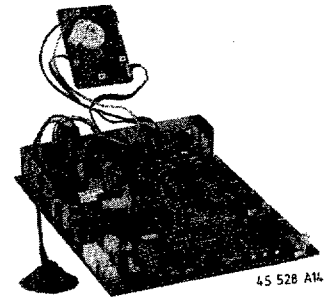


Service  
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# Service Manual

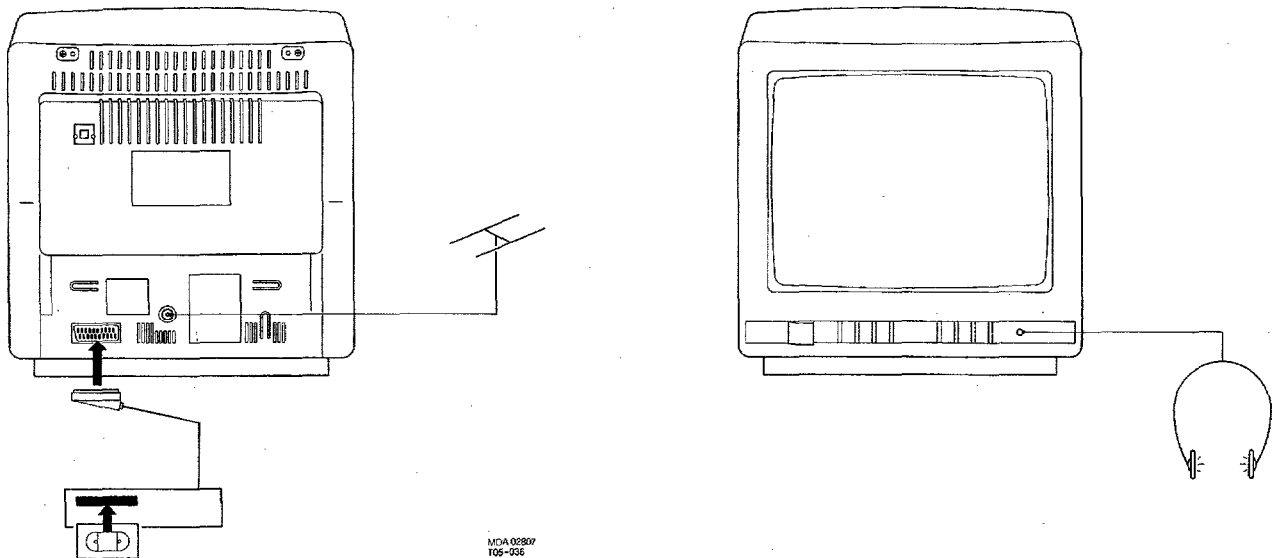
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## Technical data


Mains voltage	: 220-240 V $\pm$ 10 %, 50 Hz $\pm$ 5 %
Aerial input impedance	: 75 $\Omega$ - coax
Minimum aerial input VHF	: 30 $\mu$ V
Minimum aerial input UHF	: 40 $\mu$ V
Maximum aerial input	: 180mV
Pull-in range colour sync	: $\pm$ 300Hz
Pull-in range horizontal sync	: $\pm$ 600Hz
Pull-in range vertical sync	: $\pm$ 5Hz
Picture tube range	: 14", 15" and 17"

<b>Euro connector:</b>	1 - Audio $\odot$ L 0.5Vrms/ $\leq$ 1k $\Omega$
	2 - Audio $\ominus$ R 0.2 - 2Vrms/ $\geq$ 10k $\Omega$
	3 - Audio $\odot$ L 0.5Vrms/ $\leq$ 1k $\Omega$
	4 - Audio $\downarrow$
	5 - Blue $\downarrow$
	6 - Audio $\ominus$ L 0.2 - 2Vrms/ $\geq$ 10k $\Omega$
	7 - Blue 0.7V <sub>pp</sub> /75 $\Omega$
	8 - Status CVBS 0 - 2V (L) 10 - 12V (H)
	9 - Green $\downarrow$
	11 - Green 0.7V <sub>pp</sub> /75 $\Omega$
	13 - Red $\downarrow$
	15 - Red 0.7V <sub>pp</sub> /75 $\Omega$
	16 - Status RGB 0 - 0.4V/75 $\Omega$ (L) 1 - 3V/75 $\Omega$ (H)
	17 - CVBS $\odot$ $\downarrow$
	18 - CVBS $\ominus$ $\downarrow$
	19 - CVBS $\odot$ 1V <sub>pp</sub> /75 $\Omega$
	20 - CVBS $\ominus$ 1V <sub>pp</sub> /75 $\Omega$
	21 - Earth screen

**Head phone:** 8 - 1000 $\Omega$  3.5 mm mini jack



MCA 02807  
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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.

## 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 oscillograms are measured with a switched on service default mode. Use a colour bar pattern of pattern generator PM5515 as input signal.
4. If necessary, the oscillograms and DC voltages are measured with (□) and without (X) aerial signal. Voltages in the power supply section have been measured for both normal operation (⊕) and in the stand-by mode (⊖). 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.

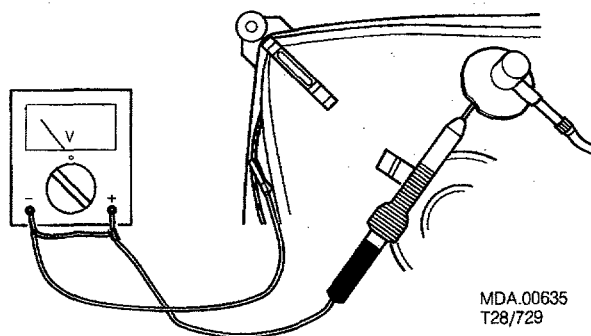


Fig. 1

## 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.

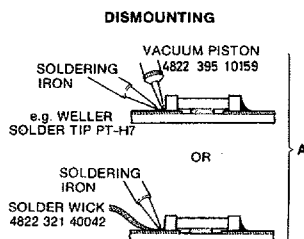
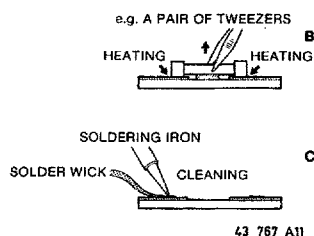


Fig. 2



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### 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).

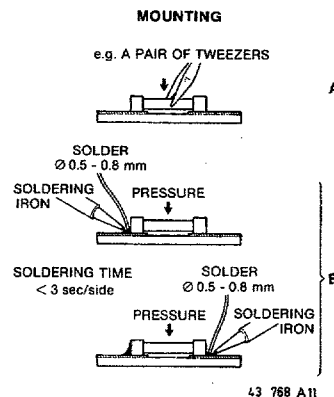


Fig. 3

#### 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).

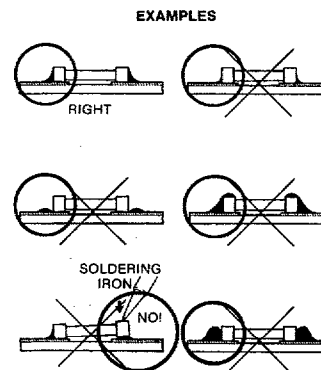


Fig. 4

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## 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).

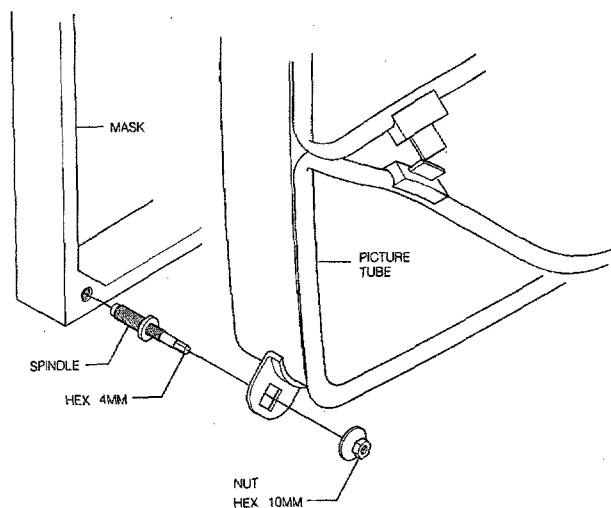
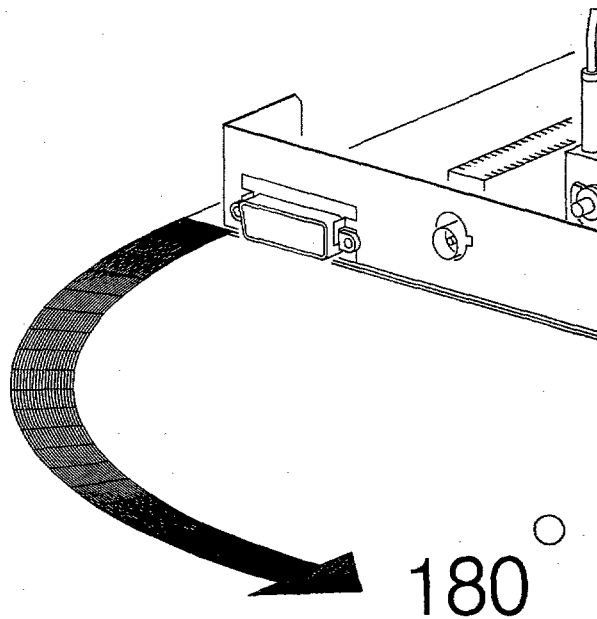


Fig. 6

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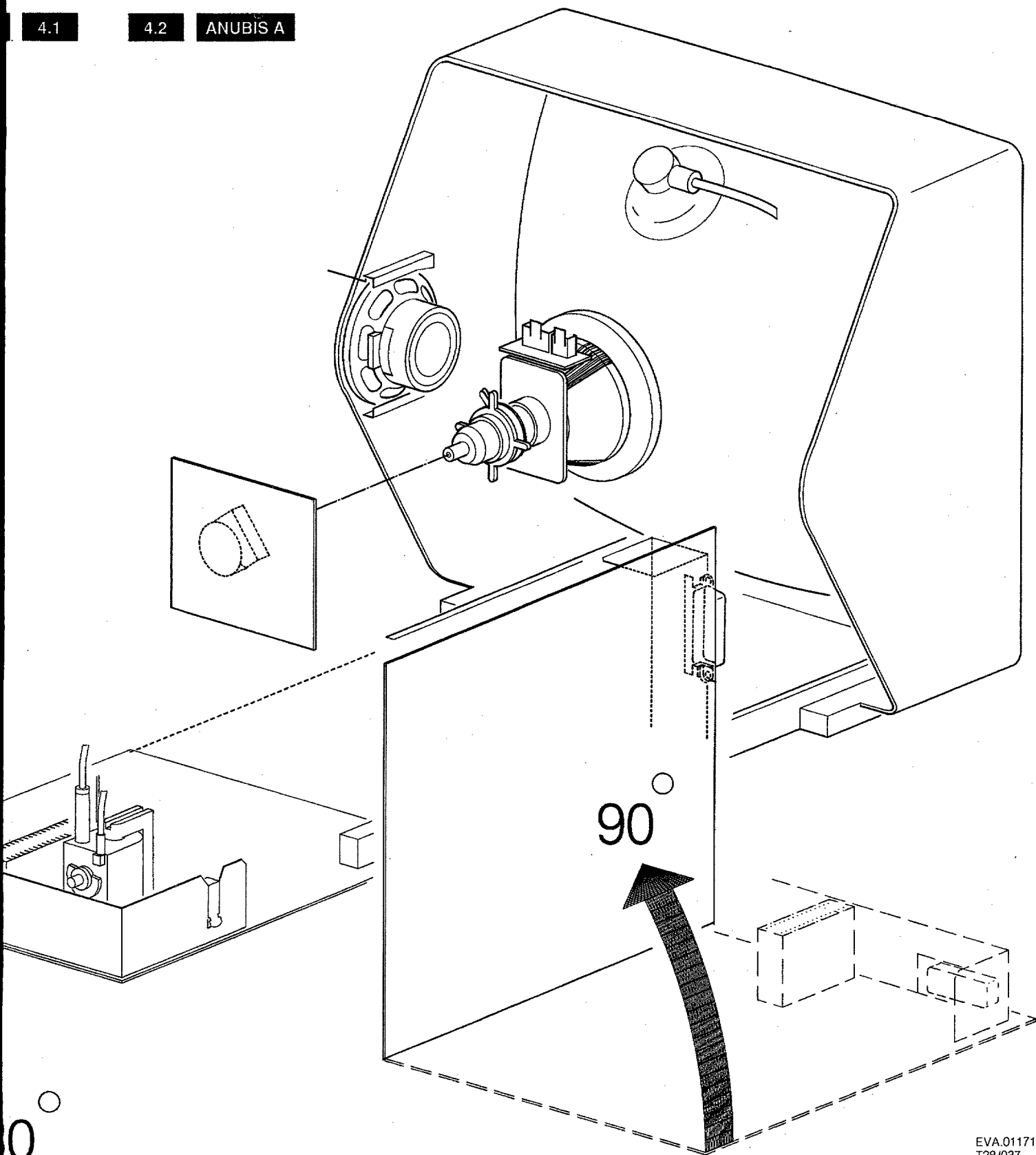
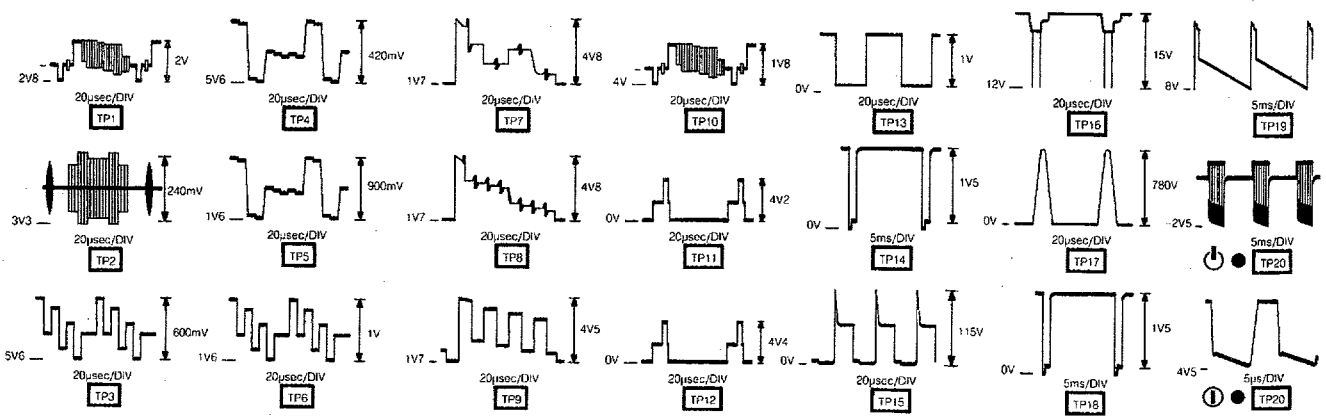
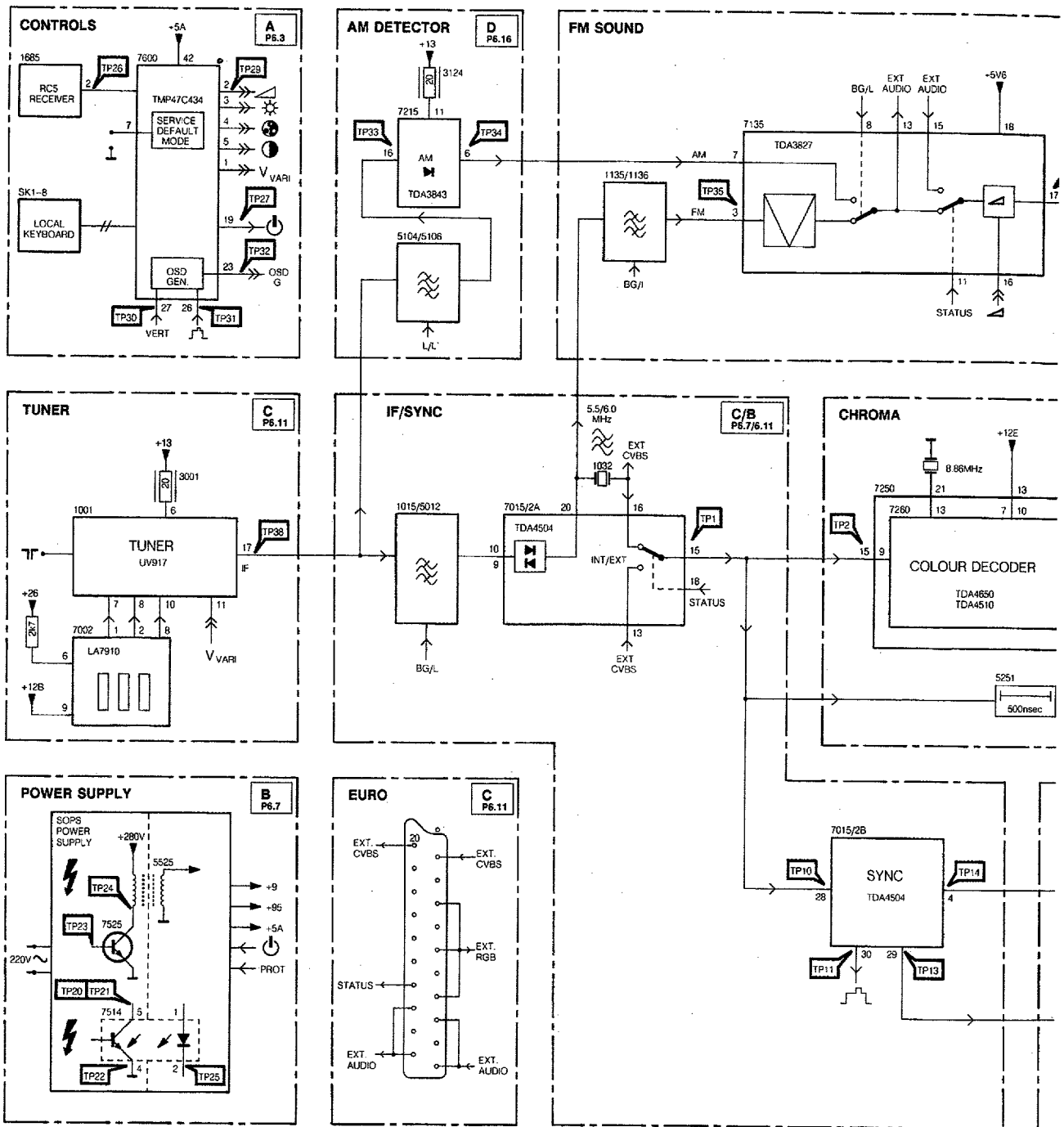
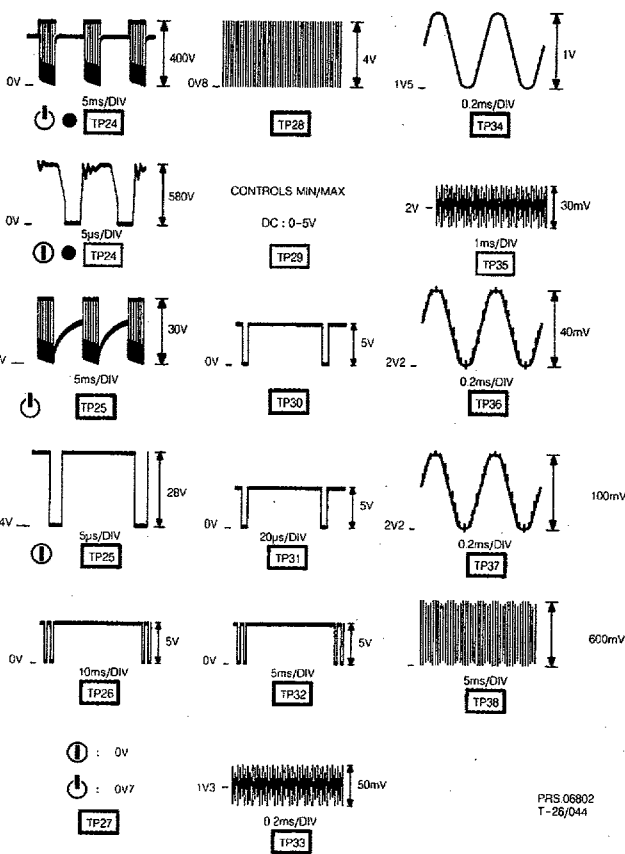
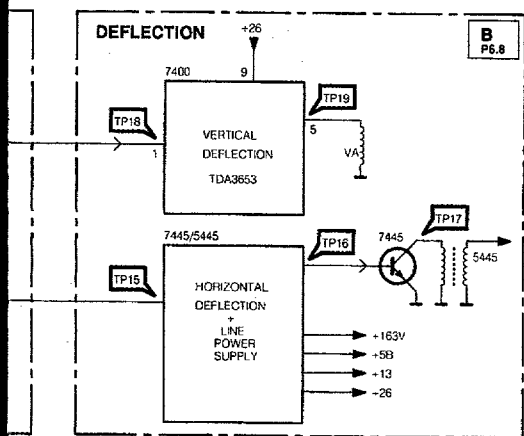
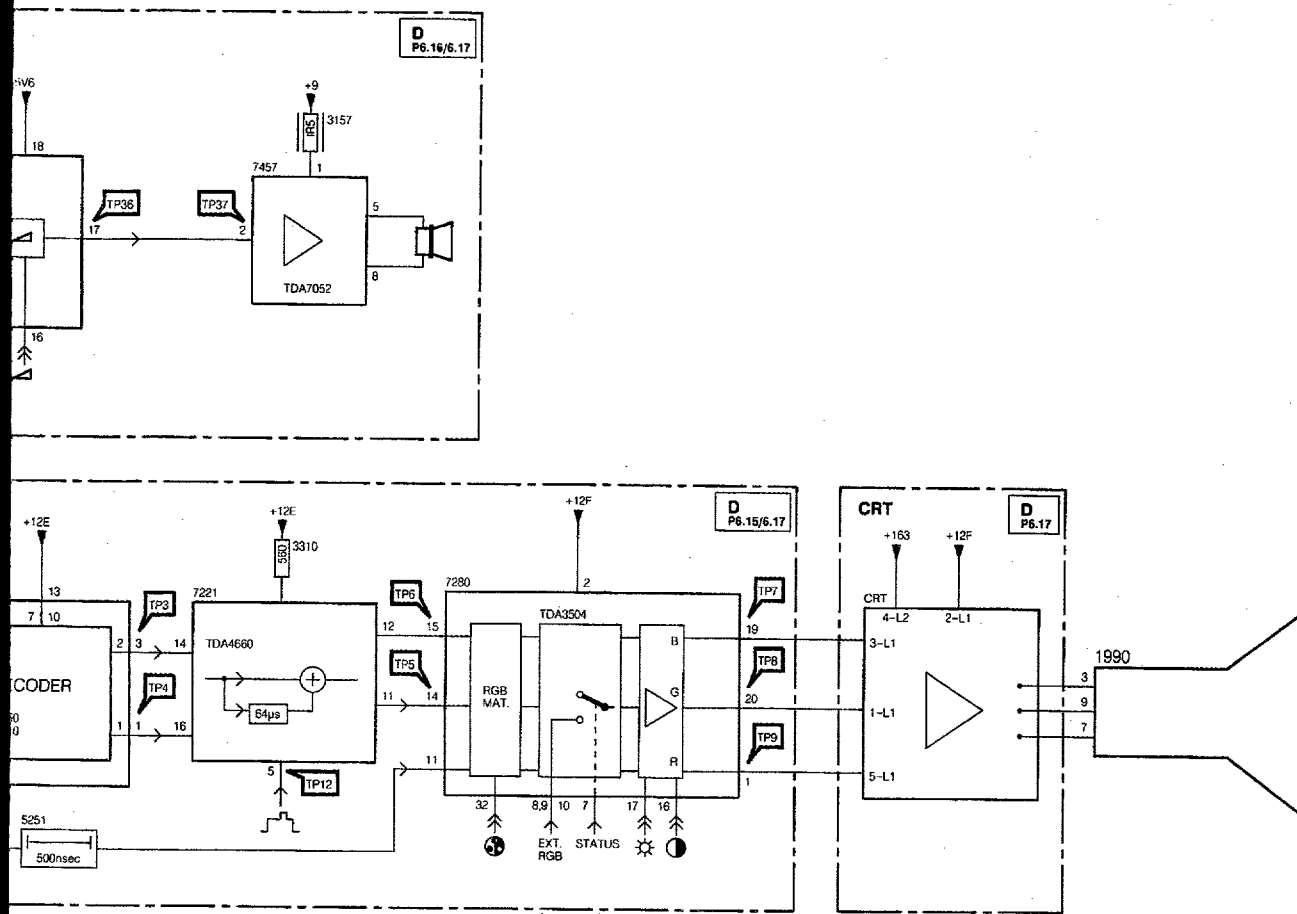


Fig. 5

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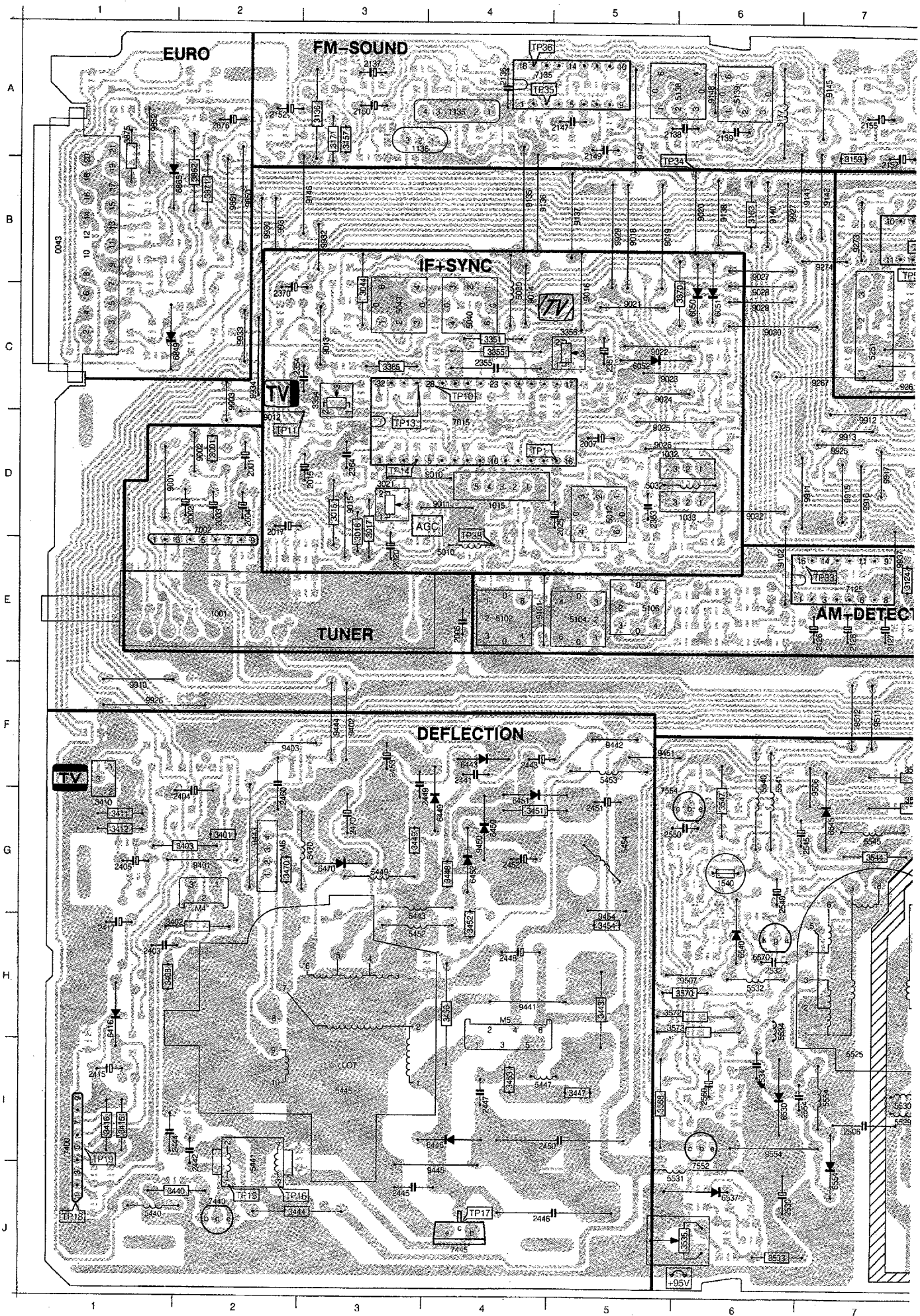


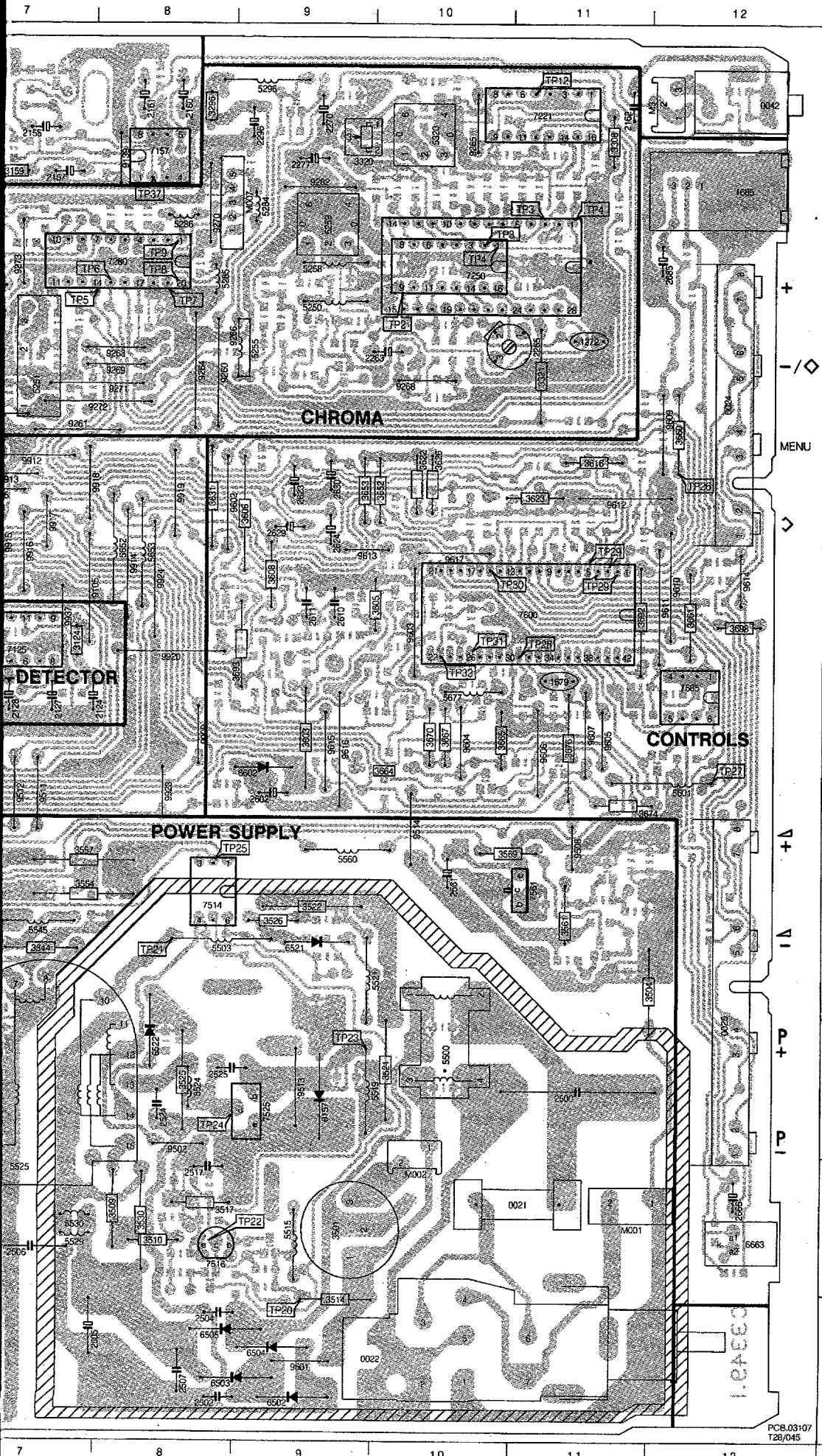
# Schéma-bloc



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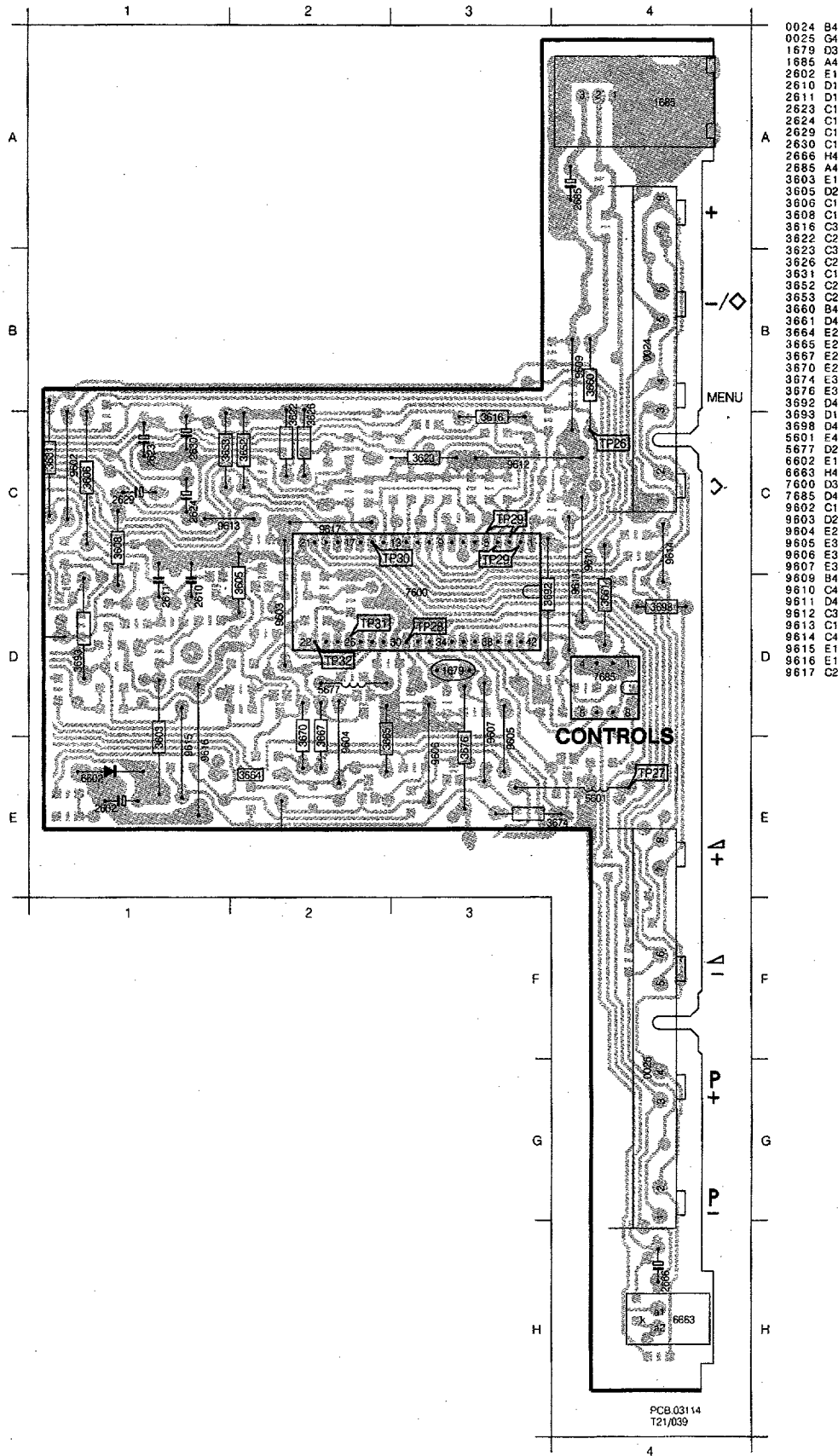






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M6	H4	3453	I4	7445	J4
M6	G2	3454	H5	7514	G8
0021	I10	3456	H4	7516	B8
0022	J9	3470	G2	7525	H8
0024	C12	3501	I9	7552	J6
0025	H12	3504	G12	7554	G5
0042	A12	3509	I8	7561	G11
0043	B1	3510	I8	7600	E11
1001	E2	3514	J9	7685	E12
1015	D4	3517	F8	9001	O1
1032	D5	3521	H10	9002	O2
1033	D6	3522	G9	9003	C2
1135	A4	3525	H8	9010	D4
1136	A3	3526	G9	9011	D4
1272	C11	3530	I8	9012	D2
1540	G6	3533	J6	9013	C3
1679	E11	3535	J6	9014	C4
1685	B12	3544	G7	9015	D3
2001	D2	3547	G6	9016	C5
2002	D2	3554	G7	9018	B5
2003	D2	3557	F7	9019	B5
2004	D2	3561	G11	9020	B6
2005	E4	3568	I5	9021	C5
2007	D6	3571	F10	9022	C5
2015	D3	3570	H6	9023	C7
2017	D2	3572	H5	9024	C5
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2025	D5	3603	F9	9026	O5
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2126	E7	3606	D9	9028	C6
2127	E7	3608	D9	9029	C6
2128	E7	3610	C11	9030	C7
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2263	C9	3676	F9	9144	B7
2265	C11	3692	E11	9146	B3
2270	A9	3693	E9	9148	A6
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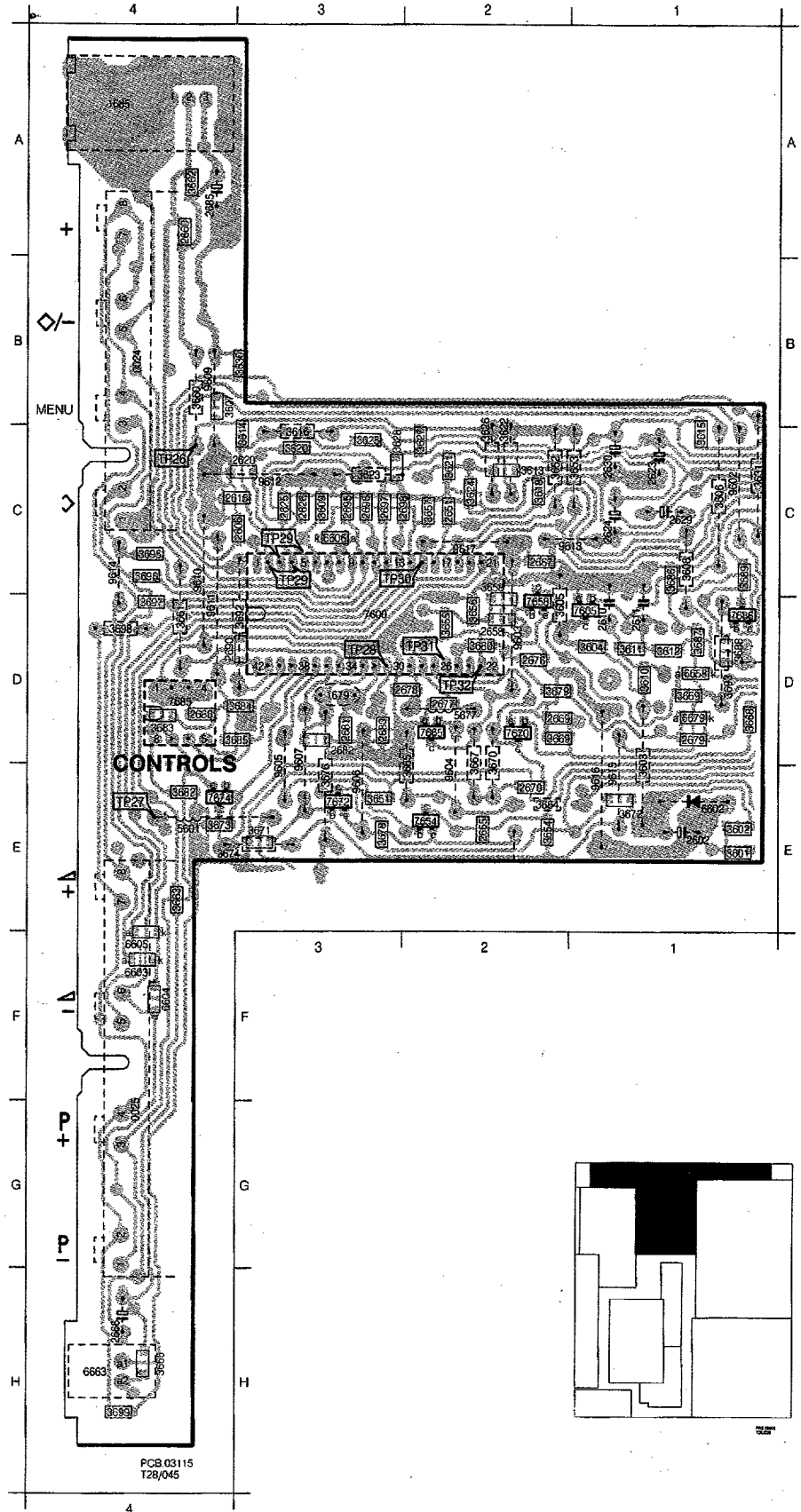
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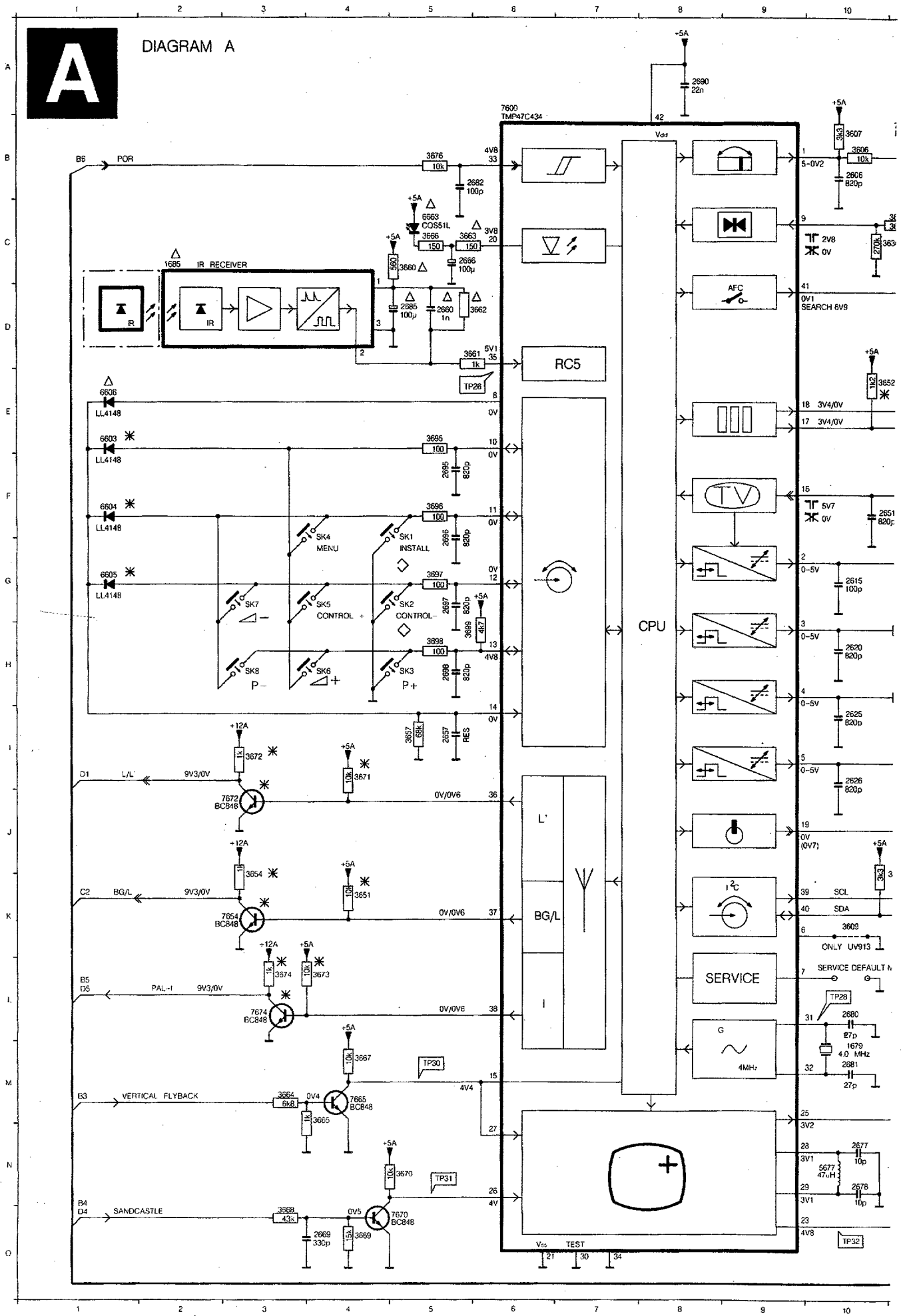


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T28/045





DIAGRAM A

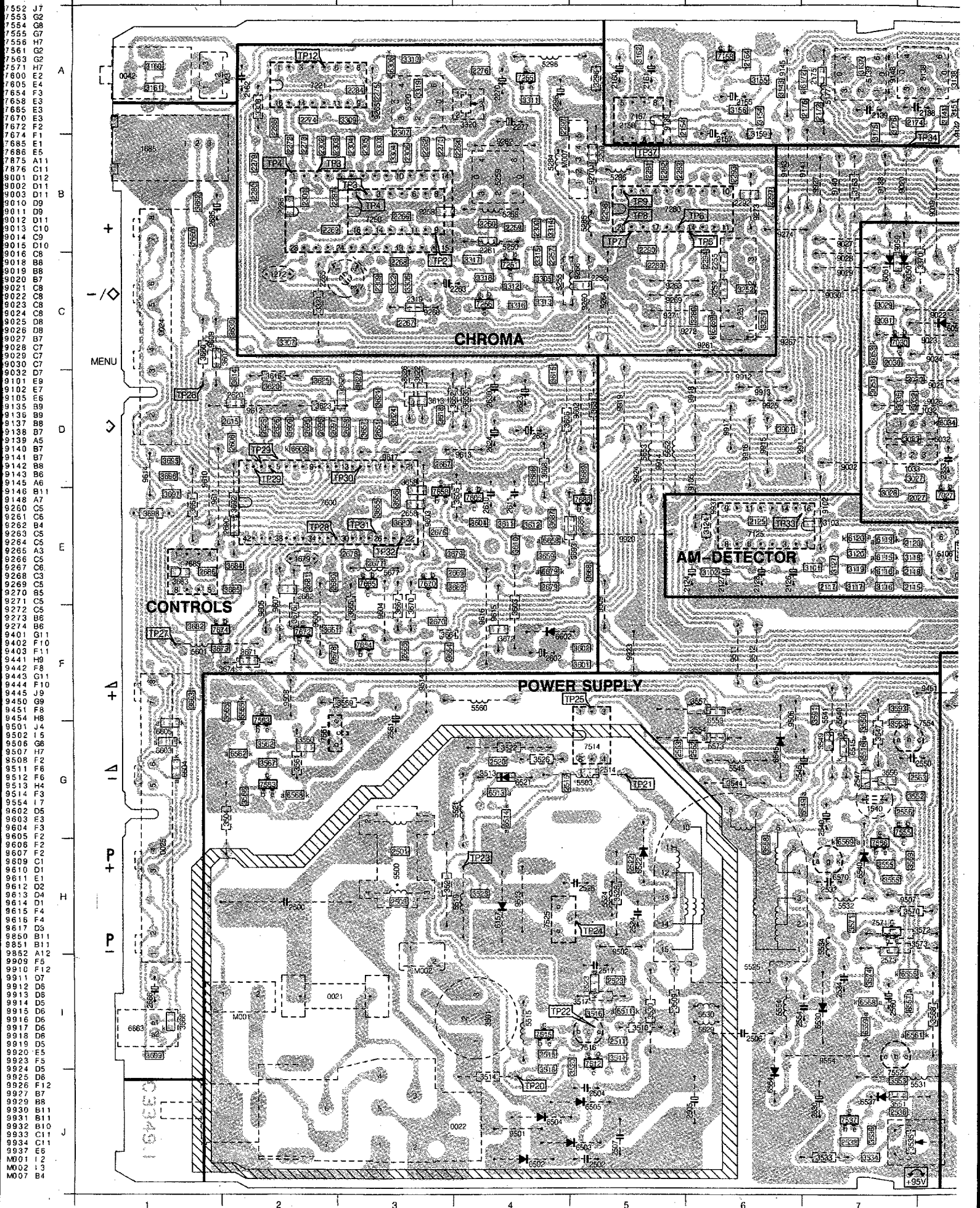




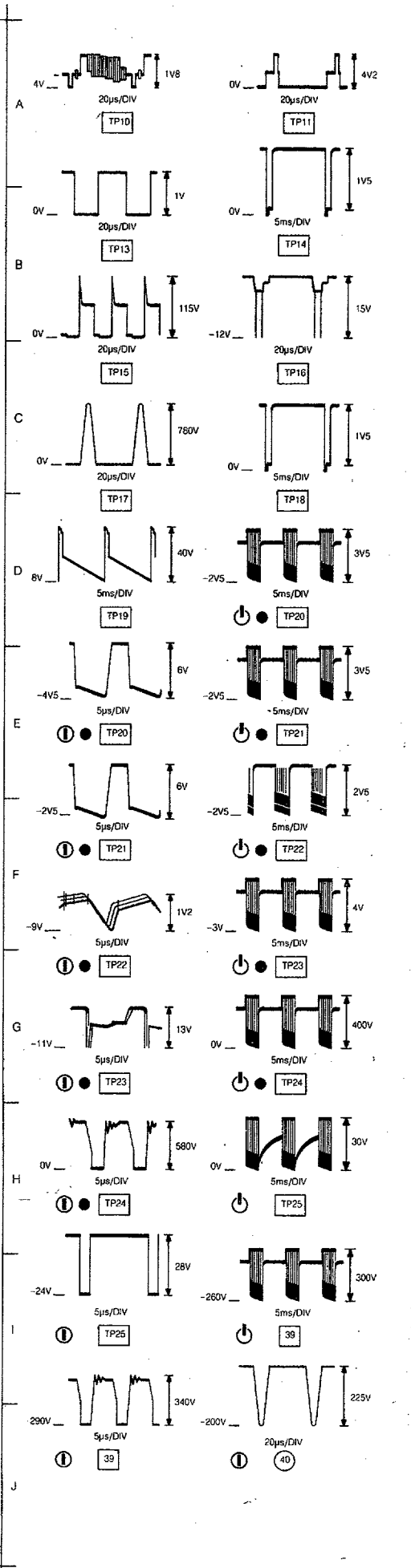
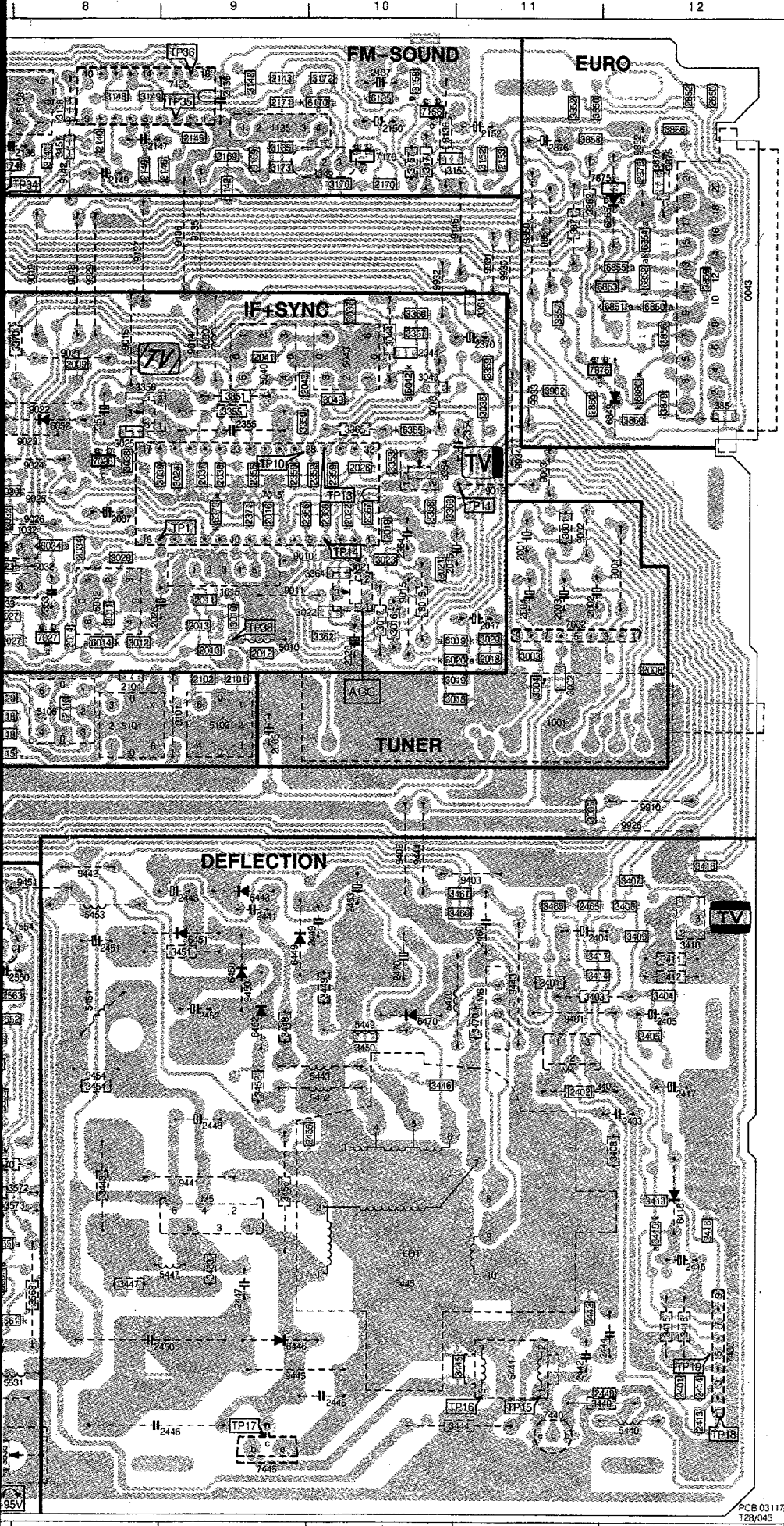
# Monocarrier

# Hauptplatine

M3 A2	2307 B3	3031 C7	3518 J4	5255 C4	7552 J7
M4 H11	2309 C3	3032 D7	3520 J5	5258 B4	7553 G2
M5 H8	2310 C3	3033 D7	3521 H3	5259 B4	7554 G8
M6 G11	2350 D9	3034 D8	3522 G4	5282 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 G4	5296 A4	7563 G2
0025 H1	2354 C11	3038 C8	3530 I5	5320 A3	7571 H7
0042 A1	2355 C9	3039 D9	3533 J7	5440 J12	7600 E2
0045 B12	2356 D9	3043 C10	3534 J7	5441 J11	7605 E4
1001 E11	2359 D10	3044 C10	3535 J7	5454 H10	7654 F3
1015 D9	2364 D10	3049 C10	3536 J7	5445 I10	7658 E3
1032 D8	2366 D10	3050 C7	3544 G6	5447 I9	7665 E3
1033 D7	2367 D10	3051 D7	3547 G7	5449 G10	7670 E3
1135 A9	2368 D10	3101 E7	3549 G7	5452 H10	7672 F2
1136 A10	2370 E11	3102 E6	3550 G7	5453 F8	7674 F1
1272 G7	2371 D8	3103 E7	3551 J7	5454 G8	7685 E1
1540 G7	2401 J12	3106 E7	3552 G7	5471 G10	7686 E5
1679 E2	2402 H11	3117 E7	3553 J7	5500 H3	7875 A11
1685 B1	2403 H12	3118 E7	3554 G6	5503 G5	7876 C11
2001 D11	2404 G11	3119 E7	3555 H7	5515 I4	9001 D12
2002 D11	2405 G12	3120 E7	3556 G7	5519 H4	9002 D11
2003 D11	2413 J12	3124 E6	3557 F6	5521 G4	9003 D11
2004 D11	2414 J12	3127 E7	3558 H6	5524 H5	9010 D9
2005 E9	2415 I12	3135 A8	3559 H7	5525 I6	9011 D11
2006 E12	2416 I12	3136 A10	3560 G2	5529 I6	9012 D11
2007 D8	2417 H12	3137 A7	3561 G2	5530 I6	9013 C10
2009 C8	2440 J11	3138 A8	3562 G2	5531 J7	9014 C9
2010 E9	2441 F9	3141 A8	3563 G7	5532 H7	9015 D10
2011 D9	2442 J11	3142 A9	3565 F2	5534 I7	9016 C8
2012 E9	2443 F9	3143 A6	3566 G2	5540 G7	9018 B8
2013 E9	2444 I12	3144 A8	3567 G2	5541 G2	9019 B8
2014 E8	2445 J10	3149 A8	3568 I8	5545 G6	9020 B7
2015 D10	2446 J9	3150 A10	3569 F2	5554 I6	9021 C8
2016 D9	2447 I9	3151 A8	3570 H7	5560 F4	9022 C8
2017 E11	2448 H9	3152 A11	3571 H7	5601 F1	9023 C8
2018 E11	2449 G10	3154 A6	3572 H7	5652 D5	9024 C8
2019 D10	2450 I8	3155 A6	3573 H7	5653 D5	9025 D8
2020 E10	2451 G8	3156 A6	3574 I7	5654 I7	9026 D8
2021 D10	2452 G9	3157 A10	3591 G7	6014 E8	9027 B7
2022 D10	2453 F10	3158 A10	3593 F7	6019 E10	9028 C7
2025 E8	2460 G11	3159 B6	3601 F5	6020 E10	9029 C7
2026 C10	2465 F11	3160 A1	3602 F5	6034 D8	9030 C7
2027 E7	2470 G10	3161 A1	3603 F4	6042 C10	9032 D7
2030 C7	2500 H2	3162 A5	3604 E4	6050 C7	9101 E9
2031 D9	2501 H3	3163 B7	3605 E4	6051 C7	9102 E7
2038 D9	2502 J5	3169 A9	3606 D5	6052 C8	9105 E6
2041 C9	2503 H3	3170 B10	3607 C2	6053 C7	9135 B9
2043 C9	2504 J5	3171 A10	3608 D4	6115 E7	9136 B9
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2101 E9	2506 I6	3173 A9	3610 E4	6119 E7	9138 E7
2102 E9	2507 J5	3175 B7	3611 E4	6120 E7	9139 A5
2104 E8	2511 I5	3176 A7	3612 E4	6125 E4	9140 B7
2110 E8	2514 G5	3251 C6	3613 D3	6157 H4	9141 B7
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2117 E7	2517 I5	3253 C6	3615 D4	6172 A7	9143 B6
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2120 E7	2522 H5	3296 A5	3618 D3	6306 A3	9146 B11
2124 E6	2523 I5	3303 B3	3620 D2	6355 C10	9148 A7
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2127 E6	2530 J7	3306 C3	3623 D2	6416 I12	9262 B4
2128 E6	2532 H7	3307 C2	3624 D3	6443 F9	9263 C5
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2256 C5	2665 F3	3401 G11	3678 F2	6565 F2	9554 I7
2257 C4	2666 I1	3402 H11	3679 E3	6568 G2	9602 D5
2258 B3	2667 D3	3403 G11	3680 E3	6569 H7	9603 E3
2259 B4	2669 E3	3404 G12	3682 F1	6570 H7	9604 F3
2260 B4	2670 F3	3405 G12	3683 E1	6573 G6	9605 F2
2261 C4	2676 E3	3406 F12	3684 E2	6574 F4	9606 F2
2262 B3	2677 E3	3407 F12	3685 E2	6603 G1	9607 F2
2263 C3	2678 E3	3408 H12	3686 D4	6604 G1	9609 C1
2264 B4	2679 E4	3409 G12	3687 E4	6605 G1	9610 D1
2265 C2	2680 E2	3410 G12	3688 E5	6606 D2	9611 E1
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2267 C3	2682 E2	3412 G12	3692 E2	6663 I1	9613 D4
2268 C3	2685 B1	3413 H12	3693 E5	6679 E4	9614 D1
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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	3444 J11	3895 A11	6854 B11	9852 A12
2275 A3	2850 A12	3442 I11	3852 A11	6855 B12	9909 F5
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2280 E2	2876 A11	3446 H10	3858 A11	7015 D9	9913 D6
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2283 B5	3003 E11	3449 G10	3862 B11	7038 C8	9916 D6
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2286 B2	3010 D9	3452 H9	3875 A12	7156 A10	9919 D5
2287 B2	3011 D8	3453 I9	3876 A12	7157 A5	9920 D5
2289 C5	3012 E8	3454 H8	3879 C12	7158 A6	9923 F5
2290 C5	3015 D10	3455 H10	3901 D6	7170 A10	9924 D5
2291 B6	3016 E10	3456 H9	3902 C11	7221 A2	9925 D6
2292 B6	3017 E10	3460 F10	5010 E9	7250 B3	9926 F12
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2294 C6	3019 E10	3466 F11	5030 C9	7255 A4	9929 B8
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2298 B5	3022 D9	3504 G2	5043 C10	7400 I12	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 E5
2302 B2	3026 D8	3513 G4	5138 A8	7514 G5	M001 I2
2303 B3	3027 D7	3514 J4	5139 A7	7515 I4	M002 I3
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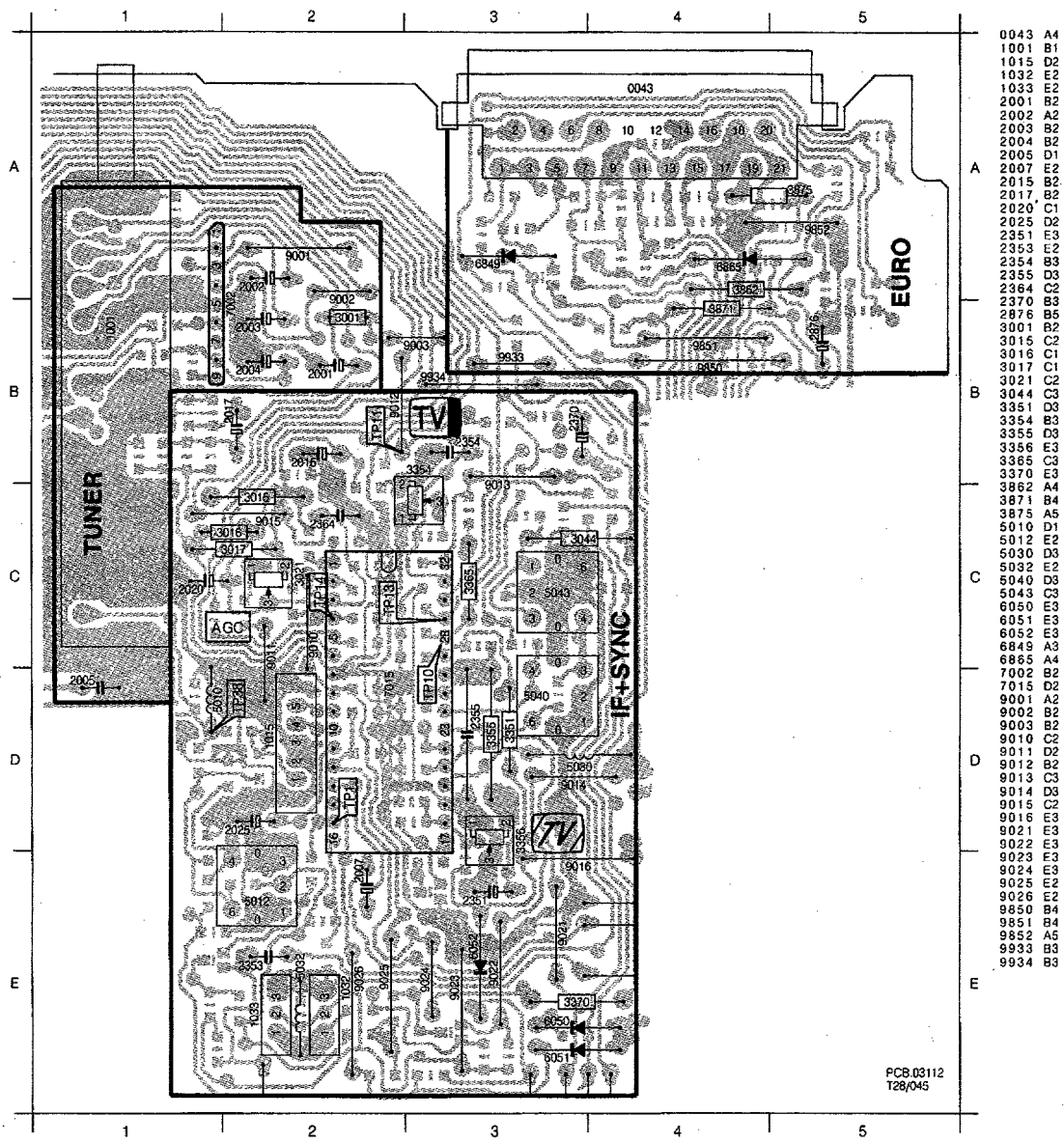








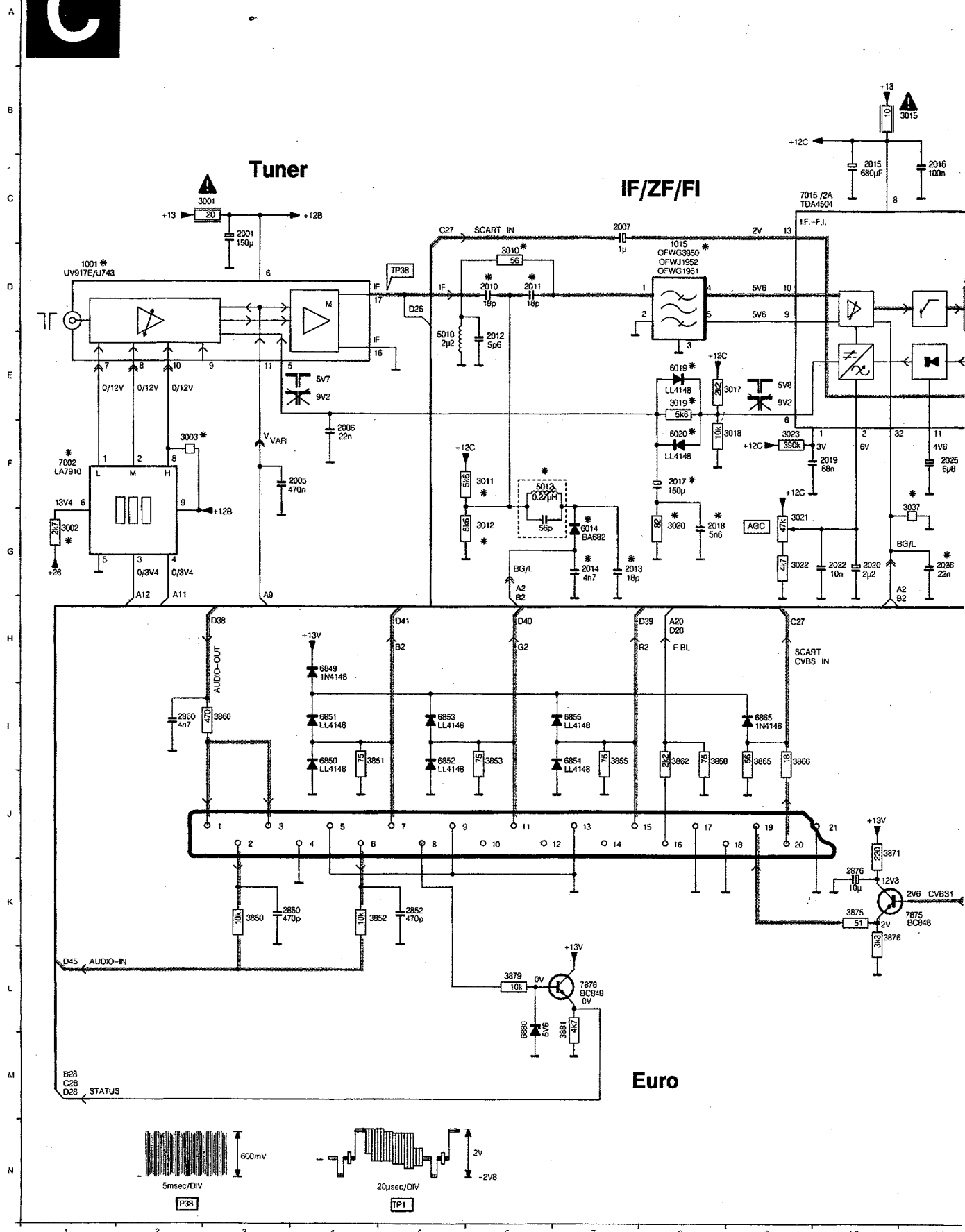






C

DIAGRAM C







Video

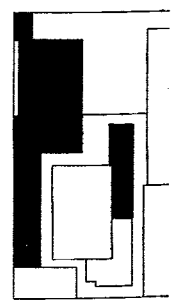
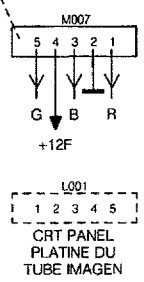
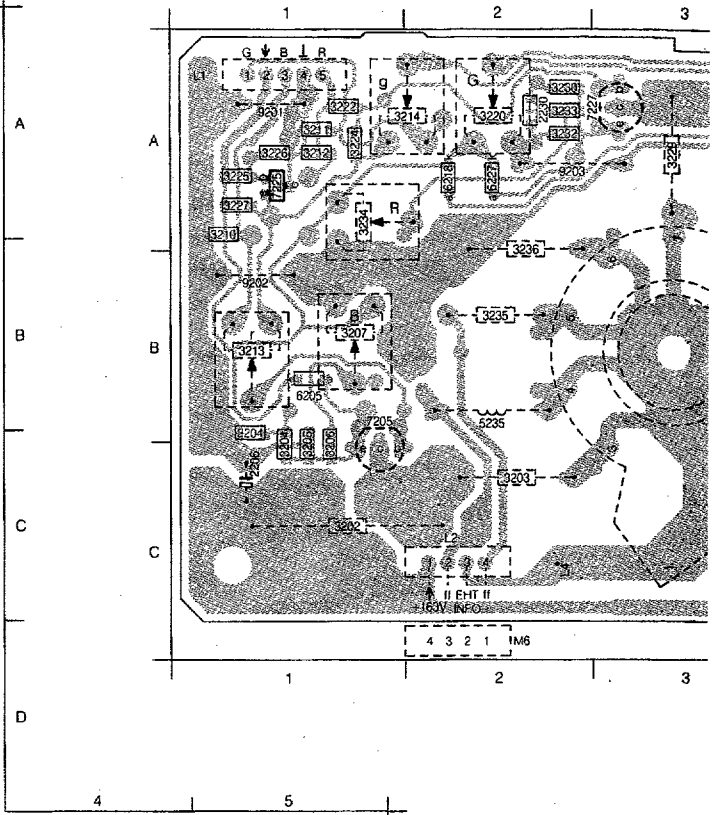
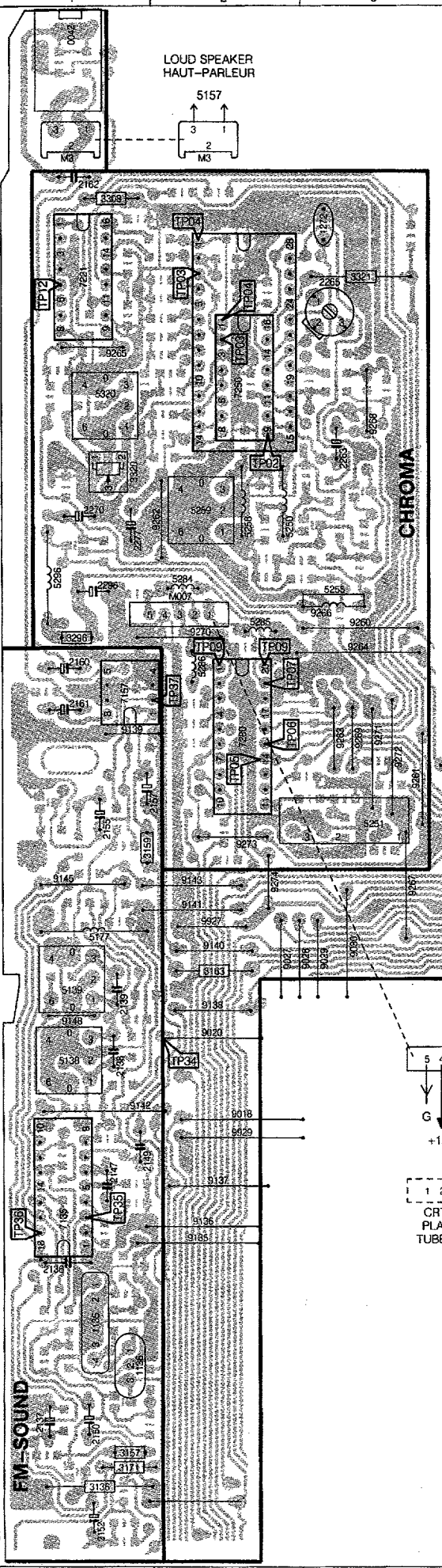
Sound

Ton

Son

CRT panel

- M3 A1
- 0042 A1
- 1135 I1
- 1136 I1
- 1272 B3
- 2124 E5
- 2126 F5
- 2127 F5
- 2128 F5
- 2136 I1
- 2137 J1
- 2138 G1
- 2139 G1
- 2147 H1
- 2149 H1
- 2150 J1
- 2152 J1
- 2155 F1
- 2157 F2
- 2160 E1
- 2161 E1
- 2162 A1
- 2263 G3
- 2265 B3
- 2270 D1
- 2277 D1
- 2296 D1
- 3124 E5
- 3136 J1
- 3157 J1
- 3159 F1
- 3183 G2
- 3171 J1
- 3296 D1
- 3308 B1
- 3320 C1
- 3321 B3
- 5102 I5
- 5104 H5
- 5106 H5
- 5138 G1
- 5139 G1
- 5177 F1
- 5250 D2
- 5251 F3
- 5255 G3
- 5258 D2
- 5259 D2
- 5284 D2
- 5285 D2
- 5286 E2
- 5296 D1
- 5320 C1
- 5652 E4
- 7125 F5
- 7135 H1
- 7157 E1
- 7221 B1
- 7250 C2
- 7280 E2
- 9018 H2
- 9020 G2
- 9027 G2
- 9028 G3
- 9029 G3
- 9030 G3
- 9032 G4
- 9101 H5
- 9102 F5
- 9105 E4
- 9135 H2
- 9136 H2
- 9137 H2
- 9138 G2
- 9139 E1
- 9140 G2
- 9141 F2
- 9142 H1
- 9143 F2
- 9145 F1
- 9148 G1
- 9260 D3
- 9261 E3
- 9262 D2
- 9263 E3
- 9264 E3
- 9265 C1
- 9266 D3
- 9267 F3
- 9268 C3
- 9269 E3
- 9270 D2
- 9271 E3
- 9272 E3
- 9273 F2
- 9274 F2
- 9911 F4
- 9912 F4
- 9913 F4
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- 9925 F4
- 9927 F2
- 9929 H2
- 9937 E5
- M007 D2

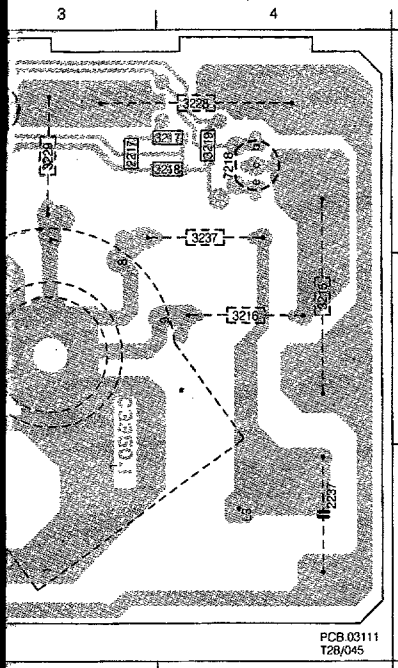


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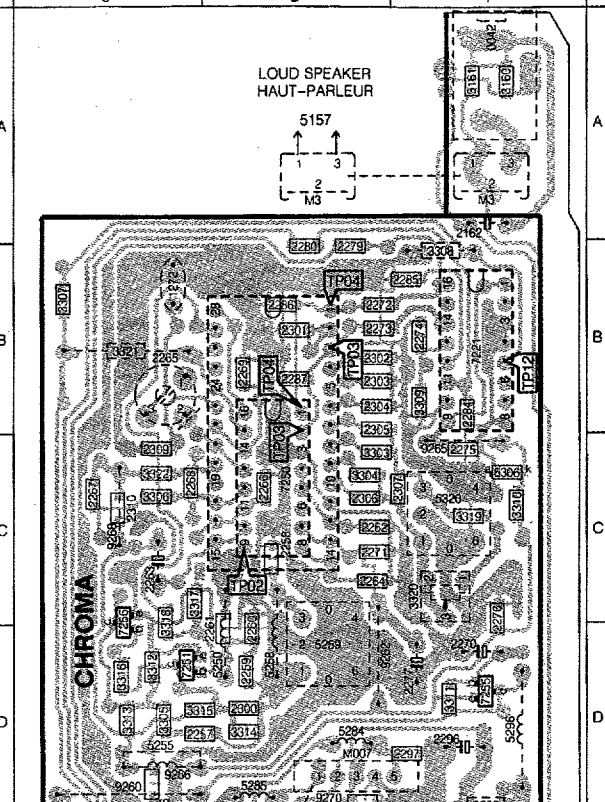
Bildröhren platte

Platine du tube image



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L2	C2	7227	A3
L3	C4	9201	A1
L4	C2	9202	B1
2204	B1	9203	A2
2206	B1		
2217	A3		
2230	A2		
2237	C4		
3202	C1		
3203	C2		
3204	C1		
3205	C1		
3206	C1		
3207	B1		
3210	A1		
3211	A1		
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3213	B1		
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3228	A4		
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3230	A2		
3231	A2		
3233	A2		
3234	A1		
3235	B2		
3236	B2		
3237	A4		
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6205	B1		
6218	A2		
6227	A2		
7205	B1		

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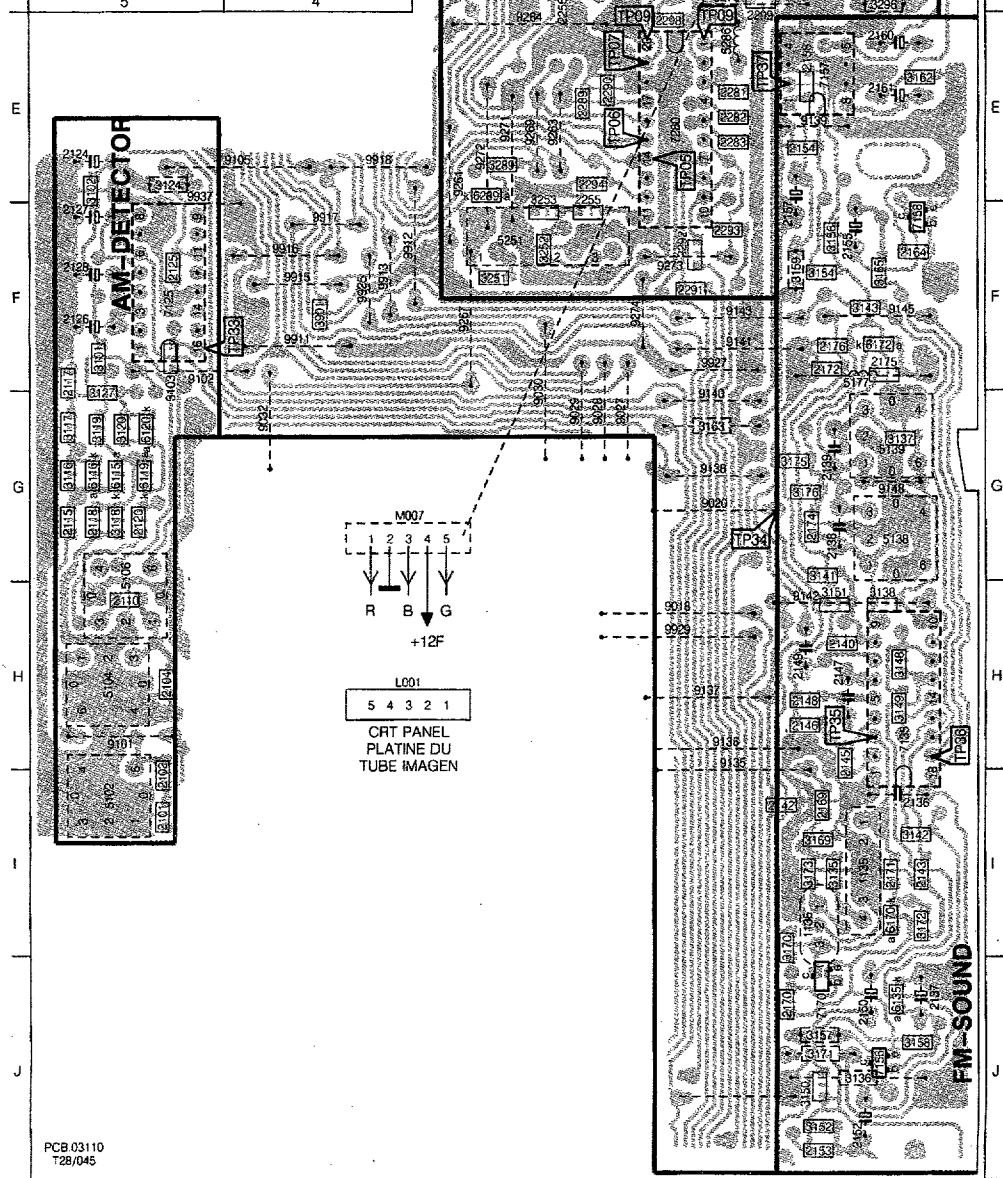


LOUD SPEAKER  
HAUT-PARLEUR

5157

CHROMA

M3	A1	3304	C2
0042	A1	3305	D3
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1136	I1	3307	B3
1272	B3	3308	B1
2101	I5	3309	B1
2102	I5	3310	C1
2104	H5	3311	O1
2110	H5	3312	D3
2115	G5	3313	D3
2117	G5	3314	D2
2118	G5	3315	D2
2120	G5	3316	O3
2124	E5	3317	C3
2125	F5	3318	O3
2126	F5	3319	C1
2127	F5	3320	C1
2129	F5	3321	B3
2136	I1	3322	C3
2137	J1	3901	F4
2138	G1	5102	I5
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
2148	H1	5255	D3
2149	H1	5258	D2
2150	J1	5259	O2
2152	J1	5261	D2
2153	J1	5262	D2
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	F1
2258	C2	7170	J1
2259	D2	7221	B1
2260	D2	7250	C2
2261	D2	7251	D3
2262	C2	7255	D1
2263	C3	7256	D3
2264	C2	7280	E2
2265	B3	8018	H2
2266	B3	9020	G2
2267	C3	9027	G2
2268	C3	9028	G3
2269	R2	9029	G3
2270	D1	9030	G3
2271	C2	9032	G4
2272	B1	9101	H5
2273	F1	9102	F5
2274	R1	9105	E4
2275	C1	9135	H2
2276	D1	9136	H2
2277	D1	9137	H2
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2282	E2	9141	F2
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2284	B1	9143	F1
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2297	D1	9268	C3
2298	E2	9269	E3
2299	E2	9270	D2
2300	D2	9271	E3
2301	B2	9272	E3
2302	B1	9273	F2
2303	C3	9274	F2
2304	R1	9911	F4
2305	R1	9912	F4
2306	C2	9913	F4
2307	C1	9915	F4
2309	C3	9916	F4
2310	C3	9917	F4
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3116	G5	9929	H2
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3118	G5	9937	F5
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3160	A1		
3161	A1		
3162	E1		
3163	G2		
3168	I1		
3170	J2		
3171	J1		
3172	I1		
3173	I1		
3175	G1		
3176	G1		
3251	F3		
3252	F3		
3253	F3		
3258	E3		
3259	C1		
3303	C1		



AM-DETECTOR



CRT PANEL  
PLATINE DU  
TUBE IMAGEN

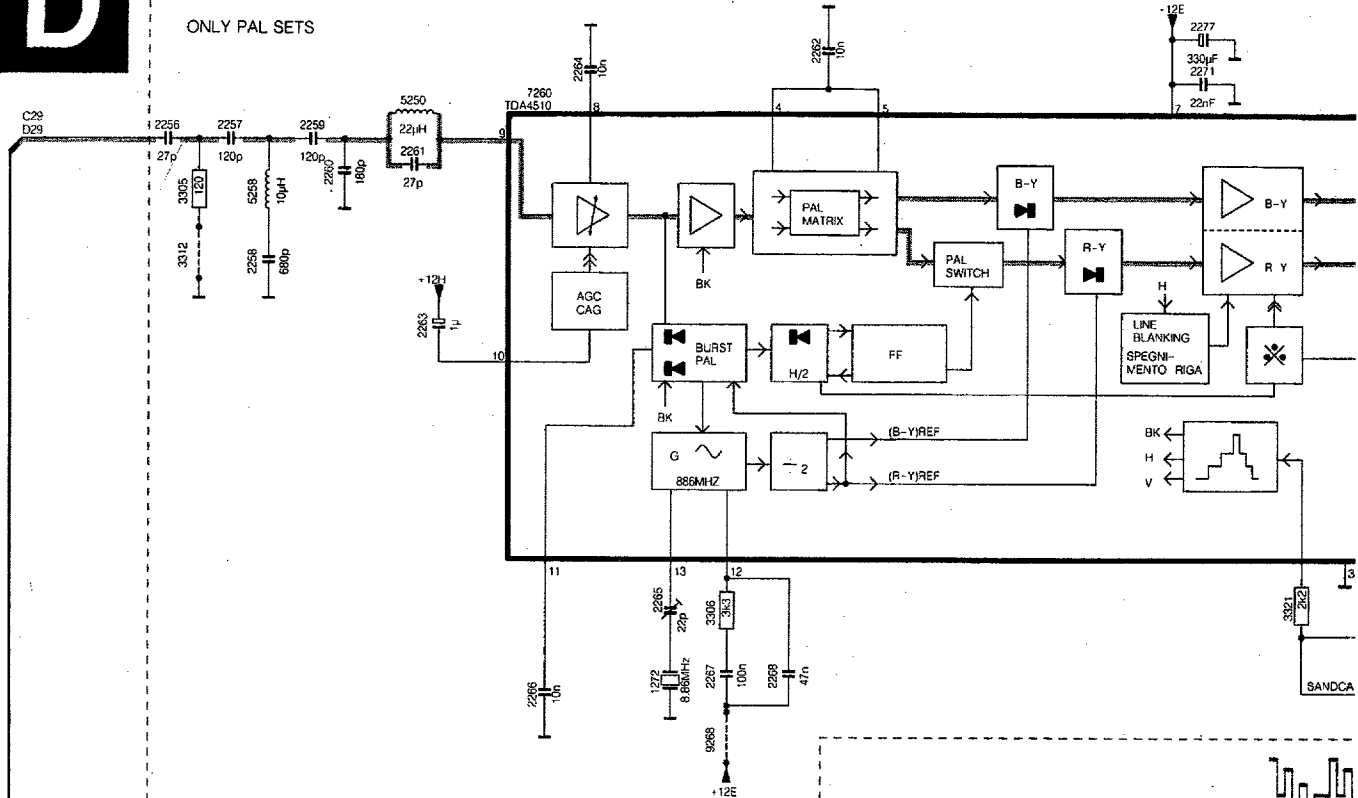
FM-SOUND

PCB.03110  
T2B/045

# D

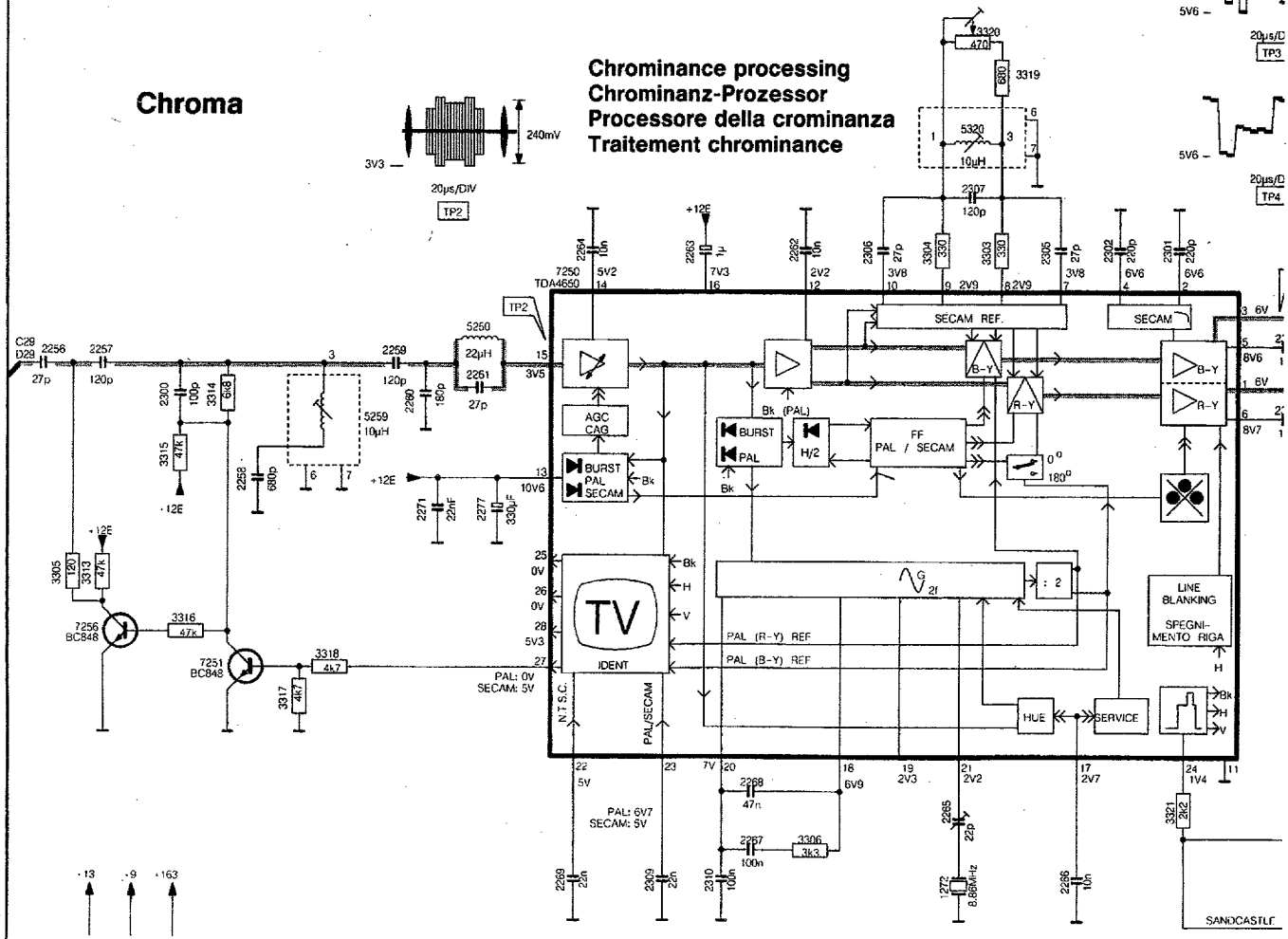
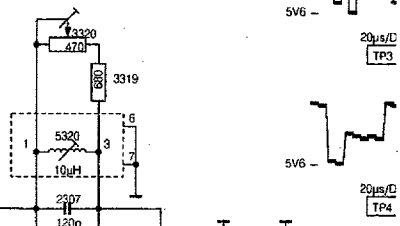
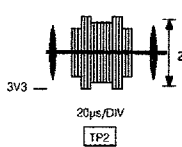
DIAGRAM D

ONLY PAL SETS



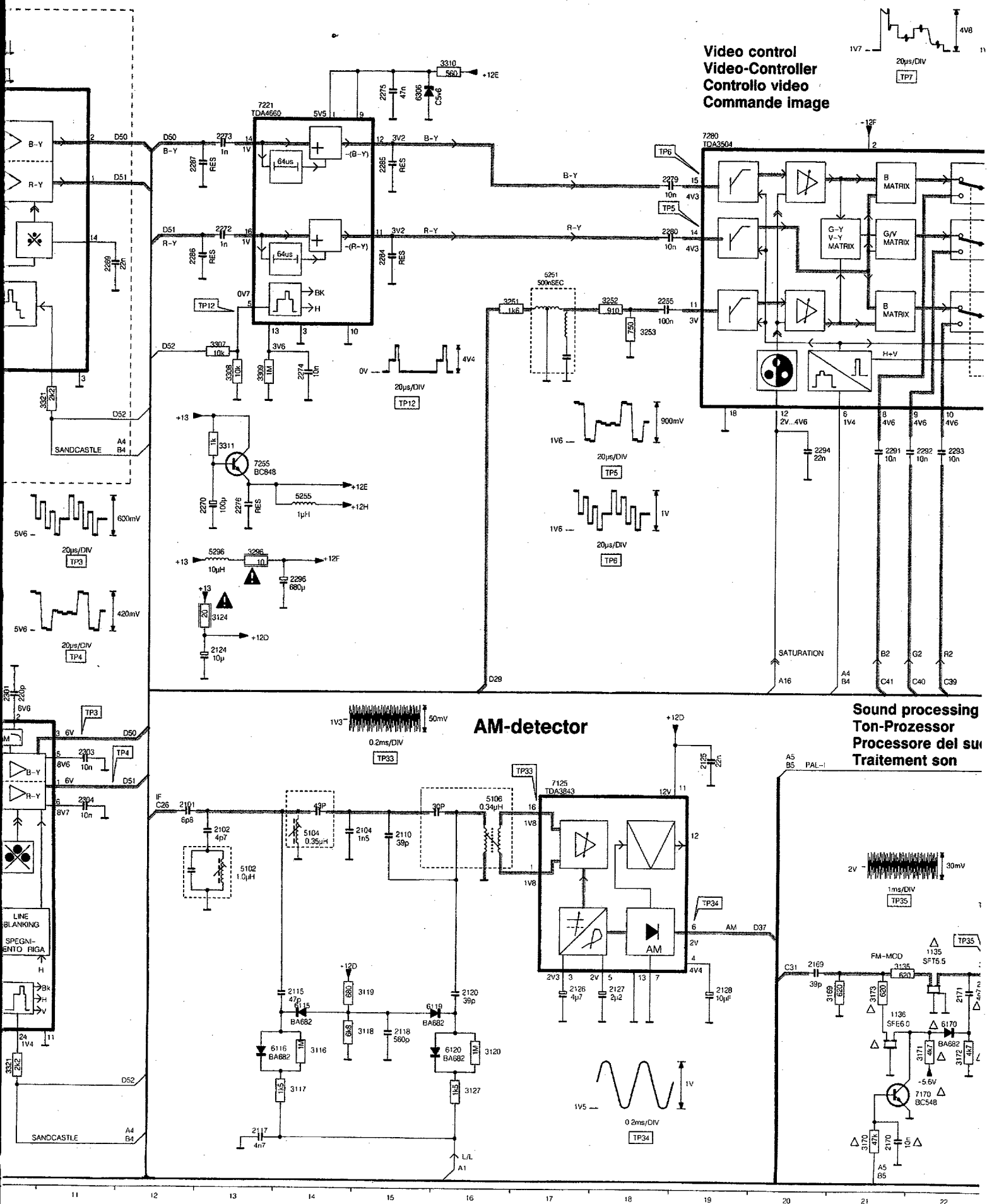
## Chroma

## Chrominance-processor Chrominanz-Prozessor Traitement de la chrominance



A, B, C

SANDCASTLE

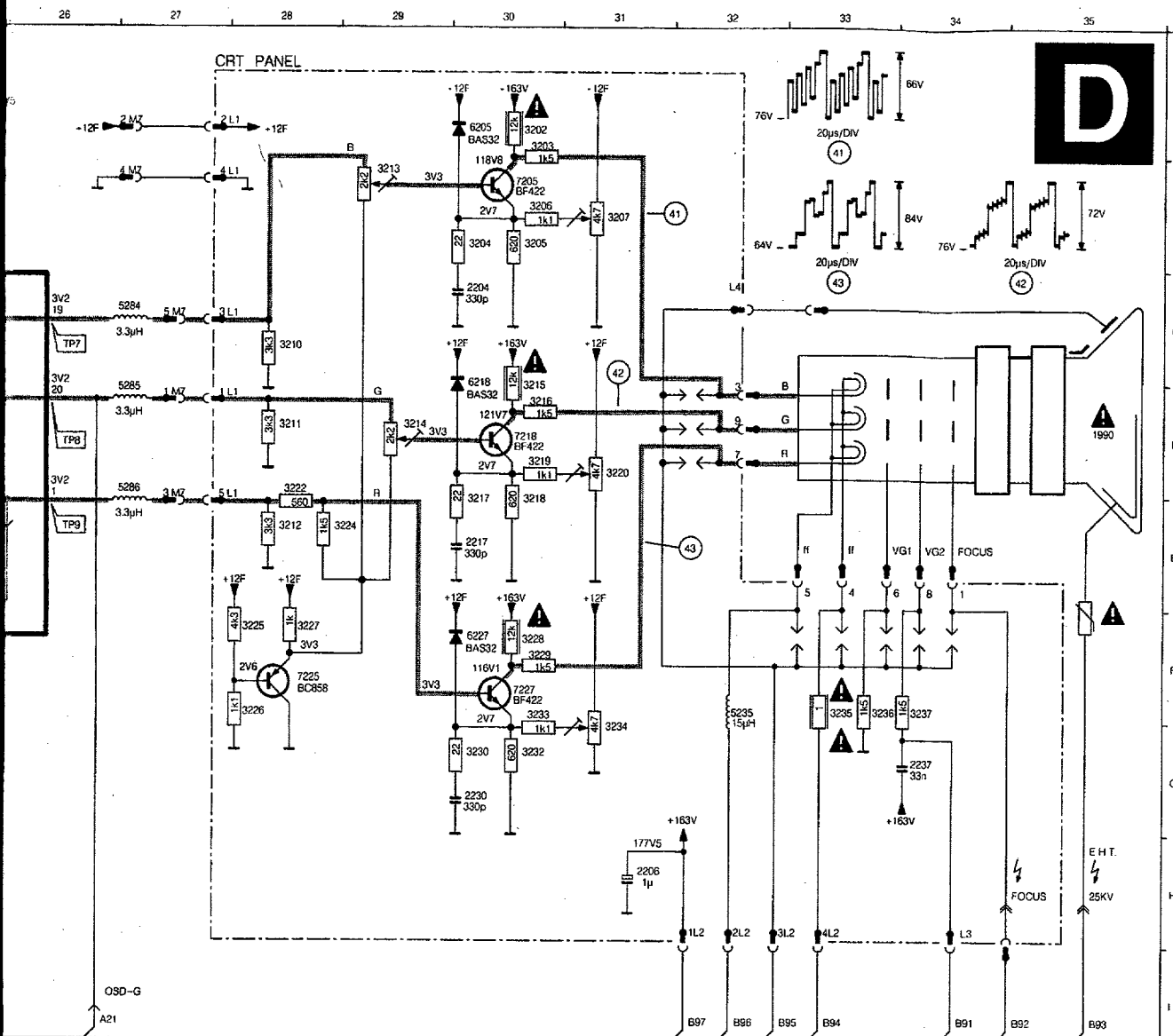


Video control  
 Video-Controller  
 Controllo video  
 Commande image

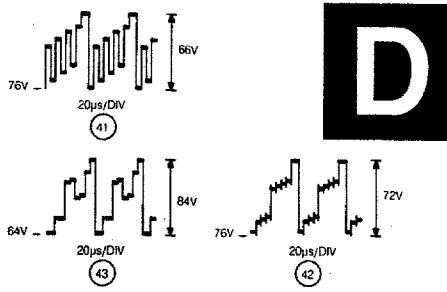
AM-detector

Sound processing  
 Ton-Prozessor  
 Processore del su  
 Traitement son



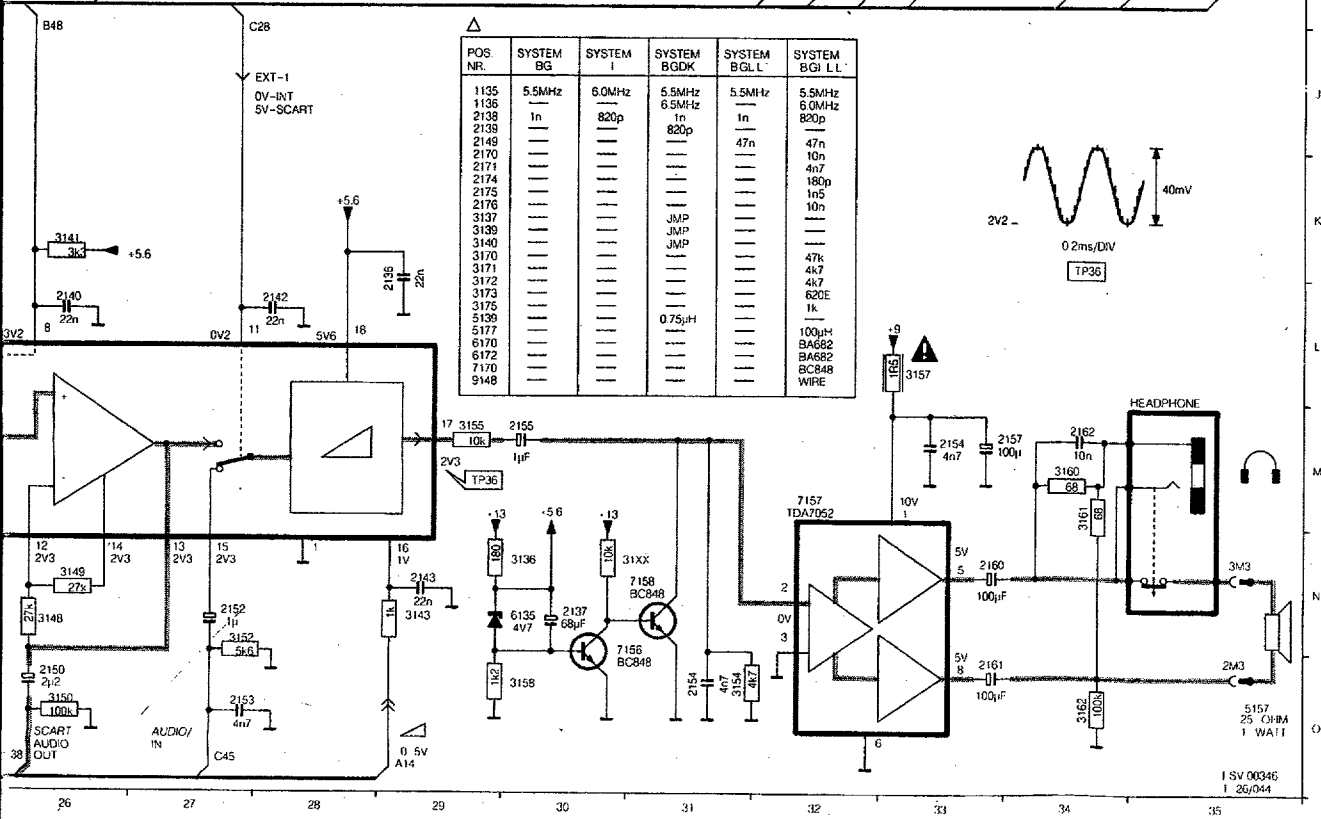
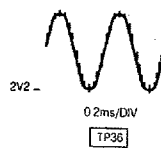


**D**



- 1135 M2
- 1136 M2
- 1272 F5
- 3203 A30
- 3204 B30
- 2101 K12
- 2102 K13
- 2104 K15
- 2110 K16
- 2115 M4
- 2117 O13
- 2118 N15
- 2120 M16
- 2124 J19
- 2125 J19
- 2126 M7
- 2127 M18
- 2128 M19
- 2136 L29
- 2137 N30
- 2138 K24
- 2139 K25
- 2140 L26
- 2142 L28
- 2143 N29
- 2145 N23
- 2146 N24
- 2147 N25
- 2148 N24
- 2149 N25
- 2150 O26
- 2152 N27
- 2153 O27
- 2154 M33
- 2155 O31
- 2155 M30
- 2157 M34
- 2160 N33
- 2161 O33
- 2162 M34
- 2169 M20
- 2170 O21
- 2171 M22
- 2174 K24
- 2175 J24
- 2176 M23
- 2204 C30
- 2206 H31
- 2217 E30
- 2220 C30
- 2223 G34
- 2255 D18
- 2256 B2
- 2256 J1
- 2257 B2
- 2257 J1
- 2258 C2
- 2258 K2
- 2259 B3
- 2259 J4
- 2260 B3
- 2260 K4
- 2261 J4
- 2262 A7
- 2262 I7
- 2263 D4
- 2263 I6
- 2264 A5
- 2264 I5
- 2265 A7
- 2265 N8
- 2266 F5
- 2266 O6
- 2267 F6
- 2267 N7
- 2268 F6
- 2268 N7
- 2269 D11
- 2269 O5
- 2270 G13
- 2271 A10
- 2271 L4
- 2272 D13
- 2273 B13
- 2274 E14
- 2275 B15
- 2276 G13
- 2277 A10
- 2277 L4
- 2279 C18
- 2280 D18
- 2281 B25
- 2282 B24
- 2283 B24
- 2284 D15
- 2285 C15
- 2286 D12
- 2287 C12
- 2288 F25
- 2290 F24
- 2291 F21
- 2292 F22
- 2293 F22
- 2294 F20
- 2296 H14
- 2300 K2
- 2301 I10
- 2302 I10
- 2303 J11
- 2304 K11
- 2305 I9
- 2306 I8
- 2307 I8
- 2308 O6
- 2310 O6
- 3116 N14
- 3117 N14
- 3118 N15
- 3119 M15
- 3120 N15
- 3124 N13
- 3127 N16
- 3135 M21
- 3136 N30
- 3138 K24
- 3141 K25
- 3143 N29
- 3148 N26
- 3149 N26
- 3150 O25
- 3152 N27
- 3154 O31
- 3155 M29
- 3157 L33
- 3158 O30
- 3160 M34
- 3161 M34
- 3162 O34
- 3169 M21
- 3170 O21
- 3171 N22
- 3172 M22
- 3173 M21
- 3175 K23
- 311X N31
- 3202 A30
- 3203 A30
- 3204 B30
- 3205 B30
- 3206 B30
- 3207 B31
- 3210 C28
- 3211 D28
- 3212 E28
- 3213 B29
- 3214 D29
- 3215 D30
- 3216 D30
- 3217 E30
- 3218 E30
- 3219 D30
- 3220 D31
- 3222 O28
- 3224 E28
- 3225 F28
- 3226 F28
- 3227 F28
- 3228 F30
- 3229 F30
- 3230 G30
- 3230 G30
- 3230 G30
- 3230 F30
- 3231 G31
- 3235 F33
- 3236 F33
- 3237 F34
- 3251 D16
- 3252 D18
- 3253 F30
- 3259 G24
- 3259 H13
- 3259 I9
- 3304 I8
- 3305 B2
- 3306 F6
- 3306 N7
- 3307 E13
- 3308 E13
- 3309 G13
- 3310 A16
- 3311 F13
- 3312 C2
- 3313 L1
- 3314 K2
- 3315 K2
- 3316 L2
- 3317 M3
- 3318 M3
- 3319 H9
- 3320 H9
- 3321 F11
- 3321 N10
- 5102 L13
- 5104 K14
- 5106 K16
- 5138 K24
- 5138 K25
- 5177 J23
- 5235 F32
- 5250 B4
- 5250 J4
- 5251 D17
- 5251 G14
- 5258 B2
- 5258 K2
- 5259 K3
- 5284 C27
- 5285 D27
- 5286 H3
- 5296 H3
- 5320 H6
- 6115 M14
- 6116 N14
- 6119 M16
- 6120 M15
- 6135 N30
- 6170 M22
- 6172 K23
- 6205 A30
- 6218 D30
- 6227 F30
- 6289 G25
- 6306 B15
- 7125 K17
- 7135 L23
- 7156 N30
- 7157 M24
- 7158 N31
- 7170 N22
- 7205 B30
- 7218 D30
- 7221 B13
- 7225 F28
- 7227 F30
- 7250 J5
- 7251 M1
- 7255 F13
- 7256 M1
- 7280 B5
- 7280 B19
- 9148 K25
- 9268 G6

POS NR.	SYSTEM BG	SYSTEM I	SYSTEM BGDK	SYSTEM BGL L	SYSTEM BGI LL
1135	5.5MHz	6.0MHz	5.5MHz	5.5MHz	5.5MHz
1136		6.0MHz	6.5MHz		6.0MHz
2138	In	820p	In	In	820p
2139					
2149				47n	47n
2170				10n	10n
2171				4n7	4n7
2174				180p	180p
2175				1n5	1n5
2176				10n	10n
3137			JMP		
3139			JMP		
3140			JMP		
3170				47n	47n
3171				4k7	4k7
3172				4k7	4k7
3173				620E	620E
3175				1k	1k
5177					0.75μH
6170					100μH
6172					BA682
7170					BA682
9148					BC848
					WIPE



## 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 condenser 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 condenser 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.

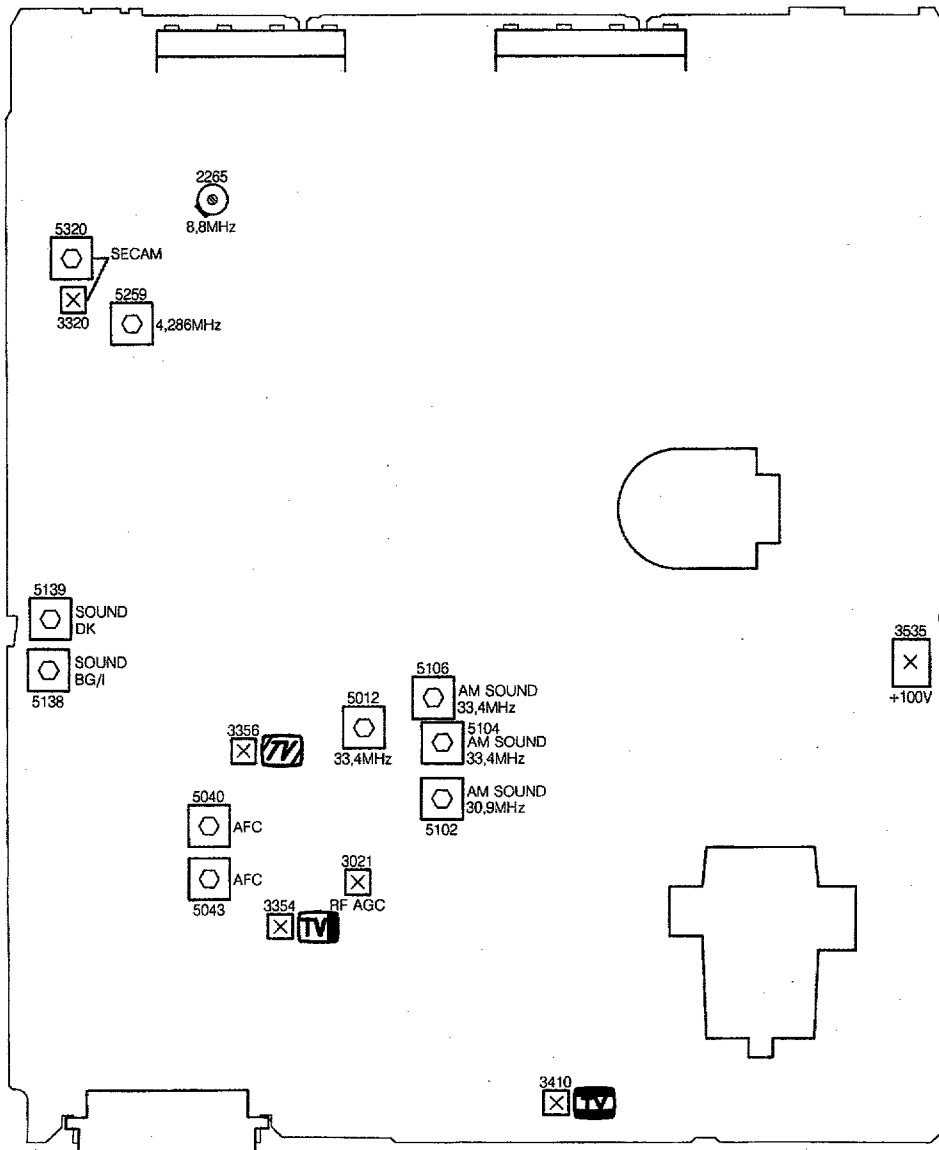


Fig. 7

MDA.02811  
T10/037

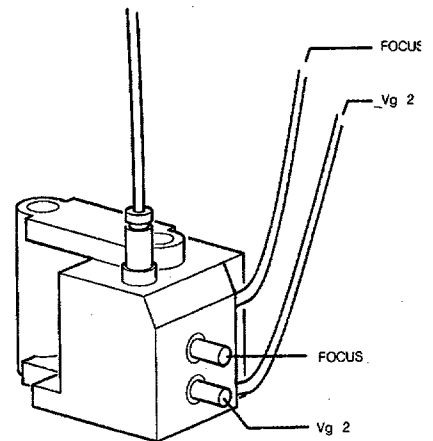


Fig. 8

MDA.00633  
CP90  
T28/723

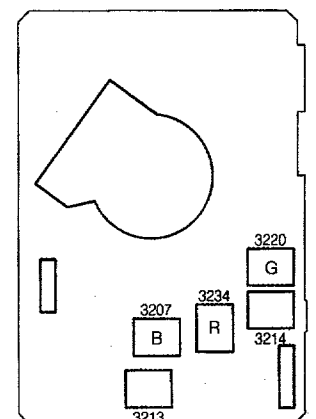


Fig. 9

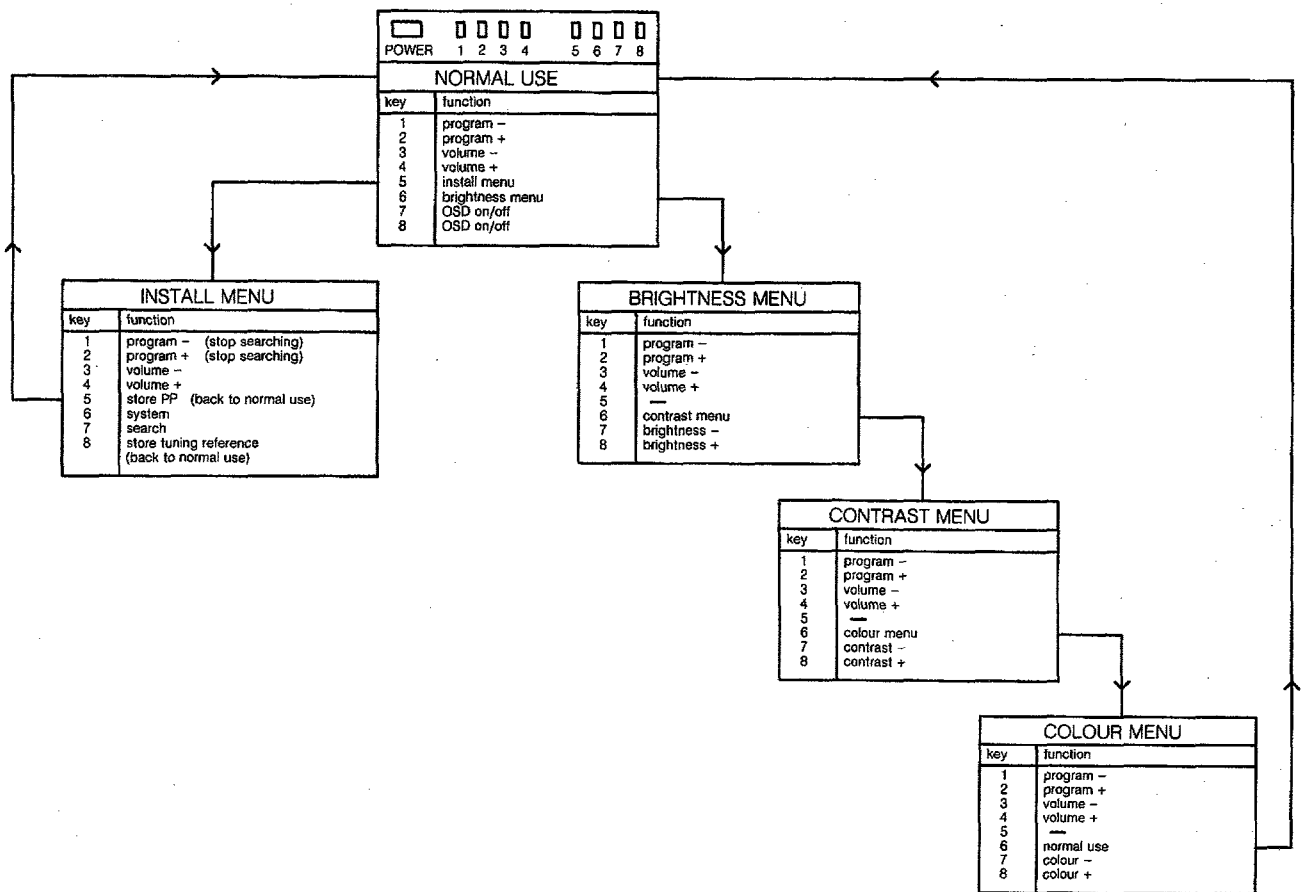
MDA.02812  
T28/036

## Quick diagnose reference

ERROR MESSAGE	ERROR DESCRIPTION	POSSIBLE DEFECTIVE COMPONENT
Flashing LED	Internal $\mu$ C error	IC7600
F4 on the screen	EEPROM error	IC7685



## 1. Local keyboard operation



MDA.02858  
T-28/044





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

	2624 4822 124 41577 4,7µF 20% 50V	3124 4822 052 10229 22Ω 5% 0,33W		3402 4822 116 52222 390Ω 5% 0,5W
	2625 4822 122 32765 820pF 10% 63V	3127 4822 051 10152 1k50 2% 0,25W		3403 4822 116 52269 3k3 5% 0,5W
	2629 4822 124 40435 10µF 20% 50V	3135 4822 051 10621 620Ω 2% 0,25W		3403 4822 116 52276 3K9 5% 0,5W
	2630 4822 124 41576 2,2µF 20% 50V	3136 4822 053 11181 180Ω 5% 2W		3404 4822 051 10202 2k0 2% 0,25W
	2651 4822 122 31974 820pF 10% 63V	3137 4822 051 10008 0Ω 5% 0,25W		3404 5322 111 90282 2K4 2% 0,25W
	2658 4822 122 31974 820pF 10% 63V	3138 4822 051 20222 2k20 5% 0,1W		3405 4822 051 10131 130Ω 2% 0,25W
	2660 5322 122 31647 1nF 10% 63V	3139 4822 051 10008 0Ω 5% 0,25W		3405 4822 051 10151 150Ω 2% 0,25W
	2666 4822 124 41525 100µF 20% 25V	3140 4822 051 10008 0Ω 5% 0,25W		3406 4822 051 10123 12k0 2% 0,25W
	2669 5322 122 31842 330pF 5% 63V	3141 4822 051 10332 3k30 2% 0,25W		3406 4822 051 10153 15K 2% 0,25W
	2676 4822 122 31768 180pF 5% 50V	3142 4822 051 10008 0Ω 5% 0,25W		3407 4822 051 20183 18k0 5% 0,1W
	2677 4822 122 31971 10pF 10% 50V	3143 4822 051 10102 1k0 2% 0,25W		3407 4822 051 10223 22K 2% 0,25W
	2678 4822 122 31971 10pF 10% 50V	3148 4822 051 10273 27k0 2% 0,25W		3408 4822 116 52259 2k4 5% 0,5W
	2679 4822 122 31839 82pF 10% 50V	3149 4822 051 10273 27k0 2% 0,25W		3409 4822 051 10008 0Ω 5% 0,25W
	2680 4822 122 31825 27pF 10% 50V	3150 4822 051 10104 100k0 2% 0,25W		3410 4822 100 11658 330Ω LIN 0,1W
	2681 4822 122 31825 27pF 10% 50V	3151 4822 051 10008 0Ω 5% 0,25W		3411 4822 116 81801 3Q6 5% 0,5W
	2682 4822 122 31765 100pF 5% 50V	3152 4822 051 10562 5k60 2% 0,25W		3411 4822 116 82721 4Q3 5% 0,5W
	2685 4822 124 41525 100µF 20% 25V	3154 4822 051 10472 4k70 2% 0,25W		3412 4822 116 81801 3Q6 5% 0,5W
	2686 4822 122 32863 22nF 80% 50V	3155 4822 051 10103 10k0 2% 0,25W		3412 4822 116 82721 4Q3 5% 0,5W
	2690 4822 122 32863 22nF 80% 50V	3156 4822 051 10008 0Ω 5% 0,25W		3413 4822 051 10273 27k0 2% 0,25W
	2695 4822 122 31974 820pF 10% 63V	3157 4822 050 21003 10k0 1% 0,6W		3414 4822 051 10008 0Ω 5% 0,25W
	2696 4822 122 31974 820pF 10% 63V	3158 4822 051 10122 1k20 2% 0,25W		3415 4822 116 52253 2k 5% 0,5W
	2697 4822 122 31974 820pF 10% 63V	3159 4822 052 11208 2Q0 5% 0,5W		3416 4822 116 52253 2k 5% 0,5W
	2698 4822 122 31974 820pF 10% 63V	3160 4822 051 10689 68Ω 2% 0,25W		3417 4822 051 10008 0Ω 5% 0,25W
	2850 4822 122 31727 470pF 5% 63V	3161 4822 051 10689 68Ω 2% 0,25W		3418 4822 051 10008 0Ω 5% 0,25W
	2852 4822 122 31727 470pF 5% 63V	3162 4822 051 10104 10k0 2% 0,25W		3440 4822 116 52199 68Ω 5% 0,5W
	2860 4822 122 31784 4,7nF 10% 50V	3163 4822 052 11208 2Q0 5% 0,5W		3442 4822 051 10562 5k60 2% 0,25W
	2876 4822 124 40435 10µF 20% 50V	3169 4822 051 10621 620Ω 2% 0,25W		3443 4822 113 80454 4Q7 10% 5W
	3001 4822 052 10229 22Ω 5% 0,33W	3171 4822 116 52283 4k7 5% 0,5W		3444 4822 053 11562 5k60 5% 2W
	3002 4822 051 10272 2k70 2% 0,25W	3172 4822 051 10472 4k70 2% 0,25W		3445 4822 051 10689 68Ω 2% 0,25W
	3004 4822 051 10008 0Ω 5% 0,25W	3173 4822 051 10621 620Ω 2% 0,25W		3447 4822 052 11181 180Ω 5% 0,5W
	3005 4822 051 10008 0Ω 5% 0,25W	3175 4822 051 10102 1k0 2% 0,25W		3448 4822 052 10108 1Q0 5% 0,33W
	3010 4822 051 10569 56Ω 2% 0,25W	3251 4822 051 10162 1k60 2% 0,25W		3449 4822 052 10108 1Q0 5% 0,33W
	3011 4822 051 10562 5k60 2% 0,25W	3252 4822 051 10911 910Ω 2% 0,25W		3451 4822 051 10333 33k0 2% 0,25W
	3012 4822 051 10562 5k60 2% 0,25W	3253 4822 051 10751 750Ω 2% 0,25W		3452 4822 111 30508 10Q 5% 0,33W
	3015 4822 052 10109 10Ω 5% 0,33W	3289 4822 051 10682 6k80 2% 0,25W		3453 4822 052 11181 180Ω 5% 0,5W
	3017 4822 116 52256 2k2 5% 0,5W	3296 4822 111 30508 10Ω 5% 0,33W		3454 4822 052 11102 1K0 5% 0,5W
	3018 4822 051 10103 10k0 2% 0,25W	3303 4822 051 10331 330Ω 2% 0,25W		3455 4822 051 20183 18k0 5% 0,1W
	3019 4822 051 10562 5k60 2% 0,25W	3304 4822 051 10331 330Ω 2% 0,25W		3456 4822 053 20434 430k0 5% 0,25W
	3020 4822 051 10829 82Ω 2% 0,25W	3305 4822 116 90536 120Ω 1% 0,125W		3460 4822 051 10113 11k0 2% 0,25W
	3021 4822 100 11392 47k LIN	3306 4822 051 10332 3k30 2% 0,25W		3465 4822 051 20185 1M80 5% 0,1W
	3022 4822 051 10472 4k70 2% 0,25W	3307 4822 051 10103 10k0 2% 0,25W		3470 4822 052 10478 4Q70 5% 0,33W
	3023 4822 051 10394 390k0 2% 0,25W	3308 4822 116 52233 10k 5% 0,5W		3501 4822 116 40137 PTC/PTC
	3024 4822 051 10472 4k70 2% 0,25W	3309 4822 051 10105 1M0 5% 0,25W		3504 4822 053 21106 10M0 5% 0,5W
	3025 4822 051 10472 4k70 2% 0,25W	3310 4822 051 10561 560Ω 2% 0,25W		3509 4822 116 52287 51k 5% 0,5W
	3026 4822 051 10101 100Ω 2% 0,25W	3311 4822 051 10102 1k0 2% 0,25W		3510 4822 116 52287 51k 5% 0,5W
	3027 4822 051 10221 220Ω 2% 0,25W	3313 4822 051 10473 47k0 2% 0,25W		3511 4822 051 10102 1k0 2% 0,25W
	3028 4822 051 10152 1k50 2% 0,25W	3314 4822 051 10682 6k80 2% 0,25W		3513 4822 051 10104 100k0 2% 0,25W
	3029 4822 051 10152 1k50 2% 0,25W	3315 4822 051 10473 47k0 2% 0,25W		3514 4822 116 52278 390k 5% 0,5W
	3030 4822 051 10221 220Ω 2% 0,25W	3316 4822 051 10473 47k0 2% 0,25W		3515 4822 051 10471 470Ω 2% 0,25W
	3031 4822 051 10331 330Ω 2% 0,25W	3317 4822 051 10472 4k70 2% 0,25W		3516 4822 051 10101 100Ω 2% 0,25W
	3032 4822 051 10181 180Ω 2% 0,25W	3318 4822 051 10472 4k70 2% 0,25W		3517 4822 116 52206 120Ω 5% 0,5W
	3033 4822 051 10182 1k80 2% 0,25W	3319 4822 051 10681 680Ω 2% 0,25W		3518 4822 051 10224 220k0 2% 0,25W
	3034 4822 051 10103 10k0 2% 0,25W	3320 4822 101 10927 470Ω		3520 4822 051 10183 18k0 2% 0,25W
	3035 4822 051 10008 0Ω 5% 0,25W	3321 4822 116 52256 2k2 5% 0,5W		3521 4822 053 11209 20Q0 5% 2W
	3036 4822 051 10008 0Ω 5% 0,25W	3322 4822 051 10008 0Ω 5% 0,25W		3522 4822 053 11209 20Q0 5% 2W
	3037 4822 051 10008 0Ω 5% 0,25W	3350 4822 051 10823 82k0 2% 0,25W		3523 4822 051 10229 22Ω 2% 0,25W
	3038 4822 051 10393 39k0 2% 0,25W	3351 4822 116 52249 1k8 5% 0,5W		3525 4822 053 11339 33Q0 5% 2W
	3039 4822 051 10393 39k0 2% 0,25W	3353 4822 051 10823 82k0 2% 0,25W		3526 4822 116 52206 120Ω 5% 0,5W
	3043 4822 051 10103 10k0 2% 0,25W	3354 4822 100 11163 100k LIN 0,1W		3530 4822 053 11569 56Ω 5% 2W
	3044 4822 116 52233 10k 5% 0,5W	3355 4822 116 52264 27k 5% 0,5W		3533 4822 050 14873 48k70 1% 0,4W
	3049 4822 051 10683 68k0 2% 0,25W	3356 4822 100 11141 10k TRIM		3534 4822 051 10332 3k30 2% 0,25W
	3050 4822 051 10332 3k30 2% 0,25W	3357 4822 051 10152 1k50 2% 0,25W		3535 4822 100 20168 1k 10% LIN 0,05W
	3051 4822 051 10223 22k0 2% 0,25W	3358 4822 051 10473 47k0 2% 0,25W		3544 4822 052 10108 1Q0 5% 0,33W
	3101 4822 051 10008 0Ω 5% 0,25W	3359 4822 051 10272 2k70 2% 0,25W		3547 4822 050 11002 1k0 1% 0,4W
	3102 4822 051 10008 0Ω 5% 0,25W	3360 4822 051 10008 0Ω 5% 0,25W		3549 4822 051 10479 47Q0 2% 0,25W
	3103 4822 051 10008 0Ω 5% 0,25W	3361 4822 051 10008 0Ω 5% 0,25W		3550 4822 051 10911 910Ω 2% 0,25W
	3116 4822 051 10105 1M0 5% 0,25W	3362 4822 051 10101 100Q0 2% 0,25W		3551 4822 051 10151 150Ω 2% 0,25W
	3117 4822 051 10152 1k50 2% 0,25W	3363 4822 051 10008 0Ω 5% 0,25W		3552 4822 051 10101 100Q0 2% 0,25W
	3118 4822 051 10682 6k80 2% 0,25W	3364 4822 051 10364 360k0 2% 0,25W		3553 4822 051 10681 680Ω 2% 0,25W
	3119 4822 051 10681 680Ω 2% 0,25W	3365 4822 116 81682 2M2 5% 0,5W		3554 4822 053 11689 68Ω 5% 2W
	3120 4822 051 10105 1M0 5% 0,25W	3370 4822 052 11471 470Ω 5% 0,5W		3555 4822 051 10101 100Ω 2% 0,25W
		3401 4822 116 52259 2k4 5% 0,5W		3556 4822 051 10681 680Ω 2% 0,25W
				3557 4822 053 11271 270Ω 5% 2W

	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	6014 4822 130 80888 BA682
	3572 4822 116 52202 82Ω 5% 0,5W	3850 4822 051 10103 10k0 2% 0,25W	6019 4822 130 80446 LL4148
	3573 4822 116 52284 47k 5% 0,5W	3851 4822 116 80747 75Ω 5% 0,125W	6020 4822 130 80446 LL4148
	3574 4822 051 10104 100k0 2% 0,25W	3852 4822 051 10103 10k0 2% 0,25W	6034 4822 130 80446 LL4148
	3591 4822 051 10008 0Ω 5% 0,25W	3853 4822 116 80747 75Ω 5% 0,125W	6042 4822 130 80888 BA682
	3593 4822 051 10008 0Ω 5% 0,25W	3854 4822 051 10008 0Ω 5% 0,25W	6050 4822 130 30621 1N4148
	3601 4822 051 10103 10k0 2% 0,25W	3855 4822 116 80747 75Ω 5% 0,125W	6051 4822 130 30621 1N4148
	3602 4822 051 10822 8k20 2% 0,25W	3856 4822 051 10008 0Ω 5% 0,25W	6052 4822 130 30621 1N4148
	3603 4822 050 12403 24k0 1% 0,4W	3857 4822 051 10008 0Ω 5% 0,25W	6053 4822 130 80446 LL4148
	3604 4822 051 10151 150Ω 2% 0,25W	3858 4822 116 80747 75Ω 5% 0,125W	6115 4822 130 80888 BA682
	3605 4822 050 12204 220k0 1% 0,4W	3859 4822 051 10008 0Ω 5% 0,25W	6116 4822 130 80888 BA682
	3606 4822 116 52233 10k 5% 0,5W	3860 4822 051 10471 470Ω 2% 0,25W	6119 4822 130 80888 BA682
	3607 4822 051 10332 3k30 2% 0,25W	3862 4822 116 52256 2k2 5% 0,5W	6120 4822 130 80888 BA682
	3610 4822 051 10153 15k0 2% 0,25W	3865 4822 116 82719 56Ω 5% 0,125W	6135 4822 130 80883 LLZ-C4V7
	3611 4822 051 10103 10k0 2% 0,25W	3866 4822 116 82718 18Ω 5% 0,125W	6170 4822 130 80888 BA682
	3612 4822 051 10103 10k0 2% 0,25W	3871 4822 116 52215 220Ω 5% 0,5W	6172 4822 130 80888 BA682
	3613 4822 051 10434 430k0 2% 0,25W	3875 4822 116 52196 51Ω 5% 0,5W	6289 4822 130 80446 BAS32L
	3614 4822 051 10472 4k70 2% 0,25W	3876 4822 051 10332 3k30 2% 0,25W	6306 4822 130 80954 LLZ-C5V6
	3615 4822 051 10824 8k20 2% 0,25W	3879 4822 051 10103 10k0 2% 0,25W	6365 4822 130 80446 LL4148
	3616 4822 116 52284 47k 5% 0,5W	3901 4822 051 10008 0Ω 5% 0,25W	6370 4822 130 82304 LLZ-F12
	3618 4822 051 20183 18k0 5% 0,1W	3902 4822 051 10008 0Ω 5% 0,25W	6415 4822 130 80446 LL4148
	3620 4822 051 10433 43k0 2% 0,25W		6416 4822 130 42488 BYD33D
	3621 4822 051 10393 39k0 2% 0,25W		6443 5322 130 31938 BYV27-200
	3622 4822 116 52234 100k 5% 0,5W	5010 4822 157 62552 2μH2	6446 4822 130 32896 BYD33M
	3623 4822 116 52247 16k 5% 0,5W	5028 4822 157 63068 0.28μH	6449 4822 130 42488 BYD33D
	3624 4822 051 10393 39k0 2% 0,25W	5030 4822 157 60123 6μH8	6451 4822 130 42488 BYD33D
	3625 4822 051 10163 16k0 2% 0,25W	5032 4822 157 62767 8μH	6452 4822 130 42488 BYD33D
	3626 4822 116 52251 18k 5% 0,5W	5040 4822 157 63064 0.19μH	6470 4822 130 42488 BYD33D
	3627 4822 051 20183 18k0 5% 0,1W	5040 4822 157 63071 0.30μH	6502 4822 130 81497 1N4005GP
	3628 4822 051 10393 39k0 2% 0,25W	5043 4822 157 63069 0.70μH	6503 4822 130 81497 1N4005GP
	3630 4822 051 10274 270k0 2% 0,25W	5138 4822 157 53635 10k 0,75μH 6%	6504 4822 130 81497 1N4005GP
	3631 4822 116 52275 360k 5% 0,5W	5139 4822 157 53635 10k 0,75μH 6%	6505 4822 130 81497 1N4005GP
	3631 4822 051 10103 10k0 2% 0,25W	5177 4822 157 52333 COIL 100μH	6511 4822 130 80446 LL4148
	3632 4822 116 52207 1k2 5% 0,5W	5250 4822 157 50961 22μH	6513 4822 130 80446 LL4148
	3634 4822 051 10102 1k0 2% 0,25W	5251 4822 320 40235 DELAY LINE	6514 4822 130 80446 LL4148
	3635 4822 051 10562 5k60 2% 0,25W	5258 4822 157 51462 10μH	6515 4822 130 80446 LL4148
	3636 4822 051 10112 1k10 2% 0,25W	5259 4822 157 52808 10μH	6516 4822 130 80886 LLZ-F22
	3637 4822 051 10683 68k0 2% 0,25W	5284 4822 157 60141 3μH3	6521 4822 130 42488 BYD33D
	3638 4822 051 10272 2k70 2% 0,25W	5285 4822 157 60141 3μH3	6522 4822 130 30621 1N4148
	3639 4822 051 10112 1k10 2% 0,25W	5286 4822 157 60141 3μH3	6523 4822 130 80446 LL4148
	3660 4822 116 52226 560Ω 5% 0,5W	5296 4822 157 51462 10μH	6530 4822 130 82033 BYD34J
	3661 4822 116 52204 1k 5% 0,5W	5320 4822 157 52808 10μH	6537 4822 130 34167 BZX79-F6V2
	3662 4822 051 10008 0Ω 5% 0,25W	5440 4822 157 52983 2N2	6540 4822 130 42488 BYD33D
	3663 4822 051 10151 150Ω 2% 0,25W	5441 4822 146 21116 LOT DRIVER	6545 4822 130 42488 BYD33D
	3664 4822 116 52296 6k8 5% 0,5W	5443 4822 157 51462 10μH	6549 4822 130 80446 LL4148
	3665 4822 116 52204 1k 5% 0,5W	5445 4822 140 10406 L.O.T.	6554 4822 130 42489 BYD33G
	3666 4822 051 10151 150Ω 2% 0,25W	5447 4822 157 62766 262LYF-0095k	6555 4822 130 82305 LLZ-F18
	3667 4822 116 52233 10k 5% 0,5W	5449 4822 156 20966 47 μH	6557 4822 130 80887 LLZ-F36
	3668 4822 051 10433 43k0 2% 0,25W	5452 4822 157 51157 3,3μH	6558 4822 130 80887 LLZ-F36
	3669 4822 051 10153 15k0 2% 0,25W	5453 4822 157 51462 10μH	6559 4822 130 80887 LLZ-F36
	3670 4822 116 52233 10k 5% 0,5W	5454 4822 156 21332 LIN. COIL	6562 4822 130 80905 LLZ-F5V1
	3671 4822 051 10103 10k0 2% 0,25W	5470 4822 157 51462 10μH	6565 4822 130 81252 LLZ-F4V7
	3672 4822 051 10102 1k0 2% 0,25W	5500 4822 212 22978 MAINS FILTER	6568 4822 130 81147 LLZ-F6V2
	3673 4822 051 10103 10k0 2% 0,25W	5503 4822 157 51235 4μH 7 10%	6569 4822 130 80446 LL4148
	3674 4822 116 52204 1k 5% 0,5W	5515 4822 157 50963 2μH2	6570 4822 130 20245 SFOR5D43
	3676 4822 116 52233 10k 5% 0,5W	5519 4822 157 51235 4μH 7 10%	6573 4822 130 80446 LL4148
	3678 4822 051 10008 0Ω 5% 0,25W	5521 4822 157 51195 1 μH	6602 4822 130 82037 HZT33
	3679 4822 051 20222 2k20 5% 0,1W	5524 4822 157 53542 1μH 2%	6603 4822 130 80446 LL4148
	3680 4822 051 10008 0Ω 5% 0,25W	5525 4822 148 81121 SOPS TRF	6604 4822 130 80446 LL4148
	3682 4822 051 10008 0Ω 5% 0,25W	5531 4822 158 10551 27μH	6605 4822 130 80446 LL4148
	3683 4822 051 10008 0Ω 5% 0,25W	5532 4822 157 51157 3,3μH	6606 4822 130 80446 LL4148
	3684 4822 051 10332 3k30 2% 0,25W	5534 4822 157 62878 1μH	

## 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
	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

	4822 255 70251	CRT SOCKET
	4822 265 30735	5 PINS
	4822 265 30734	6 PINS
	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