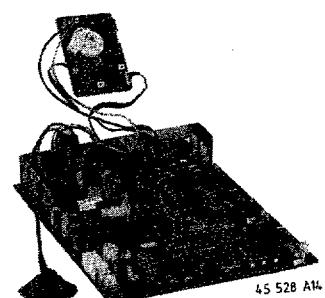


Service
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Service Manual

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Technical data

Mains voltage : 220-240 V ± 10 %,
50 Hz ± 5 %

Aerial input impedance : 75 Ω - coax

Minimum aerial input VHF : 30μV

Minimum aerial input UHF : 40μV

Maximum aerial input : 180mV

Pull-in range colour sync : ±300Hz

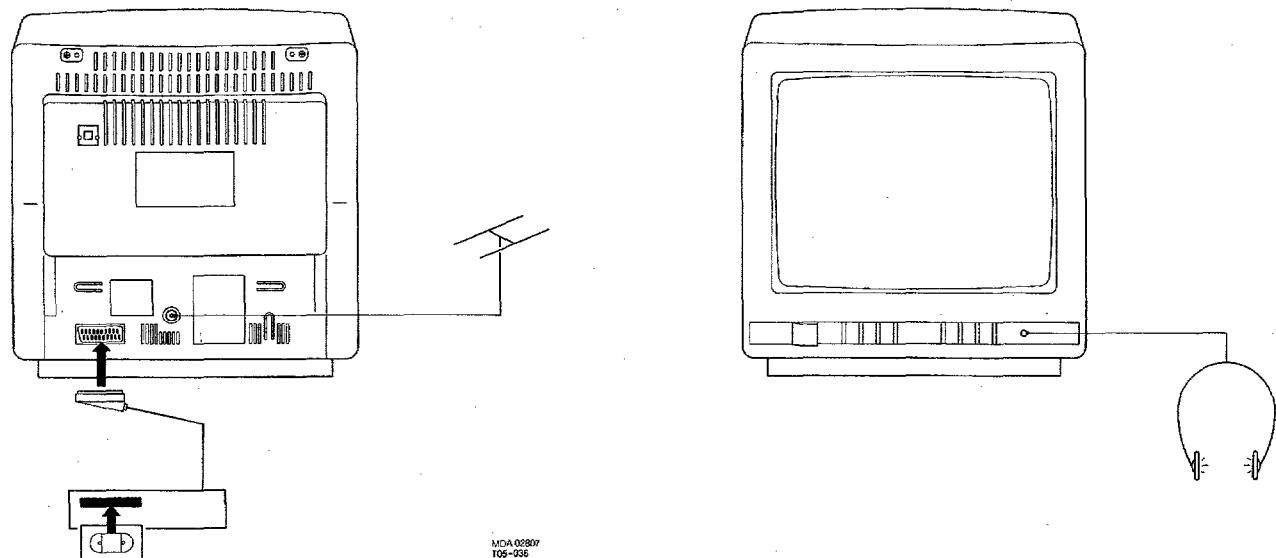
Pull-in range horizontal sync : ±600Hz

Pull-in range vertical sync : ±5Hz

Picture tube range : 14", 15" and 17"

- Euro connector:**
- 1 - Audio \ominus L 0.5Vrms/ $\leqslant 1k\Omega$
 - 2 - Audio \odot R 0.2 - 2Vrms/ $\geqslant 10k\Omega$
 - 3 - Audio \ominus L 0.5Vrms/ $\leqslant 1k\Omega$
 - 4 - Audio \perp
 - 5 - Blue \perp
 - 6 - Audio \odot L 0.2 - 2Vrms/ $\geqslant 10k\Omega$
 - 7 - Blue 0.7V_{pp}/75Ω
 - 8 - Status CVBS 0 - 2V (L) 10 - 12V (H)
 - 9 - Green \perp
 - 11 - Green 0.7V_{pp}/75Ω
 - 13 - Red \perp
 - 15 - Red 0.7V_{pp}/75Ω
 - 16 - Status RGB 0 - 0.4V/75Ω (L) 1 - 3V/75Ω (H)
 - 17 - CVBS \ominus \perp
 - 18 - CVBS \odot \perp
 - 19 - CVBS \ominus 1V_{pp}/75Ω
 - 20 - CVBS \odot 1V_{pp}/75Ω
 - 21 - Earth screen

Head phone: 8 - 1000Ω 3.5 mm mini jack



Warnings

1. A set to be repaired should always be connected to the mains via a suitable isolating transformer.
2. Safety regulations demand that the set be restored to its original condition and that components identical with the original types be used. Safety components are marked by the symbol .
3. To prevent damage to ICs and transistors any flash-over of the EHT should be avoided. To prevent damage to the picture tube the method, indicated in Fig. 1, has to be applied to discharge the picture tube. Make use of an EHT probe and a universal meter (position DC-V). Discharge until the reading of the meter is 0V (after approx. 30s).
4. **ESD** 
All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair may 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 on the same potential.
5. Together with the deflection unit and the possible multipole unit the flat square picture tubes applied form one whole. The deflection and multipole units have been adjusted optimally in the factory. Adjustment of these units during repair is thus not recommended.
6. The EHT cable has been bonded in the line output transformer. It can thus not be replaced.
7. Proceed with care when testing the EHT section and the picture tube.
8. Never replace any modules or any other parts while the set is switched on.
9. Wear safety goggles during replacement of the picture tube.
10. Use plastic instead of metal alignment tools. This in order to preclude short-circuit or to prevent a specific circuit from being rendered unstable.

Remarks

ANUBIS A 3.1

1. Service default mode

The service default mode (SDM) is a fixed, defined state the set can be brought in. All controls are in a fixed position and the automatic switch-off feature is disabled. The set accepts all commands via the remote control or the local keyboard.

To switch on the SDM, connect pin 7 of IC7600 to ground and switch on the set with the mains switch. The SDM can be left by switching the set into stand-by or by switching off the set with the mains switch.

2. The direct voltages and waveforms should be measured relative to the nearest earthing point on the printed circuit board.
3. The direct voltages and oscilloscopes are measured with a switched on service default mode. Use a colour bar pattern or pattern generator PM5515 as input signal.
4. If necessary, the oscilloscopes and DC voltages are measured with () and without () aerial signal. Voltages in the power supply section have been measured for both normal operation (①) and in the stand-by mode (②). These values have been indicated by means of the corresponding symbols.
5. The components, mentioned in the parts lists, are per position completely interchangeable with the components in the set, irrespective of the possible type indications.
6. The picture tube board is provided with printed spark gaps. Each spark gap is arranged between an electrode of the picture tube and the aquadag coating.

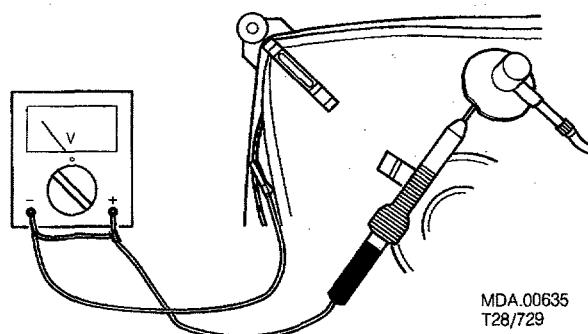


Fig. 1

7. Servicing of SMDs (Surface Mounted Devices)

7.1 General cautions on handling and storage.

- Oxidation on the SMDs terminals results in poor soldering. Do not handle SMDs with bare hands.
- Avoid for storage places that are sensitive to oxidation such as places with sulfur or chlorine gas, direct sunlight, high temperatures or a high degree of humidity.
As a result the capacitance or resistance value of the SMDs may be affected.
- Rough handling of circuit boards containing SMDs may cause damage to the components as well as the circuit boards. Circuit boards containing SMDs should never be bent or flexed. Different circuit board materials expand and contract at different rates when heated or cooled and the components and/or solder connections may be damaged due to the stress. Never rub or scrape chip components as this may cause the value of the component to change. Similarly, do not slide the circuit board across any surface.

7.2 Removal of SMDs

- Heat the solder (for 2-3 seconds) at each terminal of the chip. Small components can, by means of litz wire and a limited horizontal force, be removed with the soldering iron. They can also be removed with a solder sucker (see Fig. 2) or
- While holding the SMD with a pair of tweezers take it off gently using the soldering iron's heat applied to each terminal (see Fig. 2B).
- Remove the excess solder on the solder lands by means of litz wire or a solder sucker (see Fig. 2C).

Caution on removal:

- When handling the soldering iron, use suitable pressure and be careful.
- When removing the chip, do not use undue force with the pair of tweezers.
- The soldering iron to be used (approx. 30 W), must preferably be provided with a thermal control (soldering temperature about 225 to 250°C).
- The chip, once removed, must **never** be used again.

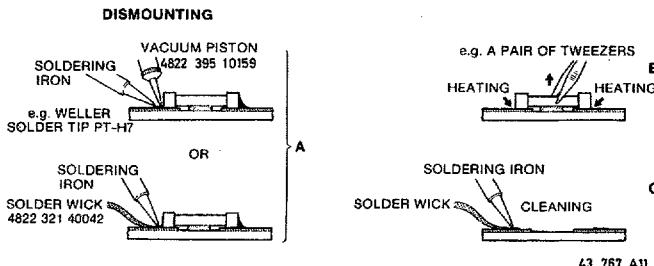


Fig. 2

7.3 Attachment of SMDs

- Locate the SMD on the solder lands by means of tweezers and solder the component at one side. Ensure that the component is positioned well on the solder lands (see Fig. 3A).
- Next complete the soldering of the terminals of the component (see Fig. 3B).

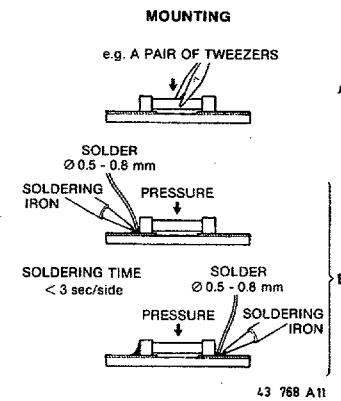


Fig. 3

Caution on attachment:

- When soldering the SMD terminals, do not touch them directly with the soldering iron. The soldering must be as quick as possible; care must be taken to avoid damage to the terminals and the body itself.
- Keep the SMD's body in contact with the printed board when soldering.
- The soldering iron to be used (approx. 30 W) must preferably be provided with a thermal control (soldering temperature about 225 to 250°C).
- Soldering should not be done outside the solder land.
- Soldering flux (of rosin) may be used but should not be acidic.
- After soldering, let the SMD cool down gradually at room temperature.
- The quantity of solder must be proportional with the size of the solder land. If the quantity is too great, the SMD might crack or the solder lands might be torn loose from the printed board (see Fig. 4).

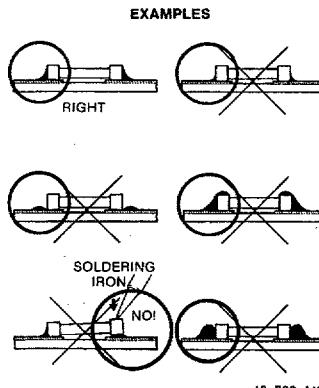


Fig. 4

1. Servicing position

To facilitate troubleshooting and repairing the set, the chassis can, after disconnection of the degaussing coil, be pulled out of the cabinet, turned 180°, and placed behind it (see Fig. 5).

2. Flat square picture tube fixation.

Demounting the picture tube:
Loosen the nuts by turning them with a box spanner hexagon (10 mm) **clockwise**, (see Fig. 6).

Mounting the picture tube:
Turn the spindles **counterclockwise** into the mask with a box spanner hexagon (4 mm).
Locate the picture tube in the mask. The easiest way is placing the cabinet with the front facing down.
Position the picture tube in the middle of the mask.
Turn the spindles **clockwise** until the nut can be fixed onto the spindle.
Turn the nut **counterclockwise** finger-tight against the picture tube fixation.
Turn the spindle **clockwise** until the whole has been fixed tightly (the nut must not turn any more).

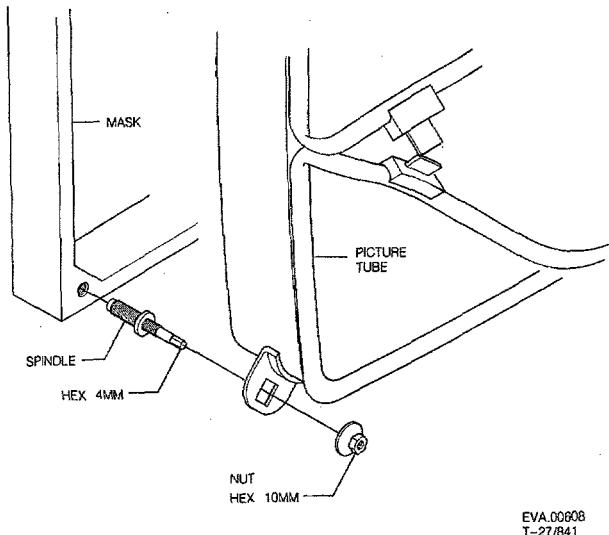
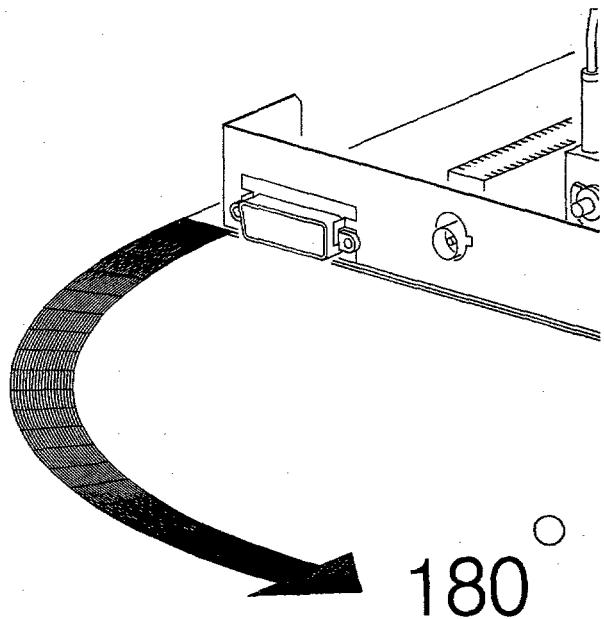


Fig. 6



4.1

4.2

ANUBIS A

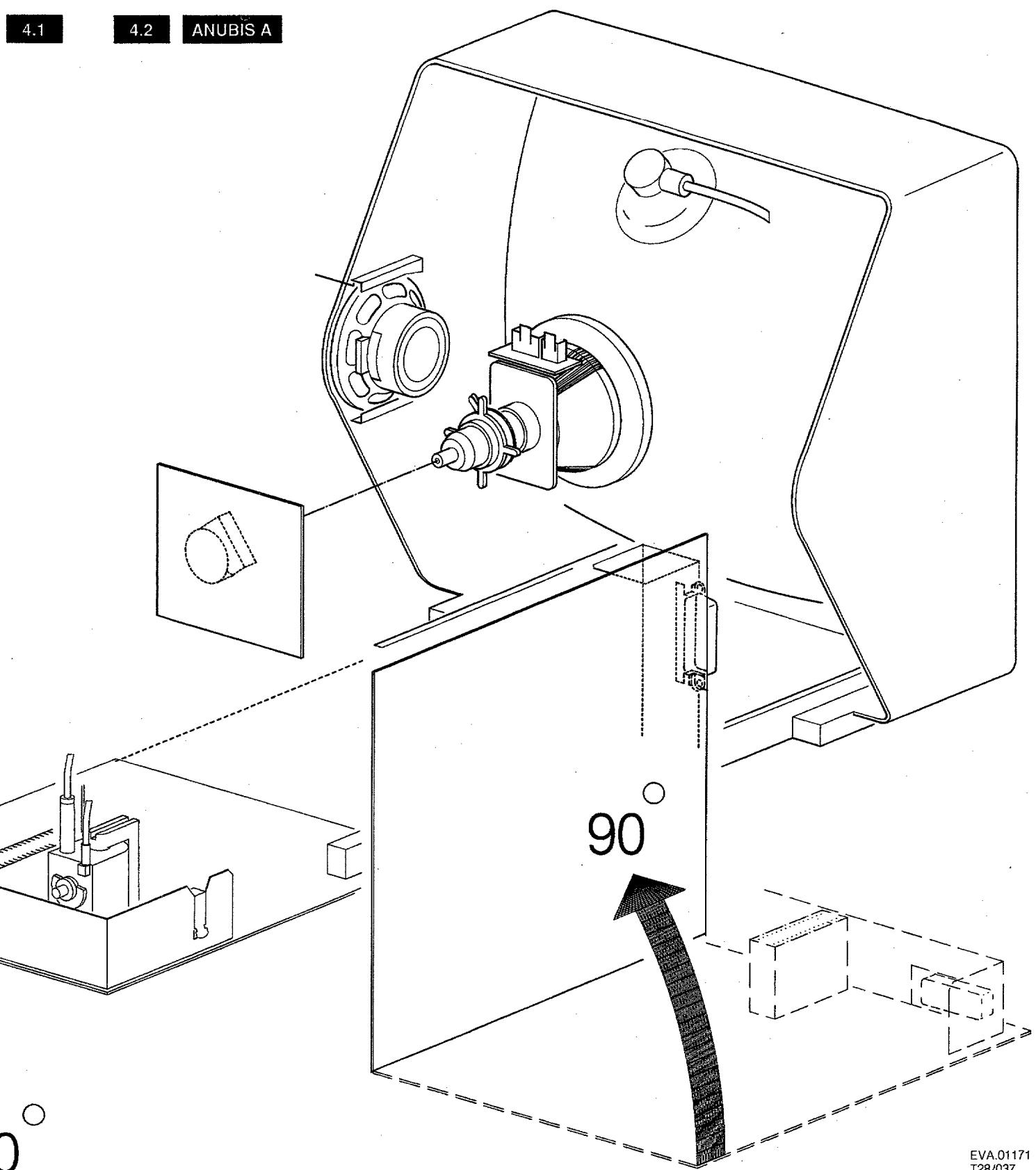


Fig. 5

EVA.01171
T28/037

Blockdiagram

Block schaltbild

ANUBIS A

5.1

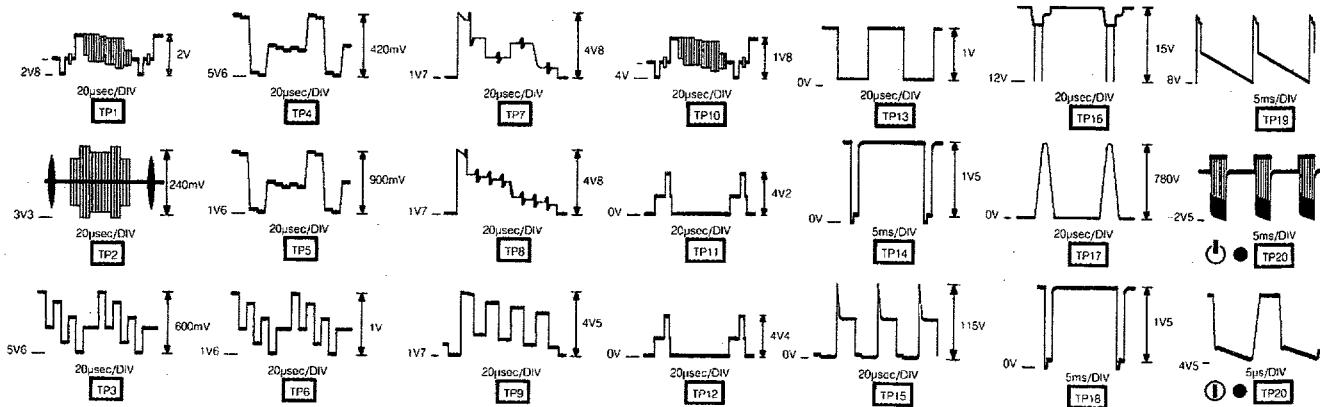
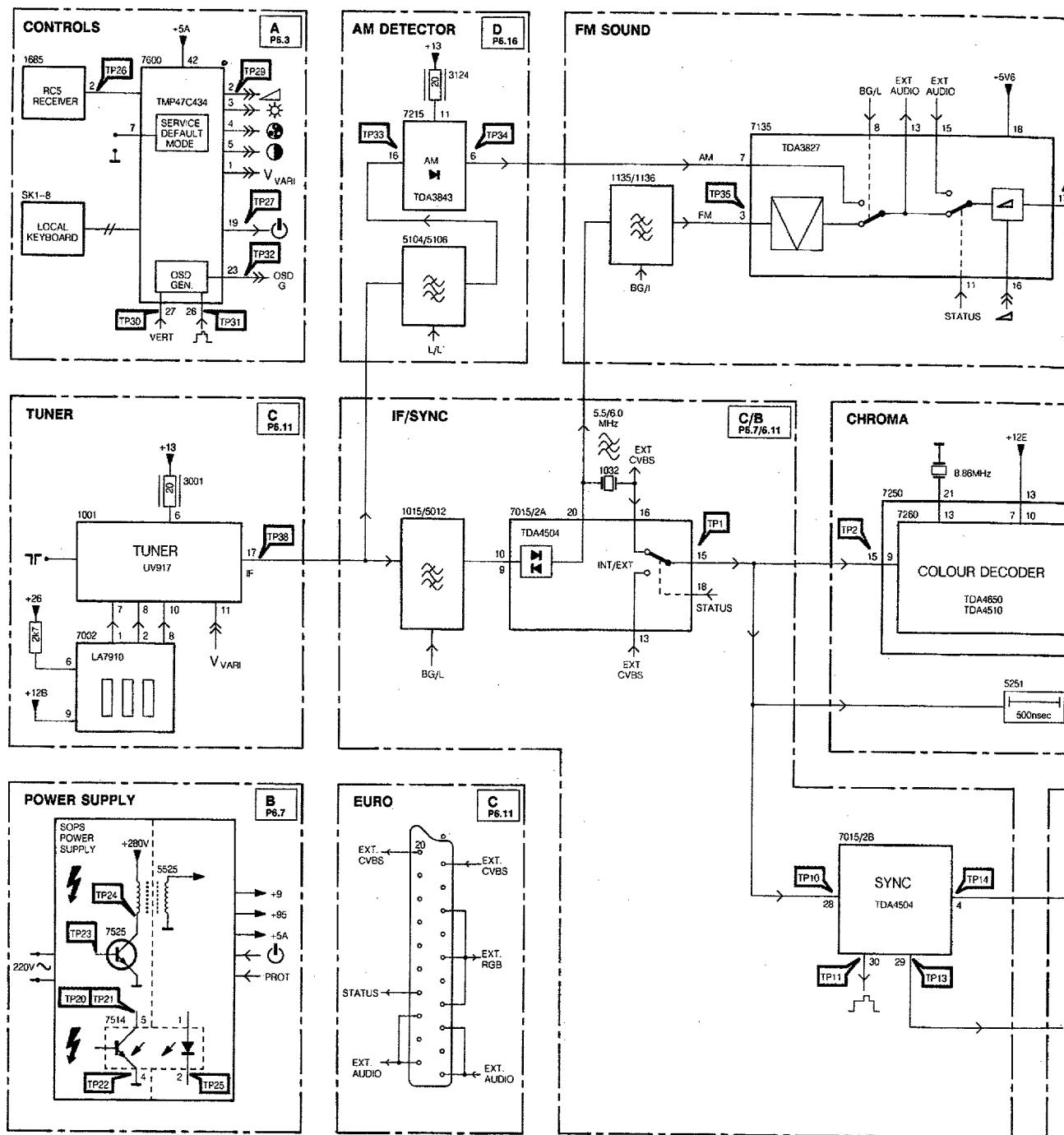
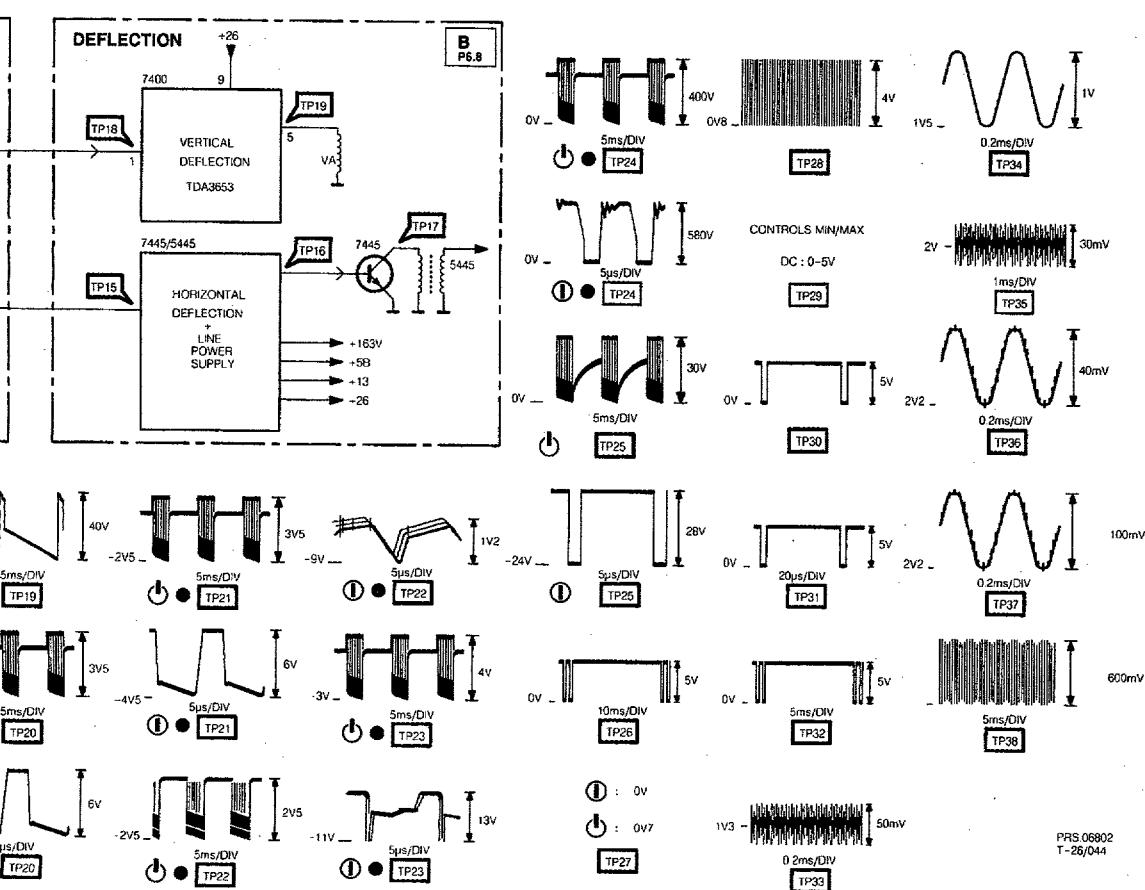
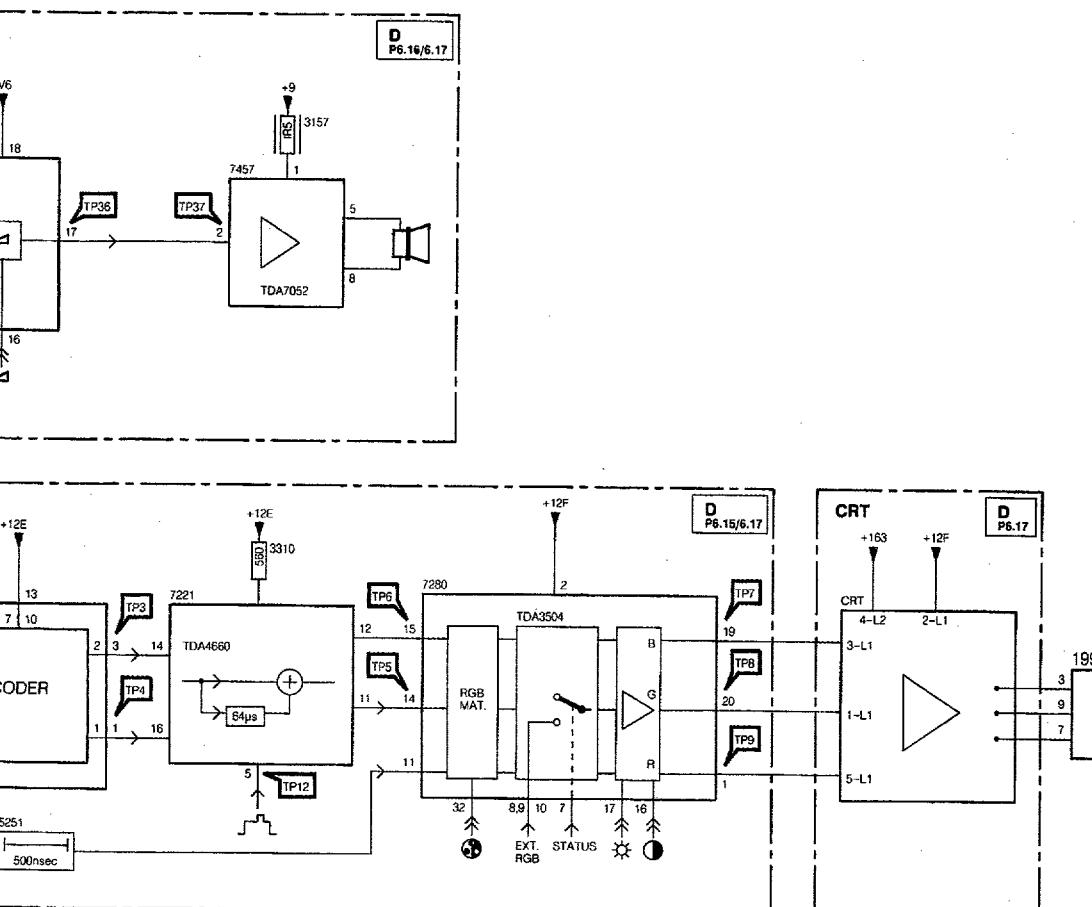
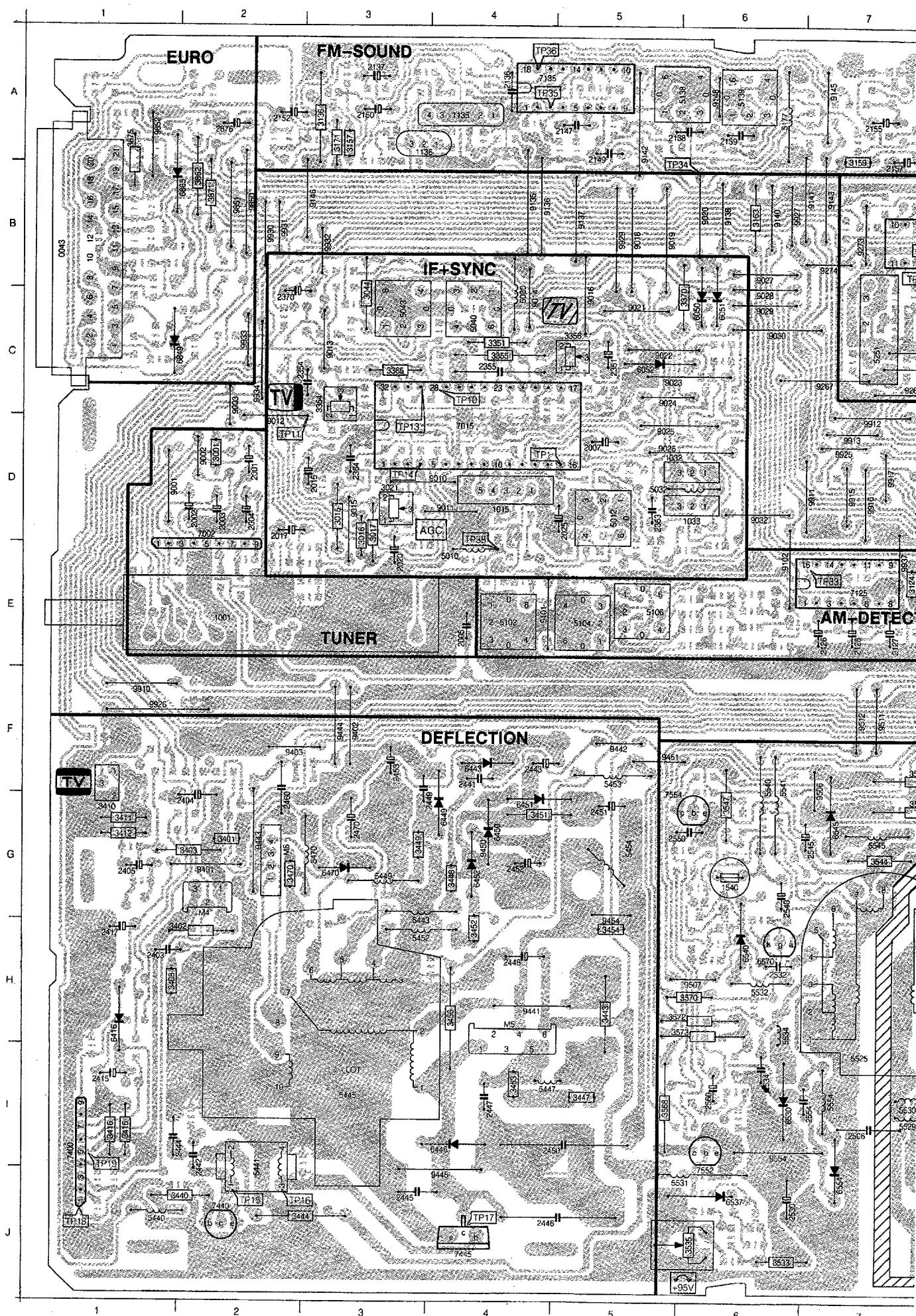
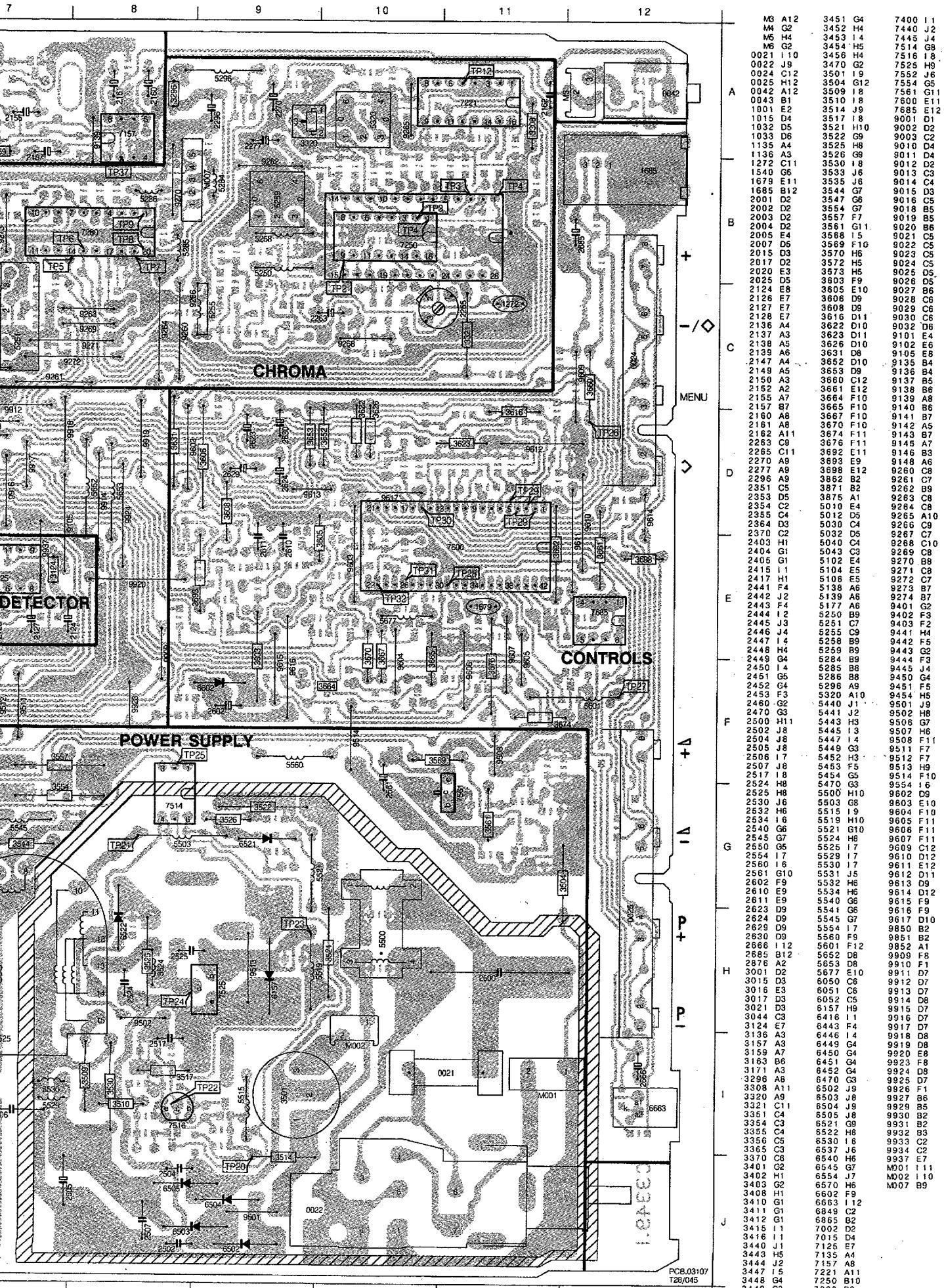
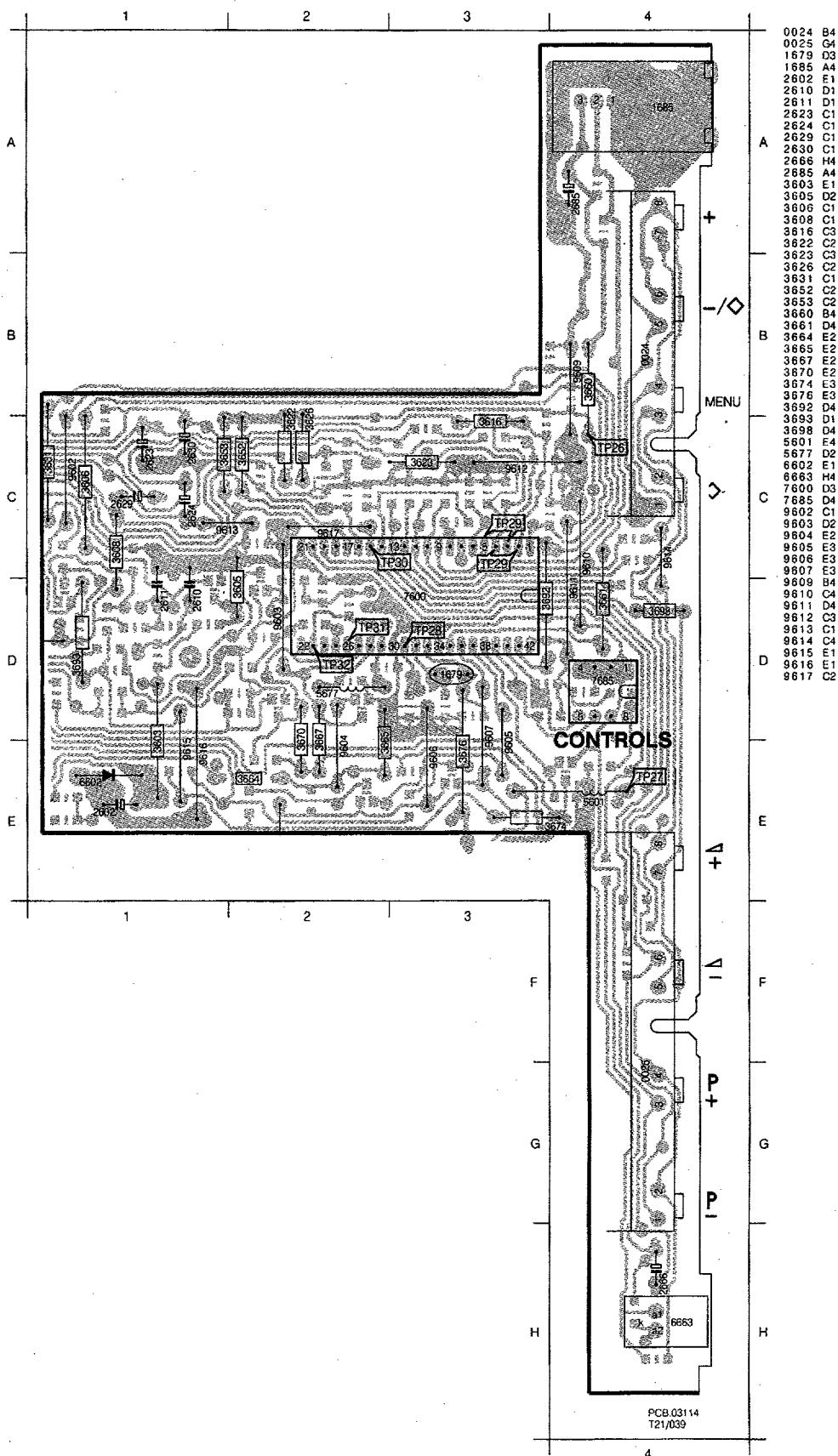


Schéma-bloc

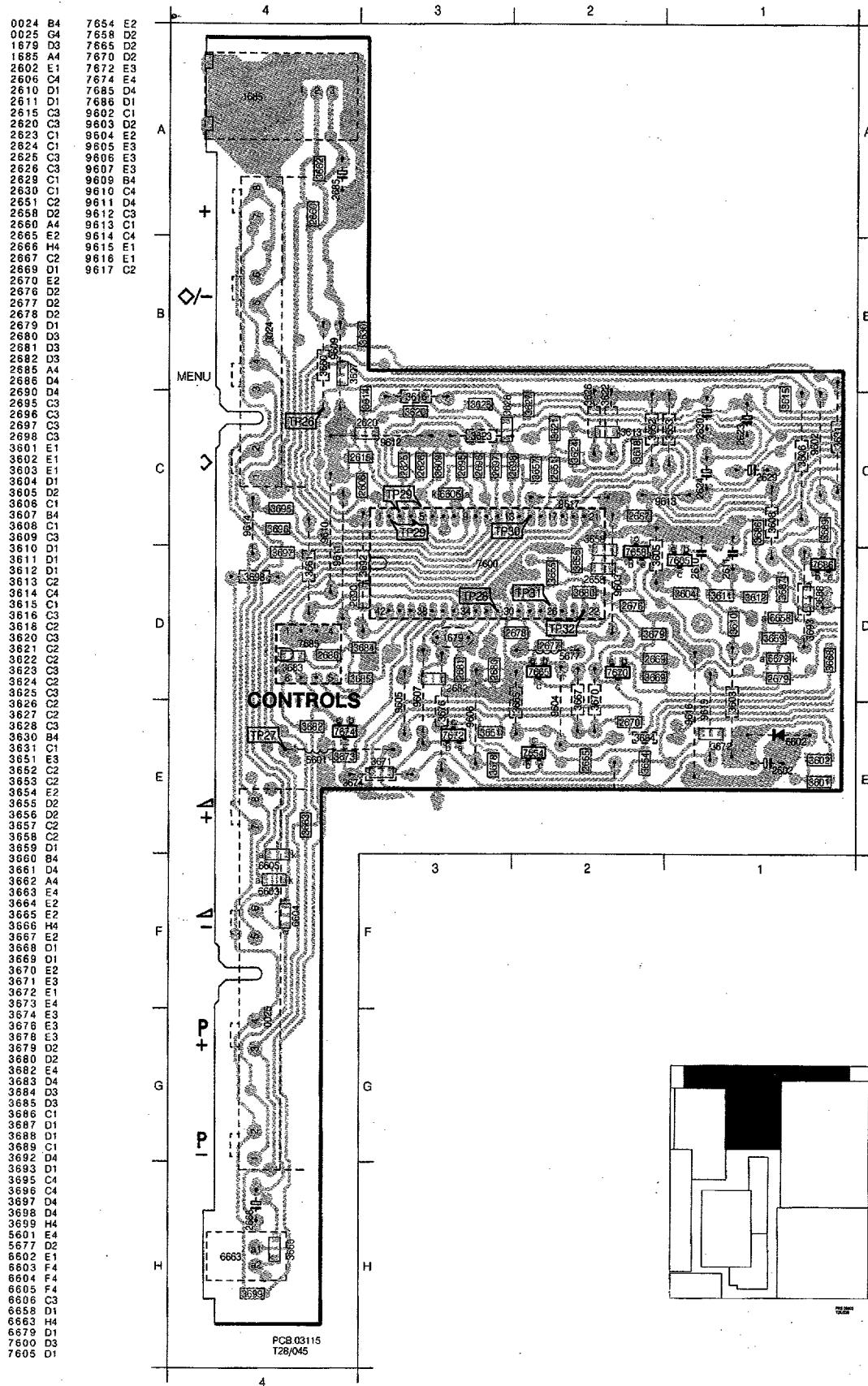


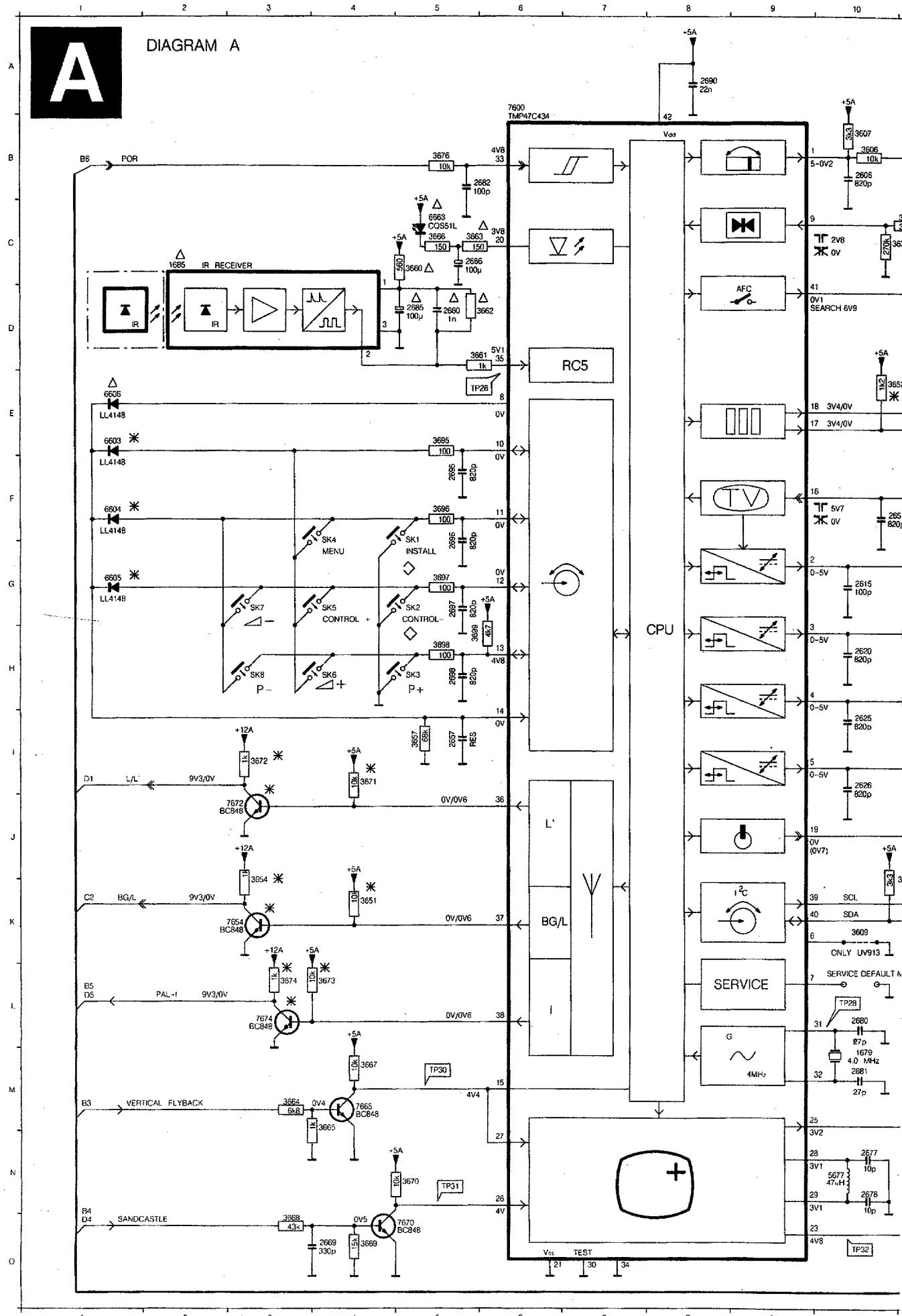






La Commande

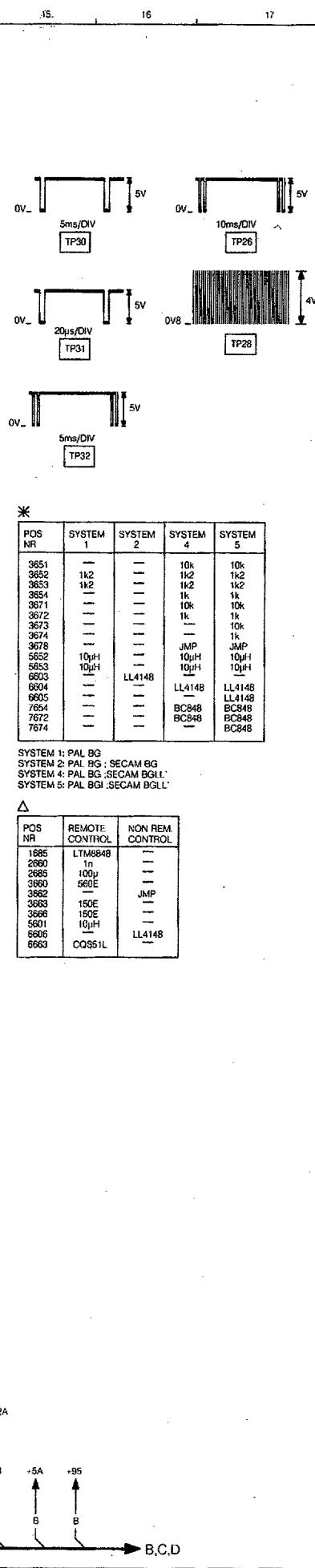
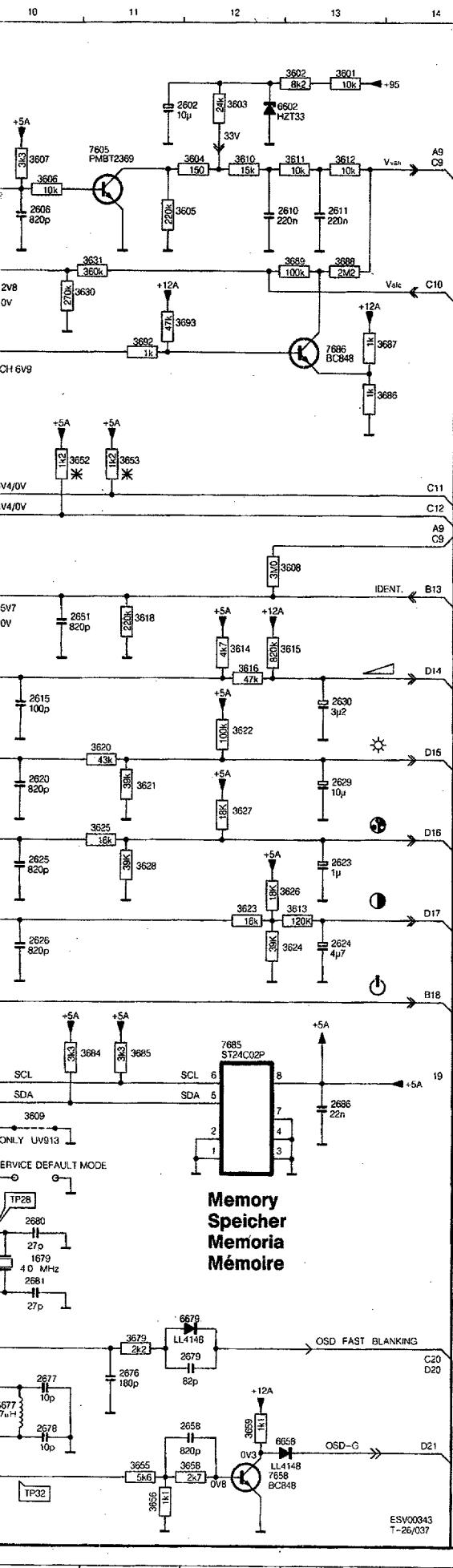




6.3

6.4

ANUBIS A



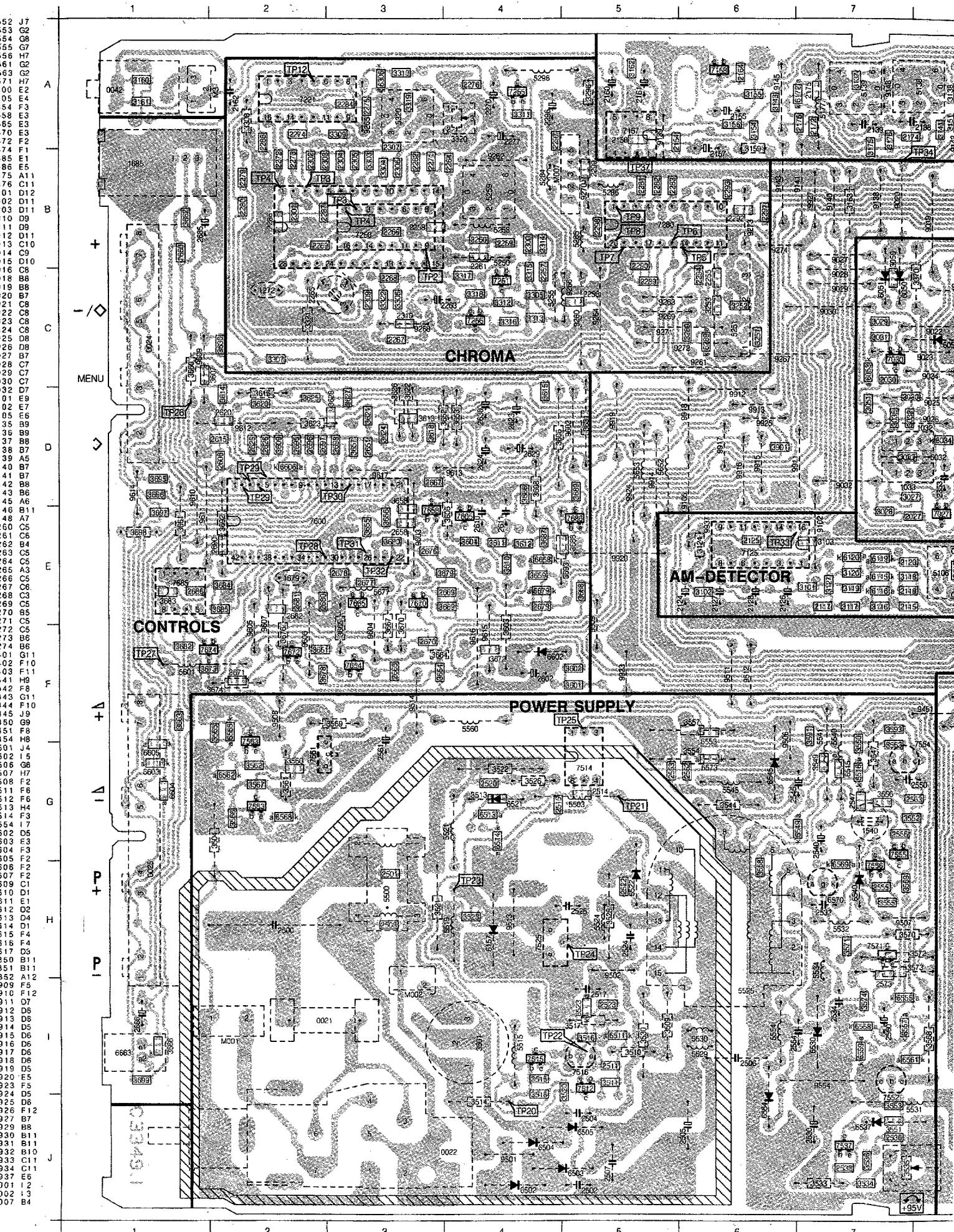
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1685 C2
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2606 B10
2610 B12
2611 B13
2615 G10
2620 H10
2623 I13
2624 I13
2625 I10
2626 I10
2629 H13
2630 G13
2651 F10
2657 F5
2658 N2
2666 D5
2669 O4
2676 N11
2677 N10
2678 N10
2579 N12
2680 L10
2581 M10
2582 B5
2685 D5
2686 K13
2690 A8
2695 F5
2696 G5
2697 G5
2698 H5
3601 A13
3602 A13
3603 A12
3604 B12
3605 B11
3606 B10
3607 B10
3608 B12
3609 K10
3610 B12
3611 B13
3612 B13
3613 I13
3614 G12
3615 G12
3616 G12
3618 F11
3620 G11
3621 H11
3522 G12
3623 I12
3624 I13
3625 H11
3626 I12
3627 H12
3628 I11
3630 C10
3631 C11
3631 X4
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3653 E11
3654 K3
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3656 O11
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3662 D6
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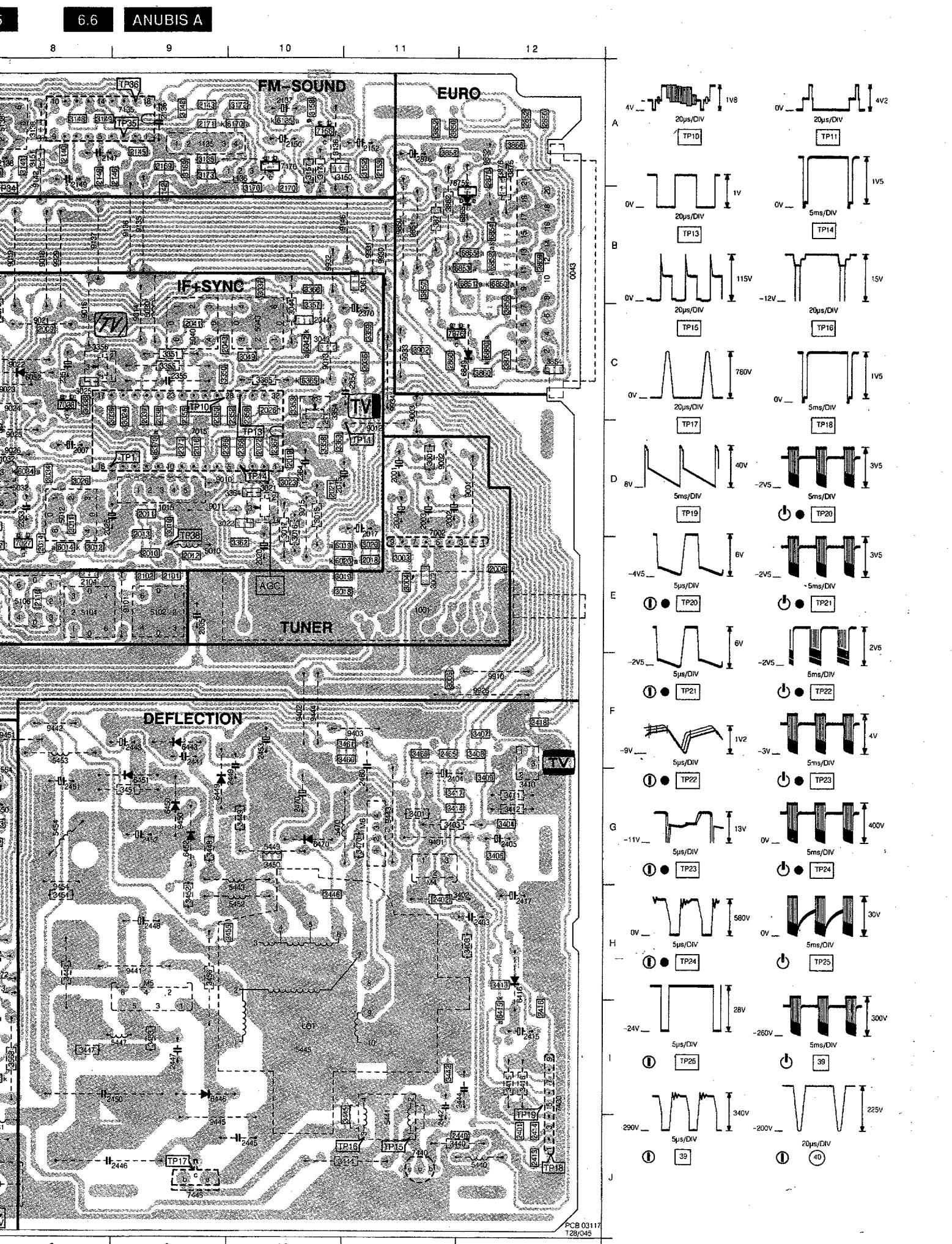
A
B
C
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L
M
N
O

Monocarrier

Hauptplatine

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M4 H11	2309 C3	3032 D7	3520 J5	5258 R4	7553 G2
M5 H9	2310 C3	3033 D7	3521 H3	5259 B4	7554 G8
M6 G1	2350 D9	3034 D8	3522 G4	5284 B4	7555 G7
0021 I2	2351 C8	3035 D7	3523 H4	5285 B5	7556 H7
0022 J3	2352 D10	3036 C11	3525 H5	5286 B5	7561 G2
0024 C1	2353 D8	3037 B10	3526 G6	5299 A4	7563 G2
0025 H1	2354 C11	3038 C8	3530 I5	5320 A3	7571 H7
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0043 B12	2356 D9	3043 C10	3534 J7	5441 J11	7605 E4
1001 E11	2359 D10	3044 C10	3535 J7	5443 H10	7654 F3
1015 D9	2364 D10	3049 C10	3536 J7	5445 I10	7658 E3
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2280 B4	2670 F3	3405 G12	3683 E1	6573 G6	9605 F2
2281 C4	2675 E3	3406 F12	3684 E2	6602 F4	9606 F2
2282 D3	2677 C3	3407 E12	3685 E2	6603 G1	9607 C9
2283 C3	2678 C3	3408 H12	3686 E2	6604 G1	9609 C1
2284 B4	2679 E4	3409 G12	3687 E4	6605 G1	9610 D1
2285 C2	2680 E2	3410 G12	3688 E5	6606 D2	9611 P1
2286 B3	2681 E2	3411 G12	3689 D5	6658 E4	9612 D2
2287 C3	2682 E2	3412 G12	3692 E2	6663 I4	9613 D4
2288 C3	2685 B1	3413 H12	3693 E5	6679 E4	9614 D1
2289 B2	2686 E1	3414 G11	3695 D1	6849 C12	9615 F4
2270 A4	2690 E2	3415 I12	3696 D1	6850 B12	9616 F4
2271 B3	2695 D2	3416 I12	3697 E1	6851 B12	9617 D3
2272 B2	2696 D2	3417 G11	3698 E1	6852 B12	9850 B11
2273 B2	2697 D2	3418 F12	3699 I1	6853 B11	9851 B11
2274 A2	2698 D3	3440 J11	3800 A11	6854 B12	9852 A12
2275 A3	2850 A12	3442 I11	3852 A11	6855 B12	9909 F5
2276 A4	2852 A12	3443 H8	3854 C12	6865 B12	9910 F12
2277 A4	2860 C11	3444 J10	3855 C12	6880 C12	9911 D7
2279 B2	2875 A12	3445 J11	3857 B1	7002 D11	9912 D6
2280 B2	2876 A11	3446 H10	3858 A11	7015 D9	9913 D6
2281 B5	3001 D11	3447 I8	3859 B12	7027 E8	9914 D5
2282 B5	3002 E11	3448 G9	3860 C12	7030 C7	9915 D6
2283 B5	3003 E11	3449 G10	3862 B11	7038 C8	9916 D6
2284 A3	3004 E11	3450 G10	3863 A12	7125 E6	9917 D6
2285 B2	3005 F11	3451 G8	3871 B11	7135 A9	9918 D6
2287 B2	3011 D9	3452 H8	3875 A12	7156 A10	9919 D5
2288 C5	3012 E8	3453 I9	3876 A12	7157 A5	9920 E5
2289 C5	3015 D10	3455 H10	3891 C12	7158 A6	9923 F5
2290 C5	3016 E10	3456 H9	3902 C11	7204 A10	9924 D5
2291 B6	3017 E10	3460 F10	5010 E9	7250 B3	9925 F12
2292 B6	3018 E10	3461 F10	5012 D8	7251 C4	9927 B7
2293 B6	3019 E10	3463 F11	5030 C9	7255 A4	9929 B8
2294 C6	3020 E11	3470 G11	5032 D8	7256 C4	9930 B11
2295 A4	3021 D10	3501 I4	5040 C8	7280 B5	9931 B11
2298 B5	3022 D10	3504 G2	5043 C10	7400 L12	9932 B10
2299 B5	3023 D10	3509 I5	5102 E9	7440 J11	9933 C11
2300 B4	3024 D9	3510 I5	5104 E8	7445 J9	9934 C11
2301 B2	3025 C8	3511 I5	5106 E8	7512 I5	9937 E6
2302 B2	3026 D8	3513 G4	5138 A8	7514 G5	M001 I2
2303 B3	3027 D7	3514 J4	5139 A7	7515 I4	M002 I3
2304 B3	3028 E7	3515 I4	5177 A7	7516 I5	M007 B4
2305 B3	3029 C7	3516 I5	5250 B4	7525 H4	
2306 B3	3030 D7	3517 I5	5251 C6	7537 J7	

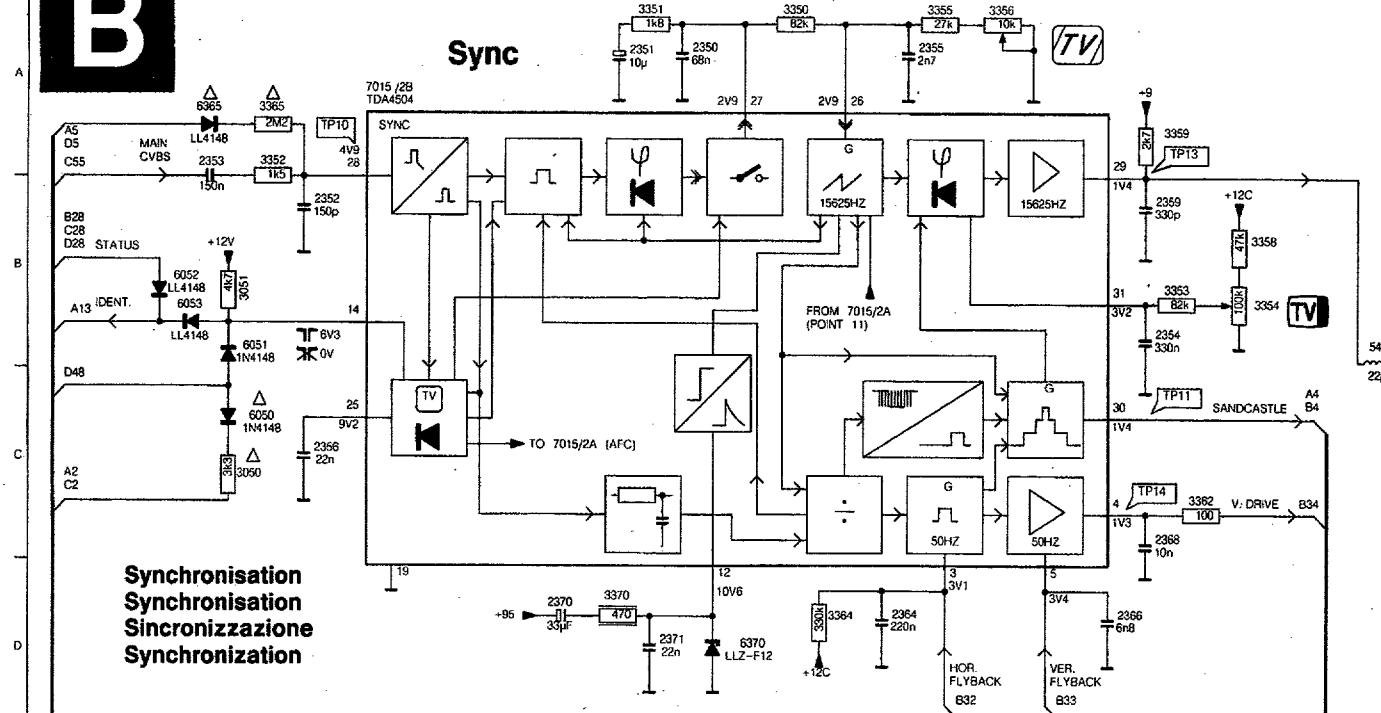




B

DIAGRAM B

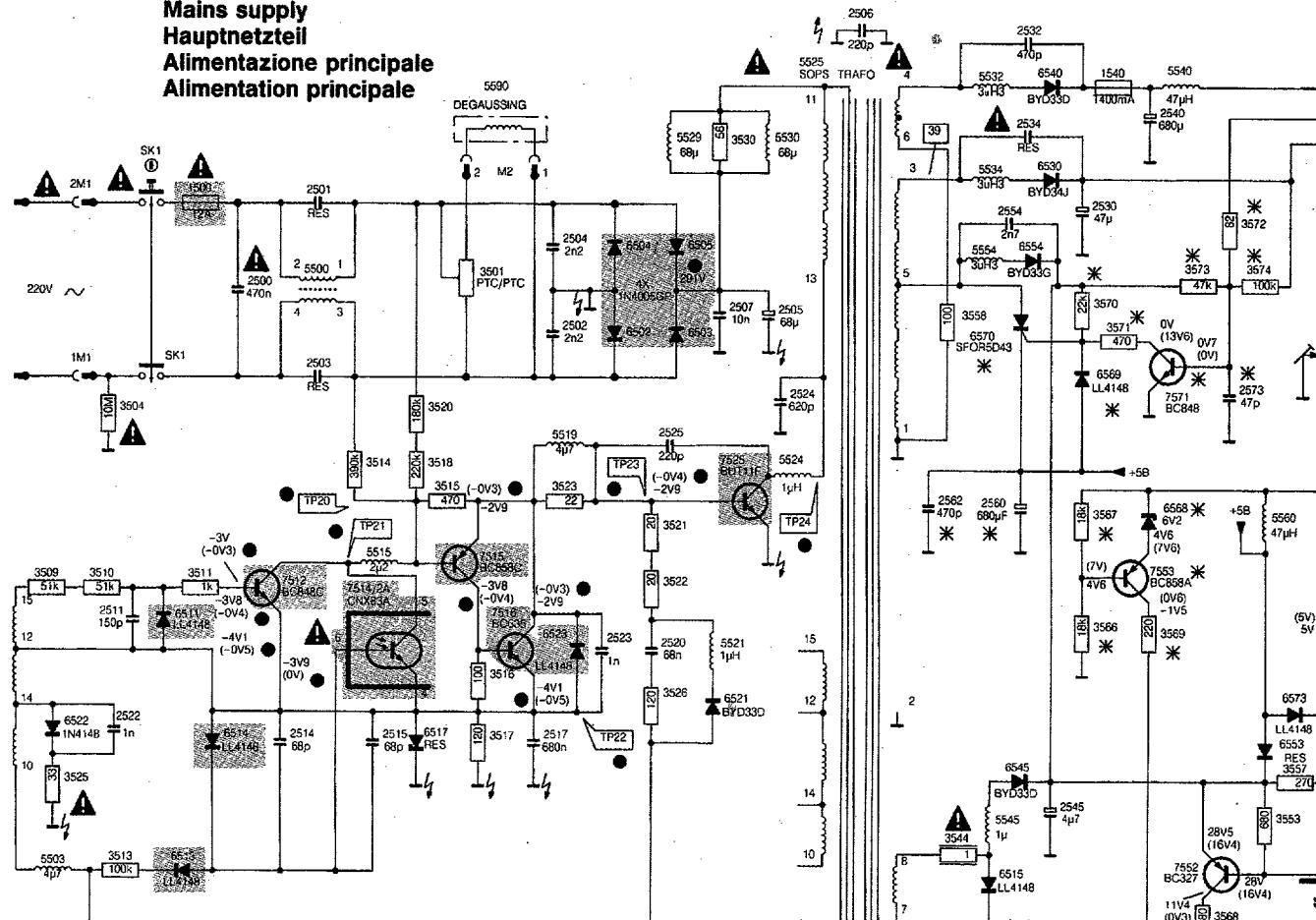
Sync



Mains supply

Maine Supply

Alimentazione principale Alimentation principale



Power supply

POS NR	SYSTEM 4	SYSTEM 5
3050	3K3	3K3
3365	2M2	2M2
6050	1N4148	1N4148
6365	LL4148	LL4148

SYSTEM 4: PAL BG SECAM BGL
 SYSTEM 5: PAL BG SECAM BGL

* ONLY FOR REMOTE CONTROL SETS

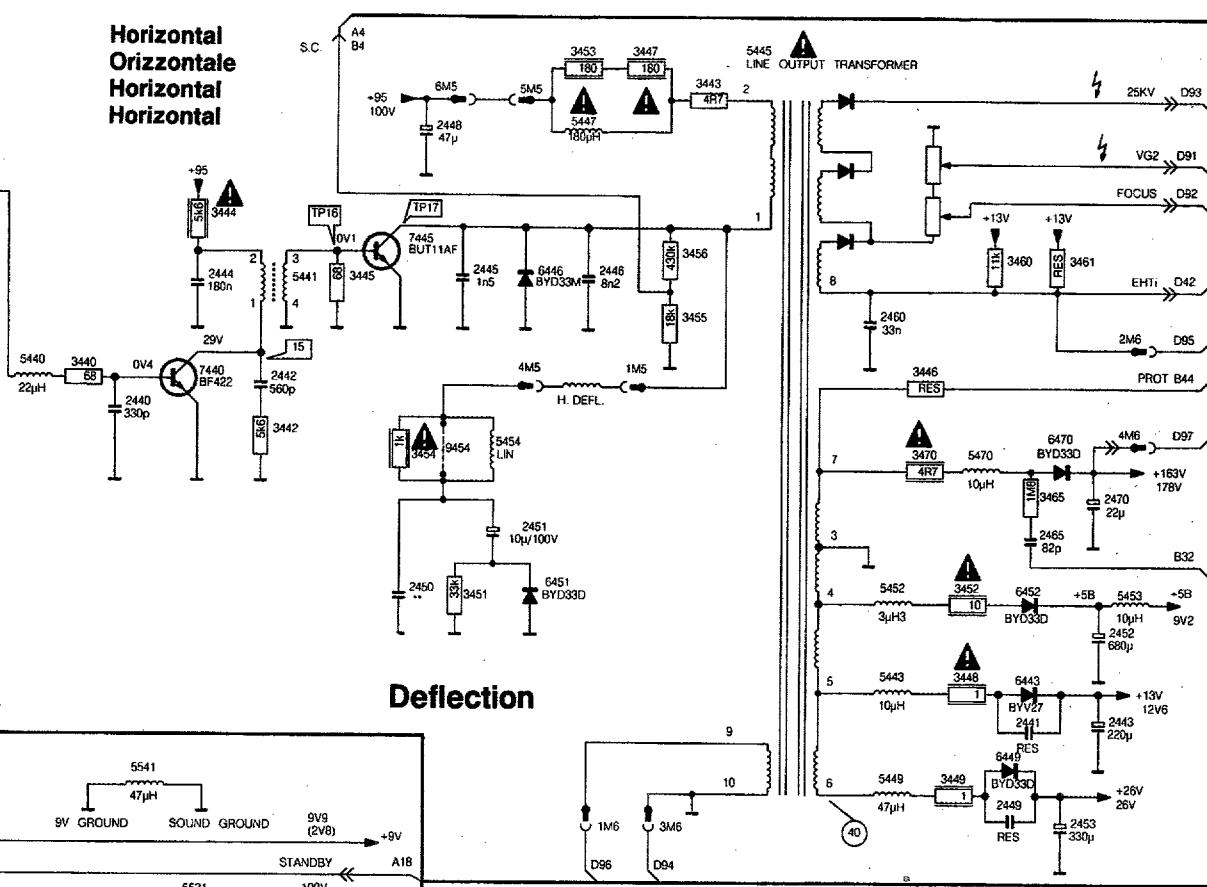
MEASURED IN
RESPECT TO



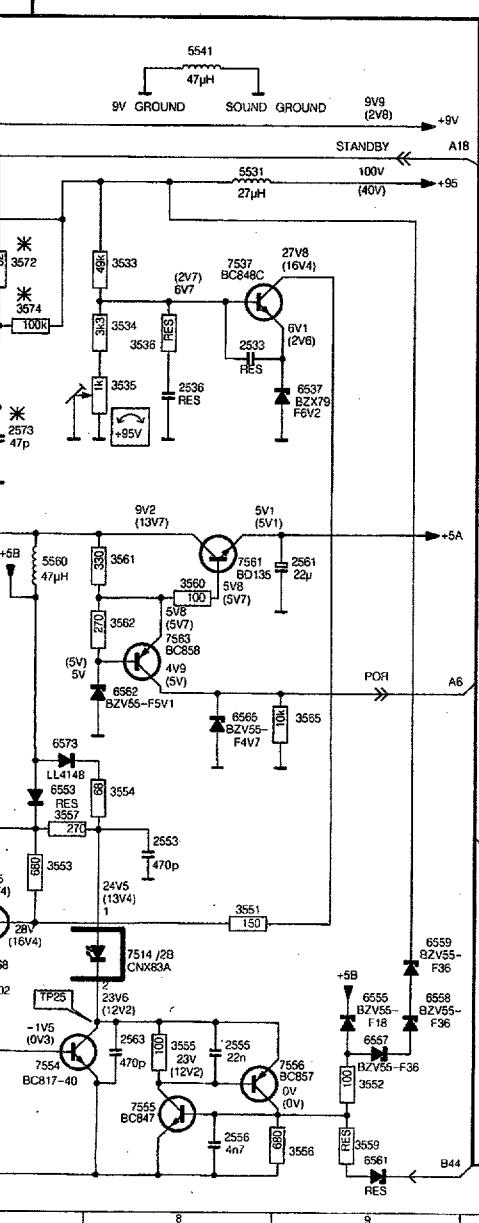
Synchronisation

Synchronization

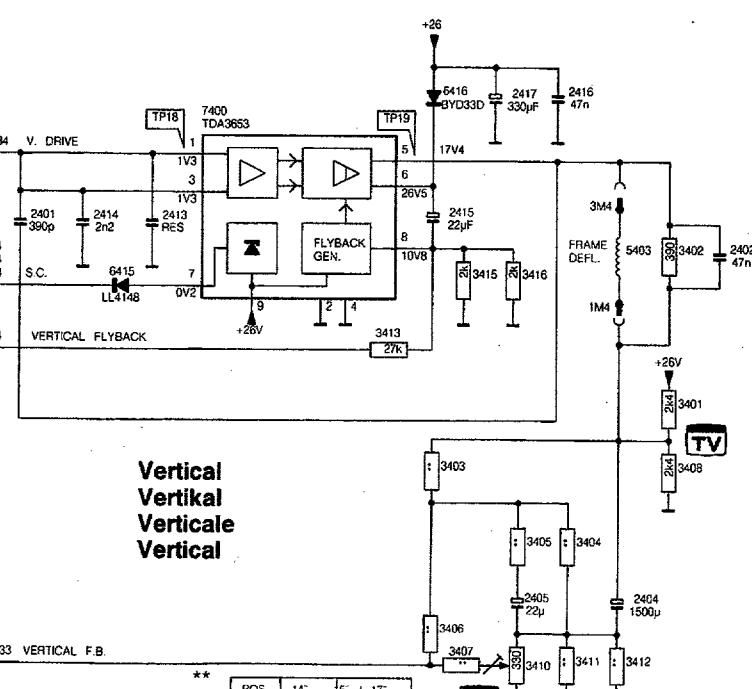
Horizontal
Orizzontale
Horizontal
Horizontal



Deflection



Vertical
Vertikal
Verticale
Vertical



833 VERTICAL F.B.

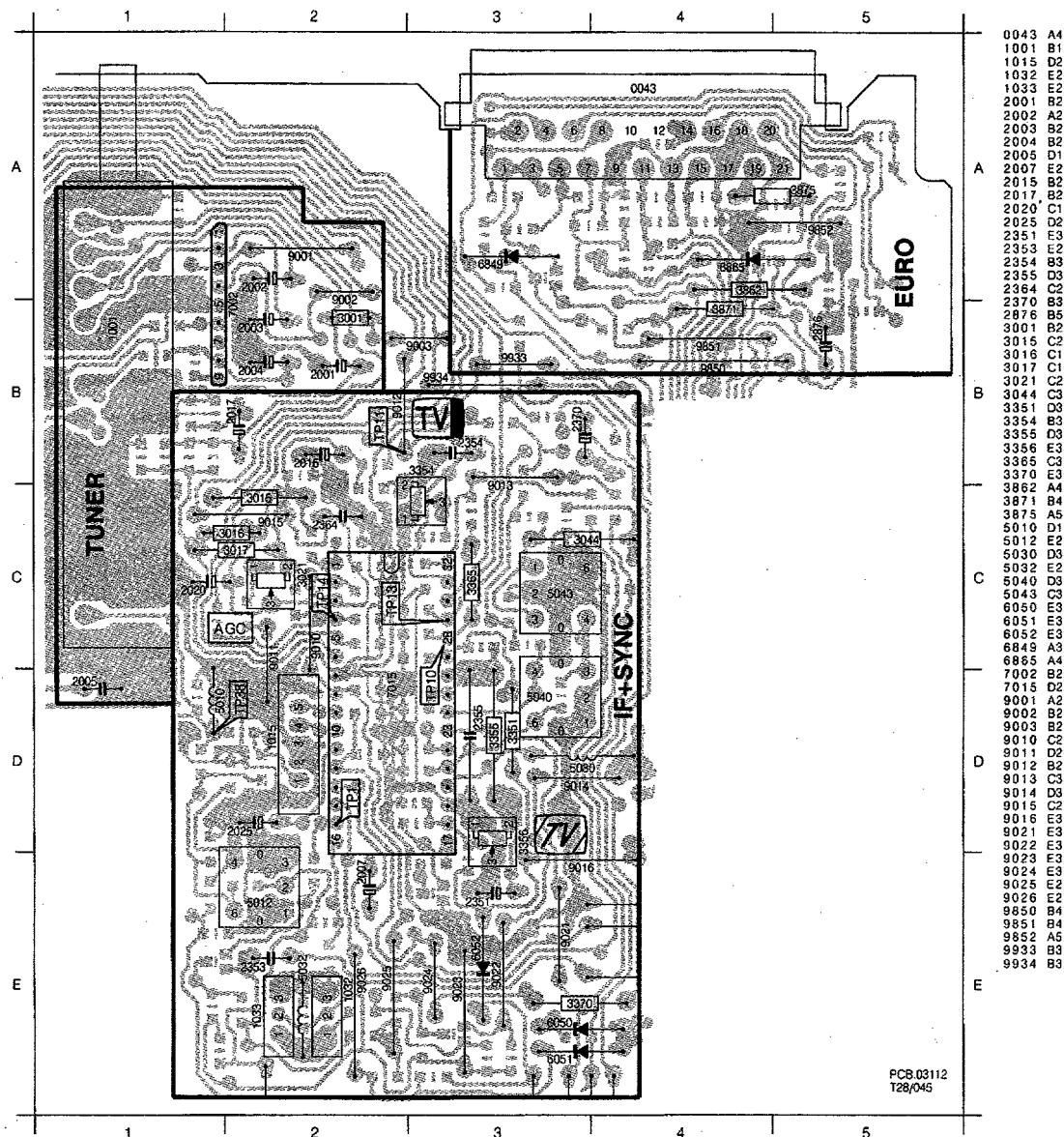
POS	14"	5' / 17"
2450	560n	470n
3403	3k3	3k9
3404	2k0	2k4
3405	130	150
3406	12k	15k
3407	18k	22k
3411	4R3	3R6
3412	4R3	3R6
3454	-	1k
5454	-	JIN COR
9454	Jumper	-

SOPHS REPAIR KIT

**SBC 7021
4822 310 20491**

ESV.0034
T-08 04

1500-F1	5549-J6
1540-E6	5550-J6
2350-A4	5551-J6
2351-A3	5552-J6
2352-B2	5553-J7
2353-B1	5554-J8
2354-C8	5555-J8
2355-A5	5556-J9
2356-C2	5557-J7
2359-B6	5558-F6
2364-D5	5559-J9
2366-D6	5560-G8
2368-D6	5561-G8
2370-D3	5562-H2
2371-D4	5565-H5
2401-G10	5568-H6
2402-G14	5568-G7
2404-I-13	5568-J7
2404-I-12	5569-H7
2405-I-13	5570-H7
2414-G10	5571-G7
2415-G12	5572-F7
2416-F13	5573-F7
2417-F12	5574-F7
2440-C8	5403-G13
2441-D13	5440-B8
2442-C9	5441-B8
2443-D13	5443-D12
2444-B8	5445-A11
2445-B10	5447-A10
2446-B10	5449-E12
2448-A10	5452-D12
2449-E13	5453-D13
2450-D9	5454-C10
2451-C10	5470-C10
2452-D13	5500-F2
2453-E13	5503-I-1
2460-B12	5515-G1
2461-C13	5519-G3
2470-C13	5521-H1
2500-F2	5525-G5
2501-F2	5526-G5
2502-F3	5529-E4
2503-F2	5530-E5
2504-F3	5531-E5
2505-F5	5532-E6
2506-E5	5533-E6
2507-F4	5540-E7
2511-H1	5541-E7
2514-I-2	5545-I-6
2517-I-3	6050-C1
2520-H4	6051-B1
2522-H1	6052-B1
2523-H4	6053-B1
2524-G5	6365-A1
2525-G4	6370-D4
2533-F6	6415-G10
2532-E5	6416-F12
2533-F8	6430-D18
2534-F8	6449-E18
2535-F8	6449-E18
2540-E7	6451-C10
2545-I-16	6452-D12
2547-J-6	6470-C13
2550-J6	6502-F4
2553-I-8	6503-F4
2554-F6	6504-F4
2555-J8	6505-F4
2556-J8	6511-H1
2560-G6	6513-I-1
2561-G9	6514-I-2
2562-G5	6515-I-6
2563-J8	6516-J-6
2573-G7	6517-13
3050-C1	6521-H4
3051-B1	6522-E4
3052-B1	6522-E4
3053-A4	6523-H4
3351-A3	6543-E6
3352-B1	6537-E7
3353-B6	6540-E6
3354-B7	6545-E6
3355-A5	6549-J9
3356-A5	6553-I-7
3358-B7	6554-F6
3359-A6	6555-J9
3362-C6	6557-J9
3364-D6	6558-J9
3365-A1	6559-I-9
3370-D7	6561-K9
3401-G13	6562-H8
3402-G13	6565-H8
3403-G12	6568-G7
3404-H12	6595-F6
3405-H12	6673-F6
3406-H12	6773-F6
3407-I-12	7015-D2
3408-H13	7400-G11
3410-I-12	7440-B12
3411-I-13	7445-B9
3412-L-13	7512-H2
3413-G12	7514-H2
3415-G12	7515-G3
3416-G12	7516-H3
3440-B8	7525-G4
3442-C9	7537-F8
3443-A11	7552-I-7
3444-B8	7553-H6
3445-B9	7554-J7
3446-C12	7555-J8
3447-C12	7556-J8
3448-D12	7557-G8
3449-E12	7563-H9
3451-C10	7571-H9
3452-D12	9454-C10
3453-A10	9511-F1



Quellenwahl

Selection de source

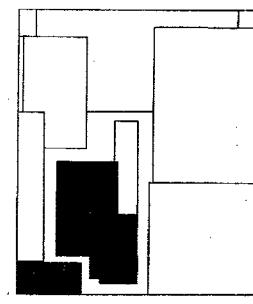
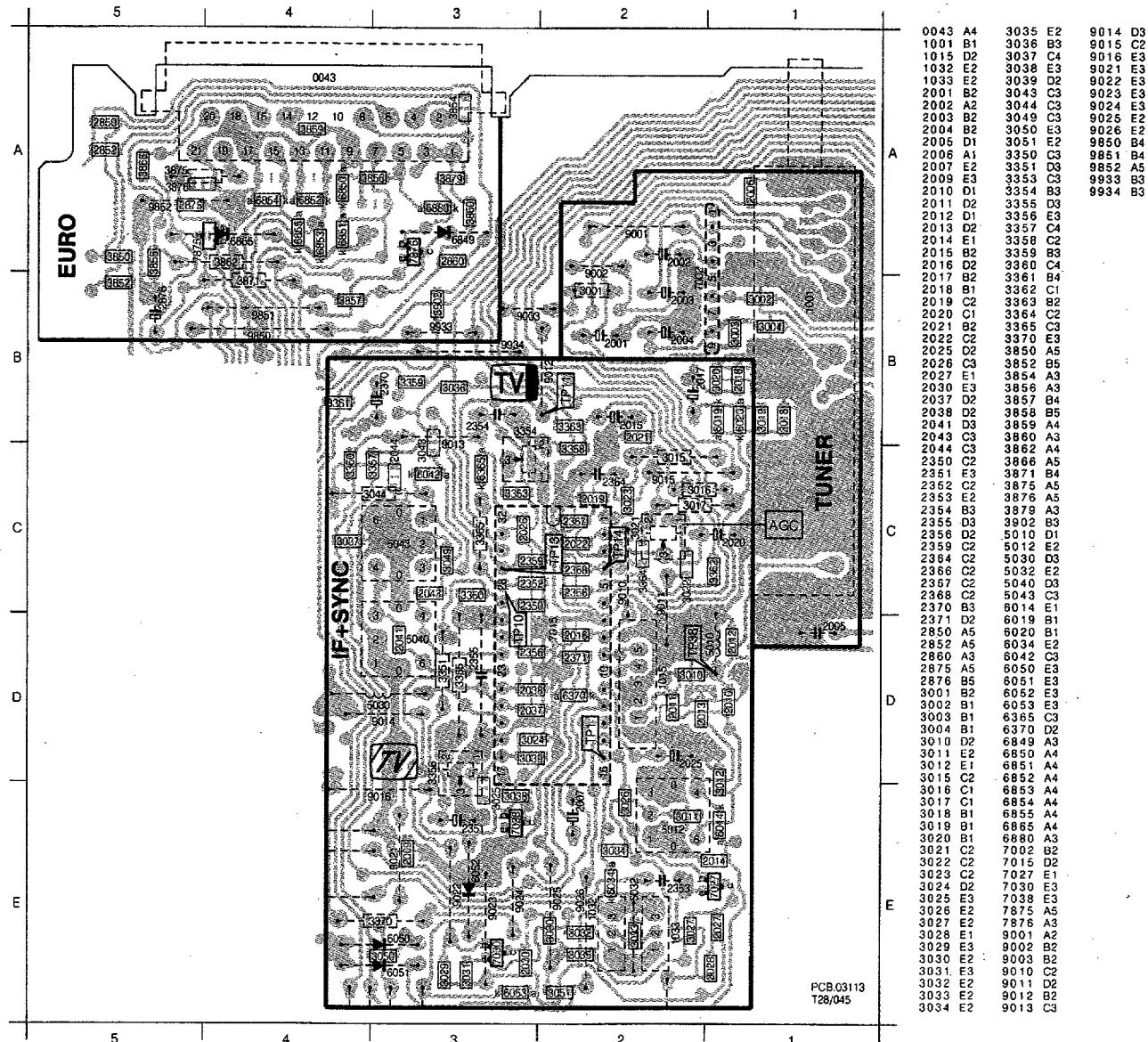
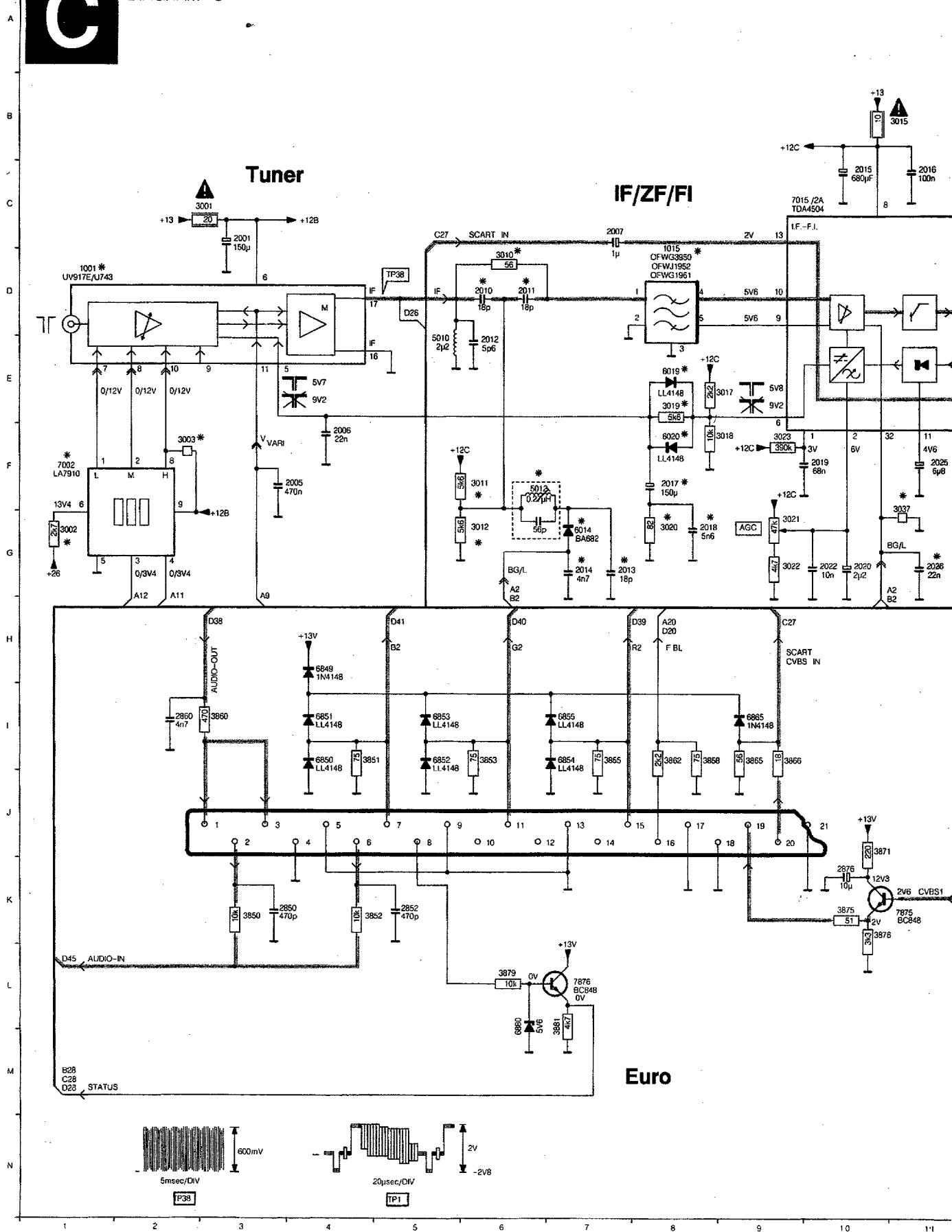
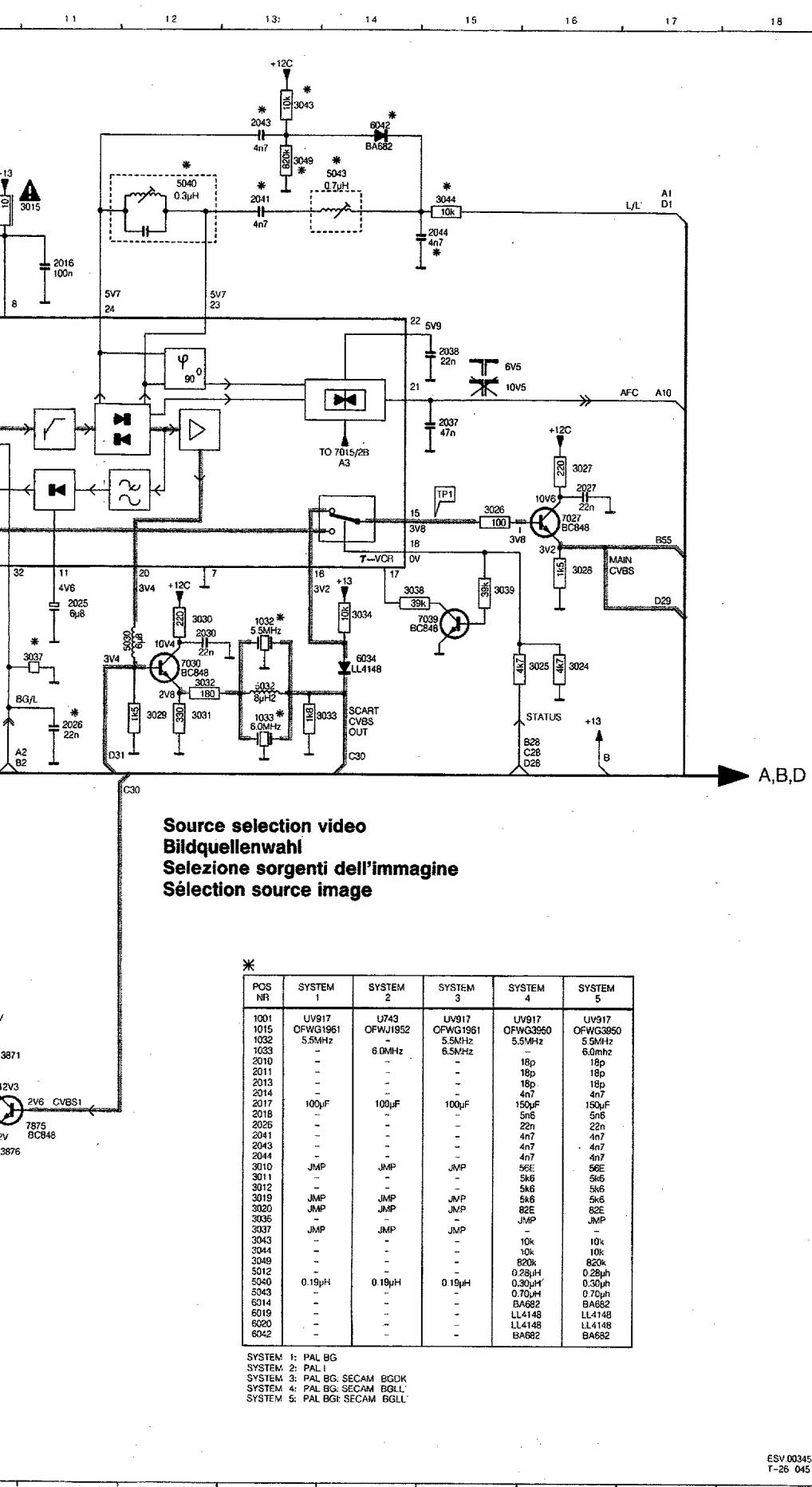


DIAGRAM C



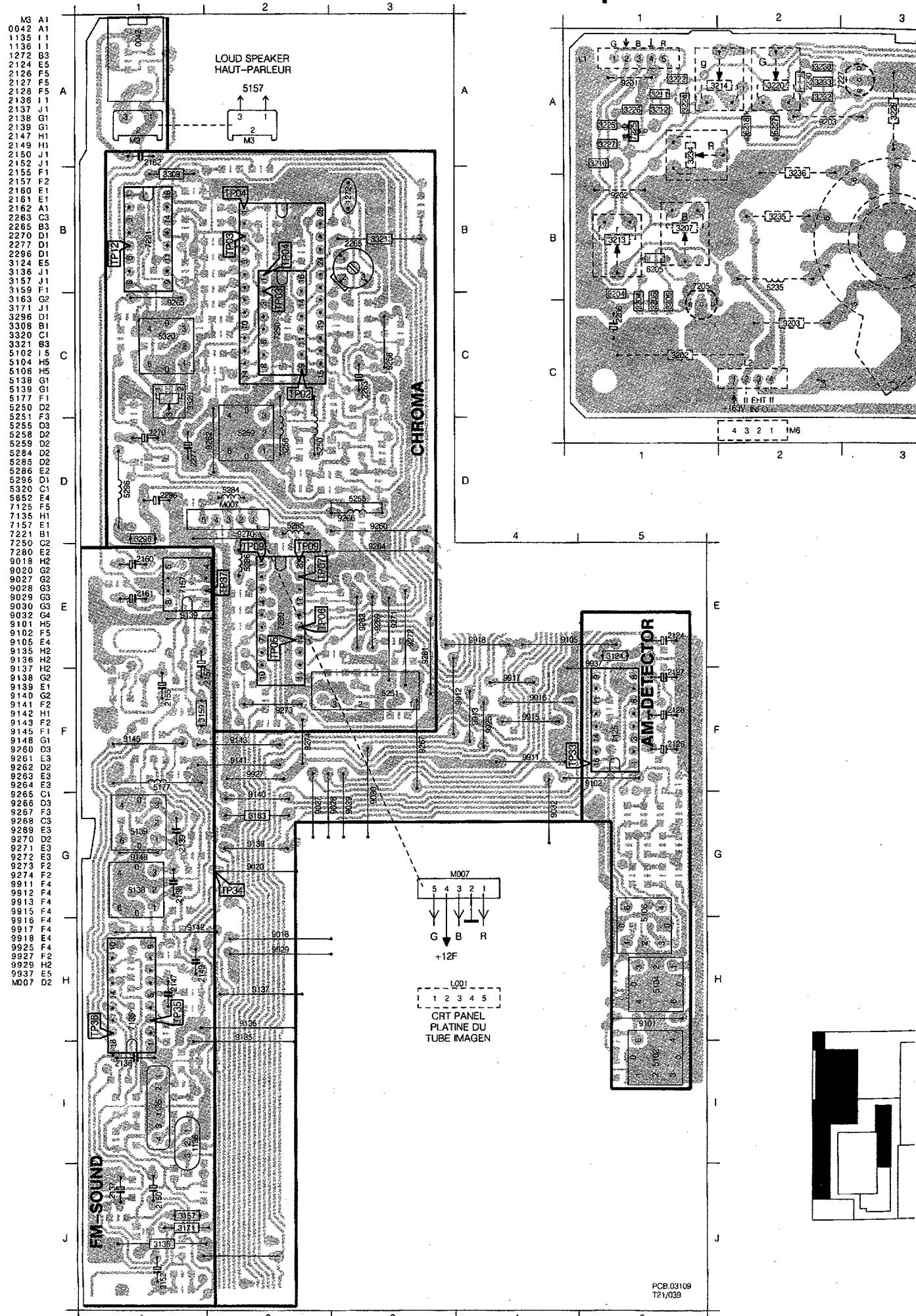


A 1001 D1
 1015 D8
 1032 F13
 1033 G13
 2001 C3
 2005 F4
 2006 F4
 2007 C7
 2010 D6
 2011 D6
 2012 E6
 2013 G7
 2014 G7
 2015 C10
 2016 C11
 2017 G8
 2018 G8
 2019 G10
 2020 G10
 2022 G10
 2025 F11
 2026 G11
 2027 E16
 2030 F12
 2037 D15
 C 2038 C15
 2041 B13
 2043 A13
 2044 B15
 2850 K3
 2852 K5
 2880 I2
 2875 K10
 3001 C3
 3003 G1
 3005 F2
 3010 G6
 3011 F6
 3012 G6
 3015 B11
 3017 E9
 3018 F9
 3019 E8
 3020 G8
 3021 G9
 3022 G9
 3023 F9
 3024 G16
 3025 G16
 3026 E15
 3027 E16
 3028 F16
 3029 G12
 3030 F12
 3031 G2
 3032 G13
 3033 F14
 3037 G11
 3038 F14
 3039 F15
 3043 A13
 3044 B15
 3049 B13
 3850 K3
 3851 I4
 3852 K5
 3853 I6
 3855 I7
 3858 I8
 3860 I3
 3862 I8
 3865 I9
 H 3866 I9
 3871 J10
 3875 K10
 3876 K10
 3879 L6
 3881 L7
 5010 E5
 5012 F6
 5030 F12
 5032 G13
 5040 B12
 5043 B14
 6014 G7
 6019 E8
 6020 F8
 6034 F14
 6032 A14
 6049 K4
 6050 I4
 6051 I4
 6052 I5
 6053 I5
 6054 I7
 6055 I7
 6065 I9
 6080 L6
 7002 F1
 7015 C9
 K 7027 E16
 7030 G12
 7039 F15
 7875 K11
 7876 L7

Video**Sound****Ton****Son****CRT panel**

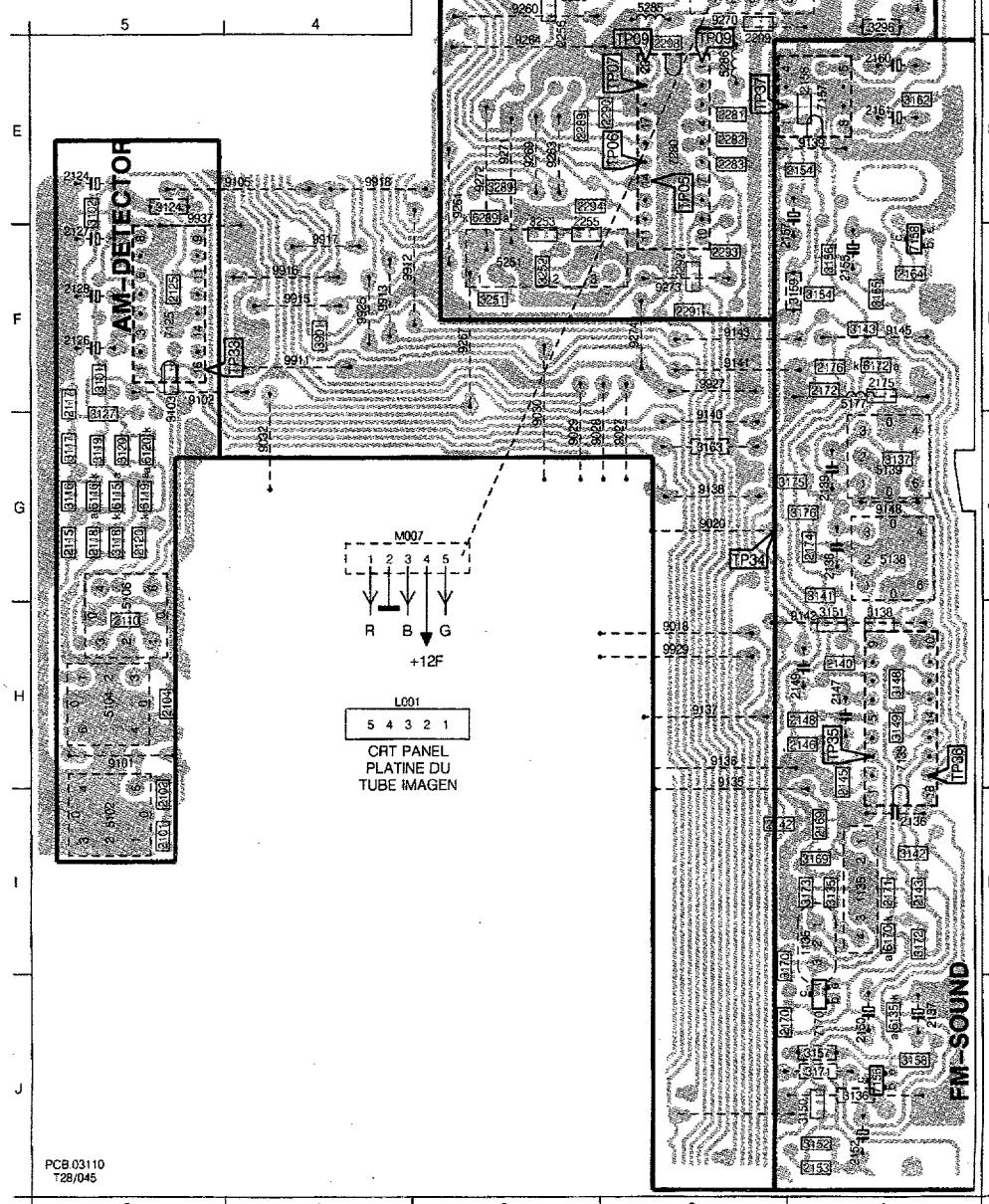
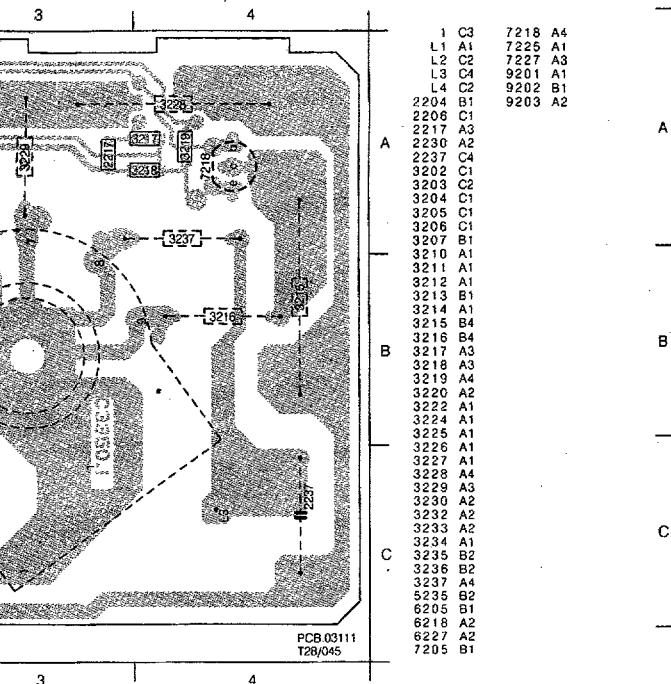
ANUBIS A

6.13



Bildröhren platte

Platine du tube image

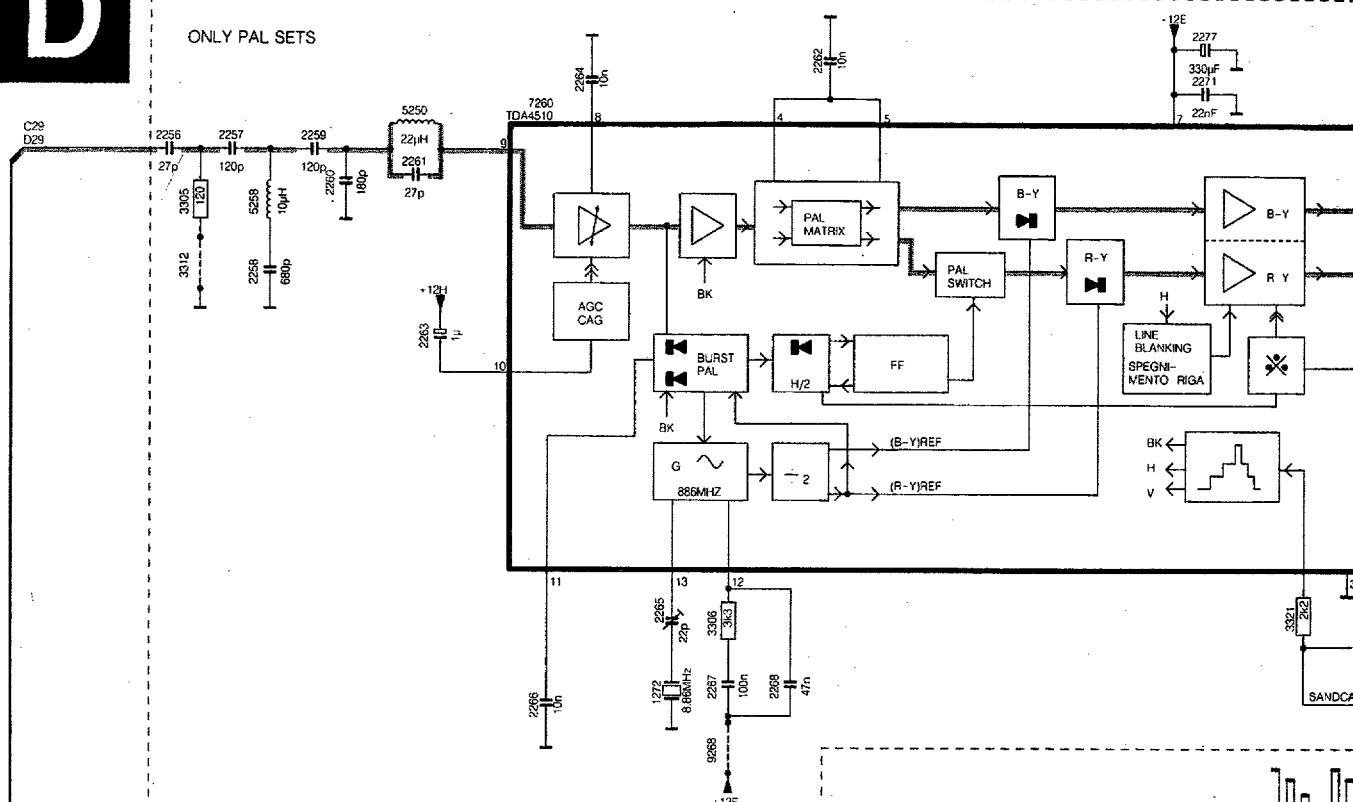


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0042 A1	3305 C3
1135 I1	3306 C3
1136 G1	3307 B3
1272 B3	3308 B1
2101 I5	3309 B1
2102 I5	3310 C1
2104 H5	3311 C1
2110 H5	3312 C3
2115 G5	3313 C3
2117 G5	3314 C2
2118 G5	3315 C3
2120 G5	3316 C3
2124 E5	3317 C3
2125 F5	3318 D3
2126 F5	3319 C1
2127 F5	3320 C1
2128 F5	3321 B3
2136 L1	3322 C1
2137 J1	3323 F4
2138 G1	5102 C5
2139 G1	5104 H5
2140 H1	5106 H5
2142 I1	5138 G1
2143 I1	5139 G1
2145 I1	5177 F1
2146 H1	5250 D2
2147 H1	5251 F3
2149 H1	5255 D3
2150 J1	5258 D2
2152 J1	5284 D2
2153 J1	5285 E2
2154 E1	5286 E2
2155 F1	5296 D1
2157 F2	5320 C1
2158 E1	5652 E4
2160 E1	6115 G5
2161 E1	6116 G5
2162 A1	6119 G5
2164 F1	6120 G5
2169 I1	6135 J1
2170 J2	6170 I1
2171 I1	6172 F1
2172 F1	6289 E3
2174 G1	6306 C1
2175 F1	7125 F5
2176 F1	7135 H1
2255 F2	7156 J1
2256 E3	7157 E1
2257 D2	7158 E1
2258 C2	7170 J1
2259 D2	7221 B1
2260 D2	7254 C2
2261 C2	7251 D3
2262 C2	7255 D1
2263 C3	7256 D3
2264 C2	7280 E2
2265 B3	9018 H3
2267 C3	9020 G3
2268 C3	9021 G3
2269 B2	9029 G3
2270 D1	9030 G3
2271 B2	9032 G4
2272 B1	9101 H5
2273 B1	9102 E5
2274 F1	9105 H2
2275 C1	9135 H2
2276 D1	9136 H2
2277 D1	9137 H2
2279 G2	9138 G2
2280 B2	9139 E1
2281 E2	9140 G2
2282 E2	9141 F2
2283 E2	9142 H1
2284 B1	9143 F2
2285 B1	9145 F1
2286 B2	9148 G1
2287 E2	9260 D3
2288 E3	9261 E3
2289 E2	9262 E3
2290 F2	9263 E3
2291 F2	9264 E3
2292 F2	9265 C1
2293 F2	9266 D3
2294 E2	9267 F3
2295 D1	9268 C3
2296 E2	9269 E3
2297 E2	9270 D2
2300 D2	9271 E3
2301 B2	9272 E3
2302 B1	9273 F2
2303 B1	9274 F2
2304 B1	9911 F4
2305 B1	9912 F4
2306 C2	9913 F4
2307 C1	9916 F4
2309 C3	9918 F4
2310 C3	9917 F4
3101 F5	9918 E4
3102 F5	9925 F4
3103 G5	9927 F2
3116 G5	9929 H2
3117 G5	9937 E5
3118 G5	9938 E5
3119 G5	9939 E5
3120 G5	9940 E5
3124 E5	9941 E5
3127 G5	9942 E5
3135 L1	9943 E5
3137 J1	9944 E5
3138 H1	9945 E5
3141 G1	9946 E5
3142 I1	9947 E5
3143 F1	9948 E5
3148 H1	9949 E5
3149 H1	9950 E5
3150 J1	9951 E5
3151 H1	9952 E5
3152 J1	9953 E5
3154 F1	9954 E5
3155 F1	9955 E5
3156 F1	9956 E5
3157 J1	9957 E5
3158 J1	9958 E5
3160 A1	9959 E5
3161 A1	9960 E5
3162 E1	9961 E5
3163 G2	9962 E5
3169 I1	9963 E5
3170 J2	9964 E5
3171 J1	9965 E5
3172 I1	9966 E5
3173 I1	9967 E5
3175 G1	9968 E5
3176 G1	9969 E5
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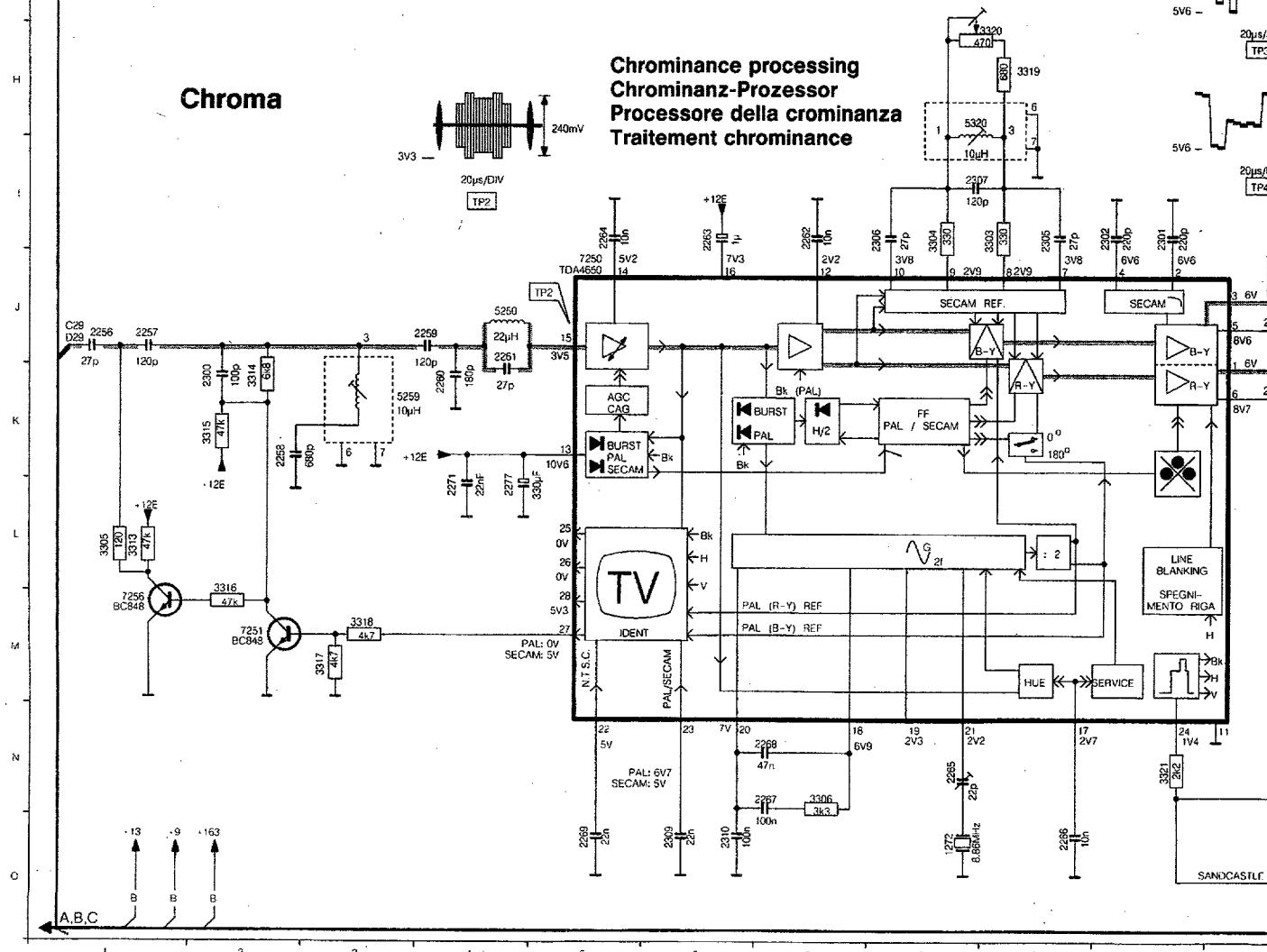
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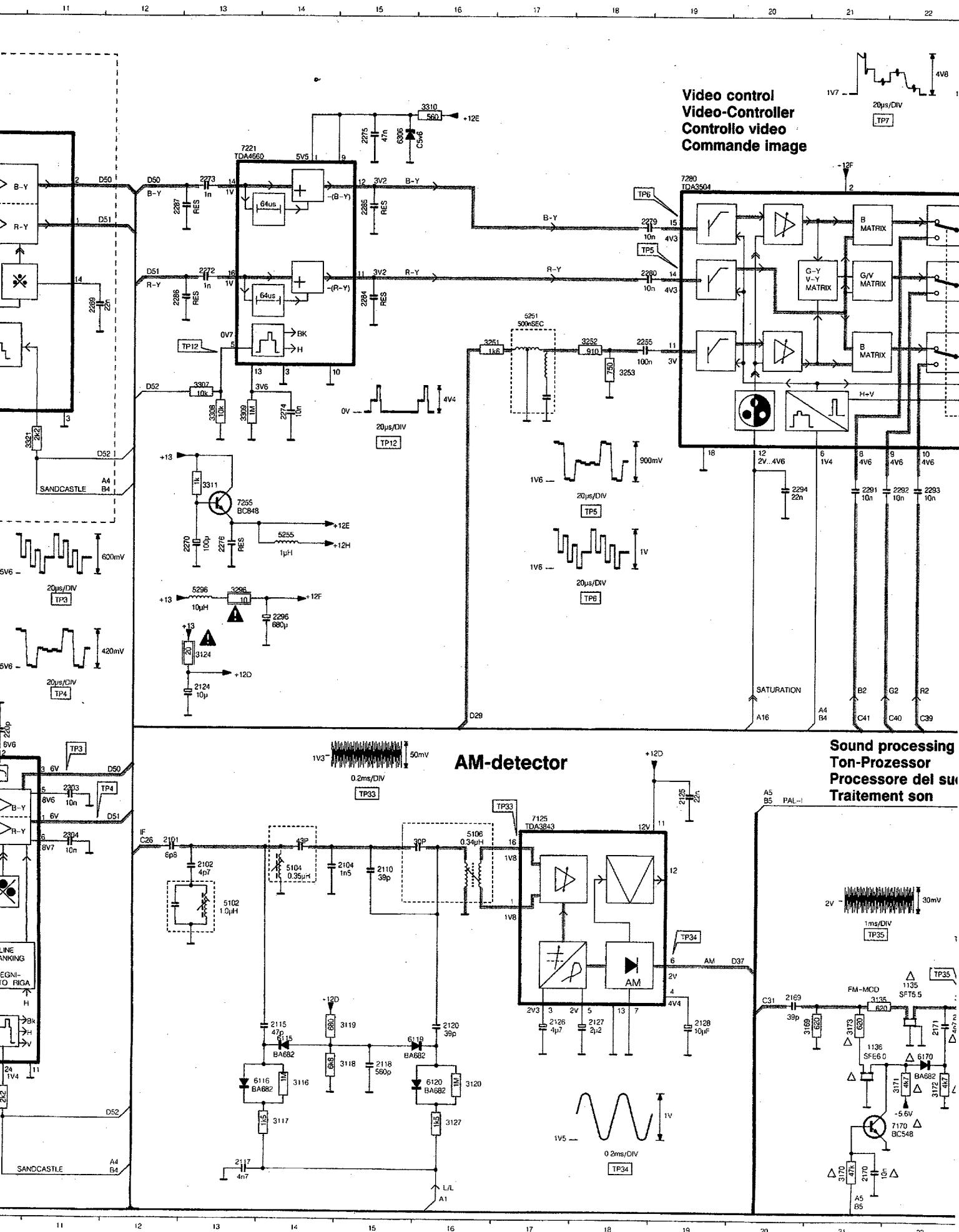
DIAGRAM D

ONLY PAL SETS



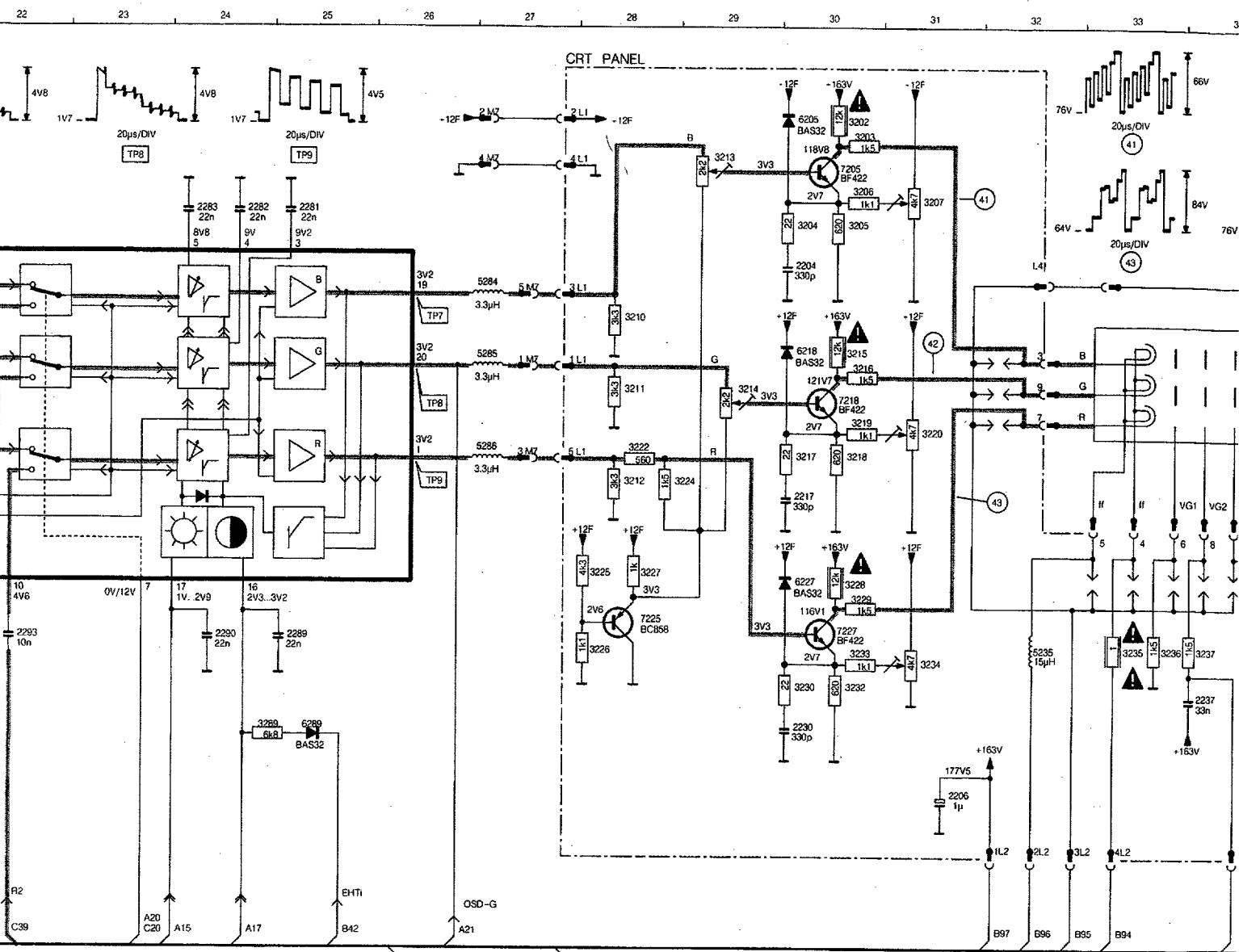
Chroma

Chrominance processing
Chrominanz-Prozessor
Processore della crominanza
Traitement chrominance


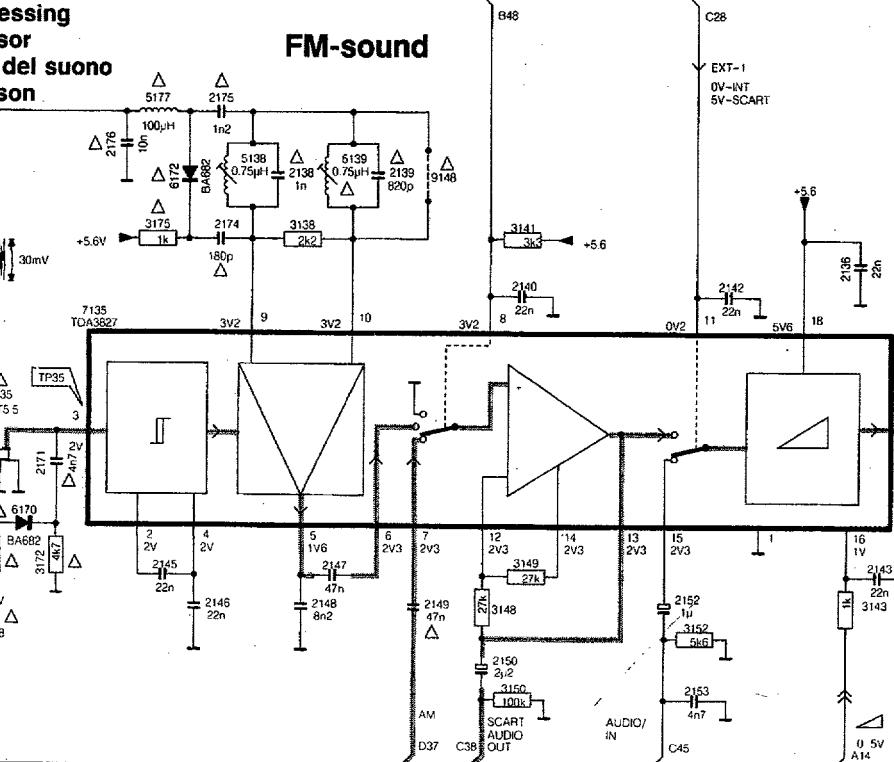


Platine du tube image

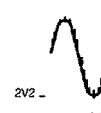
ANUBIS A 6.17

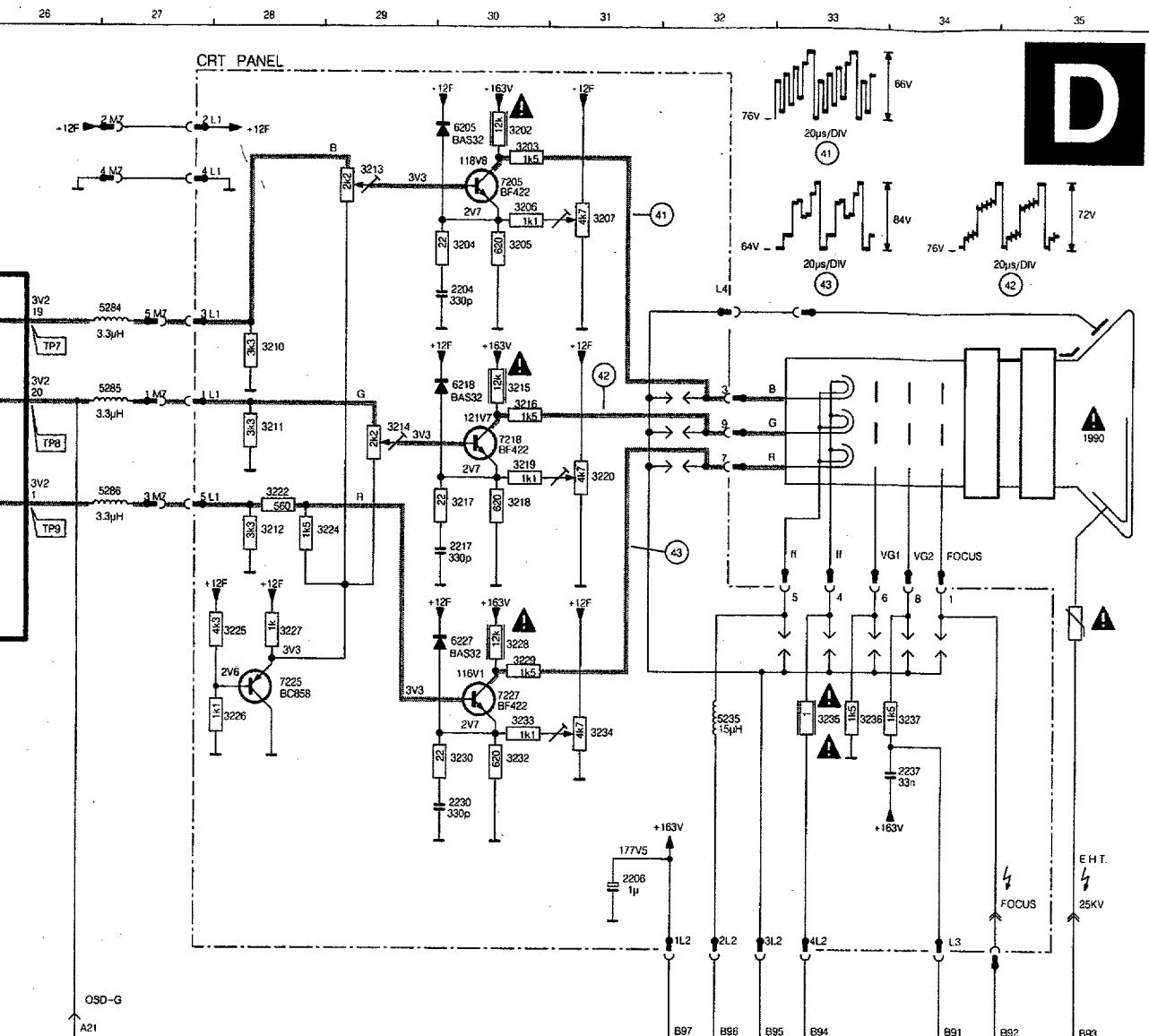


FM-sound

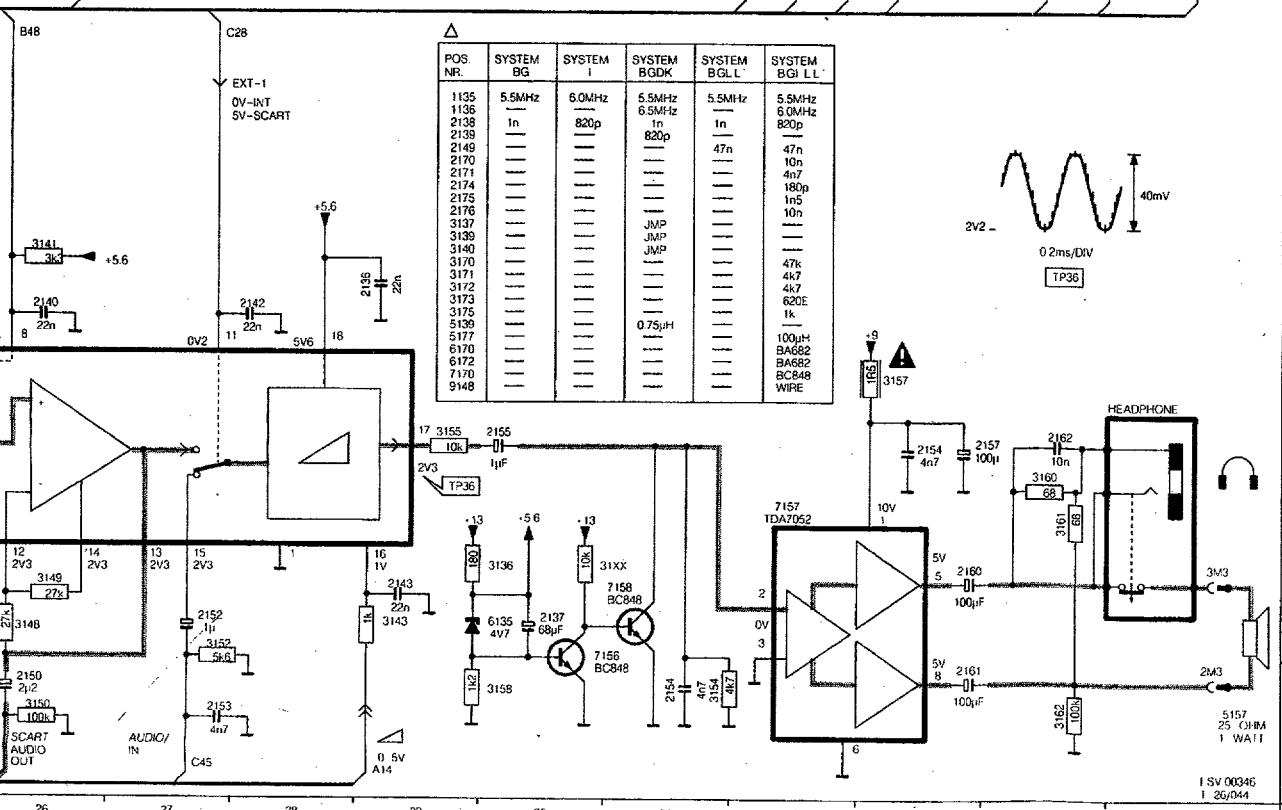
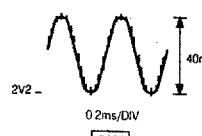


POS. NR.	SYSTEM BG	SYSTEM I	SYSTEM BGDK	SYSTEM BGL'	SYSTEM BGI LL'
1135	5.5MHz	6.0MHz	5.5MHz	5.5MHz	5.5MHz
1136	—	—	5.5MHz	—	6.0MHz
2138	In	820p	6.5MHz	In	820p
2139	—	—	820p	—	—
2149	—	—	—	47n	47n
2170	—	—	—	—	10n
2171	—	—	—	—	4n7
2174	—	—	—	—	180p
2175	—	—	—	—	1n5
2176	—	—	—	—	10n
3137	—	—	JMP	—	—
3139	—	—	JMP	—	—
3140	—	—	JMP	—	—
3170	—	—	—	—	47k
3171	—	—	—	—	4k7
3172	—	—	—	—	4k7
3173	—	—	—	—	620E
3175	—	—	—	—	1k
5139	—	—	0.75μH	—	—
5177	—	—	—	—	100μH
6170	—	—	—	—	BA682
6172	—	—	—	—	BA682
7170	—	—	—	—	BC848
9146	—	—	—	—	WIRE





POS. NR.	SYSTEM BG	SYSTEM I	SYSTEM BGDK	SYSTEM BGL L'	SYSTEM BGI L'
1135	5.5MHz	6.0MHz	5.5MHz	5.5MHz	5.5MHz
1136	—	—	6.5MHz	—	6.0MHz
2138	In	820p	In	In	820p
2149	—	—	820p	—	—
2170	—	—	—	47n	47n
2171	—	—	—	—	10n
2174	—	—	—	—	—
2175	—	—	—	—	180p
2176	—	—	—	—	1.5
3137	—	—	JMB	—	—
3139	—	—	JMB	—	—
3140	—	—	JMB	—	—
3170	—	—	—	—	47k
3171	—	—	—	—	4k7
3172	—	—	—	—	4k7
3173	—	—	—	—	620E
5155	—	—	—	—	1k
5159	—	—	0.75 μ H	—	—
5177	—	—	—	—	100 μ H
6170	—	—	—	—	BA682
6172	—	—	—	—	BA682
7170	—	—	—	—	BC848
9148	—	—	—	—	WIRE



I SV 00346
I 26/044

Electrical instructions

1. Adjustments on the main panel (Fig. 7)

1.1 +100V power supply voltage

Connect a voltmeter (DC) between pin 6 of connector M5 and ground. Adjust potentiometer 3535 for a voltage of +100V.

1.2 Horizontal synchronization

Interconnect pins 8 and 28 of IC7015.
Apply an aerial signal and tune the set.
Adjust potentiometer 3356 until the picture is straight. Remove the interconnection.

1.3 Horizontal centring

Is adjusted with potentiometer 3354.

1.4 Vertical centring

Can be adjusted by eventually mounting one of the resistors 3401 or 3408.

1.5 Picture height

Is adjusted with potentiometer 3410.

1.6 Focussing

Is adjusted with the focussing potentiometer in the line output transformer (see Fig. 8).

1.7 IF filter for PAL/SECAM BGLL'- or PAL/SECAM BGLL'I sets

Connect a signal generator (e.g. PM 5326) via a condensator 5p6 to pin 17 of the tuner and adjust the frequency for 33.4 MHz. Connect an oscilloscope to pin 1 of filter 1015. Switch on the set and select system Europe via the system button on the set.
Adjust 5012 for a minimum amplitude.

1.8 AFC

a. Alignments for PAL/SECAM BGLL'- or PAL/SECAM BGLL'I sets

Connect a signal generator (e.g. PM 5326) as indicated in point 1.7 and adjust the frequency for 33.4 MHz. Tune the set in the VHF1 band at a tuning voltage of approx. 5V on pin 11 of the tuner. Select system France via the system button on the set. Connect a voltmeter to pin 21 of IC7015. Adjust 5040 for 6V (DC).
Next adjust the frequency of the signal generator for 38.9 MHz. Select system Europe on the set. Adjust 5043 for 6V (DC).

b. Alignment for PAL BG-, PAL/SECAM BG-, PAL/SECAM BGDK- or PAL I sets

Connect a signal generator (e.g. PM 5326) as indicated in point 1.7 and adjust the frequency for 38.9 MHz (PAL I: 39.5MHz). Connect a voltmeter to pin 21 of IC7015. Adjust 5040 for 6V (DC).

1.9 RF AGC

If the picture of a strong local transmitter is reproduced distorted, adjust potentiometer 3021 until the picture is undistorted.

1.10 Chroma band-pass filter for PAL/SECAM sets

Connect a signal generator (e.g. PM5326) to pin 20 of the euro connector and adjust it for a frequency of 4,286 MHz. Connect pin 8 of the euro connector and pin 27 of IC7250 to pin 13 of IC7250 (+12V). Connect an oscilloscope to pin 15 of IC7250. Adjust 5259 for a maximum amplitude.
Remove the interconnections.

1.11 Chroma subcarrier oscillator

Apply a PAL colour-bar pattern. Interconnect pin 11 of IC7260 (TDA4510) or pin 17 of IC7250 (TDA4650) to ground. Adjust 2265 so that colour pattern on the screen is practically stationary.

Remove the interconnection.

1.12 SECAM demodulators for PAL/SECAM sets

Apply a SECAM black pattern. Connect an oscilloscope to pin 1 of IC7250. Adjust 5320 for 0 reading.
Connect the oscilloscope to pin 3 of IC7250. Adjust 3320 for 0 reading.

1.13 The FM sound section

a. General adjustments

Apply a PAL BG (PAL I for PAL I sets) generator signal whose sound carrier is (FM) modulated with a frequency of 1 kHz.
Set the generator to the mono mode.
Tune the set and select, if possible, system Europe.
Adjust 5138 for maximum sound output.

b. Additional adjustment for PAL/SECAM BGDK sets

After the general adjustment (see point a.) put the generator in SECAM DK position.
Adjust 5139 for maximum sound output.

1.14 The AM sound section for PAL/SECAM BGLL'- or PAL/SECAM BGLL'I sets

Connect pin 3 of IC7125 to a fixed voltage level of +2V by means of a adjustable power supply.
Connect a signal generator (e.g. PM 5326) via a condensator 5p6 to pin 17 of the tuner and adjust the frequency for 32,4 MHz. Modulate (AM) the signal with 1 kHz.
Tune the set in the UHF band and select system France.
First adjust 5106 for maximum sound output. Next adjust 5104 for maximum sound output.
Adjust the frequency of the signal generator for 30,9 MHz. and modulate (AM) the signal with 1 kHz.
Adjust 5102 for minimum sound output.
Remove the power supply connection.

2. Adjustments on the picture tube panel (Fig. 9)

2.1 Cut-off points of picture tube

Apply a black pattern generator signal. Adjust contrast at minimum.
 Adjust brightness until the DC voltage across potentiometer 3213 is 0V.
 Adjust 3207, 3220 and 3234 for a black level of 125V on the collectors of transistors 7205, 7218 and 7227.
 Adjust Vg2 potentiometer until the gun that first emits light is just no longer visible. Adjust the two other guns with the respective controls (3207, 3220 or 3234) until just no light will be visible.

2.2 Grey scale

Apply a test pattern signal and adjust the set for normal operation. Allow the set to warm up for about 10 minutes. Adjust 3213 and 3214 until the desired grey scale has been obtained.

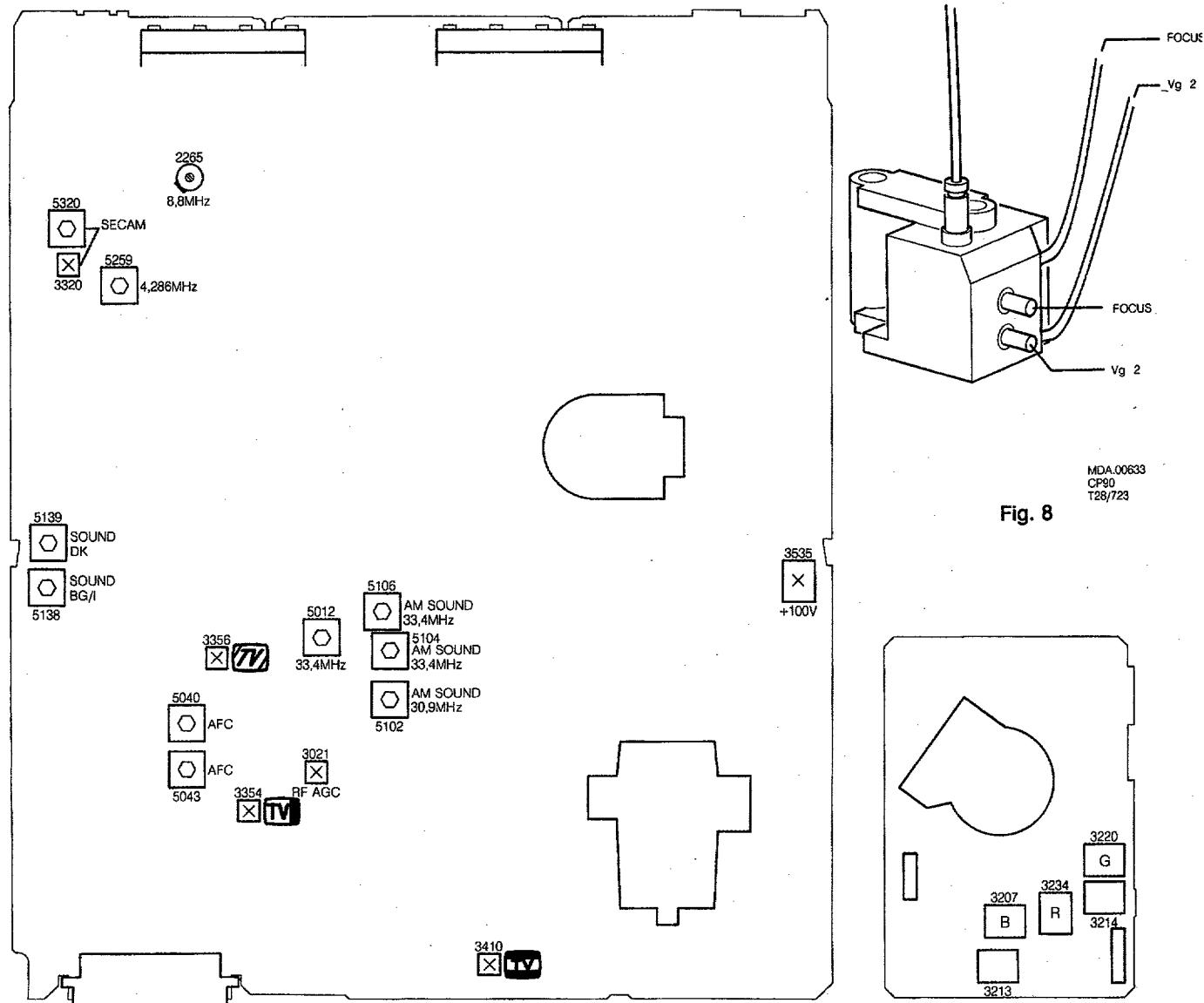


Fig. 7

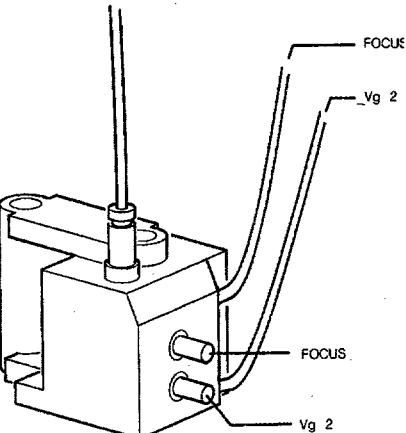
MDA.02811
T10/037

Fig. 8

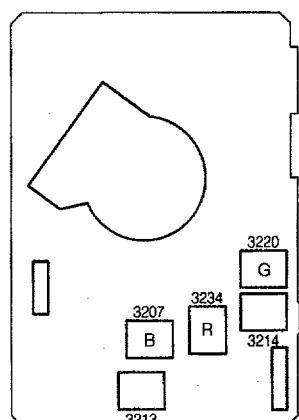
MDA.00633
CP90
T28/723

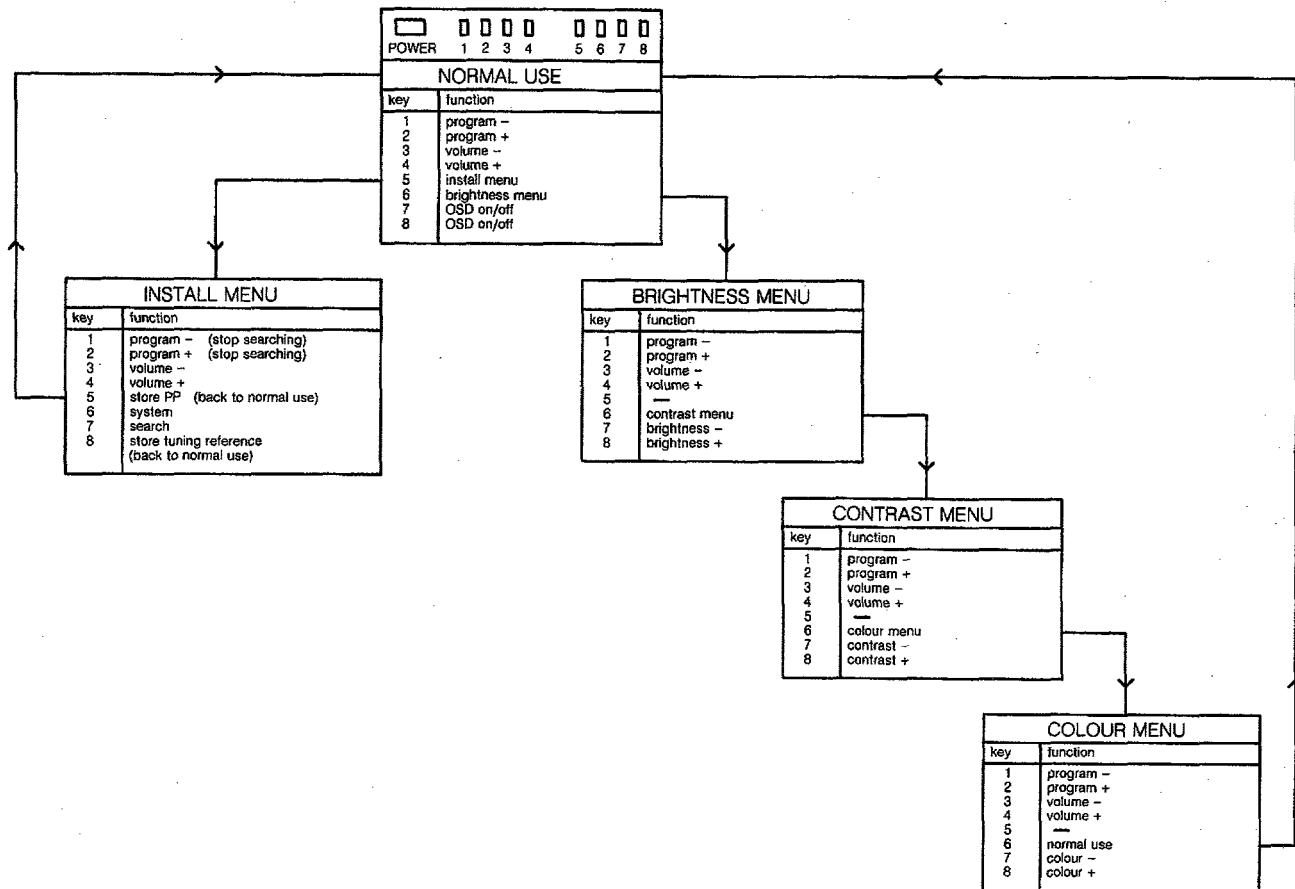
Fig. 9

MDA.02812
T28/036

Quick diagnose reference

ERROR MESSAGE	ERROR DESCRIPTION	POSSIBLE DEFECTIVE COMPONENT
Flashing LED	Internal µC error	IC7600
F4 on the screen	EEPROM error	IC7685

1. Local keyboard operation



MDA.02858
T-26/044

* Switching on the hotel mode

Select program number 38.

Hold key 5 depressed while pressing key 1.
Now the volume control is limited to a pre-set maximum and the installation menu can no longer be displayed.

* Switching off the hotel mode

Select program number 38.

Hold key 5 depressed while pressing key 7.
Now the set can be operated normally again.

2. Connections via the EURO connector

2.1 CVBS sources

If a CVBS source (e.g. a video recorder) is connected to the EURO connector, this source should generate a CVBS status signal at pin 8 of the EURO connector.

2.2 RGB sources

If an RGB source (e.g. a laser disc player) is connected to the EURO connector, this source should generate both a CVBS status signal at pin 8 and an RGB signal at pin 16 of the EURO connector.

Mono carrier

	4822 267 60243	EURO CONN.	2127	4822 124 41576	2,2µF 20% 50V	2310	4822 122 32893	100nF 80% 50V
	4822 267 31292	JACK 3.5mm	2128	4822 124 40435	10µF 20% 50V	2350	4822 122 32891	68nF 10% 63V
	4822 265 30389	2P FOR M1	2136	4822 121 43808	22nF 10% 100V	2351	4822 124 40435	10µF 20% 50V
	4822 265 40596	2P FOR M2	2137	4822 124 40193	68µF 20% 16V	2352	4822 122 31808	150pF 10% 50V
	4822 267 40666	3P FOR M3	2138	4822 121 51231	820pF 1% 400V	2353	4822 121 41854	150nF 5% 63V
	4822 264 40207	3P FOR M4	2138	4822 121 43066	1nF 2% 400V	2354	5322 121 42661	330nF 5% 63V
	4822 265 40421	6P FOR M5	2139	4822 121 51231	820pF 1% 400V	2355	4822 121 42937	2,7nF 1% 250V
Various			2140	4822 122 32863	22nF 80% 50V	2356	4822 122 32863	22nF 80% 50V
			2142	4822 122 32863	22nF 80% 50V	2359	5322 122 31842	330pF 5% 63V
			2143	4822 122 32863	22nF 80% 50V	2364	4822 121 42408	220nF 5% 63V
	4822 276 12597	SWITCH SK1	2145	4822 122 32863	22nF 80% 50V	2366	4822 122 32597	6,8nF 10% 63V
	4822 466 82782	SHIELD FOR 7600	2146	4822 122 32863	22nF 80% 50V	2370	4822 124 40767	33µF 100 V
	4822 277 21438	SWITCH 0025	2147	5322 121 42491	47nF 5% 100V	2371	4822 122 32863	22nF 80% 50V
	4822 276 40414	SWITCH 0024	2148	4822 122 32856	8,2nF 10% 63V	2401	4822 122 31771	390pF 5% 50V
	4822 256 30274	FUSE HOLDER	2149	5322 121 42491	47nF 5% 100V	2402	4822 122 32542	47nF 10% 63V
	4822 255 40955	LED HOLDER	2150	4822 124 41576	2,2µF 20% 50V	2404	4822 124 40432	1500µF 20% 25V
	4822 492 70559	SPRING 7525	2152	4822 124 40242	1µF 20% 63V	2405	4822 124 41678	22µF 20% 25V
	4822 492 70559	SPRING 7445	2153	4822 122 31784	4,7nF 10% 50V	2414	4822 122 31644	2,2nF 10% 63V
	1001 4822 210 10405	UV917E	2154	4822 122 31784	4,7nF 10% 50V	2415	4822 124 41678	22µF 20% 25V
	1001 4822 210 10421	U743/IEC	2155	4822 124 40242	1µF 20% 63V	2416	4822 122 32542	47nF 10% 63V
	1015 4822 242 72212	OFWG3950	2157	4822 124 41525	100µF 20% 25V	2417	4822 124 41859	330µF 20% 35V
	1015 4822 242 70936	OFWJ1952	2158	4822 122 32863	22nF 80% 50V	2440	5322 122 31842	330pF 5% 63V
	1015 4822 242 72374	OFWG1961	2160	4822 124 41525	100µF 20% 25V	2442	4822 122 40112	560pF 20% 500V
	1032 4822 242 72211	TPS 5,5MW	2161	4822 124 41525	100µF 20% 25V	2443	4822 124 40196	220µF 20% 16V
	1033 4822 153 30025	6,0MHz	2162	4822 122 33401	10nF 80% 63V	2444	4822 121 43139	180nF 10% 100V
	1033 4822 242 71375	TP6,5MB	2169	4822 122 31972	39pF 5% 50V	2445	4822 122 33467	1,5nF 10% R 2kV
	1135 4822 242 70714	SFT5,5MBF	2170	4822 122 32862	10nF 80% 50V	2446	5322 121 42523	8,2nF 5% 2kV
	1135 4822 242 71841	SFT6,0MA	2171	4822 122 31784	4,7nF 10% 50V	2447	4822 121 42004	10nF 10% 400V
	1136 4822 242 71713	SFE6,0MBF	2172	4822 122 32893	100nF 80% 50V	2448	4822 124 41056	47µF 50% 200V
	1136 4822 242 72057	SFE6,5MB	2174	4822 122 31768	180pF 5% 50V	2450	4822 121 42442	560nF 5% 200V
	1272 4822 242 70304	8,867 238 MHz	2175	4822 122 31781	1500pF 10% 50V	2451	5322 124 40641	10µF 20% 100V
	1500 4822 070 32002	218002,(2A)	2176	4822 122 32862	10nF 80% 50V	2452	4822 124 41677	680µF 20% 25V
	1540 4822 253 10064	19372(0,4A)	2255	4822 122 32893	100nF 80% 50V	2453	4822 124 41859	330µF 20% 35V
	1679 4822 242 70831	CSA4,00MG	2256	4822 122 31825	27pF 10% 50V	2460	4822 121 51385	33nF 20% 100V
	1685 4822 218 20981	LTM8848A-1	2257	4822 122 31766	120pF 5% 50V	2465	4822 122 31839	82pF 10% 50V
			2258	4822 122 31775	680pF 5% 50V	2470	4822 124 42103	22µF 20% 200V
			2259	4822 122 31766	120pF 5% 50V	2500	4822 124 41531	470nF 10% 250V
			2260	4822 122 31768	180pF 5% 50V	2502	4822 126 11141	2,2nF 10% 1kV
			2261	4822 122 31825	27pF 10% 50V	2504	4822 126 11141	2,2nF 10% 1kV
			2262	4822 122 32862	10nF 80% 50V	2505	4822 124 42104	68µF 20% 385V
	2001 4822 124 40198	470µF 20% 16V	2263	4822 124 40242	1µF 20% 63V	2506	4822 126 11137	3,3nF 20% 400V
	2005 4822 121 51252	470nF 5% 63V	2264	4822 122 32862	10nF 80% 50V	2507	5322 121 41977	47nF 5% 250V
	2006 4822 122 32863	22nF 80% 50V	2265	4822 125 50045	20pF	2511	4822 122 31808	150pF 10% 50V
	2007 4822 124 40242	1µF 20% 63V	2266	4822 122 32862	10nF 80% 50V	2514	4822 122 31961	68pF 5% 63V
	2010 4822 122 31769	18pF 5% 50V	2267	4822 122 32893	100nF 80% 50V	2515	4822 122 31961	68pF 5% 63V
	2011 4822 122 31769	18pF 5% 50V	2268	5322 122 31641	47nF 50V	2517	5322 121 42498	680nF 5% 63V
	2013 4822 122 31769	18pF 5% 50V	2269	4822 122 32863	22nF 80% 50V	2520	4822 122 32891	68nF 10% 63V
	2014 4822 122 31784	4,7nF 10% 50V	2270	4822 124 41525	100µF 20% 25V	2522	4822 122 31746	1000pF 5% 50V
	2015 4822 124 40199	680µF 20% 16V	2271	4822 122 32863	22nF 80% 50V	2523	4822 122 31746	1000pF 5% 50V
	2016 4822 122 32893	100nF 80% 50V	2272	5322 122 31647	1nF 10% 63V	2524	4822 126 11208	680pF 10% 1kV
	2017 4822 124 40195	150µF 20% 16V	2273	5322 122 31647	1nF 10% 63V	2525	4822 126 11207	220pF 10% 1kV
	2017 4822 124 41643	100µF 20% 16V	2274	4822 122 32862	10nF 80% 50V	2530	4822 124 41056	47µF 50% 200V
	2018 4822 122 31916	5,6nF 10% 63V	2275	5322 122 31641	47nF 50V	2532	4822 122 32585	470pF 10% 500V
	2019 4822 122 32891	68nF 10% 63V	2277	4822 124 40849	330µF 20% 16V	2534	4822 126 11209	1,5nF 10% 1kV
	2020 4822 124 41576	2,2µF 20% 50V	2279	4822 122 32862	10nF 80% 50V	2540	4822 124 41677	680µF 20% 25V
	2025 4822 124 41578	6,8µF 20% 50V	2280	4822 122 32862	10nF 80% 50V	2545	4822 124 41577	4,7µF 20% 50V
	2026 4822 122 32863	22nF 80% 50V	2281	4822 122 32863	22nF 80% 50V	2547	4822 122 31746	1000pF 5% 50V
	2027 4822 122 32863	22nF 80% 50V	2282	4822 122 32863	22nF 80% 50V	2550	4822 121 42786	33 nF 2% 100V
	2030 4822 122 32863	22nF 80% 50V	2283	4822 122 32863	22nF 80% 50V	2553	4822 122 31727	470pF 5% 63V
	2038 4822 122 32863	22nF 80% 50V	2289	4822 122 32863	22nF 80% 50V	2554	4822 122 31174	2,7nF 10% 500V
	2041 4822 122 31784	4,7nF 10% 50V	2290	4822 122 32863	22nF 80% 50V	2555	4822 122 32863	22nF 80% 50V
	2043 4822 122 31784	4,7nF 10% 50V	2291	4822 122 32862	10nF 80% 50V	2556	4822 122 31784	4,7nF 10% 50V
	2044 4822 122 31784	4,7nF 10% 50V	2292	4822 122 32862	10nF 80% 50V	2560	4822 124 41677	680µF 20% 25V
	2101 4822 122 32507	6,8pF 5% 50V	2293	4822 122 32862	10nF 80% 50V	2561	4822 124 41678	22µF 20% 25V
	2102 4822 122 32082	4,7pF 5% 50V	2294	4822 122 32863	22nF 80% 50V	2562	4822 122 31727	470pF 5% 63V
	2104 4822 122 31781	1500pF 10% 50V	2300	4822 122 31765	100pF 5% 50V	2563	4822 122 31727	470pF 5% 63V
	2110 4822 122 31972	39pF 5% 50V	2301	4822 122 31965	220pF 5% 63V	2573	4822 122 31772	47pF 5% 50V
	2115 4822 126 11206	430pF 5% 50V	2302	4822 122 31965	220pF 5% 63V	2602	4822 124 40435	10µF 20% 50V
	2117 4822 122 31784	4,7nF 10% 50V	2303	4822 122 32862	10nF 80% 50V	2606	4822 122 31974	820pF 10% 63V
	2118 4822 122 32765	820pF 10% 63V	2304	4822 122 32862	10nF 80% 50V	2610	4822 121 41673	220nF 10% 100V
	2120 4822 126 11206	430pF 5% 50V	2305	4822 122 31825	27pF 10% 50V	2611	4822 121 41673	220nF 10% 100V
	2124 4822 124 40435	10µF 20% 50V	2306	4822 122 31825	27pF 10% 50V	2615	4822 122 31765	100pF 5% 50V
	2125 4822 122 32863	22nF 80% 50V	2307	4822 122 31766	120pF 5% 50V	2623	4822 124 40242	1µF 20% 63V
	2126 4822 124 41577	4,7µF 20% 50V	2309	4822 122 32863	22nF 80% 50V			

3558 4822 051 10101 100Ω 2% 0,25W	3685 4822 051 10332 3k30 2% 0,25W	5540 4822 156 20966 47 μH
3560 4822 051 10101 100Ω 2% 0,25W	3686 4822 051 10102 1k0 2% 0,25W	5541 4822 156 20966 47 μH
3561 4822 116 52219 330Ω 5% 0,5W	3687 4822 051 10102 1k0 2% 0,25W	5545 4822 157 51195 1 μH
3562 4822 051 10271 270Ω 2% 0,25W	3688 4822 050 12403 24k0 1% 0,4W	5554 4822 157 51157 3,3μH
3563 4822 051 10101 100Ω 2% 0,25W	3689 4822 051 10104 100k0 2% 0,25W	5560 4822 157 51462 10μH
3565 4822 051 10103 10k0 2% 0,25W	3692 4822 116 52204 1k 5% 0,5W	5601 4822 157 51462 10μH
3566 4822 051 20183 18k0 5% 0,1W	3693 4822 116 52284 47k 5% 0,5W	5652 4822 157 51462 10μH
3567 4822 051 20183 18k0 5% 0,1W	3695 4822 051 10101 100Ω 2% 0,25W	5653 4822 157 51462 10μH
3568 4822 053 11681 680Ω 5% 2W	3696 4822 051 10101 100Ω 2% 0,25W	5677 4822 157 53906 47μH
3569 4822 116 52215 220Ω 5% 0,5W	3697 4822 051 10101 100Ω 2% 0,25W	
3570 4822 116 52257 22k 5% 0,5W	3698 4822 116 52175 100Ω 5% 0,5W	
3571 4822 051 10471 470Ω 2% 0,25W	3699 4822 051 10472 4k70 2% 0,25W	
3572 4822 116 52202 82Ω 5% 0,5W	3850 4822 051 10103 10k0 2% 0,25W	
3573 4822 116 52284 47k 5% 0,5W	3851 4822 116 80747 75Ω 5% 0,125W	
3574 4822 051 10104 100k0 2% 0,25W	3852 4822 051 10103 10k0 2% 0,25W	
3591 4822 051 10008 0Ω 5% 0,25W	3853 4822 116 80747 75Ω 5% 0,125W	
3593 4822 051 10008 0Ω 5% 0,25W	3854 4822 051 10008 0Ω 5% 0,25W	
3601 4822 051 10103 10k0 2% 0,25W	3855 4822 116 80747 75Ω 5% 0,125W	
3602 4822 051 10822 8k20 2% 0,25W	3856 4822 051 10008 0Ω 5% 0,25W	
3603 4822 050 12403 24k0 1% 0,4W	3857 4822 051 10008 0Ω 5% 0,25W	
3604 4822 051 10151 150Ω 2% 0,25W	3858 4822 116 80747 75Ω 5% 0,125W	
3605 4822 050 12204 220k0 1% 0,4W	3859 4822 051 10008 0Ω 5% 0,25W	
3606 4822 116 52233 10k 5% 0,5W	3860 4822 051 10471 470Ω 2% 0,25W	
3607 4822 051 10332 3k30 2% 0,25W	3862 4822 116 52256 2k2 5% 0,5W	
3610 4822 051 10153 15k0 2% 0,25W	3865 4822 116 82719 56Ω 5% 0,125W	
3611 4822 051 10103 10k0 2% 0,25W	3866 4822 116 82718 18Ω 5% 0,125W	
3612 4822 051 10103 10k0 2% 0,25W	3871 4822 116 52215 220Ω 5% 0,5W	
3613 4822 051 10434 430k0 2% 0,25W	3875 4822 116 52196 51Ω 5% 0,5W	
3614 4822 051 10472 4k70 2% 0,25W	3876 4822 051 10332 3k30 2% 0,25W	
3615 4822 051 10824 820k0 2% 0,25W	3879 4822 051 10103 10k0 2% 0,25W	
3616 4822 116 52284 47k 5% 0,5W	3901 4822 051 10008 0Ω 5% 0,25W	
3618 4822 051 20183 18k0 5% 0,1W	3902 4822 051 10008 0Ω 5% 0,25W	
3620 4822 051 10433 43k0 2% 0,25W		
3621 4822 051 10393 39k0 2% 0,25W	5010 4822 157 62552 2μH2	
3622 4822 116 52234 100k 5% 0,5W	5028 4822 157 63068 0.28μH	
3623 4822 116 52247 16k 5% 0,5W	5030 4822 157 60123 6μH8	
3624 4822 051 10393 39k0 2% 0,25W	5032 4822 157 62767 8μH	
3625 4822 051 10163 16k0 2% 0,25W	5040 4822 157 63064 0.19μH	
3626 4822 116 52251 18k 5% 0,5W	5040 4822 157 63071 0.30μH	
3627 4822 051 20183 18k0 5% 0,1W	5043 4822 157 63069 0.70μH	
3628 4822 051 10393 39k0 2% 0,25W	5138 4822 157 53635 10k 0,75μH 6%	
3630 4822 051 10274 270k0 2% 0,25W	5139 4822 157 53635 10K 0,75μH 6%	
3631 4822 116 52275 360k 5% 0,5W	5177 4822 157 52333 COIL 100μH	
3635 4822 051 10103 10k0 2% 0,25W	5250 4822 157 50961 22μH	
3652 4822 116 52207 1k2 5% 0,5W	5251 4822 320 40235 DELAY LINE	
3653 4822 116 52207 1k2 5% 0,5W	5258 4822 157 51462 10μH	
3654 4822 051 10102 1k0 2% 0,25W	5259 4822 157 52808 10μH	
3655 4822 051 10562 5k60 2% 0,25W	5284 4822 157 60141 3μH3	
3656 4822 051 10112 1k10 2% 0,25W	5285 4822 157 60141 3μH3	
3657 4822 051 10683 68k0 2% 0,25W	5286 4822 157 60141 3μH3	
3658 4822 051 10272 2k70 2% 0,25W	5296 4822 157 51462 10μH	
3659 4822 051 10112 1k10 2% 0,25W	5320 4822 157 52808 10μH	
3660 4822 116 52226 560Ω 5% 0,5W	5440 4822 157 52983 2N2	
3661 4822 116 52204 1k 5% 0,5W	5441 4822 146 21116 LOT DRIVER	
3662 4822 051 10008 0Ω 5% 0,25W	5443 4822 157 51462 10μH	
3663 4822 051 10151 150Ω 2% 0,25W	5445 4822 140 10406 L.O.T.	
3664 4822 116 52296 6k8 5% 0,5W	5447 4822 157 62766 262LYF-0095k	
3665 4822 116 52204 1k 5% 0,5W	5449 4822 156 20966 47 μH	
3666 4822 051 10151 150Ω 2% 0,25W	5452 4822 157 51157 3,3μH	
3667 4822 116 52233 10k 5% 0,5W	5453 4822 157 51462 10μH	
3668 4822 051 10433 43k0 2% 0,25W	5454 4822 156 21332 LIN. COIL	
3669 4822 051 10153 15k0 2% 0,25W	5470 4822 157 51462 10μH	
3670 4822 116 52233 10k 5% 0,5W	5500 4822 212 22978 MAINS FILTER	
3671 4822 051 10103 10k0 2% 0,25W	5503 4822 157 51235 4μH 7 10%	
3672 4822 051 10102 1k0 2% 0,25W	5515 4822 157 50963 2μH2	
3673 4822 051 10103 10k0 2% 0,25W	5519 4822 157 51235 4μH 7 10%	
3674 4822 116 52204 1k 5% 0,5W	5521 4822 157 51195 1 μH	
3676 4822 116 52233 10k 5% 0,5W	5524 4822 157 53542 1μH 2%	
3678 4822 051 10008 0Ω 5% 0,25W	5525 4822 148 81121 SOPS TRF	
3679 4822 051 20222 2k20 5% 0,1W	5531 4822 158 10551 27μH	
3680 4822 051 10008 0Ω 5% 0,25W	5532 4822 157 51157 3,3μH	
3682 4822 051 10008 0Ω 5% 0,25W	5534 4822 157 62878 1μH	
3683 4822 051 10008 0Ω 5% 0,25W		
3684 4822 051 10332 3k30 2% 0,25W		

CRT-panel

	6658 4822 130 80446 LL4148 6663 4822 130 33951 CQS51L-3 6679 4822 130 80446 LL4148 6849 4822 130 30621 1N4148 6850 4822 130 80446 LL4148 6851 4822 130 80446 LL4148 6852 4822 130 80446 LL4148 6853 4822 130 80446 LL4148 6854 4822 130 80446 LL4148 6855 4822 130 80446 LL4148 6865 4822 130 30621 1N4148 6880 4822 130 81147 LLZ-F6V2		4822 255 70251 CRT SOCKET 4822 265 30735 5 PINS 4822 265 30734 6 PINS
	7002 4822 209 10892 LA7910 7015 4822 209 63107 TDA4504B/N1B 7027 4822 130 61207 BC848 7030 4822 130 61207 BC848 7038 4822 130 61207 BC848 7125 4822 209 63105 TDA3843/V2 7135 4822 209 63217 TDA3827/V2 7156 4822 130 61207 BC848 7157 4822 209 60956 TDA7052/N1 7158 4822 130 61207 BC848 7170 4822 130 61207 BC848 7221 4822 209 63108 TDA4660/V2 7250 4822 209 63109 TDA4650/V3 7251 4822 130 61207 BC848 7255 5322 130 42136 BC848C 7256 4822 130 61207 BC848 7260 4822 209 70019 TDA4510/V2/S8 7280 4822 209 63104 TDA3504/V1 7400 4822 209 60955 TDA3653B/N1 7440 4822 130 41782 BF422 7445 4822 130 42679 BUT11AF 7512 5322 130 42136 BC848C 7514 4822 130 82034 CNX83A 7515 4822 130 42513 BC858C 7516 5322 130 44349 BC635 7525 4822 130 42679 BUT11AF 7537 5322 130 42136 BC848C 7552 4822 130 42155 BC327A 7553 5322 130 42012 BC858A 7554 4822 130 42032 BC337A 7555 5322 130 60159 BC846 7556 4822 130 60136 BC856 7561 4822 130 40823 BD135 7563 5322 130 42012 BC858 7571 4822 130 61207 BC848 7600 4822 310 31846 TMP47C434N3121 7605 4822 209 73852 PMBT2369 7654 4822 130 61207 BC848 7658 4822 130 61207 BC848 7665 4822 130 61207 BC848 7670 4822 130 61207 BC848 7672 4822 130 61207 BC848 7674 4822 130 61207 BC848 7685 4822 209 62098 ST24C02CP 7686 4822 130 61207 BC848 7875 4822 130 61207 BC848 7876 4822 130 61207 BC848		2204 5322 122 31842 330pF 5% 63V 2206 4822 124 41828 1μF 20% 250V 2217 5322 122 31842 330pF 5% 63V 2230 5322 122 31842 330pF 5% 63V 2237 4822 121 41926 33nF 5% 630V
	3202 4822 053 11123 12kΩ 5% 2W 3203 4822 111 50518 1k5 5% 0,5W 3204 4822 051 10229 22Ω 2% 0,25W 3205 4822 051 10621 620Ω 2% 0,25W 3206 4822 051 10112 1k10 2% 0,25W 3207 4822 100 11638 4k7 20% 0,1W 3210 4822 051 10332 3k30 2% 0,25W 3211 4822 051 10332 3k30 2% 0,25W 3212 4822 051 10332 3k30 2% 0,25W 3213 4822 100 11637 2k2 20% 0,1W 3214 4822 100 11637 2k2 20% 0,1W 3215 4822 053 11123 12kΩ 5% 2W 3216 4822 111 50518 1k5 5% 0,5W 3217 4822 051 10229 22Ω 2% 0,25W 3218 4822 051 10621 620Ω 2% 0,25W 3219 4822 051 10112 1k10 2% 0,25W 3220 4822 100 11638 4k7 20% 0,1W 3222 4822 051 10561 560Ω 2% 0,25W 3224 4822 051 10152 1k50 2%-0,25W 3225 4822 051 10432 4k30 2% 0,25W 3226 4822 051 10112 1k10 2% 0,25W 3227 4822 051 10102 1k0 2% 0,25W 3228 4822 053 11123 12kΩ 5% 2W 3229 4822 111 50518 1k5 5% 0,5W 3230 4822 051 10229 22Ω 2% 0,25W 3232 4822 051 10621 620Ω 2% 0,25W 3233 4822 051 10112 1k10 2% 0,25W 3234 4822 100 11638 4k7 20% 0,1W 3235 4822 052 10108 1Ω 5% 0,33W 3236 4822 111 50518 1k5 5% 0,5W 3237 4822 111 50518 1k5 5% 0,5W		5235 4822 157 50965 15μH
	6205 4822 130 80446 BAS32L 6218 4822 130 80446 BAS32L 6227 4822 130 80446 BAS32L		7205 4822 130 41782 BF422 7218 4822 130 41782 BF422 7225 5322 130 42012 BC858A 7227 4822 130 41782 BF422