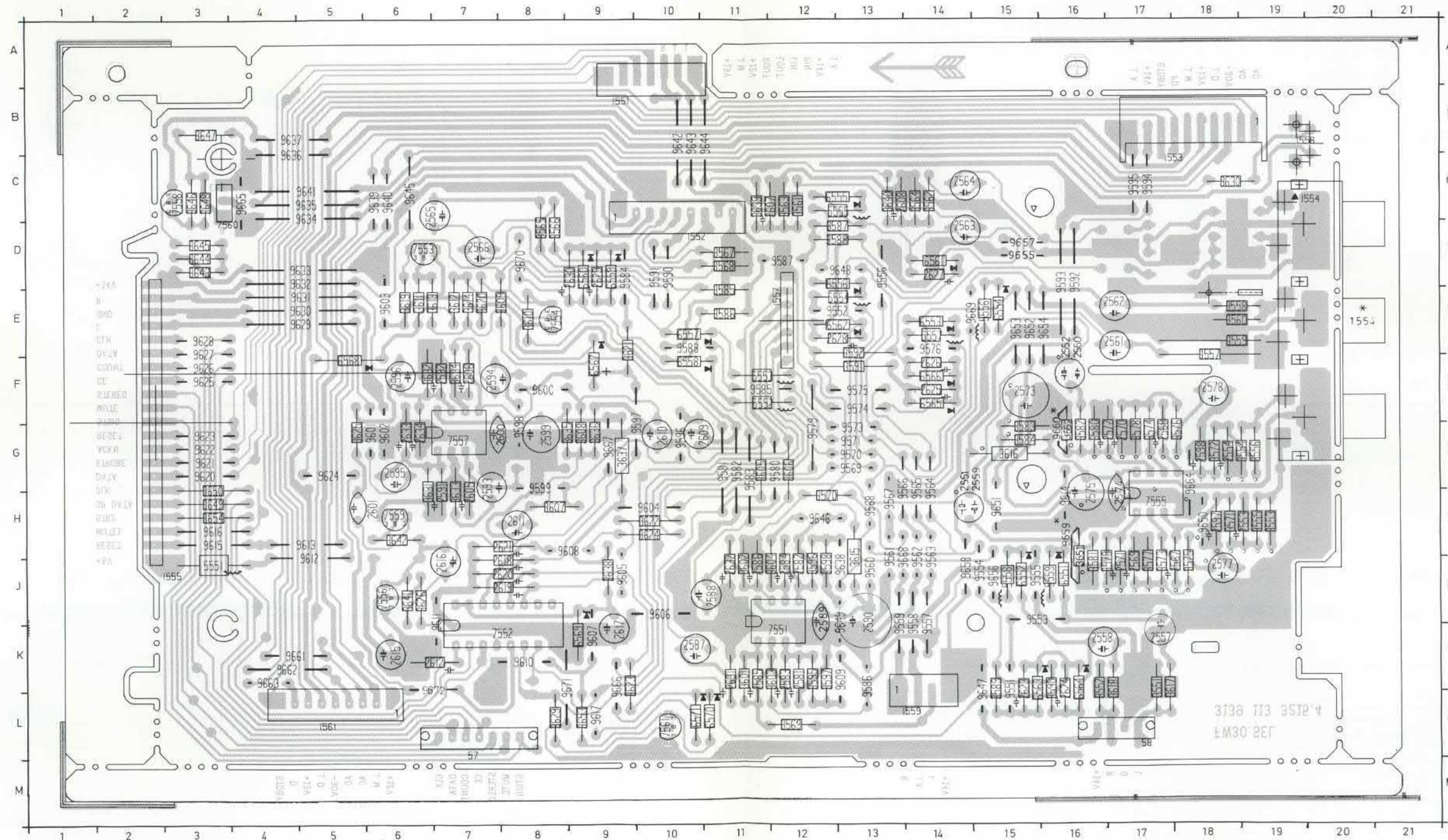


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| 1552 | G 2 | 3623 | H 9 |
| 1553 | G 3 | 3624 | H 10 |
| 1554 | G 4 | 3625 | H 11 |
| 1555 | G 5 | 3626 | H 12 |
| 1556 | G 6 | 3627 | H 13 |
| 1557 | G 7 | 3628 | H 14 |
| 1558 | G 8 | 3629 | H 15 |
| 1559 | G 9 | 3630 | H 16 |
| 1560 | G 10 | 3631 | H 17 |
| 1561 | G 11 | 3632 | H 18 |
| 1562 | G 12 | 3633 | H 19 |
| 1563 | G 13 | 3634 | H 20 |
| 1564 | G 14 | 3635 | H 21 |
| 1565 | G 15 | 3636 | H 22 |
| 1566 | G 16 | 3637 | H 23 |
| 1567 | G 17 | 3638 | H 24 |
| 1568 | G 18 | 3639 | H 25 |
| 1569 | G 19 | 3640 | H 26 |
| 1570 | G 20 | 3641 | H 27 |
| 1571 | G 21 | 3642 | H 28 |
| 1572 | G 22 | 3643 | H 29 |
| 1573 | G 23 | 3644 | H 30 |
| 1574 | G 24 | 3645 | H 31 |
| 1575 | G 25 | 3646 | H 32 |
| 1576 | G 26 | 3647 | H 33 |
| 1577 | G 27 | 3648 | H 34 |
| 1578 | G 28 | 3649 | H 35 |
| 1579 | G 29 | 3650 | H 36 |
| 1580 | G 30 | 3651 | H 37 |
| 1581 | G 31 | 3652 | H 38 |
| 1582 | G 32 | 3653 | H 39 |
| 1583 | G 33 | 3654 | H 40 |
| 1584 | G 34 | 3655 | H 41 |
| 1585 | G 35 | 3656 | H 42 |
| 1586 | G 36 | 3657 | H 43 |
| 1587 | G 37 | 3658 | H 44 |
| 1588 | G 38 | 3659 | H 45 |
| 1589 | G 39 | 3660 | H 46 |
| 1590 | G 40 | 3661 | H 47 |
| 1591 | G 41 | 3662 | H 48 |
| 1592 | G 42 | 3663 | H 49 |
| 1593 | G 43 | 3664 | H 50 |
| 1594 | G 44 | 3665 | H 51 |
| 1595 | G 45 | 3666 | H 52 |
| 1596 | G 46 | 3667 | H 53 |
| 1597 | G 47 | 3668 | H 54 |
| 1598 | G 48 | 3669 | H 55 |
| 1599 | G 49 | 3670 | H 56 |
| 1600 | G 50 | 3671 | H 57 |
| 1601 | G 51 | 3672 | H 58 |
| 1602 | G 52 | 3673 | H 59 |
| 1603 | G 53 | 3674 | H 60 |
| 1604 | G 54 | 3675 | H 61 |
| 1605 | G 55 | 3676 | H 62 |
| 1606 | G 56 | 3677 | H 63 |
| 1607 | G 57 | 3678 | H 64 |
| 1608 | G 58 | 3679 | H 65 |
| 1609 | G 59 | 3680 | H 66 |
| 1610 | G 60 | 3681 | H 67 |
| 1611 | G 61 | 3682 | H 68 |
| 1612 | G 62 | 3683 | H 69 |
| 1613 | G 63 | 3684 | H 70 |
| 1614 | G 64 | 3685 | H 71 |
| 1615 | G 65 | 3686 | H 72 |
| 1616 | G 66 | 3687 | H 73 |
| 1617 | G 67 | 3688 | H 74 |
| 1618 | G 68 | 3689 | H 75 |
| 1619 | G 69 | 3690 | H 76 |
| 1620 | G 70 | 3691 | H 77 |
| 1621 | G 71 | 3692 | H 78 |
| 1622 | G 72 | 3693 | H 79 |
| 1623 | G 73 | 3694 | H 80 |
| 1624 | G 74 | 3695 | H 81 |
| 1625 | G 75 | 3696 | H 82 |
| 1626 | G 76 | 3697 | H 83 |
| 1627 | G 77 | 3698 | H 84 |
| 1628 | G 78 | 3699 | H 85 |
| 1629 | G 79 | 3700 | H 86 |
| 1630 | G 80 | 3701 | H 87 |
| 1631 | G 81 | 3702 | H 88 |
| 1632 | G 82 | 3703 | H 89 |
| 1633 | G 83 | 3704 | H 90 |
| 1634 | G 84 | 3705 | H 91 |
| 1635 | G 85 | 3706 | H 92 |
| 1636 | G 86 | 3707 | H 93 |
| 1637 | G 87 | 3708 | H 94 |
| 1638 | G 88 | 3709 | H 95 |
| 1639 | G 89 | 3710 | H 96 |
| 1640 | G 90 | 3711 | H 97 |
| 1641 | G 91 | 3712 | H 98 |
| 1642 | G 92 | 3713 | H 99 |
| 1643 | G 93 | 3714 | H 100 |
| 1644 | G 94 | 3715 | H 101 |
| 1645 | G 95 | 3716 | H 102 |
| 1646 | G 96 | 3717 | H 103 |
| 1647 | G 97 | 3718 | H 104 |
| 1648 | G 98 | 3719 | H 105 |
| 1649 | G 99 | 3720 | H 106 |
| 1650 | G 100 | 3721 | H 107 |
| 1651 | G 101 | 3722 | H 108 |
| 1652 | G 102 | 3723 | H 109 |
| 1653 | G 103 | 3724 | H 110 |
| 1654 | G 104 | 3725 | H 111 |
| 1655 | G 105 | 3726 | H 112 |
| 1656 | G 106 | 3727 | H 113 |
| 1657 | G 107 | 3728 | H 114 |
| 1658 | G 108 | 3729 | H 115 |
| 1659 | G 109 | 3730 | H 116 |
| 1660 | G 110 | 3731 | H 117 |
| 1661 | G 111 | 3732 | H 118 |
| 1662 | G 112 | 3733 | H 119 |
| 1663 | G 113 | 3734 | H 120 |
| 1664 | G 114 | 3735 | H 121 |
| 1665 | G 115 | 3736 | H 122 |
| 1666 | G 116 | 3737 | H 123 |
| 1667 | G 117 | 3738 | H 124 |
| 1668 | G 118 | 3739 | H 125 |
| 1669 | G 119 | 3740 | H 126 |
| 1670 | G 120 | 3741 | H 127 |
| 1671 | G 121 | 3742 | H 128 |
| 1672 | G 122 | 3743 | H 129 |
| 1673 | G 123 | 3744 | H 130 |
| 1674 | G 124 | 3745 | H 131 |
| 1675 | G 125 | 3746 | H 132 |
| 1676 | G 126 | 3747 | H 133 |
| 1677 | G 127 | 3748 | H 134 |
| 1678 | G 128 | 3749 | H 135 |
| 1679 | G 129 | 3750 | H 136 |
| 1680 | G 130 | 3751 | H 137 |
| 1681 | G 131 | 3752 | H 138 |
| 1682 | G 132 | 3753 | H 139 |
| 1683 | G 133 | 3754 | H 140 |
| 1684 | G 134 | 3755 | H 141 |
| 1685 | G 135 | 3756 | H 142 |
| 1686 | G 136 | 3757 | H 143 |
| 1687 | G 137 | 3758 | H 144 |
| 1688 | G 138 | 3759 | H 145 |
| 1689 | G 139 | 3760 | H 146 |
| 1690 | G 140 | 3761 | H 147 |
| 1691 | G 141 | 3762 | H 148 |
| 1692 | G 142 | 3763 | H 149 |
| 1693 | G 143 | 3764 | H 150 |
| 1694 | G 144 | 3765 | H 151 |
| 1695 | G 145 | 3766 | H 152 |
| 1696 | G 146 | 3767 | H 153 |
| 1697 | G 147 | 3768 | H 154 |
| 1698 | G 148 | 3769 | H 155 |
| 1699 | G 149 | 3770 | H 156 |
| 1700 | G 150 | 3771 | H 157 |
| 1701 | G 151 | 3772 | H 158 |
| 1702 | G 152 | 3773 | H 159 |
| 1703 | G 153 | 3774 | H 160 |
| 1704 | G 154 | 3775 | H 161 |
| 1705 | G 155 | 3776 | H 162 |
| 1706 | G 156 | 3777 | H 163 |
| 1707 | G 157 | 3778 | H 164 |
| 1708 | G 158 | 3779 | H 165 |
| 1709 | G 159 | 3780 | H 166 |
| 1710 | G 160 | 3781 | H 167 |
| 1711 | G 161 | 3782 | H 168 |
| 1712 | G 162 | 3783 | H 169 |
| 1713 | G 163 | 3784 | H 170 |
| 1714 | G 164 | 3785 | H 171 |
| 1715 | G 165 | 3786 | H 172 |
| 1716 | G 166 | 3787 | H 173 |
| 1717 | G 167 | 3788 | H 174 |
| 1718 | G 168 | 3789 | H 175 |
| 1719 | G 169 | 3790 | H 176 |
| 1720 | G 170 | 3791 | H 177 |
| 1721 | G 171 | 3792 | H 178 |
| 1722 | G 172 | 3793 | H 179 |
| 1723 | G 173 | 3794 | H 180 |
| 1724 | G 174 | 3795 | H 181 |
| 1725 | G 175 | 3796 | H 182 |
| 1726 | G 176 | 3797 | H 183 |
| 1727 | G 177 | 3798 | H 184 |
| 1728 | G 178 | 3799 | H 185 |
| 1729 | G 179 | 3800 | H 186 |
| 1730 | G 180 | 3801 | H 187 |
| 1731 | G 181 | 3802 | H 188 |
| 1732 | G 182 | 3803 | H 189 |
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| 1738 | G 188 | 3809 | H 195 |
| 1739 | G 189 | 3810 | H 196 |
| 1740 | G 190 | 3811 | H 197 |
| 1741 | G 191 | 3812 | H 198 |
| 1742 | G 192 | 3813 | H 199 |
| 1743 | G 193 | 3814 | H 200 |
| 1744 | G 194 | 3815 | H 201 |
| 1745 | G 195 | 3816 | H 202 |
| 1746 | G 196 | 3817 | H 203 |
| 1747 | G 197 | 3818 | H 204 |
| 1748 | G 198 | 3819 | H 205 |
| 1749 | G 199 | 3820 | H 206 |
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| 1751 | G 201 | 3822 | H 208 |
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| 1754 | G 204 | 3825 | H 211 |
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| 1762 | G 212 | 3833 | H 219 |
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| 1767 | G 217 | 3838 | H 224 |
| 1768 | G 218 | 3839 | H 225 |
| 1769 | G 219 | 3840 | H 226 |
| 1770 | G 220 | 3841 | H 227 |
| 1771 | G 221 | 3842 | H 228 |
| 1772 | G 222 | 3843 | H 229 |
| 1773 | G 223 | 3844 | H 230 |
| 1774 | G 224 | 3845 | H 231 |
| 1775 | G 225 | 3846 | H 232 |
| 1776 | G 226 | 3847 | H 233 |
| 1777 | G 227 | 3848 | H 234 |
| 1778 | G 228 | 3849 | H 235 |
| 1779 | G 229 | 3850 | H 236 |
| 1780 | G 230 | 3851 | H 237 |
| 1781 | G 231 | 3852 | H 238 |
| 1782 | G 232 | 3853 | H 239 |
| 1783 | G 233 | 3854 | H 240 |
| 1784 | G 234 | 3855 | H 241 |
| 1785 | G 235 | 3856 | H 242 |
| 1786 | G 236 | 3857 | H 243 |
| 1787 | G 237 | 3858 | H 244 |
| 1788 | G 238 | 3859 | H 245 |
| 1789 | G 239 | 3860 | H 246 |
| 1790 | G 240 | 3861 | H 247 |
| 1791 | G 241 | 3862 | H 248 |
| 1792 | G 242 | 3863 | H 249 |
| 1793 | G 243 | 3864 | H 250 |
| 1794 | G 244 | 3865 | H 251 |
| 1795 | G 245 | 3866 | H 252 |
| 1796 | G 246 | 3867 | H 253 |
| 1797 | G 247 | 3868 | H 254 |
| 1798 | G 248 | 3869 | H 255 |
| 1799 | G 249 | 3870 | H 256 |
| 1800 | G 250 | 3871 | H 257 |

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 | K17 | 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 | | |
| 1551 | B9 | 2558 | K16 | 2573 | F15 | 2591 | H6 | 2609 | G11 | 2627 | D14 | 3558 | E18 | 3575 | J18 | 3590 | L16 | 3609 | E8 | 3624 | H10 | 3639 | C11 | 5554 | D13 | 6560 | D9 | 7555 | H17 | 9560 | J13 | 9576 | E14 | 9594 | C17 | 9609 | K13 | 9626 | F3 | 9641 | C4 | 9658 | J14 | 3651 | H16 | | |
| 1552 | D10 | 2559 | H15 | 2574 | H17 | 2592 | F6 | 2610 | G10 | 2628 | E12 | 3559 | E18 | 3576 | G18 | 3591 | F13 | 3610 | E8 | 3625 | G5 | 3640 | C13 | 5555 | D13 | 6561 | D14 | 7556 | J6 | 9561 | J13 | 9579 | G12 | 9595 | C17 | 9610 | K8 | 9627 | E3 | 9642 | B10 | 9659 | H16 | 3652 | G16 | | |
| 1553 | B18 | 2560 | F16 | 2575 | H16 | 2593 | H7 | 2611 | H8 | 2629 | D9 | 3560 | E18 | 3577 | J17 | 3592 | F13 | 3611 | E6 | 3626 | J6 | 3641 | J6 | 5556 | D15 | 6562 | F13 | 7557 | G7 | 9562 | J14 | 9580 | G12 | 9596 | G10 | 9611 | K7 | 9628 | E3 | 9643 | B10 | 9660 | G16 | 3653 | L9 | | |
| 1554 | E20 | 2561 | E17 | 2577 | J18 | 2594 | F7 | 2612 | K7 | 2630 | D9 | 3561 | C12 | 3578 | G17 | 3595 | 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 | C14 | 3579 | J16 | 3596 | J12 | 3613 | E7 | | | 3643 | D3 | 5558 | J15 | 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 | | |
| 1558 | B20 | 2565 | C6 | 2583 | K12 | 2598 | G18 | 2618 | H8 | 2634 | G6 | 3565 | D8 | 3582 | G16 | 3601 | K14 | 3616 | G15 | 3631 | H7 | 3646 | C3 | 5562 | J15 | 6567 | E9 | 9552 | E13 | 9567 | H13 | 9585 | F11 | 9601 | G6 | 9616 | H3 | 9633 | D5 | 9648 | E13 | 9665 | C4 | | | | |
| 1559 | L14 | 2566 | D7 | 2584 | J12 | 2599 | G8 | 2619 | J8 | 2635 | L17 | 3566 | D8 | 3583 | G15 | 3602 | J11 | 3617 | L17 | 3632 | F7 | 3647 | B3 | 5563 | E14 | 6568 | F5 | 9553 | J15 | 9568 | H13 | 9586 | K13 | 9602 | G6 | 9617 | L9 | 9634 | C4 | 9649 | J13 | 9666 | K9 | | | | |
| 1561 | L6 | 2567 | J18 | 2585 | K11 | 2600 | G8 | 2620 | J8 | 2636 | L16 | 3567 | D11 | 3584 | G15 | 3603 | K12 | 3618 | L17 | 3633 | H7 | 3648 | C3 | 5564 | E15 | 6569 | K9 | 9554 | J14 | 9569 | G13 | 9587 | D12 | 9603 | E6 | 9620 | G3 | 9635 | C4 | 9650 | H18 | 9667 | G9 | | | | |
| 2551 | G15 | 2568 | G17 | 2586 | J11 | 2601 | H6 | 2621 | H8 | 2637 | H8 | 3553 | H18 | 3568 | D11 | 3585 | E11 | 3604 | J12 | 3619 | E6 | 3634 | F7 | 3649 | H3 | 6555 | C13 | 6670 | D8 | 9555 | J15 | 9570 | G13 | 9588 | K14 | 9604 | H10 | 9621 | G3 | 9636 | C4 | 9651 | H15 | 9668 | J14 | 9655 | D15 |
| 2552 | E16 | 2569 | J17 | 2587 | K10 | 2605 | H7 | 2623 | L15 | 2638 | L15 | 3554 | G18 | 3571 | H18 | 3586 | E11 | 3605 | G11 | 3620 | E7 | 3635 | G9 | 3650 | G3 | 6556 | D13 | 7551 | K12 | 9556 | D13 | 9571 | G13 | 9590 | D10 | 9605 | J9 | 9622 | G3 | 9637 | B4 | 9652 | E16 | 9669 | E15 | 9657 | D15 |
| 2553 | H19 | 2570 | G17 | 2588 | J11 | 2606 | F7 | 2624 | L16 | 2639 | L16 | 3555 | H19 | 3572 | G18 | 3587 | D13 | 3606 | G12 | 3621 | F9 | 3636 | G9 | 5551 | J3 | 6557 | E10 | 7552 | K8 | 9557 | K14 | 9573 | F13 | 9591 | D10 | 9606 | J10 | 9623 | G3 | 9638 | J13 | 9653 | E15 | 9671 | K8 | 9672 | K6 |

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|------|-----|
| 3569 | L12 |
| 3570 | H12 |
| 3651 | H16 |
| 3652 | G16 |
| 3653 | L9 |
| 6570 | L10 |
| 6571 | L10 |
| 7561 | L10 |
| 9655 | D15 |
| 9657 | D15 |
| 9672 | K6 |

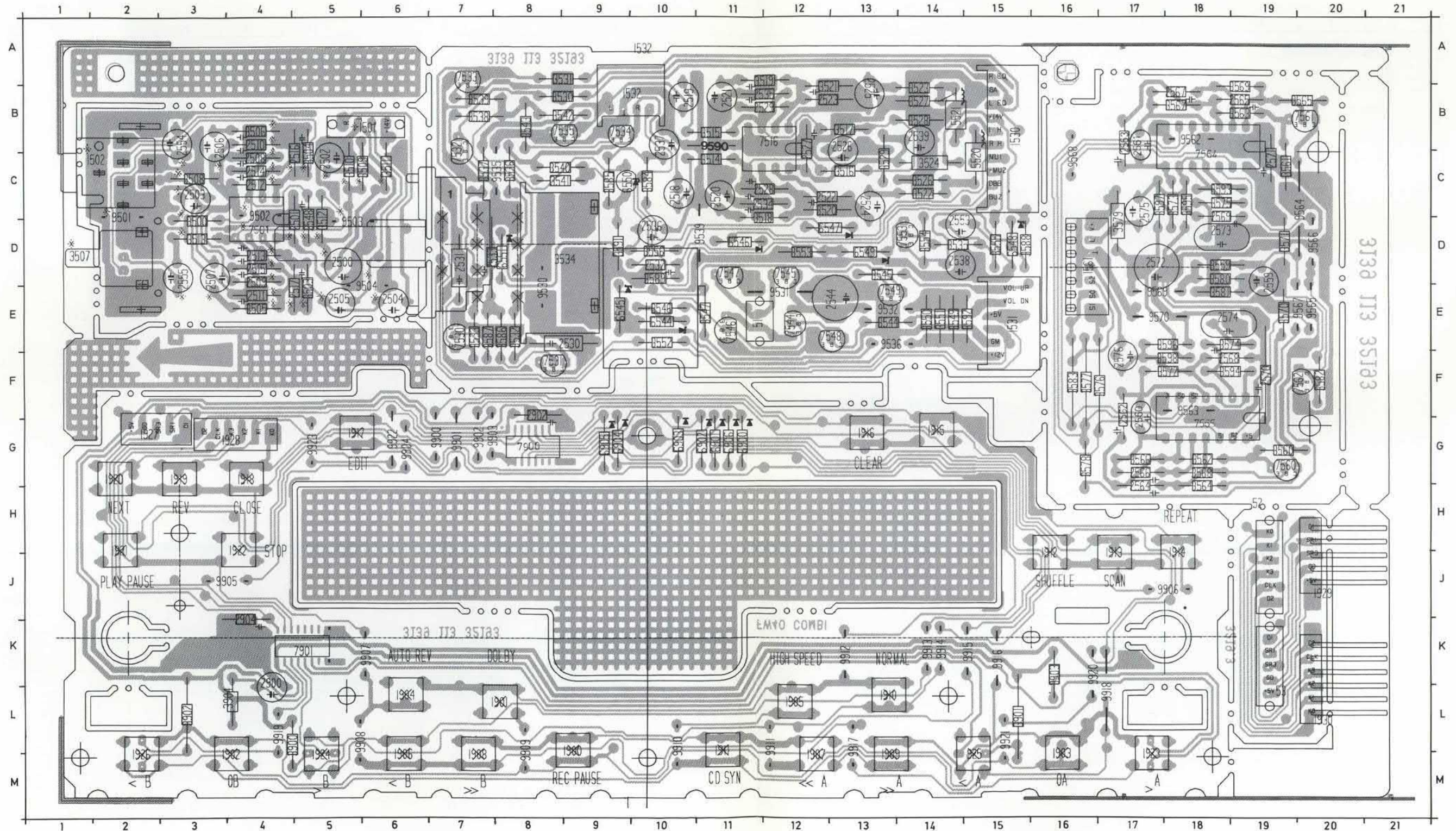


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|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|



COMBI BOARD COMPONENT LAYOUT

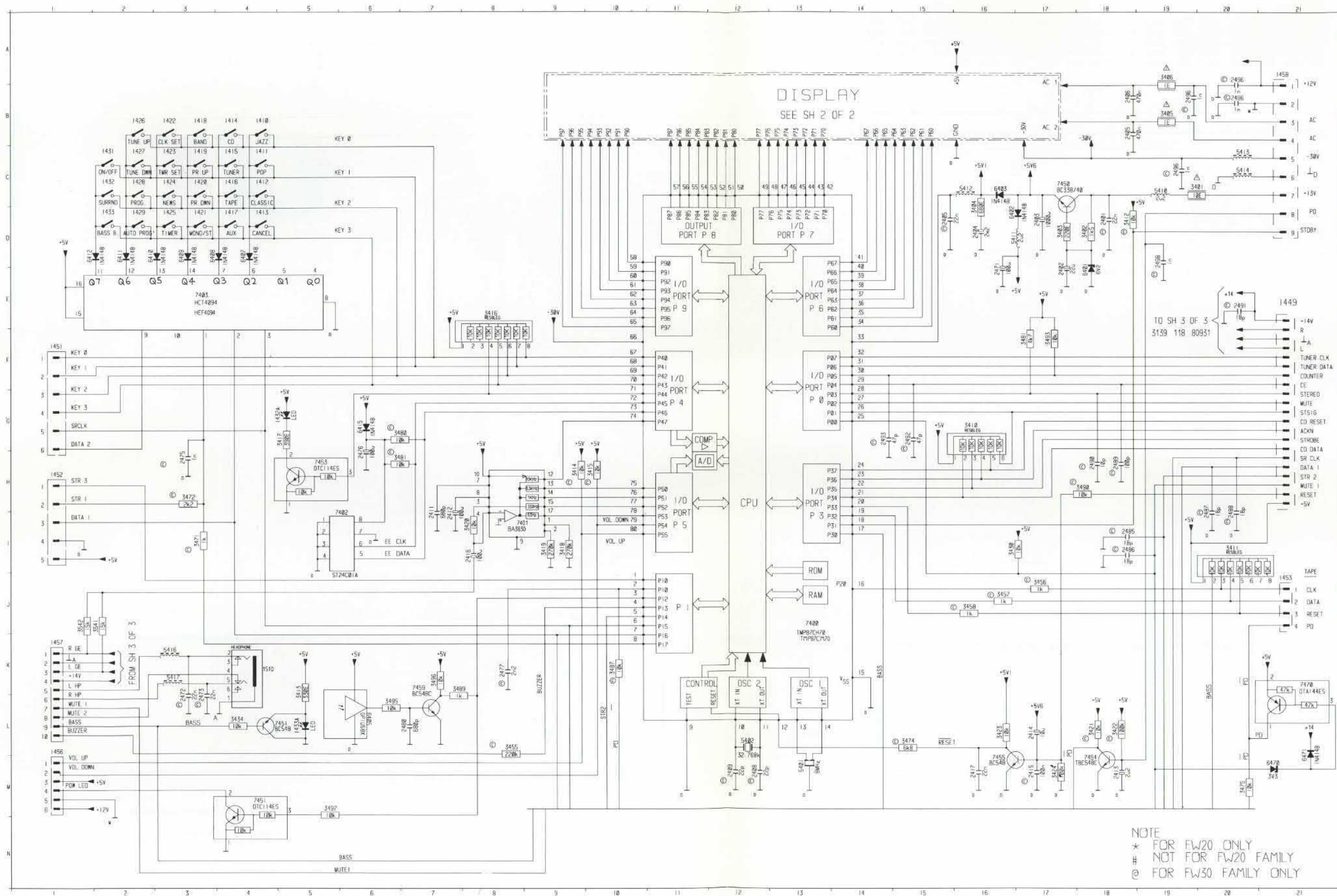
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| 051 | E11 | 1904 | L6 | 1918 | G4 | 2501 | C4 | 2515 | D4 | 2529 | B12 | 2555 | D3 | 2572 | D17 | 3511 | C6 | 3525 | A14 | 3540 | C8 | 3554 | D14 | 3570 | E19 | 3584 | C10 | 3598 | E17 | 6550 | C9 | 7533 | A7 | 7565 | F18 | 9904 | G6 | 9918 | K17 | | |
| 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 |
| 1531 | E15 | 1910 | K13 | 1924 | L5 | 2507 | D3 | 2521 | B11 | 2535 | B12 | 2564 | G17 | 3500 | C3 | 3517 | B13 | 3531 | A9 | 3546 | E10 | 3562 | G18 | 3576 | E17 | 3590 | B11 | 5520 | B15 | 6904 | G9 | 7547 | D11 | 9504 | D5 | 9567 | E20 | 9910 | L10 | 2902 2904 | F8 J4 |
| 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 | | |
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| 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 | | |
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| 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 | | |



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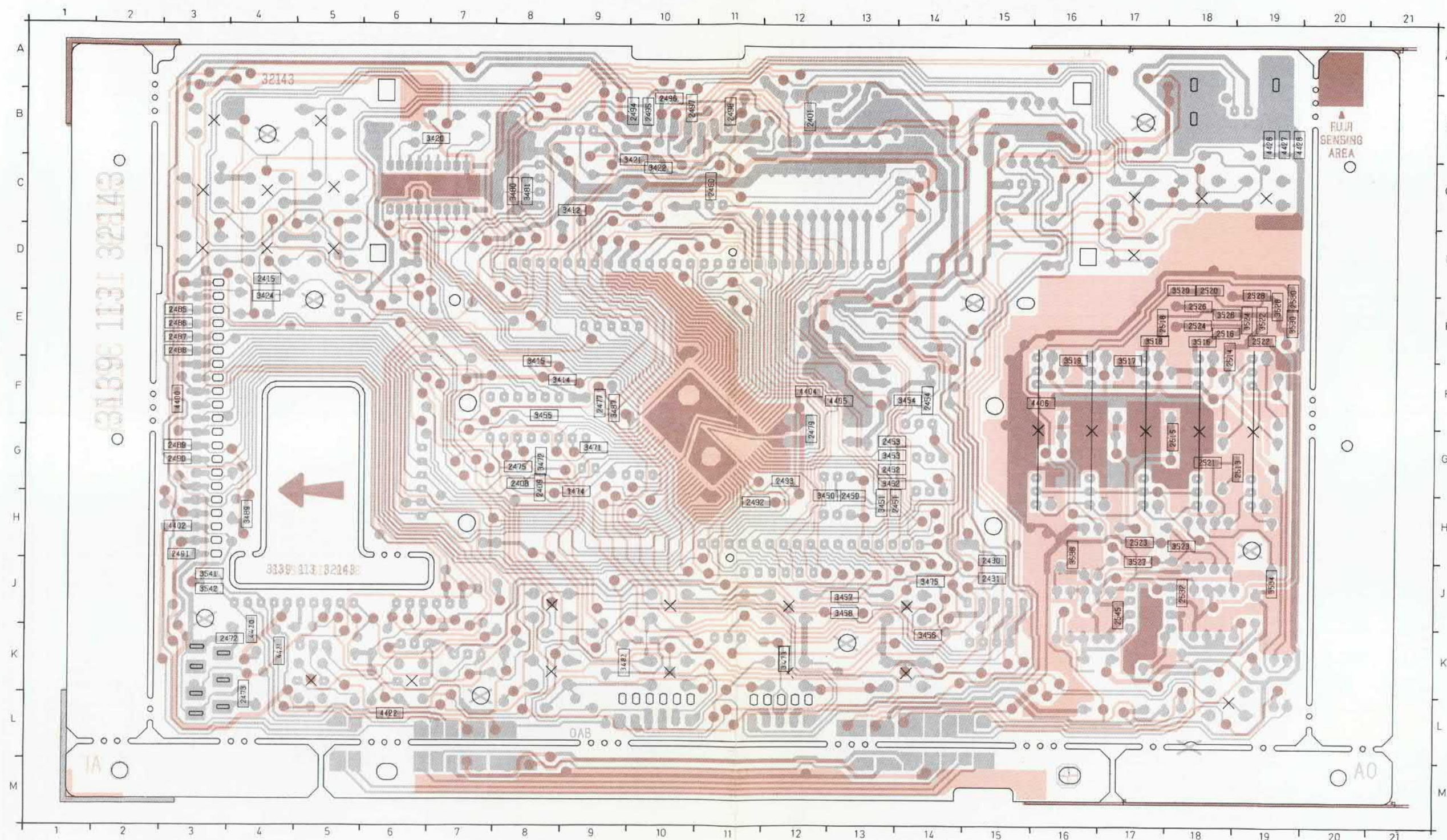
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FRONT CIRCUIT I



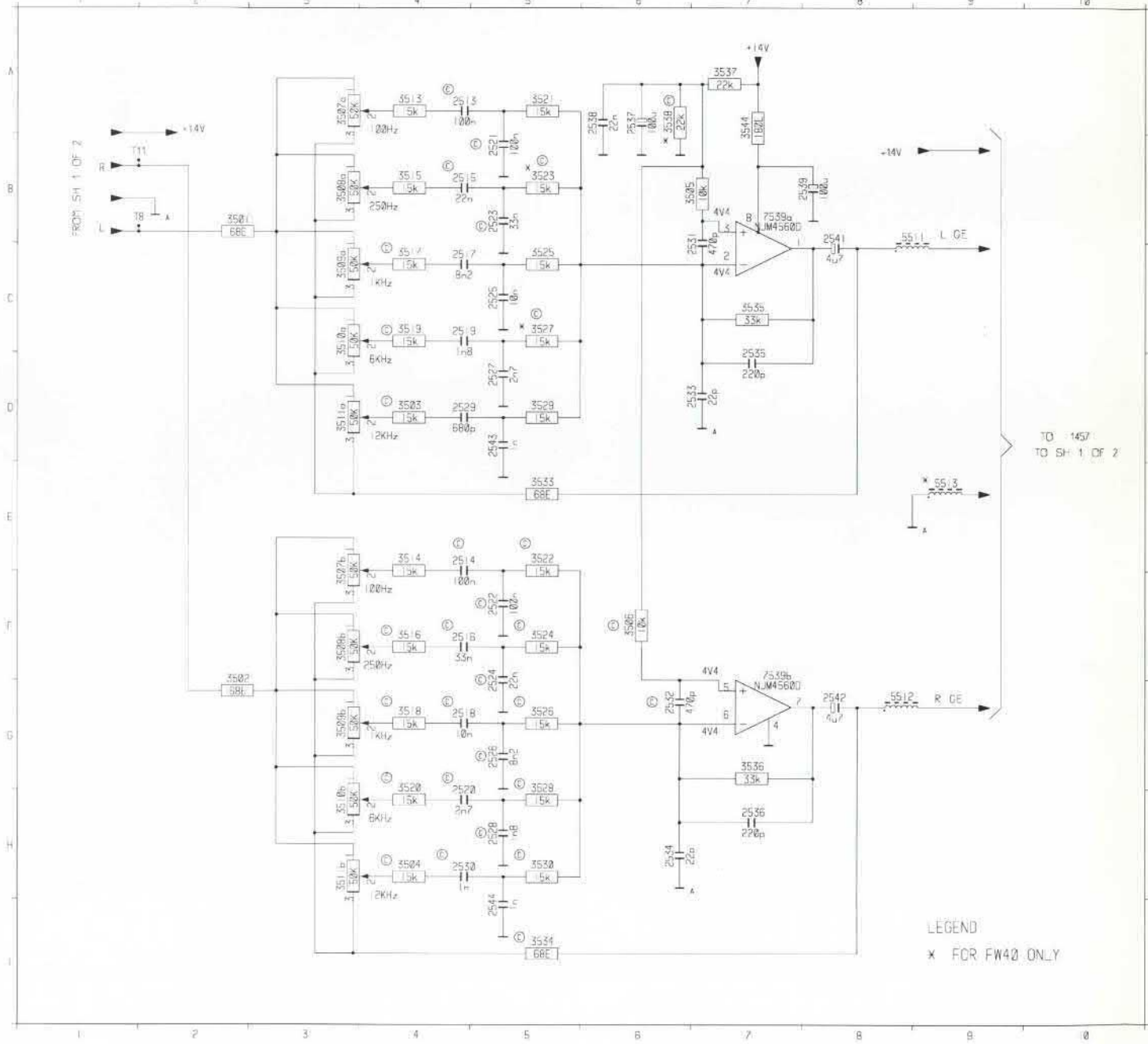
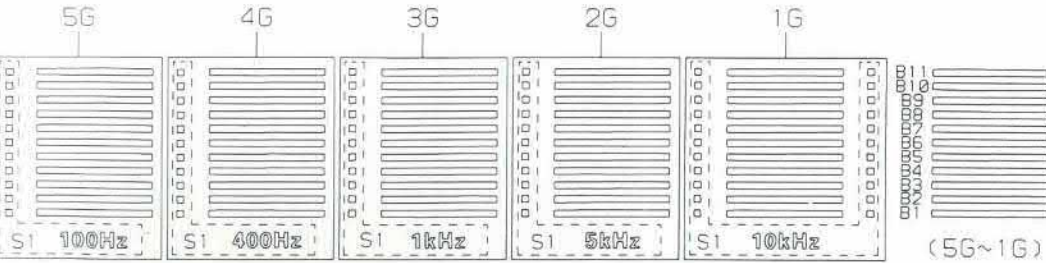
NOTE
* FOR FW20 ONLY
NOT FOR FW20 FAMILY
@ FOR FW30 FAMILY ONLY

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| 2401 | B12 | 2431 | J14 | 2454 | F14 | 2477 | F9 | 2488 | E3 | 2493 | G12 | 2498 | B11 | 2518 | E17 | 2524 | E18 | 2545 | J17 | 3421 | G10 | 3452 | G13 | 3457 | J13 | 3474 | H9 | 3487 | F9 | 3519 | J16 | 3526 | E18 | 3538 | H16 | 4402 | H3 | 4420 | K4 | 4428 | B19 |
| 2408 | G8 | 2450 | H13 | 2460 | C11 | 2479 | G12 | 2489 | G3 | 2494 | B10 | 2513 | G19 | 2520 | D18 | 2526 | E18 | 3412 | C9 | 3422 | C10 | 3453 | G13 | 3458 | J13 | 3475 | J14 | 3489 | H4 | 3520 | D18 | 3527 | J17 | 3541 | J3 | | | 4421 | K4 | | |
| 2409 | G8 | 2451 | H13 | 2472 | K4 | 2485 | E3 | 2490 | G3 | 2495 | B10 | 2514 | E18 | 2521 | G18 | 2528 | E19 | 3414 | F9 | 3424 | E4 | 3454 | F14 | 3471 | G9 | 3480 | C8 | 3516 | E18 | 3522 | E19 | 3528 | E19 | 3542 | J3 | 4404 | F12 | 4423 | L6 | | |
| 2415 | D4 | 2452 | G13 | 2473 | L4 | 2486 | E3 | 2491 | J3 | 2496 | B10 | 2515 | G18 | 2522 | E19 | 2530 | E19 | 3415 | F8 | 3450 | H12 | 3455 | F8 | 3472 | G8 | 3481 | C8 | 3517 | F17 | 3523 | H18 | 3530 | E19 | 4400 | F3 | 4405 | F13 | 4426 | B19 | | |
| 2430 | J14 | 2453 | G13 | 2475 | G8 | 2487 | E3 | 2492 | H11 | 2497 | B10 | 2516 | E18 | 2523 | H17 | 2532 | J18 | 3420 | B7 | 3451 | H13 | 3456 | K14 | 3473 | K12 | 3482 | K9 | 3518 | E17 | 3524 | E19 | 3534 | J19 | | | 4406 | J16 | 4427 | B19 | | |



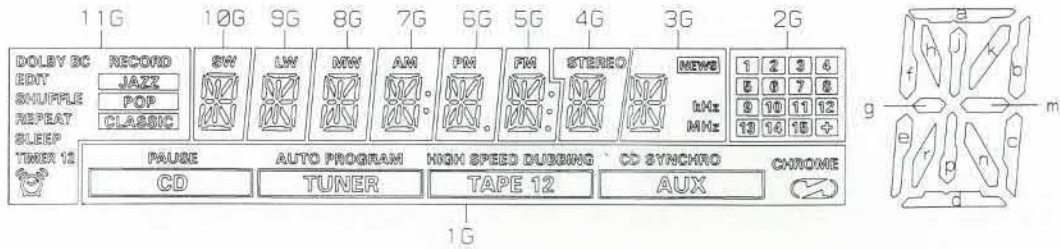
FRONT CIRCUIT II

GRID ASSIGNMENT



LEGEND
* FOR FW40 ONLY

GRID ASSIGNMENT

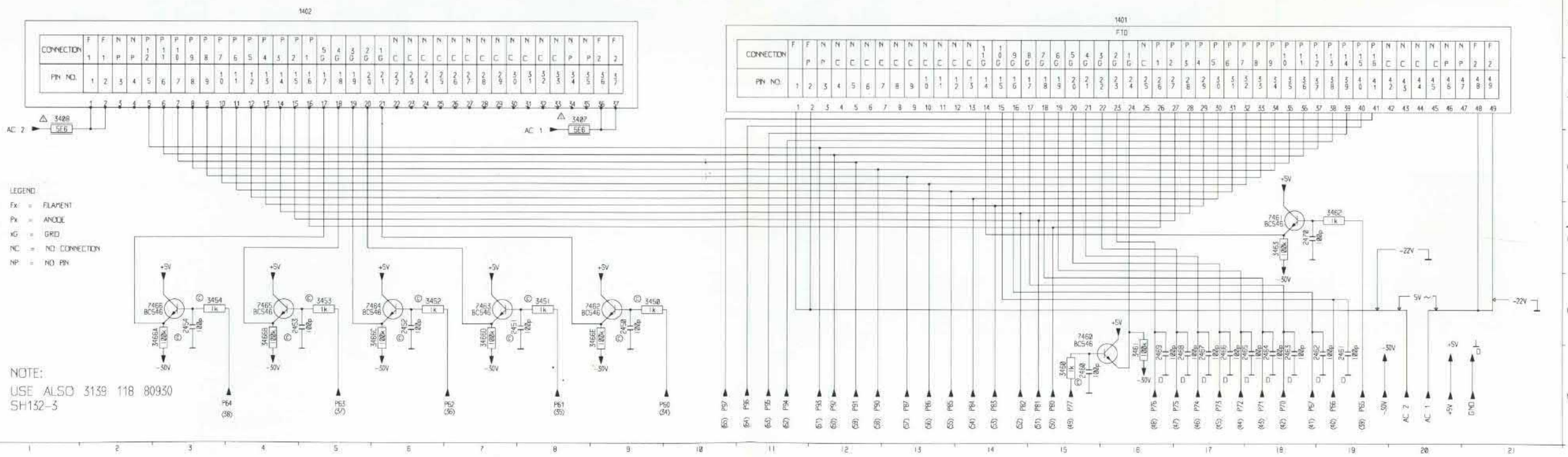


ANODE CONNECTION

| | 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

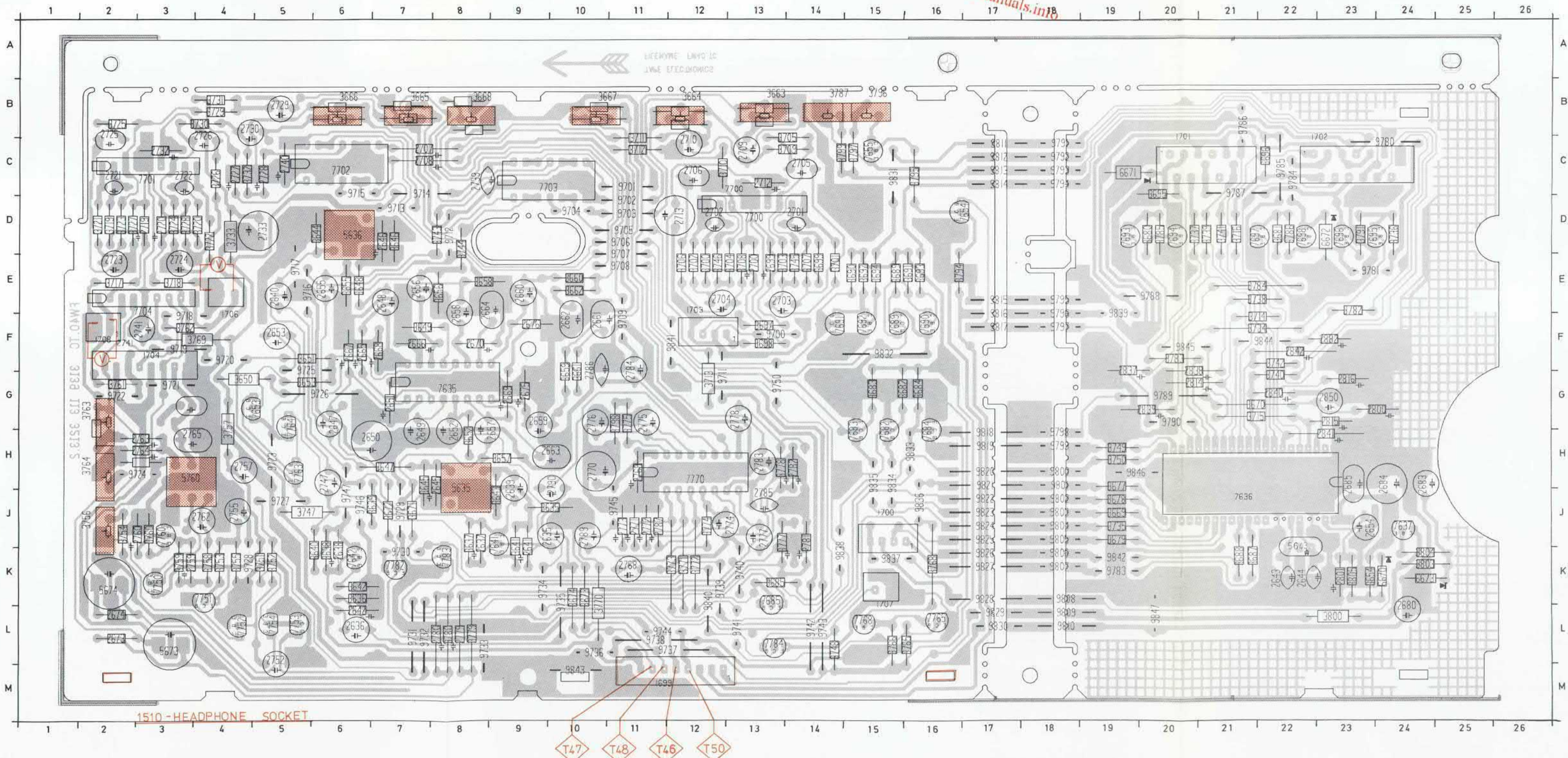
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|-----|-----|---------|-----|-----|-----|-----|-----|--------|------|----|------------|
| P1 | 1 | a | a | a | a | a | a | a | a | 1 | PAUSE |
| P2 | 2 | J.P | J.P | J.P | J.P | J.P | J.P | J.P | J.P | 2 | AUTO |
| P3 | 3 | k | k | k | k | k | k |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



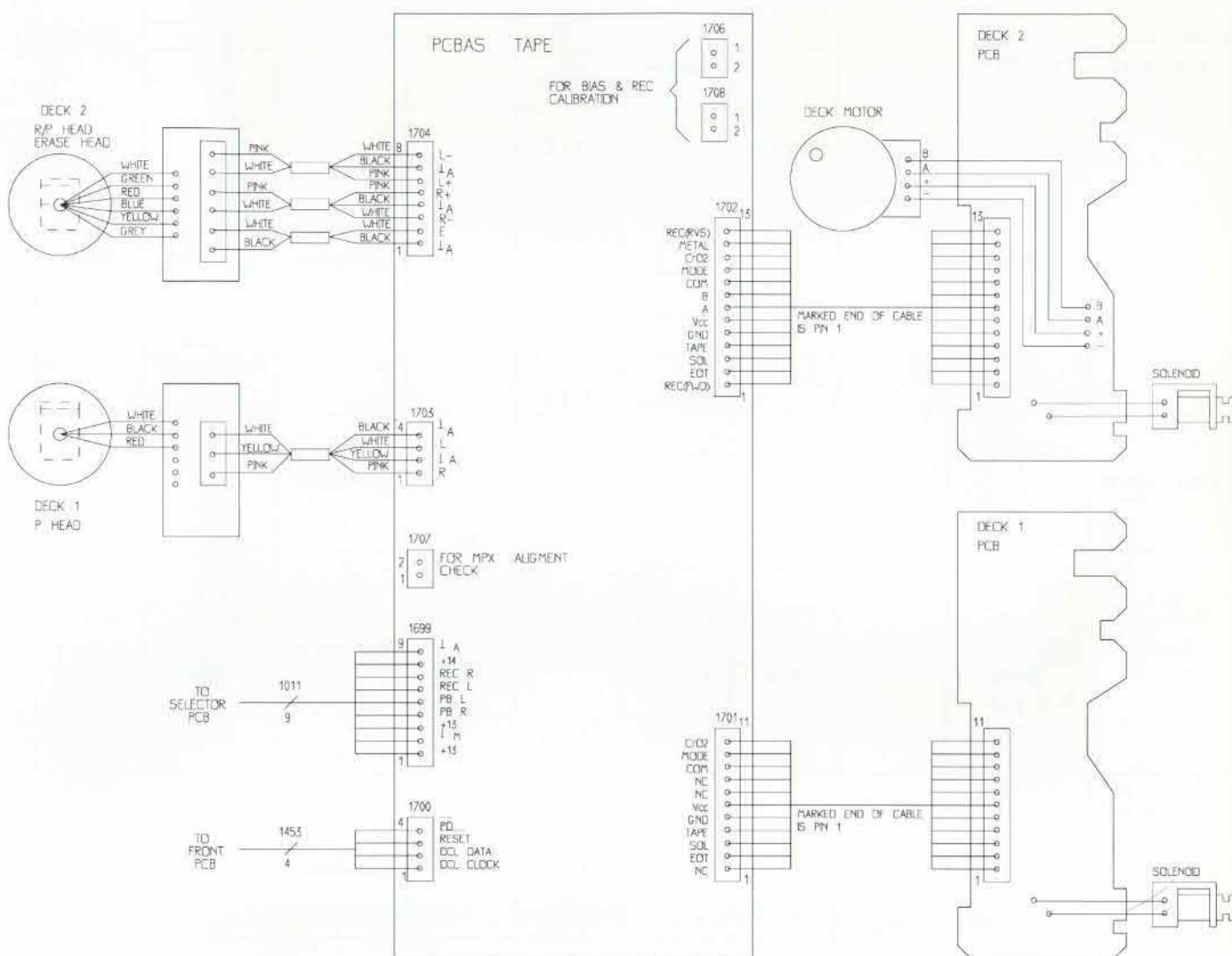
NOTE:
NUMBER IN (++) ARE PIN NUMBER OF 7401

TAPE CORE LAYOUT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| 1699 | M11 | 2643 | K22 | 2659 | G9 | 2680 | L24 | 2712 | C13 | 2739 | C8 | 2771 | J11 | 2787 | J10 | 3646 | H7 | 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 | 7654 | D17 | 7700 | D13 | 7782 | K7 | 9714 | C7 | 9730 | J7 | 9746 | J6 | 9794 | C18 | 9810 | L18 | 9826 | K17 | 9842 | K19 | 2801 | K23 |
| 1701 | B20 | 2645 | H8 | 2661 | F10 | 2684 | H24 | 2719 | D3 | 2741 | F3 | 2773 | J11 | 2790 | H10 | 3648 | E6 | 3664 | B12 | 3682 | G16 | 3699 | E14 | 3715 | G21 | 3731 | B4 | 3748 | H4 | 3764 | H2 | 3783 | F20 | 3804 | K24 | 7655 | C15 | 7701 | C3 | 7783 | K8 | 9715 | C6 | 9731 | L7 | 9747 | J6 | 9795 | E18 | 9811 | C17 | 9827 | K17 | 9844 | F22 | 2802 | G21 |
| 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 | 7656 | D17 | 7702 | C6 | 7784 | L13 | 9716 | E6 | 9732 | L7 | 9750 | G13 | 9796 | E18 | 9812 | C17 | 9828 | K17 | 9845 | F20 | 2803 | G23 |
| 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 | 7657 | D17 | 7703 | C9 | 9700 | F13 | 9717 | E5 | 9733 | L8 | 9750 | G13 | 9797 | F18 | 9813 | C17 | 9829 | L17 | 9846 | H19 | 2804 | G23 |
| 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 | 7658 | D17 | 7704 | E3 | 9701 | C11 | 9718 | F3 | 9734 | K10 | 9751 | E23 | 9798 | H18 | 9814 | C17 | 9830 | L17 | 2805 | G23 | | |
| 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 | 7659 | D17 | 7705 | C3 | 9702 | C11 | 9719 | F3 | 9735 | K10 | 9752 | E23 | 9799 | H18 | 9815 | E17 | 9831 | C15 | 2806 | G20 | | |
| 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 | 3791 | D23 | 3804 | K24 | 7660 | D17 | 7706 | C9 | 9703 | D11 | 9720 | F4 | 9736 | L10 | 9753 | E23 | 9800 | H18 | 9816 | F17 | 9832 | F15 | 2807 | G20 | | |
| 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 | 3792 | E16 | 3804 | K24 | 7661 | D17 | 7707 | C3 | 9704 | D10 | 9721 | G3 | 9737 | L12 | 9755 | E23 | 9801 | H18 | 9817 | F17 | 9833 | H15 | 2808 | G22 | | |
| 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 | 3793 | E16 | 3804 | K24 | 7662 | D17 | 7708 | C3 | 9705 | D11 | 9722 | G2 | 9738 | L11 | 9756 | B21 | 9802 | J18 | 9818 | H17 | 9834 | H15 | 2809 | G22 | | |
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| 2638 | K6 | 2654 | J23 | 2670 | F8 | 2706 | C12 | 2728 | C5 | 2764 | H3 | 2782 | H14 | 3641 | J9 | 3657 | H9 | 3673 | K10 | 3692 | E15 | 3708 | C13 | 3724 | D3 | 3740 | G22 | 3757 | H4 | 3774 | J12 | 3795 | E16 | 3804 | K24 | 7664 | D17 | 7710 | C3 | 9707 | D11 | 9724 | H2 | 9740 | K13 | 9758 | E20 | 9804 | J18 | 9820 | H17 | 9836 | H15 | 2811 | G23 | | |
| 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 | 3796 | E16 | 3804 | K24 | 7665 | D17 | 7711 | C3 | 9708 | F11 | 9725 | G6 | 9741 | L13 | 9759 | G20 | 9805 | J18 | 9821 | H17 | 9837 | K15 | 2812 | G23 | | |
| 2640 | E5 | 2656 | E7 | 2674 | L2 | 2708 | C7 | 2730 | B4 | 2766 | K11 | 2784 | F11 | 3643 | J9 | 3659 | F10 | 3677 | H19 | 3694 | E15 | 3710 | C12 | 3726 | C4 | 3742 | F22 | 3759 | K3 | 3776 | J18 | 3799 | E16 | 3804 | K24 | 7666 | D17 | 7712 | C3 | 9709 | F11 | 9726 | G6 | 9742 | L14 | 9760 | G20 | 9806 | K18 | 9822 | J17 | 9838 | K14 | 2813 | G23 | | |
| 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 | 3800 | L28 | 7641 | J9 | 7696 | D23 | 7765 | L16 | 9711 | G12 | 9722 | J5 | 9743 | L14 | 9759 | C18 | 9807 | K18 | 9823 | J17 | 9839 | F19 | 2814 | G23 | | |
| 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 | 3803 | K24 | 7642 | K6 | 7697 | D22 | 7766 | L15 | 9712 | G2 | 9728 | K4 | 9744 | L11 | 9792 | C18 | 9808 | K18 | 9824 | J17 | 9840 | K12 | 1707 | K15 | 3805 | K23 |



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 | mV-meter | 3763 | 7.0mV |
| | SBC 420* | | - | Record | | 3762 | | 3764 | |
| Recording playback level | 400Hz TCC 130*** and SBC 419** | | Play | Record Chrome | | 3761 | mV-meter | 3667 | 0.68mV #3 |
| | | | - | Playback | T46 | | | 3668 | 300mV ± 17mV |
| | | | | | T50 | | | check | |
| | 400Hz TCC 130*** and SBC 420* | | Play | Record | | 3761 | | 3667 | 0.45mV #3 |
| | | | - | Playback | | 3762 | | 3668 | |
| | | | | | T46 | | | check | 300mV ± 17mV |
| T50 | | | | | | | | | |
| 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

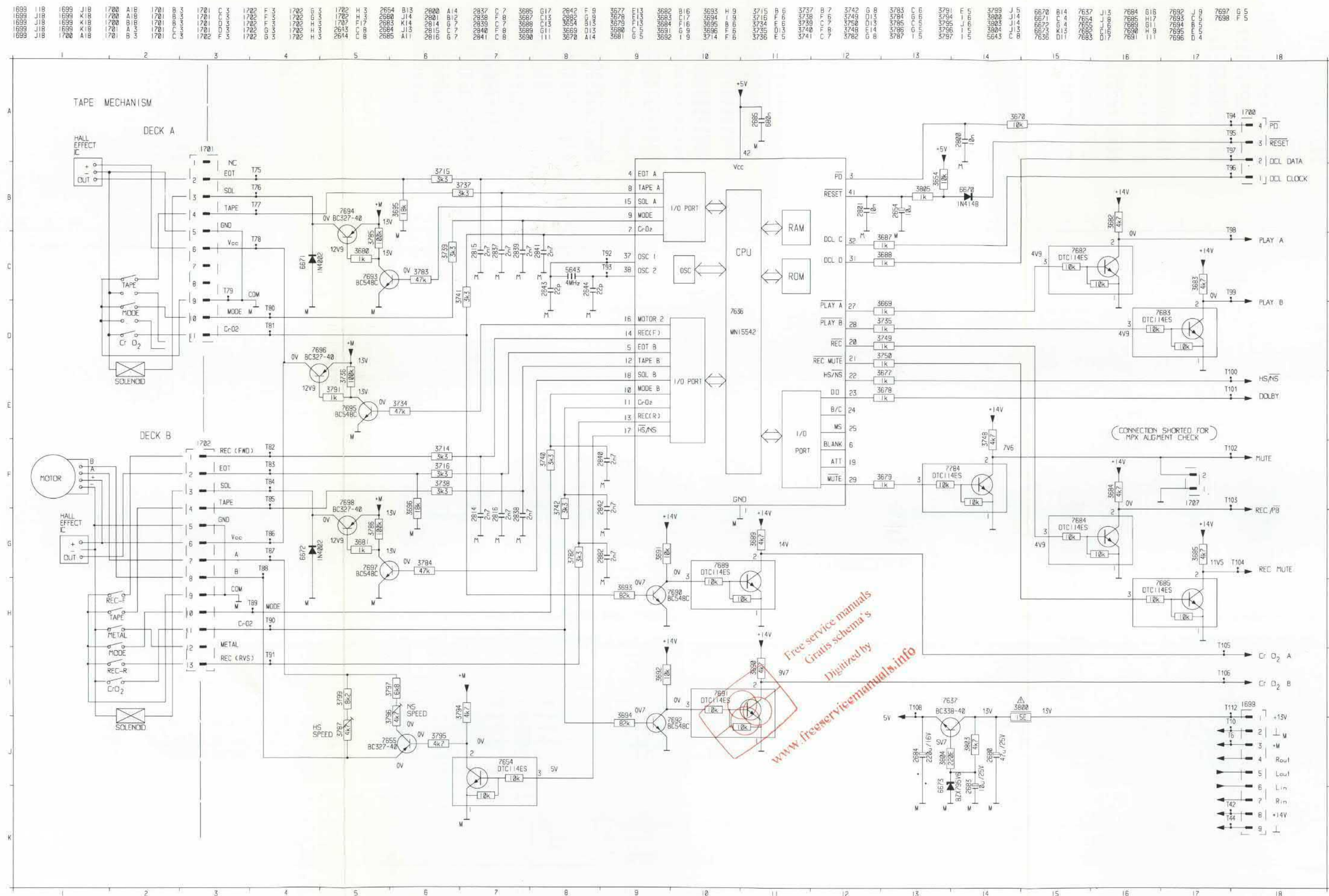
*** TCC 130 : 4822 397 30144 (dolby level adj, 200nWB/m)

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

#2 Adjustment for Chrome must be done before Ferro.

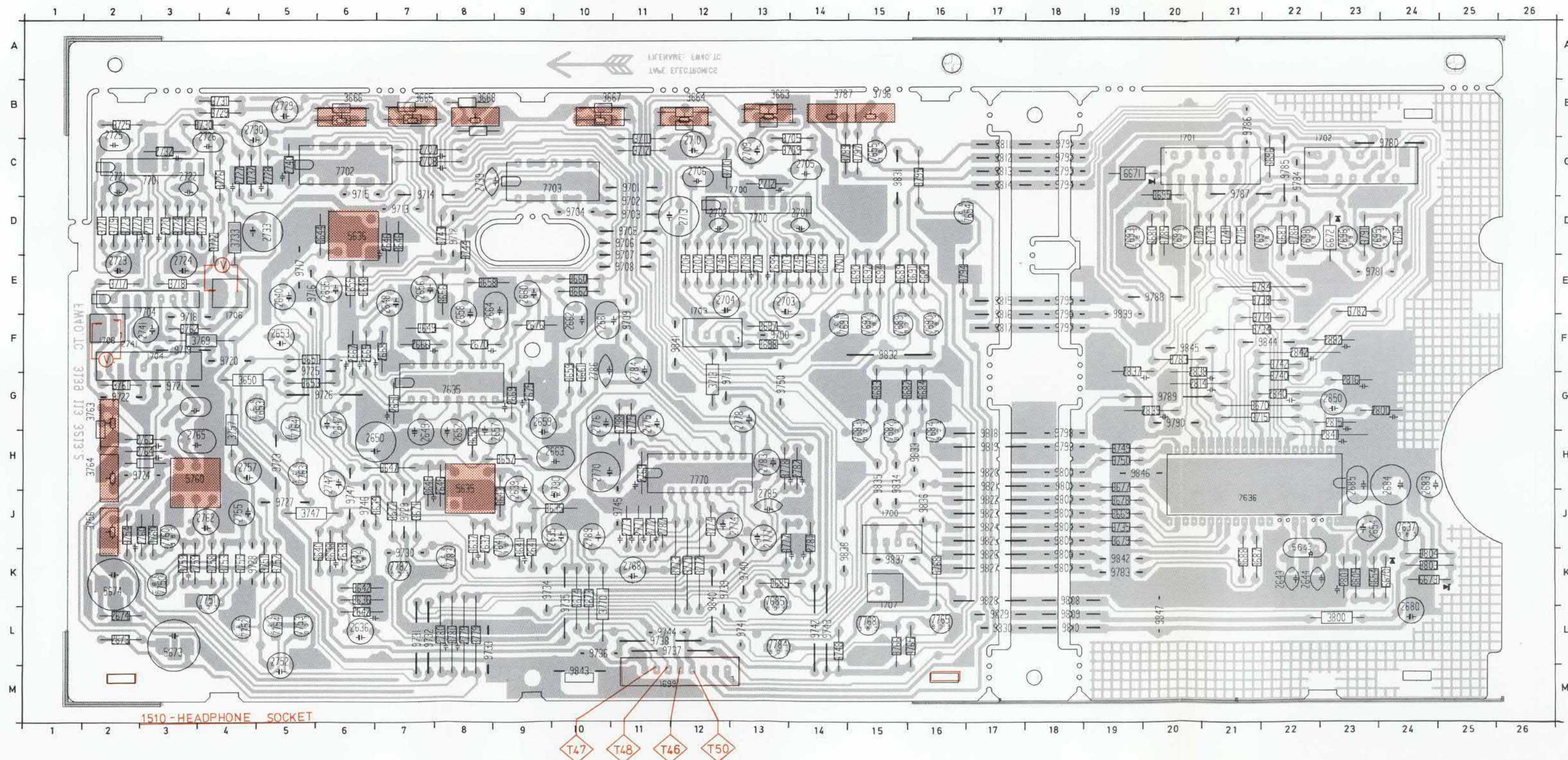
#3 Repeat until Rec/Playback level is achieved.

TAPE CORE CIRCUIT I

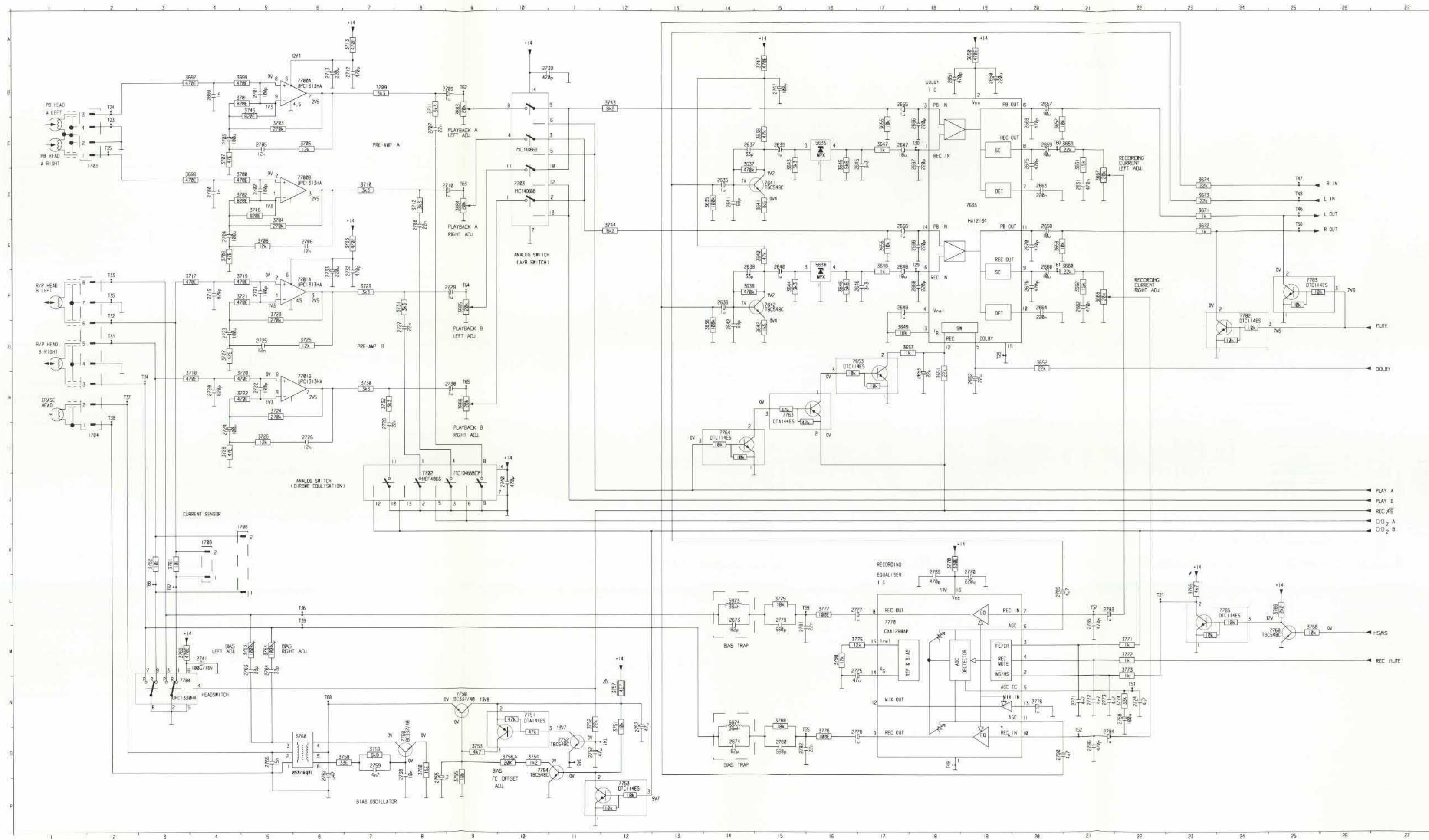


PCS 63 155

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| 1699 | M11 | 2643 | K22 | 2659 | G9 | 2680 | L24 | 2712 | C13 | 2739 | C8 | 2771 | J11 | 2787 | J10 | 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 | J11 | 2644 | K22 | 2659 | G9 | 2683 | L24 | 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 | 3805 | H8 | 7654 | D17 | 7700 | D13 | 7782 | K7 | 9714 | C7 | 9730 | J7 | 9746 | J6 | 9794 | C18 | 9810 | L18 | 9826 | J17 | 9842 | K19 | 2801 | K23 |
| 1701 | H10 | 2645 | H20 | 2660 | H10 | 2684 | H24 | 2719 | D3 | 2741 | F3 | 2773 | J11 | 2790 | H10 | 3648 | E6 | 3664 | B12 | 3682 | G16 | 3699 | E14 | 3715 | G21 | 3731 | B4 | 3748 | H4 | 3764 | H2 | 3783 | F20 | 3806 | D6 | 7655 | C15 | 7701 | C3 | 7783 | K8 | 9715 | C6 | 9732 | L7 | 9747 | J6 | 9795 | E18 | 9811 | C17 | 9827 | K17 | 9844 | F22 | 2814 | Q21 |
| 1702 | B22 | 2646 | D7 | 2661 | 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 | J22 | 7682 | H15 | 7702 | C6 | 7784 | L13 | 9716 | E6 | 9731 | L7 | 9750 | G13 | 9796 | E18 | 9812 | C17 | 9828 | K17 | 9845 | F20 | 2815 | G23 |
| 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 | 3807 | L3 | 7683 | H15 | 7703 | C9 | 9700 | F13 | 9717 | E5 | 9733 | L8 | 9780 | C24 | 9797 | F18 | 9813 | C17 | 9829 | L17 | 9846 | H19 | 2816 | G23 |
| 1704 | F3 | 2648 | E7 | 2664 | H8 | 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 | 3808 | E2 | 7674 | K20 | 7704 | E3 | 9701 | C11 | 9718 | F3 | 9734 | K10 | 9781 | E23 | 9798 | H18 | 9814 | C17 | 9830 | L17 | | | 2837 | F19 |
| 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 | 3809 | H3 | 7685 | K13 | 7750 | K3 | 9702 | C11 | 9719 | F3 | 9735 | K10 | 9783 | K19 | 9799 | H18 | 9815 | E17 | 9831 | C15 | | | 2838 | F20 |
| 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 | 3791 | D23 | 3810 | K20 | 7689 | F15 | 7751 | K4 | 9703 | D11 | 9720 | F4 | 9736 | L10 | 9784 | C22 | 9800 | H18 | 9816 | F17 | 9832 | F15 | | | 2839 | G20 |
| 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 | 3794 | E16 | 3811 | E9 | 7690 | F16 | 7752 | L4 | 9704 | D10 | 9721 | G3 | 9737 | L12 | 9785 | C22 | 9801 | H18 | 9817 | F17 | 9833 | H16 | | | 2840 | G22 |
| 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 | 3795 | E16 | 3812 | D22 | 7691 | F14 | 7753 | L5 | 9705 | D11 | 9722 | G2 | 9738 | L11 | 9786 | B21 | 9802 | J18 | 9818 | F17 | 9834 | H15 | | | 2841 | G23 |
| 2637 | J8 | 2653 | F5 | 2669 | G9 | 2705 | C14 | 2727 | C4 | 2763 | H3 | 2781 | J14 | 3640 | K6 | 3656 | E8 | 3672 | J7 | 3691 | E16 | 3707 | E14 | 3723 | D2 | 3739 | D21 | 3756 | J2 | 3773 | K12 | 3796 | B15 | 3813 | K24 | 7692 | F15 | 7754 | L5 | 9706 | D11 | 9723 | H5 | 9739 | K12 | 9787 | C21 | 9803 | J18 | 9819 | F17 | 9835 | H15 | | | 2842 | F23 |
| 2638 | K6 | 2654 | J23 | 2700 | 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 | 3797 | C15 | 3814 | G8 | 7693 | D19 | 7760 | J3 | 9707 | D11 | 9724 | H2 | 9740 | K13 | 9788 | H17 | 9804 | J18 | 9820 | H17 | 9836 | F19 | | | 2843 | G20 |
| 2639 | J9 | 2655 | E6 | 2673 | L2 | 2707 | C7 | 2729 | B5 | 2765 | H3 | 2783 | H13 | 3642 | K6 | 3658 | E8 | 3674 | K10 | 3693 | E16 | 3709 | E13 | 3725 | B2 | 3741 | D21 | 3758 | K4 | 3775 | G11 | 3798 | H11 | 3815 | G23 | 7694 | D20 | 7763 | H5 | 9708 | F11 | 9725 | G6 | 9742 | L14 | 9790 | G20 | 9806 | K18 | 9822 | J17 | 9838 | K14 | | | 2844 | F21 |
| 2640 | E5 | 2656 | E7 | 2674 | L2 | 2708 | C7 | 2730 | B4 | 2768 | K11 | 2784 | F11 | 3643 | J9 | 3659 | F10 | 3677 | H19 | 3694 | E15 | 3710 | C12 | 3726 | C4 | 3742 | F22 | 3759 | K3 | 3774 | K12 | 3799 | C14 | 3816 | J23 | 7694 | D23 | 7764 | H6 | 9711 | F12 | 9726 | H8 | 9743 | L18 | 9792 | G12 | 9807 | K18 | 9823 | J17 | 9839 | F19 | | | 2845 | F23 |
| 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 | 3800 | L23 | 3803 | K24 | 7695 | D23 | 7765 | L16 | 9711 | G12 | 9727 | J5 | 9743 | L14 | 9791 | C18 | 9807 | K18 | 9824 | J17 | 9840 | K15 | 2805 | K23 | | |
| 2642 | L6 | 2658 | E8 | 2676 | E9 | 2710 | C12 | 2733 | D5 | 2769 | F10 | 2786 | F10 | 3645 | H7 | 3661 | F10 | 3679 | J19 | 3696 | C22 | 3712 | C11 | 3728 | D3 | 3744 | D8 | 3761 | G2 | 3779 | L8 | 3803 | K24 | 7692 | K6 | 7697 | D22 | 7768 | L15 | 9712 | H8 | 9728 | K4 | 9744 | L11 | 9792 | C18 | 9808 | K18 | 9824 | J17 | 9840 | K15 | 2806 | K23 | | |

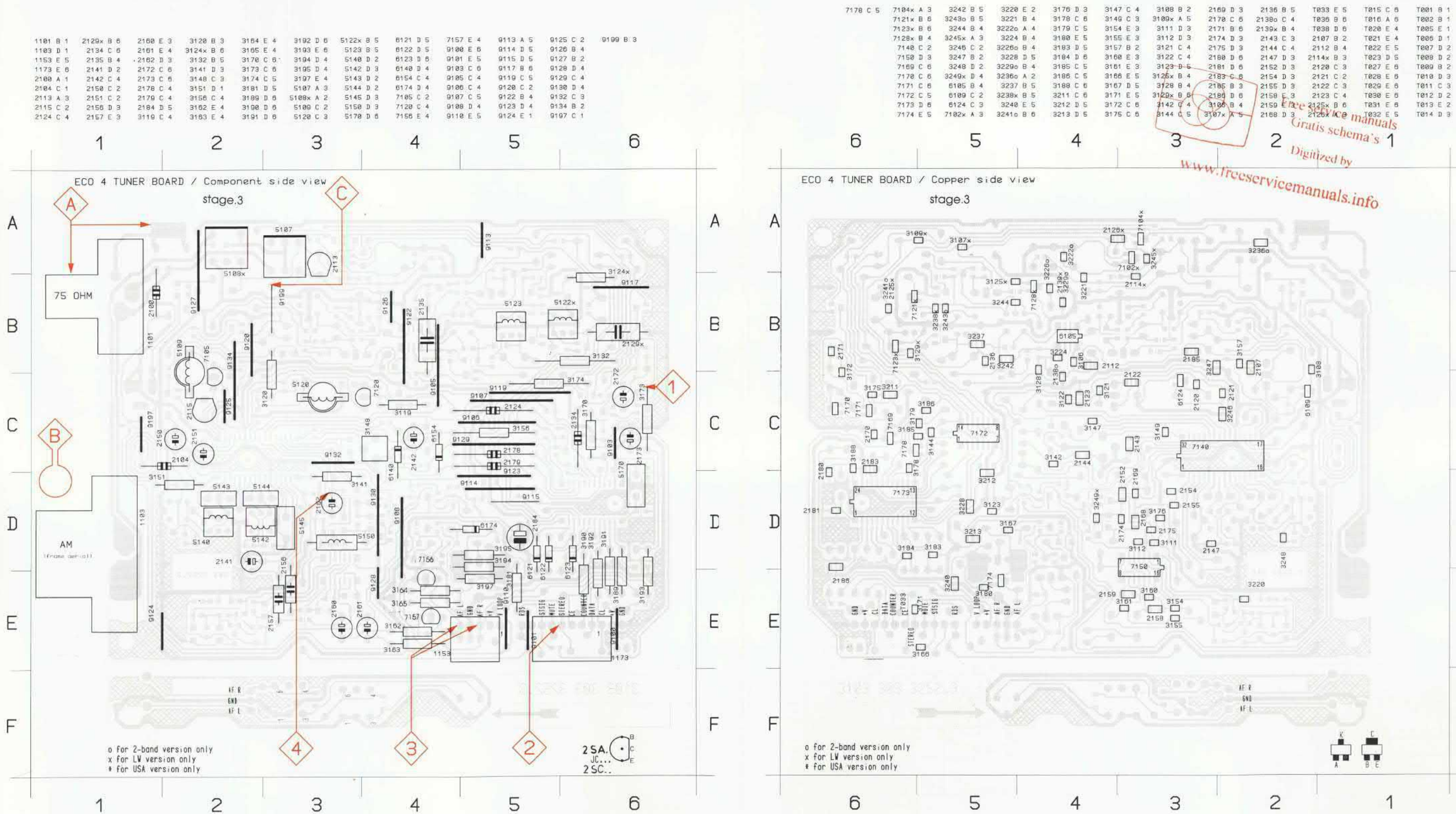


TAPE CORE CIRCUIT II

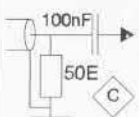


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| 1783 | 7700A | 1 | 1 |
| 1784 | 7700B | 1 | 1 |
| 1785 | 7700A | 1 | 1 |
| 1786 | 7700B | 1 | 1 |
| 1787 | 7700A | 1 | 1 |
| 1788 | 7700B | 1 | 1 |
| 1789 | 7700A | 1 | 1 |
| 1790 | 7700B | 1 | 1 |
| 1791 | 7700A | 1 | 1 |
| 1792 | 7700B | 1 | 1 |
| 1793 | 7700A | 1 | 1 |
| 1794 | 7700B | 1 | 1 |
| 1795 | 7700A | 1 | 1 |
| 1796 | 7700B | 1 | 1 |
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| 1798 | 7700B | 1 | 1 |
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| 1800 | 7700B | 1 | 1 |
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| 1853 | 7700A | 1 | 1 |
| 1854 | 7700B | 1 | 1 |
| 1855 | 7700A | 1 | 1 |
| 1856 | 7700B | 1 | 1 |
| 1857 | 7700A | 1 | 1 |
| 1858 | 7700B | 1 | 1 |
| 1859 | 7700A | 1 | 1 |
| 1860 | 7700B | 1 | 1 |
| 1861 | 7700A | 1 | 1 |
| 1862 | 7700B | 1 | 1 |
| 1863 | 7700A | 1 | 1 |
| 1864 | 7700B | 1 | 1 |
| 1865 | 7700A | 1 | 1 |
| 1866 | 7700B | 1 | 1 |
| 1867 | 7700A | 1 | 1 |
| 1868 | 7700B | 1 | 1 |
| 1869 | 7700A | 1 | 1 |
| 1870 | 7700B | 1 | 1 |
| 1871 | 7700A | 1 | 1 |
| 1872 | 7700B | 1 | 1 |
| 1873 | 7700A | 1 | 1 |
| 1874 | 7700B | 1 | 1 |
| 1875 | 7700A | 1 | 1 |
| 1876 | 7700B | 1 | 1 |
| 1877 | 7700A | 1 | 1 |
| 1878 | 7700B | 1 | 1 |
| 1879 | 7700A | 1 | 1 |
| 1880 | 7700B | 1 | 1 |
| 1881 | 7700A | 1 | 1 |
| 1882 | 7700B | 1 | 1 |
| 1883 | 7700A | 1 | 1 |
| 1884 | 7700B | 1 | 1 |
| 1885 | 7700A | 1 | 1 |
| 1886 | 7700B | 1 | 1 |
| 1887 | 7700A | 1 | 1 |
| 1888 | 7700B | 1 | 1 |
| 1889 | 7700A | 1 | 1 |
| 1890 | 7700B | 1 | 1 |
| 1891 | 7700A | 1 | 1 |
| 1892 | 7700B | 1 | 1 |
| 1893 | 7700A | 1 | 1 |
| 1894 | 7700B | 1 | 1 |
| 1895 | 7700A | 1 | 1 |
| 1896 | 7700B | 1 | 1 |
| 1897 | 7700A | 1 | 1 |
| 1898 | 7700B | 1 | 1 |
| 1899 | 7700A | 1 | 1 |
| 1900 | 7700B | 1 | 1 |

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)

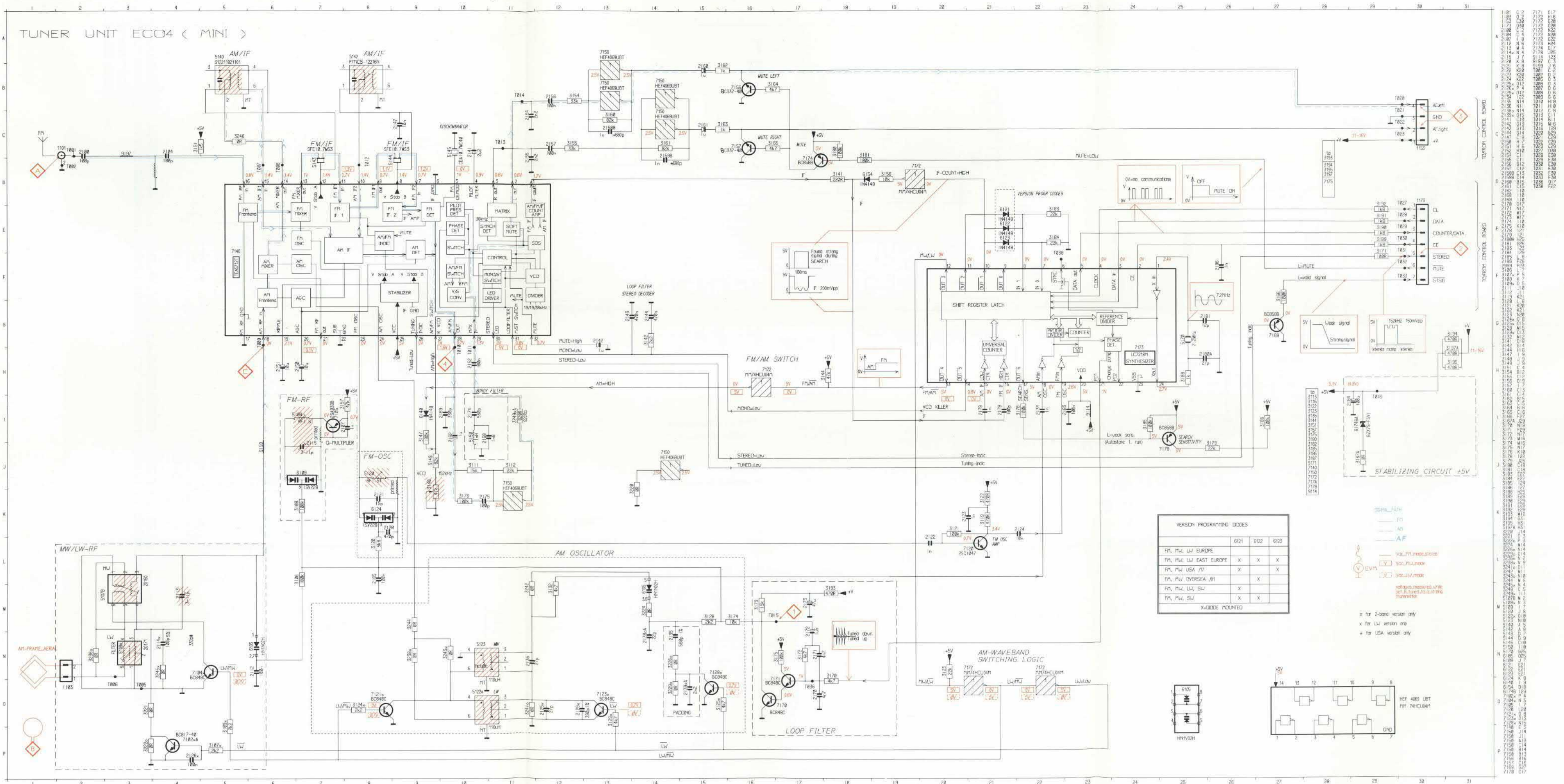
| Waverange | Input frequency | Input | Set tuned to | Adjust | Output | Scope / Voltmeter |
|--|--|---|--------------|--------------|-----------|-------------------------------|
| VARICAP ALIGNMENT | | | | | | |
| FM /00/01/05/10/17 87.5 - 108MHz | | | 108 MHz | 5120 | 1 | 8 ± 0.2V |
| | | | 87.5MHz | 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 | A 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 | A | 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 | B mod=1kHz 30% AM | 198kHz | 5108 | 4 | MAX |
| MW /00/05/10/14 3-band version | 1494kHz | | 1494kHz | 2113 | | |
| | 549kHz | | 549kHz | 5107 | | |
| MW /01/17 2-band version | 1500kHz | | 1500kHz | 2113 | | MAX |
| | 550kHz | | 550kHz | 5107 | | |

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

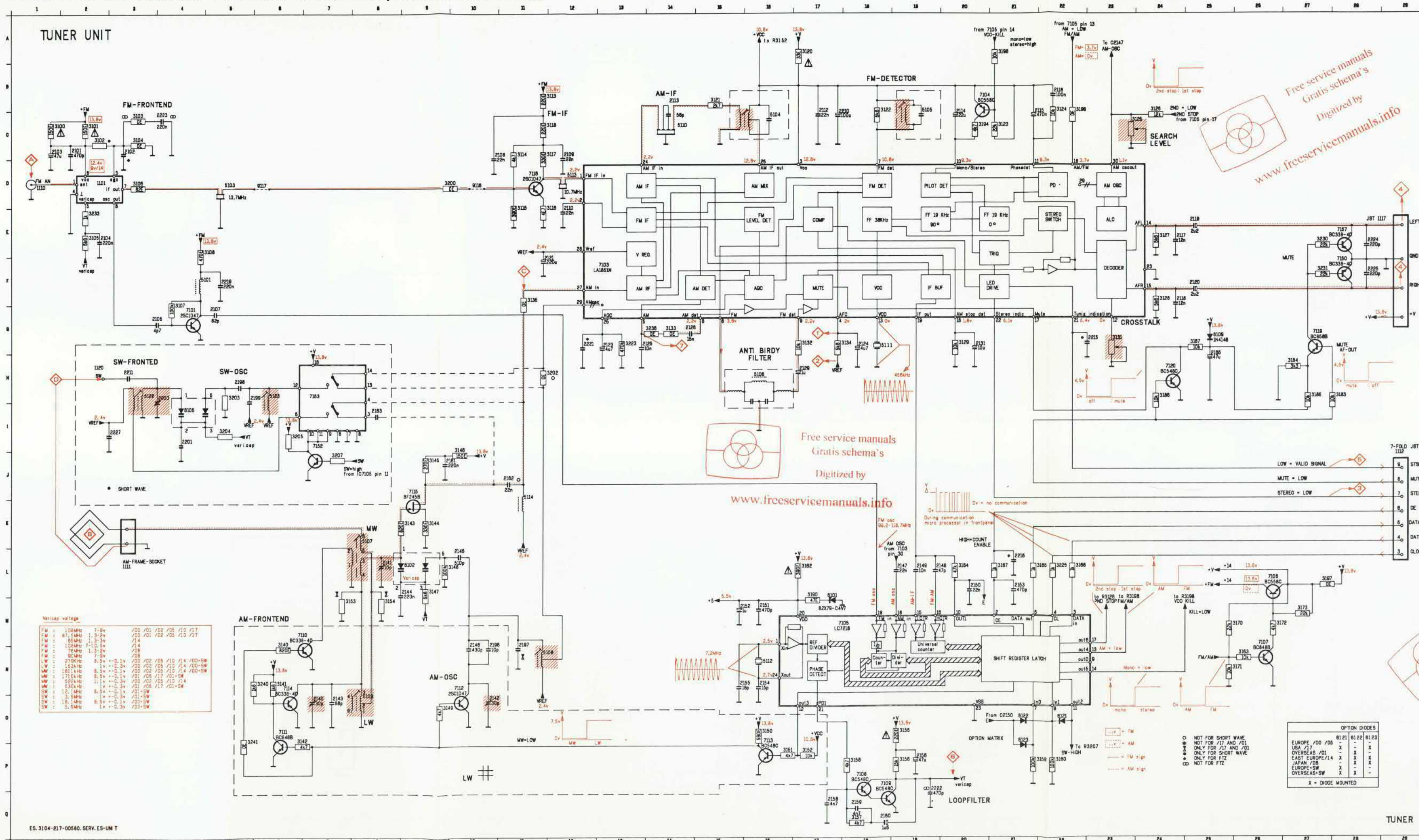
repeat

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

ECO4 CIRCUIT DIAGRAM - For all versions produced from wk 249 onwards except /22.



TUNER 92 CIRCUIT DIAGRAM - For /22 and other versions produced before wk 249.



Vericap voltage

| | | | |
|----|----------|---------|--------------------------------|
| FM | 1.08MHz | 7-9v | /00 /01 /02 /03 /10 /17 |
| FM | 87.5MHz | 1-3.2v | /00 /01 /02 /03 /10 /17 |
| FM | 65.4MHz | 1-3.2v | /1 |
| FM | 108MHz | 7-12.5v | /14 |
| FM | 75MHz | 1-2.5v | /08 |
| FM | 90MHz | 7-9v | /08 |
| LW | 270kHz | 8.5v | /00 /01 /02 /03 /10 /14 /00-SW |
| LW | 1.63MHz | 1v | /00 /01 /02 /03 /10 /14 /00-SW |
| LW | 1.61MHz | 8.5v | /00 /01 /02 /03 /10 /14 /00-SW |
| LW | 1.71MHz | 8.5v | /00 /01 /02 /03 /10 /14 /00-SW |
| LW | 2.62MHz | 1.1v | /00 /01 /02 /03 /10 /14 /00-SW |
| SW | 1.2.1MHz | 8.5v | /01 /02 /03 /10 /14 /01-SW |
| SW | 1.3.1MHz | 1v | /01 /02 /03 /10 /14 /01-SW |
| SW | 1.8.1MHz | 8.5v | /01 /02 /03 /10 /14 /01-SW |
| SW | 2.1MHz | 1v | /01 /02 /03 /10 /14 /01-SW |

OPTION DIODES

| | | | |
|---------------------|------|------|------|
| EUROPE /00 /08 | 8121 | 8122 | 8123 |
| NOT FOR /17 AND /01 | X | - | X |
| USA /17 | X | - | X |
| OVERSEAS /01 | X | - | X |
| EAST EUROPE/14 | X | - | X |
| JAPAN /08 | X | - | X |
| EUROPE-SW | X | - | X |
| OVERSEAS-SW | X | - | X |

X = DIODE MOUNTED

- NOT FOR SHORT WAVE
- NOT FOR /17 AND /01
- ONLY FOR /17 AND /01
- ONLY FOR SHORT WAVE
- ONLY FOR /17
- NOT FOR FTZ

TUNER


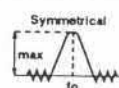

Free service manuals
Gratis schema's
Digitized by
www.freesevice manuals.info

Free service manuals
Gratis schema's
Digitized by
www.freesevice manuals.info

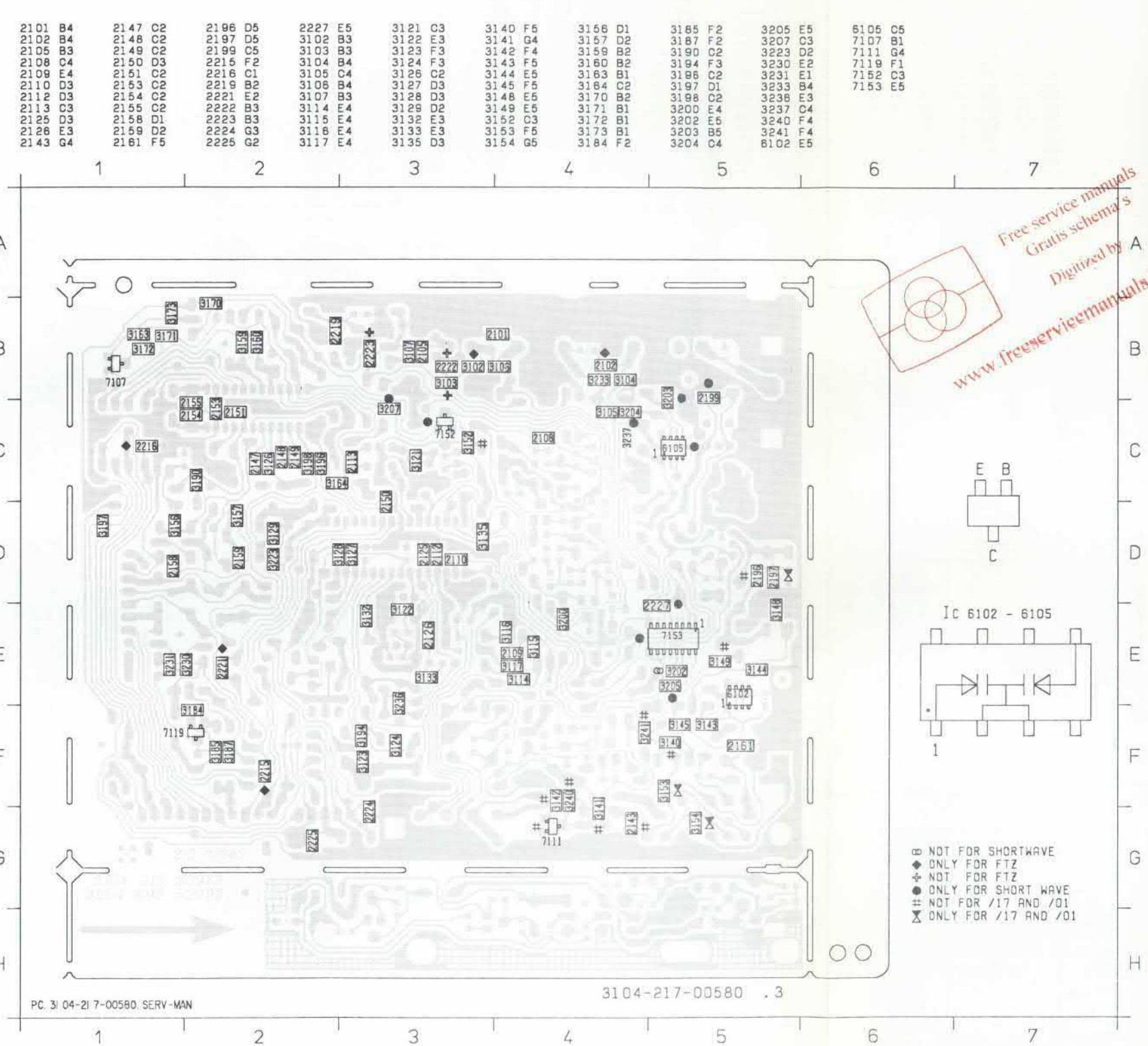
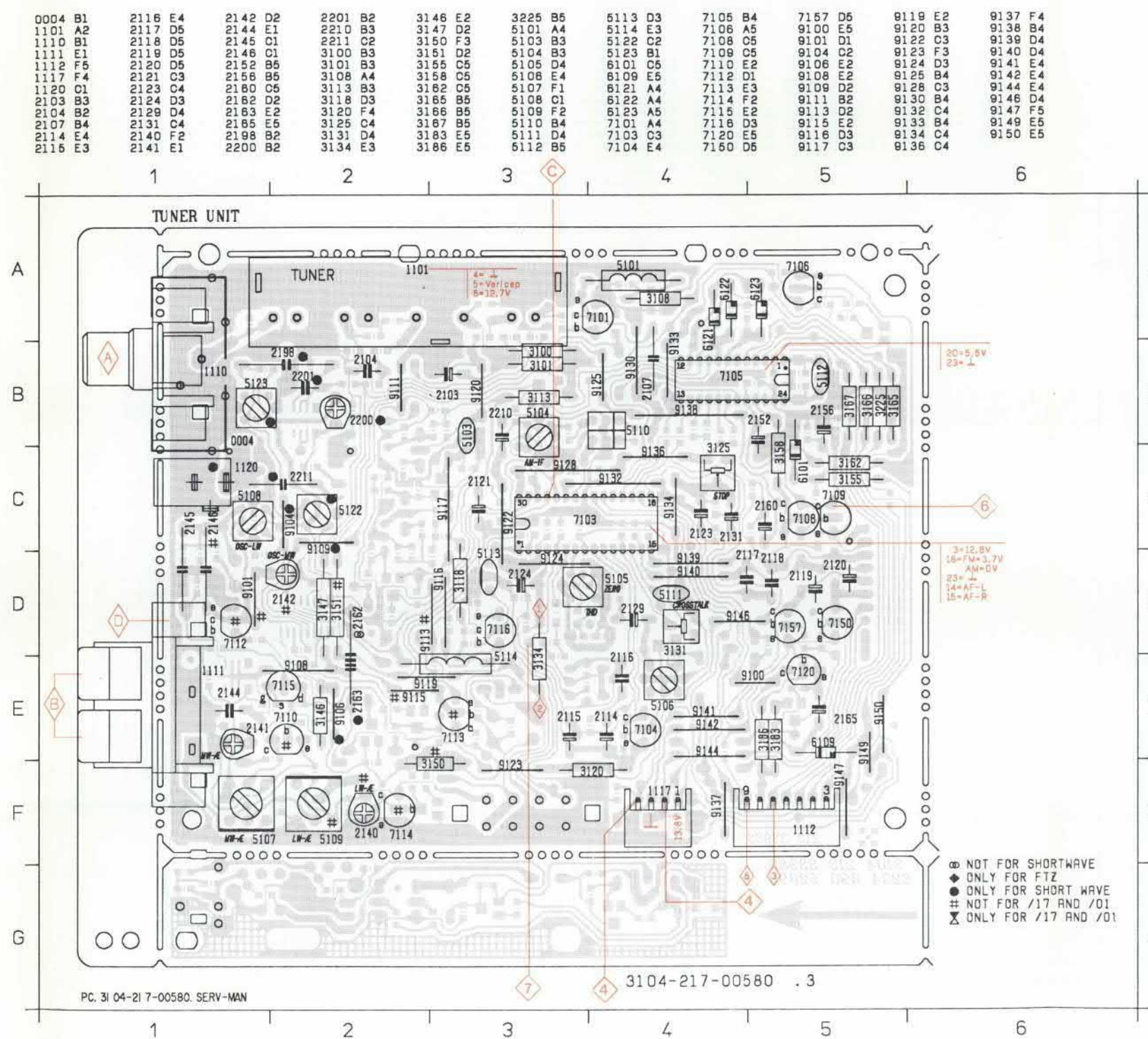
Free service manuals
Gratis schema's
Digitized by
www.freesevice manuals.info

- 2101 B 2 7101 9 4
- 2102 C 3 7103 F13
- 2103 C 1 7105 M18
- 2104 E 2 7106 L26
- 2105 9 4 7107 M25
- 2107 G 5 7108 P18
- 2108 C10 7109 P18
- 2109 C12 7110 M 7
- 2110 Q12 7111 0 6
- 2112 B17 7112 M10
- 2113 B14 7113 016
- 2114 C20 7114 M 6
- 2115 C21 7115 9
- 2116 B22 7116 D11
- 2117 E24 7119 M27
- 2118 E25 7120 M24
- 2120 F25 7122 I 7
- 2121 F11 7123 H 7
- 2123 D13 7127 E28
- 2125 Q13 8118 D10
- 2126 Q14
- 2128 M17
- 2131 000
- 2140 0 7
- 2141 L 8
- 2142 010
- 2143 0 7
- 2144 8
- 2145 L10
- 2146 M10
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- 2148 L19
- 2149 L20
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- 2152 M15
- 2153 L21
- 2154 M16
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- 2156 P18
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- 2623 E 4

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.

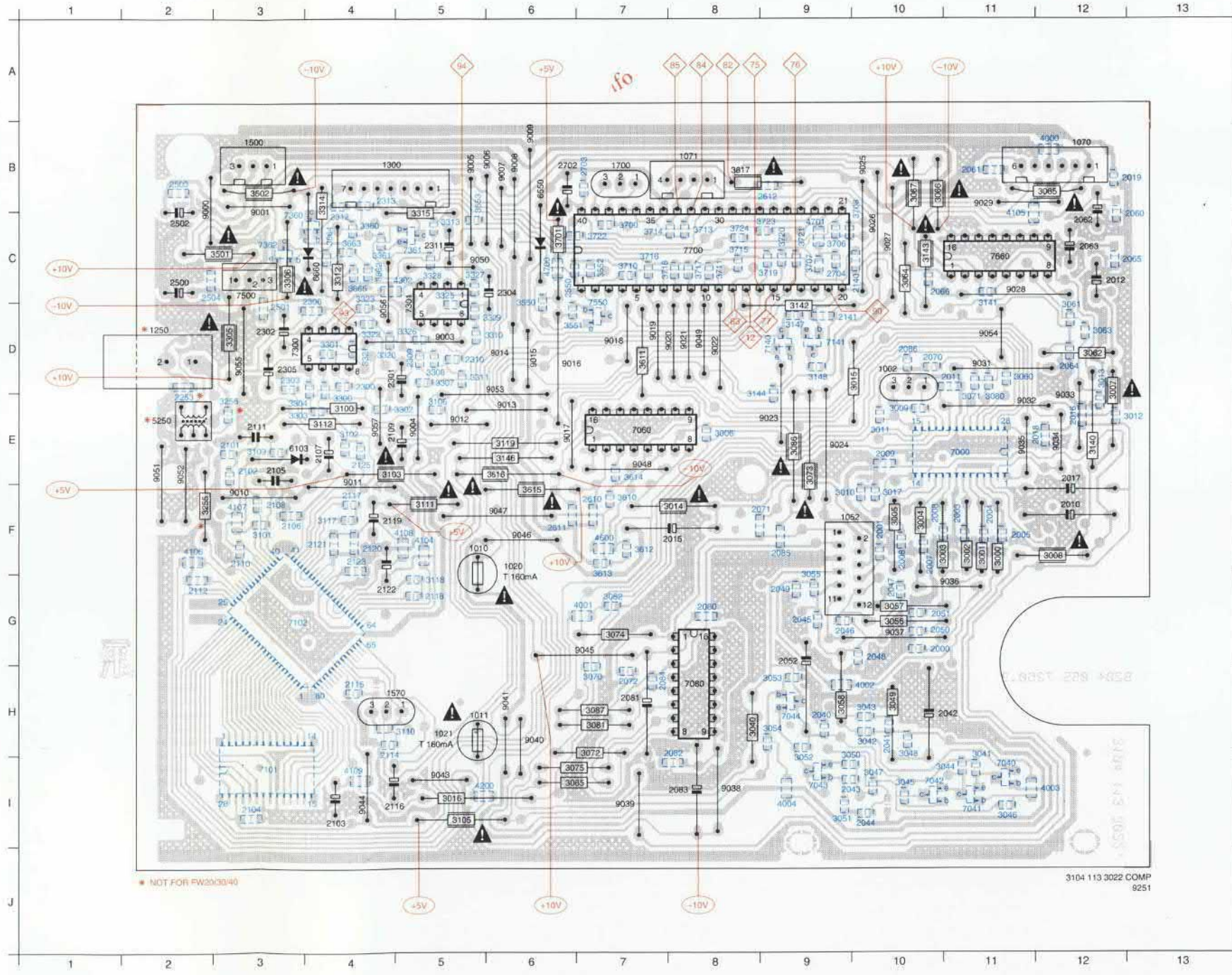


* Mod 1kHz 30% AM
 (...) For Grid = 10kHz
 + For LW version only
 @ For /34 version only

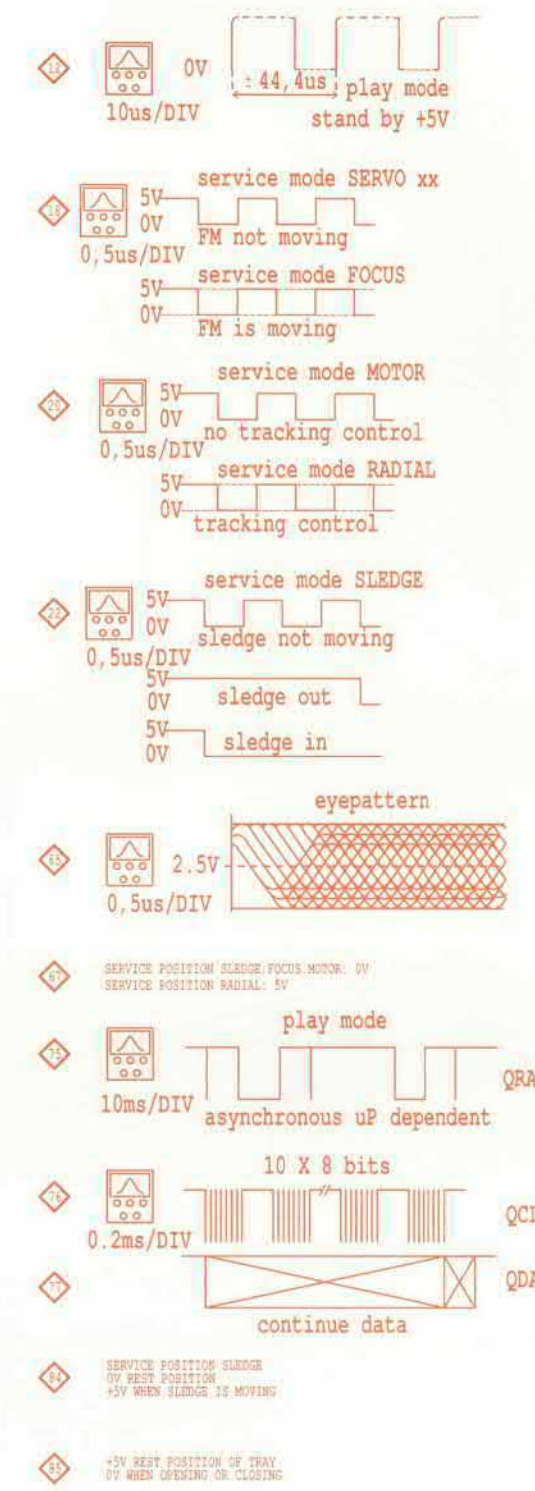
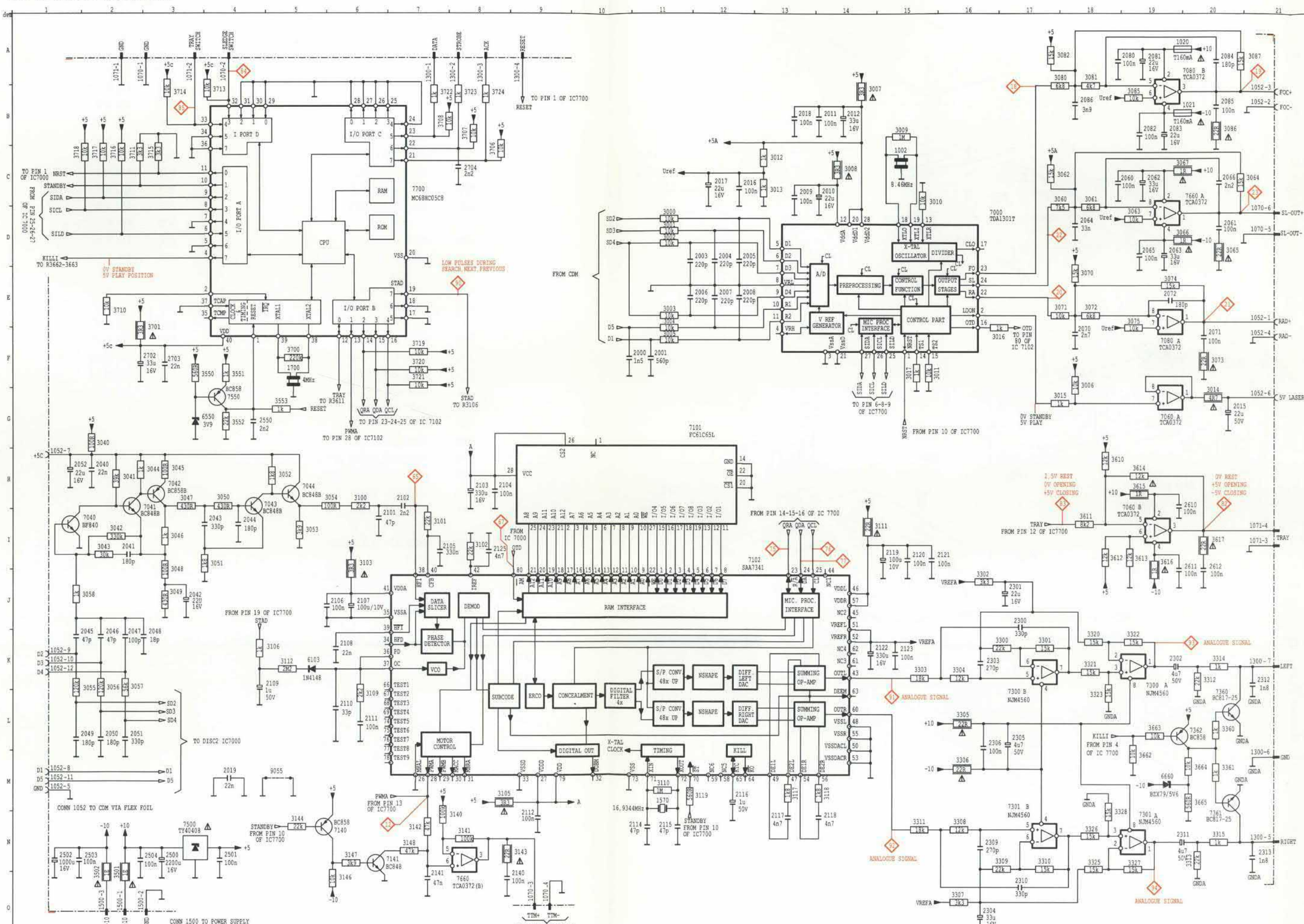
Repeat

CD COMPONENT AND CHIP LAYOUT

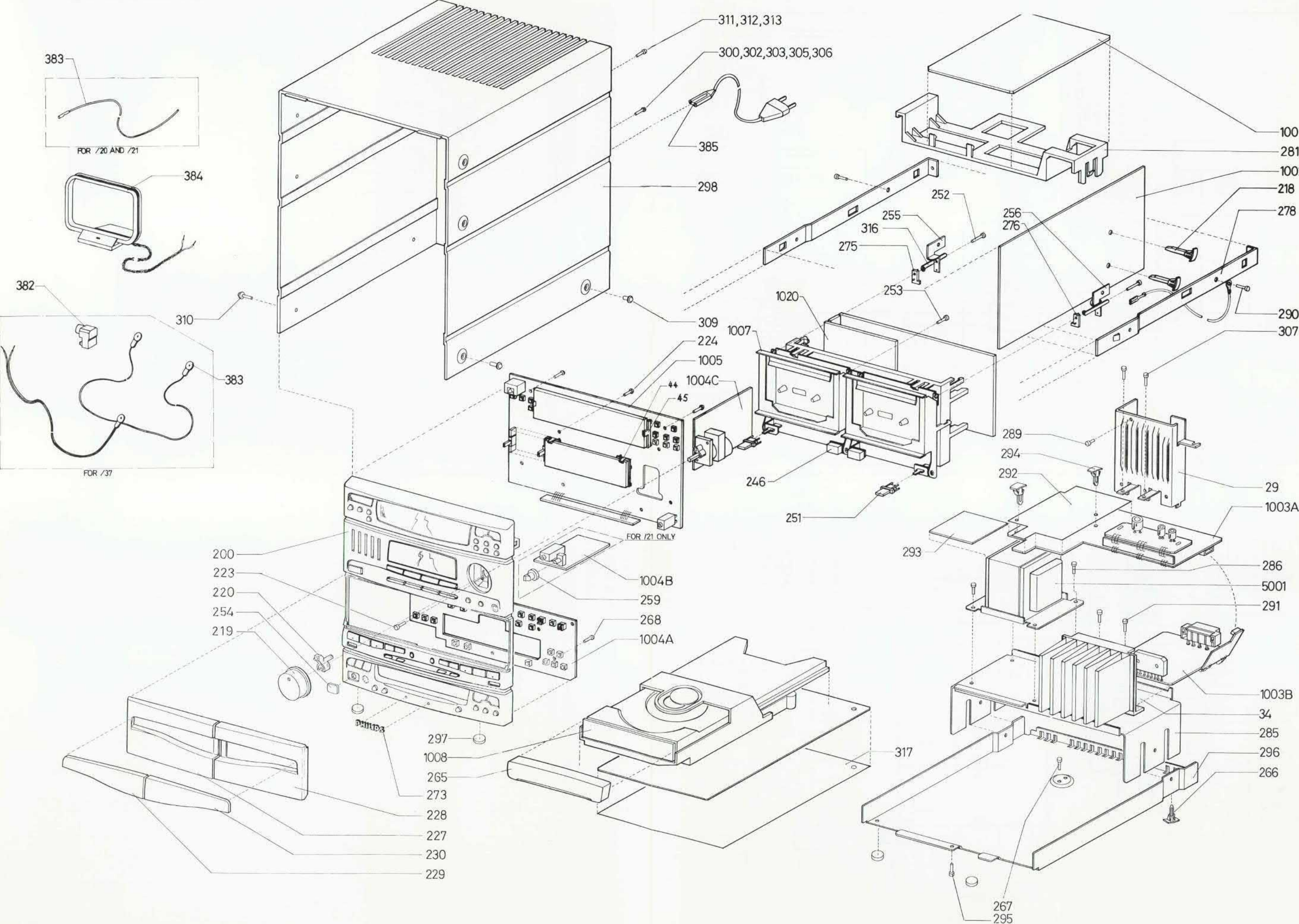
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|-----|------|-----|------|-----|------|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| 1002 | D10 | 2008 | F10 | 3050 | G10 | 2101 | E3 | 2122 | F4 | 2502 | C2 | 3010 | F9 | 3052 | I9 | 3075 | H5 | 3140 | E12 | 3310 | D5 | 3552 | C7 | 3711 | C8 | 4108 | F2 | 7080 | H8 | 9007 | B6 | 9027 | C10 | 9049 | D8 |
| 1010 | F3 | 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 | E12 | 3054 | H9 | 3081 | H7 | 3142 | D9 | 3312 | D5 | 3554 | C5 | 3713 | C8 | 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 | H7 | 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 | H8 | 3144 | E8 | 3314 | C4 | 3612 | F7 | 3716 | C7 | 4200 | I5 | 7141 | D9 | 9011 | F4 | 9032 | E11 | 9053 | D5 |
| 1022 | 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 | C8 | 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 | E5 | 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 | D6 | 3000 | F11 | 3042 | H10 | 3063 | D12 | 3103 | E4 | 3300 | E4 | 3325 | C5 | 3662 | C4 | 3722 | C7 | 5251 | E2 | 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 | 2113 | E4 | 2306 | D3 | 3002 | F11 | 3044 | I10 | 3065 | D12 | 3106 | E5 | 3302 | E4 | 3327 | C5 | 3664 | C4 | 3724 | C8 | 6650 | C4 | 7600 | 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 | C9 | 9020 | D8 | 9041 | H8 | | | | |
| 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 | G6 | 2312 | C4 | 3006 | E8 | 3048 | I10 | 3071 | E11 | 3112 | E4 | 3306 | C3 | 3361 | 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 | D6 | 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 | G5 | 3308 | D5 | 3350 | 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 | 7090 | E7 | 9006 | B6 | 9026 | C10 | 9048 | E7 | | |



CD CIRCUIT DIAGRAM



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 |

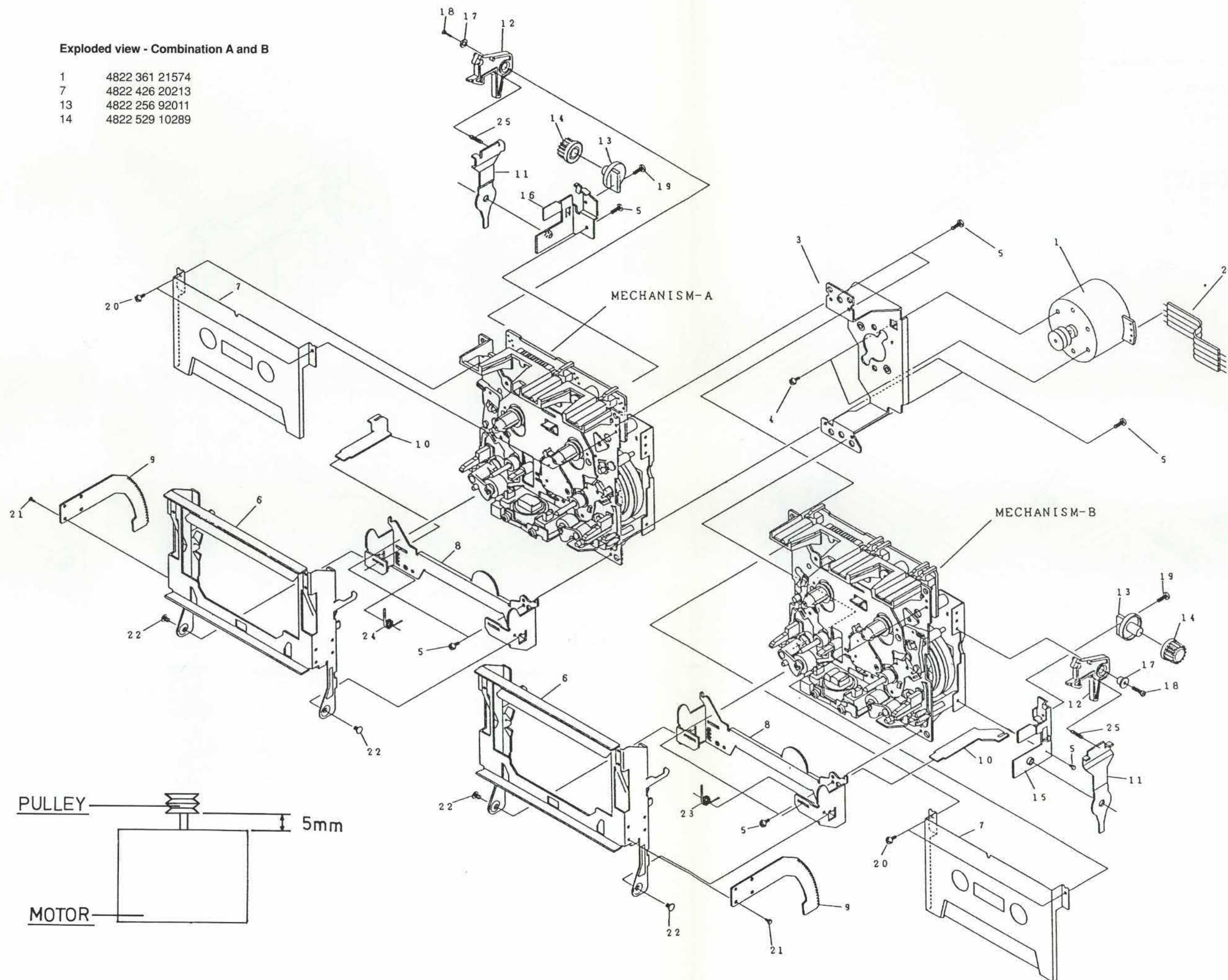
LISTS OF SCREWS

| | |
|-----|------------|
| 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.

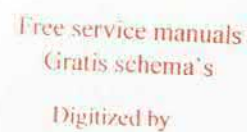
Exploded view - Combination A and B

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



| | |
|----|----------------|
| 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 |



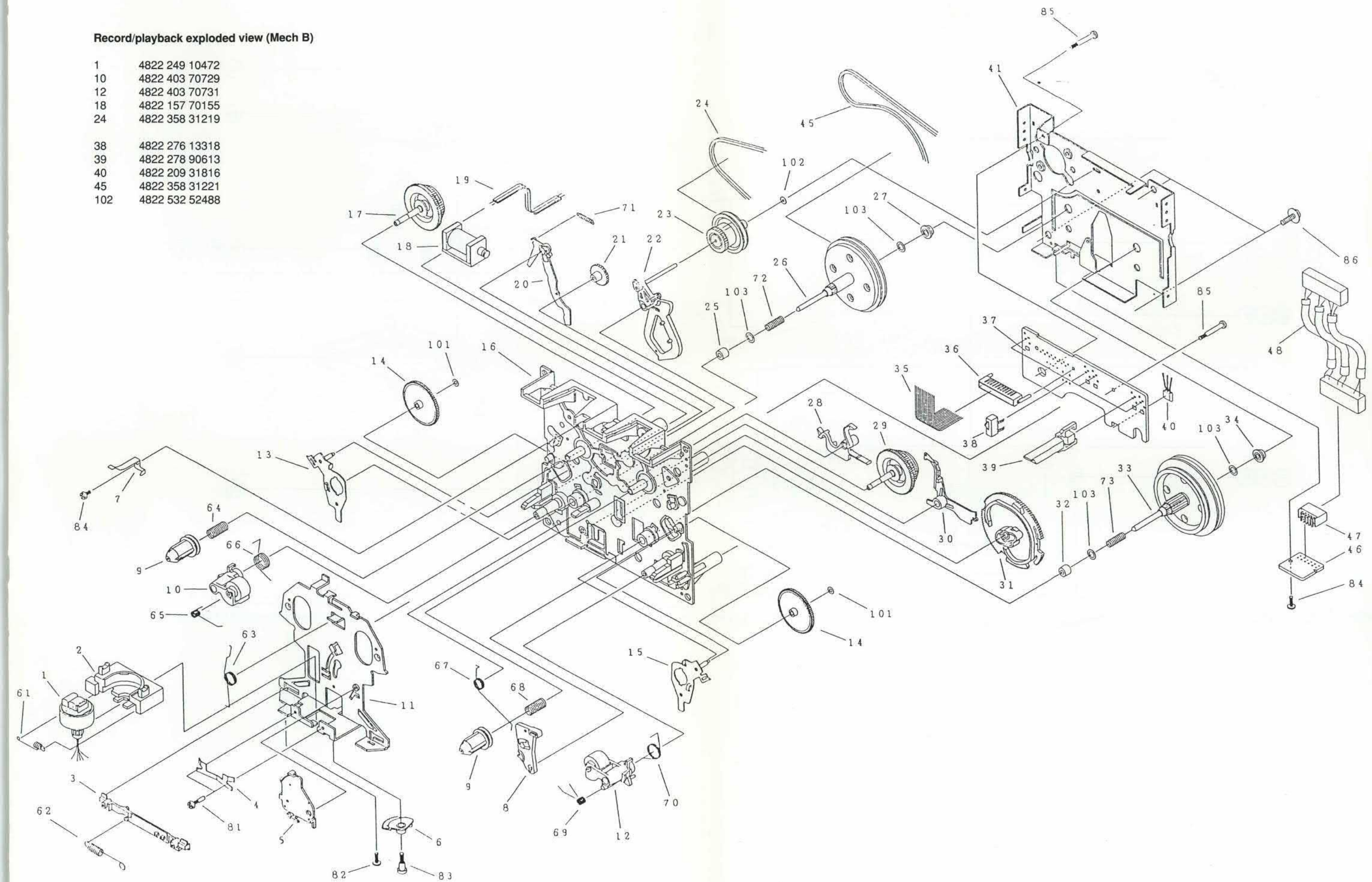
www.freesevicemanuals.info¹



Record/playback exploded view (Mech B)

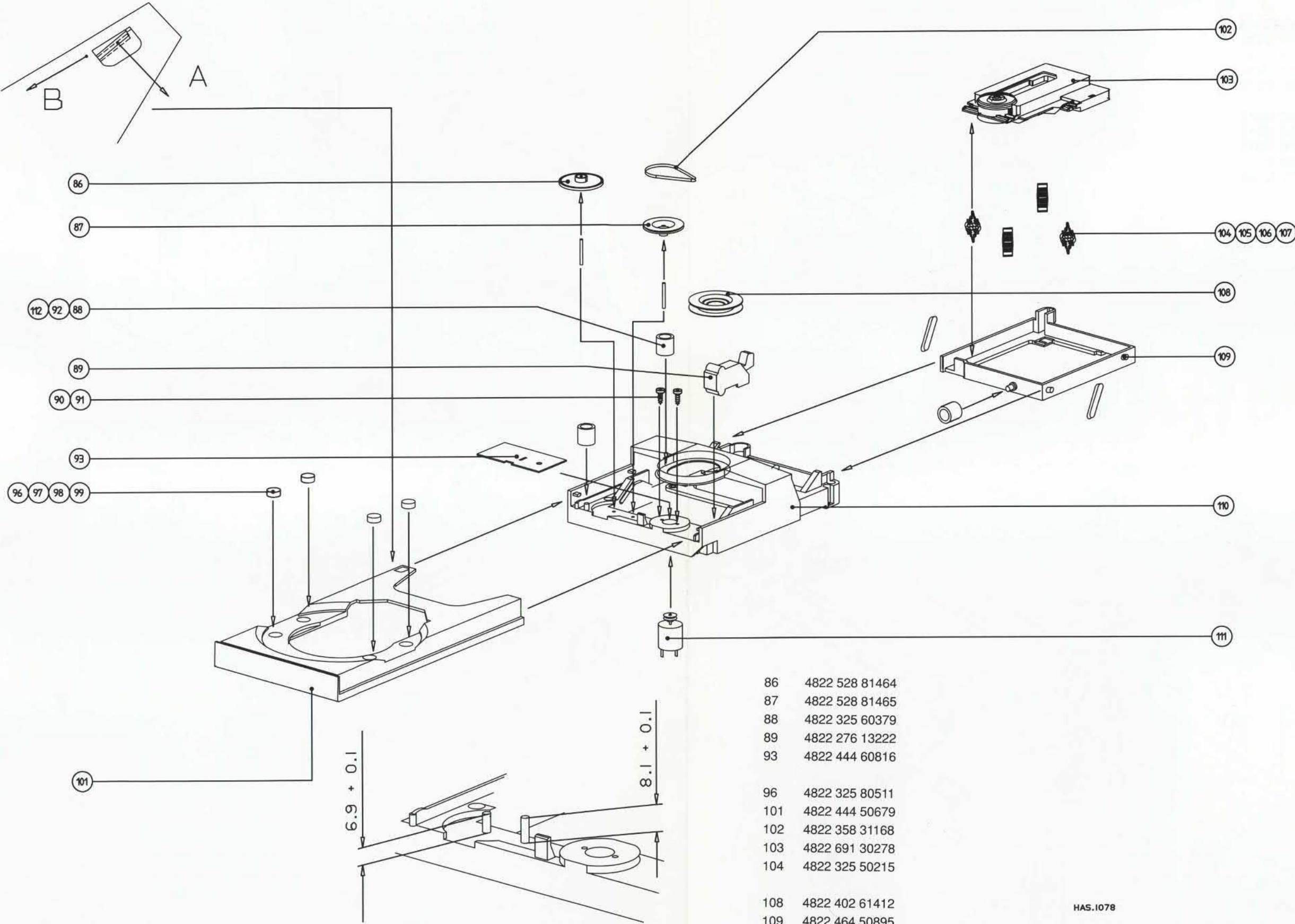
1 4822 249 10472
10 4822 403 70729
12 4822 403 70731
18 4822 157 70155
24 4822 358 31219

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 5% 0.33W |
| 3264 | 4822 052 10478 Δ | 4 Ω 5% 0.33W |
| 3265 | 4822 052 10478 Δ | 4 Ω 5% 0.33W |
| 3266 | 4822 052 10478 Δ | 4 Ω 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 |



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| 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 |



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| 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 |



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| 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% |



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| 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 |



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| 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

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| 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 |



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| 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 |



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| 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% |










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| 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 |




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| 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

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| 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 |

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| 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 |



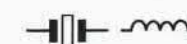
| | | |
|------|----------------|-----------------|
| 3100 | 4822 050 21501 | Δ 150Ω 1% 0.6W |
| 3101 | 4822 050 21501 | Δ 150Ω 1% 0.6W |
| 3102 | 4822 051 20224 | 220k 5% 0.1W |
| 3104 | 4822 051 20154 | 150k 5% 0.1W |
| 3105 | 4822 051 20562 | 5k6 5% 0.1W |
| 3106 | 4822 051 20829 | 82Ω 5% 0.1W |
| 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 |



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|------|----------------|----------------------|
| 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 |



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|------|----------------|------------------------|
| 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 |



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|------|----------------|------------|
| 6101 | 4822 130 34174 | BZX79-C4V7 |
| 6102 | 4822 130 83075 | HN1V02H |
| 6109 | 4822 130 30621 | 1N4148 |



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|------|----------------|----------|
| 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 |



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|--------|----------------|------------------|
| 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 |



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|--------|----------------|------------------|
| 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 |



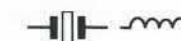
| | | |
|--------|----------------|--------------|
| 3500 * | 4822 116 52195 | 47Ω 5% 0.5W |
| 3503 * | 4822 116 52238 | 12k 5% 0.5W |
| 3504 * | 4822 116 52234 | 100k 5% 0.5W |



| | | |
|--------|------------------|-----------------------|
| 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 |



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|------|------------------|--------------|
| 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 |



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|------|----------------|----------------|
| 5520 | 4822 157 53447 | Bread Inductor |
| 5521 | 4822 157 53447 | Bread Inductor |

* For -/21/34 only



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|------|----------------|------------|
| 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 |



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|--------|----------------|-------------|
| 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 |





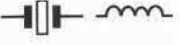


| | | |
|------|----------------|------------------|
| 2401 | 5322 122 32654 | 22nF 10% 63V |
| 2402 | 4822 124 23176 | 22μF 20% 16V |
| 2403 | 4822 124 40184 | 1000μF 20% 10V |
| 2404 | 4822 124 80211 | 22mF 20% 5.5V |
| 2405 | 4822 121 51252 | 470nF 5% 63V |
| 2406 | 4822 121 51252 | 470nF 5% 63V |
| 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 |

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| 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 |

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|---|----------------|----------------|
| 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 |

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|---|----------------|-----------|
| 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 |



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|------|----------------|--------------------|
| 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 | 22 μ F 20% 40V |
| 2011 | 4822 122 33496 | 100nF 10% 63V |
| 2012 | 4822 124 40272 | 33 μ F 20% 16V |
| 2015 | 5322 124 21643 | 22 μ F 20% 40V |
| 2016 | 4822 122 33496 | 100nF 10% 63V |
| 2017 | 5322 124 21643 | 22 μ F 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 | 22 μ F 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 | 22 μ F 20% 40V |
| 2060 | 4822 122 33496 | 100nF 10% 63V |
| 2061 | 4822 122 33496 | 100nF 10% 63V |
| 2062 | 4822 124 40272 | 33 μ F 20% 16V |
| 2063 | 4822 124 40272 | 33 μ F 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 | 22 μ F 20% 40V |
| 2082 | 4822 122 33496 | 100nF 10% 63V |



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| 2083 | 5322 124 21643 | 22 μ F 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 | 330 μ F 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 | 100 μ F 20% 10V |
| 2108 | 4822 122 33809 | 22nF 20% 50V |
| 2109 | 4822 124 40242 | 1 μ F 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 | 1 μ F 20% 63V |
| 2117 | 5322 126 10223 | 4.7nF 10% 63V |
| 2118 | 5322 126 10223 | 4.7nF 10% 63V |
| 2119 | 4822 124 41584 | 100 μ F 20% 10V |
| 2120 | 4822 122 33496 | 100nF 10% 63V |
| 2121 | 4822 122 33496 | 100nF 10% 63V |
| 2122 | 4822 124 40849 | 330 μ F 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 | 33 μ F 20% 16V |
| 2302 | 4822 124 40246 | 4.7 μ F 20% 63V |
| 2303 | 4822 122 33216 | 270pF 5% 50V |
| 2304 | 4822 124 40272 | 33 μ F 20% 16V |
| 2305 | 4822 124 40246 | 4.7 μ F 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 | 4.7 μ F 20% 63V |
| 2312 | 4822 122 33219 | 1.8nF 10% 50V |
| 2313 | 4822 122 33219 | 1.8nF 10% 50V |
| 2500 | 4822 124 80148 | 2200 μ F 20% 16V |
| 2501 | 4822 122 33496 | 100nF 10% 63V |
| 2502 | 4822 124 41853 | 1000 μ F 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 | 33 μ F 20% 16V |
| 2703 | 4822 122 33809 | 22nF 20% 50V |




| | | |
|------|----------------|---------------|
| 2704 | 4822 122 33175 | 2.2nF 20% 50V |
|------|----------------|---------------|



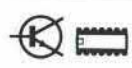


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|------|-------------------------|-----------------------|
| 3000 | 4822 050 21003 | 10k 1% 0.6W |
| 3001 | 4822 050 21003 | 10k 1% 0.6W |
| 3002 | 4822 050 21003 | 10k 1% 0.6W |
| 3003 | 4822 050 21003 | 10k 1% 0.6W |
| 3004 | 4822 050 21003 | 10k 1% 0.6W |
| 3005 | 4822 050 21003 | 10k 1% 0.6W |
| 3006 | 4822 051 20103 | 10k 5% 0.1W |
| 3007 | 4822 052 10338 Δ | 3 Ω 5% 0.33W |
| 3008 | 4822 052 10338 Δ | 3 Ω 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 | 4 Ω 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 | 100 Ω 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 | 100 Ω 5% 0.1W |
| 3046 | 4822 051 10102 | 1k 2% 0.25W |
| 3047 | 4822 051 20434 | 430k 5% 0.1W |
| 3048 | 4822 051 20101 | 100 Ω 5% 0.1W |
| 3049 | 4822 050 24301 | 430 Ω 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 | 100 Ω 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 | 22 Ω 5% 0.33W |
| 3066 | 4822 052 10108 Δ | 1 Ω 5% 0.33W |
| 3067 | 4822 052 10108 Δ | 1 Ω 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 |



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|------|-------------------------|-----------------------|
| 3073 | 4822 052 10229 Δ | 22 Ω 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 | 1 Ω 5% 0.33W |
| 3084 | 4822 052 10108 | 1 Ω 5% 0.33W |
| 3085 | 4822 050 21003 | 10k 1% 0.6W |
| 3086 | 4822 052 10229 Δ | 22 Ω 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 | 3 Ω 5% 0.33W |
| 3105 | 4822 052 10338 Δ | 3 Ω 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 | 22 Ω 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 | 560 Ω 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 | 22 Ω 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 | 22 Ω 5% 0.33W |
| 3306 | 4822 052 10229 Δ | 22 Ω 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 |

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|------|---|-----------------------|
| 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.

(GB)

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

(NL)

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

(I)

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.

(F)

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

(D)

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

(S) Varning !

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

(SF) Varoitus !

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

(DK) Advarse !

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