Service
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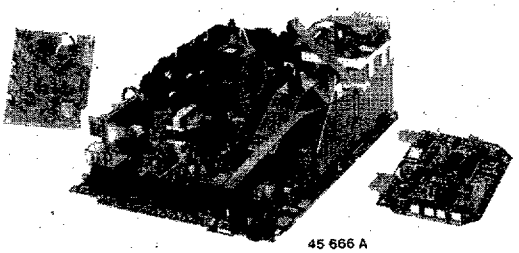
45 666 A

Service Manual

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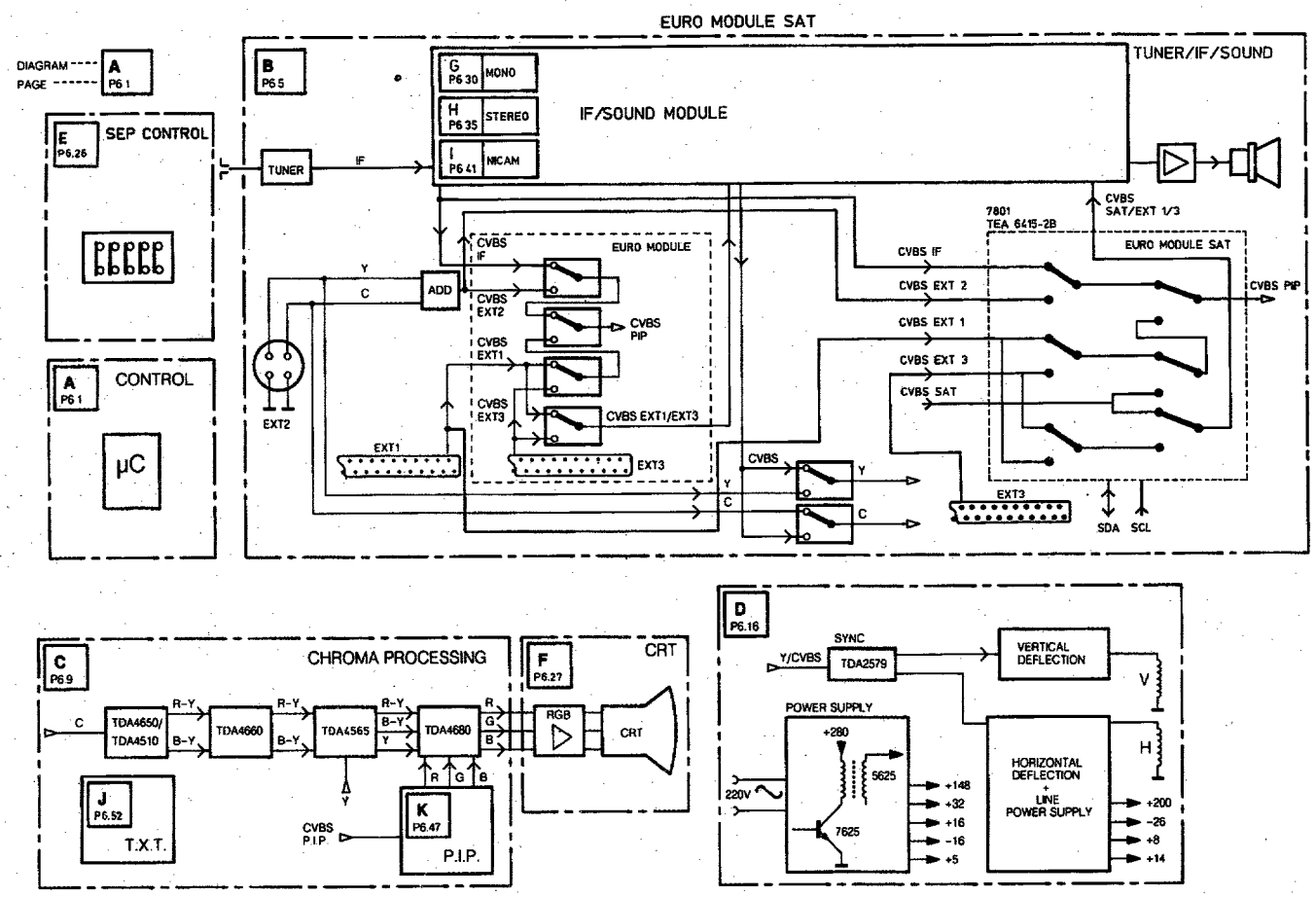
Block diagram



Technical specification

Mains voltag	:220 - 240 V (± 10%)
Mains frequency	:50 Hz (± 10%)
Aerial input impedance	:75Ω - coax
Minimum aerial voltage	:40µV
Maximum aerial voltage	:32mV
Pull-in range colour synchronization	: ± 300Hz
Pull-in range horizontal synchronization	: ± 300Hz

Local operation functions:

P +; P -; ◿ +; ◿ -; install

Programmes: 0-59
VCR operation on programmes: 0-59

Indications:

- On Screen Display (OSD)

- LED: - standby (red)
  - operation (green)
  - RC5 reception (flashing yellow)
  - internal fault in µP (flashing)

Errata

DIAGRAM: SCHALTBILD:	LOCATION: POSITION:	CORRECTION: KORREKTUR:	
(Page/ Seite):		Present situation: Vorliegende Situation:	Corrected situation: Korrekte Situation:
B (6.6)	C20	Item number R3386 Positionsnummer R3386	Item number R3886 Positionsnummer R3886
B (6.7)	O24	Connecting line reference E58 Verbindungsleitung Ref. E58	Connecting line reference D58 Verbindungsleitung Ref. D58
B (6.6)	B14	Connecting line reference A21 Verbindungsleitung Ref. A21	Connecting line reference D21 Verbindungsleitung Ref. D21
C (6.11)	K24	C2366	Delete C2366 C2366 entfernen
C (6.11)	N15 N16	Circuitry with TS7372 Circuitry with TS7374 Schaltung mit TS7322 Schaltung mit TS7374	Delete R3394, TS7372 and short circuit e-c TS7372 Delete R3395, TS7374 and short circuit e-c TS7374 R3394. TS7372 entfernen und Stromkreis e-c TS7372 kurzschließen R3305, TS7374 entfernen und Stromkreis e-c TS7374 kurzschließen
D (6.17)	E17		Add R3537 100kΩ (4822 116 52234) in series with R3539 R3537 100kΩ (4822 116 52234) in Reihe mit R3539 schalten
D (6.16)	A2	Connecting line reference B40 Verbindungsleitung Ref. B40	Connecting line reference B21 Verbindungsleitung Ref. B21
F (6.27/6.28)	D10	cD6301 connected to cTS7305 cD6331 connected to cTS7335 cD6361 connected to cTS7356 cD6302 verbunden mit cTS7305 cD6331 verbunden mit cTS7335 cD6361 verbunden mit cTS7356	cD6301 connected to bTS7305 cD6331 connected to bTS7335 cD6361 connected to bTS7356 cD6301 verbunden mit bTS7305 cD6331 verbunden mit bTS7335 cD6361 verbunden mit bTS7356
PWB mono carrier/Leiterplatte Monoträger (6.20)	F2	S5561	S5661
Spare parts list/ Stückliste (10.4)		6648-4822 130 34488-BZX79/F12	6648-4822 130 34197-BZX79/B12

Electrical adjustments/Electrische Abgleicharbeiten

Adapted Vg2, white drive, white limiter and cut-off settings: see service information GR2.2 93.02
Angepaßte Einstelungen für Vg2, Weißabgleich, Weißspitzenbegrenzung und Sperrpunktabgleich: siehe Service Information GR2.2 93.02

Turn page/Bitte wenden

Modifications during production/Änderungen während der Herstellung

* Modified line output transformer T5545: see of point 1 of service information GR2.2 93.01
* Modifizierter Zeilenausgangstransformator T5545: siehe Punkt 1 der Service-Information GR2.2 93.01

* Modified CRT panel: see points 2 and 3 of service information GR2.2 93.01
* Modifizierte CRT-Platine: siehe Punkt 2 und 3 der Service-Information GR2.2 93.01

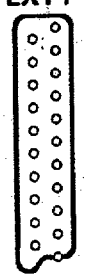
* Modified TXT module: see service information GR2.2 93.03
* Modifiziertes Videtext-Modul: siehe Service-Information GR2.2 93.03

* Modified IF module: see service information GR2.2 94.01
* Modifiziertes ZF-Modul: siehe Service-Information GR2.2 94.01

Connection facilities

1. Specification of the terminal sockets

EXT1



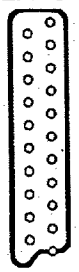
1 - Audio ⊖ R (0,5V_{RMS} ≤ 1kΩ)
2 - Audio ⊕ R (0,2 - 2V_{RMS}; 0,5 V_{nom}; ≥ 10kΩ)
3 - Audio ⊖ L (0,5V_{RMS} ≤ 1kΩ)
4 - Audio ⊥
5 - Blue ⊥
6 - Audio ⊕ L (0,2 - 2V_{RMS}; 0,5 V_{nom}; ≥ 10kΩ)
7 - Blue ⊕ (0,7V_{pp}/75Ω)
8 - RC5 ⊖ (500-800mV_{pp}) + CVBS-Status 1 ⊕ (0-2V: int.; 9,5-12V: ext.)
9 - Green ⊥
10 - -
11 - Green ⊕ (0,7V_{pp}; 75Ω)
12 - -
13 - Red ⊥
14 - -
15 - Red ⊕ (0,7V_{pp}; 75Ω)
16 - RGB-Status (0-0,4V: int. 1-3V ext. 75Ω)
17 - CVBS ⊖ ⊥
18 - CVBS ⊕ ⊥
19 - CVBS ⊖ (1V_{pp}/75Ω)
20 - CVBS ⊕ (1V_{pp}/75Ω)
21 - Earth screen

EXT2

1 - ⊥
2 - ⊥
3 - Y ⊕ (1V_{pp}; 75Ω)
4 - C ⊕ (1V_{pp}; 75Ω)

2x ◎ CINCH Audio ⊕ L+R (0,2-2V_{RMS}; 0,5 V_{nom} ≥ 10kΩ)

EXT3



1 - Audio ⊖ R (0,5V_{RMS}; ≤ 1kΩ)
2 - Audio ⊕ R (0,2 - 2V_{RMS}; 0,5 V_{nom}; ≥ 10kΩ)
3 - Audio ⊖ L (0,5V_{RMS}; ≤ 1kΩ)
4 - Audio ⊥
5 -
6 - Audio ⊕ L (0,2 - 2V_{RMS}; 0,5 V_{nom}; ≥ 10kΩ)
7 - -
8 - CVBS status 3 ⊖ (0-2V: int.; 9,5-12V: ext.)
9 - -
10 - -
11 - -
12 - -
13 - -
14 - -
15 - -
16 - -
17 - CVBS ⊖ ⊥
18 - CVBS ⊕ ⊥
19 - CVBS ⊖ (1V_{pp}/75Ω)
20 - CVBS ⊕ (1V_{pp}/75Ω)
21 - Earth screen

Audio out

2x ◎ CINCH Audio ⊖ L+R (0,5V_{RMS}; ≤ 1kΩ)

Front

◎ 3.5mm ≥ 8Ω

2. Connecting equipment

Depending on the type of TV set, a variety of equipment can be connected. The exact number of pieces of equipment depends on the number of connectors on the back of the TV set (EXT1, 2 or 3). The wiring diagram in Fig. 2.1 shows which kinds of equipment can be connected. The wiring diagram shows the TV set with the maximum number of connectors possible for the GR2.2 chassis.

An RGB source (e.g. laserdisc player) can only be connected to EXT1. In order to switch the TV set to RGB operation, this RGB source must generate both a CVBS status signal at pin 8 and an RGB status signal at pin 16 of the euroconnector. It is not possible to switch the equipment to EXT1 in RGB operation using the remote control.

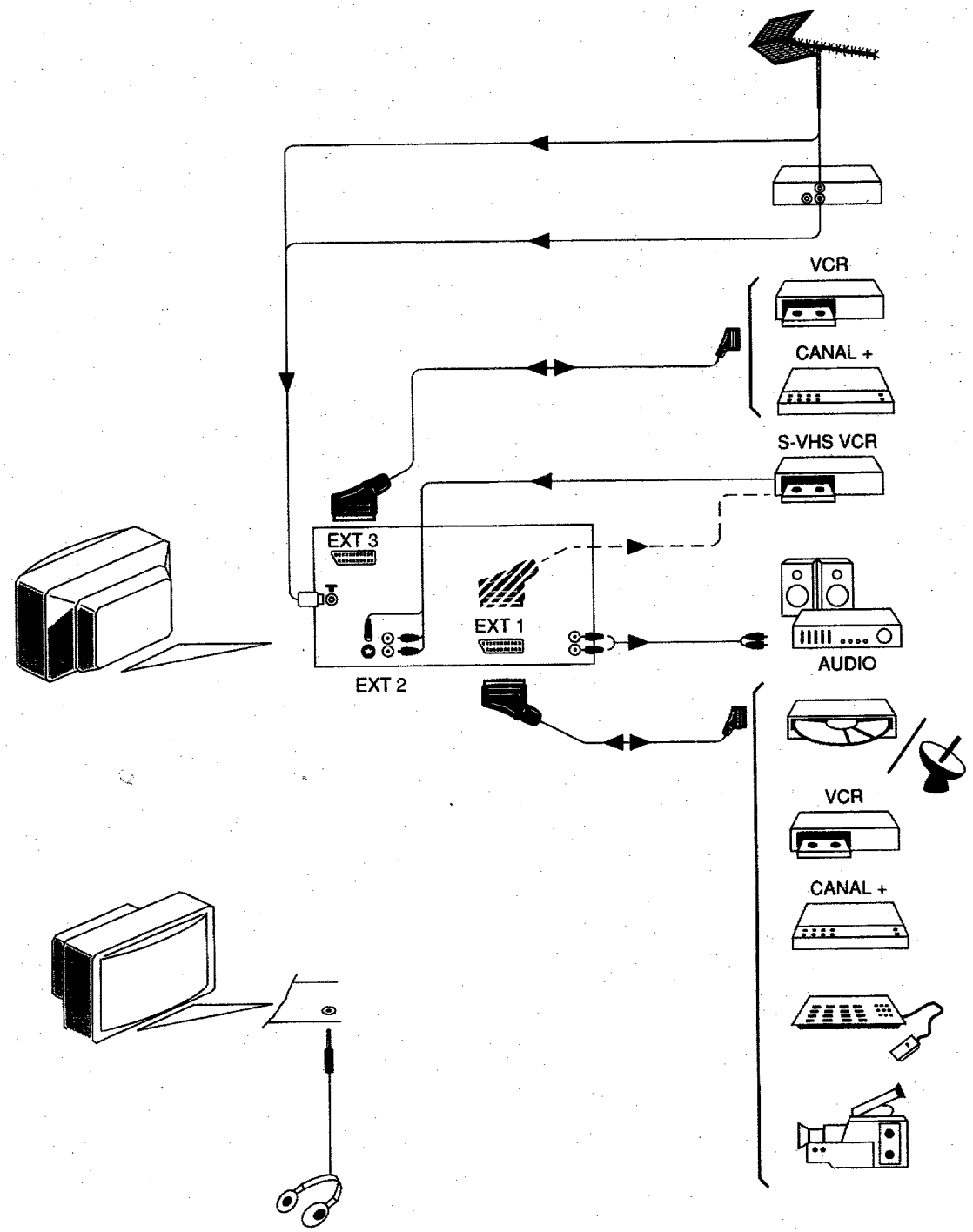


Fig. 2.1

Mechanical instructions

1. Removing the back plate

It is only possible to remove the back plate after removing the screws on the top, side, possibly on the underneath **and possibly under the EXT 3 connection** (see Fig. 4.1). In the case of subwoofer units, the subwoofer speaker on the carrier panel should also be unplugged.

2. Service position 1

Service position for module service and to measure test points
Unlock the chassis after the cables of the degaussing coil and any PIP module have been disconnected, and pull it backwards until all test points are accessible (see Fig. 4.2).
In order to make the tuner and the IF/sound module accessible, the bracket above these modules can be removed (see Fig. 4.3). With the exception of one fault message, the unit continues to function normally when the PIP module is not connected.

3. Service position 2

Service position for repair
Place the chassis on the heat sink on the tuner side after service position 1 is reached (see Fig. 4.4).
Warning: make sure that the heat sink of the sound output amplifier does not form a short circuit with the raster/line heat sink if the bracket of the euromodule has been removed!

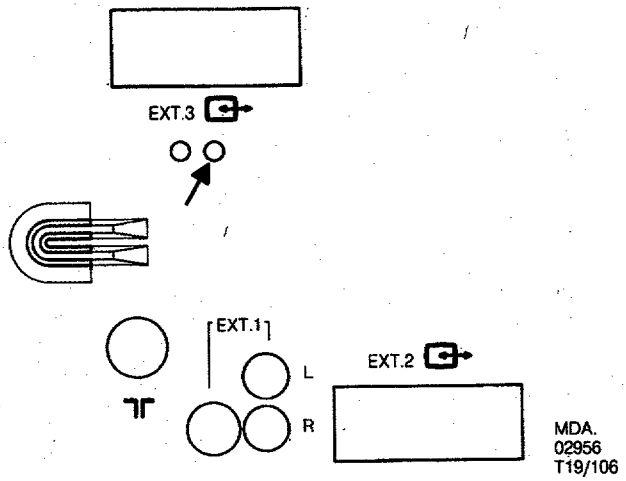


Fig. 4.1

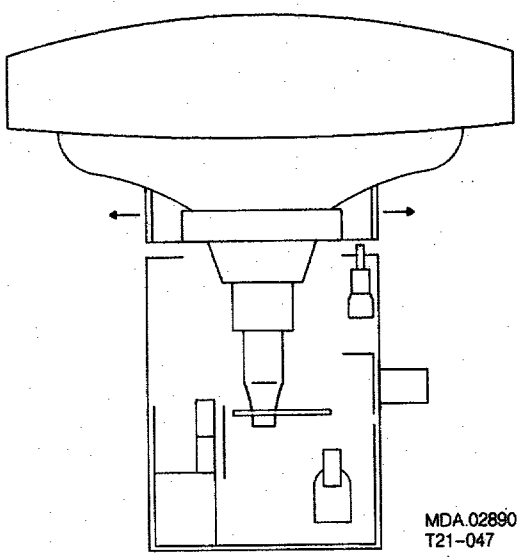


Fig. 4.2

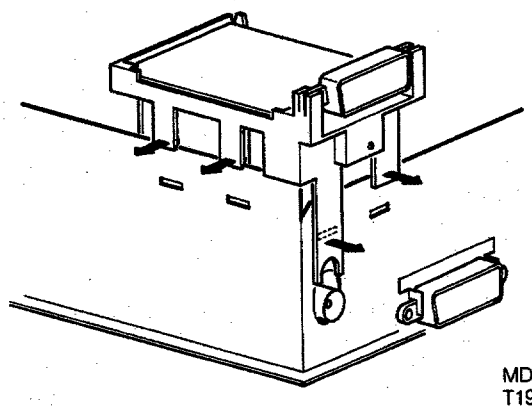


Fig. 4.3

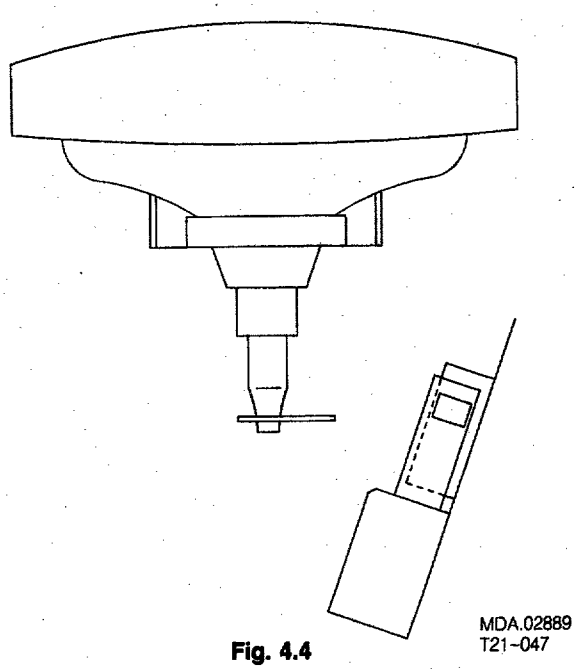


Fig. 4.4

Warnings

1. Safety regulations require that the unit should be returned in its original condition and that components identical to the original components are used. The safety components are indicated by the symbol ⚠.
2. In order to prevent damage to ICs and transistors, all high-voltage flashovers must be avoided. In order to prevent damage to the picture tube, it should be discharged using the method shown in Fig.3.1. Use a high-voltage probe and a multimeter (position DC-V). Discharge until the meter reading is OV (after approx. 30s).
3. **ESD**

   All ICs and many other semiconductors are sensitive to electrostatic discharges (ESD). Careless handling during repair can drastically shorten their life. Make sure that during repair you are connected by a pulse band with resistance to the same potential as the earth of the unit. Keep components and tools also at this same potential.
4. When repairing a unit, always connect it to the mains voltage via an isolating transformer.
5. Be careful when taking measurements in the high-voltage section and on the picture tube.
6. Never replace modules or other components while the unit is switched on.
7. It is recommended that safety goggles are worn when replacing the picture tube.
8. When making settings, use plastic rather than metal tools.
   This will prevent any short circuits and the danger of a circuit becoming unstable.
9. After repair the wiring should be fastened once more in the cable clamps for this purpose.
10. In order to prevent measuring errors, the heat sinks should not be used as reference points for measurements.
    The heat sink for the sound output amplifier (next to the channel selector) is connected to the -16 or -12 volts.
11. Together with the deflection unit and any multipole unit, the flat square picture tubes used form an integrated unit. The deflection and the multipole units are set optimally at the factory. Adjustment of this unit during repair is therefore not recommended.
12. The high-voltage cable in 21" units is glued in the line output transformer. This can therefore not be replaced.

Notes

1. The cold chassis direct voltages and oscillograms should be measured with regard to the tuner earth (⊥). Voltages on the line mains side of the SOPS transformer 5625 should be measured with respect to (⏚).
2. The direct voltages and oscillograms given in the diagrams should be measured in the service default mode (see section 9). A colour bar signal, modulated on a picture carrier wave of 475.25 MHz, should be used as the video signal. A 1 kHz signal should be used for the sound (for all systems).
3. Where necessary, the oscillograms and direct voltages are measured with (⏉) and without aerial signal(⏉). Voltages in the power supply section are measured both for normal operation (Ⓓ) and in standby (⏻). These values are indicated by means of the appropriate symbols.
4. The picture tube PCB has printed spark gaps. Each spark gap is connected between an electrode of the picture tube and the Aquadag coating.
5. The semiconductors indicated in the circuit diagram and in the parts lists are completely interchangeable per position with the semiconductors in the unit, irrespective of the type indication on these semiconductors.
6. The connectors used for the modules (board to board) are gold-plated and should only be replaced by the same type.
7. In the case of fault finding and/or repair to the teletext module, the accessibility of the circuit and the components can be increased by using extension cards.
   The order numbers of these extension cards are:
   * 6 times: 4822 395 30259
   * 8 times: 4822 214 31402
8. Both multisystem and single system units are mentioned in this documentation.
   The term multisystem unit is used to refer to a unit that is suitable for the reception of PAL BGI and SECAM BGLL' systems.
   A multi-system set for Eastern-Europa is suitable for the reception of the PAL/SECAM BGDK systems. The term single system unit is used to refer to all other units (such as PAL BG, PAL/SECAM BG and PAL I units).
9. Blackline units can be recognized by the thick, protected high-voltage cable. Non-blackline units have a thin, unprotected high-voltage cable.

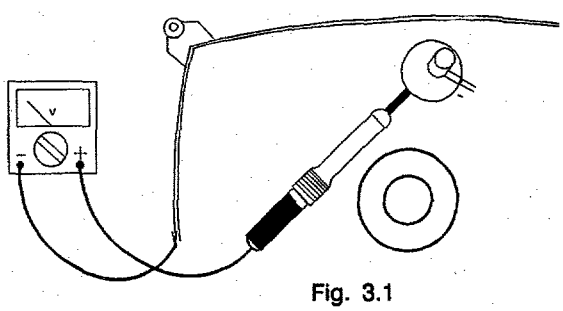
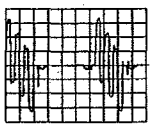
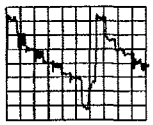


Fig. 3.1

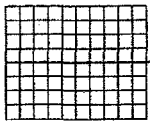
Oscillogrammes / Oszillogramme / Oscillogrammes



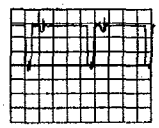
TP 1
0,2 V/div AC
20 µS/div



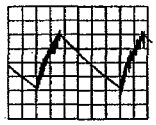
TP 8
50 mV/div AC
10 µS/div



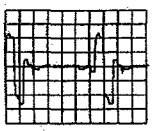
TP 14 ⏱
0,2 V/div DC
0,5 mS/div



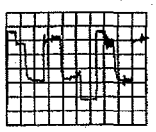
TP 21
0,5 V/div DC
5 µS/div



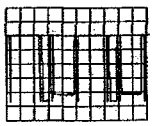
TP 26 ⏱
0,1 V/div AC
5 mS/div



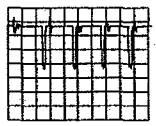
TP 2
0,2 V/div AC
20 µS/div



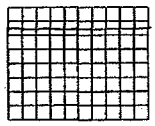
TP 9
0,5 V/div AC
10 µS/div



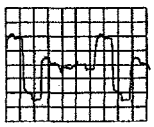
TP 15
1 V/div AC
0,2 mS/div



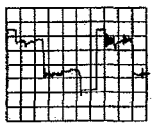
TP 21 ⏱
0,5 V/div DC
10 µS/div



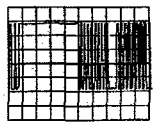
TP 27
1 V/div DC



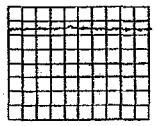
TP 3
0,2 V/div AC
10 µS/div



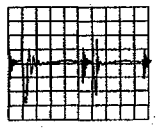
TP 10
0,5 V/div AC
10 µS/div



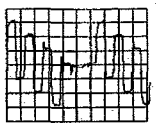
TP 16
1 V/div DC
0,1 mS/div



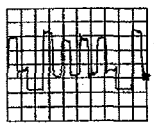
TP 22
1 V/div DC



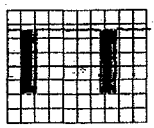
TP 27 ⏱
50 mV/div AC
10 mS/div



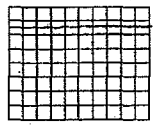
TP 4
0,2 V/div AC
10 µS/div



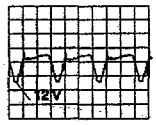
TP 11
0,5 V/div AC
10 µS/div



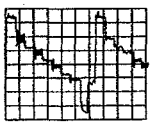
TP 17
1 V/div DC
20 mS/div



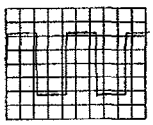
TP 23
1 V/div DC



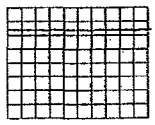
TP 28
0,5 V/div AC
5 µS/div



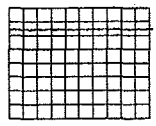
TP 5
0,1 V/div AC
10 µS/div



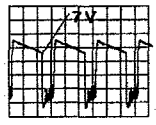
TP 12
1 V/div AC
10 µS/div



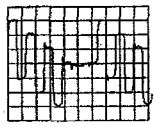
TP 18
2 V/div DC
20 mS/div



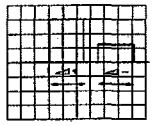
TP 24
5V/div DC



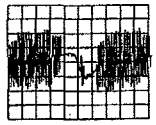
TP 28 ⏱
1 /div AC
10 mS/div



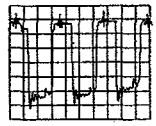
TP 6
0,2 V/div AC
10 µS/div



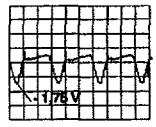
TP 13
1 V/div DC
1 S/div



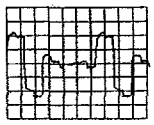
TP 19
50 mV/div AC
10 µS/div



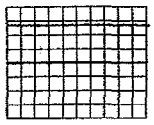
TP 25
0,2 V/div AC
5 µS/div



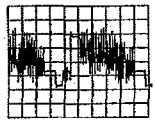
TP 29
0,5 V/div AC
5 µS/div



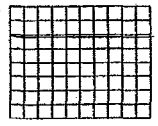
TP 7
0,2 V/div AC
10 µS/div



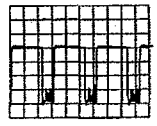
TP 14
1 V/div DC
0,5 mS/div



TP 20
0,5 V/div AC
10 µS/div

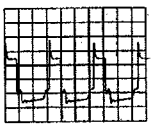


TP 26
1 V/div DC

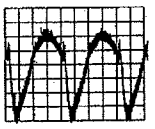


TP 29 ⏱
1 V/div AC
10 mS/div

Oscillogrammes / Oszillogramme / Oscillogrammes

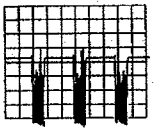


TP 30
2 V/div DC
5 µS/div

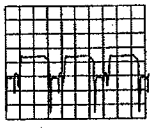


TP 36
0,2 V/div AC
5 mS/div

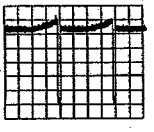
TP 41 b
5 V/div AC
5 mS/div



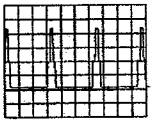
TP 30 ⏻
1 V/div DC
10 mS/div



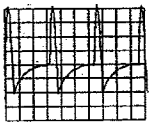
TP 37
2 V/div AC
20 µS/div



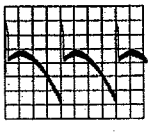
TP 41 c
0,1 V/div AC
5 mS/div



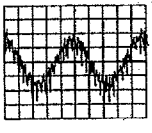
TP 31
2 V/div DC
20 µS/div



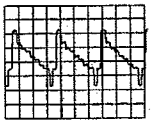
TP 38
20 mV/div AC
20 µS/div



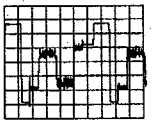
TP 41 d
5 V/div AC
5 mS/div



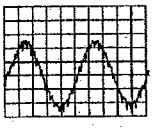
TP 32
50 mV/div DC
0,2 mS/div



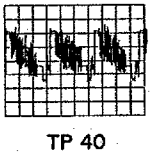
TP 39
0,2 V/div AC
20 µS/div



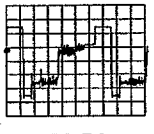
TP 51
130 V_{pp}
115 V_{pp} for 21"



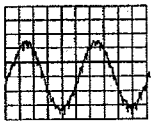
TP 33
2 V/div DC
0,2 mS/div



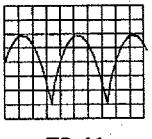
TP 40
0,5 V/div AC
20 µS/div



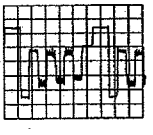
TP 52
120 V_{pp}
115 V_{pp} for 21"



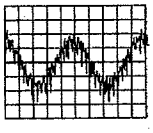
TP 34
2 V/div DC
20 µS/div



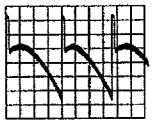
TP 41
2 V/div AC
5 mS/div



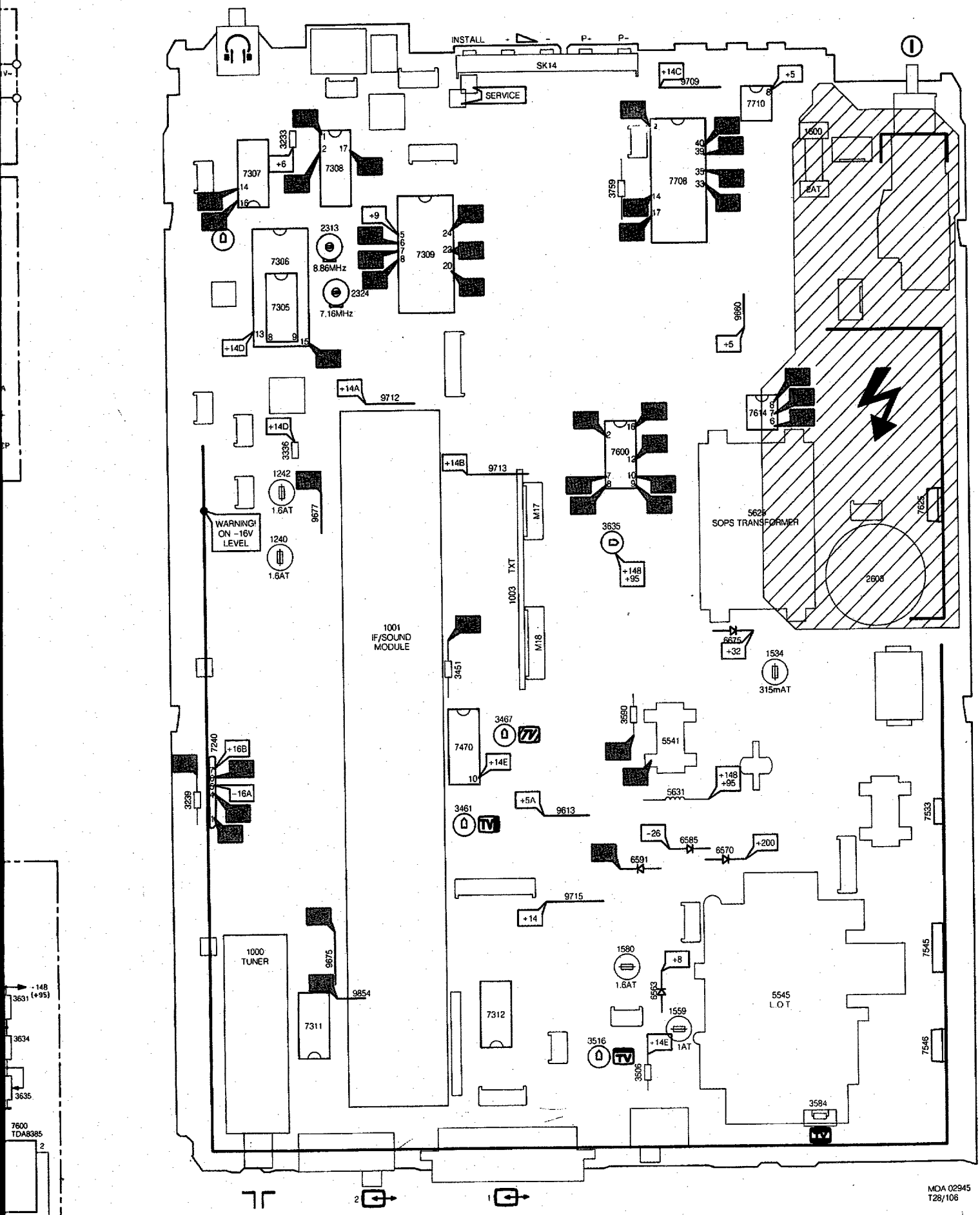
TP 53
120 V_{pp}
110 V_{pp} for 21"

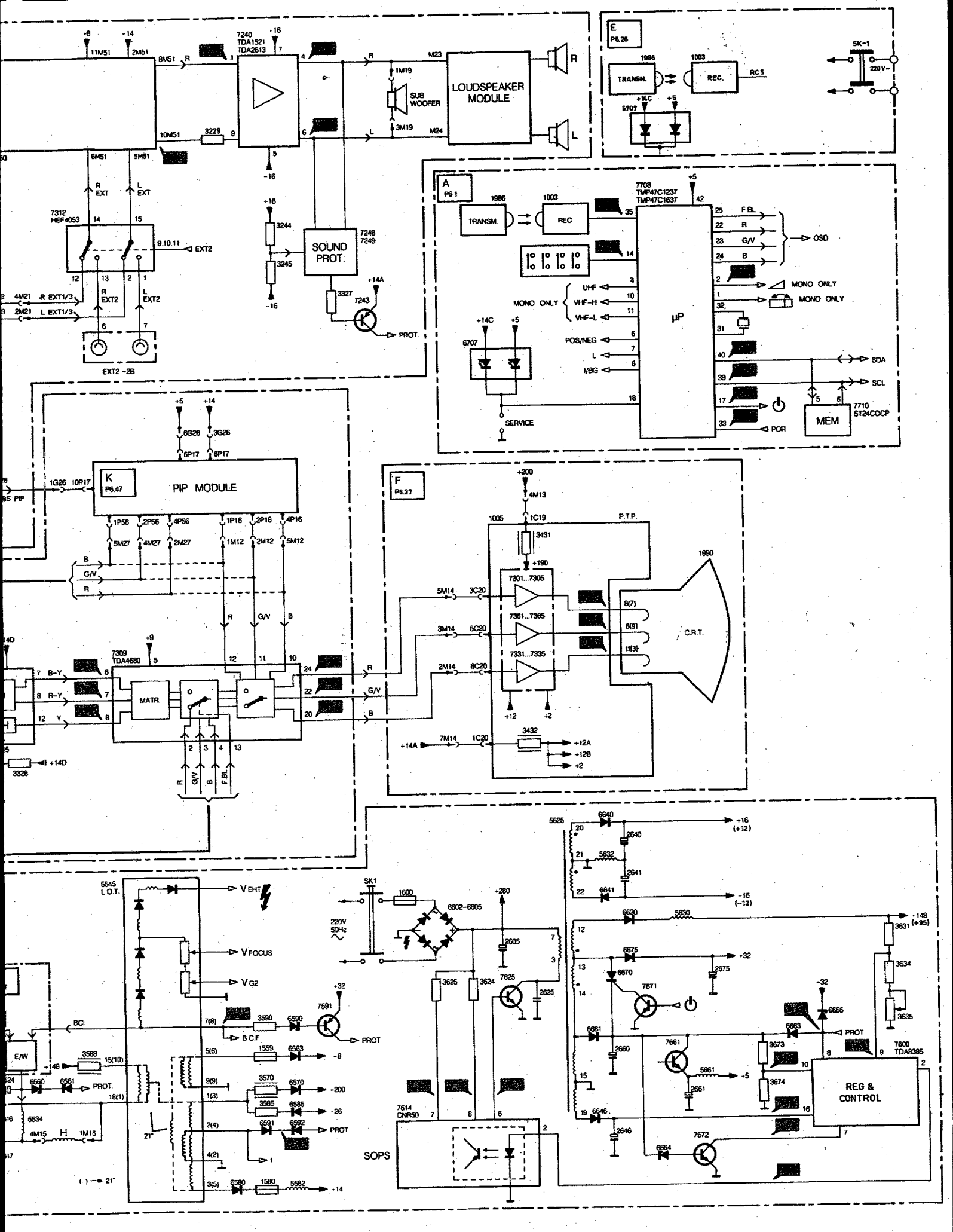


TP 35
50 mV/div DC
0,2 mS/div

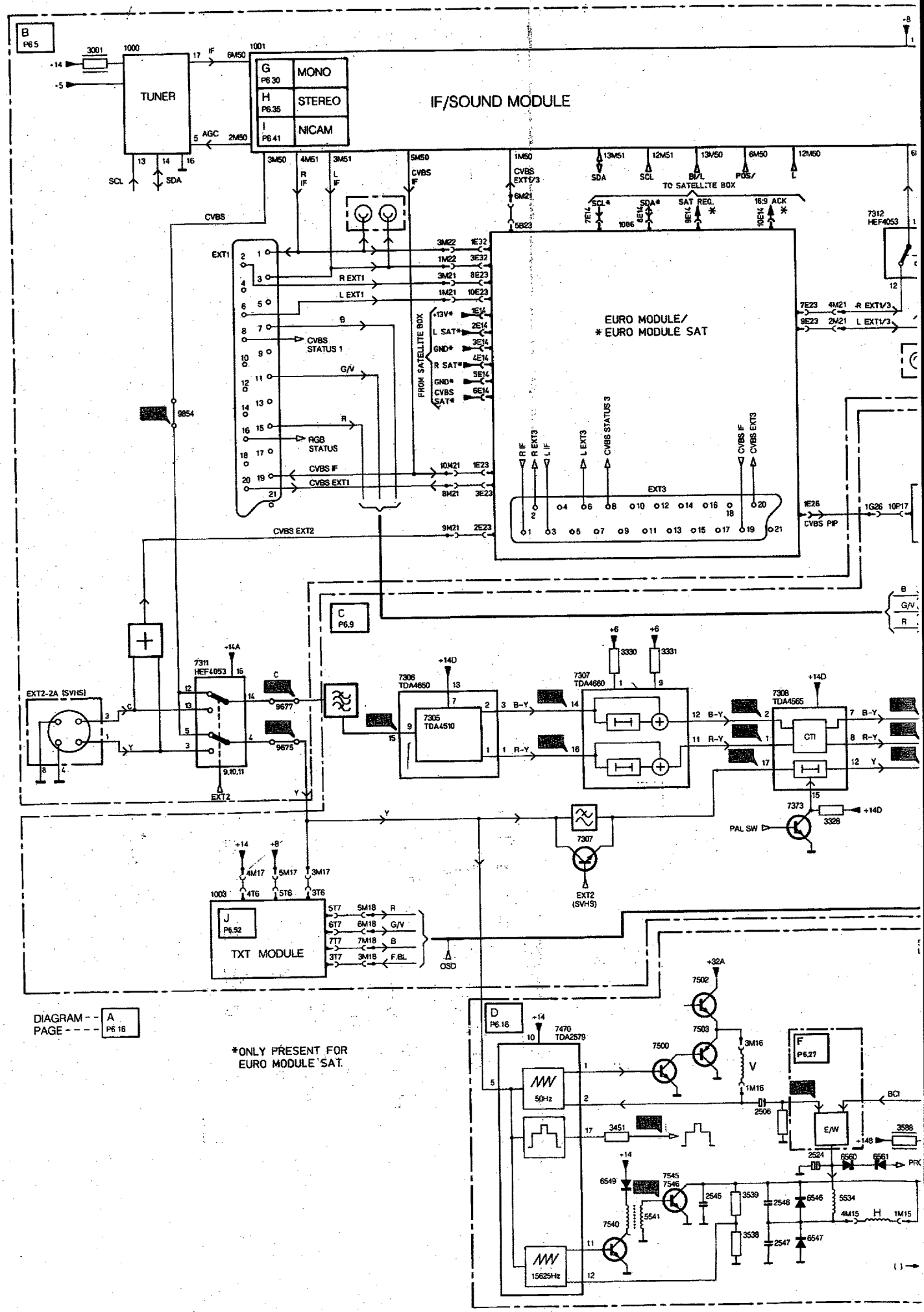


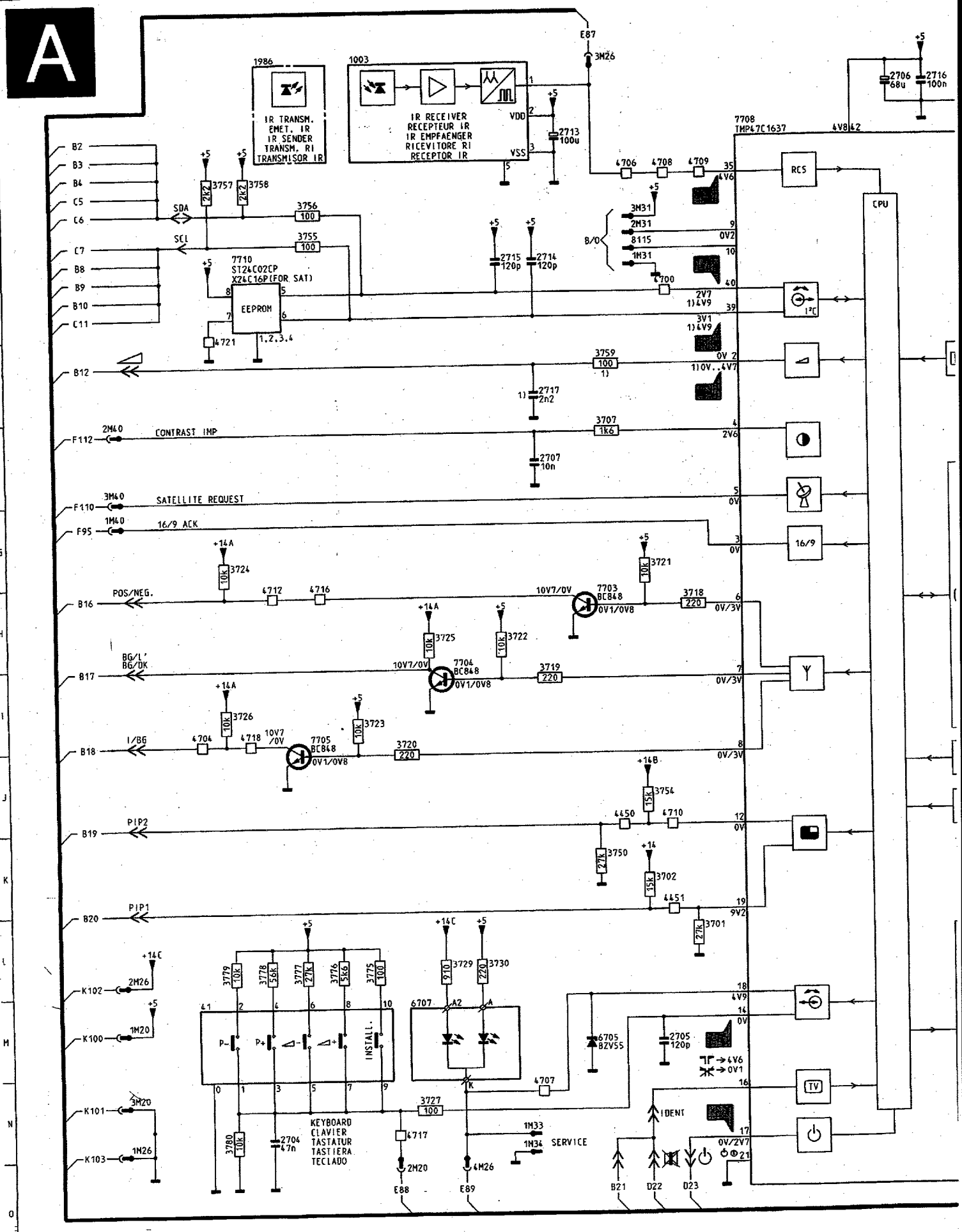
TP 41 a
5 V/div AC
5 mS/div


INSTALL
SK14
SERVICE
P+
P-
+14C
9709
+5
7710
1600
BAT
7708
3759
7307
3233
+6
7308
+9
7309
2313
8.86MHz
2324
7.16MHz
7306
7305
+14D
9680
+14A
9712
7614
7600
+14B
9713
M17
M18
TXT
1003
WARNING!
ON -16V
LEVEL
1242
1.6AT
1240
1.6AT
9677
3336
3635
+14B
+95
5625
SOPS TRANSFORMER
2608
7625
1001
IF/SOUND
MODULE
3451
6675
+32
1534
315mAT
7470
3467
+14E
3590
5541
+148
+95
5631
7533
3461
+5A
9613
-26
6585
6570
+200
6591
9715
+14
1000
TUNER
9675
9854
7311
7312
1580
1.6AT
+8
6563
1559
1AT
+14E
3516
3506
5545
L.O.T
7545
3584
7240
+16B
-16A
3239
MDA 02945
T28/106

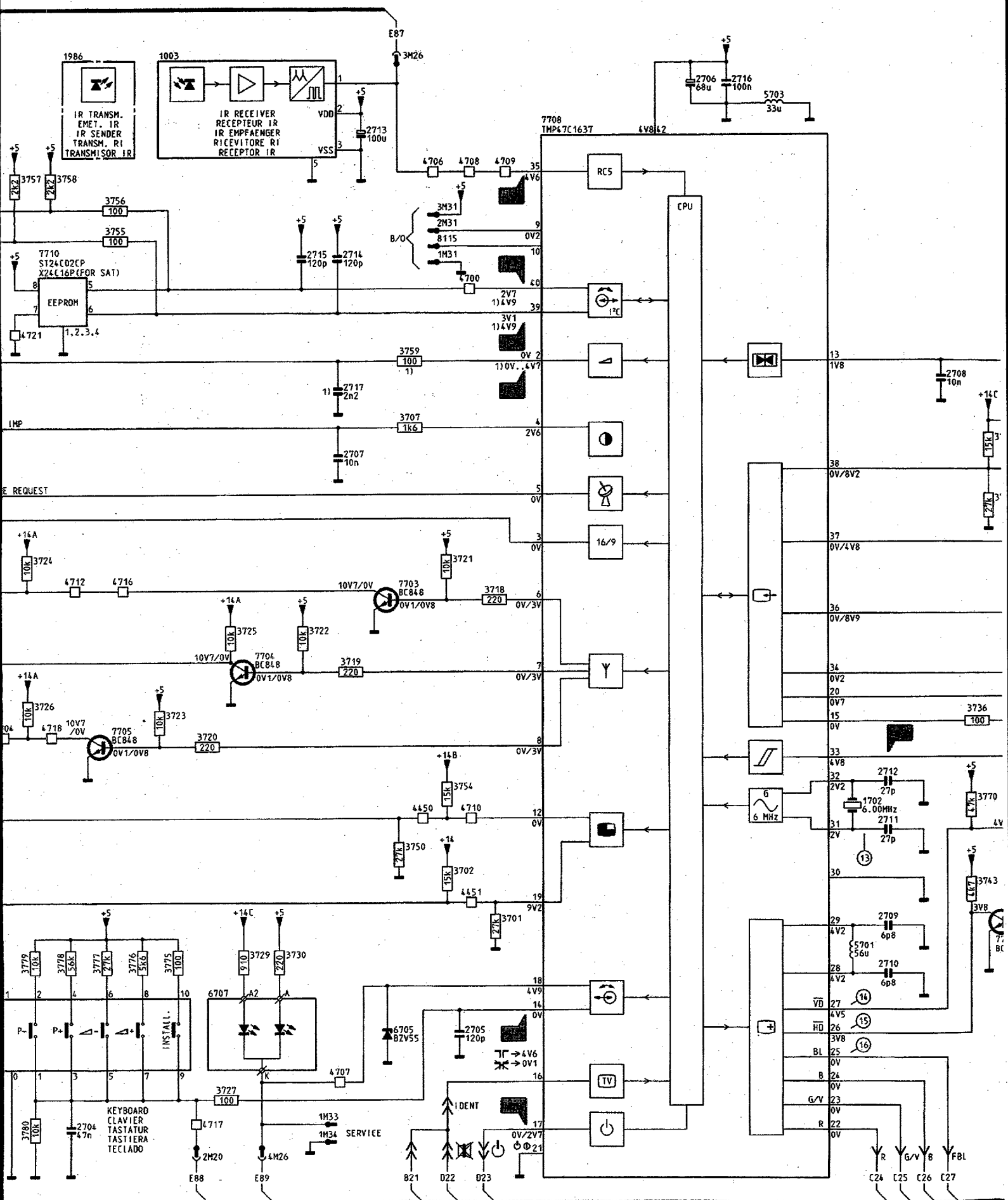

LOUDSPEAKER MODULE
SUB WOOFER
SOUND PROT.
PIP MODULE
MATR.
C.R.T.
REG & CONTROL
SOPS
TRANSM.
REC.
μP
MEM
SERVICE
OSD
MONO ONLY
SDA
SCL
POR
PROT.
EXT2 -2B
7240 TDA1521 TDA2613
7312 HEF4053
7248 7249
7708 TMP47C1237 TMP47C1637
7710 ST24COCP
7309 TDA4680
7301...7305
7361...7365
7331...7335
7600 TDA8385
7614 CNR50
5545 L.O.T.
220V 50Hz
SK-1
220V~

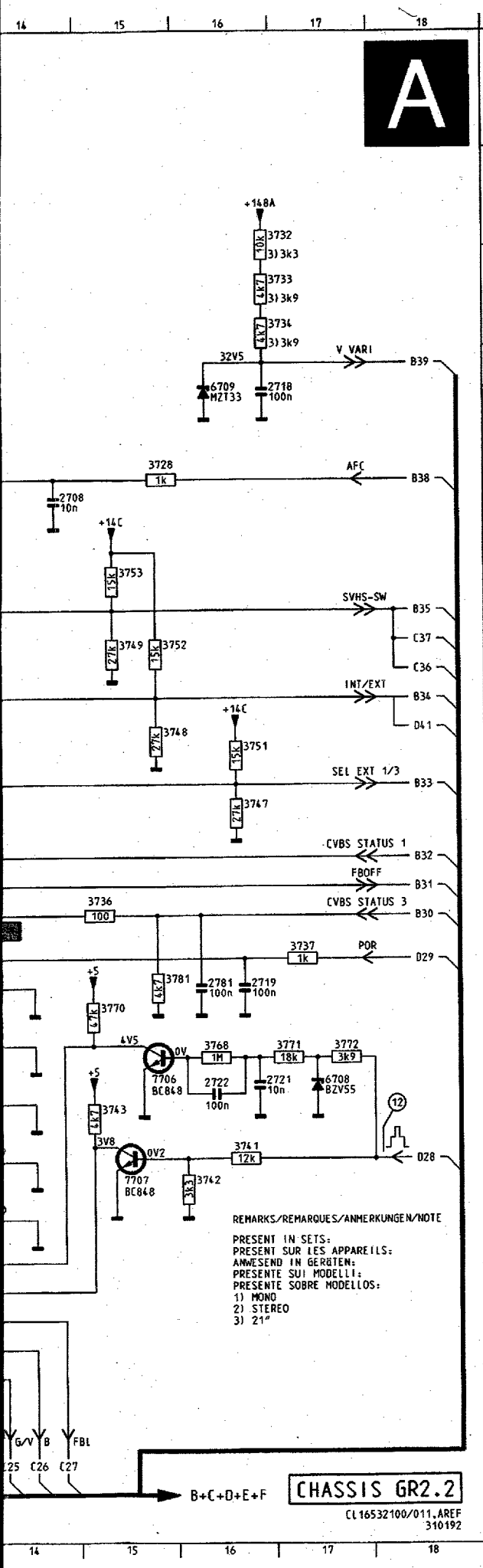
Blockdiagram / Blockschaltbild / Schéma-bloc




A
1986
IR TRANSM.
EMET. IR
IR SENDER
TRANSM. RI
TRANSMISOR IR
1003
IR RECEIVER
RECEPTEUR IR
IR EMPFAENGER
RICEVITORE RI
RECEPTOR IR
VDD
VSS
E87
3M26
2713 100u
7708
TMP47C1637
4V8 42
2706 68u
2716 100n
RCS
CPU
I²C
16/9
TV
B2
B3
B4
C5
C6
C7
B8
B9
B10
C11
SDA
SCL
3757 2k2
3758 2k2
3756 100
3755 100
7710
ST24C02CP
X24C16P(FOR SAT)
EEPROM
4721
1.2.3.4
2715 120p
2714 120p
B/O
3M31
2M31
8115
1M31
4700
2V7
1)4V9
3V1
1)4V9
0V 2
1)0V..4V7
B12
3759 100
1)
1) 2717 2n2
F112
2M40
CONTRAST IMP
3707 1k6
2707 10n
2V6
F110
3M40
SATELLITE REQUEST
F95
1M40
16/9 ACK
B16
POS/NEG.
4712
4716
+14A
3724 10k
10V7/0V
7703 BC848
0V1/0V8
3721 10k
3718 220
0V/3V
B17
BG/L'
BG/DK
3725 10k
3722 10k
7704 BC848
3719 220
B18
I/BG
4704
4718
3726 10k
3723 10k
7705 BC848
3720 220
+14B
3754 15k
4450
4710
B19
PIP2
3750 27k
3702 15k
4451
B20
PIP1
3701 27k
9V2
K102
2M26
K100
1M20
K101
3M20
K103
1M26
3779 10k
3778 56k
3777 27k
3776 5k6
3775 100
P-
P+
INSTALL.
6707
3729 910
3730 220
6705 BZV55
2705 120p
4707
3727 100
4717
2M20
E88
4M26
E89
KEYBOARD
CLAVIER
TASTATUR
TASTIERA
TECLADO
3780 10k
2704 47n
1M33
1M34
SERVICE
IDENT
B21
D22
D23
4V6
0V1
0V/2V7

Controls / Bedienung / La Commande





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	1702	J13
	1986	A 3
	2M31	C 9
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	2705	M 8
	2706	A11
	2707	F 7
	2708	E14
	2709	L14
	2710	L14
	2711	K14
B	2712	J14
	2713	B 7
	2714	D 7
	2715	D 6
	2716	A12
	2717	E 7
	2718	D16
	2719	J16
C	2721	K16
	2722	K16
	2781	J16
	3701	L 9
	3702	K 8
	3707	F 8
	3718	H 9
D	3719	I 7
	3720	I 5
	3721	G 8
	3722	H 6
	3723	I 5
	3724	G 3
	3725	H 6
	3726	I 3
E	3727	N 5
	3728	E15
	3729	L 6
	3730	L 6
	3732	B16
	3733	C16
	3734	C16
F	3736	I 15
	3737	J17
	3741	L16
	3742	L16
	3743	K15
	3747	H16
	3748	G15
	3749	F15
G	3750	K 8
	3751	H16
	3752	F15
	3753	F15
	3754	J 8
	3755	C 4
	3756	C 4
	3757	C 3
H	3758	C 3
	3759	E 8
	3768	K16
	3770	J15
	3771	K17
	3772	K17
	3775	L 5
I	3776	L 4
	3777	L 4
	3778	L 3
	3779	L 3
	3780	N 3
	3781	J15
	41	M 3
J	4450	J 8
	4451	K 8
	4700	D 8
	4704	I 3
	4706	B 8
	4707	N 7
	4708	B 8
	4709	B 9
K	4710	J 8
	4712	H 4
	4716	H 4
	4717	N 5
	4718	I 3
	4721	E 3
	5701	L13
	5703	B12
L	6705	M 7
	6707	M 5
	6708	K17
	6709	D16
	7703	H 8
	7704	I 6
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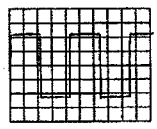
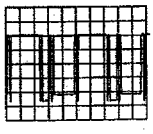
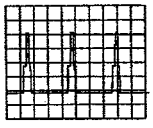
M	7706	K15
	7707	L15
	7708	B 9
	7710	D 3
	8115	F 9
N		
O		



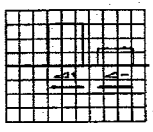
TP 12
1 V/div AC
10 µS/div



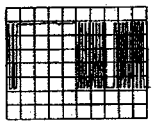
TP 15
1 V/div AC
0,2 mS/div



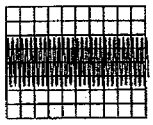
⑫
2 V/div AC
20 µS/div



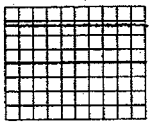
TP 13
1 V/div DC
1 S/div



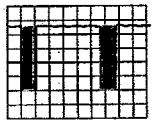
TP 16
1 V/div DC
0,1 mS/div



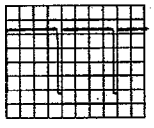
⑬
1 V/div AC
0,5 µS/div



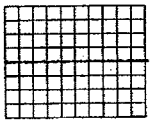
TP 14
1 V/div DC
0,5 mS/div



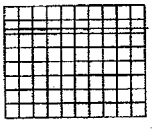
TP 17
1 V/div DC
20 mS/div



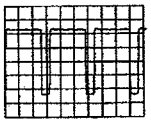
⑭
1 V/div AC
5 mS/div



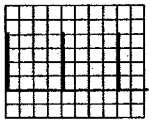
TP 14 ⏻
0,2 V/div DC
0,5 mS/div



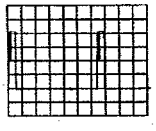
TP 18
2 V/div DC
20 mS/div



⑮
1 V/div AC
20 µS/div

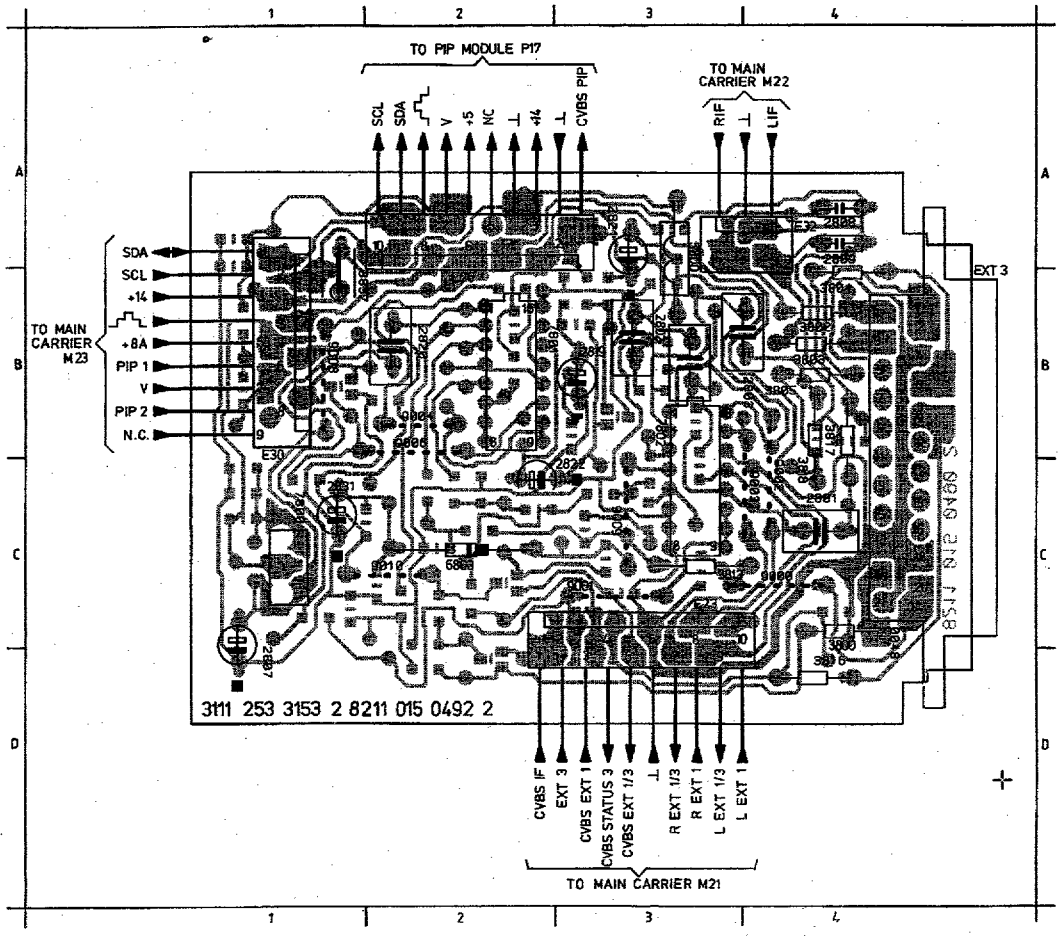


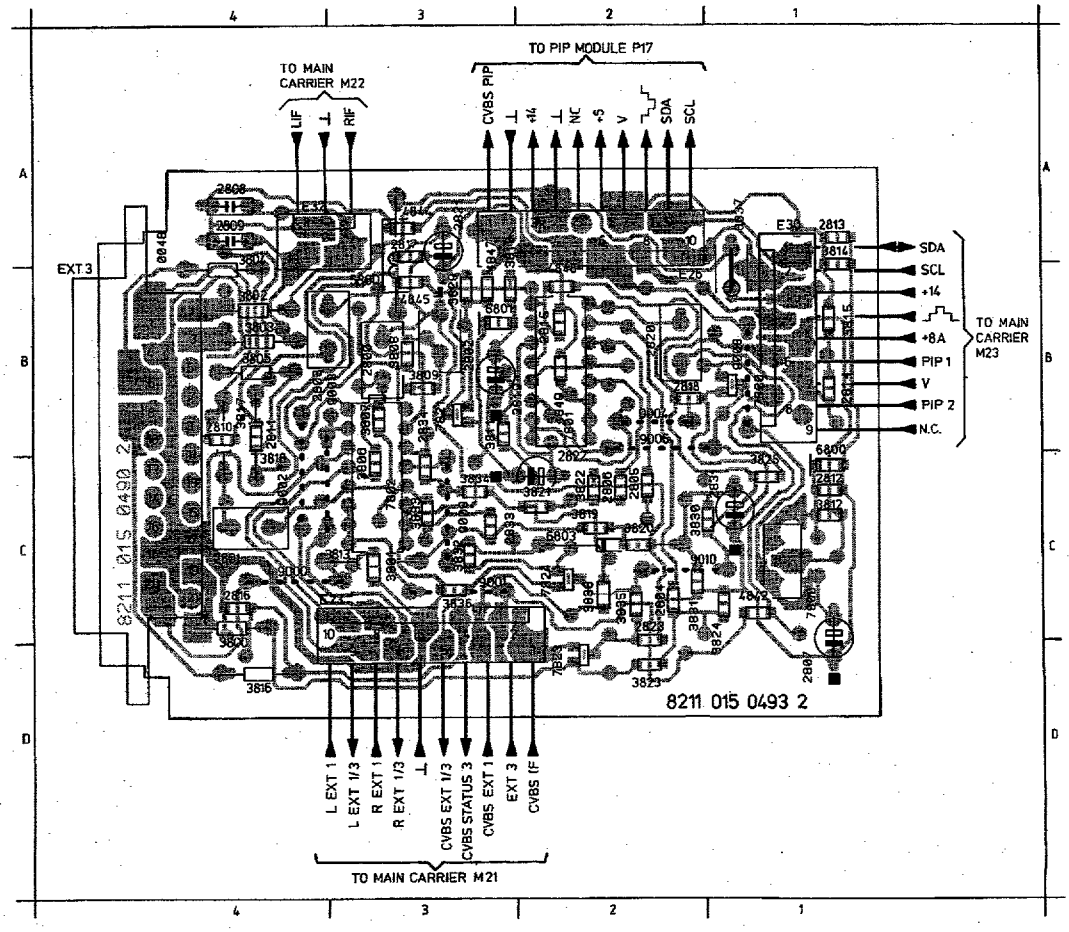
⑯
0,5 V/div AC
5 mS/div



⑯
1 V/div AC
10 µS/div

Euro module (ECO)
Euro-AV-Platte (ECO)
Module Prise Péritélévision (ECO)





E23 D3
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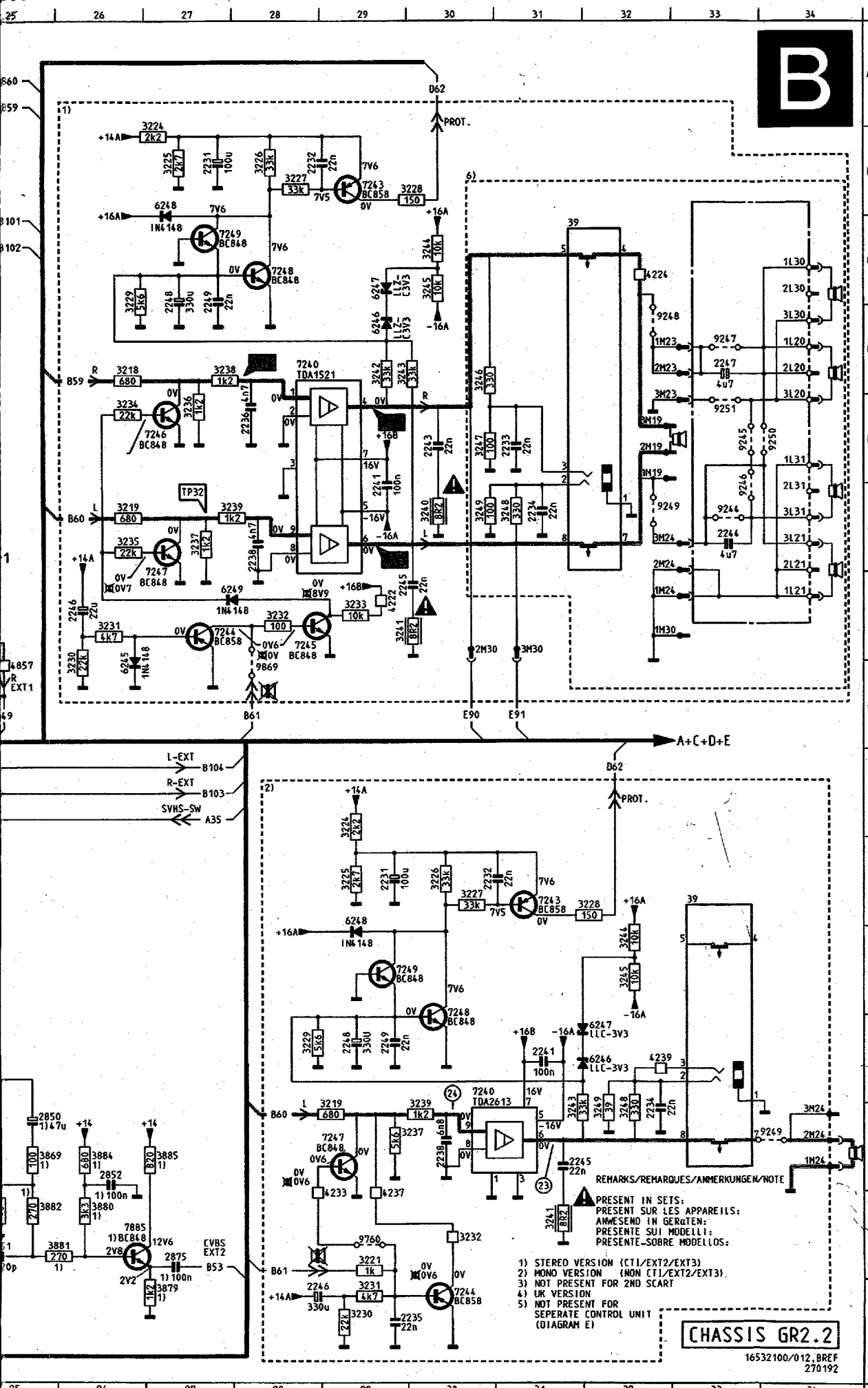
E30 B1
E32 A3
0048 C4
2800 B3
2801 C4
2802 B3
2803 B4
2804 D2
2805 C2
2806 C2
2807 D1
2808 A4
2809 B4
2810 C4
2811 C4
2812 C1
2813 B1
2814 B1
2815 B2
2816 D4
2817 B3
2818 C2
2819 B3
2820 B2
2821 B3
2822 C2
2823 D2
2831 C1
2833 C3
2834 C3
3800 D4
3801 C3
3802 B4
3803 B4
3804 B4
3805 B4
3806 C3
3807 C3
3808 B3
3809 B3
3810 B3
3811 C3
3812 C1
3813 C3
3815 B1
3816 D4
3817 C4
3818 C4
3819 C2
3820 C2
3821 C2
3822 C2
3823 D2
3824 D1
3825 C1
3829 B3
3830 C2
3831 C2
3832 C3
3833 C3
3834 C3
3835 D2
3836 D3
3837 B1
3838 D2
4800 A4
4842 D1
4844 B3
4845 B3
4847 B3
4848 B2
4849 B2
5800 B3
6800 C1
6801 B3
6803 C2
7800 C1
7801 B2
7802 C3
7820 B1
7821 C3
7823 D2
7824 C2
9000 C4
9001 D3
9002 C4
9003 C4
9004 C2
9006 C2
9008 B1
9009 C3
9010 C2



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	1242	H 3	3260	I21
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A	2002	F 2	3262	D24
	2003	G 3	3263	K20
	2004	D 4	3264	L20
	2008	G 4	3265	H22
	2010	G 4	3266	H25
	2230	F 1	3267	I23
	2231	J29	3268	I23
	2231	B27	3386	C20
B	2232	J30	3850	E21
	2232	B28	3851	G22
	2233	E31	3852	G22
	2234	M32	3853	G23
	2234	F31	3854	G23
	2235	O29	3855	H21
	2236	E28	3856	E21
	2237	J 4	3857	E21
C	2238	M30	3858	D21
	2238	F28	3859	D21
	2239	I 5	3860	G21
	2240	J 4	3861	O21
	2241	L31	3862	F21
	2241	F29	3866	J22
	2242	I 4	3867	O24
	2243	E30	3868	N25
D	2244	F33	3869	M25
	2245	M31	3870	M24
	2245	G29	3871	N22
	2246	O28	3872	F20
	2246	G26	3874	H20
	2247	D33	3879	O27
	2248	L29	3880	N26
E	2248	C27	3881	N25
	2249	L29	3882	N25
	2249	C27	3884	M26
	2250	D23	3885	M27
	2251	D25	3887	B21
	2252	I22	3888	F23
	2254	G23	3889	C21
	2255	G25	3890	D21
F	2256	H24	39	C31
	2257	H23	39	J33
	2262	M20	4222	G29
	2263	M21	4223	J 4
	2264	L21	4224	C32
	2265	L21	4233	N29
	2266	I23	4237	N29
G	2850	M25	4239	L32
	2851	N25	4850	O22
	2852	M26	4851	N23
	2853	C21	4853	K21
	2854	G21	4856	G22
	2875	N27	4857	H25
	3001	B 2	4858	J22
H	3002	H 5	4859	J24
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	3010	F 4	4861	F 4
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	3219	F26	5001	G 3
	3220	H 4	5240	I 3
	3221	N29	5242	H 3
I	3222	K 1	6245	H26
	3224	I29	6246	L32
	3224	B27	6246	D29
	3225	J29	6247	L32
	3225	B27	6247	C29
	3226	J30	6248	B27
	3226	B28	6248	J29
J	3227	J30	6249	G27
	3227	B28	7003	G 3
	3228	J32	7240	L30
	3228	B30	7240	D28
	3229	I28	7243	J31
	3229	C26	7243	B29
	3230	O29	7244	D30
	3230	H26	7244	G27
K	3231	O29	7245	G28
	3231	G26	7246	E27
	3232	N30	7247	M29
	3232	G28	7247	F27
	3233	G29	7248	L30
	3234	E26	7248	C28
	3235	F26	7249	K29
	3236	E27	7249	C27
L	3237	M29	7311	M22
	3237	F27	7312	J22
	3238	D27	7850	C21
	3239	M30	7885	N26
	3239	F27	7886	F20
	3240	F30	9244	F33
	3241	N31	9245	E33
M	3241	G29	9246	F33
	3242	D29	9247	D33
	3243	D29	9248	D32
	3243	M31	9249	F32
	3244	C30	9249	M34
	3244	K32	9250	E34
	3245	C30	9251	E33
N	3245	K32	9760	N29
	3246	D30	9869	H28
	3247	E30		
	3248	M32		
	3248	F31		
	3249	M32		
	3249	F30		
	3250	G24		
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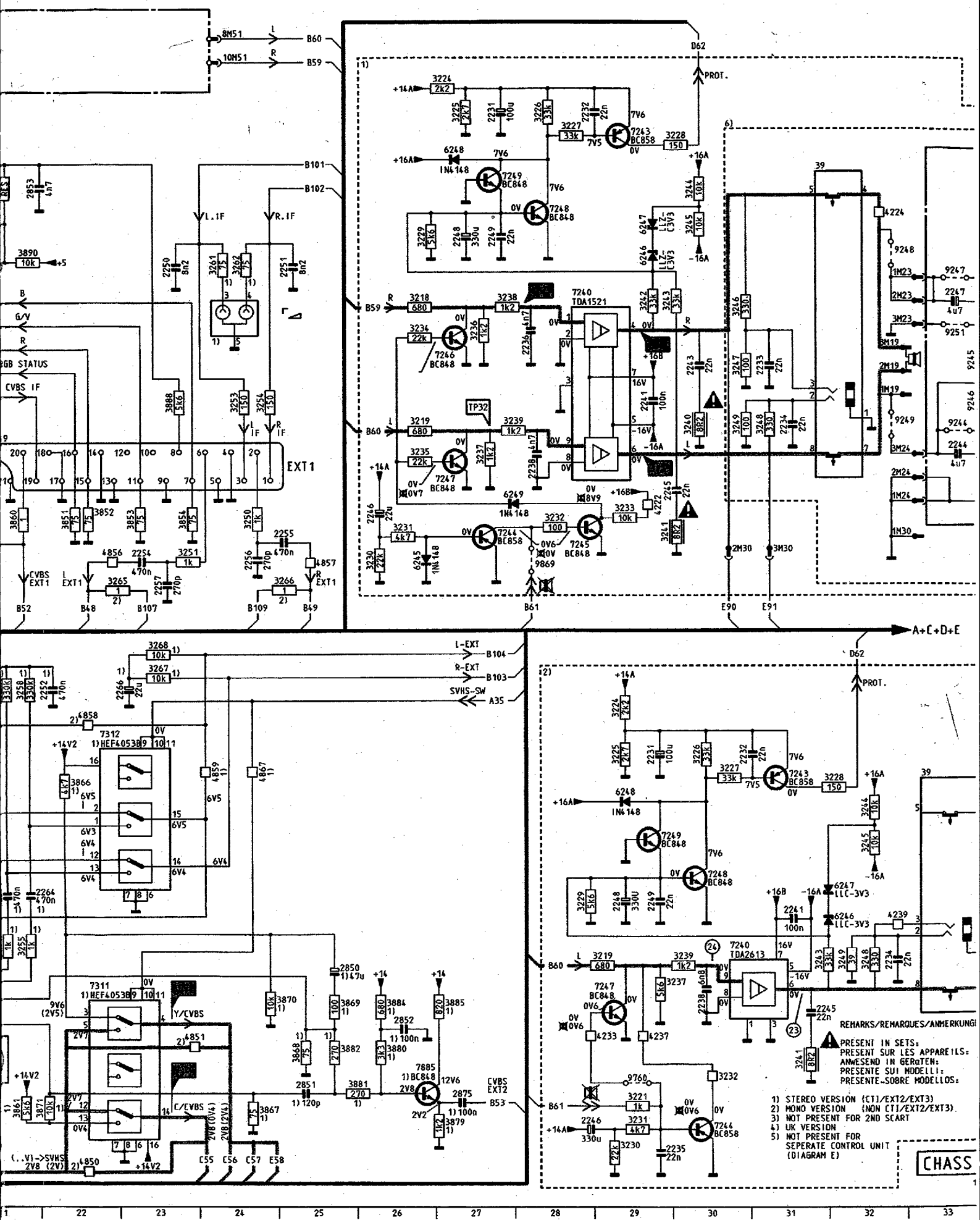
8M51
10M51
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B59
B101
B102
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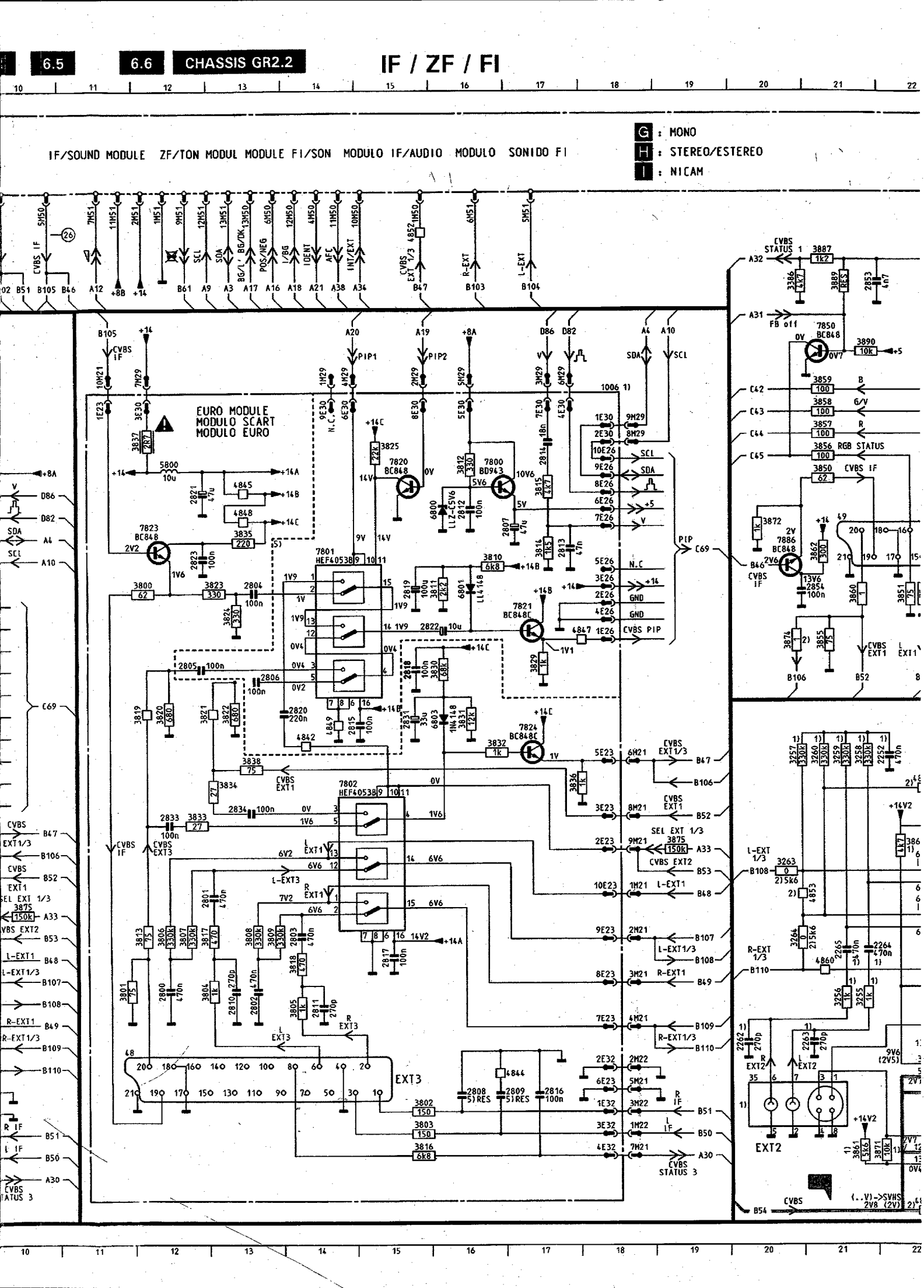
R.IF
EXT1
CVBS IF
GB STATUS
B52
B48
B107
B109
B49
B61
E90
E91
D62
PROT.
7240 TDA1521
7240 TDA2613
A+C+D+E
L-EXT
R-EXT
SVHS-SW
B104
B103
A35
7312 HEF4053B
7311 HEF4053B
Y/CVBS
C/CVBS
CVBS EXT2
B53
REMARKS/REMARQUES/ANMERKUNG
PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERäTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:
1) STEREO VERSION (CTI/EXT2/EXT3)
2) MONO VERSION (NON CTI/EXT2/EXT3)
3) NOT PRESENT FOR 2ND SCART
4) UK VERSION
5) NOT PRESENT FOR SEPERATE CONTROL UNIT (DIAGRAM E)

IF / ZF / FI

IF/SOUND MODULE ZF/TON MODUL MODULE FI/SON MODULO IF/AUDIO MODULO SONIDO FI

G : MONO
H : STEREO/ESTEREO
I : NICAM



Tuner / Kanalwähler / Sélecteur

B

TP 20
0,5 V/div AC
10 µS/div

TP 33
50 mV/div DC
0,2 mS/div

TP 35
50 mV/div DC
0,2 mS/div

TP 32
50 mV/div DC
0,2 mS/div

TP 34
2 V/div DC
20 µS/div

TP 39
0,2 V/div AC
20 µS/div

TP 40
0,5 V/div AC
20 µS/div

23
0,1 V/div DC
0,2 mS/div

24
50 mV/div DC
0,2 mS/div

25
0,5 V/div AC
10 µS/div

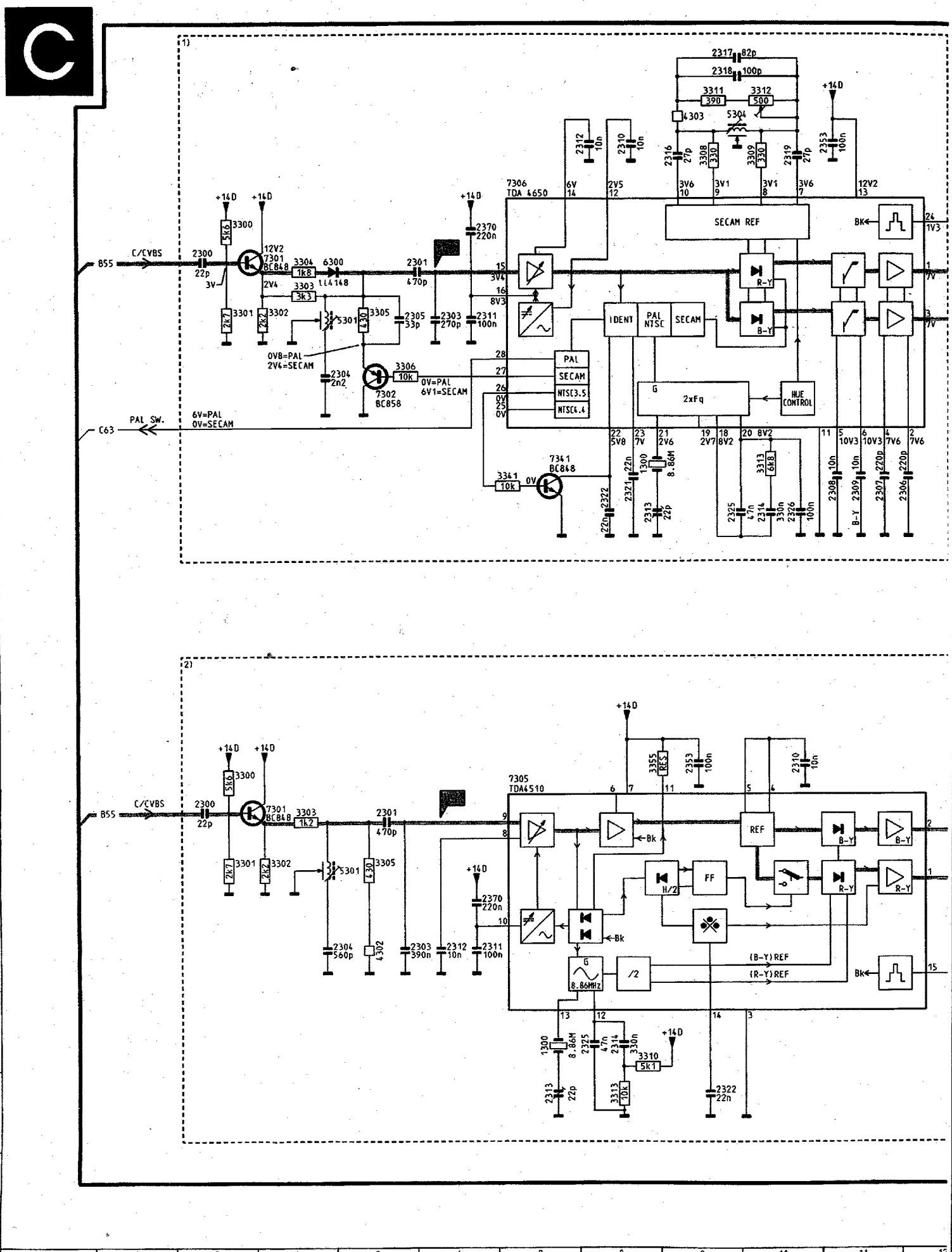
26
0,5 V/div AC
10 µS/div

P

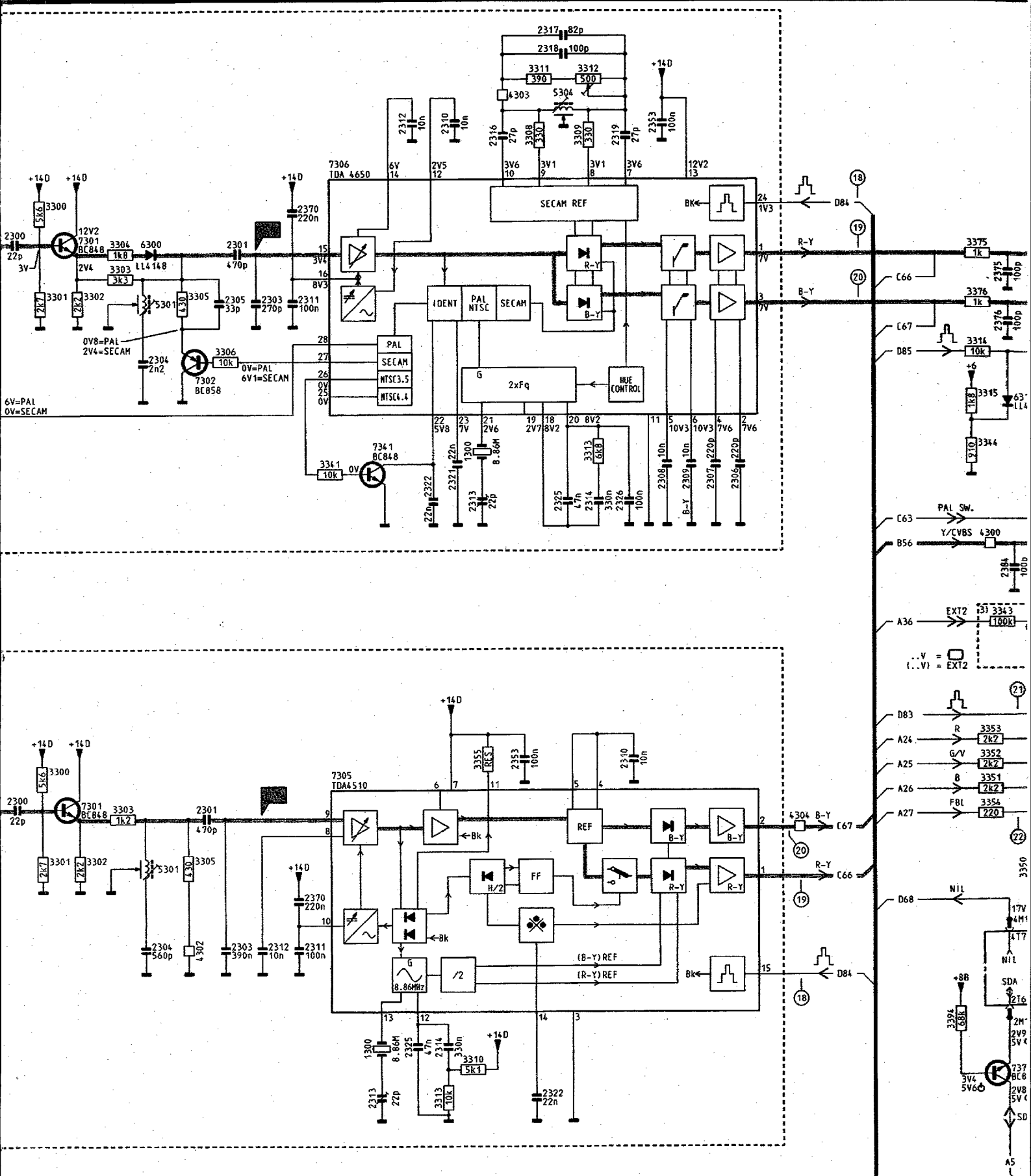
EURO MODULE SATELLITE

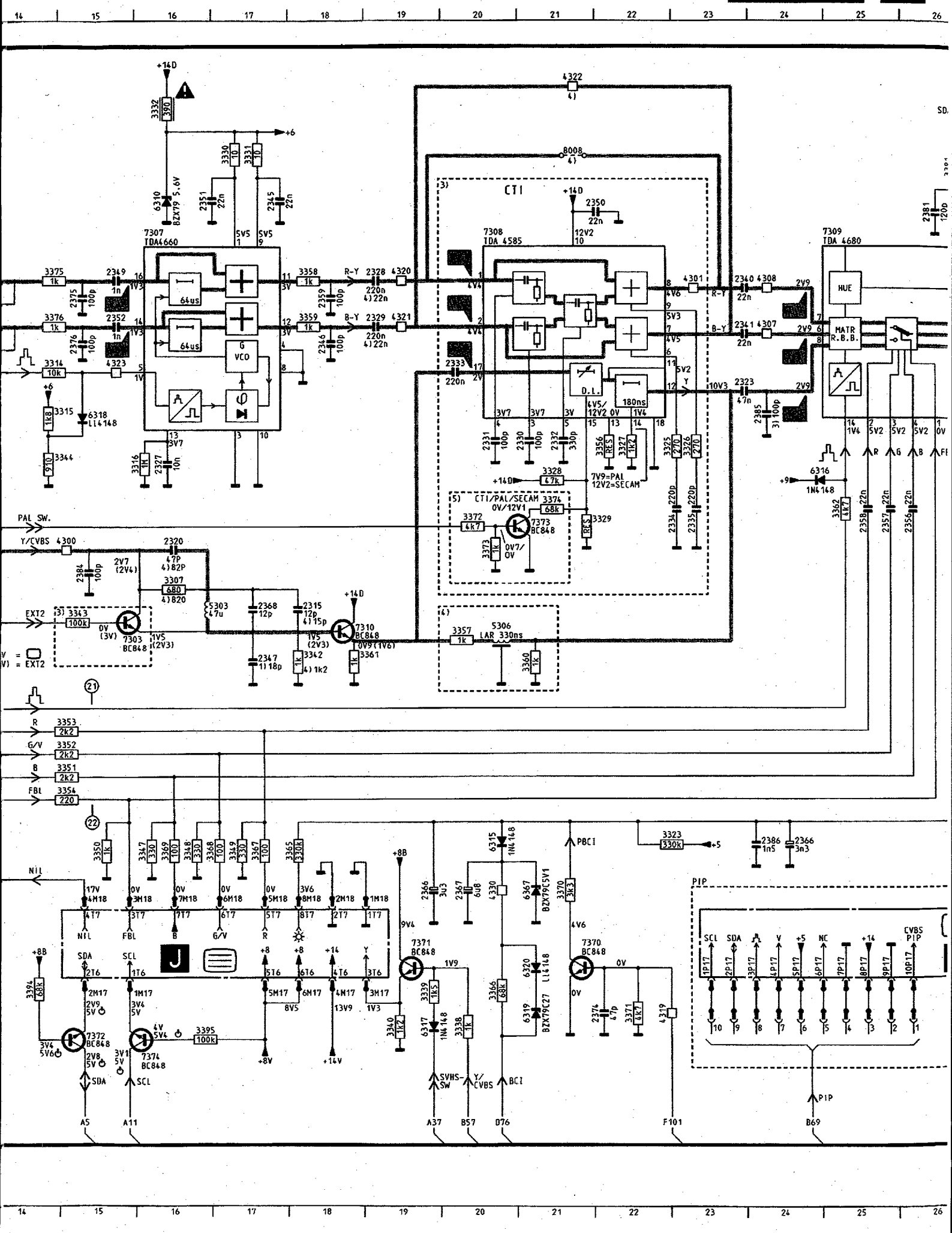
TO SATELLITE UNIT (DIAGRAM L,M,N,O)

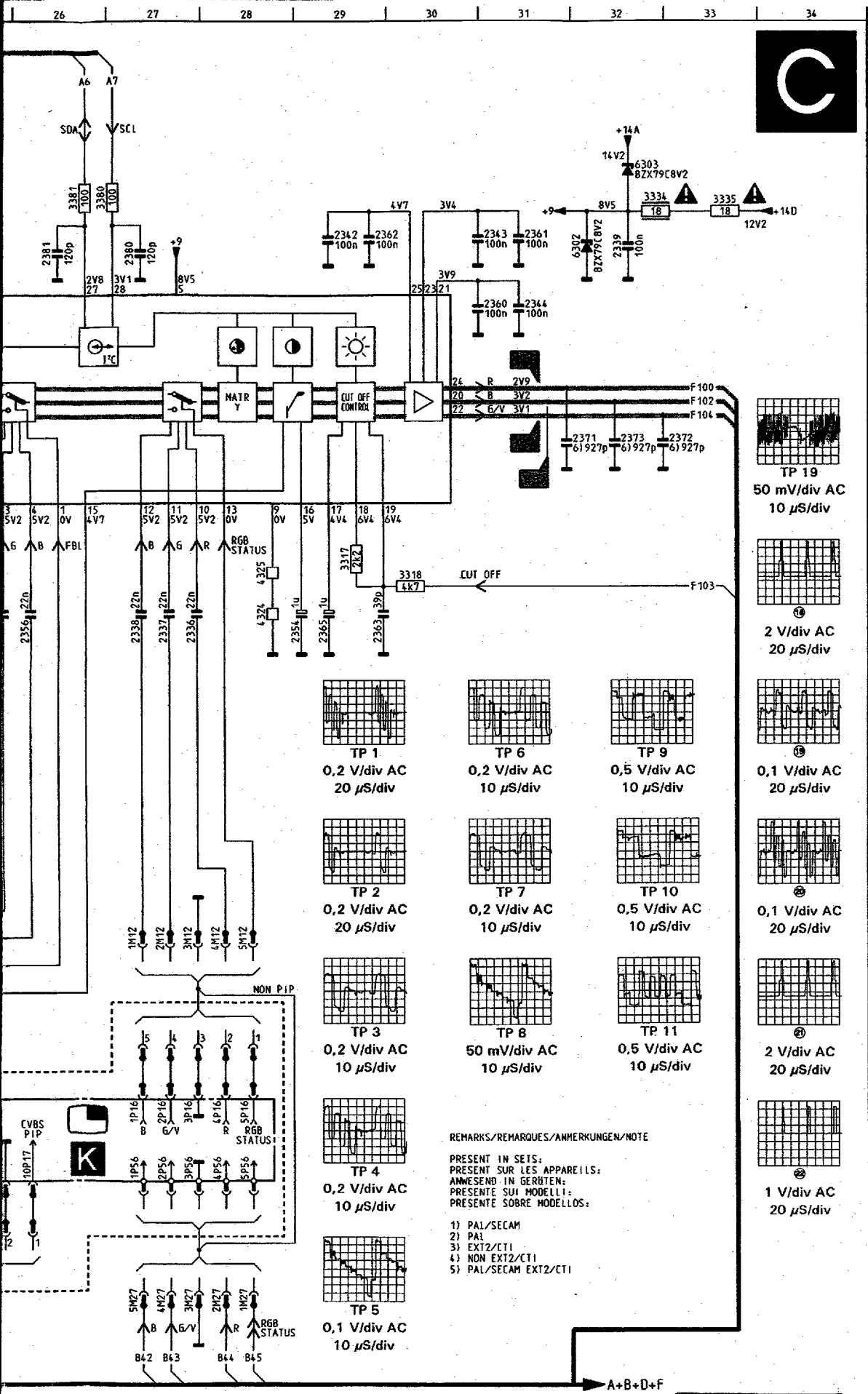
Video


C
1)
2)
B55
C/CVBS
C63
PAL SW.
7306
TDA 4650
SECAM REF
IDENT
PAL NTSC
SECAM
PAL
SECAM
NTSC3.5
NTSC4.4
2xFq
HUE CONTROL
R-Y
B-Y
BK
7301
BC848
7302
BC858
7341
BC848
0V8=PAL
2V4=SECAM
0V=PAL
6V1=SECAM
6V=PAL
0V=SECAM
7305
TDA4510
REF
FF
H/2
/2
8.86MHz
(B-Y)REF
(R-Y)REF
+14D

Video


7306 TDA 4650
SECAM REF
IDENT
PAL NTSC
SECAM
2xFq
HUE CONTROL
R-Y
B-Y
PAL
SECAM
NTSC3.5
NTSC4.4
7301 BC848
7302 BC858
7341 BC848
0V8=PAL
2V4=SECAM
0V=PAL
6V1=SECAM
6V=PAL
0V=SECAM
7305 TDA4510
REF
FF
H/2
/2
8.86MHz
(B-Y)REF
(R-Y)REF
C63 PAL SW.
B56 Y/CVBS 4300
A36 EXT2
D83
A24 R
A25 G/V
A26 B
A27 FBL
D68
D84
C66
C67
A5


7307
TDA4660
7308
TDA 4585
7309
TDA 4680
CTI
HUE
MATR
R.B.B.
D.L.
180ns
VCO
64us
CTI/PAL/SECAM
7V9=PAL
12V2=SECAM
PAL SW.
Y/CVBS
EXT2
7303
BC848
7310
BC848
5306
LAR 330ns
7371
BC848
7370
BC848
7372
BC848
7374
BC848
PIP
SCL
SDA
SVHS-SW
Y/CVBS
BCI
PBCI
A5
A11
A37
B57
D76
F101
B69



	1300	F 8	3318	F30
	1300	M 7	3323	K23
	2300	C 3	3325	F23
	2300	J 3	3326	F23
A	2301	D 6	3327	F22
	2301	J 5	3328	F21
	2303	D 6	3329	G21
	2303	L 5	3330	B17
	2304	E 4	3331	B17
	2304	L 4	3332	A16
	2305	D 5	3334	B32
	2306	F12	3335	B33
B	2307	F11	3338	M20
	2308	F11	3339	M19
	2309	F11	3340	M19
	2310	B 8	3341	F 7
	2310	J10	3342	H18
	2311	D 6	3343	H15
	2311	L 6	3344	F14
	2312	B 8	3347	K16
C	2312	L 6	3348	K16
	2313	G 8	3349	K17
	2313	N 7	3350	K15
	2314	G10	3351	J15
	2314	M 8	3352	J15
	2315	H18	3353	I15
	2316	B 9	3354	J15
D	2317	A 9	3355	J 8
	2318	A 9	3356	F22
	2319	B10	3357	H20
	2320	G16	3358	D18
	2321	F 8	3359	D18
	2322	N 9	3360	I21
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	2338	G27	3394	M14
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	2343	C31	4304	J12
	2344	C31	4307	D24
	2345	C17	4308	D24
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	2368	H17	6319	M21
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	2373	E32	7302	E 5
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	3304	D 4		
	3305	D 5		
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	3309	B10		
	3310	M 8		
	3311	B 9		
	3312	B10		
	3313	F10		
O	3313	N 8		
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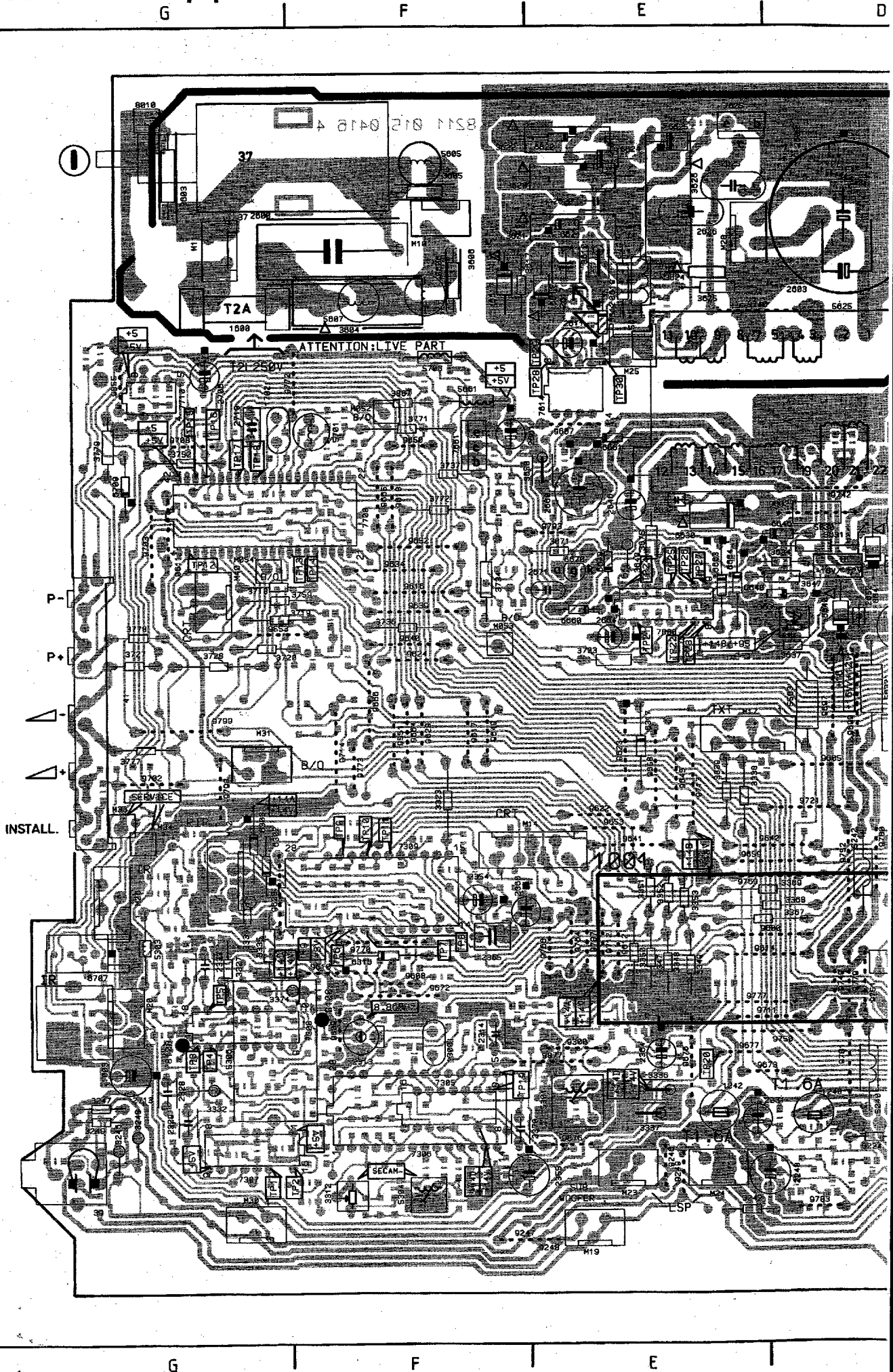
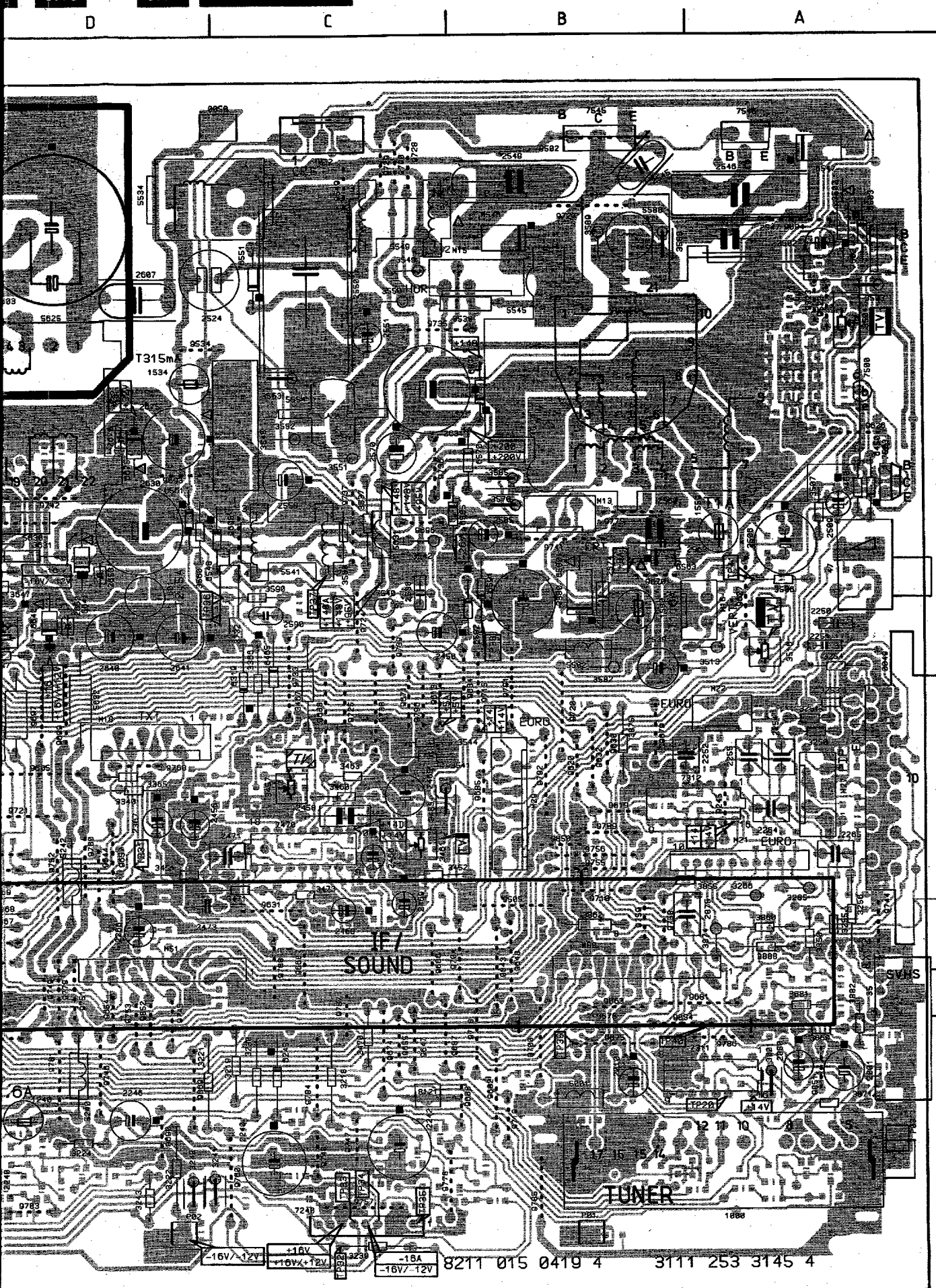
	3317	F29		

Monocarrier / Hauptplatine / Châssis





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M20 G4
M21 A4
M22 A3
M23 E5
M24 E5
M25 E2
M26 G4
1 M27 A4
M28 D1
M29 B4
M30 G5
M31 F3
M32 C1
M33 G4
M34 G4
M40 G3
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P02 C5
P03 A5
0035 A5
0037 G1
0039 G5
0041 G3
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1600 G2
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2001 A5
2010 B5
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2242 C5
2248 D5
2248 D5
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2251 A3
2252 A3
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2286 D4
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2354 F4
2355 E5
2364 E5
2365 F4
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2367 D4
2370 E5
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2458 C4
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2466 C4
2468 C4
4 2469 C4
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2473 C4
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2545 A1
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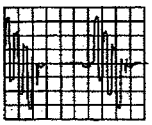
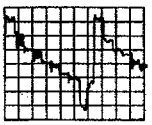
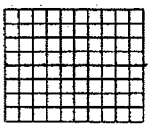


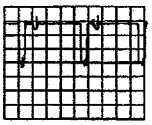
TP 1
0,2 V/div AC
20 µS/div



TP 8
50 mV/div AC
10 µS/div

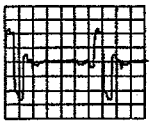


TP 14
0,2 V/div DC
0,5 mS/div

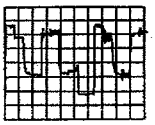


TP 21
0,5 V/div DC
5 µS/div

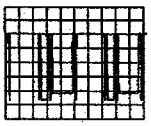
TP 26
0,1 V/div AC
5 mS/div



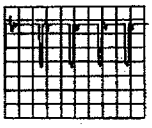
TP 2
0,2 V/div AC
20 µS/div



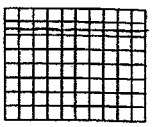
TP 9
0,5 V/div AC
10 µS/div



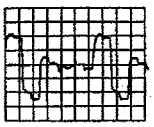
TP 15
1 V/div AC
0,2 mS/div



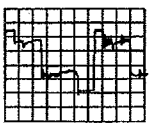
TP 21
0,5 V/div DC
10 µS/div



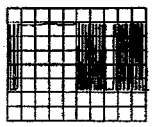
TP 27
1 V/div DC



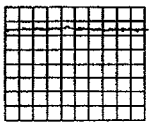
TP 3
0,2 V/div AC
10 µS/div



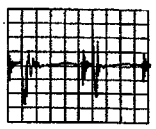
TP 10
0,5 V/div AC
10 µS/div



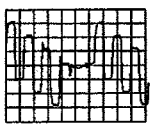
TP 16
1 V/div DC
0,1 mS/div



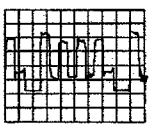
TP 22
1 V/div DC



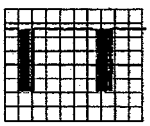
TP 27
50 mV/div AC
10 mS/div



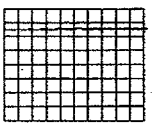
TP 4
0,2 V/div AC
10 µS/div



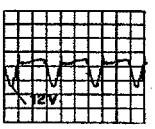
TP 11
0,5 V/div AC
10 µS/div



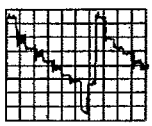
TP 17
1 V/div DC
20 mS/div



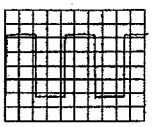
TP 23
1 V/div DC



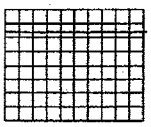
TP 28
0,5 V/div AC
5 µS/div



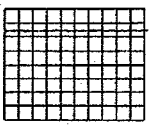
TP 5
0,1 V/div AC
10 µS/div



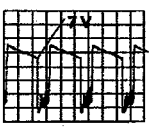
TP 12
1 V/div AC
10 µS/div



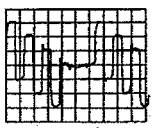
TP 18
2 V/div DC
20 mS/div



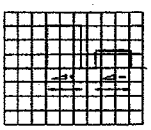
TP 24
5V/div DC



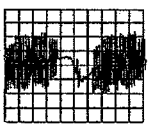
TP 28
1 /div AC
10 mS/div



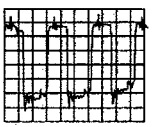
TP 6
0,2 V/div AC
10 µS/div



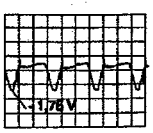
TP 13
1 V/div DC
1 S/div



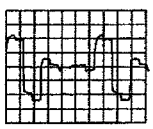
TP 19
50 mV/div AC
10 µS/div



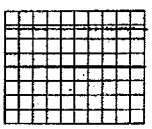
TP 25
0,2 V/div AC
5 µS/div



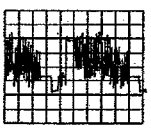
TP 29
0,5 V/div AC
5 µS/div



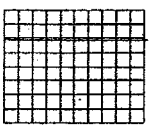
TP 7
0,2 V/div AC
10 µS/div



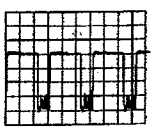
TP 14
1 V/div DC
0,5 mS/div



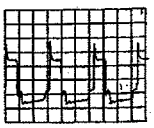
TP 20
0,5 V/div AC
10 µS/div



TP 26
1 V/div DC

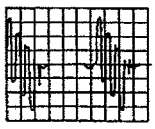


TP 29
1 V/div AC
10 mS/div



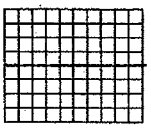
TP 30
2 V/div DC
5 µS/div

F3 B2 D4 B5 D4 D4 D5 D5 C5 B5 A5 C4 C4 B4 C1 B3 B3 E2 B3 E4 G4 G3 B4 A5 D5 F3 A5 G2 C5 E5 E5

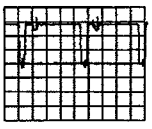


TP 1
0,2 V/div AC
20 µS/div

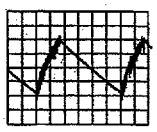
TP 8
50 mV/div AC
10 µS/div



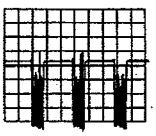
TP 14 ⏻
0,2 V/div DC
0,5 mS/div



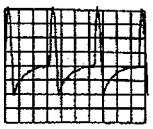
TP 21
0,5 V/div DC
5 µS/div



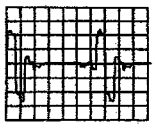
TP 26 ⏻
0,1 V/div AC
5 mS/div



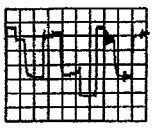
TP 30 ⏻
1 V/div DC
10 mS/div



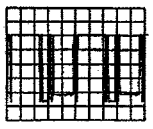
TP 38
20 mV/div AC
20 µS/div



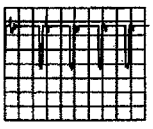
TP 2
0,2 V/div AC
20 µS/div



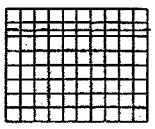
TP 9
0,5 V/div AC
10 µS/div



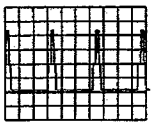
TP 15
1 V/div AC
0,2 mS/div



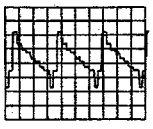
TP 21 ⏻
0,5 V/div DC
10 µS/div



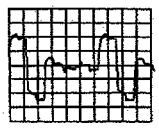
TP 27
1 V/div DC



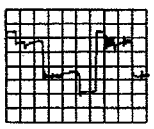
TP 31
2 V/div DC
20 µS/div



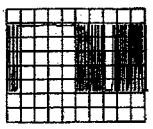
TP 39
0,2 V/div AC
20 µS/div



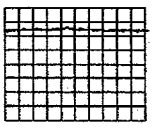
TP 3
0,2 V/div AC
10 µS/div



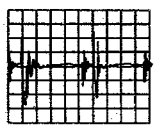
TP 10
0,5 V/div AC
10 µS/div



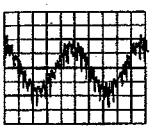
TP 16
1 V/div DC
0,1 mS/div



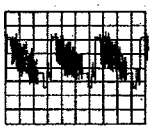
TP 22
1 V/div DC



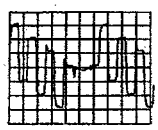
TP 27 ⏻
50 mV/div AC
10 mS/div



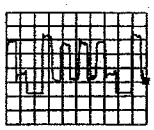
TP 32
50 mV/div DC
0,2 mS/div



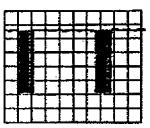
TP 40
0,5 V/div AC
20 µS/div



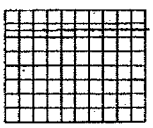
TP 4
0,2 V/div AC
10 µS/div



TP 11
0,5 V/div AC
10 µS/div

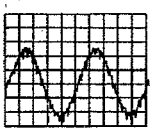


TP 17
1 V/div DC
20 mS/div

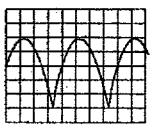


TP 23
1 V/div DC

TP 28
0,5 V/div AC
5 µS/div

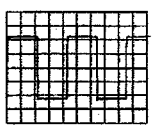


TP 33
2 V/div DC
0,2 mS/div

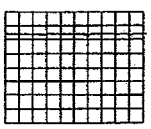


TP 41
2 V/div AC
5 mS/div

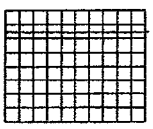
TP 5
0,1 V/div AC
10 µS/div



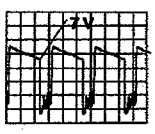
TP 12
1 V/div AC
10 µS/div



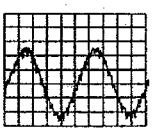
TP 18
2 V/div DC
20 mS/div



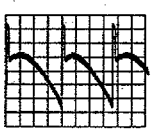
TP 24
5V/div DC



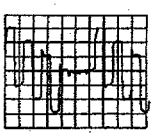
TP 28 ⏻
1 /div AC
10 mS/div



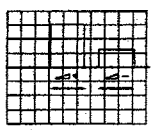
TP 34
2 V/div DC
20 µS/div



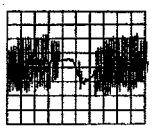
TP 41 a
5 V/div AC
5 mS/div



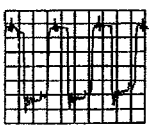
TP 6
0,2 V/div AC
10 µS/div



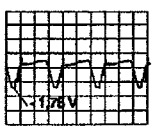
TP 13
1 V/div DC
1 S/div



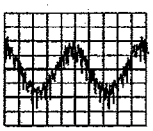
TP 19
50 mV/div AC
10 µS/div



TP 25
0,2 V/div AC
5 µS/div

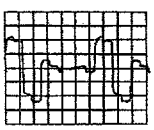


TP 29
0,5 V/div AC
5 µS/div

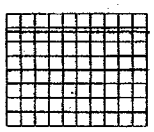


TP 35
50 mV/div DC
0,2 mS/div

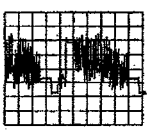
TP 41 b
5 V/div AC
5 mS/div



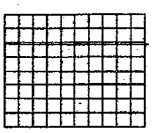
TP 7
0,2 V/div AC
10 µS/div



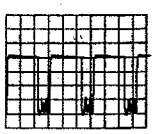
TP 14
1 V/div DC
0,5 mS/div



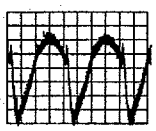
TP 20
0,5 V/div AC
10 µS/div



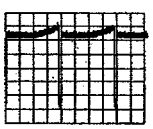
TP 26
1 V/div DC



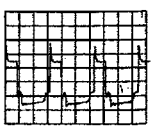
TP 29 ⏻
1 V/div AC
10 mS/div



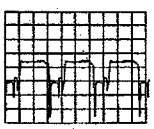
TP 36
0,2 V/div AC
5 mS/div



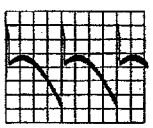
TP 41 c
0,1 V/div AC
5 mS/div



TP 30
2 V/div DC
5 µS/div



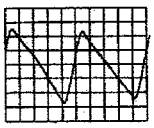
TP 37
2 V/div AC
20 µS/div



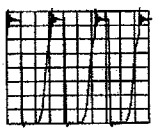
TP 41 d
5 V/div AC
5 mS/div

6.16 CHASSIS GR2.2

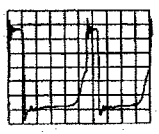
Power supply / Stromversorgun



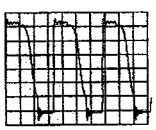
① 2 V/div AC
2 mS/div
280 V DC



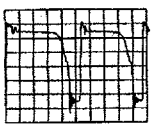
② 50 V/div AC
5 µS/div



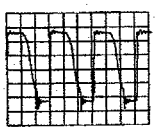
② ⏻ 50 V/div AC
5 µS/div



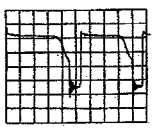
③ 50 V/div AC
5 µS/div



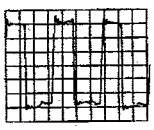
③ ⏻ 50 V/div AC
5 µS/div



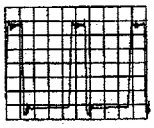
④ 5 V/div AC
5 µS/div



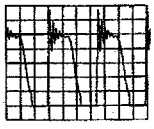
④ ⏻ 5 V/div AC
5 µS/div



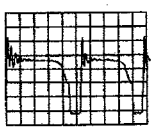
⑤ 0,5 V/div AC
5 µS/div



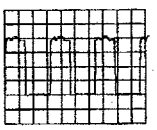
⑤ ⏻ 0,5 V/div AC
5 µS/div



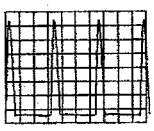
⑥ 100 V/div AC
5 µS/div



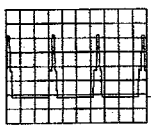
⑥ ⏻ 2 V/div AC
2 mS/div



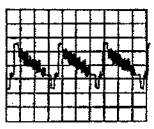
⑦ 0,5 V/div AC
20 µS/div



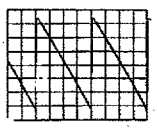
⑧ 0,5 V/div AC
20 µS/div



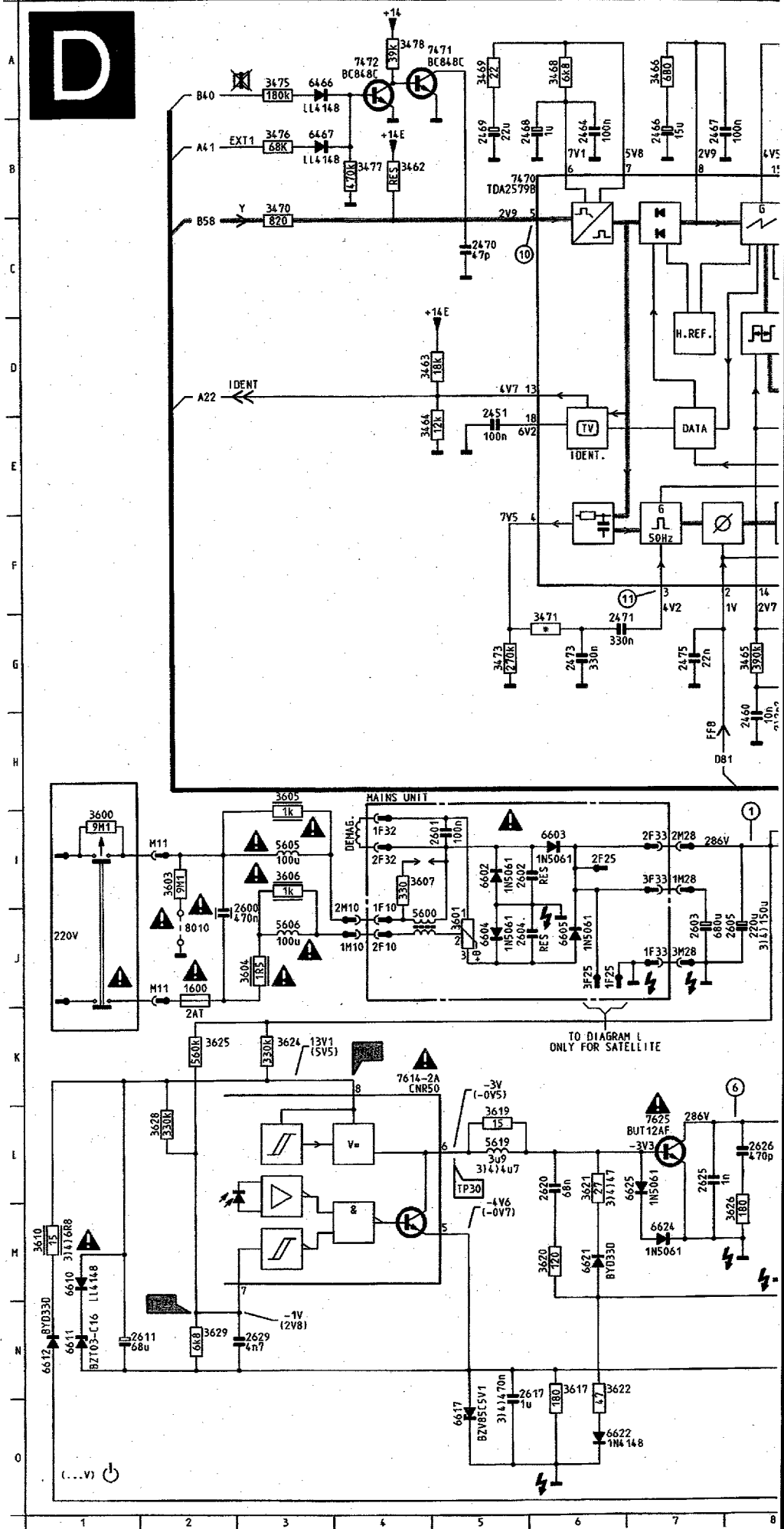
⑨ 2 V/div AC
20 µS/div



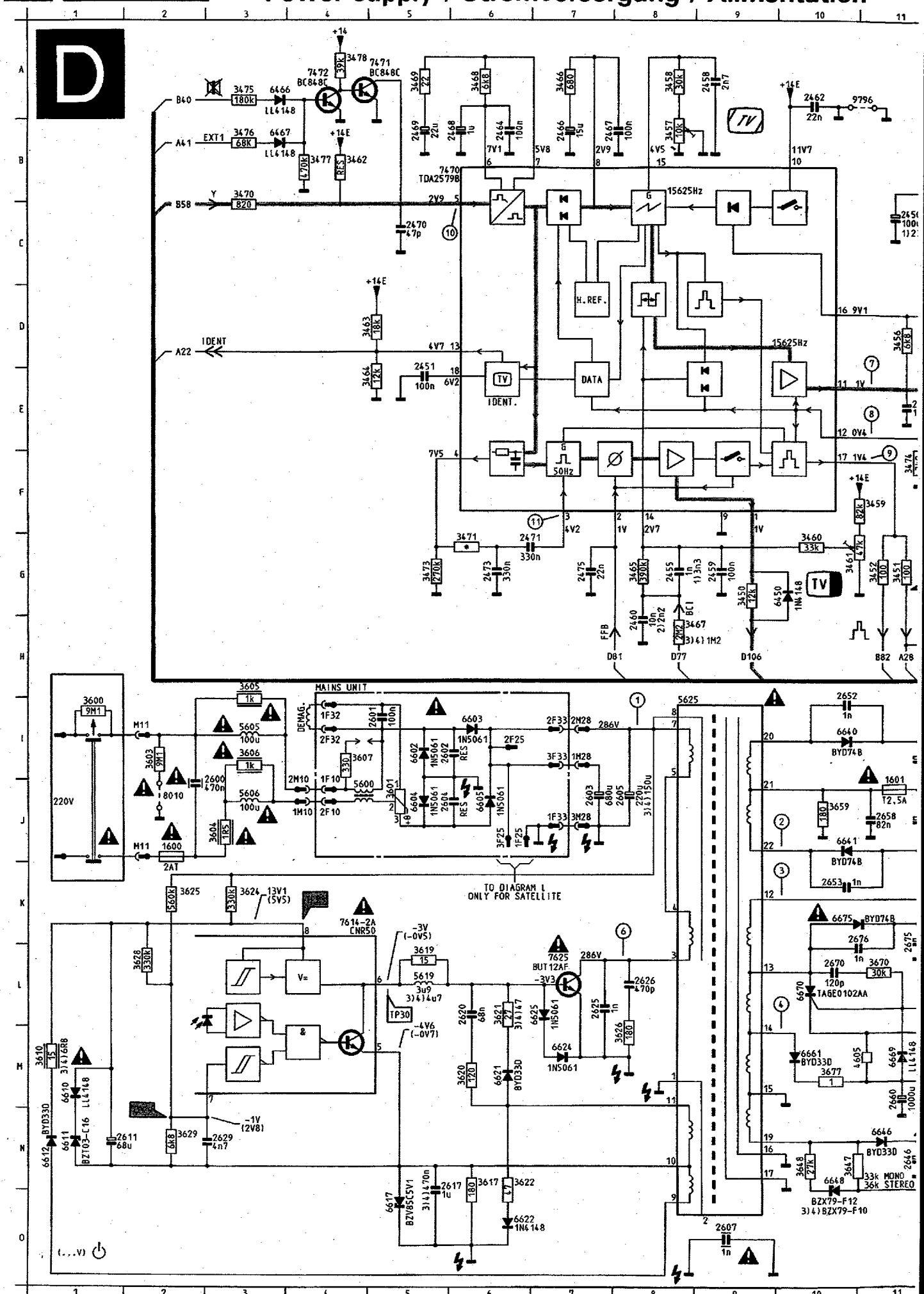
⑩ 0,5 V/div AC
5 mS/div

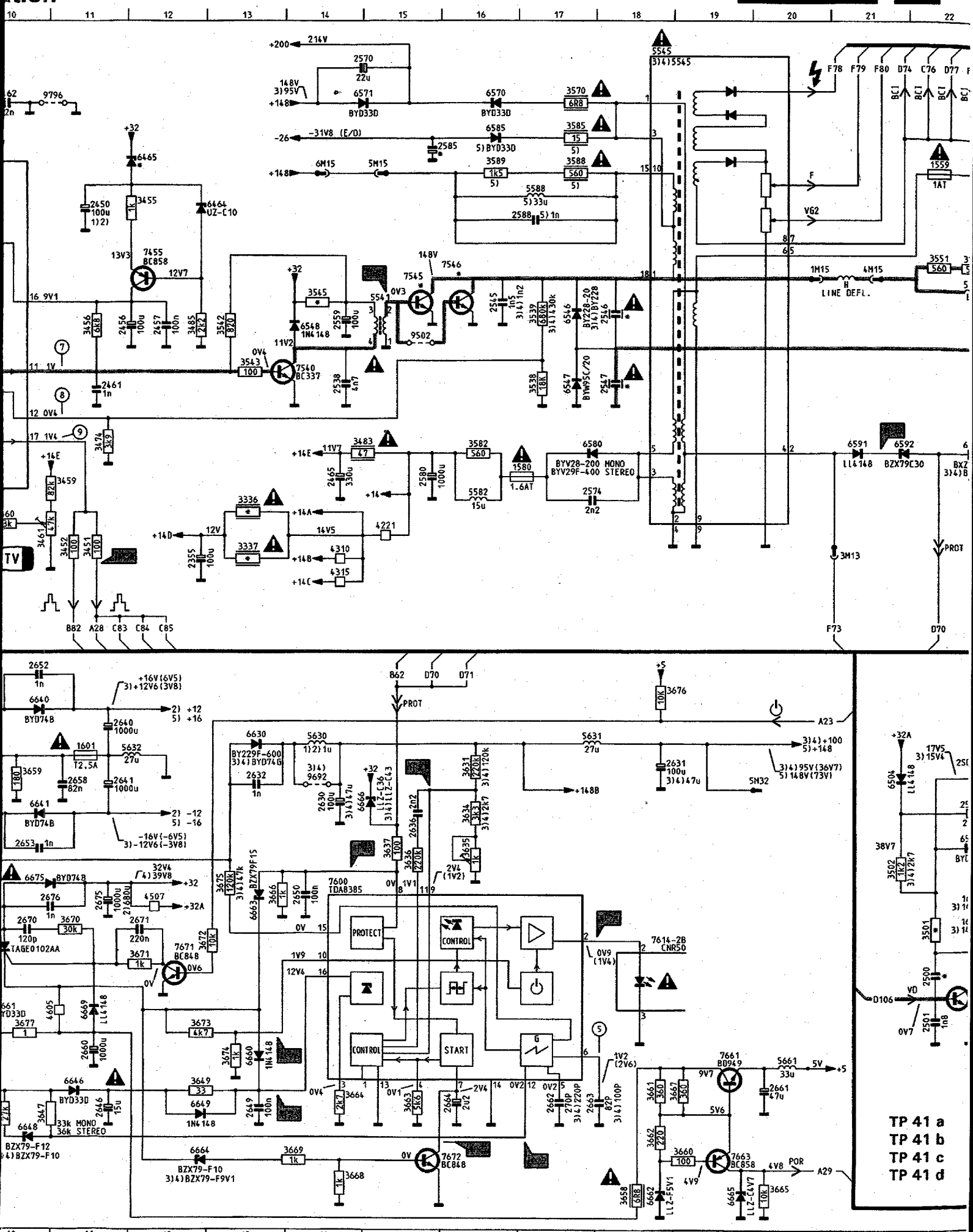


⑪ 0,5 V/div AC
5 mS/div

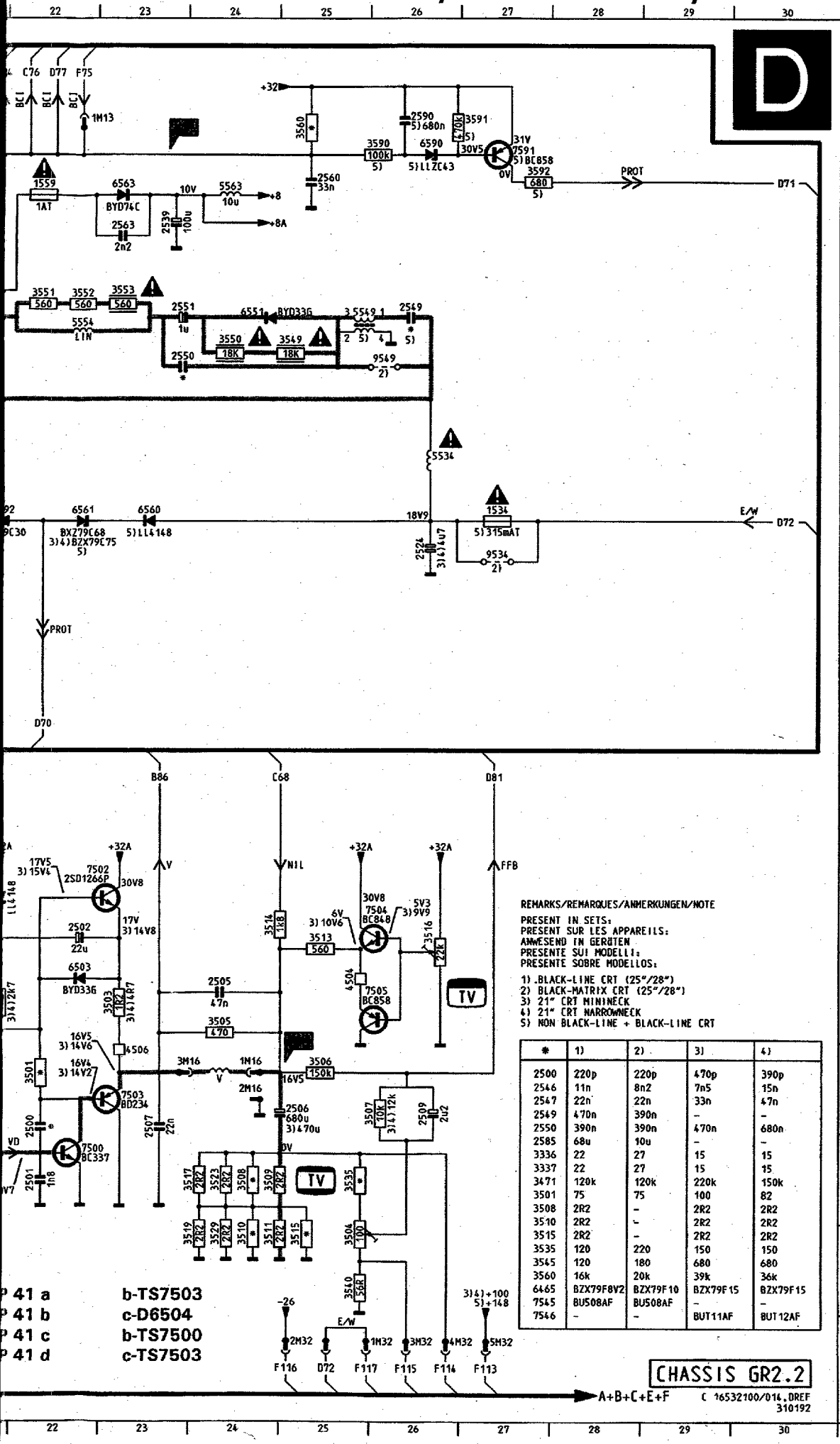


Power supply / Stromversorgung / Alimentation



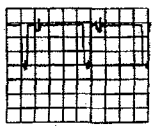

TP 41 a
TP 41 b
TP 41 c
TP 41 d
PROTECT
CONTROL
START
7600 TDA8385
7614-2B CNR50
7455 BC858
7540 BC337
7545
7546
7671 BC848
7672 BC848
7661 BD949
7663 BC858
BYV28-200 MONO
BYV29F-400 STEREO
LINE DEFL.
PROT
POR
A23
A29
B62
D70
D71
B82
A28
C83
C84
C85
F73
D70
D106
TV

Synchronization / Synchronisation



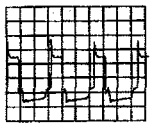
*	1)	2)	3)	4)
2500	220p	220p	470p	390p
2546	11n	8n2	7n5	15n
2547	22n	22n	33n	47n
2549	470n	390n	-	-
2550	390n	390n	470n	680n
2585	68u	10u	-	-
3336	22	27	15	15
3337	22	27	15	15
3471	120k	120k	220k	150k
3501	75	75	100	82
3508	2R2	-	2R2	2R2
3510	2R2	-	2R2	2R2
3515	2R2	-	2R2	2R2
3535	120	220	150	150
3545	120	180	680	680
3560	16k	20k	39k	36k
6465	BZX79F8V2	BZX79F10	BZX79F15	BZX79F15
7545	BU508AF	BU508AF	-	-
7546	-	-	BUT11AF	BUT12AF

1534	F27	3552	C22	6649	N12
1559	B22	3553	C23	6660	M13
1580	F17	3560	B25	6661	M10
1600	J 2	3570	A17	6662	O18
1601	J11	3582	F16	6663	K13
2355	G12	3585	B17	6664	O12
2450	C11	3588	B17	6665	O19
2451	E 5	3589	B16	6666	J15
2455	G 8	3590	B26	6669	M11
2456	D11	3591	A27	6670	L10
2457	D12	3592	B27	6675	K10
2458	A 9	3600	I 1	7455	C12
2459	G 9	3601	J 5	7470	B 6
2460	H 8	3603	I 2	7471	A 5
2461	E11	3604	J 3	7472	A 4
2462	A10	3605	H 3	7540	E14
2464	B 6	3606	I 3	7545	D15
2465	F14	3607	I 4	7546	C16
2466	B 7	3610	M 1	7591	B27
2467	B 7	3617	M 6	7600	K14
2468	B 6	3619	L 5	7614	K 5
2469	B 5	3620	M 6	7614	L19
2470	C 5	3621	L 6	7625	L 7
2471	G 6	3622	N 6	7661	M19
2473	G 6	3624	K 3	7663	O19
2475	G 7	3625	K 2	7671	L12
2524	F26	3626	M 8	7672	O16
2538	E14	3628	L 2	8010	J 2
2539	C23	3629	N 2	9502	D15
2545	D16	3631	J16	9534	F27
2546	D18	3634	J16	9549	D26
2547	E18	3635	K16	9692	J14
2549	D26	3636	K15	9796	A11
2550	D23	3637	K15		
2551	D23	3647	N10		
2559	D14	3648	N10		
2560	B25	3649	N12		
2563	C23	3658	O18		
2570	A14	3659	J10		
2574	F17	3660	O19		
2580	F15	3661	N18		
2585	B15	3662	N18		
2588	C17	3663	N15		
2590	A26	3664	N14		
2600	J 2	3665	O20		
2601	I 5	3666	K13		
2602	I 5	3667	N19		
2603	J 7	3668	O14		
2604	J 5	3669	O14		
2605	J 8	3670	L11		
2607	O 9	3671	L12		
2611	N 1	3672	L12		
2617	N 5	3673	M12		
2620	L 6	3674	M13		
2625	L 7	3675	K13		
2626	L 8	3676	I18		
2629	N 3	3677	M10		
2630	J14	4221	G15		
2631	J18	4310	G14		
2632	J13	4315	G14		
2636	J15	4507	K12		
2640	I11	4605	M11		
2641	J11	5534	E26		
2646	N11	5541	D15		
2649	N13	5545	A18		
2650	K14	5545	A18		
2652	I10	5549	D25		
2653	K10	5554	D22		
2658	J11	5563	B24		
2660	M11	5582	F16		
2661	N20	5588	B17		
2662	N17	5600	J 4		
2663	N17	5605	I 3		
2664	N16	5606	J 3		
2670	L10	5619	L 5		
2671	L12	5625	I 8		
2675	K11	5630	I14		
2676	K11	5631	I17		
3336	F13	5632	J12		
3337	G13	5661	N20		
3450	G 9	6450	G10		
3451	G11	6464	C12		
3452	G11	6465	B12		
3455	C12	6466	A 3		
3456	D11	6467	B 3		
3457	B 8	6546	D17		
3458	A 8	6547	E17		
3459	F11	6548	D14		
3460	G10	6551	D24		
3461	G10	6560	F23		
3462	B 4	6561	F22		
3463	D 5	6563	B23		
3464	E 5	6570	A16		
3465	G 8	6571	A14		
3466	A 7	6580	F17		
3467	H 8	6585	B16		
3468	A 6	6590	B26		
3469	A 5	6591	F21		
3470	B 3	6592	F21		
3471	G 6	6602	I 5		
3473	G 5	6603	I 6		
3474	F11	6604	J 5		
3475	A 3	6605	J 6		
3476	B 3	6610	M 1		
3477	B 4	6611	N 1		
3478	A 4	6612	N 1		
3483	F14	6617	O 5		
3485	D12	6621	M 6		
3538	E17	6622	O 6		
3539	O17	6624	M 7		
3542	D13	6625	L 7		
3543	E13	6630	I13		
3545	D14	6640	I10		
3549	D25	6641	J10		
3550	D24	6646	N11		
3551	C22	6648	N10		

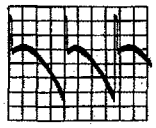


TP 21
0,5 V/div DC
5 µS/div

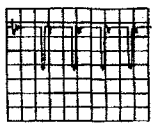
TP 26 ⏱
0,1 V/div AC
5 mS/div



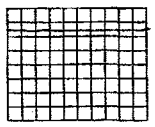
TP 30
2 V/div DC
5 µS/div



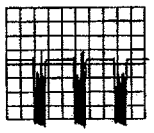
TP 41 a
5 V/div AC
5 mS/div



TP 21 ⏱
0,5 V/div DC
10 µS/div

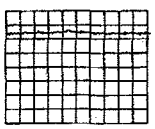


TP 27
1 V/div DC

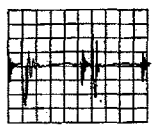


TP 30 ⏱
1 V/div DC
10 mS/div

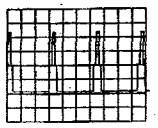
TP 41 b
5 V/div AC
5 mS/div



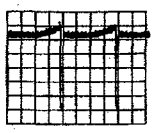
TP 22
1 V/div DC



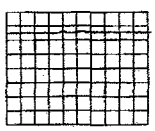
TP 27 ⏱
50 mV/div AC
10 mS/div



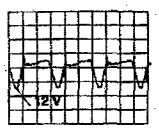
TP 31
2 V/div DC
20 µS/div



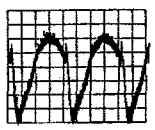
TP 41 c
0,1 V/div AC
5 mS/div



TP 23
1 V/div DC

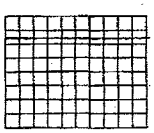


TP 28
0,5 V/div AC
5 µS/div

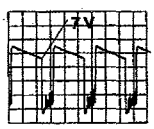


TP 36
0,2 V/div AC
5 mS/div

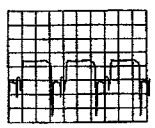
TP 41 d
5 V/div AC
5 mS/div



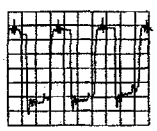
TP 24
5V/div DC



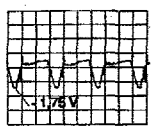
TP 28 ⏱
1 /div AC
10 mS/div



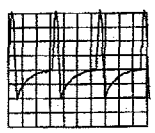
TP 37
2 V/div AC
20 µS/div



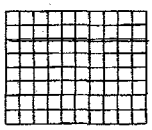
TP 25
0,2 V/div AC
5 µS/div



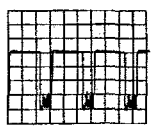
TP 29
0,5 V/div AC
5 µS/div



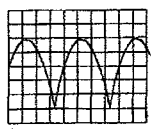
TP 38
20 mV/div AC
20 µS/div



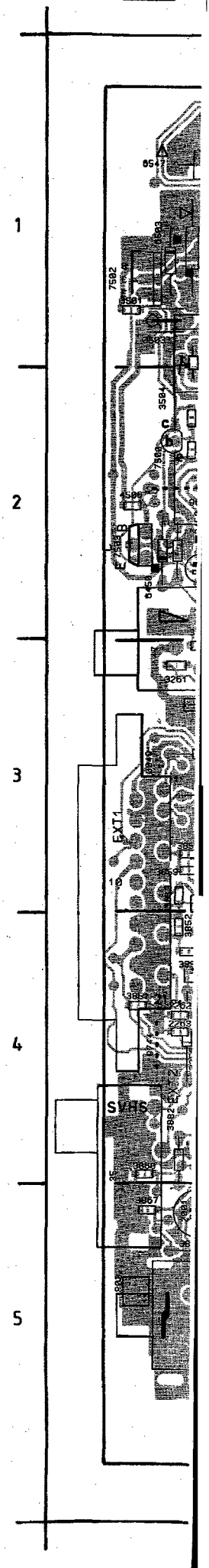
TP 26
1 V/div DC



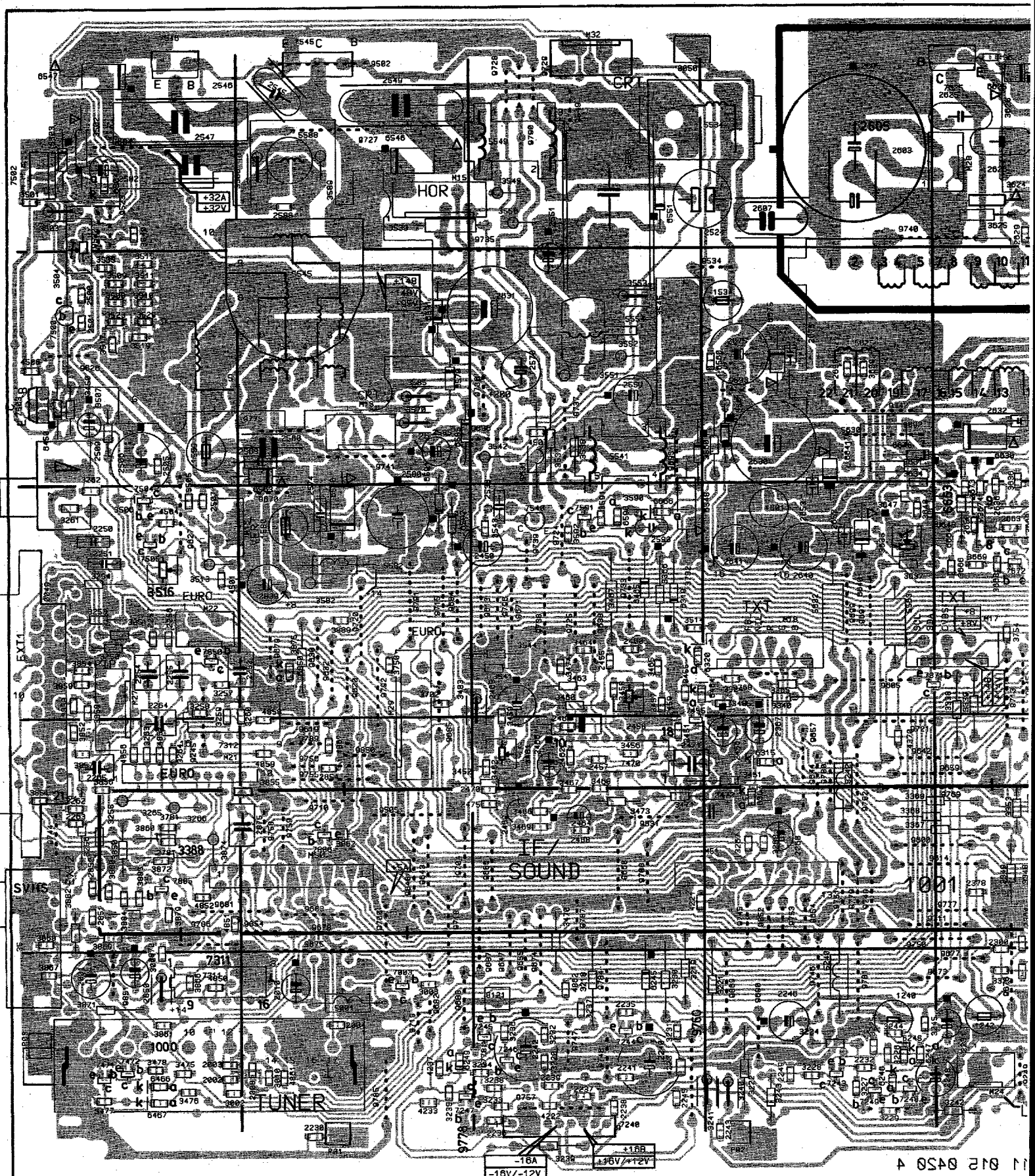
TP 29 ⏱
1 V/div AC
10 mS/div

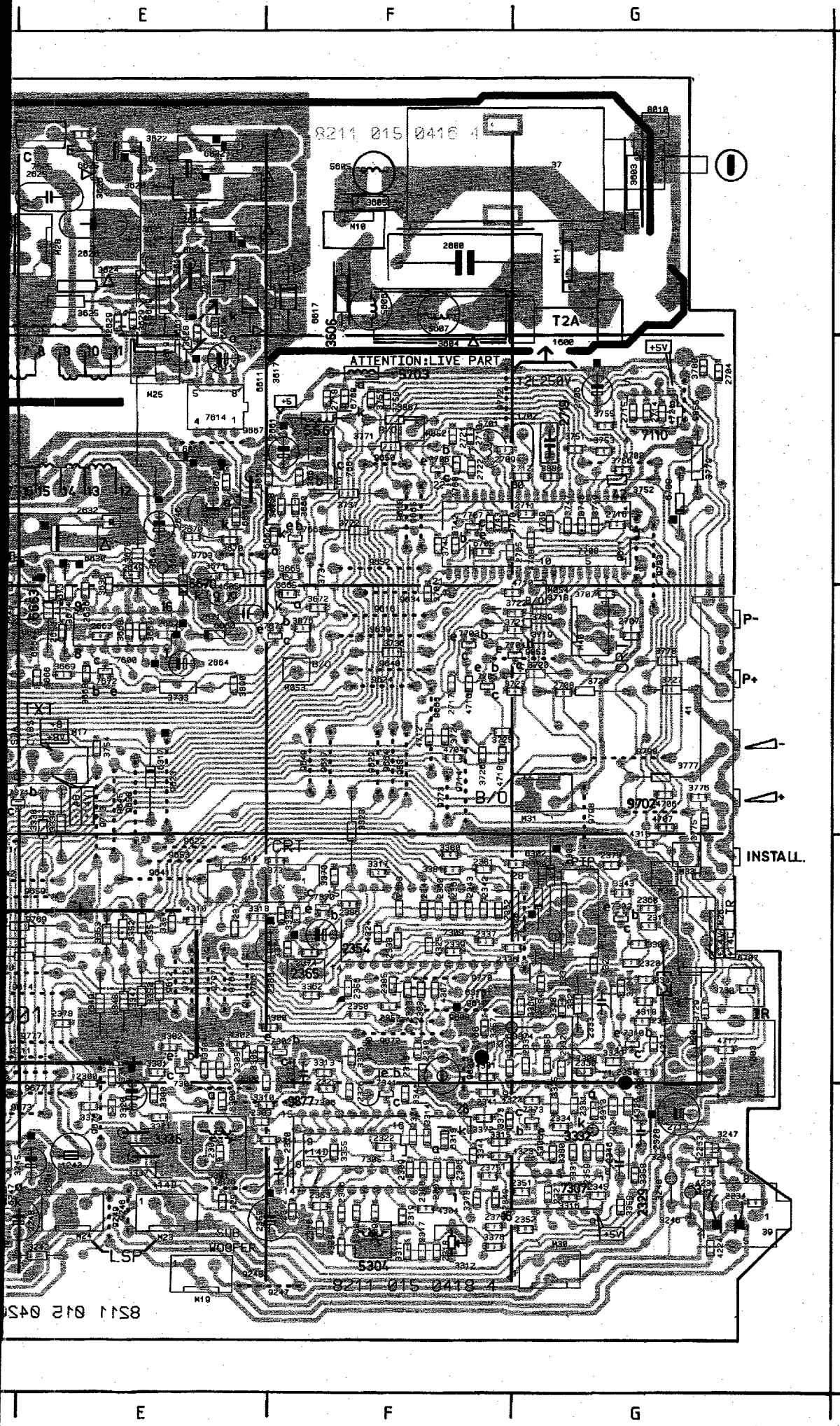


TP 41
2 V/div AC
5 mS/div



Monocarrier / Hauptplatine / Châssis





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M14 E4 2345 G5 2716 G2 3362 F4
M15 B1 2346 G5 2717 F3 3365 D3
M16 A3 2347 G4 2718 F2 3366 C3
M17 D3 2349 F5 2719 F2 3367 D4
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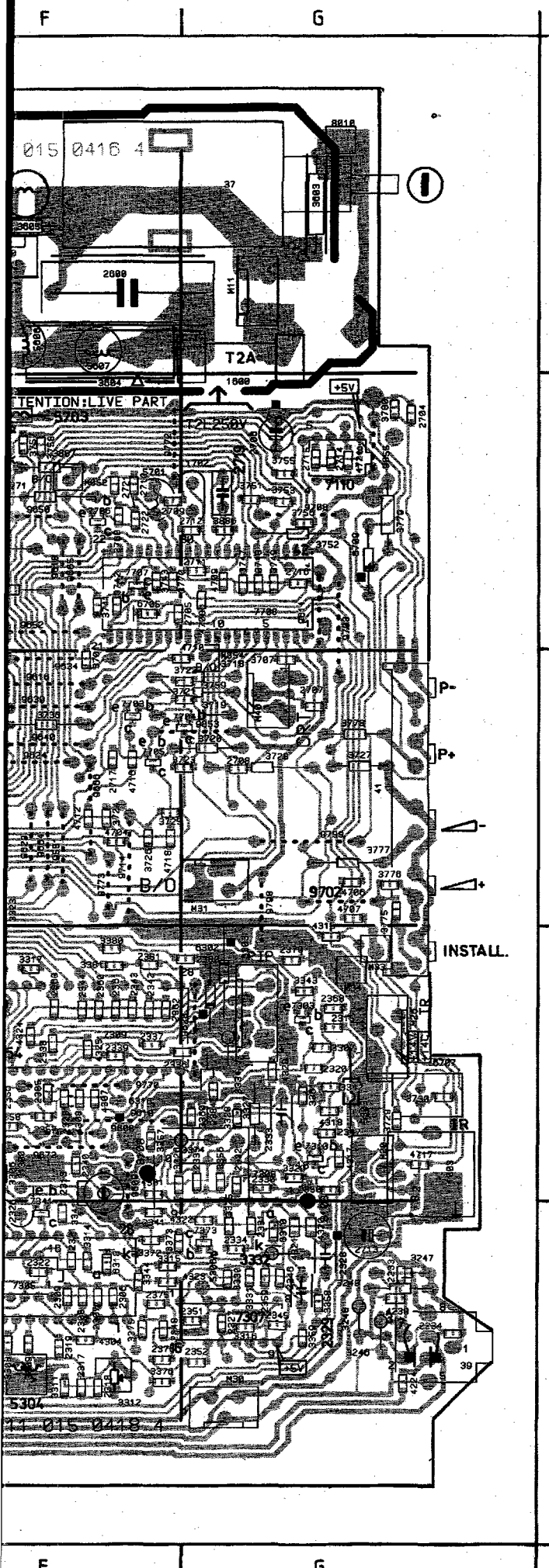

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2231 D5	2470 B4	3257 A3	3511 A2	3850 A4	6317 E3	9609 F5	9777 D4
2232 D5	2471 C4	3258 A4	3513 A3	3851 A4	6318 F5	9610 F4	9778 B5
2233 G5	2473 C4	3259 A4	3514 C3	3852 A4	6319 C3	9611 G2	9779 D4
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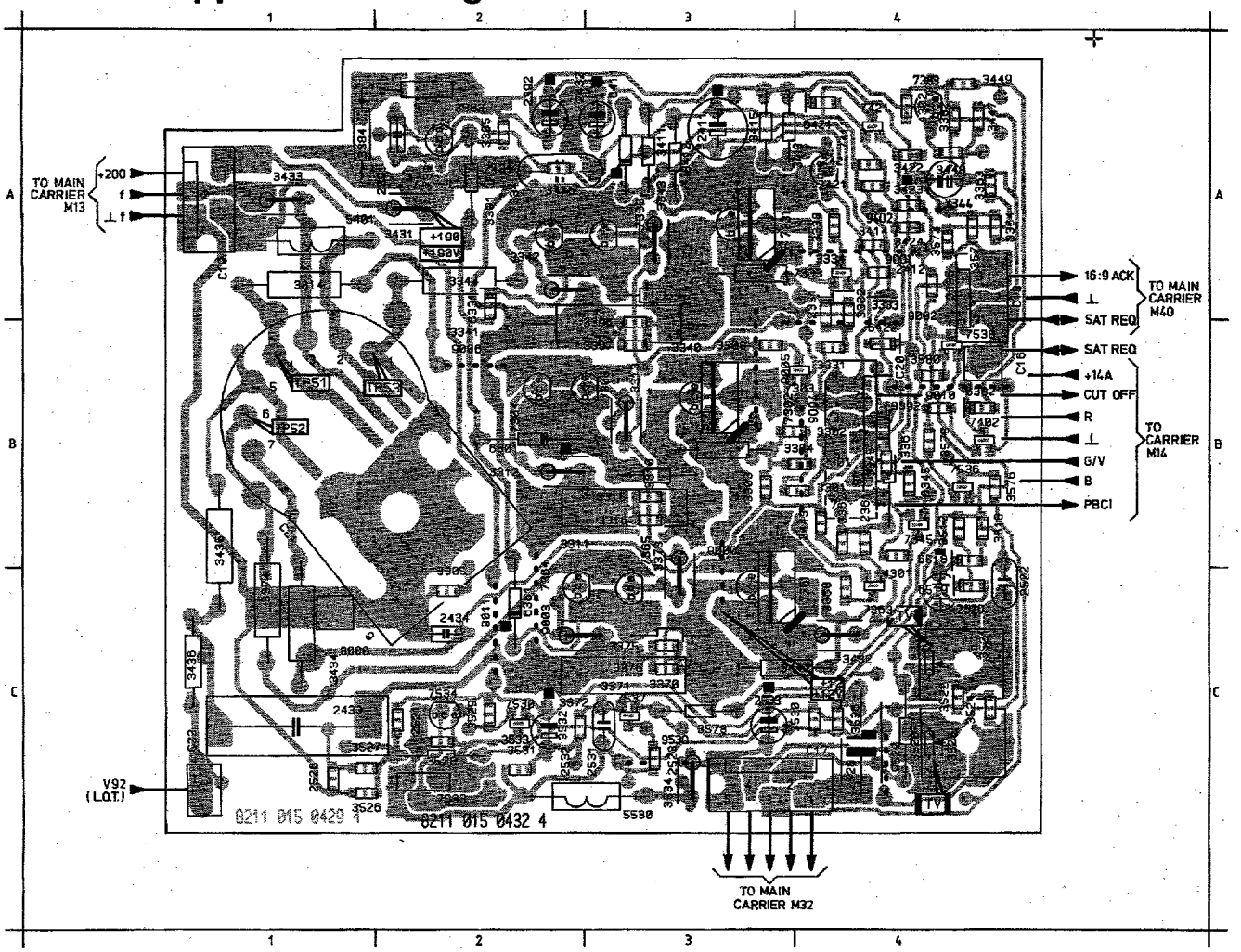
Picture tube module "narrowneck" / Bildröhren Modul "narrowneck" / Module support tube image "narrowneck"



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C21 B1
C22 C1
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2344 A4
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2391 A1
2392 A2
2411 A3
2412 A4
2421 A4
2431 A2
2432 A2
2433 C1
2434 C2
2520 C4
2521 C1
2522 C4
2523 C3
2526 C1
2528 C4
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2533 C3
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3303 B3
3304 B3
3305 C2
3309 B3
3310 B3
3311 B3
3312 B2
3313 B3
3314 A1
3315 B3
3316 B3
3331 B4
3332 A4
3333 A4
3334 A3
3338 A4
3340 A3
3341 A3
3342 A2
3343 A3
3344 A2
3345 B4
3361 B4
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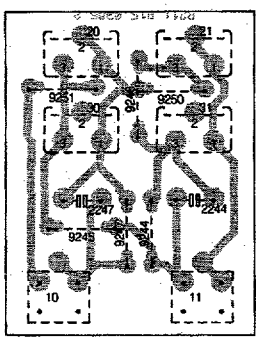
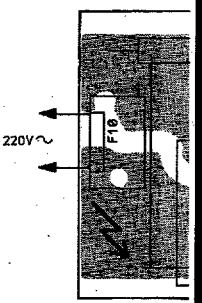
3363 A4
3364 A4
3368 C4
3370 C3

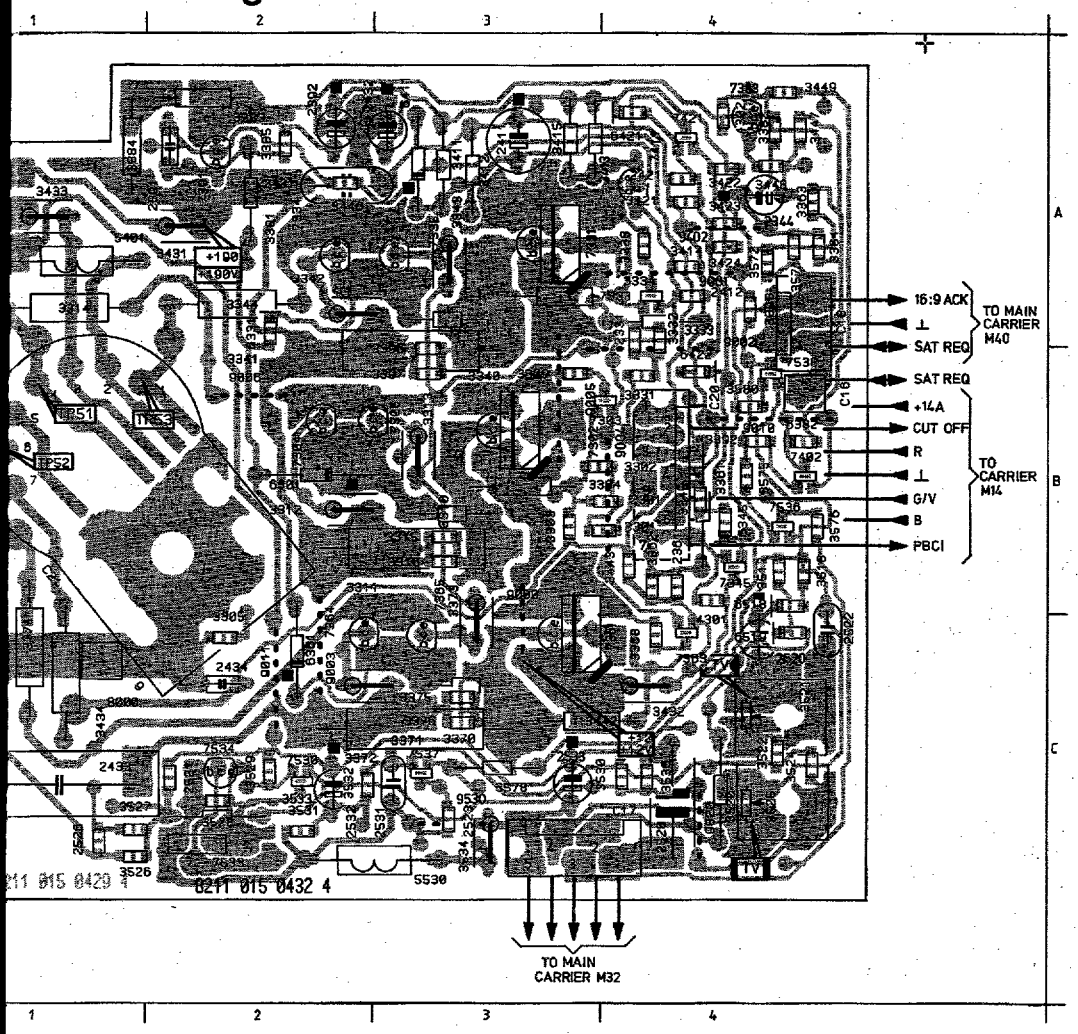
Loud speaker module
Lautsprecher Platte
Module haut parleur



Mains r
Netzteil
Module



nodule "narrowneck" / Bildröhren Modul "narrowneck" /
ort tube image "narrowneck"



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V92 (L.O.T.)

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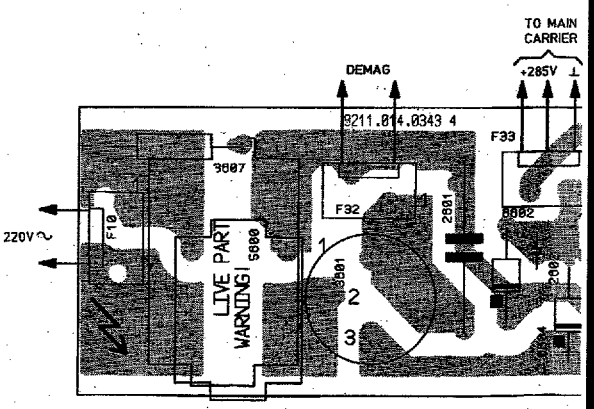
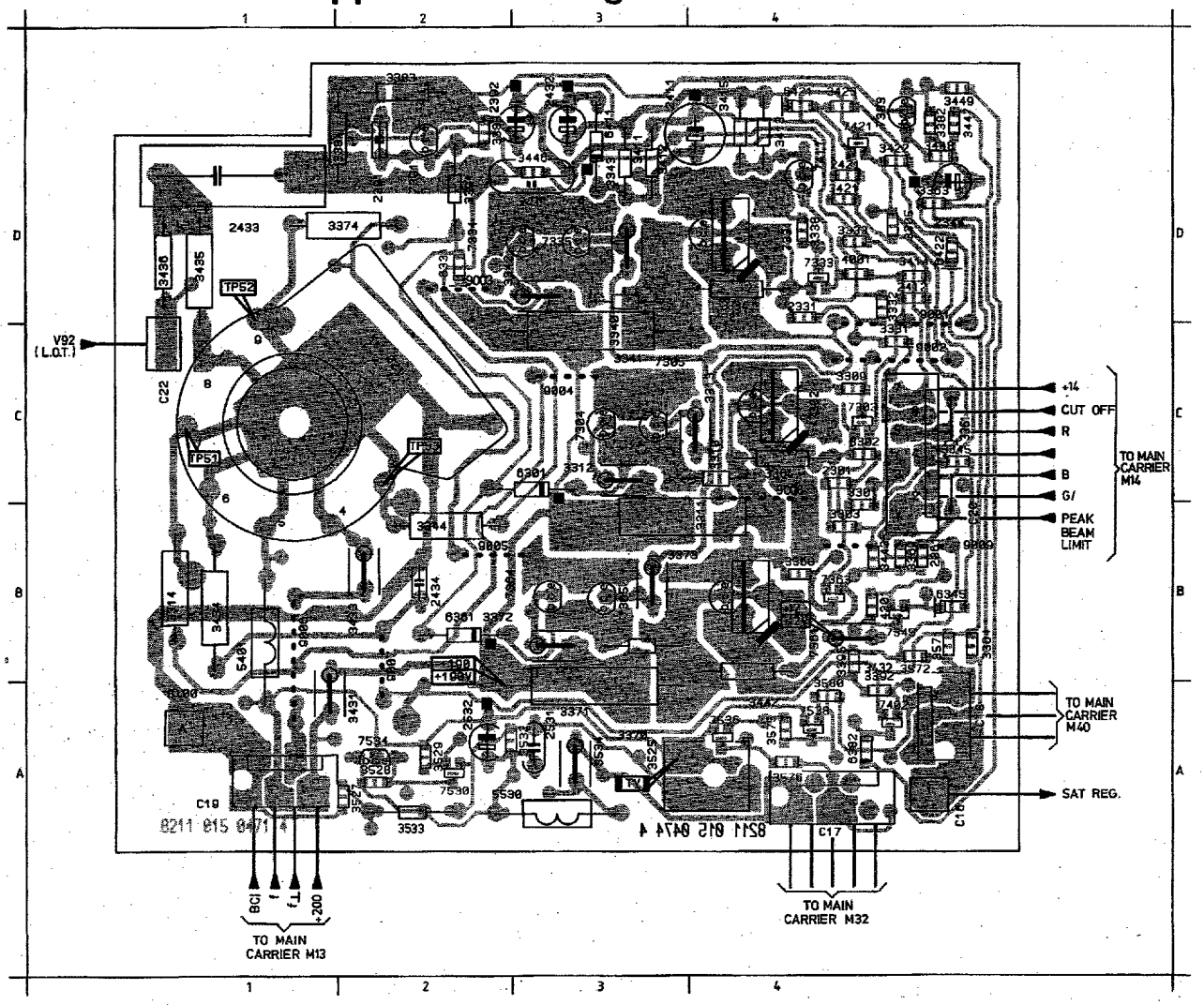
Mains module
Netzteil
Module secteur



Picture tube module "mini neck" / Bildröhren Modul "mini neck" / Module support tube image "mini neck"



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C20	C4	3435	D1
C21	C2	3436	D1
C22	D1	3442	B4
2301	C4	3443	B4
2331	D4	3446	D3
2344	D4	3447	D4
2361	B4	3448	D4
2391	D2	3449	D4
2392	D3	3525	A4
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2412	D4	3528	A2
2421	D4	3529	A3
2431	D3	3532	A3
2433	D1	3533	A2
2434	B3	3534	A3
2531	A3	3571	B4
2532	A3	3572	B4
3301	C4	3575	A4
3302	C4	3576	A4
3303	B4	3580	A4
3304	C4	4001	D4
3305	D4	4301	B4
3309	C4	5401	B2
3310	C4	6301	C3
3311	B4	6331	D3
3312	C4	6345	B4
3313	C4	6361	B3
3314	B1	6382	A4
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3332	D4	6422	D4
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3341	D4	7331	D4
3342	D3	7333	D4
3343	D4	7334	D3
3344	B3	7335	D3
3345	C4	7345	B4
3361	C4	7361	B4
3362	B4	7363	B4
3363	D4	7364	B3
3364	B4	7365	B4
3368	B4	7391	D2
3370	B4	7402	A4
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3373	B4	7530	A3
3374	D2	7534	A2
3384	D2	7536	A4
3385	D3	7538	A4
3391	D3	8100	A1
3392	A4	9001	D4
3395	B4	9002	C4
3411	D4	9003	D3
3412	D4	9004	C3
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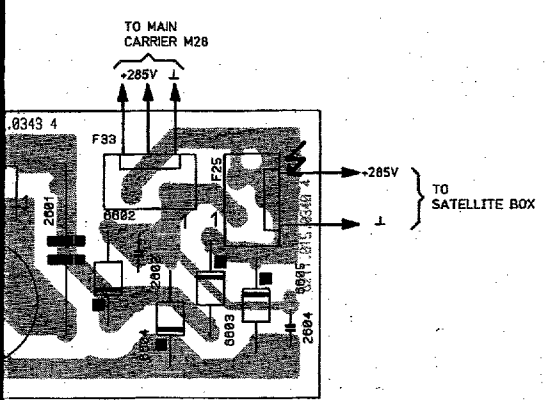
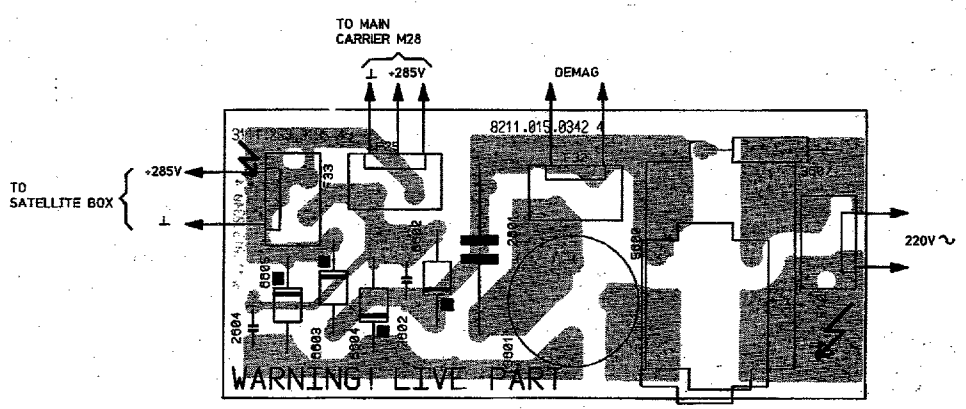
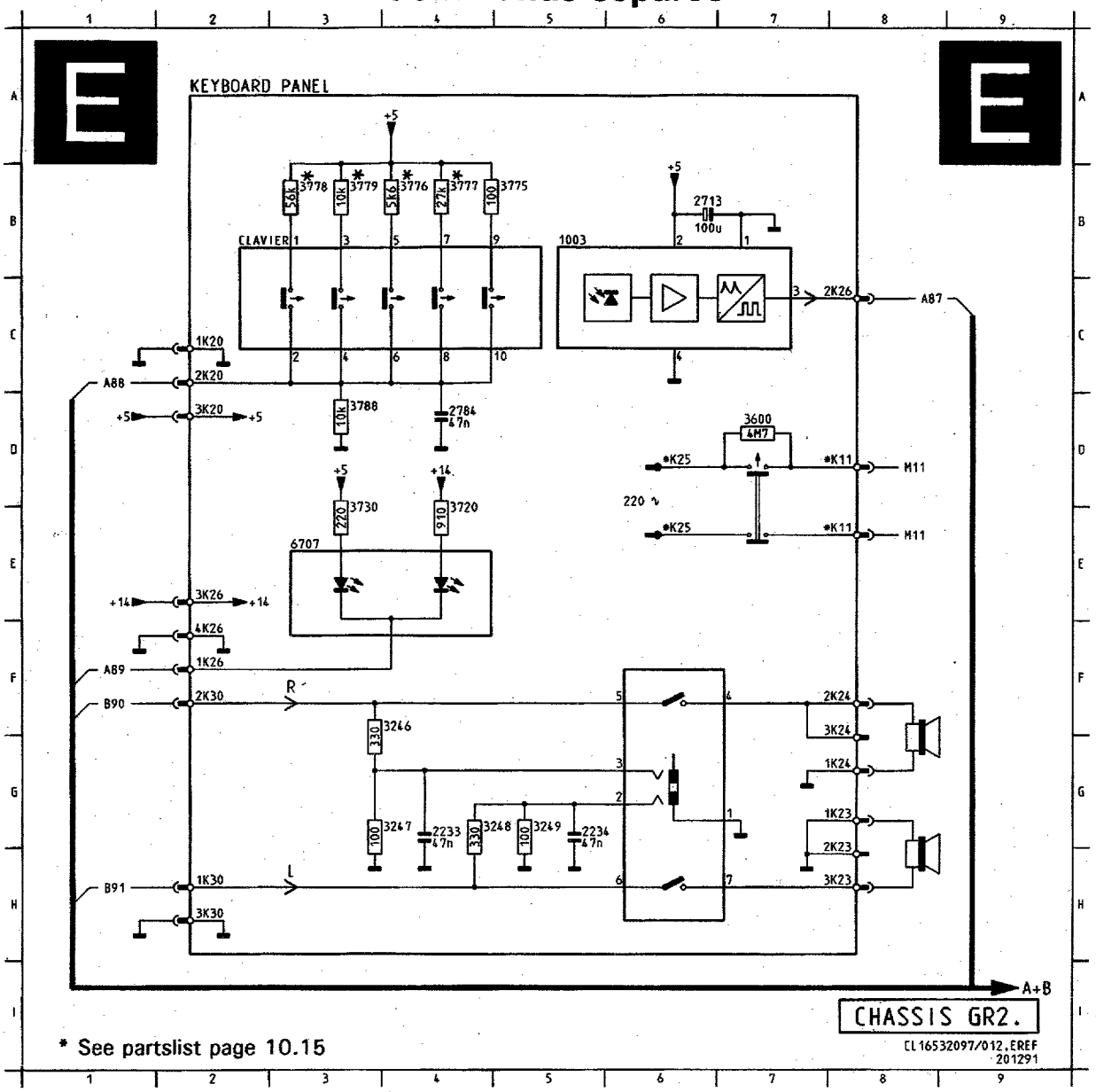




Separate Controle/Separate Bedienung/ Commande séparée



* See partslist page 10.15

1003 B 5
2233 G 4
2234 G 5
2713 B 6
2784 D 4
3246 F 3
3247 G 3
3248 G 4
3249 G 5
3600 D 7
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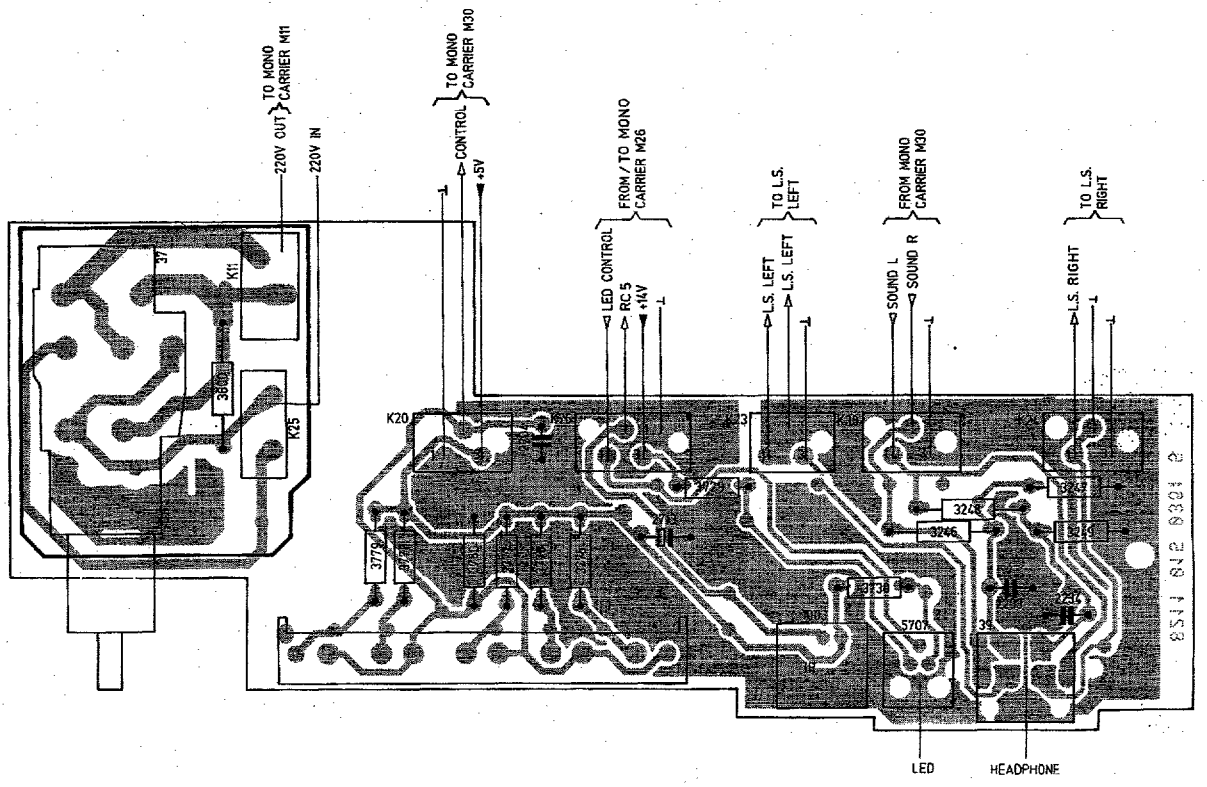
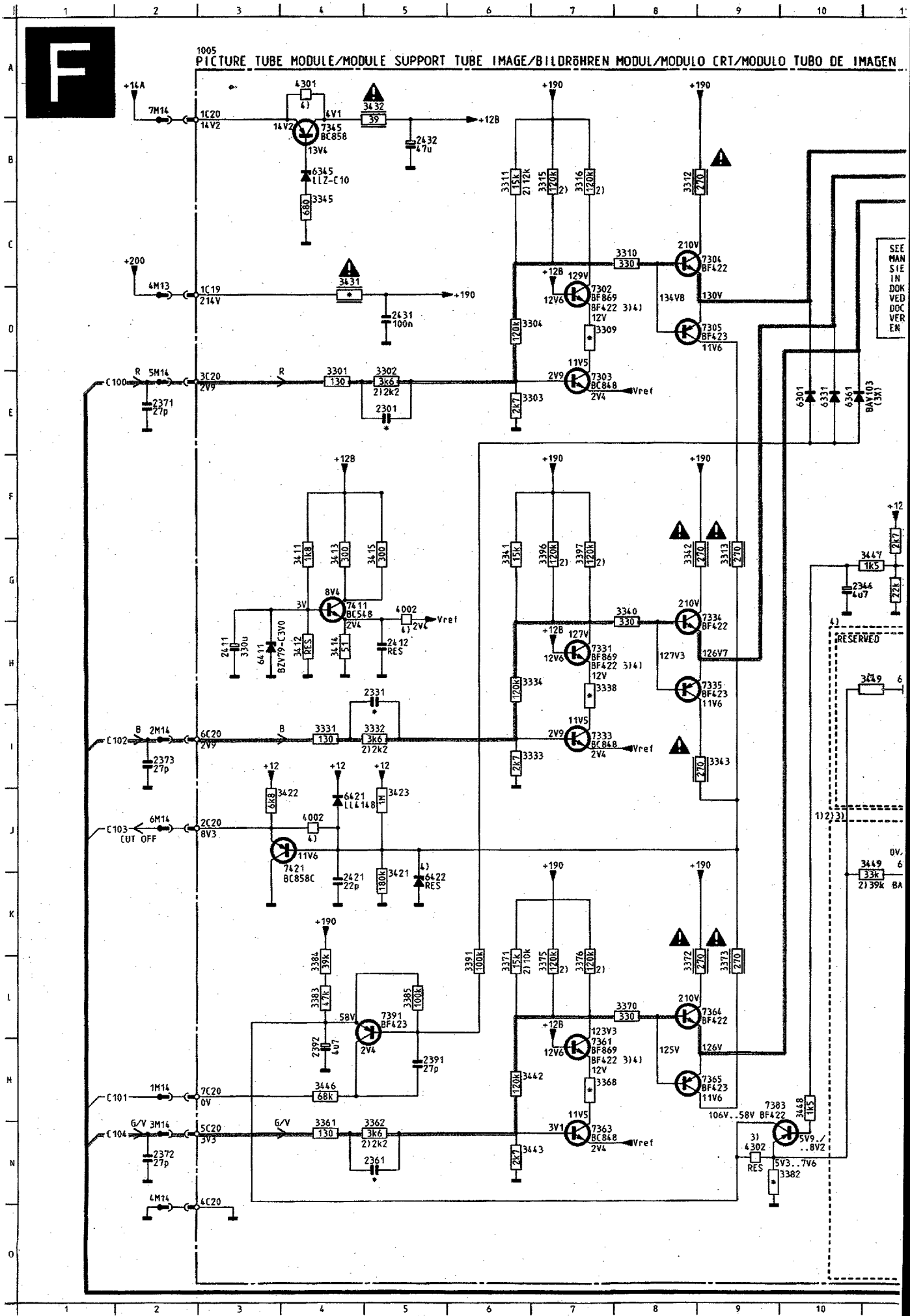
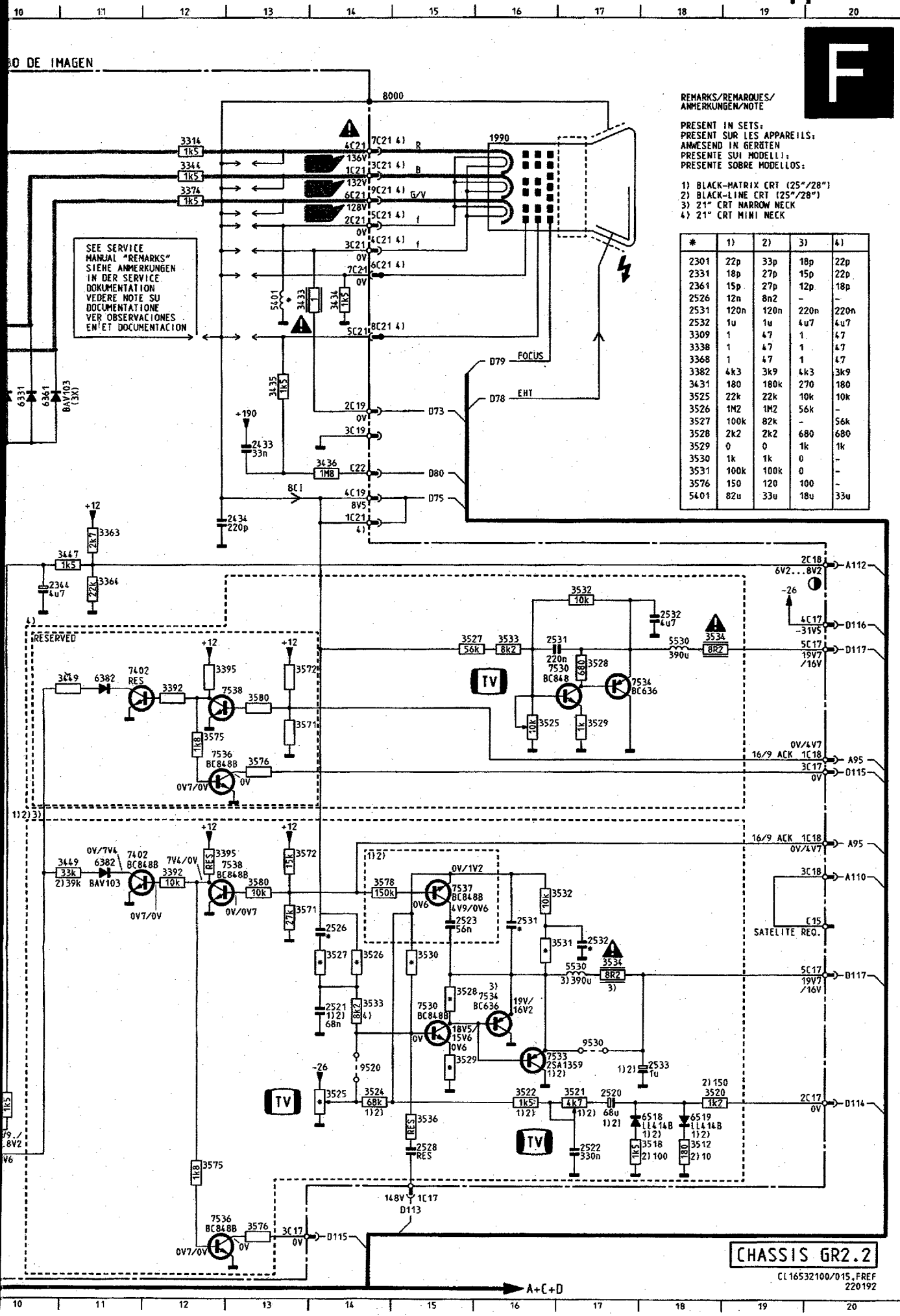
3788 D 3
6707 E 3



Picture tube module



Bildröhren Module/Module support tube image



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2531	120n	120n	220n	220n
2532	1u	1u	4u7	4u7
3309	1	47	1	47
3338	1	47	1	47
3368	1	47	1	47
3382	4k3	3k9	4k3	3k9
3431	180	180k	270	180
3525	22k	22k	10k	10k
3526	1M2	1M2	56k	-
3527	100k	82k	-	56k
3528	2k2	2k2	680	680
3529	0	0	1k	1k
3530	1k	1k	0	-
3531	100k	100k	0	-
3576	150	120	100	-
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2331 H 5 3571 I1
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2361 N 5 3572 H1
2371 E 2 3572 J1
2372 N 2 3575 M1
2373 I 2 3575 I1
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3382 N 9
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3384 L 4
3385 L 5
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3414 H 4
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3422 J 3
3423 J 5
3431 D 4
3432 A 5
3433 D13
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3446 M 4
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3449 H11
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3518 N18
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3522 M16
3524 M14
3525 I16
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3526 K14
3527 H15
3527 K14
3528 H17
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3529 I17
3529 M15
3530 K15
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3532 G17
3532 K16
3533 H16
3533 L14

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844	G10	3571	K13
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523	K15	6301	E10
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528	N15	6345	B 4
531	H16	6361	E10
531	K16	6382	H11
532	G18	6382	J11
532	K17	6411	H 3
801	E 4	6421	J 4
802	E 5	6422	K 5
803	E 6	6518	N18
804	D 6	6519	N18
809	D 7	7302	D 7
810	C 8	7303	E 7
811	B 6	7304	C 9
812	B 8	7305	D 9
813	G 9	7331	H 7
814	B12	7333	I 7
815	B 7	7334	H 9
816	B 7	7335	H 9
831	I 4	7345	B 4
832	I 5	7361	M 7
833	I 6	7363	N 7
834	H 6	7364	L 9
838	H 7	7365	M 9
840	G 8	7383	M10
841	G 6	7391	L 5
842	G 8	7402	H11
843	I 9	7402	J11
844	B12	7411	G 4
845	B 4	7421	J 4
861	N 4	7530	H17
862	N 5	7530	L15
863	F11	7533	M16
864	G11	7534	H17
868	M 7	7534	L16
870	L 8	7536	O12
871	L 6	7536	I12
872	L 8	7537	K15
873	L 9	7538	H12
874	B12	7538	K12
875	L 7	9530	M17
876	L 7		
882	N 9		
883	L 4		
884	L 4		
885	L 5		
891	L 6		
892	K12		
892	H12		
895	H12		
895	J12		
896	G 7		
897	G 7		
411	G 4		
412	H 4		
413	G 4		
414	H 4		
415	G 5		
421	J 5		
422	J 3		
423	J 5		
431	D 4		
432	A 5		
433	D13		
434	D14		
435	E13		
436	F14		
442	M 6		
443	N 6		
446	M 4		
447	G11		
448	M10		
449	H11		
449	J11		
512	N18		
518	N18		
520	M18		
521	M17		
522	M16		
524	M14		
525	I16		
525	M14		
526	K14		
527	H15		
527	K14		
528	H17		
528	L15		
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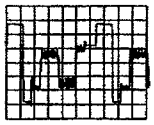
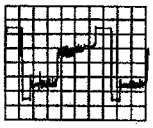
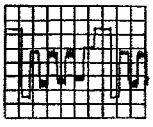
533	L14		



TP 51
130 V_{pp}
115 V_{pp} for 21"

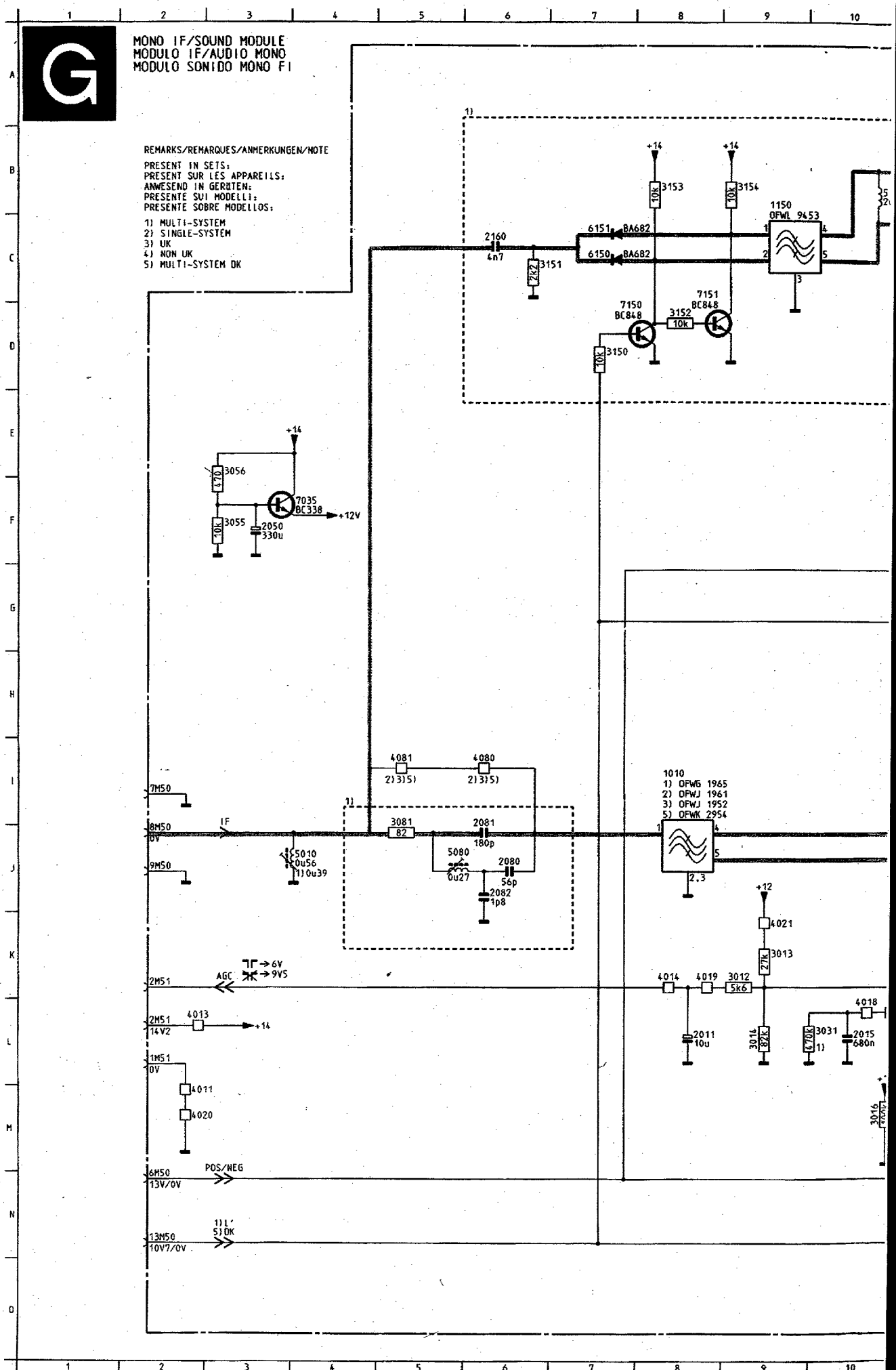


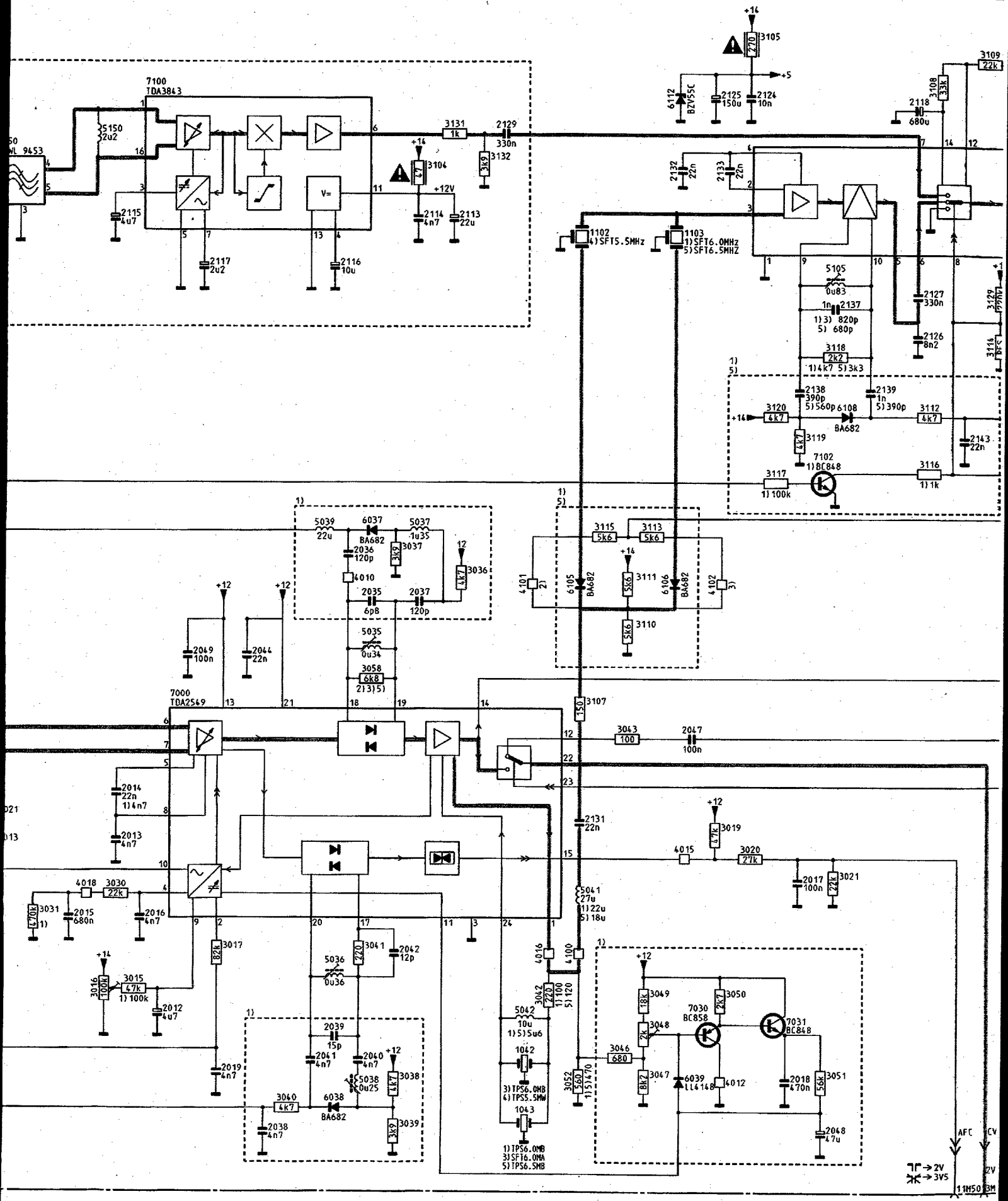
TP 52
120 V_{pp}
115 V_{pp} for 21"

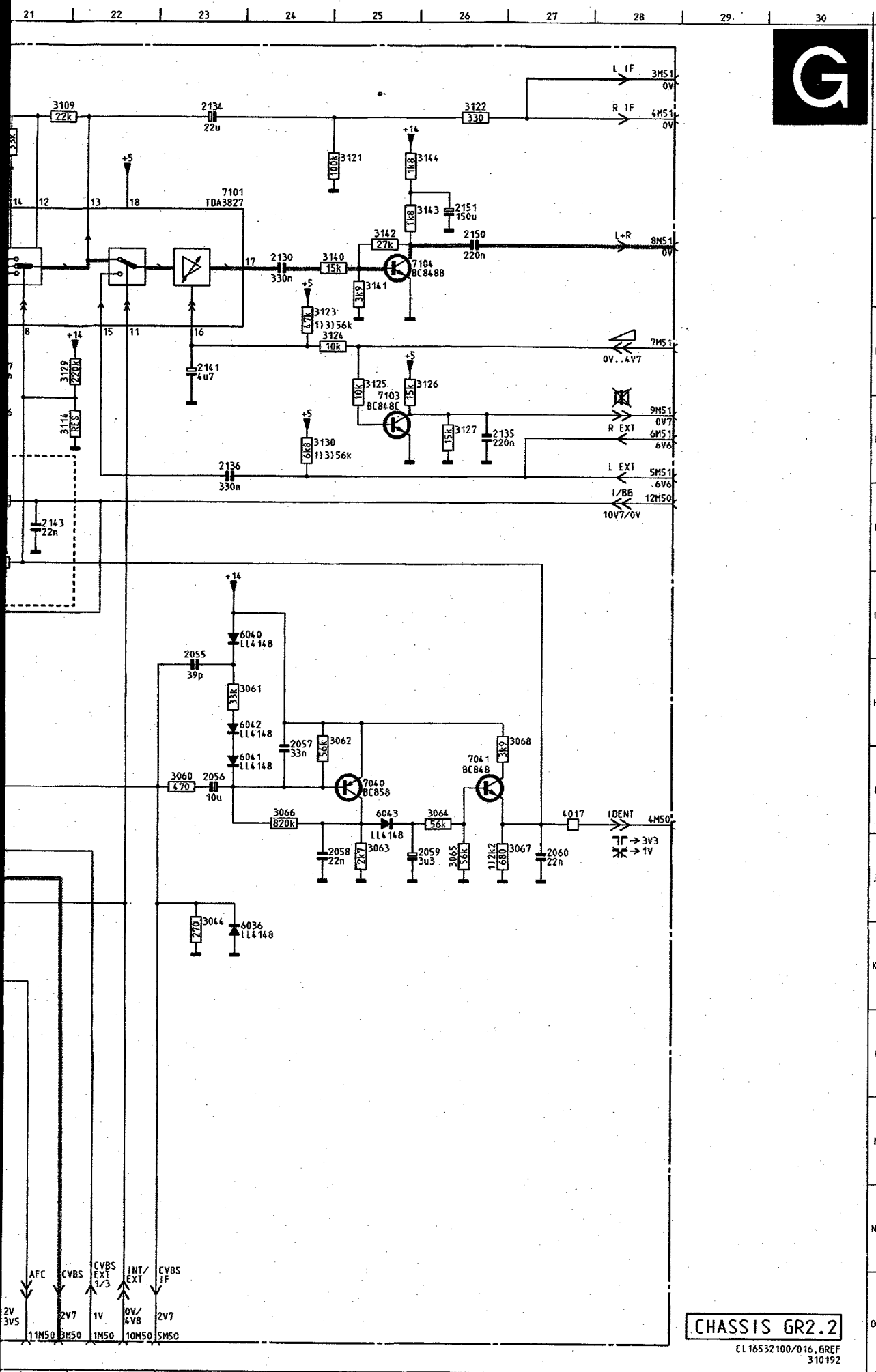


TP 53
120 V_{pp}
110 V_{pp} for 21"

Mono IF/sound module / Mono ZF/Tonmodul




7100
TDA3843
7000
TDA2549
7102
1) BC848
7030
BC858
7031
BC848
1102
4) SFT5.5MHz
1103
1) SFT6.0MHz
5) SFT6.5MHz
BA682
BZV55C
LL4148
AFC
CV
2V
3V5
11M50
3M



CHASSIS GR2.2

CL16532100/016.GREF
310192

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	1042	N16	3119	F19
	1043	N16	3120	F19
	1102	D16	3121	B25
A	1103	D18	3122	A26
	1150	B 9	3123	D24
	2011	L 8	3124	D24
	2012	M11	3125	D25
	2013	K11	3126	D25
	2014	J11	3127	E26
	2015	L10	3129	D21
	2016	L11	3130	E24
B	2017	L19	3131	B15
	2018	N19	3132	C15
	2019	N12	3140	C24
	2035	H14	3141	C25
	2036	G13	3142	C25
	2037	H14	3143	B25
	2038	O12	3144	B25
	2039	M13	3150	D 7
C	2040	N14	3151	C 6
	2041	N13	3152	D 8
	2042	L14	3153	B 8
	2044	I12	3154	B 9
	2047	J18	4010	H13
	2048	O19	4011	M 2
	2049	I11	4012	N18
D	2050	F 3	4014	K 8
	2055	H23	4015	K18
	2056	I23	4016	L16
	2057	I24	4017	I27
	2058	J24	4018	L10
	2059	J26	4019	K 8
	2060	J27	4020	M 2
	2080	J 6	4021	K 9
E	2081	J 6	4080	I 6
	2082	J 6	4081	I 5
	2113	C15	4100	L16
	2114	C14	4101	H16
	2115	C11	4102	H18
	2116	D13	5010	J 4
	2117	D12	5035	H14
F	2118	B21	5036	M13
	2124	B18	5037	G14
	2125	B18	5038	N14
	2126	E21	5039	G13
	2127	D21	5041	L16
	2129	B15	5042	M16
	2130	C24	5080	J 5
	2131	K16	5105	D19
G	2132	C17	5150	B10
	2133	C18	6036	K23
	2134	A23	6037	G14
	2135	E26	6038	N13
	2136	E23	6039	N18
	2137	D20	6040	G23
	2138	E19	6041	I23
H	2139	E20	6042	H23
	2141	D23	6043	I25
	2143	F21	6105	H16
	2150	C26	6106	H17
	2151	B26	6108	F20
	2160	C 6	6112	B17
	3012	K 9	6150	C 7
	3013	K 9	6151	C 7
I	3014	L 9	7000	L11
	3015	M11	7030	M18
	3016	M10	7031	M19
	3017	L12	7035	F 4
	3019	K18	7040	I25
	3020	K18	7041	I26
	3021	K20	7100	B11
J	3030	L11	7101	B23
	3031	L10	7102	F19
	3036	H15	7103	E25
	3037	G14	7104	C25
	3038	N14	7150	D 8
	3039	N14	7151	C 8
	3040	N13		
	3041	L14		
K	3042	M16		
	3043	J17		
	3044	J23		
	3046	N17		
	3047	N17		
	3048	M17		
	3049	M17		
L	3050	M18		
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	3061	H23		
M	3062	H24		
	3063	J25		
	3064	I26		
	3065	J26		
	3066	I24		
	3067	J27		
	3068	H27		
	3081	J 5		
N	3104	C14		
	3105	A19		
	3107	I16		
	3108	B21		
	3109	A21		
	3110	H17		
	3111	H17		
	3112	F21		
O	3113	G17		
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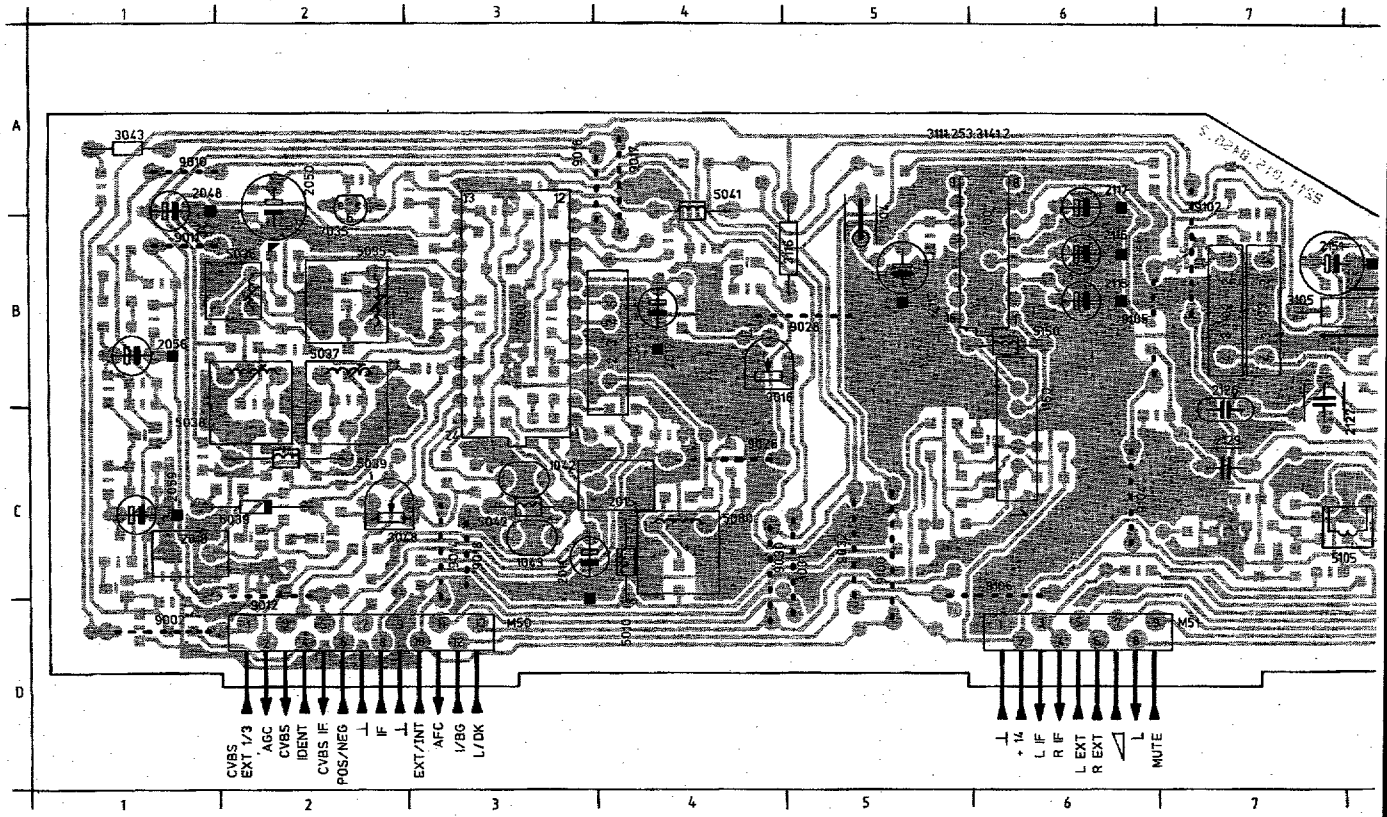
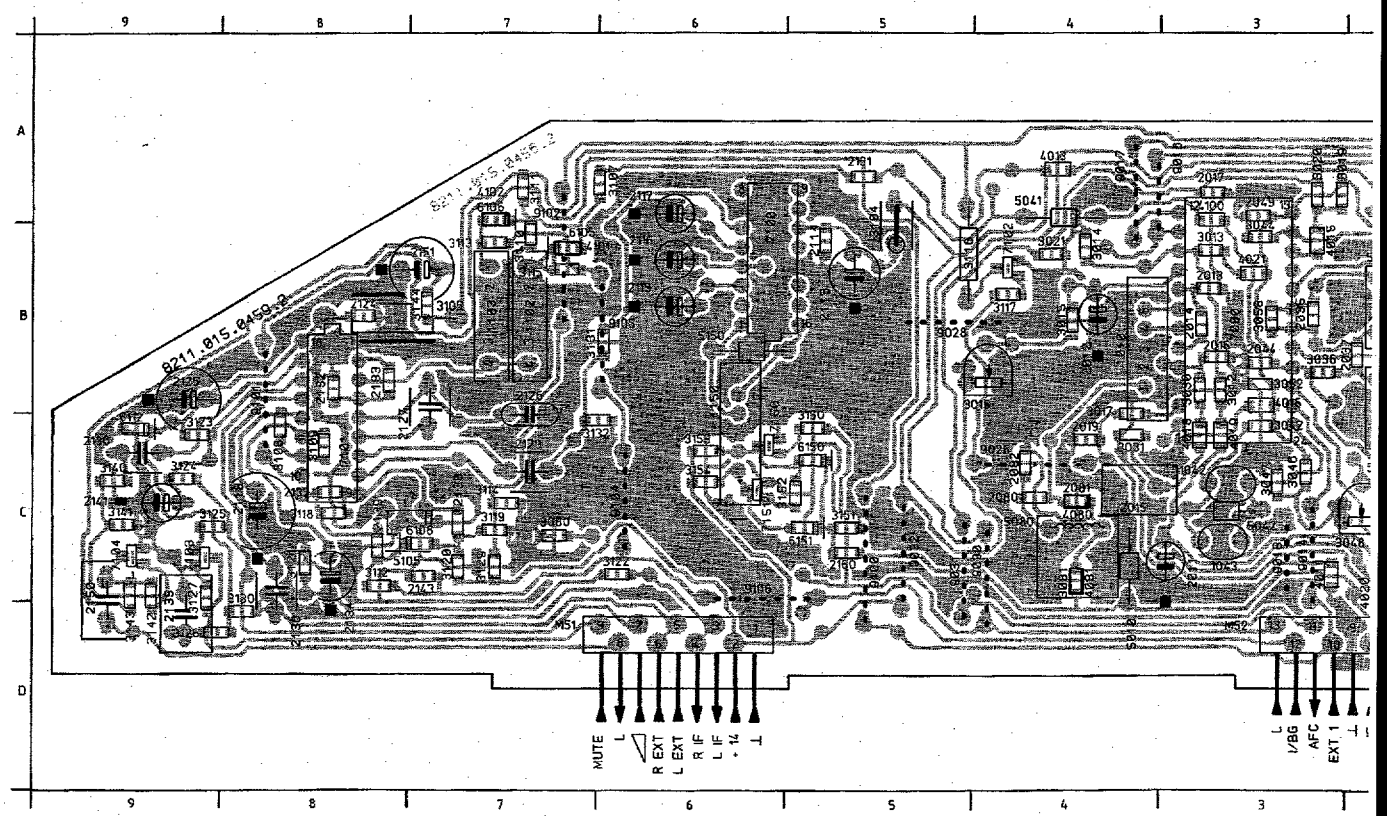
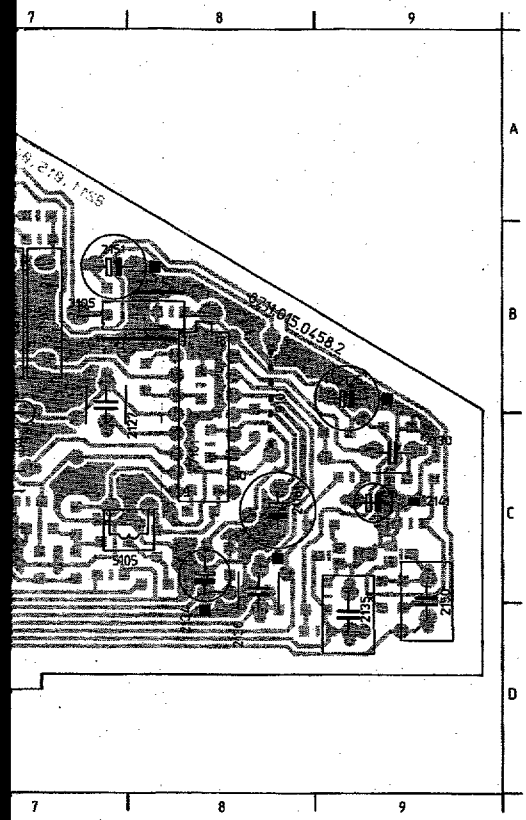
	3116	F21		
	3117	F19		

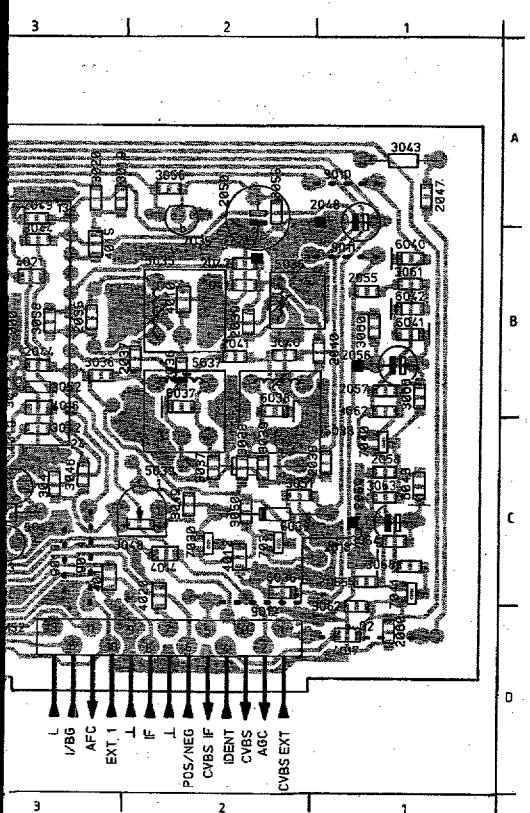
Mono IF/sound module / Mono ZF/Tonmodul /





Module FI/son mono





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M51	D6	3109	C8
1010	B4	3110	B7
1042	C3	3111	A7
1043	C3	3112	C8
1102	B7	3113	B7
1103	B7	3114	C7
1150	C6	3115	B7
2011	C4	3116	B5
2012	B4	3117	B5
2013	B4	3118	C8
2014	B4	3119	C7
2015	C4	3120	C8
2016	B4	3121	C8
2017	A4	3122	C7
2018	C2	3123	C9
2019	C4	3124	C9
2035	B3	3125	C9
2036	B3	3126	D9
2037	B3	3127	C9
2038	C2	3129	C7
2039	B2	3130	D9
2040	B2	3131	B7
2041	B2	3132	C7
2042	B2	3140	C9
2044	B3	3141	C9
2047	A1	3142	C9
2048	A2	3143	C9
2049	A3	3144	B8
2050	A2	3150	C6
2055	B2	3151	C6
2056	B1	3152	C6
2057	B1	3153	C6
2058	C1	3154	C6
2059	C1	4010	B3
2060	D1	4011	C3
2080	C5	4012	C2
2081	C4	4013	A4
2082	C5	4014	C3
2113	B6	4015	B3
2114	B6	4016	B3
2115	B6	4017	D2
2116	B6	4018	C4
2117	A6	4019	C4
2118	C9	4020	C3
2124	B8	4021	B3
2125	B9	4080	C4
2126	B7	4081	C4
2127	B8	4100	A4
2129	C7	4101	B7
2130	C9	4102	A7
2131	A5	5010	C4
2132	B8	5035	B3
2133	B8	5036	B2
2134	C8	5037	B3
2135	D9	5038	B2
2136	C9	5039	C2
2137	C8	5041	A4
2138	C8	5042	C4
2139	C8	5080	C4
2141	C9	5105	C8
2143	C8	5150	B6
2150	C9	6036	C2
2151	B8	6037	B3
2160	C6	6038	B2
3012	B4	6039	C2
3013	B4	6040	B1
3014	B4	6041	B1
3015	B4	6042	B1
3016	B5	6043	C1
3017	B4	6105	B7
3019	A3	6106	A7
3020	A3	6108	C8
3021	B4	6112	C9
3030	B4	6150	C6
3031	C4	6151	C6
3036	B3	7000	C4
3037	C2	7030	C2
3038	C2	7031	C2
3039	C2	7035	A3
3040	B2	7040	C2
3041	B2	7041	C1
3042	C3	7100	B6
3044	B3	7101	B8
3046	C3	7102	B5
3047	C3	7103	C9
3048	C3	7104	C9
3049	C3	7150	C6
3050	C2	7151	C6
3051	C2	9002	D2
3052	B3	9010	A2
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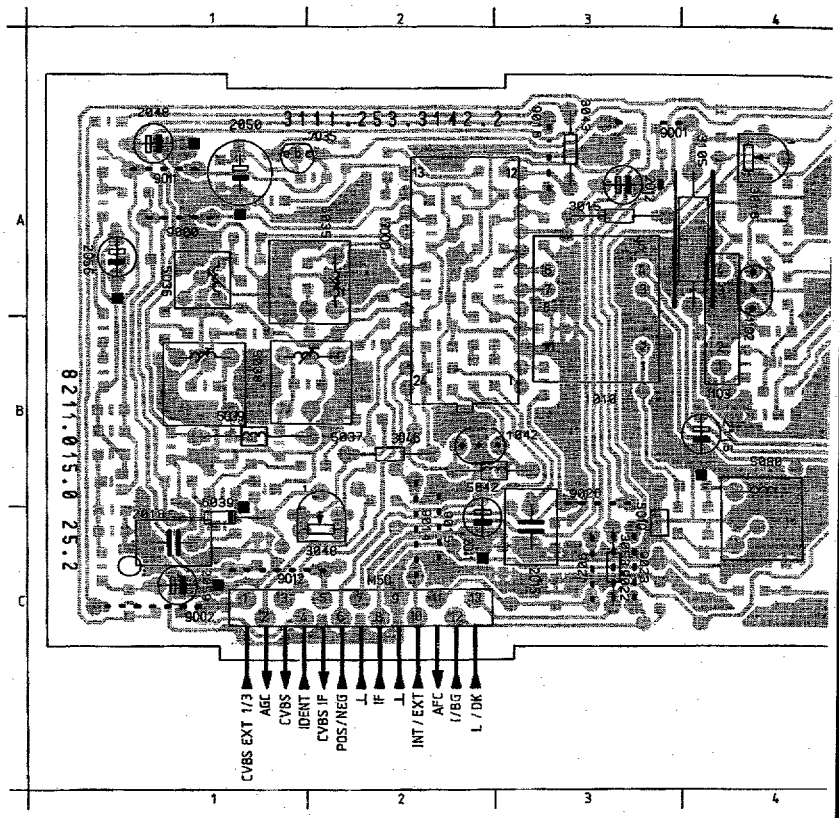
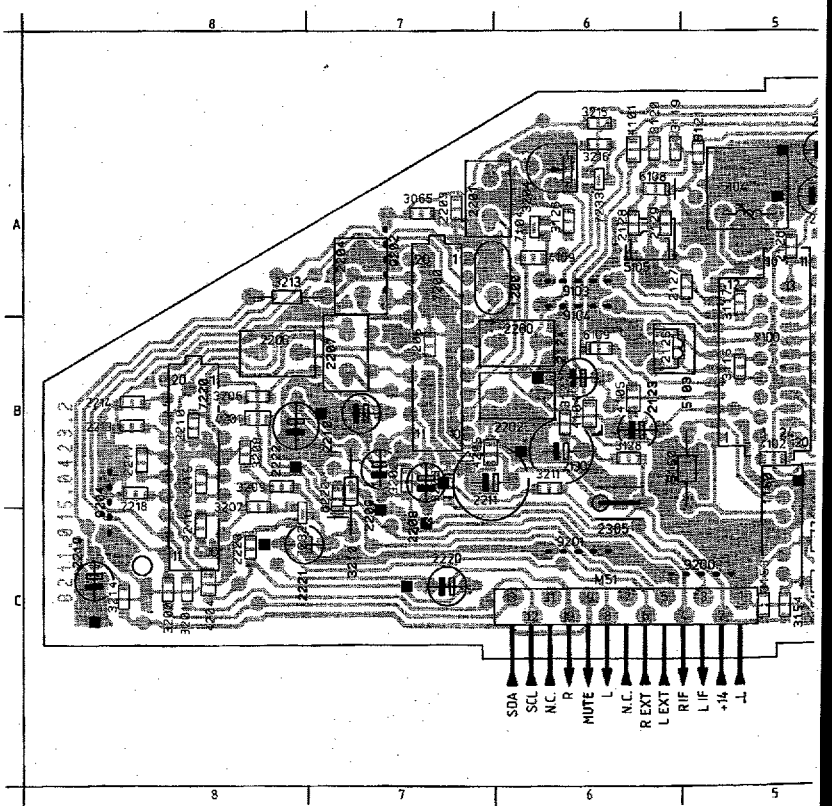
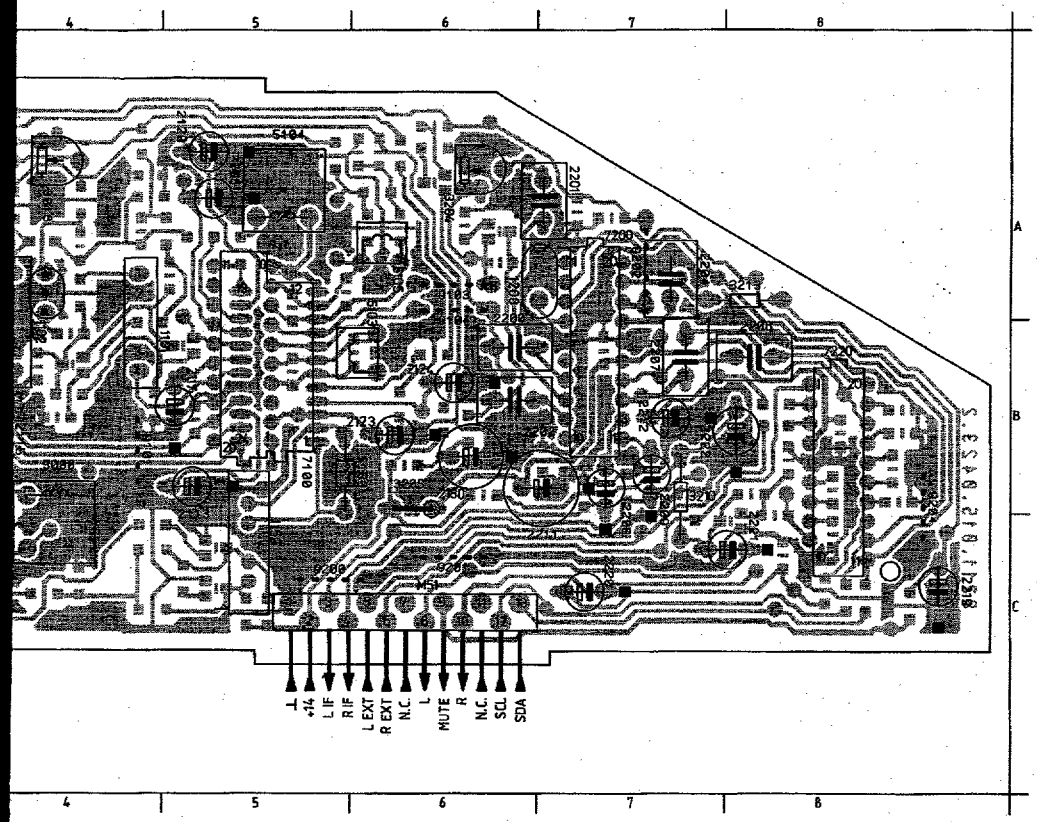
3058	B3	9014	C3
3060	B2	9016	A4
3061	B1	9017	A4
3062	B1	9018	C3
3063	C1	9026	C5
3064	C1	9028	B5
3065	C2	9030	C5
3066	B1	9031	C5
3067	C2	9032	C5
3068	C1	9100	C5
3080	C7	9101	B9
3081	C4	9102	B7
3104	A5	9104	C7
3105	B8	9105	B7
3107	A7	9106	C6

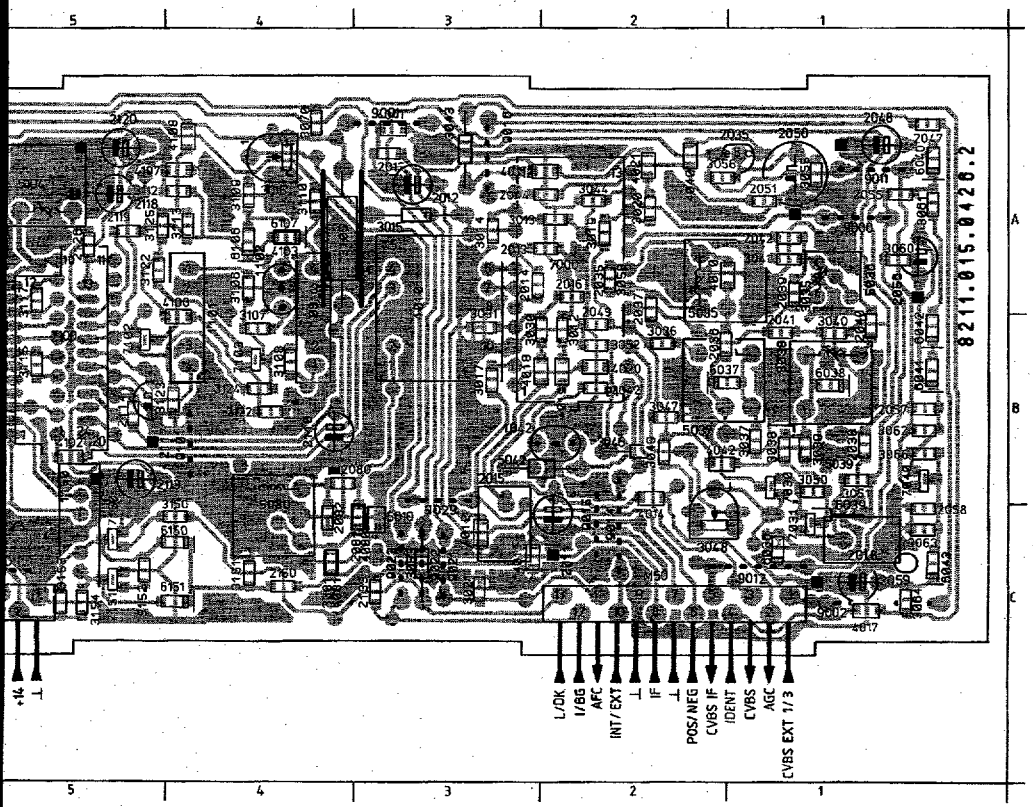
Stereo IF/sound module / Stereo ZF/Tonmodul /





Module FI/son stéréo





M50 C2
M51 C6
1010 B4
1042 B3
1101 A5
1102 A4
1103 B4
1150 C5
1200 A7
2011 C3
2012 A3
2013 A3
2014 A3
2015 C3
2016 A3
2017 A4
2018 C1
2035 A2
2036 B2
2037 A2
2038 B1
2039 A1
2040 B1
2041 B1
2042 A1
2044 A3
2048 A1
2049 B2
2050 A1
2051 A2
2055 A1
2056 A1
2057 B1
2058 C1
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2081 C4
2082 C4
2113 B5
2114 B5
2115 B4
2117 B5
2118 A5
2119 A5
2120 A5
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2123 B6
2124 B6
2125 B6
2126 A5
2127 A6
2128 A6
2129 A6
2130 B6
2133 C4
2160 C4
2200 B7
2201 A7
2202 B7
2203 A7
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2206 B8
2207 B8
2208 B7
2209 B7
2210 B8
2211 B7
2212 B7
2213 B9
2214 B9
2215 B8
2216 C8
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2218 B9
2219 C9
2220 C7
2221 C8
2222 B8
2223 C8
3012 B3
3013 A3
3014 A3
3015 A3
3016 A4
3017 B3
3019 A2
3020 A2
3021 C3
3030 B3
3031 B3
3035 A1
3036 B2
3037 B2
3038 B1
3039 B1
3040 B1
3041 A1
3042 B2
3043 A3
3044 A2
3046 B2
3047 B2
3048 C2
3049 B2
3050 B1
3051 B1
3052 B2
3053 C3
3055 A1
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3058 A2
3060 A1
3061 A1
3062 B1
3063 C1
3064 C1
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3066 B1
3070 A4
3081 C4
3105 A4
3106 A4
3107 B4
3108 B4
3109 A4
3110 A4
3112 A5
3113 A5
3115 B5
3117 A5
3119 A6
3120 A6
3121 A6
3122 A5
3123 B5
3124 B4
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3126 A6
3127 B6
3128 B6
3150 C5
3151 C4
3152 C5
3153 C5
3154 C5
3200 C9
3201 C8
3202 B7
3203 B7
3204 A6
3205 C6
3206 B8
3207 C8
3208 B8
3209 B8
3210 B8
3211 B6
3213 A8
3214 C9
3215 A6
3216 A6
4010 A2
4011 C3
4012 C3
4014 B2
4015 A3
4017 C1
4018 B3
4019 B3
4020 B2
4021 A2
4040 A2
4041 A4
4042 B2
4080 C4
4081 C4
4100 B5
4101 A6
4102 B5
4103 A4
4104 B6
4105 B6
4107 A5
4108 A5
4109 A7
4201 B8
4204 C8
4205 B7
5010 C4
5035 A2
5036 A1
5037 B2
5038 B1
5039 B1
5042 B3
5080 C4
5103 B6
5104 A5
5105 A6
5150 B6
6036 C2
6037 B2
6038 B1
6039 C1
6040 A1
6041 B1
6042 B1
6043 C1
6106 A4
6107 A4
6108 A6
6109 B6
6150 C5
6151 C5
6220 B8
7000 B3
7030 B2
7031 C1
7035 A2
7040 B1
7100 B5
7102 B5
7103 B4
7104 A7
7150 C5
7151 C5
7200 A7
7220 B8
7232 C8
7233 A6
9000 A1
9001 A4
9002 C1
9011 A1
9012 C2
9014 C2
9015 C2
9016 A3
9021 C3
9022 C3
9023 C4
9026 C3
9101 B5
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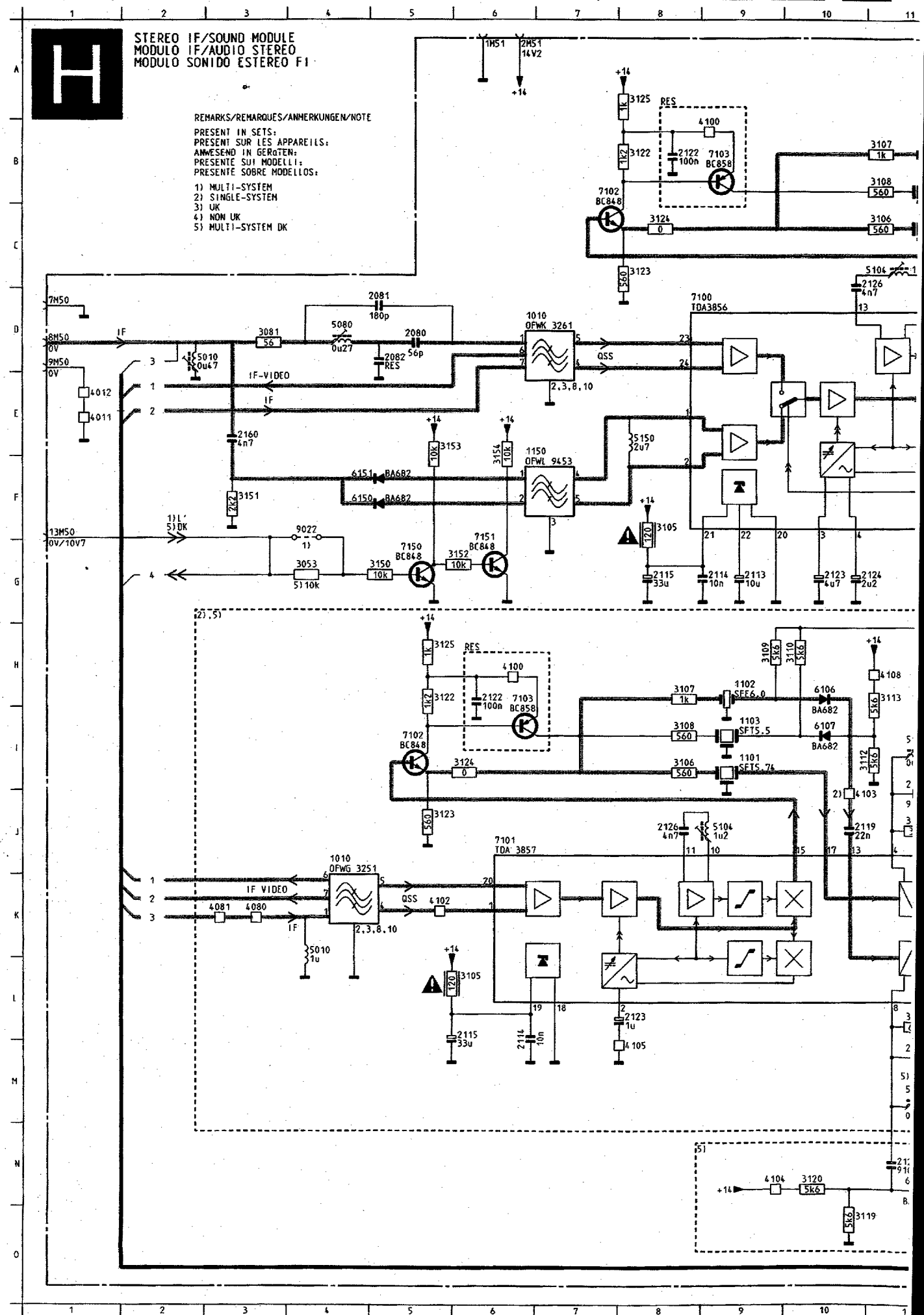
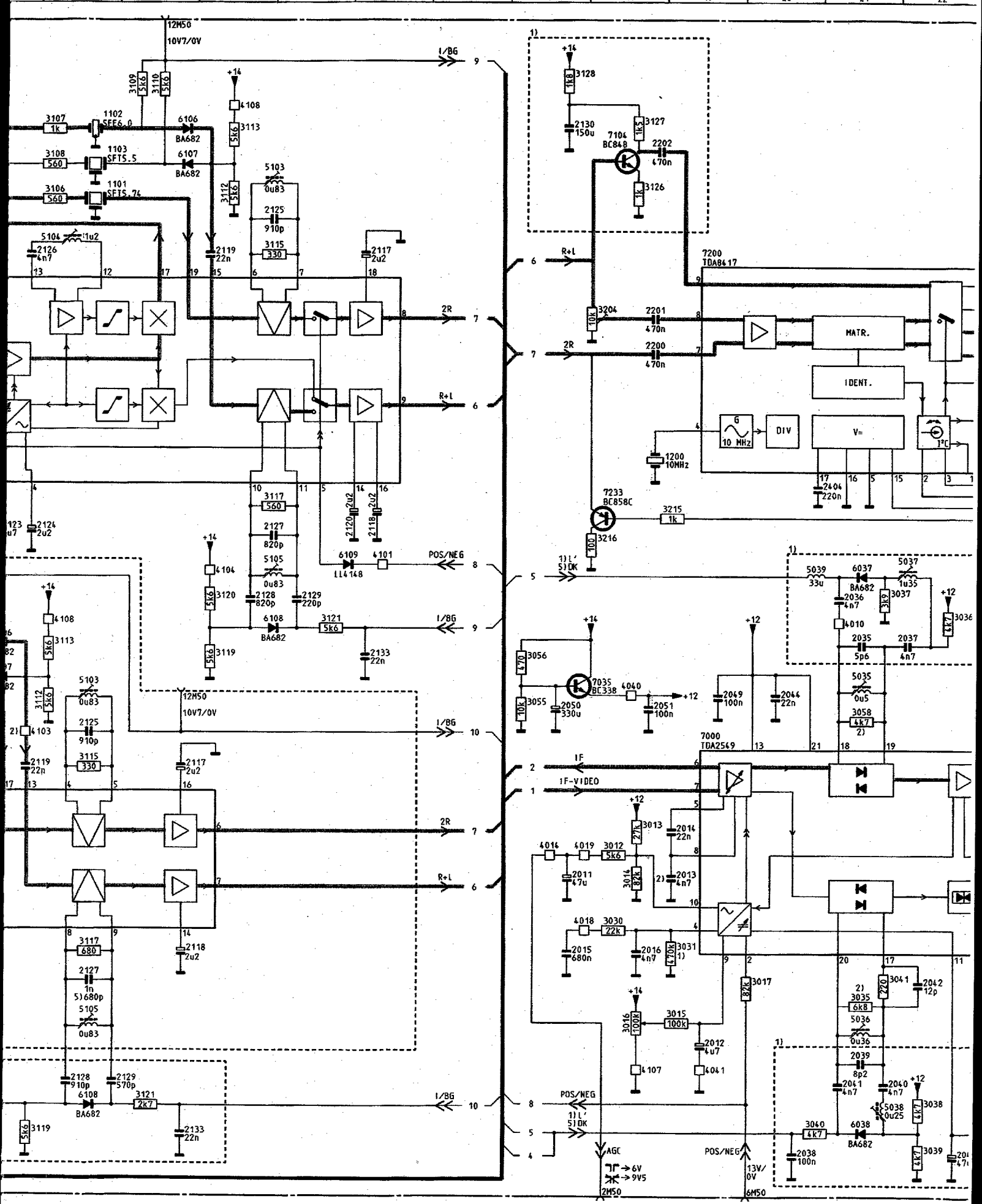
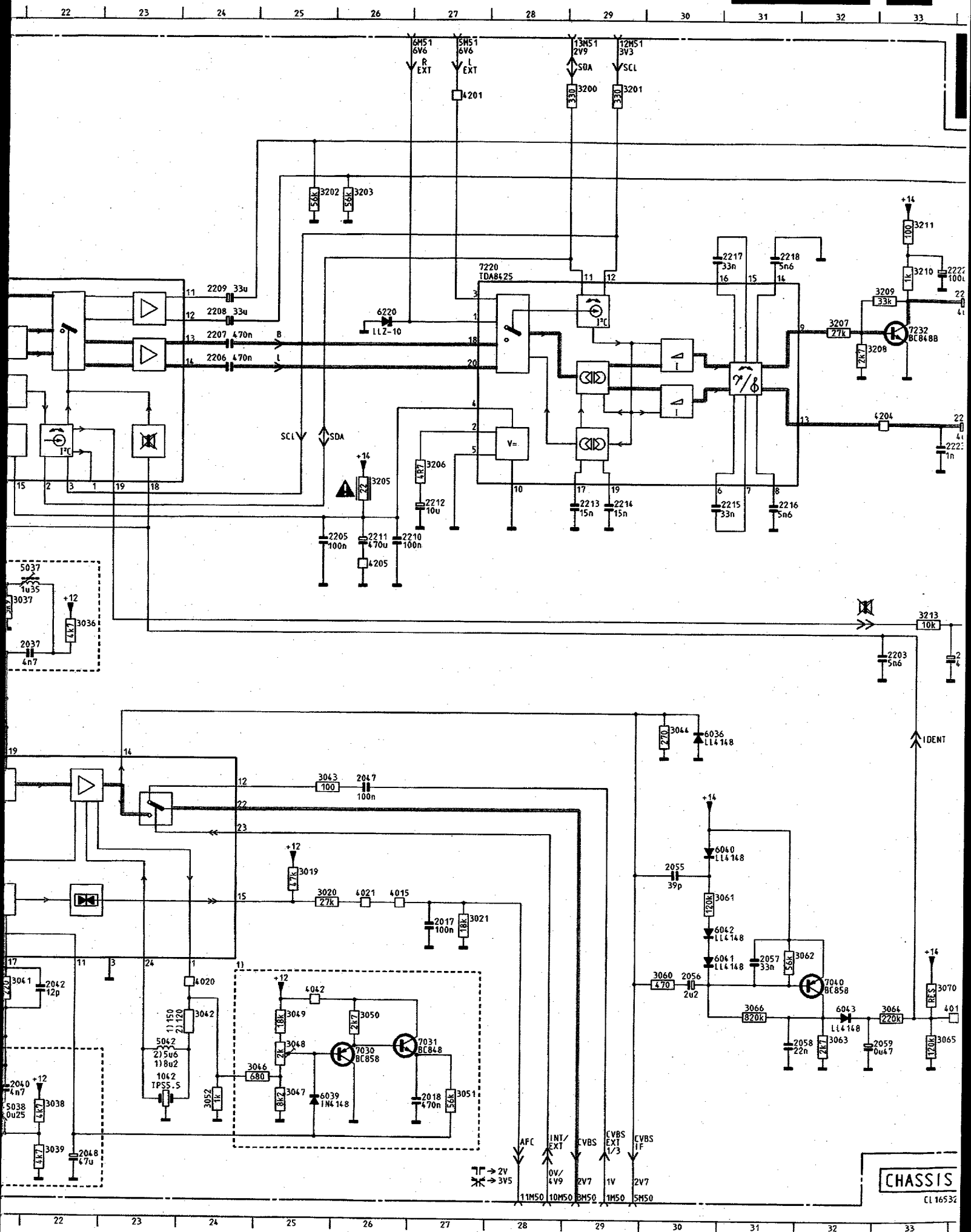
9104 A6
9200 C6
9201 C6
9202 A7
9204 C9

Stereo IF/sound module / Stereo ZF/Tonmodul /



Module FI/son stéréo

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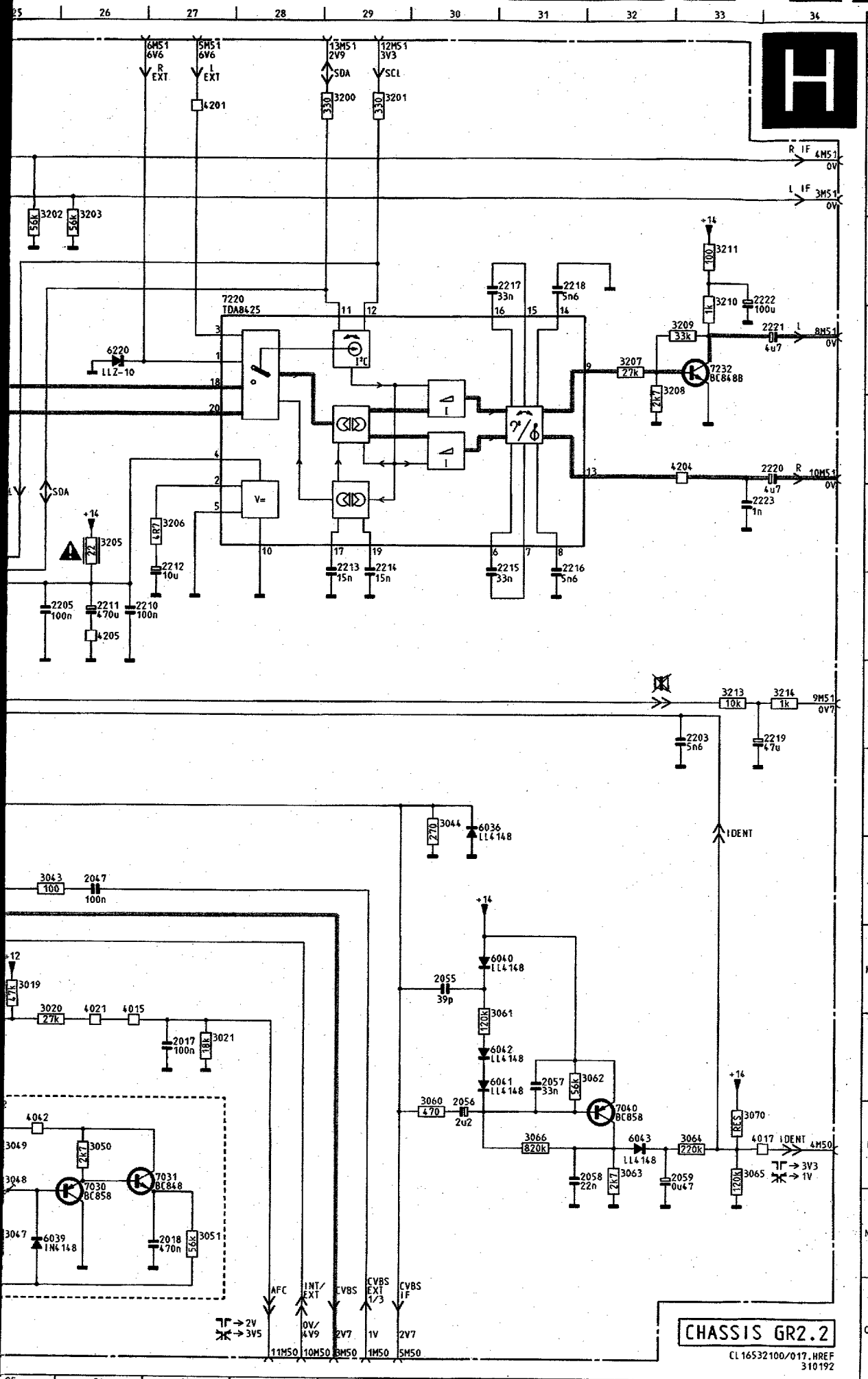
5M51 6V6 L EXT
13M51 2V9 SDA
12M51 3V3 SCL
4201
3200
3201
3202
3203
7220 TDA8425
6220 LLZ-10
2209 33u
2208 33u
2207 470n B
2206 470n L
SCL
SDA
I²C
V=
3205
3206
2212 10u
2205 100n
2211 470u
2210 100n
4205
2213 15n
2214 15n
2215 33n
2216 5n6
2217 33n
2218 5n6
3207 27k
7232 BC848B
3208 2k7
3209 33k
3210 1k
3211 100
4204
2223 1n
5037 1u35
3037
3036 4k7
2037 4n7
3213 10k
2203 5n6
IDENT
3043 100
2047 100n
3019 47k
3020 27k
4021
4015
2017 100n
3021 18k
3041
2042 12p
4020
3042
5042
5038 0u25
3038 4k7
3039 4k7
2048 47u
4042
3049 18k
3050 2k7
3048 2k
7030 BC858
7031 BC848
3046 680
3047 8k2
6039 1N4148
3052 1k
2018 470n
3051 56k
3044 270
6036 LL4148
6040 LL4148
2055 39p
3061 120k
6042 LL4148
6041 LL4148
2057 33n
3062 56k
7040 BC858
3060 470
2056 2u2
3066 820k
6043 LL4148
3064 220k
2058 22n
3063 2k7
2059 0u47
3065 120k
3070
AFC
INT/ EXT
CVBS
CVBS EXT 1/3
CVBS IF
2V / 3V5
0V/ 4V9
2V7
1V
2V7
11M50
10M50
8M50
1M50
5M50



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1042	N23	3047	N25	5103	I 11
1101	C11	3048	M25	5104	J 9
1101	I 9	3049	M25	5104	C11
1102	B11	3050	M26	5105	G13
1102	H 9	3051	N27	5105	M11
1103	B11	3052	N24	5150	E 8
1103	I 9	3053	G 4	6036	I30
1150	F 6	3055	I17	6037	G21
1200	F18	3056	I17	6038	O21
2011	K17	3058	I21	6039	N25
2012	N19	3060	M30	6040	K30
2013	K19	3061	K30	6041	L30
2014	K19	3062	L31	6042	L30
2015	L17	3063	M32	6043	M32
2016	L18	3064	M33	6106	B12
2017	L27	3065	M33	6106	H10
2018	N27	3066	M31	6107	B12
2035	H21	3070	M33	6107	I10
2036	H21	3081	D 3	6108	H13
2037	H22	3105	F 8	6108	N11
2038	O20	3105	L 6	6109	G14
2039	N21	3106	C11	6150	F 5
2040	N21	3106	I 8	6151	F 5
2041	N21	3107	B11	6220	D26
2042	M22	3107	H 8	7000	J19
2044	I20	3108	B11	7030	N26
2047	J26	3108	I 8	7031	M27
2048	O22	3109	A12	7035	I18
2049	I19	3109	H 9	7040	M32
2050	I17	3110	A12	7100	D 8
2051	I18	3110	H10	7101	J 6
2055	K30	3112	C13	7102	B 7
2056	M30	3112	I11	7102	I 5
2057	L31	3113	B13	7103	B 9
2058	M31	3113	H11	7103	H 6
2059	M33	3115	C13	7104	B18
2080	D 5	3115	J11	7150	G 5
2081	D 5	3117	G13	7151	G 6
2082	D 5	3117	L11	7200	D19
2113	G 9	3119	I13	7220	D27
2114	G 9	3119	O10	7232	D33
2114	L 6	3120	H13	7233	G18
2115	G 8	3120	N10	9022	F 4
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2117	C15	3121	N12		
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2120	G14	3124	I 6		
2122	B 8	3125	A 8		
2122	H 6	3125	H 5		
2123	G10	3126	C18		
2123	L 8	3127	B18		
2124	G10	3128	A17		
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2126	J 8	3153	E 5		
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2130	B17	3205	F26		
2133	I15	3206	F27		
2133	O12	3207	D32		
2160	E 3	3208	D32		
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2201	D18	3210	C33		
2202	B18	3211	C33		
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2205	G25	3214	H34		
2206	E24	3215	G19		
2207	D24	3216	G18		
2208	D24	4010	H21		
2209	D24	4011	E 1		
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2211	G26	4014	K17		
2212	G27	4015	L26		
2213	G29	4017	M34		
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2215	G31	4019	K17		
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2217	C31	4021	L26		
2218	C31	4040	I18		
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2220	E34	4042	M25		
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2222	C33	4081	K 3		
2223	F33	4100	B 9		
2404	F20	4100	H 6		
3012	K18	4101	G15		
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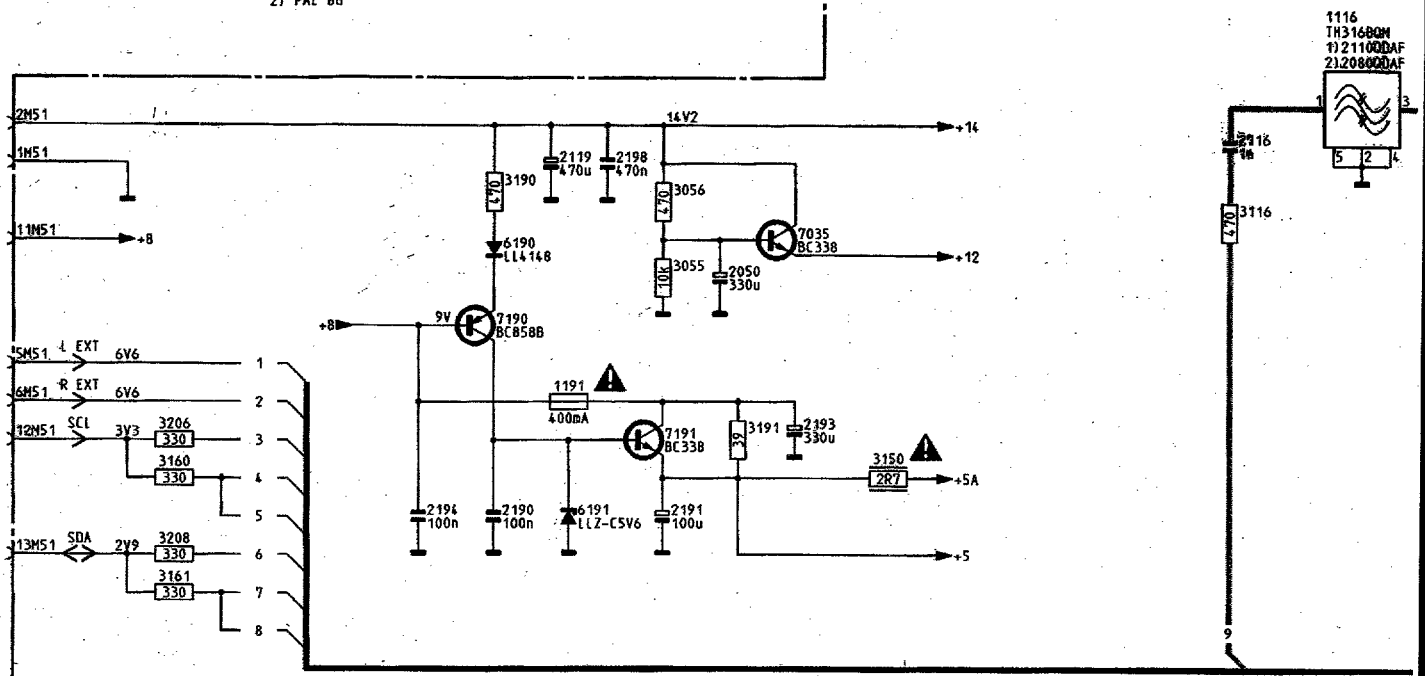
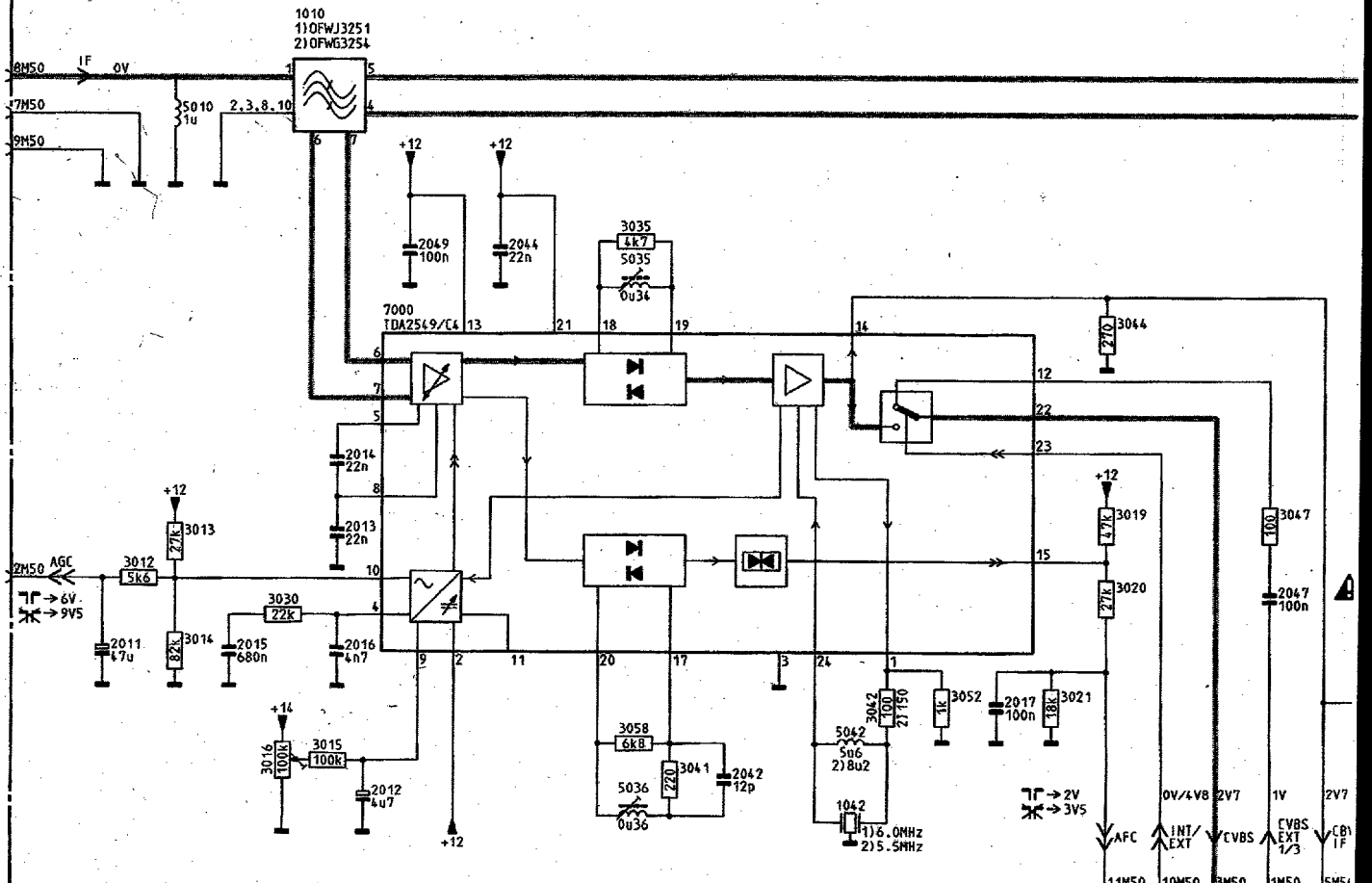
3038	N22	5035	I21		
3039	O22	5036	M21		
3040	O20	5037	G22		
3041	M21	5038	N21		
3042	N24	5039	H20		
3043	J25	5042	M23		

REMARKS/REMARQUES/ANMERKUNGEN/NOTE

PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERÄTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:

1) PAL I
2) PAL BG

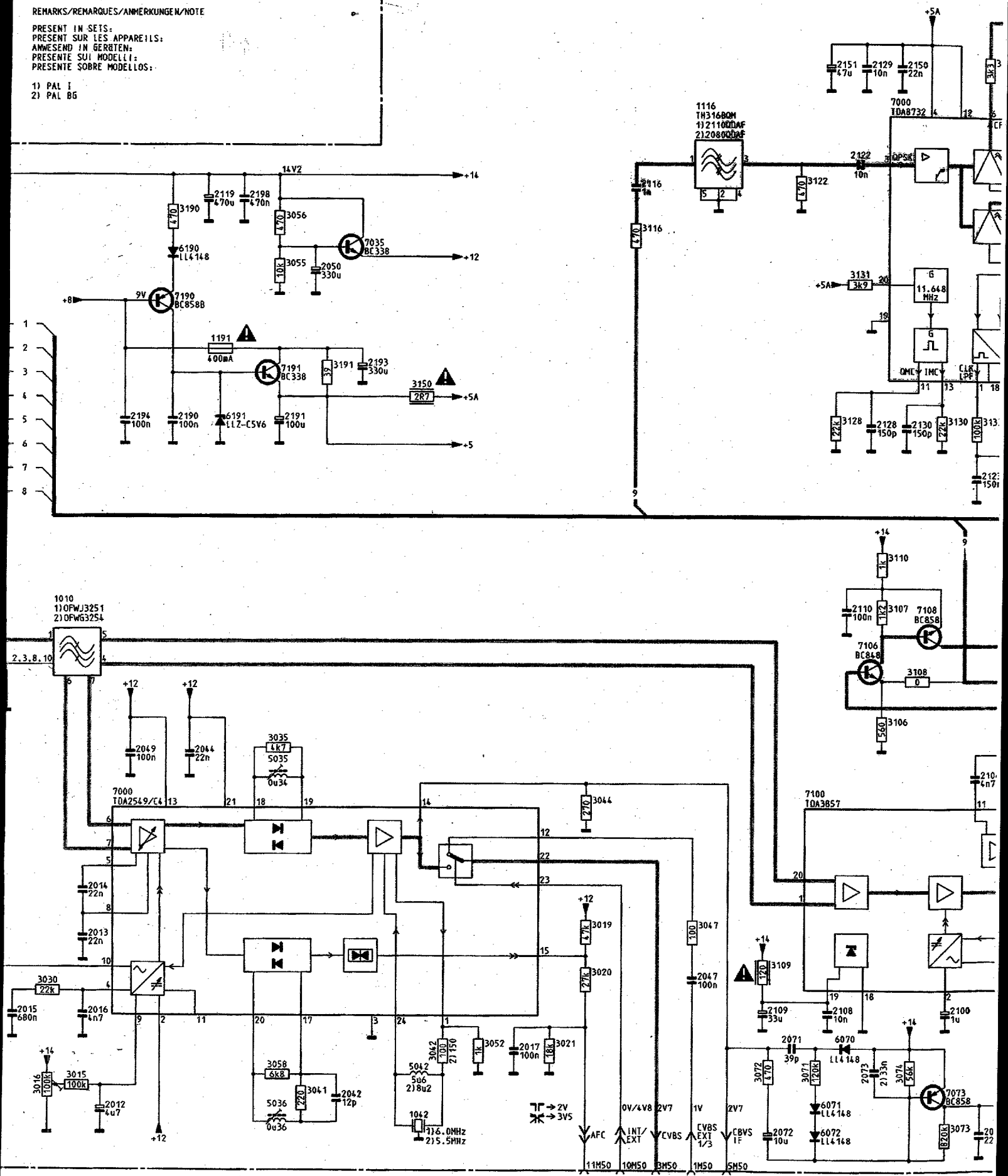


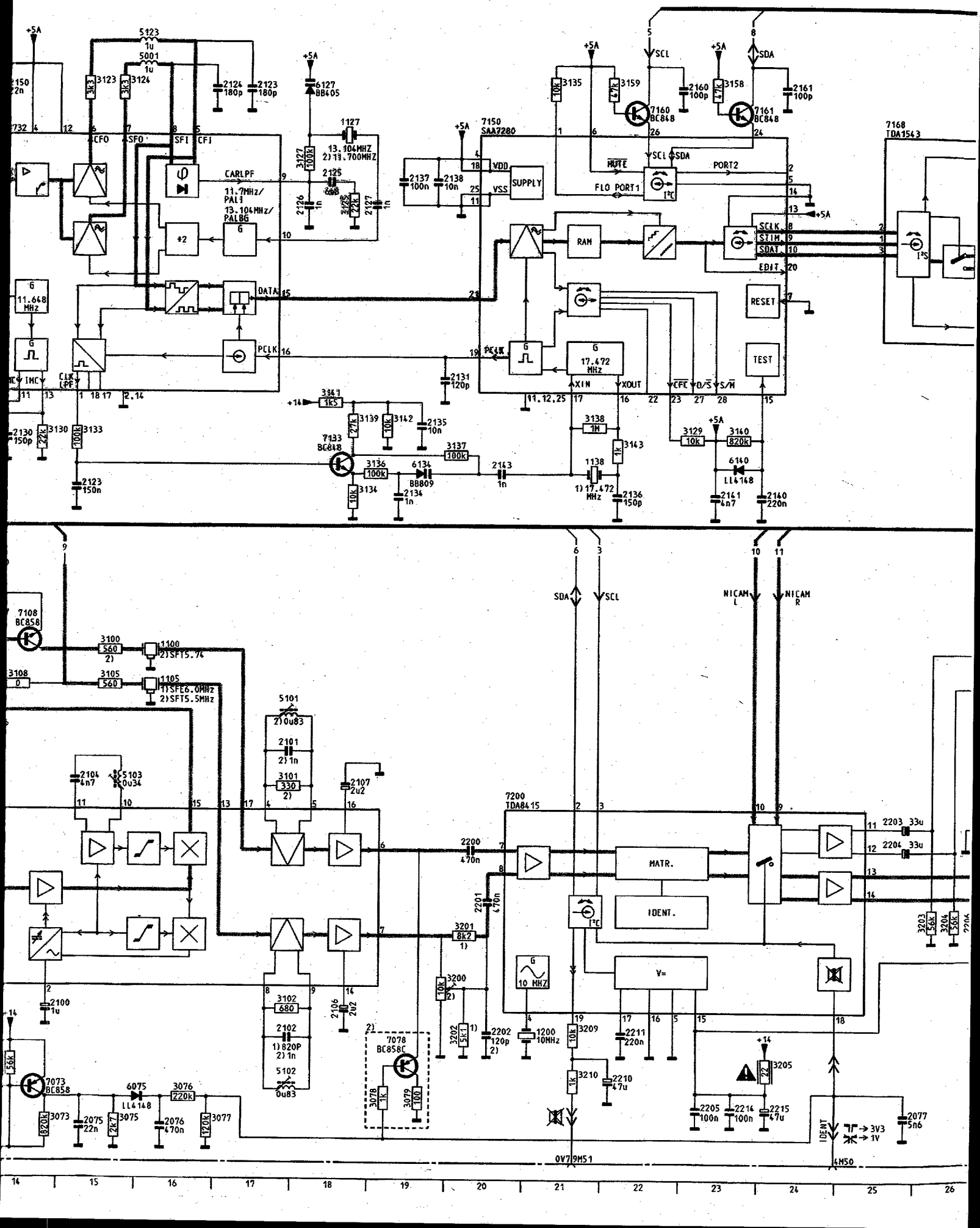


REMARKS/REMARQUES/ANMERKUNGEN/NOTE

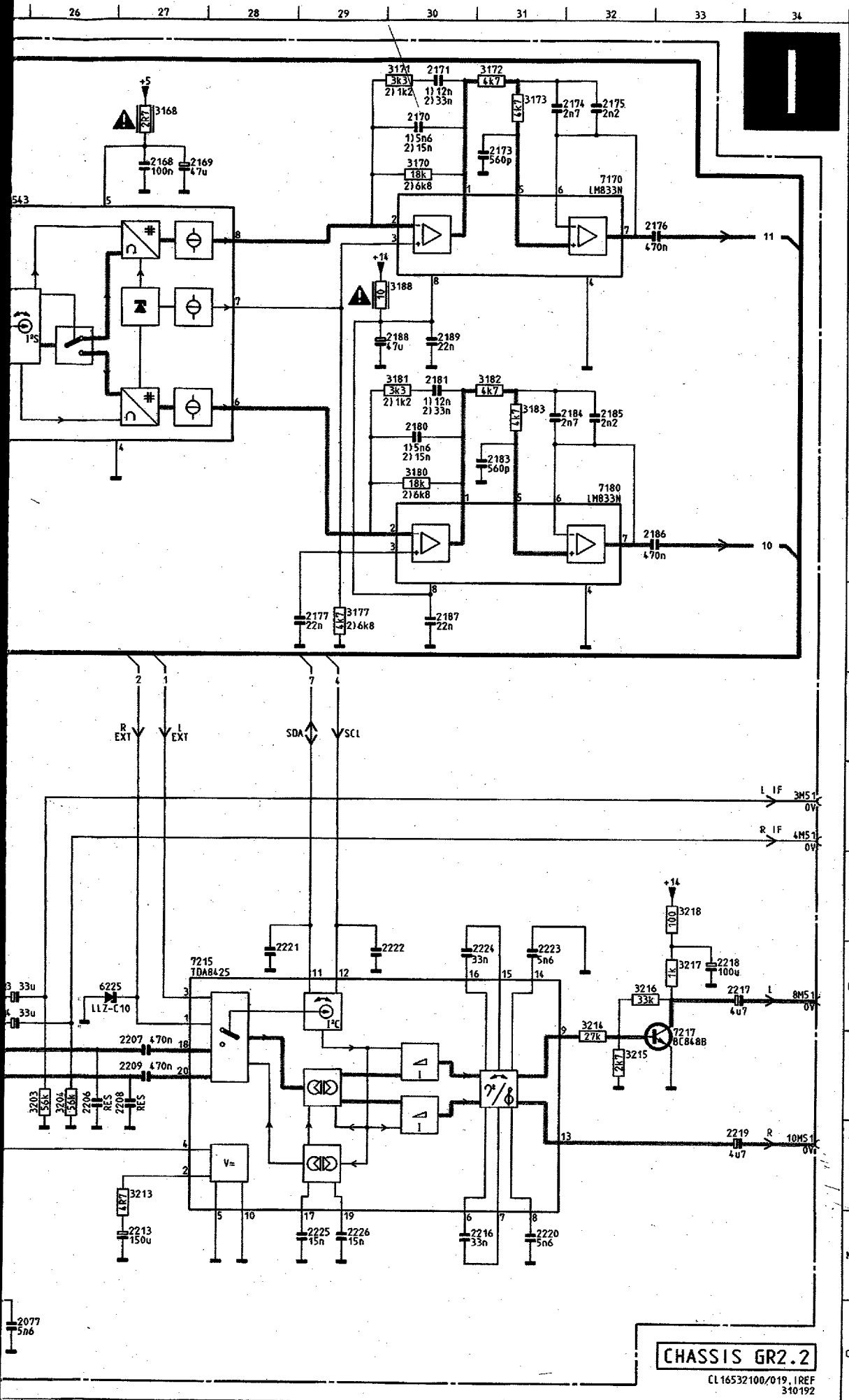
PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERÄTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:

1) PAL I
2) PAL BG




+5A
5123 1u
5001 1u
3123 3k3
3124 3k3
2124 180p
2123 180p
6127 BB405
1127 13.104MHZ 2) 13.700MHZ
3127 100k
2125 68p
2126 1n
3125 22k
2127 1n
CFO
SFO
SFI
CFI
CARLPF
11.7MHz/ PAL I
13.104MHz/ PALBG
÷2
G
11.648 MHz
DATA
PCLK
CLK (PF)
IMC
2130 150p
3130 22k
3133 100k
2123 150n
3161 1k5
3139 27k
3142 10k
2135 10n
7133 BC848
3137 100k
3136 100k
6134 BB809
3134 10k
2134 1n
2163 1n
7150 SAA7280
VDD
VSS
SUPPLY
2137 100n
2138 10n
3135 10k
3159 47k
7160 BC848
2160 100p
3158 47k
7161 BC848
2161 100p
SCL
SDA
MUTE
FLO PORT1
PORT2
I²C
RAM
RESET
TEST
EDIT
SCLK
STIM
SDAT
7168 TDA1543
I²S
2131 120p
G 17.472 MHz
XIN
XOUT
3138 1M
3143 1k
1138 1) 17.472 MHz
2136 150p
3129 10k
3140 820k
6140 LL4148
2141 4n7
2140 220n
7108 BC858
3100 560 2)
1100 2) SFT5.74
3108 0
3105 560
1105 1) SFE6.0MHz 2) SFT5.5MHz
5101 2) 10u83
2101 2) 1n
3101 330 2)
2104 4n7
5103 0u34
2107 2u2
7200 TDA8415
2200 470n
2201 470n
MATR.
IDENT.
V=
G 10 MHZ
3201 8k2 1)
3200 10k 2)
3202 5k1 1)
2202 120p 2)
1200 10MHz
3209 10k
2211 220n
3210 1k
2210 47u
2203 33u
2204 33u
3203 56k
3204 56k
3102 680
2102 1) 820P 2) 1n
5102 0u83
2106 2u2
2100 1u
7078 BC858C
3078 1K
3079 100
7073 BC858
6075 LL4148
3076 220k
3073 820k
2075 22n
3075 2k7
2076 470n
3077 120k
3205 22
2205 100n
2214 100n
2215 47u
2077 5n6
IDENT
→ 3V3
→ 1V
NICAM L
NICAM R
0V719M51
4M50

Module FI/son NICAM



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	1042	O 8	3021	N 9	7170	B32
	1100	I 16	3030	M 3	7180	F32
	1105	I 16	3035	J 6	7190	E 5
A	1116	B11	3041	N 6	7191	F 6
	1127	B18	3042	N 8	7200	K20
	1138	G21	3044	K10	7215	K27
	1191	E 5	3047	L11	7217	L33
	1200	N21	3052	N 9		
	2011	N 2	3055	D 6		
	2012	O 4	3056	D 6		
	2013	M 4	3058	N 6		
B	2014	L 4	3071	N13		
	2015	N 3	3072	N12		
	2016	N 4	3073	O14		
	2017	M 9	3074	N14		
	2042	O 7	3075	O15		
	2044	J 5	3076	O16		
	2047	M11	3077	O16		
	2049	J 4	3078	O19		
C	2050	D 7	3079	O19		
	2071	N12	3100	I 15		
	2072	O12	3101	K17		
	2073	N13	3102	M17		
	2075	O15	3105	I 15		
	2076	O16	3106	J14		
	2077	O25	3107	I 14		
D	2100	N14	3108	I 14		
	2101	J17	3109	M12		
	2102	N17	3110	H14		
	2104	K15	3116	D11		
	2106	N18	3122	C13		
	2107	K18	3123	B15		
	2108	N13	3124	B15		
	2109	N12	3125	C18		
E	2110	I 13	3127	C18		
	2116	C11	3128	F13		
	2119	C 5	3129	F23		
	2122	C13	3130	F14		
	2123	B17	3131	D13		
	2123	G15	3133	F15		
	2124	B17	3134	G18		
	2125	C18	3135	B21		
F	2126	C18	3136	G19		
	2127	C18	3137	F20		
	2128	F13	3138	F21		
	2129	B13	3139	F18		
	2130	F14	3140	F23		
	2131	E20	3141	F18		
	2134	G19	3142	F19		
G	2135	F19	3143	F22		
	2136	G22	3150	F 8		
	2137	C19	3158	B23		
	2138	C19	3159	B22		
	2140	G24	3160	F 2		
	2141	G23	3161	G 2		
	2143	G20	3168	A27		
H	2150	B14	3170	B30		
	2151	B13	3171	A30		
	2160	B23	3172	A31		
	2161	B24	3173	A31		
	2168	B27	3177	G29		
	2169	B27	3180	E30		
	2170	A30	3181	D30		
	2171	A30	3182	D31		
I	2173	B31	3183	E31		
	2174	A31	3188	C30		
	2175	A32	3190	C 5		
	2176	C33	3191	E 7		
	2177	G29	3200	M20		
	2180	E30	3201	L20		
	2181	D30	3202	N20		
	2183	E31	3203	L26		
J	2184	E31	3204	L26		
	2185	E32	3205	N24		
	2186	F33	3206	E 2		
	2187	G30	3208	F 2		
	2188	D29	3209	N21		
	2189	D30	3210	N21		
	2190	F 5	3213	M27		
K	2191	F 6	3214	L32		
	2193	E 7	3215	L32		
	2194	F 4	3216	K32		
	2198	C 6	3217	K33		
	2200	K20	3218	J33		
	2201	L20	5001	A16		
	2202	N20	5010	I 2		
	2203	K25	5035	J 6		
L	2204	K25	5036	O 6		
	2205	O23	5042	N 8		
	2206	L26	5101	J17		
	2207	L27	5102	N17		
	2208	L27	5103	K15		
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M	2211	N22	6071	O13		
	2213	N27	6072	O13		
	2214	O23	6075	O16		
	2215	O24	6127	B18		
	2216	N31	6134	G19		
	2217	K33	6140	G23		
	2218	K33	6190	D 5		
	2219	M33	6191	F 5		
N	2220	N31	6225	K26		
	2221	K28	7000	K 4		
	2222	K29	7000	B14		
	2223	K31	7035	D 7		
	2224	K31	7073	O14		
	2225	N29	7078	N19		
	2226	N29	7100	K13		
	3012	M 2	7106	I 13		
O	3013	M 2	7108	L14		
	3014	M 2	7133	F18		
	3015	N 3	7150	B20		
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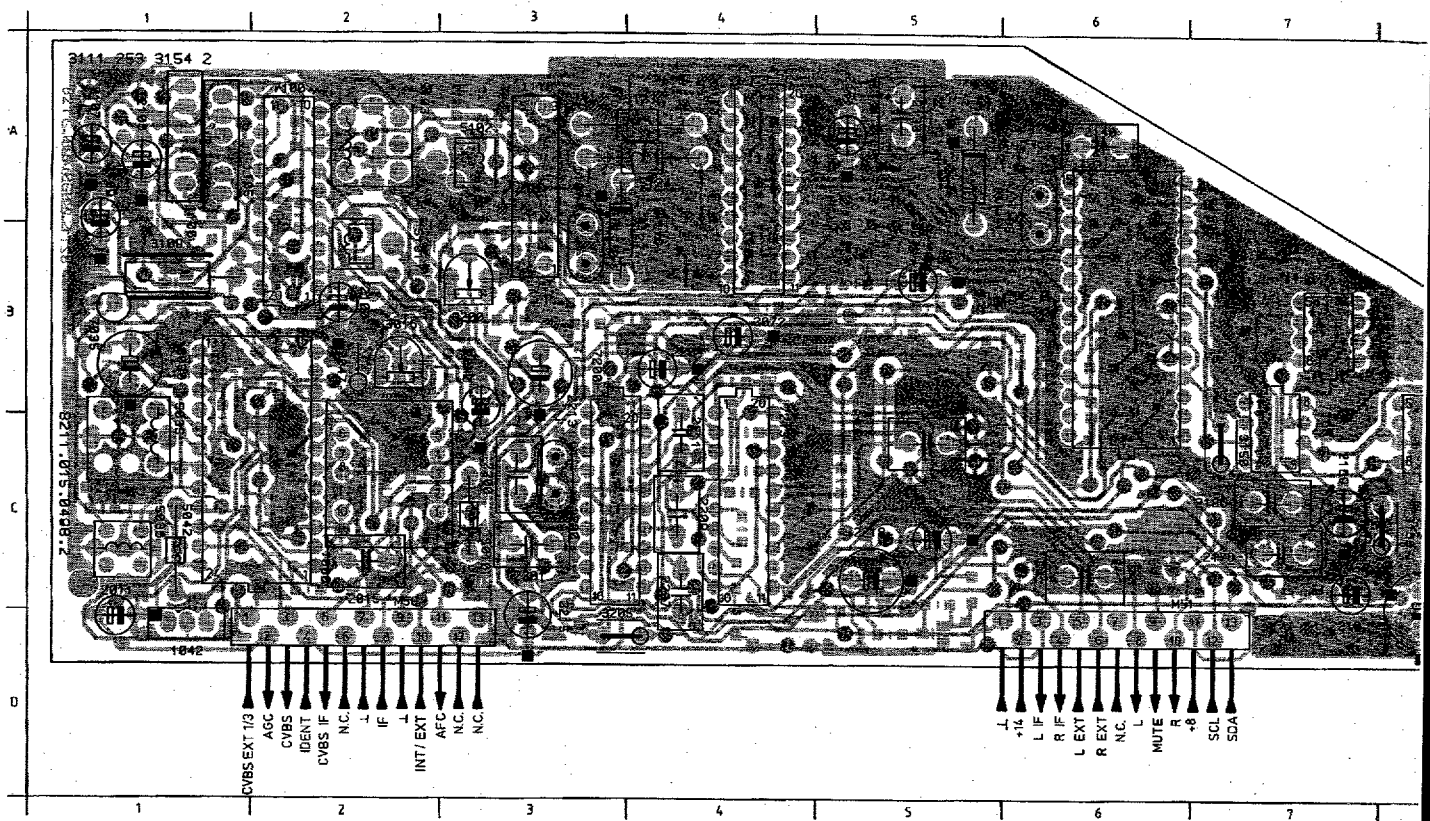
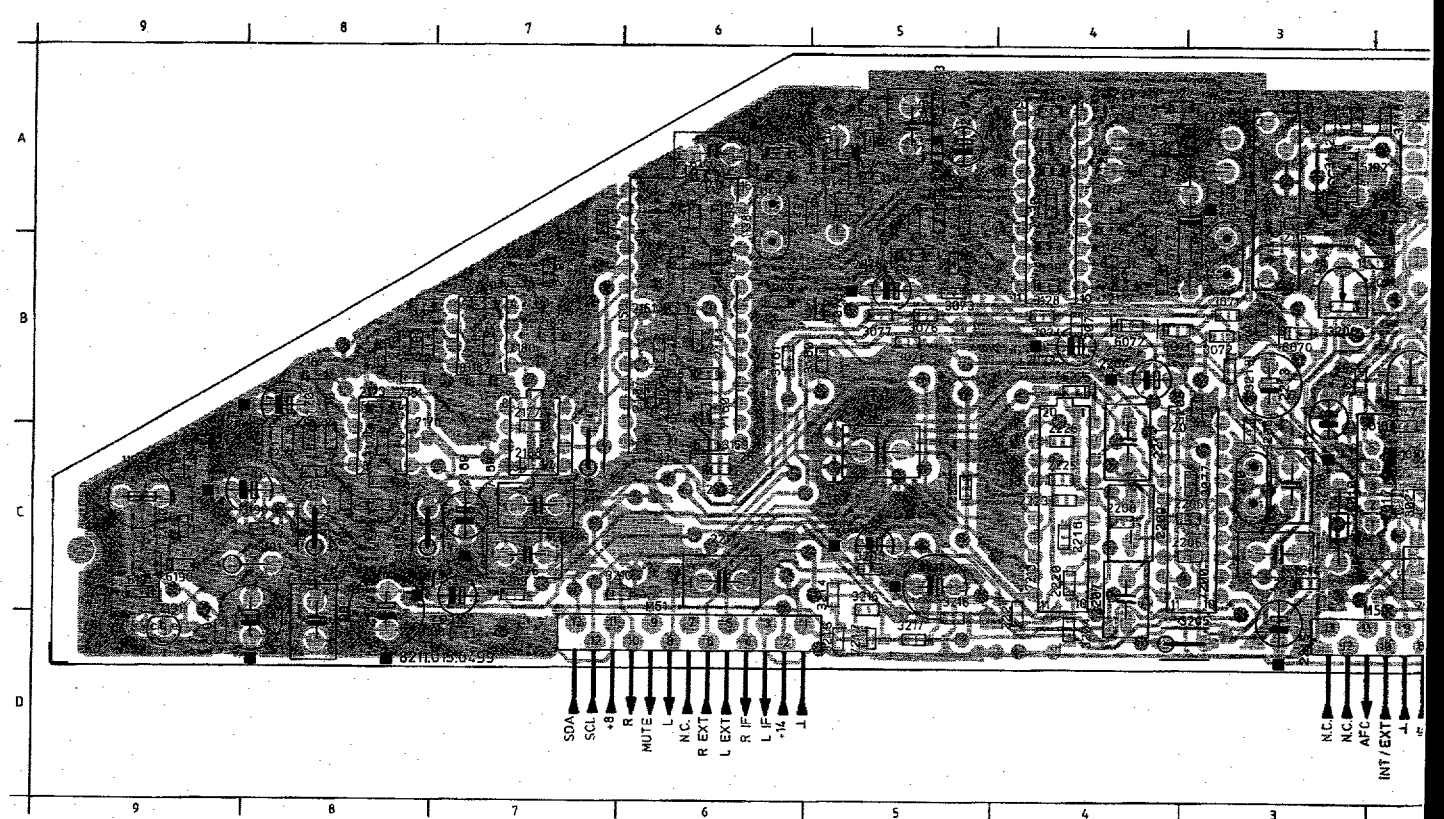
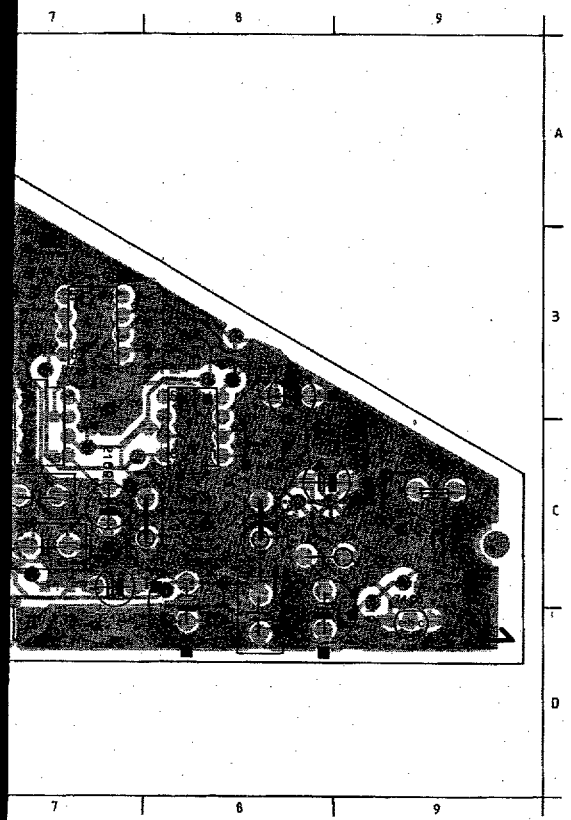
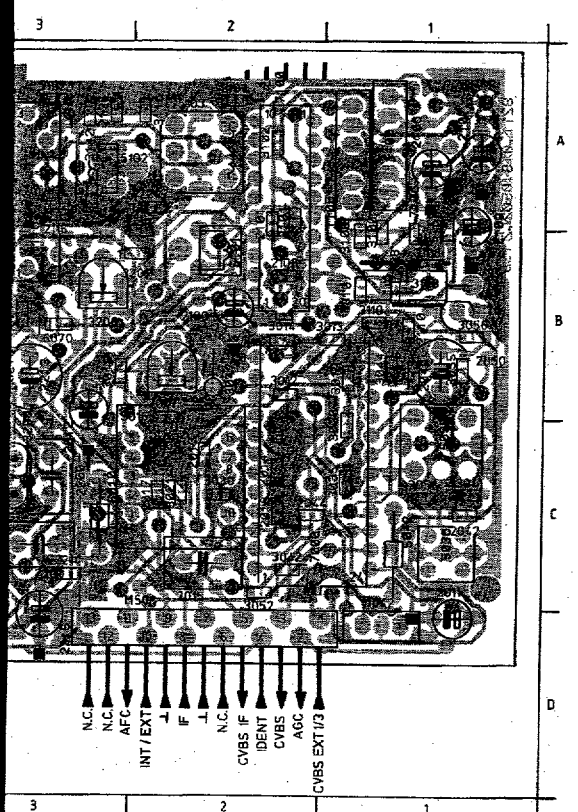
NICAM IF/sound module / NICAM ZF/Tonmodul /





Module FI/son NICAM





M50 D2	2220 C4	5102 A3
M51 D6	2221 D4	5103 A2
1010 C2	2222 C6	5123 A4
1042 D1	2223 C4	5124 A4
1100 A1	2224 C5	6070 B3
1105 A1	2225 C4	6071 B4
1116 A3	2226 C4	6072 B4
1127 B3	3012 B2	6075 B5
1138 B6	3013 B1	6127 B3
1191 C9	3014 B2	6134 A5
1200 C3	3015 B3	6140 A6
2011 D1	3016 B2	6190 C9
2012 C3	3019 B1	6191 C9
2013 C2	3020 C1	6225 B4
2014 C2	3021 C2	7000 C2
2015 C2	3030 C2	7035 B1
2016 C2	3035 C1	7073 B5
2017 C2	3041 C1	7078 B5
2042 C1	3042 C2	7100 B2
2044 C2	3044 B1	7106 B1
2047 C2	3047 B2	7108 B1
2049 B1	3052 C2	7120 A4
2050 B1	3055 B1	7133 A5
2071 B3	3056 B1	7150 C6
2072 B4	3058 C1	7160 C6
2073 B4	3071 B3	7161 B6
2075 A5	3072 B3	7168 B7
2076 B5	3073 B5	7170 C8
2077 C3	3074 B4	7180 B7
2100 B2	3075 B5	7190 C9
2101 B2	3076 B5	7191 D9
2102 A3	3077 B5	7200 C3
2104 A2	3078 B5	7213 C4
2106 A1	3079 B6	7217 D5
2107 A1	3100 B1	
2108 B2	3101 B2	
2109 B1	3102 A2	
2110 B1	3105 B1	
2116 A3	3106 B1	
2119 C8	3107 B1	
2122 A4	3108 B1	
2123 A4	3109 B1	
2124 A4	3110 B1	
2125 B4	3116 A2	
2126 B4	3122 A3	
2127 B4	3123 A4	
2128 B5	3124 B4	
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2132 A4	3129 B6	
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2135 A3	3133 A5	
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2137 B6	3135 C6	
2138 B6	3136 A5	
2140 A6	3137 A5	
2141 B7	3138 A6	
2143 A5	3139 A5	
2151 A5	3140 A6	
2160 B6	3141 A3	
2161 B6	3142 A3	
2168 C7	3143 A6	
2169 C7	3150 C7	
2170 C8	3158 B6	
2171 C8	3159 C6	
2173 B8	3160 B5	
2174 C8	3161 B6	
2175 C8	3168 C8	
2176 C7	3170 C8	
2177 C7	3171 C8	
2180 B8	3172 C8	
2181 B8	3173 C8	
2183 B7	3177 B8	
2184 B7	3180 B8	
2185 B7	3181 B8	
2186 C7	3182 B7	
2187 B8	3183 B7	
2188 B8	3188 C8	
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2190 C9	3191 C8	
2191 C8	3200 B3	
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2201 C3	3205 D3	
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2203 C5	3208 B3	
2204 B4	3209 C7	
2205 C3	3210 C6	
2206 C3	3213 B3	
2207 C4	3214 C5	
2208 C4	3215 D5	
2209 C4	3216 D5	
2210 C7	3217 D5	
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2213 B3	4000 D7	
2214 C3	4199 B9	
2215 D3	5010 C3	
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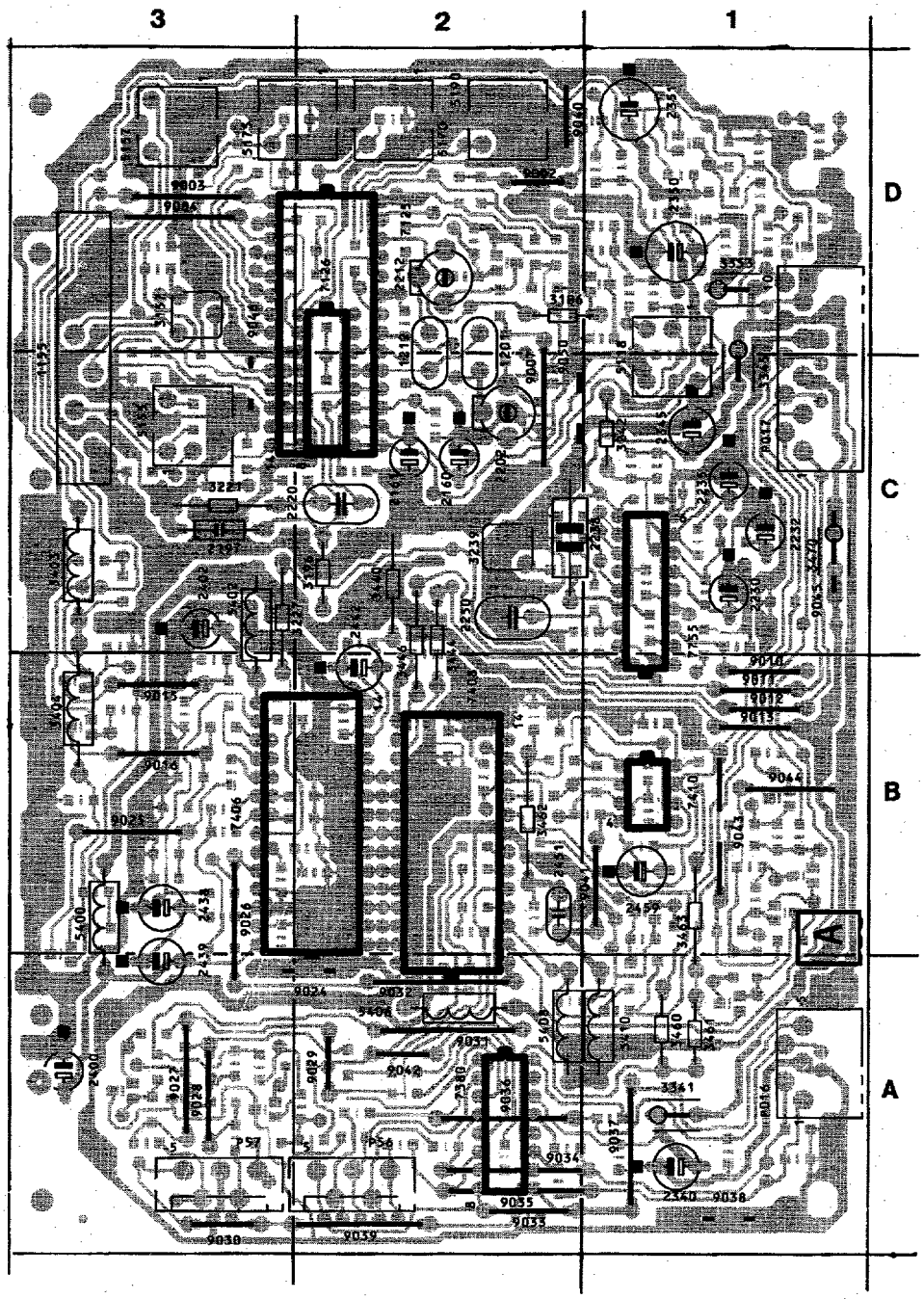
2217 C6	5036 C1	
2218 C5	5042 C1	
2219 C5	5101 B2	

PIP module / PIP-Modul / Module PIP



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1201 D2	2405 B3	3270 C1	4001 D2	7755 B
1212 D2	2409 B3	3275 C1	4002 C3	9002 D
2103 D1	2410 B3	3276 C1	4003 B2	9003 D
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2118 D1	2414 B3	3331 A1	4005 C2	9007 C
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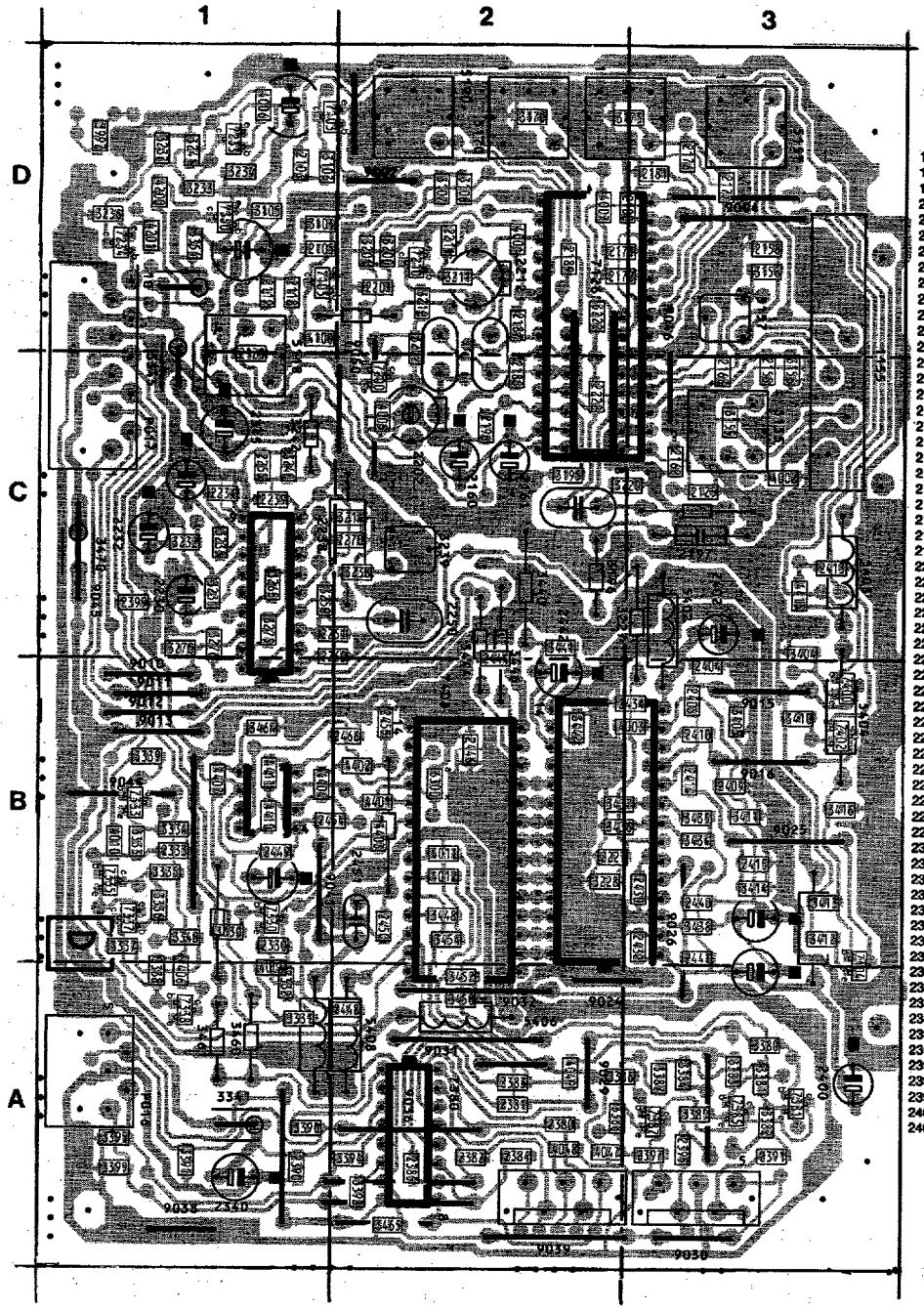

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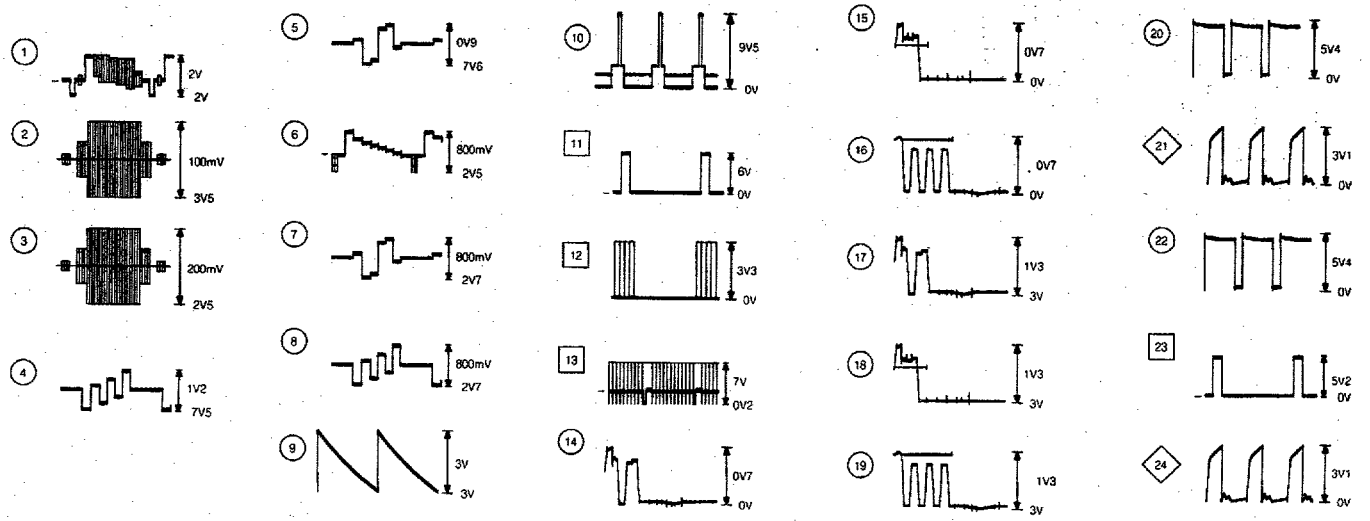

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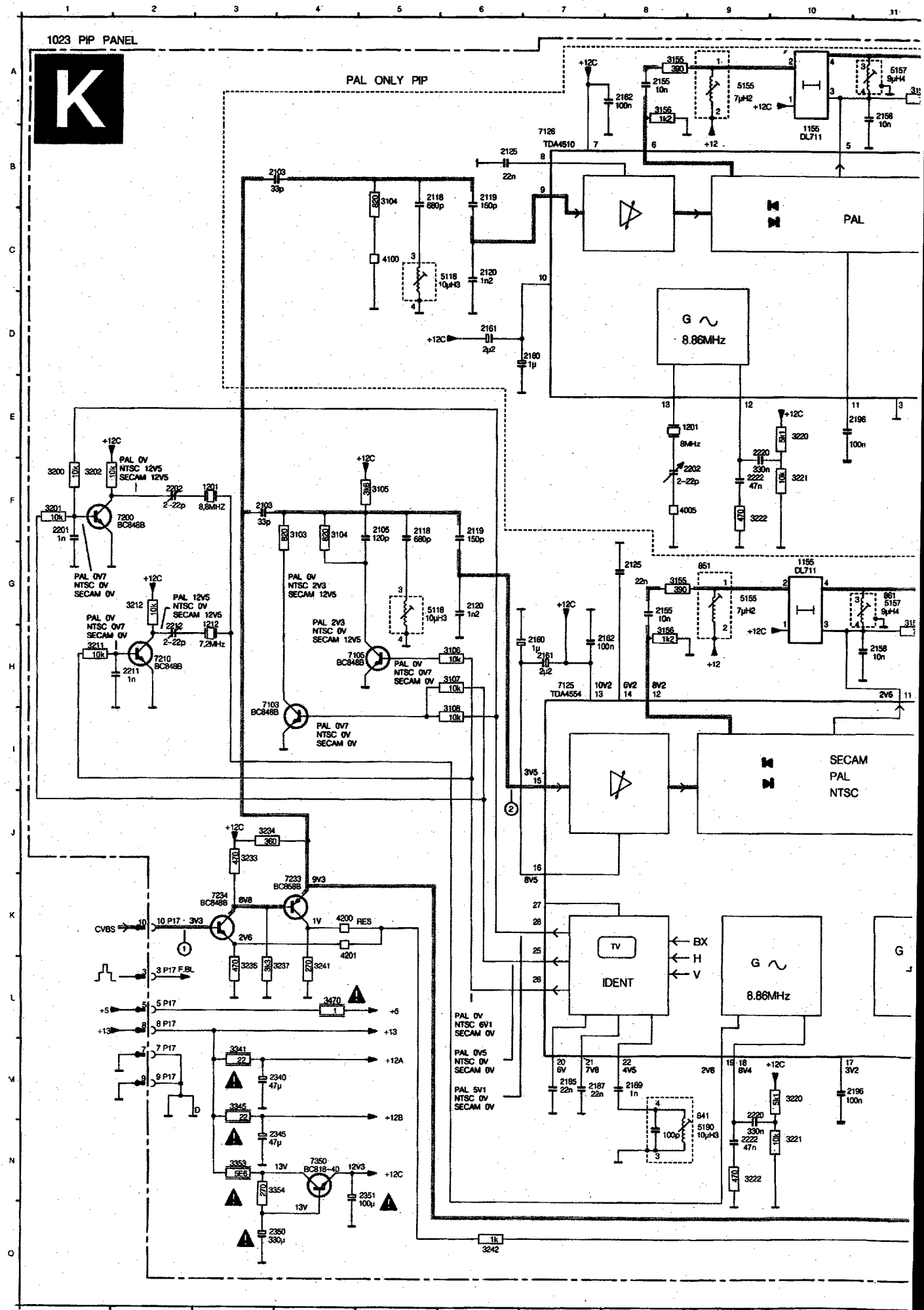

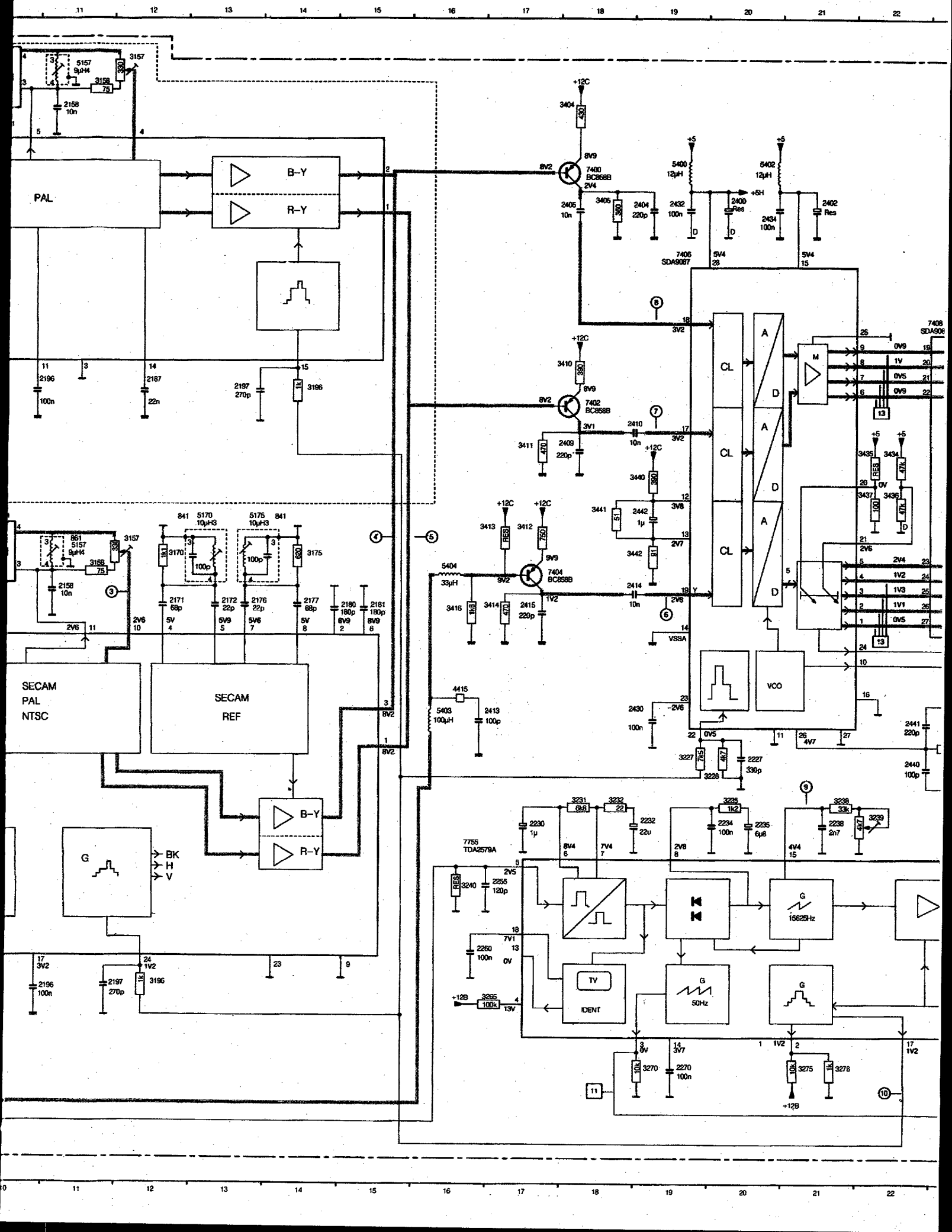
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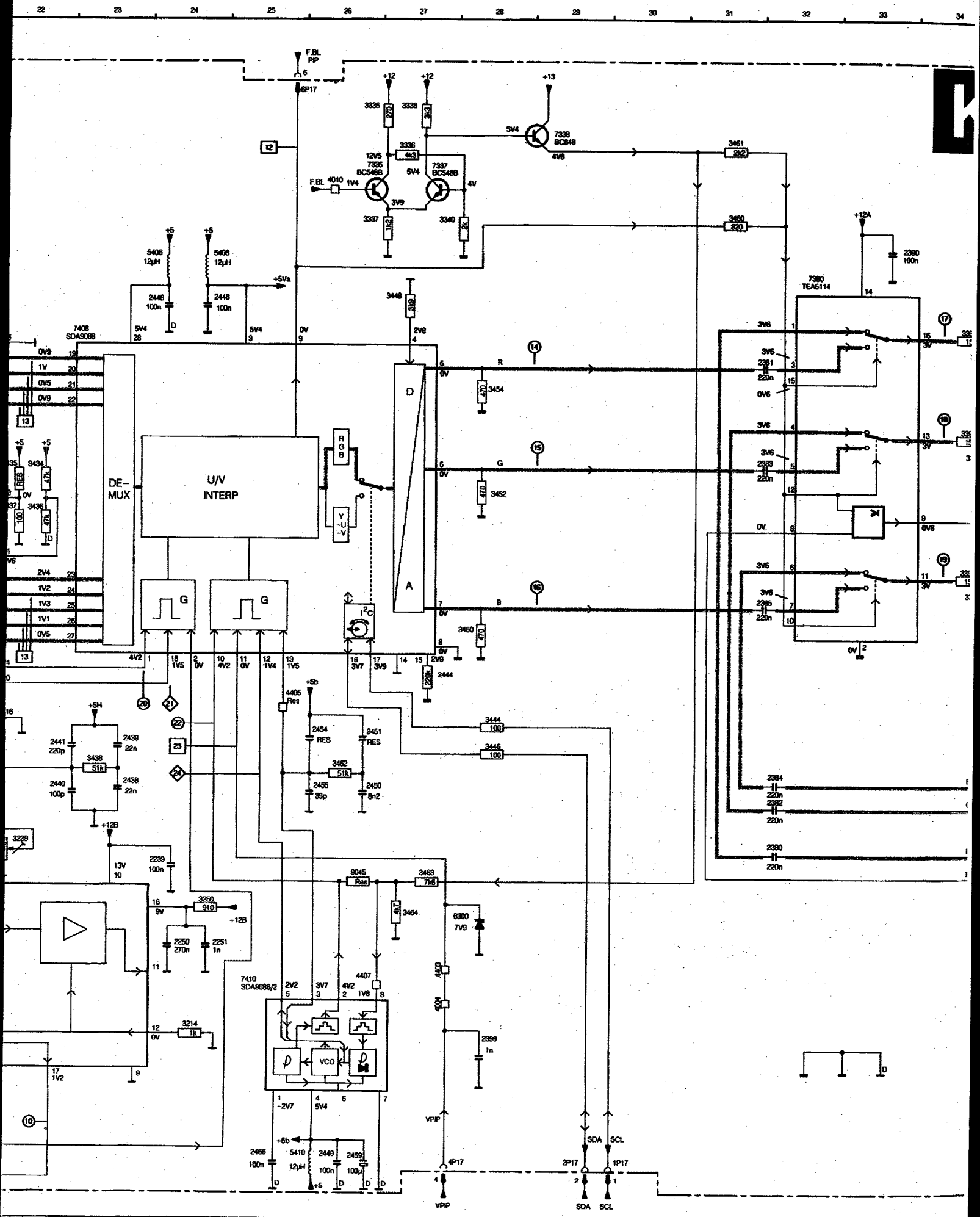
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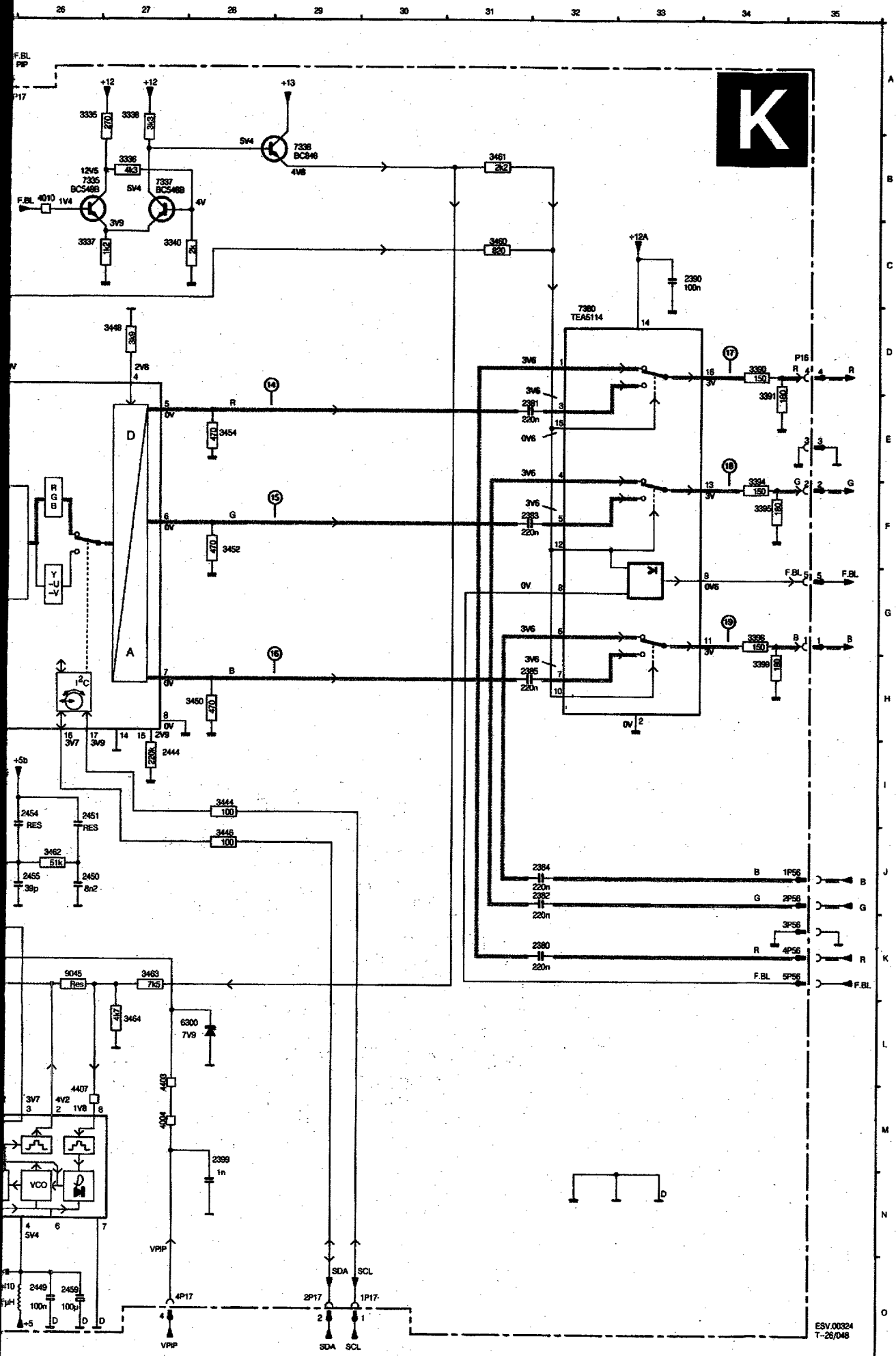

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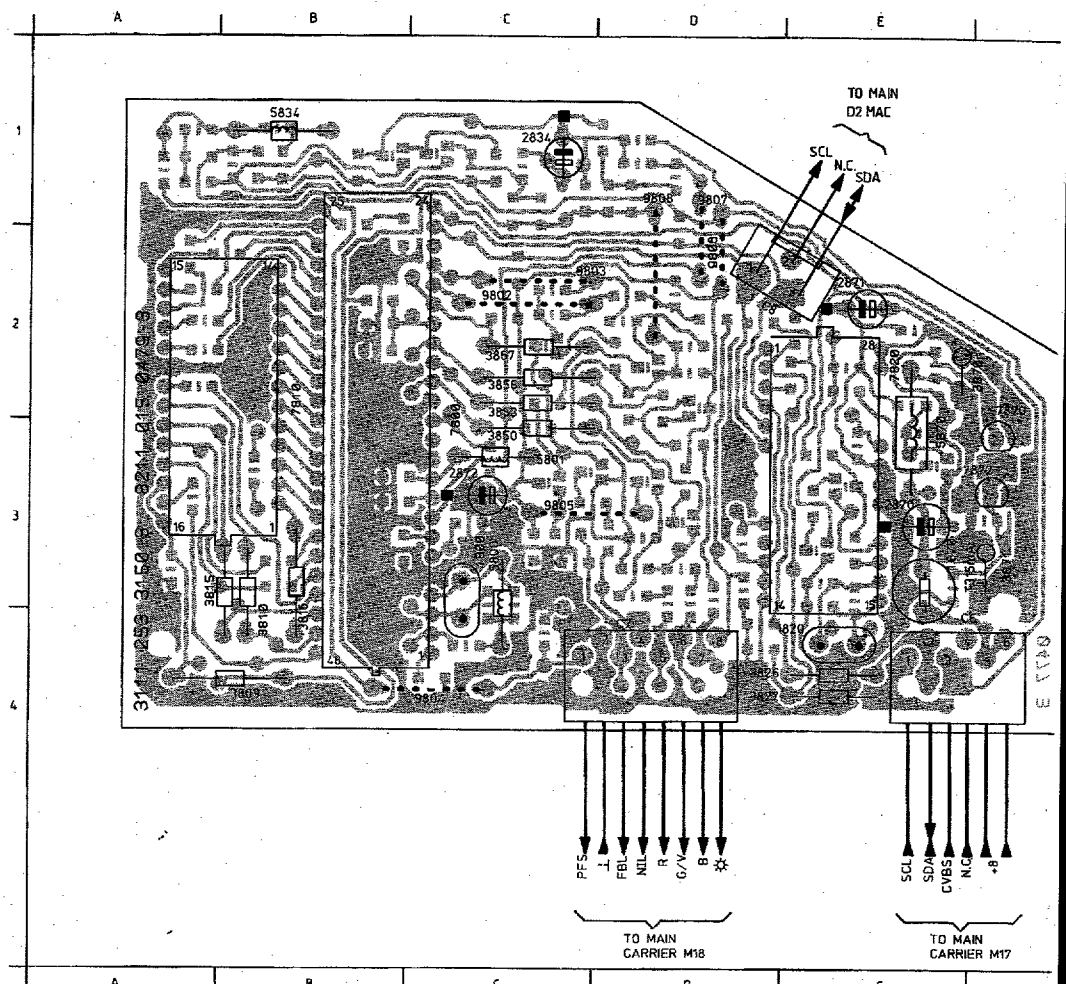

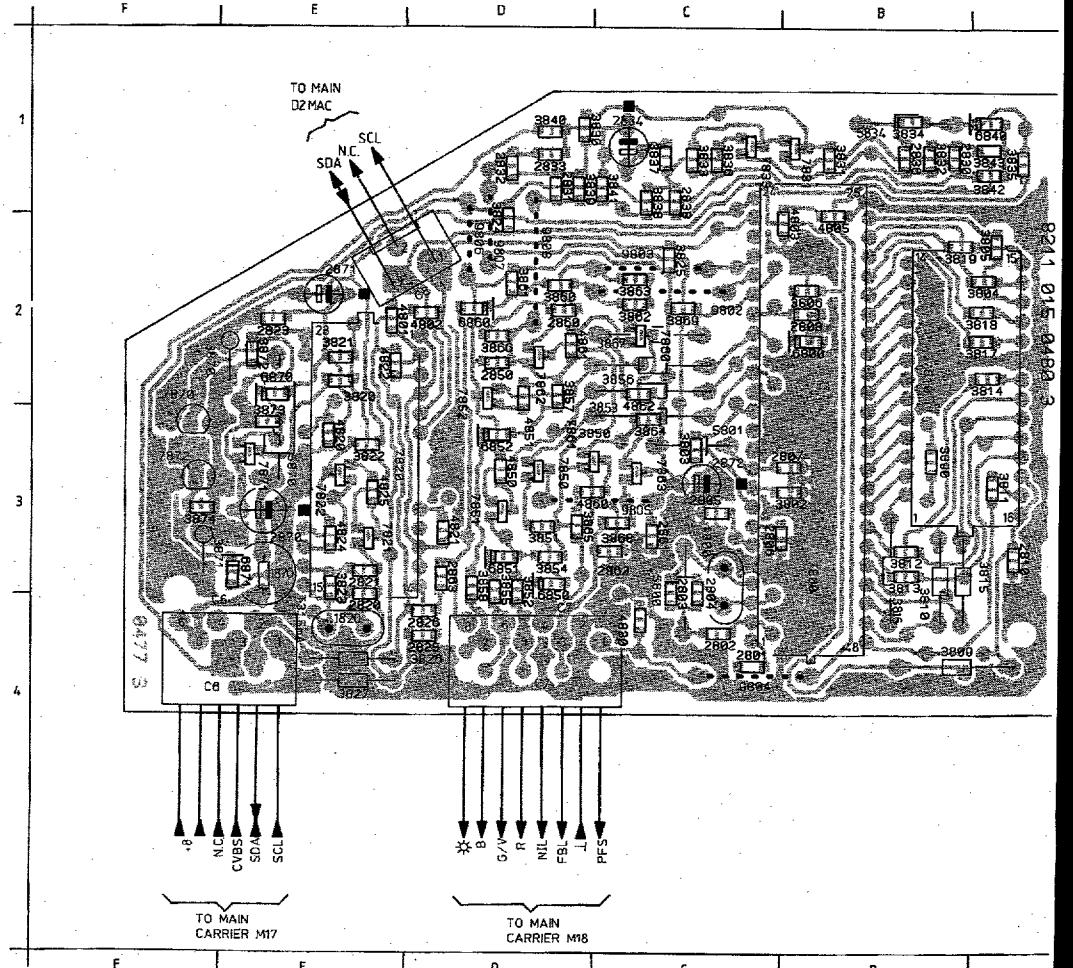

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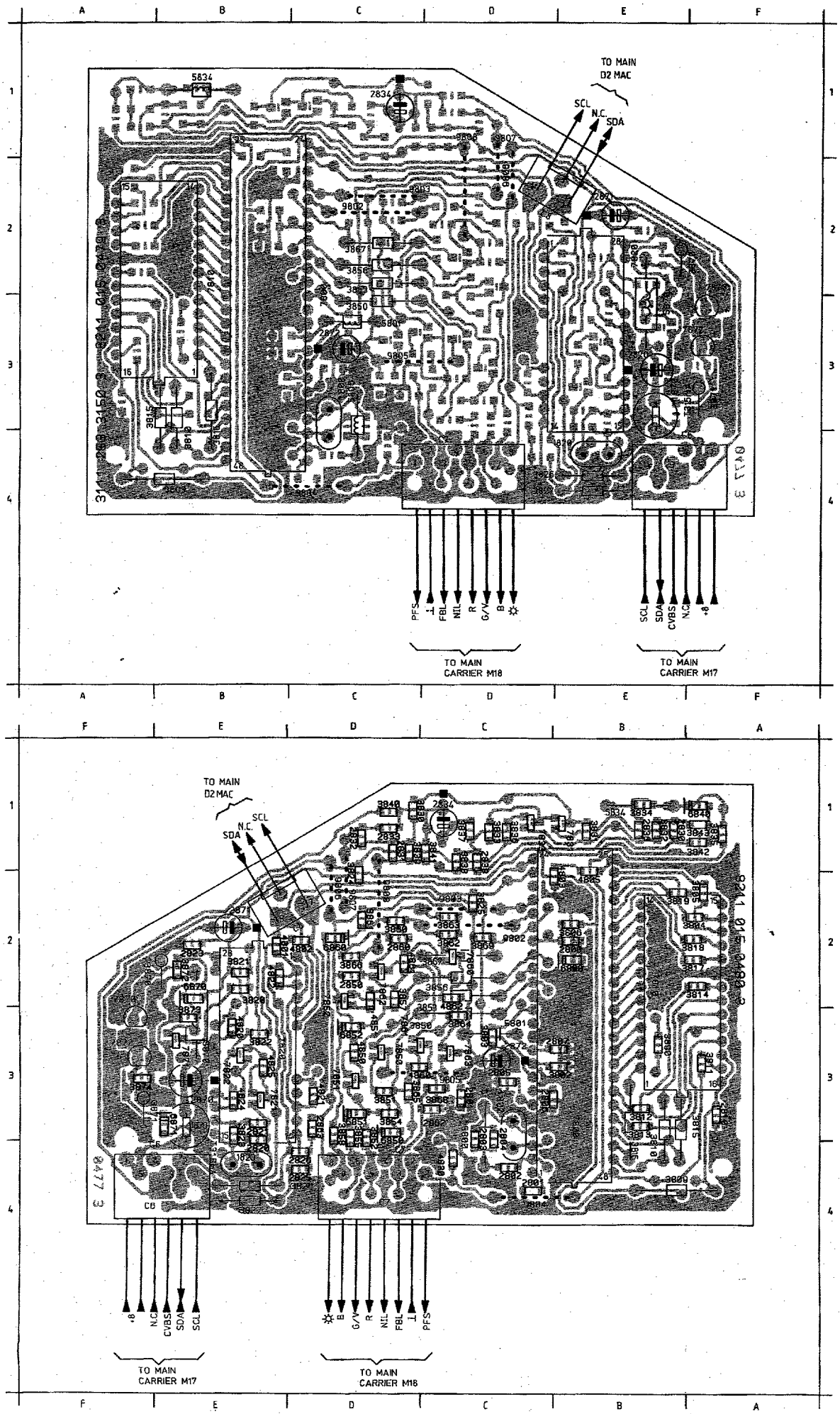

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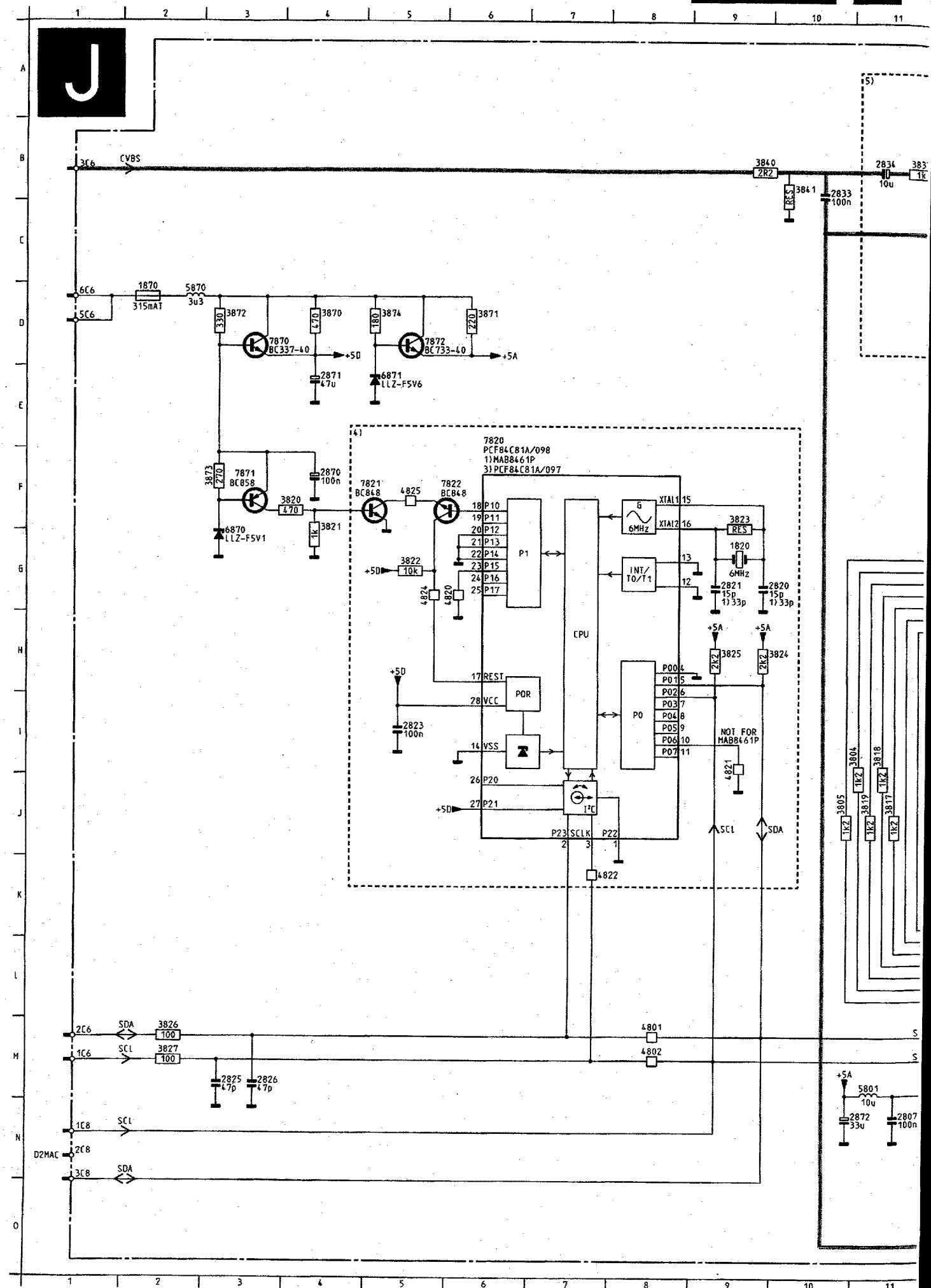

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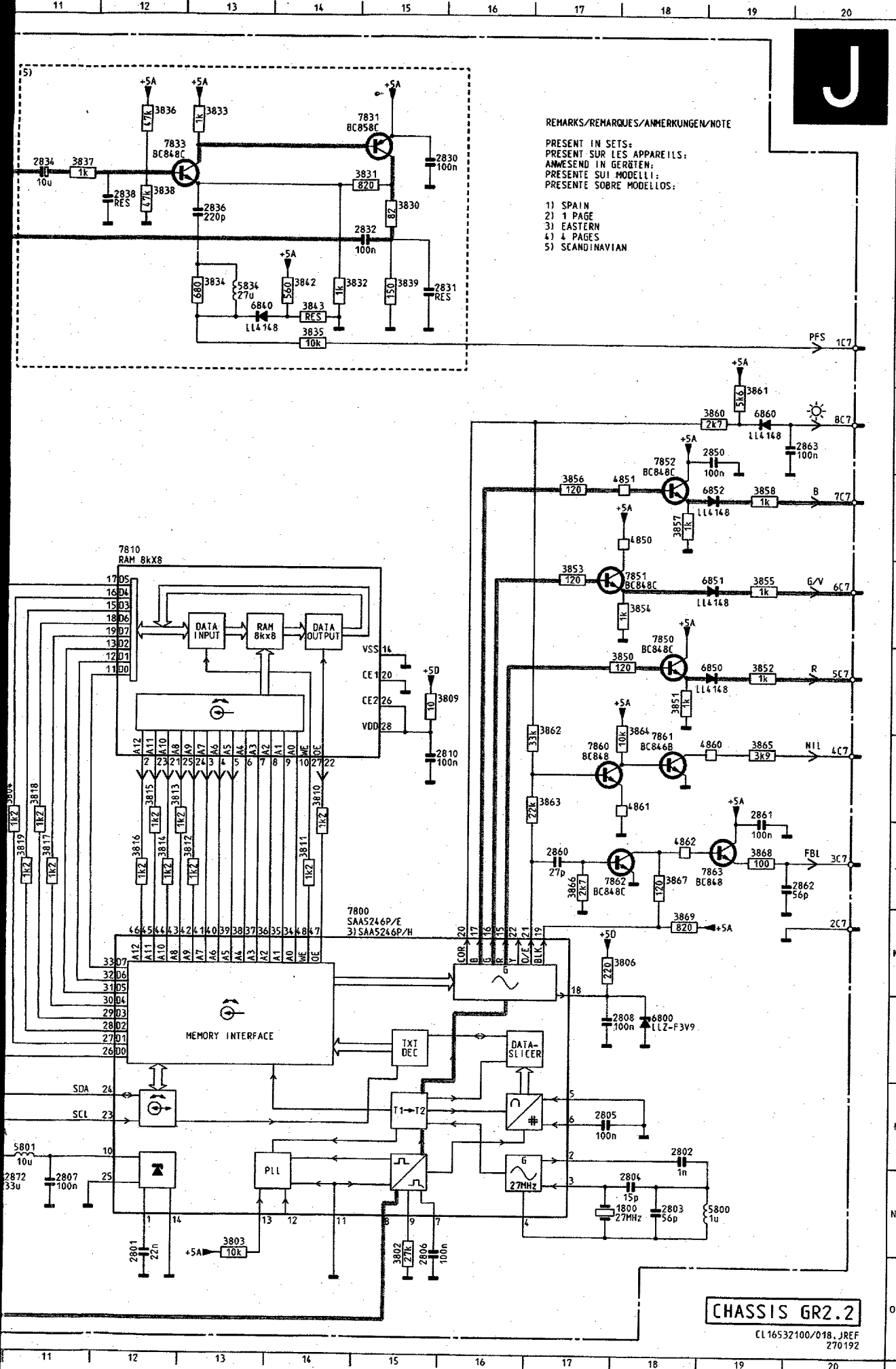

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	3806	K17		
	3809	H15		
	3810	I14		
	3811	J14		
	3812	J13		
	3813	I12		
	3814	J12		
F	3815	I12		
	3816	J12		
	3817	J11		
	3818	I11		
	3819	J11		
	3820	F 4		
	3821	F 4		
G	3822	G 5		
	3823	F 9		
	3824	H 9		
	3825	H 9		
	3826	M 2		
	3827	M 2		
	3830	B15		
	3831	B15		
H	3832	C14		
	3833	A13		
	3834	C13		
	3835	D14		
	3836	A12		
	3837	B11		
	3838	B12		
I	3839	C15		
	3840	B 9		
	3841	B10		
	3842	C14		
	3843	D14		
	3850	H18		
	3851	H18		
	3852	H19		
J	3853	G17		
	3854	G18		
	3855	G19		
	3856	F17		
	3857	F18		
	3858	F19		
	3860	E19		
K	3861	D19		
	3862	H17		
	3863	I17		
	3864	H18		
	3865	I19		
	3866	J17		
	3867	J18		
	3868	J19		
L	3869	K18		
	3870	D 4		
	3871	D 6		
	3872	D 3		
	3873	F 3		
	3874	D 5		
	4801	M 8		
M	4802	M 8		
	4820	G 6		
	4821	I 9		
	4822	K 7		
	4824	G 5		
	4825	F 5		
	4850	F18		
	4851	F18		
N	4860	I19		
	4861	I18		
	4862	J18		
	5800	N19		
	5801	M11		
	5834	C13		
	5870	D 2		
	6800	L18		
O	6840	D13		
	6850	H19		
	6851	G19		
	6852	F19		
	6860	E19		

Electrical adjustments

Setting conditions

All electrical settings should be made under the following conditions:

* supply voltage: 220 - 240 V ± 10%; 50 Hz ± 5%
* warming-up time ≈ 10 minutes
* the voltages and oscillograms have been measured with regard to tuner earth.
* measuring probe: Ri > 10 MΩ; Ci < 2.5 pF.

1. Settings on the carrier board

1.1 +148V/+95V supply voltage

Connect a voltmeter over C2631. Using R3635, set the supply voltage to +148V ± 0.5V for 25" and 28" units or to 95V ± 0.5V for 21" units.

1.2 Focusing

This is set using the focusing potentiometer (on the top of the line output transformer).

1.3 Vg2 setting

Connect a pattern generator and supply a blanking frame signal (black picture). Switch the unit to the service default mode (see section 9).
Connect an oscilloscope to the emitters of transistors 7304 and 7364 on the picture tube module. Set the oscilloscope to frame frequency. Measure the DC voltage level of the measuring pulses (see Fig. 7.2). Using the Vg2 potentiometer on the line output transformer, set the measuring pulse with the lowest DC voltage level to:

* +145V ± 5V for 25" and 28" blackline units (protected high-voltage cable)
* +130V ± 5V for 28" non-blackline units
* +118V ± 5V for 25" non-blackline units
* +120V ± 5V for 21" units.

1.4 Horizontal synchronization

Connect pin 5-IC7470 to pin 9-IC7470.
Supply an aerial signal and tune the set.
Adjust potentiometer 3457 until the picture is straight. Remove the interconnection.

1.5 Horizontal centring

Set using potentiometer 3461.

1.6 Vertical centring

Set using potentiometer 3516.

1.7 Picture height

Set using potentiometer 3504.

1.8 Chroma bandpass filter

a. Setting for PAL/SECAM sets (TDA4650)

Connect a signal generator (e.g. PM 5326) to pin 20 of the euroconnector (EXT1) and set its frequency to 4.286 MHz/0.2 Vpp. Switch the unit to EXT1. Connect pin 27-IC7306 to pin 13-IC7306 (+12V). Connect an oscilloscope to pin 15-IC7306.
Set 5301 to maximum amplitude.
Remove the interconnection.

b. Setting for PAL sets (TDA4510)

Connect a signal generator (e.g. PM 5326) to pin 20 of the euroconnector (EXT1) and set its frequency to 4.43 MHz. Connect the unit to EXT1. Connect an oscilloscope to pin 9-IC7305 (TDA4650).Set 5301 to maximum amplitude.

1.9 Chroma auxiliary oscillator

Connect a pattern generator and supply a PAL colour bar pattern. Connect pin 11-IC7305 (TDA4510) or pin 17-IC7306 (TDA4650) to earth. Set 2313 so that the colour on the screen has practically stopped. Remove the interconnection.

1.10 SECAM demodulators for PAL/SECAM sets (TDA4650)

Connect a pattern generator and supply a SECAM black pattern. Connect an oscilloscope to pin 1-IC7306 (TDA4650). Set 5304 to minimum amplitude.Connect the oscilloscope to pin 3-IC7306 (TDA4650). Set 3312 to minimum amplitude.

1.11 White balance

Connect a pattern generator and select a white picture. Switch on the service menu (see section 9) and select "WHITE BALANCE".
Set the value of "Green" to 51, and the Value of "Blue" to 46. In most cases no futher adjustments are required.

1.12 Peak white limit

Switch on the service menu (see section 9) and select "WHITE BALANCE".
Set "WHITE LIMIT" to the value:

- 43 for blackline units
- 53 for non-blackline units
- 53 for 21" units.

1.13 Cut-off points of the picture tube

Connect a pattern generator and select a black picture. Switch on the service menu (see section 9) and select "CUT OFF".
Set the value of "Red" to 56, and fore "Green" to 16, and for "Blue" to 15. In most cases no futher adjustments are required.

1.14 Options

Switch on the service menu and select "OPTION 1" or "OPTION 2".
Switch the options "ON" and "OFF" according to whether the following options are present:

- "PIP" on a PIP set
- "2ND SCART" on a set with two euroconnectors
- "TELETEXT" on a teletext set
- "SVHS" for the Y/C connector in mono sets
- "MULTI SYSTEM" for multisystem sets
- "HYPERBAND" for a tuner which can be tuned to the frequency band of 300 MHz to 450 MHz
- "UHF ONLY" for a tuner which can only be tuned to the UHF band
- "NICAM TWIN" for stereo sets which can also receive NICAM sound.
- "SIXTEEN/NINE" for switching between normal screen size and wide screen size.

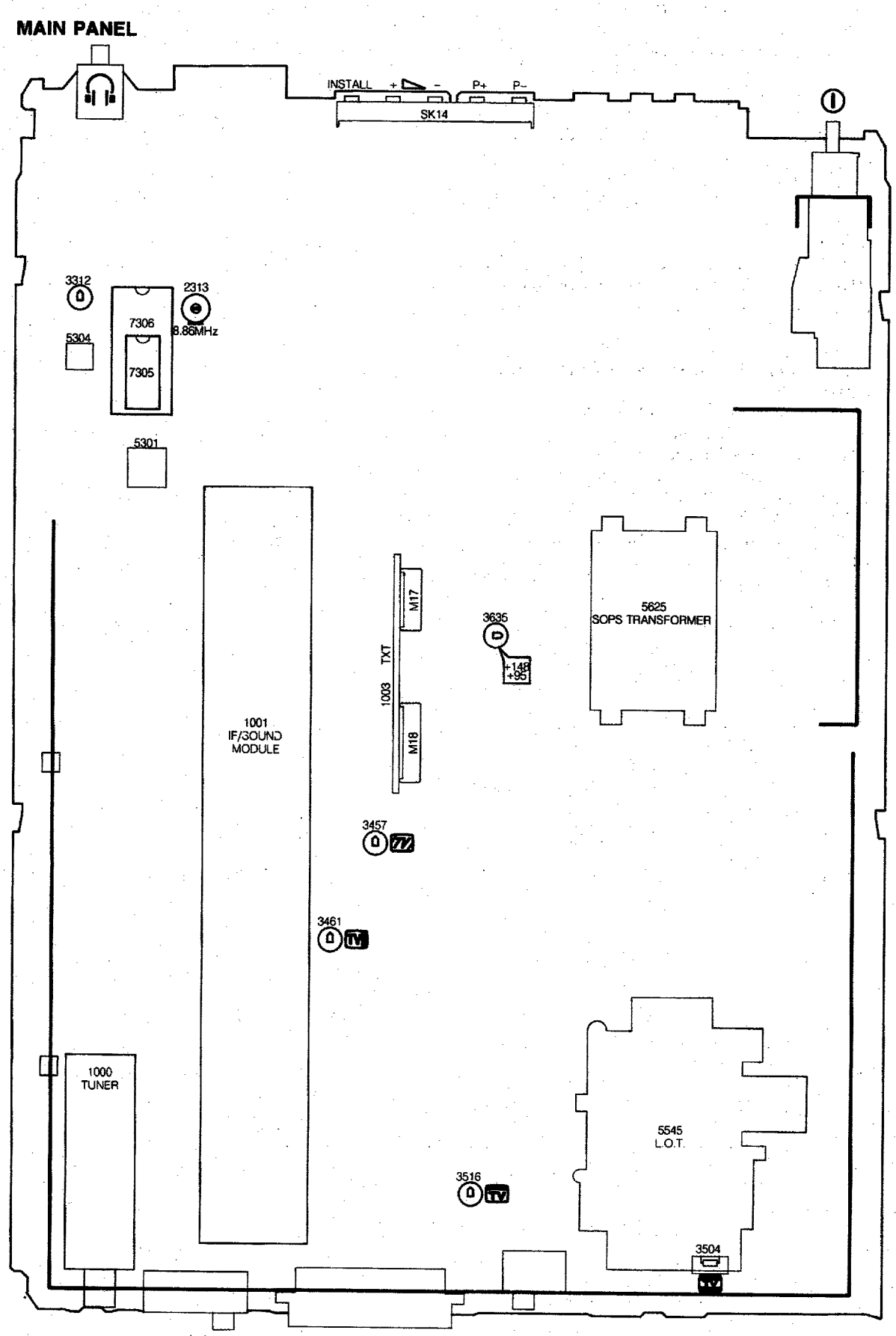

MAIN PANEL
INSTALL
+
-
P+
P-
SK14
3312
2313
7306
8.86MHz
5304
7305
5301
1001
IF/SOUND
MODULE
1003 TXT
M17
M18
3635
+148
+95
5625
SOPS TRANSFORMER
3457
3461
1000
TUNER
5545
L.O.T.
3516
3504

Fig. 7.1

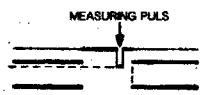

MEASURING PULS

Fig. 7.2

2. MF/sound module adjustment (Fig 7.3)

2.1 The M.F. sound modulator

a. For multi-system France (BGLI).

Stereo + mono:

- Connect a pattern generator (e.g PM 5518) to the tuner and adjust the generator to SECAM L with a frequency of 47.25 MHz (SECAM L'). Adjust L 5080 to minimum picture distortion.
- Adjust the pattern generator to PAL BG with a frequency of 475.25 MHz.

Stereo:

- Connect an oscilloscope to pin 17 of IC 7100 (TDA 3856). Using L 5104 adjust the amplitude of the signal to its minimum value.

b. For Europe (BG) stereo and East-European multi system (BGDK) stereo.

- Adjust the pattern generator to PAL BG with a frequency of 475.25 MHz.
- Connect an oscilloscope to pin 15 of IC 7101 (TDA 3857). Using L 5104 adjust the amplitude of the signal to its minimum value.

c. For NICAM (BGI) stereo.

- Adjust the pattern generator to PAL BG with a frequency of 475.25 MHz.
- Connect an oscilloscope to pin 15 of IC 7100 (TDA 3857). Using L 5103 adjust the amplitude of the signal to its minimum value.

2.2 The FM sound modulator

a. For multi system France (BGLI) + Europe + mono UK.

Adjust the pattern generator to PAL BG with a frequency of 475.25 MHz with stereo L = 3kHz and R = 1kHz.

- 5.5 MHz

Connect an oscilloscope to pin 2 of M 24. Using L 5105 adjust the amplitude to its maximum value.

- 5.74 MHz (only for stereo)

Connect an oscilloscope to pin 3 of M 23. Using L 5103 adjust the amplitude to its maximum value.

b. For East-European multi system (BGDK).

- 6.5 MHz.

Adjust the pattern generator to SECAM DK with a frequency of 475.25 MHz.
Connect an oscilloscope to pin 2 of M 24. Using L 5105 adjust the amplitude to its maximum value.

- 5.74 MHz (only for stereo)

Adjust the pattern generator to PAL BG with a frequency of 475.25 MHz with stereo L = 3kHz and R = 1kHz.
Connect an oscilloscope to pin 3 of M 23. Using L 5103 adjust the amplitude to its maximum value.

c. For NICAM

- NICAM I.

Adjust the pattern generator to PAL I with a frequency of 475.25 MHz.
Select analogue sound.
Connect an oscilloscope to pin 7 of IC 7100 (TDA 3857). Using L 5102 adjust the amplitude to its maximum value.

- NICAM BG.

Adjust the pattern generator to PAL BG with a frequency of 475.25 MHz.
Select analogue stereo sound with L = 3kHz and R = 1kHz.

* 5.5 MHz.

Connect an oscilloscope to pin 7 of IC 7100 (TDA 3857).
Using L 5102 adjust the amplitude to its maximum value.

* 5.74 MHz.

Connect an oscilloscope to pin 6 of IC 7100 (TDA 3857).
Using L 5101 adjust the amplitude to its maximum value.

2.3 AFC and picture demodulation:

Adjust the pattern generator to the system given in the table below (PAL BGI and SECAM BGDK to 475.25 MHz, SECAM L' to 47.25 MHz).

- Connnect an oscilloscope to pin 3 of connector G 29 and using L 5035 or L 5037 (see table) adjust the amplitude to its minimum value.
- Connect an oscilloscope to pin 11 of connector G 29 and using L 5036 or L 5038 (see table) adjust to 2V Dc.

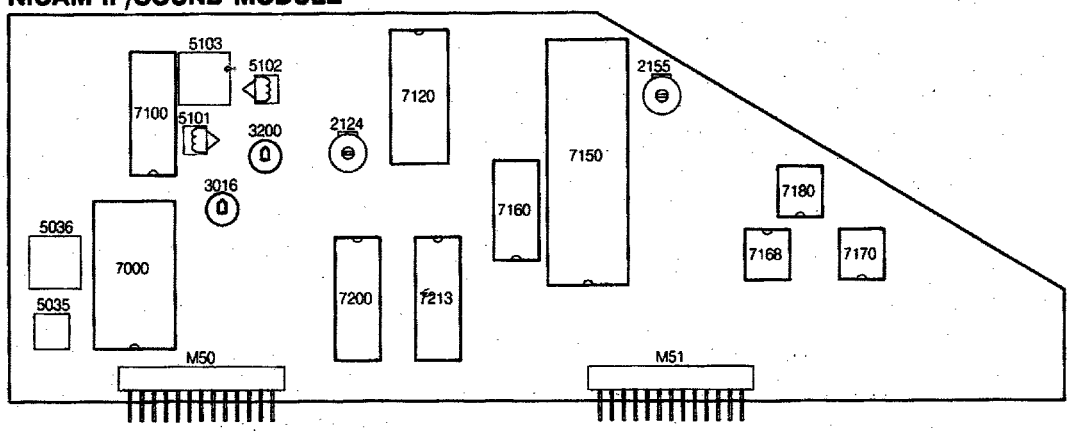
SYSTEM	L5035/L5036	L5037/L5038
Multi French (BGLI) mono/stereo	SECAM L'	SECAM BG/PAL BG
Europe (BG) stereo	PAL BG	--
Europe (BG) mono	--	PAL BG
Multi Eastern- Europe (BGDK) stereo	SECAM K	--
Multi Eastern- Europe (BGDK) mono	--	SECAM K
UK mono	--	PAL I
UK stereo	PAL I	--

2.4 **RF-AGC**
If the picture from a strong local transmitter is distorted, adjust 3016 until the picture is not distorted.

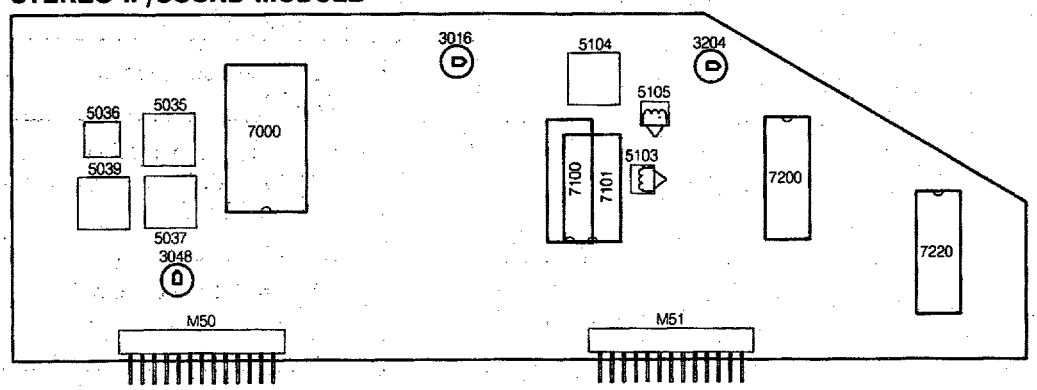
2.5 **MF-AGC** (Multi French (BGLI) system sets).
Connect a pattern generator and select a SECAM-L colour bar signal with a frequency of 475.25 MHz.
Connect an oscilloscope to pin 3 of connector G 29.
Using 3048 adjust the amplitude of the video signal to 1.8 Vpp.

2.6 **Stereo matrix** (stereo and NICAM units)
Connect a pattern generator and supply a PAL BG signal with stereo sound. Select only the right-hand channel sound. Set the balance of the unit completely to the left.
Set 3204 (stereo units) or 3200 (NICAM PAL BG units) to minimum sound reproduction.

NICAM IF/SOUND MODULE



STEREO IF/SOUND MODULE



MONO IF/SOUND MODULE

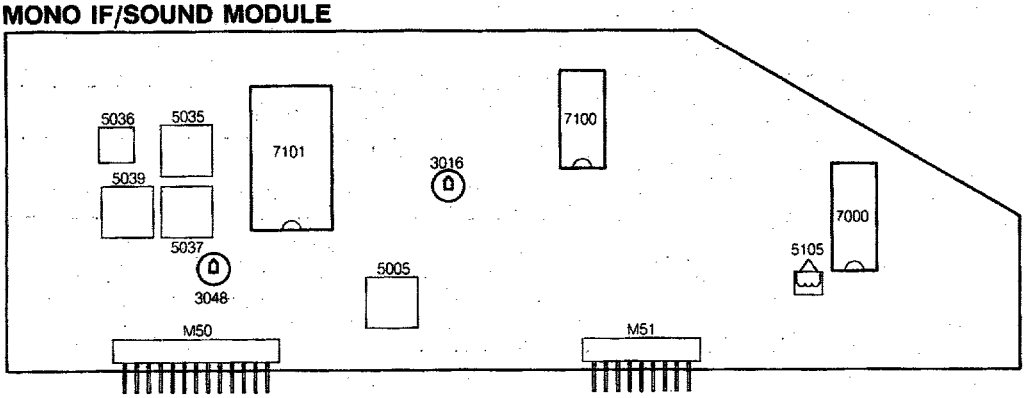


Fig. 7.3

PIP MODULE

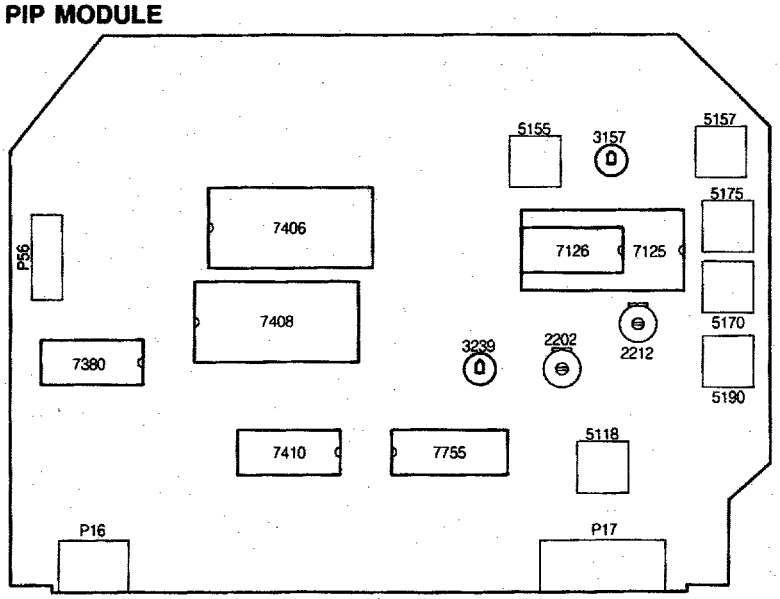


Fig. 7.4

3. Adjustments on the PIP module (Fig. 7.4)

Adjustment conditions
Before making each adjustment, ensure that a PIP picture with the prescribed signal is visible on the screen and that the unit has reached its operating temperature (after ≈ 10 min.).

3.1 Horizontal synchronization
Do not supply an aerial or generator signal.
Connect pin 28-IC7125 to pin 13-IC7125 if TDA4554 is present (PAL selection). Connect pin 5-IC7755 to earth.
Measure the frequency at pin 17-IC7755 and using 3239 set it to 15.625 Hz ± 25 Hz.
Remove the interconnection.

3.2 Chroma bandpass filter

a. Adjustment for PIP modules with TDA4554
Connect a signal generator (e.g. PM 5326) to pin 10 of P17 and set its frequency to 4.286 MHz/0.2 Vpp.
Connect pin 27-IC7125 to 13-IC7125. Connect an oscilloscope to pin 15-IC7125.
Set 5118 to maximum amplitude.
Remove the interconnection.

b. Adjustment for PIP modules with TDA4510
Connect a signal generator (e.g. PM 5326) to pin 10 of P17 and set its frequency to 4.43 MHz/0.2Vpp.
Connect an oscilloscope to pin 9-IC7126.
Set 5118 to maximum amplitude.

3.3 PAL chroma auxiliary oscillator
Connect a pattern generator and supply a PAL colour bar pattern. Connect pin 17-IC7125 (TDA4554) or pin 11-IC7126 (TDA4510) to earth.
Set 2202 so that the colour of the PIP picture is practically still.
Remove the interconnection.

3.4 NTSC chroma auxiliary oscillator for PIP modules with TDA4554
Connect a pattern generator and supply an NTSC M colour bar pattern. Connect pin 17-IC7125 to earth. Set 2202 so that the colour of the PIP picture is practically still.
Remove the interconnection.

3.5 Delay line
Connect a pattern generator and supply a PAL colour bar signal. Connect the X-input of the oscilloscope to pin 1-IC7125 (TDA4554) or pin 1-IC7126 (TDA4510). Connect the Y-input of the oscilloscope to pin 3-IC7125 (TDA4554) or pin 2-IC7126 (TDA4510). Set the oscilloscope to the X-Y position.
Set 5155 and 5157 so that the vectors lie in one line (points which are furthest from the origin).
Set the pattern generator to the "DEM" mode.
Set R3157 so that the vectors lie on top of one another in the origin.

3.6 SECAM identification for PIP modules with TDA4554
Connect a pattern generator and supply a SECAM colour bar signal.
Connect pin 27-IC7125 to pin 13-IC7125.
Connect an oscilloscope to pin 21-IC7125.
Set 5190 to minimum DC level.
Remove the interconnection.

3.7 SECAM demodulators for PIP modules with TDA4554
Connect a pattern generator and supply a SECAM signal without contents (black). Connect pin 27-IC7125 to pin 13-IC7125. Connect an oscilloscope to pin 1-IC7125. Using 5175, set the DC level during the scan equal to the DC level during the flyback.
In the same way set 5170, but now measure at pin 3-IC7125.
Remove the interconnection.

4. Adjustments on the picture tube module

4.1 Picture width
Set using potentiometer 3525.

4.2 East/West correction
Set using potentiometer 3521. This setting is only for 25" and 28" units.

Repair tips

1. Servicing of SMDs (Surface Mounted Devices)

1.1 General cautions on handling and storage

a. Oxidation on the terminals of SMDs results in poor soldering. Do not handle SMDs with bare hands.

b. Avoid using storage places that are sensitive to oxidation such as places with sulphur or chlorine gas, direct sunlight, high temperatures or a high degree of humidity.
The capacitance or resistance value of the SMDs may be affected by this.

c. 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.

1.2 Removal of SMDs

a. Heat the solder (for 2-3 seconds) at each terminal of the chip. By means of litz wire and a slight horizontal force, small components can be removed with the soldering iron. They can also be removed with a solder sucker (see Fig. 8.1A) or:

b. 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. 8.1B).

c. Remove the excess solder on the solder lands by means of litz wire or a solder sucker (see Fig. 8.1C).

Caution on removal:

a. When handling the soldering iron, use suitable pressure and be careful.

b. When removing the chip, do not use undue force with the pair of tweezers.

c. The soldering iron to be used (approx. 30 W) should preferably be equipped with a thermal control (soldering temperature: 225 to 250°C).

d. The chip, once removed, must **never** be reused.

1.3 Attachment of SMDs

a. Locate the SMD on the solder lands by means of tweezers and solder the component on one side. Ensure that the component is positioned correctly on the solder lands (see Fig. 8.2A).

b. Next complete the soldering of the terminals of the component (see Fig. 8.2B).

Caution when attaching SMDs:

a. When soldering the SMD terminals, do not touch them directly with the soldering iron. The soldering should be done as quickly as possible; care must be taken to avoid damage to the terminals of the SMDs themselves.

b. Keep the SMD's body in contact with the printed board when soldering.

c. The soldering iron to be used (approx. 30 W) should preferably be equipped with a thermal control (soldering temperature: 225 to 250°C).

d. Soldering should not be done outside the solder land.

e. Soldering flux (of rosin) may be used, but should not be acidic.

f. After soldering, let the SMD cool down gradually at room temperature.

g. The quantity of solder must be proportional to 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. 8.3).

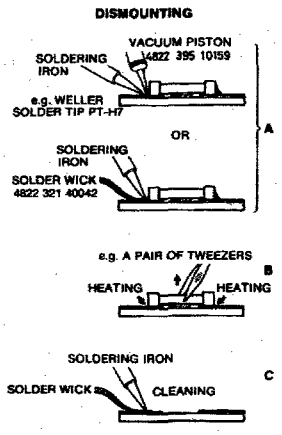


Fig. 8.1

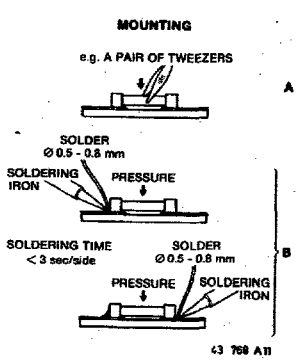


Fig. 8.2

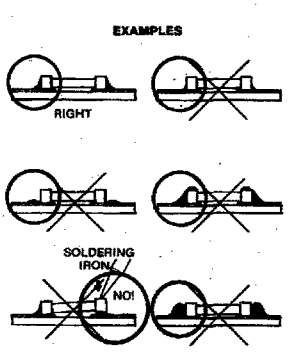


Fig. 8.3

2. Replacing the EEPROM IC7710

If the EEPROM has to be replaced during a repair, the microprocessor will load the EEPROM with a number of default values for the white balance, peak white limit and cut-off point settings.
However, all these values should be checked and adjusted, if necessary.
All options should also be set, the programs installed and personal preference set.

3. Table of error messages

Error indication	Description	Possible fault
OSD: ERR PIP	I^2C fault PIP module	* +5 on PIP module * IC7406
OSD: ERR TXT	I^2C fault TXT module	* +5 on teletext module * IC7800
OSD: ERR NICAM	I^2C fault IC7160 (NICAM units)	* +5 on IF/sound module * IC7160, C2160, C2161, C2221, C2222 * IC7213
OSD: ERR 8415	I^2C fault IC7200 (stereo and NICAM units)	* +14 on IF/Sound module * IC7200 * IC7220
OSD: ERR 8425	I^2C fault IC7213 (NICAM units) I^2C fault IC7220 (Stereo units)	* IC7213/IC7220
OSD: ERR EEPROM	I^2C fault IC7710	* IC7710
OSD: ERR TUNER	I^2C fault tuner	* Tuner * TS7003
OSD: ERR CHROMA	I^2C fault IC7309	* supply IC7309 (+9) * IC7309
Flashing LED	Internal fault in μP	* IC7708
OSD: ERR BUS	I^2C bus blocked	* C2714, C2715

Directions for use

1. Service-Default-Mode

The GR2.2 is equipped with a service default mode. The service default mode is a fixed defined mode in which the unit can be placed.

1.1 Mode definition

The definition of the fixed mode in the service default mode is as follows:

- all sound and picture controls are in the central position (with the exception of the volume which is set to low)
- The set should be tuned to 475.25 MHz
- system:
  * PAL BG, PAL/SECAM BG or PAL I for single system units (option 2 MULTI SYSTEM "OFF")
  * SECAM L for multisystem units. (option 2 MULT SYSTEM "ON")
  * SECAM DK for sets for Eastern-Europa with option 2 MULTI SYSTEM "ON".
  * PAL BG for sets for Eastern-Europa with option 2 MULTI SYSTEM "OFF".

1.2 Switching on and off

The service default mode is switched on by briefly short-circuiting the pins M33 and M34 (SERVICE) behind the INSTALL key on the carrier panel when switching the unit on with the mains switch. In order to indicate that the unit is in the service default mode, an "SER" appears on the screen. The service default mode can only be switched off by switching the unit to standby (⏻). If the unit is switched off and then on again using the mains switch or mains plug, the service default mode remains switched on.

1.3 Operation and extra facilities

In addition to the fact that the unit can be operated normally, in the service default mode two extra functions are available:

- Autostore
  When operating the **install** key on the local control panel, the unit is tuned to the next transmitter frequency. This frequency is also stored under the selected programme number. Therefore the installation menu cannot be accessed in the service default mode!
- Service menu
  The service menu is activated by first pressing the ◿ - key and then at the same time the P+ key on the local control panel. The service menu now appears on the screen. The service menu offers the facility to set various options and make a number of picture tube settings. The various components in the service menu are selected using the coloured keys on the remote control. The various components themselves are adjusted using the + and - keys on the remote control.The values and options set are immediately stored in the EEPROM.

Note 1:
If the service menu does not appear on the screen and the autostore function does not react, then the "LOCK" function is probably activated.
If the autostore function only does not react, the hotel mode is activated.

Note 2:
If a multisystem unit in the service default mode is to be used with the PAL/SECAM BG system, option 2 "MULTI SYSTEM" may be temporarily disabled "OFF".

Note 3:
If a multi-system set for Eastern-Europe in the service default mode is nevertheless to be used with the PAL BG system, option 2 "MULTI SYSTEM" may be temporarily disabled ("OFF").

2. Hotel mode

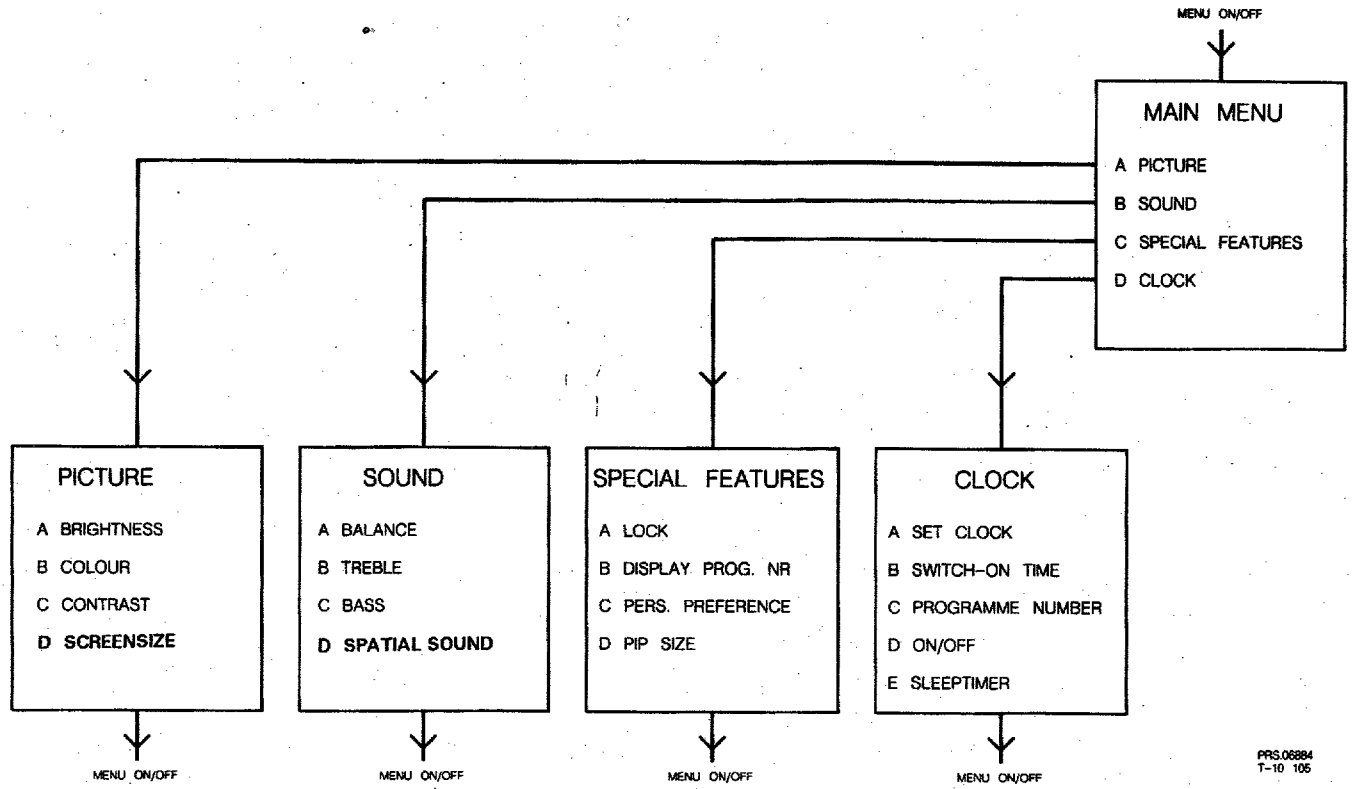
In the hotel mode the volume control is limited to a maximum to be set beforehand and the installation menu cannot be called up.

2.1 Switching the hotel mode on and off

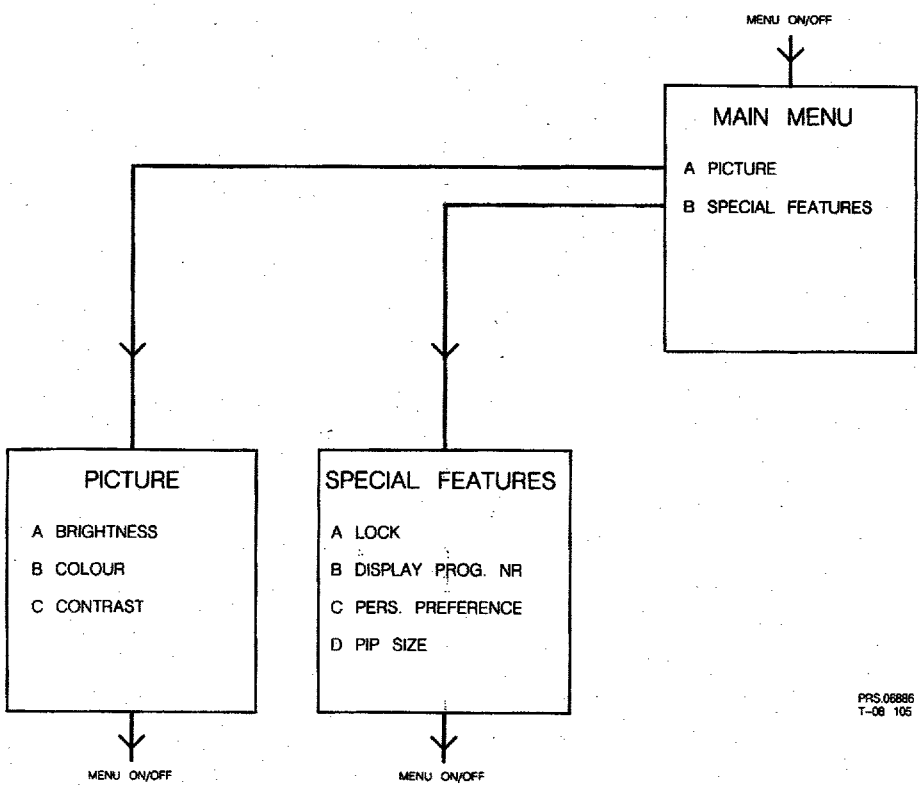
Select programme number 38.
First press ◿ + and keep this depressed while pressing P -.

Survey of menus

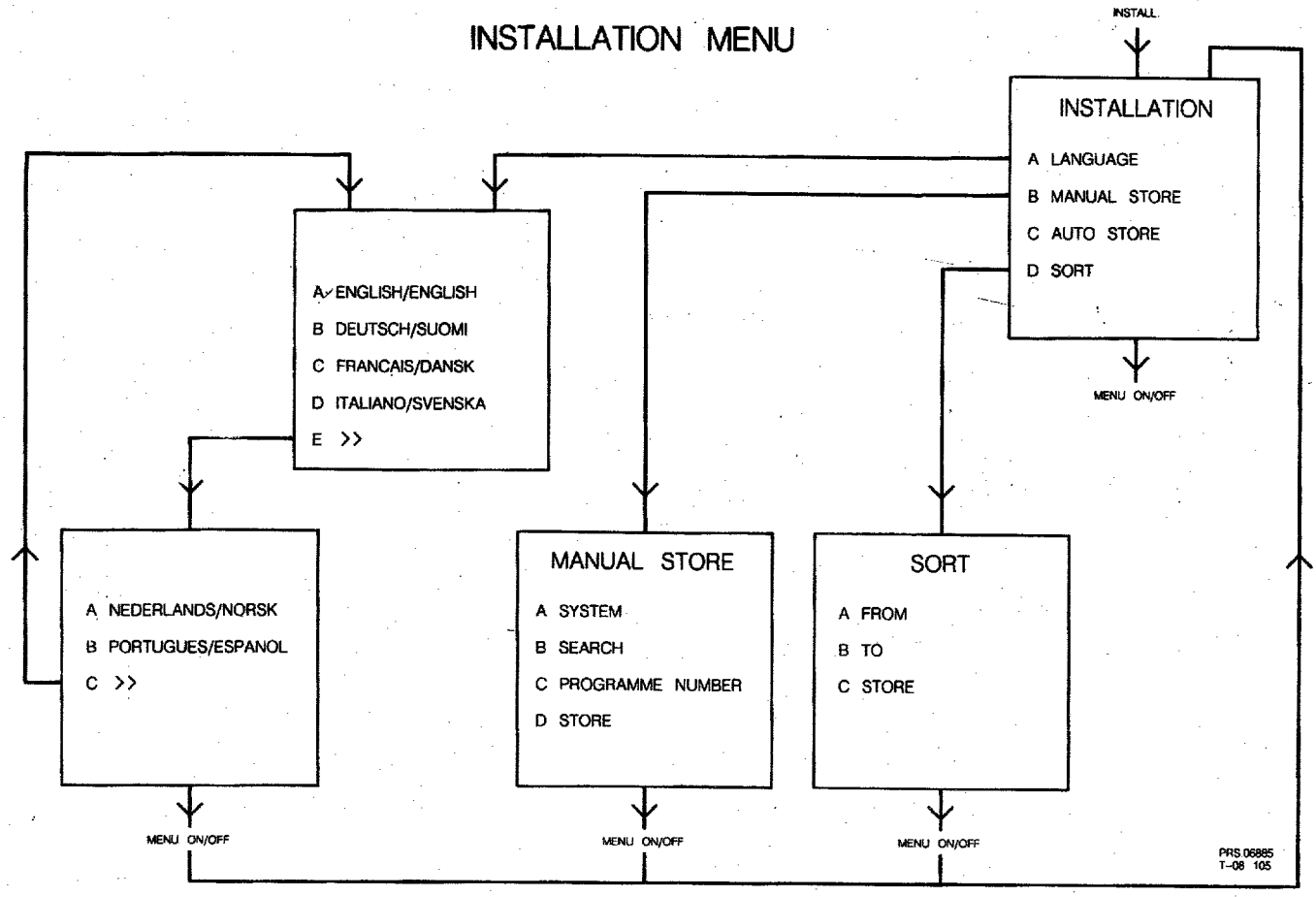
MAIN MENU STEREO



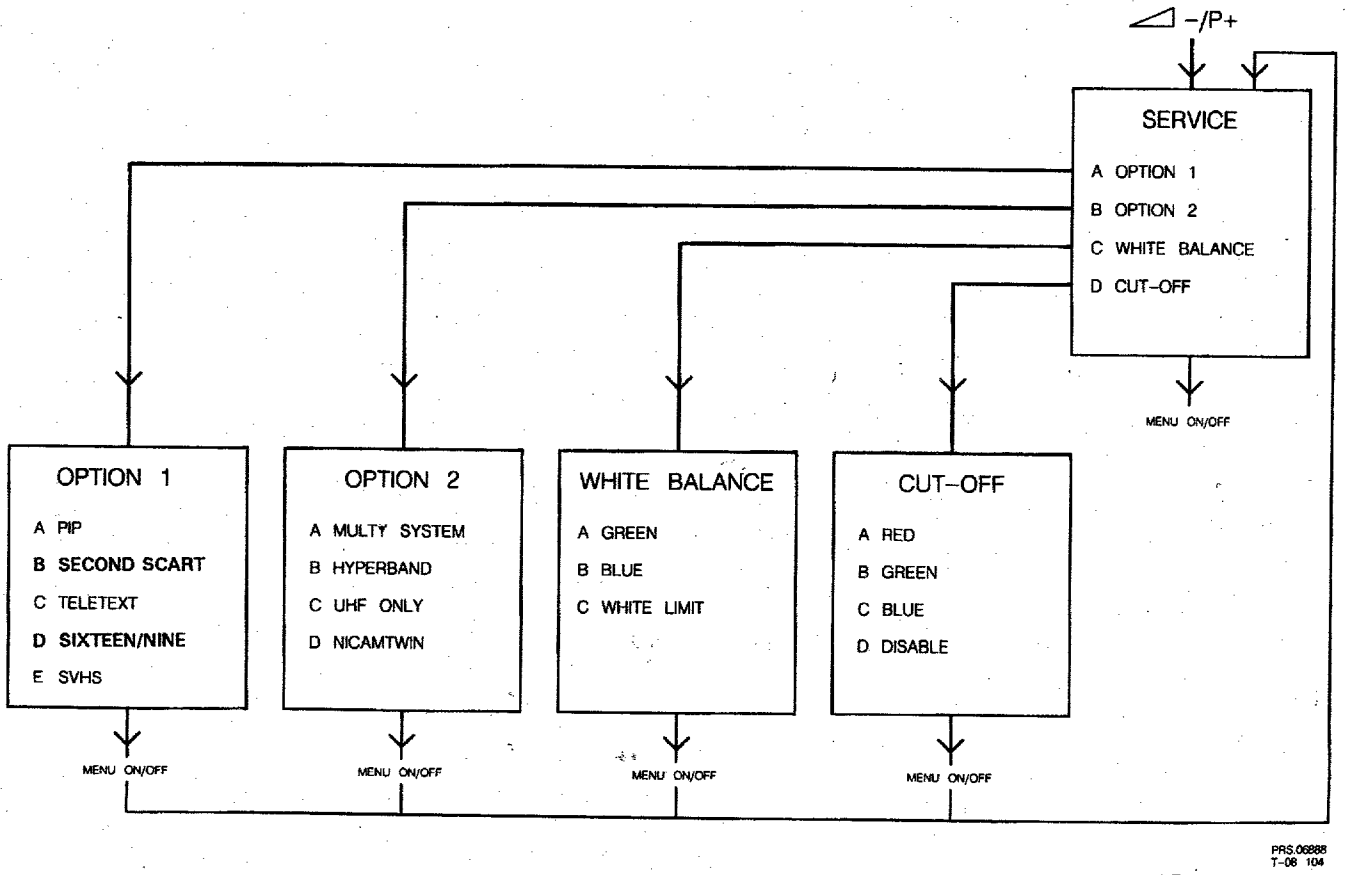
MAIN MENU MONO



INSTALLATION MENU



SERVICE MENU



Main Carrier

Mechanical parts

	4822 492 70871	spring wire
	4822 404 31174	bracket EURO module
▲	4822 256 91766	Spring fix.
0103	4822 466 93111	insulator
0170	4822 466 30395	shield for µP
0010	4822 265 30389	2p male
0011	4822 265 30389	2p male
0012	4822 265 30351	5p male
0013	4822 265 30378	4p male
0014	4822 290 40295	7p male
0015	4822 265 40421	6p male
0016	4822 264 40207	3p male
0017	4822 267 50591	6p male
0018	4822 264 50148	8p male
0019	4822 264 40239	3p male
0022	4822 267 40666	3p male
0023	4822 264 40207	3p male
0024	4822 264 40207	3p male
0027	4822 265 30351	5p male
0028▲	4822 265 30877	3p
0029	4822 265 41086	9p male
0032	4822 290 40283	5p male
0035	4822 267 20387	SVHS-connector
0039	4822 267 31014	bushing
0040	4822 267 40878	3p male
0041	4822 276 50354	switch
0042▲	4822 256 30274	Fuse holder
0047	4822 267 30631	cinch fem. 2p
0049	4822 267 60243	euro connector
	4822 267 30546	6p female
	4822 267 50637	10p female

Various

1000	4822 210 10436	U944C/IEC
1000	4822 210 50124	UV916E/IEC
1002	4822 526 10405	ferrite bead
1003	4822 212 23667	infra red receiver
1004	4822 526 10405	ferrite bead
1240	4822 071 51602	fuse T1.6A
1242	4822 071 51602	fuse T1.6A
1300	4822 242 70304	8,867MHz
1534	4822 071 53151	fuse T315mA
1559	4822 071 51002	fuse T1A
1580	4822 071 51602	fuse T1.6A
1600	4822 070 32002	fuse T2A
1601	4822 071 52502	fuse T2.5A
1702	4822 242 70392	6MHz

⊣⊢

2001	4822 124 40849	330µF 20% 16V
2002	4822 122 31797	22nF 10% 63V
2003	4822 122 31947	100nF 20% 63V
2008	4822 122 31765	100pF 5% 50V
2010	4822 124 40435	10µF 20% 50V
2231	4822 124 41525	100µF 20% 25V
2232	4822 122 32863	22nF 80% 50V
2233	4822 122 32863	22nF 80% 50V
2234	4822 122 32863	22nF 80% 50V
2235	4822 122 32863	22nF 80% 50V
2236	4822 122 31784	4,7nF 10% 50V
2237	4822 122 31947	100nF 20% 63V
2238	4822 122 31784	4,7nF 10% 50V
2238[1b]	4822 122 32597	6,8nF 10% 63V
2239	4822 122 31947	100nF 20% 63V
2240	4822 124 40214	1000µF 20% 25V
2241	4822 122 31947	100nF 20% 63V
2242	4822 124 40214	1000µF 20% 25V
2243	4822 122 32863	22nF 80% 50V
2245	4822 122 32863	22nF 80% 50V
2246[1b]	4822 124 40849	330µF 20% 16V
2246	4822 124 41596	22µF 20% 50V
2248	4822 124 40849	330µF 20% 16V
2249	4822 122 32863	22nF 80% 50V
2250	4822 121 41857	10nF 5% 250V
2251	4822 121 41857	10nF 5% 250V
2252	4822 121 51252	470nF 5% 63V
2254	4822 121 51252	470nF 5% 63V
2255	4822 121 51252	470nF 5% 63V
2256	4822 122 32142	270pF 5% 63V
2257	4822 122 32142	270pF 5% 63V
2262	4822 122 32142	270pF 5% 63V
2263	4822 122 32142	270pF 5% 63V
2264	4822 121 51252	470nF 5% 63V
2265	4822 121 51252	470nF 5% 63V
2266	4822 124 41796	22µF 20% 16V
2300	4822 122 32482	22pF 5% 63V
2301	4822 122 31773	560pF 5% 50V
2303	4822 122 32142	270pF 5% 63V
2304[7]	4822 122 31773	560pF 5% 50V
2304	4822 122 32999	2,2nF 5%
2305	4822 126 10324	33pF 63V
2306	4822 122 31965	220pF 5% 63V
2307	4822 122 31965	220pF 5% 63V
2308	4822 122 32442	10nF 50V
2309	4822 122 32442	10nF 50V
2310	4822 122 32442	10nF 50V
2311	4822 122 33496	100nF 10% 63V
2312	4822 122 32442	10nF 50V
2313	4822 125 50045	20pF
2314	5322 121 42661	330nF 5% 63V
2315[2,4]	4822 122 32139	12pF 5% 63V
2315[1,3]	4822 122 32504	15pF 5% 50V
2316	4822 122 31825	27pF 10% 50V
2317	4822 122 33466	82pF 2%
2318	4822 122 32875	100pF 5% 50V
2319	4822 122 31825	27pF 10% 50V
2320[2,4]	4822 122 31772	47pF 5% 50V
2320[1,3]	4822 122 31839	82pF 10% 50V
2321	4822 122 31797	22nF 10% 63V
2322	4822 122 31797	22nF 10% 63V
2323	4822 122 32542	47nF 10% 63V
2325	4822 122 32542	47nF 10% 63V
2326[7,8]	4822 051 10008	jumper
2326	4822 122 33496	100nF 10% 63V
2328[1,3]	4822 121 41856	22nF 5% 250V
2328[2,4]	4822 121 42408	220nF 5% 63V
2329[1,3]	4822 121 41856	22nF 5% 250V
2329[2,4]	4822 121 42408	220nF 5% 63V
2330	4822 122 31765	100pF 5% 50V
2331	4822 122 31765	100pF 5% 50V
2332	5322 122 31842	330pF 5% 63V
2333	4822 121 42408	220nF 5% 63V
2334	4822 122 31965	220pF 5% 63V
2335	4822 122 31965	220pF 5% 63V
2336	4822 122 31797	22nF 10% 63V
2337	4822 122 31797	22nF 10% 63V
2338	4822 122 31797	22nF 10% 63V
2339	4822 122 33496	100nF 10% 63V
2340	4822 122 31797	22nF 10% 63V
2341	4822 122 31797	22nF 10% 63V
2342	4822 122 33496	100nF 10% 63V
2343	4822 122 33496	100nF 10% 63V
2344	4822 122 33496	100nF 10% 63V
2345	4822 122 31797	22nF 10% 63V
2346	4822 122 31765	100pF 5% 50V
2347	4822 122 31769	18pF 5% 50V
2349	5322 122 31647	1nF 10% 63V
2350	4822 122 31797	22nF 10% 63V
2351	4822 122 31797	22nF 10% 63V
2352	5322 122 31647	1nF 10% 63V
2353	4822 122 33496	100nF 10% 63V
2354	4822 124 40242	1µF 20% 63V
2355	4822 124 40849	330µF 20% 16V
2356	4822 122 31797	22nF 10% 63V
2357	4822 122 31797	22nF 10% 63V
2358	4822 122 31797	22nF 10% 63V
2359	4822 122 31765	100pF 5% 50V
2360	4822 122 33496	100nF 10% 63V
2361	4822 122 33496	100nF 10% 63V
2362	4822 122 33496	100nF 10% 63V
2363	4822 122 31972	39pF 5% 50V
2365	5322 121 42661	330nF 5% 63V
2366	4822 124 41566	3,3µF 20% 50V
2367	4822 124 41578	6,8µF 20% 50V
2368	4822 122 32139	12pF 5% 63V
2370	4822 121 42408	220nF 5% 63V
2371	4822 122 31825	27pF 10% 50V
2372	4822 122 31825	27pF 10% 50V
2373	4822 122 31825	27pF 10% 50V
2374	4822 122 31772	47pF 5% 50V
2375	4822 122 31765	100pF 5% 50V
2376	4822 122 31765	100pF 5% 50V
2380	4822 122 31766	120pF 5% 50V
2381	4822 122 31766	120pF 5% 50V
2384	4822 122 31772	47pF 5% 50V
2385	4822 122 31765	100pF 5% 50V
2386	4822 122 33481	1,8nF 15%
2450	4822 124 80059	100µF 20% 25V
2451	4822 122 33496	100nF 10% 63V
2455	5322 122 31647	1nF 10% 63V
2455[2]	5322 122 33446	3,3nF 10% 63V
2456	4822 124 80059	100µF 20% 25V
2457	4822 122 33496	100nF 10% 63V
2458	4822 121 42937	2.7nF 1% 250V
2459	4822 122 33496	100nF 10% 63V
2460[1]	4822 122 31644	2,2nF 10% 63V
2460	4822 122 32442	10nF 50V
2461	5322 122 31647	1nF 10% 63V
2462	4822 122 31797	22nF 10% 63V
2464	4822 122 33496	100nF 10% 63V
2465	4822 124 40849	330µF 20% 16V
2466	4822 124 22403	10µF 20% 16V
2467	4822 122 33496	100nF 10% 63V
2468	4822 124 40244	2,2µF 20% 63V
2469	4822 124 41596	22µF 20% 50V
2470	4822 122 31772	47pF 5% 50V
2471	5322 121 42661	330nF 5% 63V
2473	5322 121 42661	330nF 5% 63V
2475	4822 122 33496	100nF 10% 63V
2500[3]	4822 122 31727	470pF 5% 63V
2500[4]	4822 122 31771	390pF 5% 50V
2500[1,2]	4822 122 31965	220pF 5% 63V
2501	4822 122 33481	1,8nF 15%
2502	5322 124 41381	22µF 20% 50V
2505	4822 122 32542	47nF 10% 63V
2506[3]	4822 124 80062	470µF 20% 35V
2506[4]	4822 124 80063	680µF 20% 35V
2506[1,2]	4822 124 80065	1000µF 20% 50V
2507	4822 122 31797	22nF 10% 63V
2509	5322 124 41379	2,2µF 20% 50V
2524	4822 124 42167	4,7µF 20% 50V
2538	4822 121 43856	4.7nF 5% 250V
2539	4822 124 80057	330µF 20% 16V

Main carrier

2545▲[1,2]	4822 126 10202	1,5nF 10% 2KV
2545▲[3,4]	4822 126 11539	1,2nF 10% 2KV
2546▲[1]	4822 121 43061	8,2nF 5% 1,6KV
2546▲[2]	4822 121 43076	11nF 5% 1600V
2546▲[3]	4822 121 70109	7,5nF 5% 1,6KV
2546▲[4]	5322 121 44345	15nF 5% 1,6KV
2547▲[1,2]	4822 121 40488	22nF 10% 400V
2547▲[3]	5322 121 44151	33nF 10% 400V
2547▲[4]	5322 121 44219	47nF 10% 400V
2549[1]	4822 121 42073	390nF 10% 400V
2549[2]	4822 121 42074	470nF 10% 400V
2550▲[1,2]	4822 121 51527	390nF 5% 250V
2550▲[3]	4822 121 51601	470nF 10% 200V
2550▲[4]	5322 121 44128	680nF 10% 250V
2551	4822 124 80069	1µF 20% 160V
2559	4822 124 80059	100µF 20% 25V
2560▲	4822 121 51408	33nF 10% 250V
2570	4822 124 80071	22µF 20% 160V
2574	4822 122 10175	2,2nF 10% 50V
2580	4822 124 80061	1000µF 20% 25V
2585[2]	4822 124 80058	68µF 20% 25V
2585[1]	5322 124 21731	10µF 20% 50V
2588[1,2]	4822 122 31644	2,2nF 10% 63V
2588[4]	5322 122 31647	1nF 10% 63V
2590	5322 121 42498	680nF 5% 63V
2600▲	4822 124 41531	470nF 10% 250V
2605▲[1,2]	4822 124 80053	220µF 20% 385V
2605▲[3,4]	4822 124 80134	150µF 20% 400V
2607▲	4822 121 51469	1nF 400V
2611	5322 124 41299	68µF 20% 25V
2617[3,4]	4822 121 51252	470nF 5% 63V
2617[1,2]	4822 121 51319	1µF 10% 63V
2620	5322 121 42465	68nF 5% 63V
2625	4822 122 40593	1nF 10% 1KV
2626	4822 122 40594	470pF 10% 1KV
2629	4822 122 31784	4,7nF 10% 50V
2630[3,4]	4822 124 23418	47µF 200V
2630[1,2]	4822 124 80055	100µF 10% 160V
2631[3,4]	4822 124 23418	47µF 200V
2631[1,2]	4822 124 80055	100µF 10% 160V
2632	4822 126 11382	1nF 10% 1KV
2636	4822 122 31644	2,2nF 10% 63V
2640	4822 124 80061	1000µF 20% 25V
2641	4822 124 80061	1000µF 20% 25V
2646	4822 124 80054	15µF 20% 50V
2649	4822 122 33496	100nF 10% 63V
2650	4822 122 33496	100nF 10% 63V
2652	5322 122 32331	1nF 10% 100V
2653	5322 122 32331	1nF 10% 100V
2658	5322 122 32838	82nF 10% 63V
2660	4822 124 80061	1000µF 20% 25V
2661	4822 124 41506	47µF 20% 16V
2662[3,4]	4822 122 31965	220pF 5% 63V
2662[1,2]	4822 122 32142	270pF 5% 63V
2663[3,4]	4822 122 31765	100pF 5% 50V
2663[1,2]	4822 122 31839	82pF 10% 50V
2664	5322 124 41379	2,2µF 20% 50V
2670	4822 122 31766	120pF 5% 50V
2671	4822 121 42408	220nF 5% 63V
2675[3,4]	4822 124 80064	680µF 20% 50V
2675[1,2]	4822 124 80065	1000µF 20% 50V
2676	5322 122 32331	1nF 10% 100V
2704	4822 122 32542	47nF 10% 63V
2705	4822 122 31766	120pF 5% 50V
2706	5322 124 41299	68µF 20% 25V
2707	4822 122 32442	10nF 50V
2708	4822 122 31766	120pF 5% 50V
2709	4822 122 32507	6,8pF 5% 50V
2710	4822 122 32507	6,8pF 5% 50V
2711	4822 122 31825	27pF 10% 50V
2712	4822 122 31825	27pF 10% 50V
2713	4822 124 41525	100µF 20% 25V
2714	4822 122 31766	120pF 5% 50V
2715	4822 122 31766	120pF 5% 50V
2716	4822 122 33496	100nF 10% 63V
2717	4822 122 31644	2,2nF 10% 63V
2718	4822 122 33496	100nF 10% 63V
2719	5322 121 42386	100nF 5% 63V
2721	4822 122 32442	10nF 50V
2722	4822 122 31947	100nF 20% 63V
2781	4822 122 33496	100nF 10% 63V
2850	4822 124 41506	47µF 20% 16V
2851	4822 122 31766	120pF 5% 50V
2852	4822 122 33496	100nF 10% 63V
2853	4822 122 31784	4,7nF 10% 50V
2854	4822 122 33496	100nF 10% 63V
2875	5322 121 42386	100nF 5% 63V

3001▲	4822 052 10399	39Ω 5% 0,33W
3002	4822 051 10223	22k 2% 0,25W
3003	4822 051 20222	2k2 5% 0,1W
3010	4822 051 10102	1k 2% 0,25W
3218	4822 116 52228	680Ω 5% 0,5W
3219	4822 116 52228	680Ω 5% 0,5W
3220	4822 051 10392	3k9 2% 0,25W
3221	4822 050 11002	1k 1% 0,4W
3222	4822 116 52234	100k 5% 0,5W
3224	4822 116 52256	2k2 5% 0,5W
3225	4822 051 10272	2k7 2% 0,25W
3226	4822 051 10333	33k 2% 0,25W
3227	4822 051 10333	33k 2% 0,25W
3228	4822 051 10151	150Ω 2% 0,25W
3229	4822 051 10562	5k6 2% 0,25W
3230	4822 116 52257	22k 5% 0,5W
3231	4822 051 10472	4k7 2% 0,25W
3232[1b]	4822 051 10008	jumper
3232	4822 051 10101	100Ω 2% 0,25W
3233	4822 051 10103	10k 2% 0,25W
3234	4822 051 10223	22k 2% 0,25W
3235	4822 051 10223	22k 2% 0,25W
3236	4822 051 10122	1k2 2% 0,25W
3237	4822 051 10122	1k2 2% 0,25W
3237[1b]	4822 051 10562	5k6 2% 0,25W
3238	4822 051 10122	1k2 2% 0,25W
3239	4822 116 52207	1k2 5% 0,5W
3240▲	4822 052 10828	8Ω2 5% 0,33W
3241▲	4822 052 10828	8Ω2 5% 0,33W
3242	4822 051 10333	33k 2% 0,25W
3243	4822 051 10333	33k 2% 0,25W
3244	4822 051 10103	10k 2% 0,25W
3245	4822 051 10103	10k 2% 0,25W
3246	4822 050 23301	330Ω 1% 0,6W
3247	4822 116 52175	100Ω 5% 0,5W
3248	4822 050 23301	330Ω 1% 0,6W
3249	4822 116 52175	100Ω 5% 0,5W
3249[1b]	4822 116 52193	39Ω 5% 0,5W
3250	4822 050 11002	1k 1% 0,4W
3251	4822 050 11002	1k 1% 0,4W
3253	4822 116 52211	150Ω 5% 0,5W
3254	4822 116 52211	150Ω 5% 0,5W
3255	4822 050 11002	1k 1% 0,4W
3256	4822 050 11002	1k 1% 0,4W
3257	4822 051 10334	330k 2% 0,25W
3258	4822 051 10334	330k 2% 0,25W
3259	4822 051 10334	330k 2% 0,25W
3260	4822 051 10334	330k 2% 0,25W
3261	4822 116 80747	75Ω 5% 0,125W
3262	4822 116 80747	75Ω 5% 0,125W
3263	4822 051 10008	jumper
3263[1b]	4822 051 10562	5k6 2% 0,25W
3264	4822 051 10008	jumper
3264[1b]	4822 051 10562	5k6 2% 0,25W
3265	4822 050 21008	1Ω 1% 0,6W
3266	4822 050 21008	1Ω 1% 0,6W
3267	4822 051 10103	10k 2% 0,25W
3268	4822 051 10103	10k 2% 0,25W
3300	4822 051 10822	8k2 2% 0,25W
3301	4822 051 10272	2k7 2% 0,25W
3302	4822 051 20222	2k2 5% 0,1W
3303[7,8]	4822 051 10122	1k2 2% 0,25W
3303	4822 051 10332	3k3 2% 0,25W
3304	4822 051 10182	1k8 2% 0,25W
3305	4822 051 10431	430Ω 2% 0,25W
3306	4822 051 10103	10k 2% 0,25W
3307[2,4]	4822 051 10681	680Ω 2% 0,25W
3307[1,3]	4822 051 10821	820Ω 2% 0,25W
3308	4822 051 10331	330Ω 2% 0,25W
3309	4822 051 10331	330Ω 2% 0,25W
3310	4822 051 10512	5k1 2% 0,25W
3311	4822 051 10391	390Ω 2% 0,25W
3312	4822 101 11186	470Ω 30% 0,1W
3313[7,8]	4822 051 10103	10k 2% 0,25W
3313	4822 051 10682	6k8 2% 0,25W
3314	4822 051 10103	10k 2% 0,25W
3318	4822 051 10472	4k7 2% 0,25W
3323	4822 116 52272	330k 5% 0,5W
3325	4822 051 10271	270Ω 2% 0,25W
3326	4822 051 10271	270Ω 2% 0,25W
3327	4822 050 11202	1k2 1% 0,4W
3328	4822 051 10473	47k 2% 0,25W
3330	4822 051 10106	10Ω 2% 0,25W
3331	4822 051 10109	10Ω 2% 0,25W
3332	4822 050 23901	390Ω 1% 0,6W
3334	4822 050 21809	18Ω 1% 0,6W
3335	4822 116 52184	18Ω 5% 0,5W
3336▲[2,4]	4822 052 10189	18Ω 5% 0,33W
3336▲[1,3]	4822 052 10279	27Ω 5% 0,33W
3337▲[2,4]	4822 052 10189	18Ω 5% 0,33W
3337▲[1,3]	4822 052 10279	27Ω 5% 0,33W
3338	4822 050 11002	1k 1% 0,4W
3339	4822 116 52243	1k5 5% 0,5W
3340	4822 050 11002	1k 1% 0,4W
3341	4822 051 10103	10k 2% 0,25W
3342[2,4]	4822 051 10102	1k 2% 0,25W
3342[1,3]	4822 051 10122	1k2 2% 0,25W
3343	4822 051 10104	100k 2% 0,25W
3344	4822 051 10103	10k 2% 0,25W
3347	4822 116 52219	330Ω 5% 0,5W
3348	4822 116 52219	330Ω 5% 0,5W
3349	4822 116 52219	330Ω 5% 0,5W
3350	4822 050 11002	1k 1% 0,4W
3351	4822 116 52263	2k7 5% 0,5W
3352	4822 116 52263	2k7 5% 0,5W
3353	4822 116 52263	2k7 5% 0,5W
3354	4822 051 10221	220Ω 2% 0,25W
3357	4822 051 10102	1k 2% 0,25W
3358	4822 051 10331	330Ω 2% 0,25W
3359	4822 051 10331	330Ω 2% 0,25W
3360	4822 051 10102	1k 2% 0,25W
3361	4822 051 10102	1k 2% 0,25W
3362	4822 051 10472	4k7 2% 0,25W
3365	4822 116 52272	330k 5% 0,5W
3366	4822 116 52297	68k 5% 0,5W
3367	4822 116 52175	100Ω 5% 0,5W
3368	4822 116 52175	100Ω 5% 0,5W
3369	4822 116 52175	100Ω 5% 0,5W
3370	4822 051 10472	4k7 2% 0,25W
3371	4822 051 10332	3k3 2% 0,25W

Main carrier

3372	4822 051 10472	4k7 2% 0,25W
3373	4822 051 10102	1k 2% 0,25W
3374	4822 050 22702	27k 1% 0,6W
3375	4822 051 10331	330Ω 2% 0,25W
3376	4822 051 10331	330Ω 2% 0,25W
3380	4822 051 10101	100Ω 2% 0,25W
3381	4822 051 10101	100Ω 2% 0,25W
3394	4822 051 10683	68k 2% 0,25W
3395	4822 051 10683	68k 2% 0,25W
3450	4822 116 52238	12k 5% 0,5W
3451	4822 116 52175	100Ω 5% 0,5W
3452	4822 116 52175	100Ω 5% 0,5W
3455	4822 051 10102	1k 2% 0,25W
3456	4822 051 10682	6k8 2% 0,25W
3457	4822 101 11191	10k 30%LIN 0.1W
3458	4822 051 10303	30k 2% 0,25W
3459	4822 051 10823	82k 2% 0,25W
3460	4822 051 10333	33k 2% 0,25W
3461	4822 101 11193	470k 30% 0.1W
3463	4822 116 52251	18k 5% 0,5W
3464	4822 051 10123	12k 2% 0,25W
3465	4822 051 10394	390k 2% 0,25W
3466	4822 051 10681	680Ω 2% 0,25W
3467[3,4]	4822 050 21205	1M2 1% 0,6W
3467[1,2]	4822 116 80692	2M2 5% 0,2W
3468	4822 051 10682	6k8 2% 0,25W
3469	4822 051 10229	22Ω 2% 0,25W
3470	4822 116 52231	820Ω 5% 0,5W
3471[1,2]	4822 116 52239	120k 5% 0,5W
3471[4]	4822 116 52245	150k 5% 0,5W
3471[3]	4822 116 52258	220k 5% 0,5W
3473	4822 116 52265	270k 5% 0,5W
3474	4822 051 10392	3k9 2% 0,25W
3475	4822 051 10184	180k 2% 0,25W
3476	4822 051 10683	68k 2% 0,25W
3477	4822 051 10474	470k 2% 0,25W
3478	4822 051 10393	39k 2% 0,25W
3483	4822 051 10479	47Ω 2% 0,25W
3485	4822 051 20222	2k2 5% 0,1W
3501[3]	4822 051 10101	100Ω 2% 0,25W
3501[1,2]	4822 051 10759	75Ω 2% 0,25W
3501[4]	4822 051 10829	82Ω 2% 0,25W
3502[1,2]	4822 053 10122	1k2 5% 1W
3502[3,4]	4822 053 10272	2k7 5% 1W
3503▲[1,2]	4822 052 10128	1Ω2 5% 0,33W
3503▲[3,4]	4822 052 10478	4Ω7 5% 0,33W
3504	4822 100 11684	100Ω 10% 0.1W
3505	4822 051 10471	470Ω 2% 0,25W
3506	4822 116 52242	130k 5% 0,5W
3507[1,2]	4822 116 52233	10k 5% 0,5W
3507[3,4]	4822 116 52238	12k 5% 0,5W
3508	4822 051 10228	2Ω2 5% 0,25W
3509	4822 051 10228	2Ω2 5% 0,25W
3510	4822 051 10228	2Ω2 5% 0,25W
3511	4822 051 10228	2Ω2 5% 0,25W
3513	4822 050 25601	560Ω 1% 0,6W
3514	4822 051 10182	1k8 2% 0,25W
3515	4822 051 10228	2Ω2 5% 0,25W
3516	4822 101 11192	22k 30% 0,1W
3517	4822 051 10228	2Ω2 5% 0,25W
3519	4822 051 10228	2Ω2 5% 0,25W
3523	4822 051 10228	2Ω2 5% 0,25W
3529	4822 051 10228	2Ω2 5% 0,25W
3535[3,4]	4822 051 10151	150Ω 2% 0,25W
3535[1]	4822 051 10221	220Ω 2% 0,25W
3535[2]	4822 051 51201	120Ω 1% 0,25W
3539[3,4]	4822 053 20434	430k 5% 0,25W
3539[1,2]	4822 053 20684	680k 5% 0,25W
3540	4822 051 51201	120Ω 1% 0,25W
3542	4822 050 28201	820Ω 1% 0,6W
3543	4822 051 10101	100Ω 2% 0,25W
3545[2]	4822 111 70178	120Ω 5% 5W
3545[1]	4822 113 80565	180Ω 5% 5W
3545[3,4]	4822 116 83686	680Ω 5% 5W
3549	4822 116 52251	18k 5% 0,5W
3550	4822 116 52251	18k 5% 0,5W
3551	4822 050 25601	560Ω 1% 0,6W
3552	4822 050 25601	560Ω 1% 0,6W
3553▲	4822 052 10561	560Ω 5% 0,33W
3560[2]	4822 116 52247	16k 5% 0,5W
3560[1]	4822 116 52254	20k 5% 0,5W
3560[4]	4822 116 52274	36k 5% 0,5W
3560[3]	4822 116 52277	39k 5% 0,5W
3570▲	4822 052 10688	6Ω8 5% 0,33W
3582	4822 050 25601	560Ω 1% 0,6W
3585▲	4822 052 10159	15Ω 5% 0,33W
3588▲	4822 052 10561	560Ω 5% 0,33W
3589	4822 050 21502	1k5 1% 0,6W
3590	4822 116 52234	100k 5% 0,5W
3591	4822 051 10474	470k 2% 0,25W
3592	4822 051 10681	680Ω 2% 0,25W
3603▲	4822 053 21915	9M1 5% 0,5W
3604	4822 113 80593	1,5Ω 10% 5W
3605▲	4822 052 10102	1k 5% 0,33W
3606▲	4822 052 10102	1k 5% 0,33W
3610▲[1,2]	4822 052 10159	15Ω 5% 0,33W
3610▲[3,4]	4822 052 10688	6Ω8 5% 0,33W
3617	4822 116 52213	180Ω 5% 0,5W
3619	4822 116 52182	15Ω 5% 0,5W
3620	4822 053 12121	120Ω 5% 3W
3621[1,2]	4822 053 12279	27Ω 5% 3W
3621[3,4]	4822 053 12479	47Ω 5% 3W
3622	4822 053 12479	47Ω 5% 3W
3624	4822 053 10334	330k 5% 1W
3625	4822 116 52292	560k 5% 0,5W
3626	4822 113 80565	180Ω 5% 5W
3628	4822 051 10334	330k 2% 0,25W
3629	4822 051 10682	6k8 2% 0,25W
3631[3,4]	4822 050 21204	120k 1% 0,6W
3631[1,2]	4822 050 22204	220k 1% 0,6W
3634[3,4]	4822 116 52263	2k7 5% 0,5W
3634[1,2]	4822 116 52269	3k3 5% 0,5W
3635	4822 101 11187	1k 30%LIN 0,1W
3636	4822 051 10224	220k 2% 0,25W
3637	4822 116 52175	100Ω 5% 0,5W
3647[1b]	4822 050 23303	33k 1% 0,6W
3647	4822 050 23603	36k 1% 0,6W
3648	4822 051 10273	27k 2% 0,25W
3649	4822 050 23309	33Ω 1% 0,6W
3658▲	4822 052 10688	6Ω8 5% 0,33W
3659	4822 051 10181	180Ω 2% 0,25W
3660	4822 051 10101	100Ω 2% 0,25W
3661	4822 051 10361	360Ω 2% 0,25W
3662	4822 051 10221	220Ω 2% 0,25W
3663	4822 051 10562	5k6 2% 0,25W
3664	4822 051 10272	2k7 2% 0,25W
3665	4822 051 10103	10k 2% 0,25W
3666	4822 051 10102	1k 2% 0,25W
3667	4822 051 10361	360Ω 2% 0,25W
3668	4822 051 10102	1k 2% 0,25W
3669	4822 051 10102	1k 2% 0,25W
3670	4822 051 10303	30k 2% 0,25W
3671	4822 050 11002	1k 1% 0,4W
3672	4822 051 10103	10k 2% 0,25W
3673	4822 051 10472	4k7 2% 0,25W
3674	4822 051 10102	1k 2% 0,25W
3675[1,2]	4822 116 52239	120k 5% 0,5W
3675[3,4]	4822 116 52284	47k 5% 0,5W
3676	4822 051 10103	10k 2% 0,25W
3677	4822 051 10118	1Ω1 5% 0,25W
3701	4822 051 10273	27k 2% 0,25W
3702	4822 051 10153	15k 2% 0,25W
3707	4822 051 10182	1k8 2% 0,25W
3718	4822 116 52215	220Ω 5% 0,5W
3719	4822 116 52215	220Ω 5% 0,5W
3720	4822 116 52215	220Ω 5% 0,5W
3721	4822 051 10103	10k 2% 0,25W
3722	4822 051 10103	10k 2% 0,25W
3723	4822 051 10103	10k 2% 0,25W
3724	4822 051 10103	10k 2% 0,25W
3725	4822 051 10103	10k 2% 0,25W
3726	4822 051 10103	10k 2% 0,25W
3727	4822 116 52175	100Ω 5% 0,5W
3728	4822 116 52175	100Ω 5% 0,5W
3729	4822 051 10911	910Ω 2% 0,25W
3730	4822 051 10221	220Ω 2% 0,25W
3732[1,2]	4822 053 11103	10k 5% 2W
3732[3,4]	4822 053 11332	3k3 5% 2W
3733[3,4]	4822 050 23902	3k9 1% 0,6W
3733[1,2]	4822 116 52283	4k7 5% 0,5W
3734[3,4]	4822 050 23902	3k9 1% 0,6W
3734[1,2]	4822 116 52283	4k7 5% 0,5W
3736	4822 116 52175	100Ω 5% 0,5W
3737	4822 050 11002	1k 1% 0,4W
3741	4822 051 10123	12k 2% 0,25W
3742	4822 051 10332	3k3 2% 0,25W
3743	4822 051 10472	4k7 2% 0,25W
3747	4822 051 10273	27k 2% 0,25W
3748	4822 051 10273	27k 2% 0,25W
3749	4822 051 10273	27k 2% 0,25W
3750	4822 051 10273	27k 2% 0,25W
3751	4822 051 10153	15k 2% 0,25W
3752	4822 116 52244	15k 5% 0,5W
3753	4822 051 10153	15k 2% 0,25W
3754	4822 051 10153	15k 2% 0,25W
3755[1b]	4822 051 10008	jumper
3755	4822 051 10101	100Ω 2% 0,25W
3756	4822 051 10101	100Ω 2% 0,25W
3757	4822 051 20222	2k2 5% 0,1W
3758	4822 051 10392	3k9 2% 0,25W
3759	4822 116 52175	100Ω 5% 0,5W
3768	4822 051 10105	1M 5% 0,25W
3770	4822 051 10473	47k 2% 0,25W
3771	4822 116 52251	18k 5% 0,5W
3772	4822 116 52276	3k9 5% 0,5W
3775	4822 051 10101	100Ω 2% 0,25W
3776	4822 051 10562	5k6 2% 0,25W
3777	4822 116 52264	27k 5% 0,5W
3778	4822 116 52291	56k 5% 0,5W
3779	4822 116 52233	10k 5% 0,5W
3780	4822 051 10103	10k 2% 0,25W
3781	4822 051 10472	4k7 2% 0,25W
3849	4822 116 52218	300Ω 5% 0,5W
3850	4822 116 52189	30Ω 5% 0,5W
3851	4822 116 80747	75Ω 5% 0,125W
3852	4822 116 80747	75Ω 5% 0,125W
3853	4822 116 80747	75Ω 5% 0,125W
3854	4822 116 80747	75Ω 5% 0,125W
3855	4822 116 52201	75Ω 5% 0,5W
3856	4822 051 10101	100Ω 2% 0,25W
3857	4822 051 10331	330Ω 2% 0,25W
3858	4822 051 10331	330Ω 2% 0,25W
3859	4822 051 10331	330Ω 2% 0,25W
3860	4822 116 80176	1Ω 5% 0,5W
3861	4822 051 10562	5k6 2% 0,25W
3866	4822 051 10472	4k7 2% 0,25W
3867	4822 116 80747	75Ω 5% 0,125W
3868	4822 116 80747	75Ω 5% 0,125W
3869	4822 116 52175	100Ω 5% 0,5W
3870	4822 051 10103	10k 2% 0,25W

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Main carrier

3871	4822 116 52175	100Ω 5% 0,5W
3872	4822 051 10102	1k 2% 0,25W
3874	4822 050 21008	1Ω 1% 0,6W
3875	4822 051 10154	150k 2% 0,25W
3879	4822 051 10122	1k2 2% 0,25W
3880	4822 051 10332	3k3 2% 0,25W
3881	4822 116 52217	270Ω 5% 0,5W
3882	4822 116 52217	270Ω 5% 0,5W
3884	4822 051 10681	680Ω 2% 0,25W
3885	4822 051 10821	820Ω 2% 0,25W
3886	4822 051 10472	4k7 2% 0,25W
3887	4822 116 52207	1k2 5% 0,5W
3888	4822 116 52289	5k6 5% 0,5W
3890	4822 051 10103	10k 2% 0,25W
9723	4822 116 52234	100K 5% 0,5W

Jumper

4221.. 4318	4822 051 10008	jumper
4319	4822 051 10152	1k5 2% 0,25W
4320.. 4329	4822 051 10008	jumper
4330	4822 051 10102	1k 2% 0,25W
4450.. 4867	4822 051 10008	jumper

5001	4822 157 60138	47µH
5240	4822 158 10551	27µH
5242	4822 158 10551	27µH
5301	4822 157 63075	7,95µH
5303	4822 157 53906	47µH
5304	4822 157 63074	7.6µH 4.3MHz
5306	4822 320 40081	470ns
5534A[3,4]	4822 157 62771	coil
5534A[1,2]	4822 158 10728	coil
5541A	4822 157 63078	line driver
5545A[2]	4822 140 10414	LOT 25"/28" BL
5545A[1]	4822 140 10417	LOT 25"/28" BM
5545A[3]	4822 140 10418	LOT 21" MN
5545A[4]	4822 140 10435	LOT 21" NN
5549	4822 157 53069	coil balance
5554A	4822 157 63079	AT4042/97
5554A[3]	4822 157 63161	AT4042/90G
5582	5322 157 52539	15µH
5588	4822 157 52505	33µH
5605A	4822 157 53995	100µH
5606A	4822 157 53995	100µH
5619[1,2]	4822 156 21125	3,9µH
5619[3,4]	4822 157 51235	4µH 7 10%
5625A[3,4]	4822 148 81159	SOPS trafo
5625A[1,2]	4822 148 81168	SOPS trafo
5630	4822 157 60387	1µH
5631	4822 158 10551	27µH
5632	4822 158 10551	27µH
5661	4822 157 52279	33µH 10%
5701	4822 157 52843	56µH 5%
5703	4822 157 52279	33µH 10%

6245	4822 130 30621	1N4148
6246	4822 130 81139	LLZ-C3V3
6247	4822 130 81139	LLZ-C3V3
6248	4822 130 80446	LL4148
6249	4822 130 80446	LL4148
6300	4822 130 80446	LL4148
6302	4822 130 34382	BZX79-C8V2
6303	4822 130 34382	BZX79-C8V2
6310	4822 130 80884	LLZ-C5V1
6315	4822 130 80446	LL4148
6316	4822 130 30621	1N4148
6317	4822 130 30621	1N4148
6318	4822 051 10008	jumper
6319	4822 130 34379	BZX79-C27
6320	4822 130 80877	BAV103
6367	4822 130 80884	LLZ-C5V1
6464	4822 130 81015	LLZ-C10
6465[3,4]	4822 130 34281	BZX79-F15
6465[1]	4822 130 61219	BZX79-F10
6465[2]	4822 130 80239	BZX79-F8V2
6466	4822 130 80446	LL4148
6467	4822 130 80446	LL4148
6503	4822 130 42488	BYD33D
6504	4822 130 80446	LL4148
6546	4822 130 41275	BY228/20
6547	4822 130 41602	BYW95C/20
6548	4822 130 30621	1N4148
6551	4822 130 42489	BYD33G
6560	4822 130 80446	LL4148
6561	4822 130 30864	BZX79-C68
6563	4822 130 80915	BYD74C
6570	4822 130 42489	BYD33G
6571	4822 130 42488	BYD33D
6580	4822 130 80791	BYV28-200/20
6580[2]	4822 130 82512	BYV29F-400
6585	4822 130 42489	BYD33G
6590	4822 130 81141	LLZ-C43
6591	4822 130 30621	1N4148
6592	4822 130 80928	BZX79-C30
6610	4822 130 80446	LL4148
6611	5322 130 34413	BZT03-C16
6612	4822 130 30621	1N4148
6617	4822 130 31456	BZV85-C5V1
6621	4822 130 42488	BYD33D
6622	4822 130 30621	1N4148
6624	4822 130 31933	1N5061
6625	4822 130 31933	1N5061
6630[1,2]	4822 130 33531	BY229F-600
6630[3,4]	4822 130 81175	BYD74G
6640	4822 130 80914	BYD74B
6641	4822 130 80914	BYD74B
6646	4822 130 42488	BYD33D
6648[1,2]	4822 130 34488	BZX79-F12
6648[3,4]	4822 130 61219	BZX79-F10
6649	4822 130 30621	1N4148
6660	4822 130 30621	1N4148
6661	4822 130 42488	BYD33D
6662	4822 130 80905	LLZ-F5V1
6663	4822 130 34281	BZX79-F15
6664[3,4]	4822 130 30862	BZX79-F9V1
6664[1,2]	4822 130 61219	BZX79-F10
6665	4822 130 80883	LLZ-C4V7
6666[1,2]	4822 130 80887	LLZ-C36
6666[3,4]	4822 130 81141	LLZ-C43
6669	4822 130 80446	LL4148
6670	4822 130 20272	E0102AA
6675	4822 130 80914	BYD74B
6705	4822 130 80905	LLZ-F5V1
6707	4822 209 72895	TLUV5320
6708	4822 130 81145	LLZ-F2V4
6709	4822 130 82037	HZT33

7003	4822 130 42133	BC817
7240[1b]	4822 209 73253	TDA2613/N1
7240	4822 209 73853	TDA1521/N4
7243	5322 130 42012	BC858
7244	4822 130 42513	BC858C
7245	5322 130 42136	BC848C
7246	5322 130 42136	BC848C
7247	5322 130 42136	BC848C
7248	4822 130 61207	BC848
7249	4822 130 61207	BC848
7301	4822 130 61207	BC848
7302	5322 130 42012	BC858
7303	4822 130 61207	BC848
7305	4822 209 30389	TDA4510/V8
7306	4822 209 30837	TDA4650/V4/S1
7307	4822 209 31216	TDA4661
7308	4822 209 71512	TDA4565/V6
7309	4822 209 63733	TDA4680/V5
7310	4822 130 61207	BC848
7311	5322 209 10576	4053B
7312	5322 209 10576	4053B
7341	4822 130 61207	BC848
7370	4822 130 61207	BC848
7371	4822 130 61207	BC848
7372	4822 130 61207	BC848
7373	4822 130 61207	BC848
7374	4822 130 61207	BC848
7455	5322 130 42012	BC858
7470	4822 209 63423	TDA2579B/N2
7471	4822 130 61207	BC848
7472	5322 130 42136	BC848C
7500	4822 130 41344	BC337-40
7502	4822 130 60775	2SD1266P
7503	4822 130 61236	BD234
7504	4822 130 61207	BC848
7505	5322 130 42012	BC858
7540	4822 130 41344	BC337-40
7545[3,4]	4822 130 61265	BU508AF
7546[3]	4822 130 42679	BUT11AF/1
7546[4]	4822 130 62735	BUT12AF
7591	5322 130 42012	BC858
7600	4822 209 63735	TDA8385/N2
7614A	4822 209 30992	CNR50
7625	4822 130 62735	BUT12AF
7661	5322 130 44921	BD943
7663	4822 130 42513	BC858C
7671	4822 130 61207	BC848
7672	4822 130 61207	BC848
7703	4822 130 61207	BC848
7704	4822 130 61207	BC848
7705	4822 130 61207	BC848
7706	4822 130 61207	BC848
7707	4822 130 61207	BC848
7708	4822 209 31209	UP GR2STL1-5.2
7708	4822 209 31211	UP GR2STL2-5.2
7708	4822 209 31212	UP GR2STL3-1.0
7708	4822 209 31213	UP GR2M1/2-5.1
7710	4822 209 62098	ST24C02AB1
7850	4822 130 61207	BC848
7885	4822 130 61207	BC848
7886	4822 130 61207	BC848

1)	25"/28" Black Matrix
1b)	Black Matrix mono
2)	25"/28" Black Line
3)	21" Mini Neck
4)	21" Narrow Neck
7)	system BG
8)	system I

L1 = English, German, French, Italian, Dutch, Portugues
L2 = English, Finnish, Danish, Swedish, Norvegian, Spanish
L3 = English, German, French, Hungarian, Czech, Russian
M1/2 = L1 + L2

Spare parts list / Stückliste / Liste

Mains module

	4822 212 23664	mains module

Mechanical parts

0010⚠	4822 265 30389	2p male
0032⚠	4822 265 30389	2p male
0033⚠	4822 265 30877	3p male

2601⚠	4822 121 40487	100nF 10% 400V
2602	4822 126 11141	2,2nF 10% 1KV
2604	4822 126 11141	2,2nF 10% 1kV

3601⚠	4822 116 40211	PTC/NTC
3607	4822 050 23901	390Ω 1% 0,6W

5600⚠	4822 157 63073	filter

6602	4822 130 31933	1N5061
6603	4822 130 31933	1N5061
6604	4822 130 31933	1N5061
6605	4822 130 31933	1N5061

CRT module

[1]	4822 212 30057	CRT Black Matrix
[2]	4822 212 30058	CRT Black Line
[3]	4822 212 30059	CRT Mini Neck
[4]	4822 212 30061	CRT Narrow Neck

Mechanical parts

0017	4822 290 40283	5p male
0018	4822 267 40878	3p male
0019	4822 265 30378	4p male
0020	4822 290 40295	7p male
0021[3]	4822 255 70251	CRT socket
0021	4822 255 70261	CRT socket
	4822 320 20188	focus cable
	4822 267 31168	3p female
	4822 267 50824	4p female
	4822 265 40252	7p female
	4822 290 40287	5p female
	4822 492 70871	spring

2301[4]	4822 122 31769	18pF 5% 50V
2301	4822 122 32482	22pF 5% 63V
2301[2]	4822 126 10324	33pF 63V
2331[1]	4822 122 31769	18pF 5% 50V
2331[2]	4822 122 31825	27pF 10% 50V
2331[3]	4822 122 32482	22pF 5% 63V
2331[4]	4822 122 32504	15pF 5% 50V
2344[3]	4822 124 21208	4,7µF 20% 50V
2344	4822 124 40246	4,7µF 20% 63V
2361[3]	4822 122 31769	18pF 5% 50V
2361[2]	4822 122 31825	27pF 10% 50V
2361[4]	4822 122 32139	12pF 5% 63V
2361[1]	4822 122 32504	15pF 5% 50V
2391	4822 121 43878	27pF 2% 500V
2411	4822 124 80057	330µF 20% 16V
2421	4822 122 32482	22pF 5% 63V
2431	4822 121 41689	100nF 10% 250V
2432[3]	4822 124 80056	47µF 20% 16V
2432	5322 124 41381	22µF 20% 50V
2433	5322 121 50885	33nF 5% 1KV
2434	5322 122 32334	220pF 10% 100V
2520	5322 124 41299	68µF 20% 25V
2521	4822 122 32891	68nF 10% 63V
2522	5322 121 42661	330nF 5% 63V
2523	4822 122 33105	56nF 10% 63V
2526[2]	4822 122 32856	8,2nF 10% 63V
2526[1]	5322 122 31648	12nF 10% 50V
2531[4]	4822 121 42408	220nF 5% 63V
2531	4822 121 43396	120nF 5% 63V
2532	4822 124 80066	1µF 20% 63V
2532[4]	4822 124 80067	4,7µF 20% 63V
2533	4822 124 40242	1µF 20% 63V

3301	4822 051 10131	130Ω 2% 0,25W
3302	4822 051 10362	3k6 2% 0,25W
3302[2]	4822 051 20222	2k2 5% 0,1W
3303	4822 051 10272	2k7 2% 0,25W
3304	4822 116 52239	120k 5% 0,5W
3304	4822 116 52239	120k 5% 0,5W
3309	4822 051 10118	1Ω1 5% 0,25W
3309[2]	4822 051 10479	47Ω 2% 0,25W
3310	4822 116 52219	330Ω 5% 0,5W
3311[2]	4822 053 12123	12k 5% 3W
3311	4822 053 12153	15k 5% 3W
3312	4822 052 10271	270Ω 5% 0,33W
3313	4822 052 10271	270Ω 5% 0,33W
3314	4822 050 21502	1k5 1% 0,6W
3315	4822 051 10124	120k 2% 0,25W
3316	4822 051 10124	120k 2% 0,25W
3331	4822 051 10131	130Ω 2% 0,25W
3332	4822 051 10362	3k6 2% 0,25W
3332[2]	4822 051 20222	2k2 5% 0,1W
3333[3]	4822 051 10272	2k7 2% 0,25W
3333	4822 116 52263	2k 7 5% 0,5W
3334	4822 116 52239	120k 5% 0,5W
3338	4822 051 10118	1Ω1 5% 0,25W
3338[3]	4822 051 10479	47Ω 2% 0,25W
3340	4822 116 52219	330Ω 5% 0,5W
3341	4822 053 12153	15k 5% 3W
3342	4822 052 10271	270Ω 5% 0,33W
3343	4822 052 10271	270Ω 5% 0,33W
3344	4822 050 21502	1k5 1% 0,6W
3345	4822 051 10681	680Ω 2% 0,25W
3361	4822 116 52208	130Ω 5% 0,5W
3362	4822 051 10362	3k6 2% 0,25W
3362[2]	4822 051 20222	2k2 5% 0,1W
3363	4822 051 10272	2k7 2% 0,25W
3364	4822 051 10223	22k 2% 0,25W
3368	4822 051 10118	1Ω1 5% 0,25W
3368[2]	4822 051 10479	47Ω 2% 0,25W
3370	4822 116 52219	330Ω 5% 0,5W
3371[2]	4822 053 12103	10k 5% 3W
3371	4822 053 12153	15k 5% 3W
3372	4822 052 10271	270Ω 5% 0,33W
3373	4822 052 10271	270Ω 5% 0,33W
3374	4822 050 21502	1k5 1% 0,6W
3382[2]	4822 051 10392	3k9 2% 0,25W
3382	4822 051 10432	4k3 2% 0,25W
3383	4822 116 52284	47k 5% 0,5W
3384	4822 116 52277	39k 5% 0,5W
3385	4822 051 10104	100k 2% 0,25W
3391	4822 116 52234	100k 5% 0,5W
3392	4822 051 10103	10k 2% 0,25W
3395	4822 051 10122	1k2 2% 0,25W
3396	4822 051 10124	120k 2% 0,25W
3397	4822 051 10124	120k 2% 0,25W
3411	4822 116 52249	1k 8 5% 0,5W
3413	4822 116 52218	300Ω 5% 0,5W
3414	4822 051 10519	51Ω 2% 0,25W
3415	4822 116 52218	300Ω 5% 0,5W
3421[3]	4822 051 10104	100k 2% 0,25W
3421	4822 051 10184	180k 2% 0,25W
3422	4822 051 10682	6k8 2% 0,25W
3423	4822 051 10105	1M 5% 0,25W
3431	4822 052 10181	180Ω 5% 0,33W
3431[4]	4822 052 10271	270Ω 5% 0,33W
3432	4822 052 10399	39Ω 5% 0,33W
3433	4822 052 10108	1Ω 5% 0,33W
3434	4822 050 21502	1k5 1% 0,6W
3435	4822 050 21502	1k5 1% 0,6W
3436	4822 050 21805	1M 8 1% 0,6W
3442	4822 116 52239	120k 5% 0,5W
3443	4822 051 10272	2k7 2% 0,25W
3446	4822 051 10683	68k 2% 0,25W
3447	4822 051 10152	1k5 2% 0,25W
3448	4822 051 10152	1k5 2% 0,25W
3449	4822 051 10333	33k 2% 0,25W
3449[2]	4822 051 10393	39k 2% 0,25W
3512[2]	4822 051 10109	10Ω 2% 0,25W
3512[1]	4822 051 10181	180Ω 2% 0,25W
3518[2]	4822 051 10101	100Ω 2% 0,25W
3518[1]	4822 051 10152	1k5 2% 0,25W
3520[1]	4822 116 52207	1k 2 5% 0,5W
3520[2]	4822 116 52211	150Ω 5% 0,5W
3521	4822 101 20902	4k 7 10% 0,05W
3522	4822 051 10152	1k5 2% 0,25W
3524	4822 051 10683	68k 2% 0,25W

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CRT module

3525[4]	4822 100 20169	10k 10% 0,05W
3525	4822 100 20644	22k 10% 0.05W
3526	4822 051 10125	1M 2 5% 0,25W
3526[4]	4822 051 10563	56k 2% 0,25W
3527[1]	4822 051 10104	100k 2% 0,25W
3527[3]	4822 051 10563	56k 2% 0,25W
3527[2]	4822 051 10823	82k 2% 0,25W
3528[3,4]	4822 051 10681	680Ω 2% 0,25W
3528	4822 051 20222	2k2 5% 0,1W
3529	4822 051 10008	jumper
3529[3,4]	4822 051 10102	1k 2% 0,25W
3530[4]	4822 051 10008	jumper
3530	4822 051 10102	1k 2% 0,25W
3531[4]	4822 051 10008	jumper
3531	4822 051 10104	100k 2% 0,25W
3532	4822 051 10103	10k 2% 0,25W
3533	4822 116 52303	8k 2 5% 0,5W
3534	4822 052 10828	8Ω2 5% 0,33W
3571	4822 051 10273	27k 2% 0,25W
3572	4822 051 10153	15k 2% 0,25W
3575	4822 051 10182	1k8 2% 0,25W
3576[4]	4822 051 10101	100Ω 2% 0,25W
3576[1]	4822 051 10151	150Ω 2% 0,25W
3576[2]	4822 051 51201	120Ω 1% 0,25W
3578	4822 116 52245	150k 5% 0,5W
3580	4822 051 10103	10k 2% 0,25W

Jumper

4001	4822 051 10008	jumper
4002	4822 051 10008	jumper

5401[2,3]	4822 156 20915	33µH
5401[4]	4822 157 63788	18µH 10%
5401[1]	4822 158 10563	82µH 7.5%
5530	4822 152 20559	

6301	4822 130 80877	BAV103
6331	4822 130 80877	BAV103
6345	4822 130 81015	LLZ-C10
6361	4822 130 80877	BAV103
6382	4822 130 80877	BAV103
6411	4822 130 32831	BZX79-F3V0
6421	4822 130 80446	LL4148
6519	4822 130 80446	LL4148

7302[1,2]	4822 130 41773	BF869
7302[3,4]	4822 130 41782	BF422
7303	4822 130 61207	BC848
7304	4822 130 41782	BF422
7305	4822 130 41646	BF423
7331[1,2]	4822 130 41773	BF869
7331[3,4]	4822 130 41782	BF422
7333	4822 130 61207	BC848
7334	4822 130 41782	BF422
7335	4822 130 41646	BF423
7345	5322 130 42012	BC858
7361[1,2]	4822 130 41773	BF869
7361[3,4]	4822 130 41782	BF422
7363	4822 130 61207	BC848
7364	4822 130 41782	BF422
7365	4822 130 41646	BF423
7383	4822 130 41782	BF422
7391	4822 130 41646	BF423
7402▲	5322 130 41982	BC848B
7411	4822 130 40938	BC548
7421	4822 130 42513	BC858C
7530▲[3]	4822 130 61207	BC848
7530	5322 130 41982	BC848B
7533	4822 130 60111	2SA1359
7534	4822 130 44283	BC636
7536▲	5322 130 41982	BC848B
7537	5322 130 41982	BC848B
7538▲	5322 130 41982	BC848B

1) 25"/28" Black Matrix
2) 25"/28" Black Line
3) 21" Mini Neck
4) 21" Narrow Neck

Euro module

15	4822 212 30074	Euro module ECO
16	4822 212 30075	Euro module PIP

Mechanical parts

0023	4822 265 40442	10p male
0026	4822 265 40442	10p male
0030	4822 265 41086	9p male
0032	4822 267 40666	3p male
0048	4822 267 60247	euro connector
0100	4822 256 91879	holder
0050	4822 267 51084	9p female
0051	4822 290 40285	3p female

2800	4822 121 51252	470nF 5% 63V
2801	4822 121 51252	470nF 5% 63V
2802	4822 121 51252	470nF 5% 63V
2803	4822 121 51252	470nF 5% 63V
2804	4822 122 33496	100nF 10% 63V
2805	4822 122 33496	100nF 10% 63V
2806	4822 122 33496	100nF 10% 63V
2807	4822 124 41506	47µF 20% 16V
2810	4822 122 32142	270pF 5% 63V
2811	4822 122 32142	270pF 5% 63V
2812	4822 122 33496	100nF 10% 63V
2813	4822 122 32542	47nF 10% 63V
2814	4822 122 31759	18nF
2815	4822 122 33496	100nF 10% 63V
2816	4822 122 33496	100nF 10% 63V
2817	4822 122 33496	100nF 10% 63V
2818	4822 122 33496	100nF 10% 63V
2819	4822 124 41525	100µF 20% 25V
2820	4822 121 42408	220nF 5% 63V
2821	4822 124 40433	47µF 20% 25V
2822	4822 124 40435	10µF 20% 50V
2823	4822 122 33496	100nF 10% 63V
2831	4822 124 40272	33µF 20% 16V
2833	4822 122 33496	100nF 10% 63V
2834	4822 122 33496	100nF 10% 63V

3800	4822 116 52189	30Ω 5% 0,5W
3801	4822 116 80747	75Ω 5% 0,125W
3802	4822 116 52211	150Ω 5% 0,5W
3803	4822 116 52211	150Ω 5% 0,5W
3804	4822 050 11002	1k 1% 0,4W
3805	4822 050 11002	1k 1% 0,4W
3806	4822 051 10334	330k 2% 0,25W
3807	4822 051 10334	330k 2% 0,25W
3808	4822 051 10334	330k 2% 0,25W
3809	4822 051 10334	330k 2% 0,25W
3810	4822 051 10682	6k8 2% 0,25W
3811	4822 051 20222	2k2 5% 0,1W
3812	4822 051 10331	330Ω 2% 0,25W
3813	4822 116 52201	75Ω 5% 0,5W
3814	4822 051 10152	1k5 2% 0,25W
3815	4822 051 10472	4k7 2% 0,25W
3816	4822 116 52296	6k 8 5% 0,5W
3817	4822 116 52224	470Ω 5% 0,5W
3818	4822 116 52224	470Ω 5% 0,5W
3819	4822 051 10008	jumper
3820	4822 051 10681	680Ω 2% 0,25W
3821	4822 051 10008	jumper
3822	4822 051 10681	680Ω 2% 0,25W
3823	4822 051 10331	330Ω 2% 0,25W
3824	4822 051 10331	330Ω 2% 0,25W
3825	4822 051 10223	22k 2% 0,25W
3829	4822 051 10102	1k 2% 0,25W
3830	4822 051 10683	68k 2% 0,25W
3831	4822 051 10123	12k 2% 0,25W

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Euro module

3832	4822 051 10102	1k 2% 0,25W
3833	4822 051 10279	27Ω 2% 0,25W
3835[16]	4822 051 10221	220Ω 2% 0,25W
3836[15]	4822 051 10102	1k 2% 0,25W
3836	4822 051 10271	270Ω 2% 0,25W
3837	4822 052 10278	2Ω7 5% 0,33W
3838	4822 116 80747	75Ω 5% 0,125W

Jumper

4842	4822 051 10008	jumper
4844	4822 051 10008	jumper
4845	4822 051 10008	jumper
4847	4822 051 10008	jumper
4848	4822 051 10008	jumper
4849	4822 051 10008	jumper

5800	4822 157 51462	10µH

6800	4822 130 80954	LLZ-C5V6
6801	4822 130 80446	LL4148
6803	4822 130 30621	1N4148

7800	5322 130 44921	BD943
7801	5322 209 10576	4053B
7802	5322 209 10576	4053B
7820	4822 130 61207	BC848
7821	5322 130 42136	BC848C
7823	4822 130 61207	BC848
7824	5322 130 42136	BC848C

15) Non PIP
16) PIP

Mono IF/sound module

5	4822 212 30064	IF MONO BGDK
6	4822 212 30065	IF MONO BGLI
7	4822 212 30066	IF MONO BG
8	4822 212 30067	IF MONO I

Various

1010[8]	4822 242 70936	OFW31952
1010[7]	4822 242 72374	OFWG1961
1010[6]	4822 242 81156	OFWG1965
1010[5]	4822 242 81186	OFWK2954
1042[8]	4822 153 30025	6MHz
1042	4822 242 72211	5,5MHz
1043[6]	4822 153 30025	6MHz
1043[5]	4822 242 71375	6,5MHz
1043[8]	4822 242 71841	6.0MHz
1102	4822 242 70714	5,5MHz
1103[6]	4822 242 71841	6.0MHz
1103[5]	4822 242 72059	6,5MHz
1150	4822 242 81157	OFWL9453

2011	4822 124 40435	10µF 20% 50V
2012	4822 124 41577	4,7µF 20% 50V
2013	4822 122 31784	4,7nF 10% 50V
2014[6]	4822 122 31784	4,7nF 10% 50V
2014	4822 122 31797	22nF 10% 63V
2015	5322 121 42498	680nF 5% 63V
2016	4822 122 31784	4,7nF 10% 50V
2017	4822 122 33496	100nF 10% 63V
2018	4822 121 51252	470nF 5% 63V
2019	4822 122 31784	4,7nF 10% 50V
2035	4822 122 32507	6,8pF 5% 50V
2036	4822 122 31766	120pF 5% 50V
2037	4822 122 31766	120pF 5% 50V
2038	4822 122 31784	4,7nF 10% 50V
2039	4822 122 32504	15pF 5% 50V
2040	4822 122 31784	4,7nF 10% 50V
2041	4822 122 31784	4,7nF 10% 50V
2042	4822 122 32139	12pF 5% 63V
2044	4822 122 31797	22nF 10% 63V
2047	4822 122 33496	100nF 10% 63V
2048	4822 124 41506	47µF 20% 16V
2049	4822 122 33496	100nF 10% 63V
2050	4822 124 40849	330µF 20% 16V
2055	4822 122 31972	39pF 5% 50V
2056	4822 124 40435	10µF 20% 50V
2057	4822 122 31981	33nF 50V
2058	4822 122 31797	22nF 10% 63V
2059	4822 124 41566	3,3µF 20% 50V
2060	4822 122 31797	22nF 10% 63V
2080	4822 122 33464	56pF 2%
2081	4822 122 31794	180pF 2% 50V
2082	4822 122 32087	1,8pF 5% 50V
2113	4822 124 41596	22µF 20% 50V
2114	4822 122 31784	4,7nF 10% 50V
2115	4822 124 41577	4,7µF 20% 50V
2116	4822 124 40435	10µF 20% 50V
2117	4822 124 41576	2,2µF 20% 50V
2118	4822 124 40432	1500µF 20% 25V
2124	4822 122 32442	10nF 50V
2125	4822 124 40195	150µF 20% 16V
2126	4822 121 43898	8,2nF 10% 50V
2127	5322 121 42661	330nF 5% 63V
2129	5322 121 42661	330nF 5% 63V
2130	5322 121 42661	330nF 5% 63V
2131	4822 122 31797	22nF 10% 63V
2132	4822 122 31797	22nF 10% 63V
2133	4822 122 31797	22nF 10% 63V
2134	4822 124 41596	22µF 20% 50V
2135	4822 121 42408	220nF 5% 63V
2136	5322 121 42661	330nF 5% 63V
2137[7]	4822 122 31746	1000pF 5% 50V
2137	4822 126 11381	820pF 2%
2137[5]	4822 126 12075	680pF 2% 63V
2138[6]	4822 122 31771	390pF 5% 50V
2138[5]	4822 126 12154	560pF 2% 50V
2139[5]	4822 122 31771	390pF 5% 50V
2139[6]	4822 126 12155	1nF 2% 50V
2141	4822 124 41577	4,7µF 20% 50V
2143	4822 122 31797	22nF 10% 63V
2150	4822 121 42408	220nF 5% 63V
2151	4822 124 40195	150µF 20% 16V
2160	4822 122 31784	4,7nF 10% 50V

3012	4822 051 10562	5k6 2% 0,25W
3013	4822 051 10273	27k 2% 0,25W
3014	4822 051 10823	82k 2% 0,25W
3015[6]	4822 051 10104	100k 2% 0,25W
3015	4822 051 10473	47k 2% 0,25W
3016	4822 100 11819	100k 30% 0,1W
3017	4822 051 10823	82k 2% 0,25W
3019	4822 051 10473	47k 2% 0,25W
3020	4822 051 10273	27k 2% 0,25W
3021	4822 051 10223	22k 2% 0,25W
3030	4822 051 10223	22k 2% 0,25W
3031	4822 051 10474	470k 2% 0,25W
3036	4822 051 10472	4k7 2% 0,25W
3037	4822 051 10392	3k9 2% 0,25W
3038	4822 051 10472	4k7 2% 0,25W
3039	4822 051 10392	3k9 2% 0,25W
3040	4822 051 10472	4k7 2% 0,25W
3041	4822 051 10221	220Ω 2% 0,25W
3042[6]	4822 051 10101	100Ω 2% 0,25W
3042[5]	4822 051 10221	220Ω 2% 0,25W
3042	4822 051 51201	120Ω 1% 0,25W
3043	4822 116 52175	100Ω 5% 0,5W
3044	4822 051 10271	270Ω 2% 0,25W
3046	4822 051 10681	680Ω 2% 0,25W
3047	4822 051 10822	8k2 2% 0,25W
3048	4822 101 11188	2k 30%LIN 0,1W
3049	4822 051 20183	18k 5% 0,1W
3050	4822 051 10272	2k7 2% 0,25W
3051	4822 051 10563	56k 2% 0,25W
3052[5,6]	4822 051 10471	470Ω 2% 0,25W
3052[7,8]	4822 051 10561	560Ω 2% 0,25W
3055	4822 051 10103	10k 2% 0,25W
3056	4822 051 10471	470Ω 2% 0,25W
3058	4822 051 10682	6k8 2% 0,25W
3060	4822 051 10471	470Ω 2% 0,25W
3061	4822 051 10333	33k 2% 0,25W
3062	4822 051 10563	56k 2% 0,25W
3063	4822 051 10272	2k7 2% 0,25W
3064	4822 051 10563	56k 2% 0,25W
3065	4822 051 10563	56k 2% 0,25W
3066	4822 051 10824	820k 2% 0,25W
3067	4822 051 10681	680Ω 2% 0,25W
3067[6]	4822 051 20222	2k2 5% 0,1W
3068	4822 051 10392	3k9 2% 0,25W
3080[8]	4822 051 10332	3k3 2% 0,25W
3080[5]	4822 051 10472	4k7 2% 0,25W
3080[6]	4822 051 10682	6k8 2% 0,25W
3080[7]	4822 051 20222	2k2 5% 0,1W
3081	4822 051 10829	82Ω 2% 0,25W
3104	4822 052 10479	47Ω 5% 0,33W
3105	4822 053 11271	270Ω 5% 2W
3107	4822 051 10151	150Ω 2% 0,25W
3108	4822 051 10333	33k 2% 0,25W
3109	4822 051 10223	22k 2% 0,25W

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Mono IF/sound module

3110	4822 051 10562	5k6 2% 0,25W
3111	4822 051 10562	5k6 2% 0,25W
3112	4822 051 10472	4k7 2% 0,25W
3113	4822 051 10562	5k6 2% 0,25W
3115	4822 051 10562	5k6 2% 0,25W
3116	4822 050 11002	1k 1% 0,4W
3117	4822 051 10104	100k 2% 0,25W
3118[5]	4822 051 10332	3k3 2% 0,25W
3118[6]	4822 051 10472	4k7 2% 0,25W
3118	4822 051 20222	2k2 5% 0,1W
3119	4822 051 10472	4k7 2% 0,25W
3120	4822 051 10472	4k7 2% 0,25W
3121	4822 051 10104	100k 2% 0,25W
3122	4822 051 10331	330Ω 2% 0,25W
3123[5,7]	4822 051 10473	47k 2% 0,25W
3123[6]	4822 051 10563	56k 2% 0,25W
3124	4822 051 10103	10k 2% 0,25W
3125	4822 051 10103	10k 2% 0,25W
3126	4822 051 10153	15k 2% 0,25W
3127	4822 051 10153	15k 2% 0,25W
3129	4822 051 10224	220k 2% 0,25W
3130	4822 051 10682	6k8 2% 0,25W
3131	4822 051 10102	1k 2% 0,25W
3132	4822 051 10392	3k9 2% 0,25W
3140	4822 051 10153	15k 2% 0,25W
3141	4822 051 10392	3k9 2% 0,25W
3142	4822 051 10273	27k 2% 0,25W
3143	4822 051 10182	1k8 2% 0,25W
3144	4822 051 10182	1k8 2% 0,25W
3150	4822 051 10103	10k 2% 0,25W
3151	4822 051 20222	2k2 5% 0,1W
3152	4822 051 10103	10k 2% 0,25W
3153	4822 051 10103	10k 2% 0,25W
3154	4822 051 10103	10k 2% 0,25W

Jumper

4010.. 4102	4822 051 10008	jumper

5010	4822 157 63081	0.56µH 20%
5010[6]	4822 157 63858	0,39µH
5035	4822 157 53534	0,34µH 5%
5036[6]	4822 157 53609	0,36µH 5%
5036	4822 157 63824	0,36µH 5% 38,9mH z
5037	4822 157 53537	1,35µH 5%
5038	4822 157 63076	1.2µH 5%
5039	4822 157 52983	2N2
5041[5]	4822 153 20251	18µH 10%
5041[6]	4822 157 52983	2N2
5041	4822 157 53001	27µH 10%
5042[7,8]	4822 152 20677	
5042[5,6]	4822 157 53634	5,6µH 10%
5080	4822 157 53539	0,27µH 5%
5105	4822 157 52511	0,83µH
5150	4822 157 62552	

6036	4822 130 80446	LL4148
6037	4822 130 80888	BA682
6038	4822 130 80888	BA682
6039	4822 130 30621	1N4148
6040	4822 130 80446	LL4148
6041	4822 130 80446	LL4148
6042	4822 130 80446	LL4148
6043	4822 130 80446	LL4148
6105	4822 130 80888	BA682
6106	4822 130 80888	BA682
6108	4822 130 80888	BA682
6112	4822 130 80884	LLZ-C5V1
6150	4822 130 80888	BA682
6151	4822 130 80888	BA682

7000	4822 209 72812	TDA2549/C4
7030	5322 130 42012	BC858
7031	4822 130 61207	BC848
7035	4822 130 44121	BC338
7040	5322 130 42012	BC858
7041	4822 130 61207	BC848
7100	4822 209 63105	TDA3843/V3
7101	4822 209 30278	TDA3827/V3
7102	4822 130 61207	BC848
7103	5322 130 42136	BC848C
7104	5322 130 41982	BC848B
7150	4822 130 61207	BC848
7151	4822 130 61207	BC848

5) system BGBK
6) system BGLI
7) system BG
8) system I

Stereo IF/sound module

[7]	4822 212 30069	IF STEREO BG
[6]	4822 212 30072	IF STEREO BGLI
[5]	4822 212 30073	IF STEREO BGDK

Various

1010[7]	4822 242 72554	OFWG3254
1010[5]	4822 242 73936	OFWK3255
1010[6]	4822 242 80205	OFWK3261
1042	4822 242 72211	5,5MHz
1101	4822 242 70485	5,74MHz
1102[6]	4822 242 71713	6,0MHz
1102[5]	4822 242 72057	6,5MHz
1103	4822 242 70714	5,5MHz
1150	4822 242 81157	OFWL9453
1200	4822 242 80208	10MHz

2011	4822 124 41506	47µF 20% 16V
2012	4822 124 41577	4,7µF 20% 50V
2013	4822 122 31784	4,7nF 10% 50V
2014	4822 122 31797	22nF 10% 63V
2015	5322 121 42498	680nF 5% 63V
2016	4822 122 31784	4,7nF 10% 50V
2017	4822 122 33496	100nF 10% 63V
2018	4822 121 51252	470nF 5% 63V
2035	4822 122 32506	5,6pF 5% 50V
2036	4822 122 31784	4,7nF 10% 50V
2037	4822 122 31784	4,7nF 10% 50V
2038	4822 122 33496	100nF 10% 63V
2039	4822 122 32083	8,2pF 5% 50V
2040	4822 122 31784	4,7nF 10% 50V
2041	4822 122 31784	4,7nF 10% 50V
2042	4822 122 32139	12pF 5% 63V
2044	4822 122 31797	22nF 10% 63V
2047	4822 122 33496	100nF 10% 63V
2048	4822 124 41506	47µF 20% 16V
2049	4822 122 33496	100nF 10% 63V
2050	4822 124 40849	330µF 20% 16V
2051	4822 122 33496	100nF 10% 63V
2055	4822 122 31972	39pF 5% 50V
2056	4822 124 41576	2,2µF 20% 50V
2057	4822 122 31981	33nF 50V
2058	4822 122 31797	22nF 10% 63V
2059	4822 124 41407	0,47µF 20% 63V
2080	4822 122 33464	56pF 2%
2081	4822 122 31794	180pF 2% 50V
2113	4822 124 40435	10µF 20% 50V
2114	4822 122 32442	10nF 50V
2115	4822 124 41509	33µF 20% 35V
2117	4822 124 41576	2,2µF 20% 50V
2118	4822 124 41576	2,2µF 20% 50V
2119	4822 122 31797	22nF 10% 63V
2120	4822 124 41576	2,2µF 20% 50V
2123	4822 124 40242	1µF 20% 63V
2123[6]	4822 124 41577	4,7µF 20% 50V
2124	4822 124 41576	2,2µF 20% 50V
2125	4822 122 10527	910pF 2% 50V
2126	4822 122 31784	4,7nF 10% 50V
2127	4822 122 31746	1000pF 5% 50V
2127[7]	4822 126 11381	820pF 2%
2127[6]	4822 126 12075	680pF 2% 63V
2128[5]	4822 122 10527	910pF 2% 50V
2128	4822 126 11381	820pF 2%
2129[6]	4822 122 31727	470pF 5% 63V
2129[5]	4822 122 33476	220pF 2% 50V
2130[6]	4822 124 40195	150µF 20% 16V
2133	4822 122 31797	22nF 10% 63V
2160	4822 122 31784	4,7nF 10% 50V
2200	4822 121 51252	470nF 5% 63V

Stereo IF/sound module

2201	4822 121 51252	470nF 5% 63V
2202	4822 121 51252	470nF 5% 63V
2203	4822 122 31916	5,6nF 10% 63V
2204	4822 121 42408	220nF 5% 63V
2205	4822 122 31947	100nF 20% 63V
2206	4822 121 51252	470nF 5% 63V
2207	4822 121 51252	470nF 5% 63V
2208	4822 124 41509	33µF 20% 35V
2209	4822 124 41509	33µF 20% 35V
2210	4822 122 31947	100nF 20% 63V
2211	4822 124 40198	470µF 20% 16V
2212	4822 124 40435	10µF 20% 50V
2213	4822 122 31782	15nF 10% 50V
2214	4822 122 31782	15nF 10% 50V
2215	4822 122 31981	33nF 50V
2216	4822 122 31916	5,6nF 10% 63V
2217	4822 122 31981	33nF 50V
2218	4822 122 31916	5,6nF 10% 63V
2219	4822 124 41577	4,7µF 20% 50V
2220	5322 121 42498	680nF 5% 63V
2221	5322 121 42498	680nF 5% 63V
2222	4822 124 41643	100µF 20% 16V
2223	5322 122 31647	1nF 10% 63V

3012	4822 051 10562	5k6 2% 0,25W
3013	4822 051 10273	27k 2% 0,25W
3014	4822 051 10823	82k 2% 0,25W
3015	4822 116 52234	100k 5% 0,5W
3016	4822 100 11819	100k 30% 0,1W
3017	4822 051 10823	82k 2% 0,25W
3019	4822 051 10473	47k 2% 0,25W
3020	4822 051 10273	27k 2% 0,25W
3021	4822 051 20183	18k 5% 0,1W
3030	4822 051 10223	22k 2% 0,25W
3031	4822 051 10474	470k 2% 0,25W
3035	4822 051 10682	6k8 2% 0,25W
3036	4822 051 10472	4k7 2% 0,25W
3037	4822 051 10392	3k9 2% 0,25W
3038	4822 051 10472	4k7 2% 0,25W
3039	4822 051 10472	4k7 2% 0,25W
3040	4822 051 10472	4k7 2% 0,25W
3041	4822 051 10221	220Ω 2% 0,25W
3042	4822 051 10151	150Ω 2% 0,25W
3042	4822 051 51201	120Ω 1% 0,25W
3043	4822 116 52175	100Ω 5% 0,5W
3044	4822 051 10271	270Ω 2% 0,25W
3046	4822 116 52228	680Ω 5% 0,5W
3047	4822 051 10822	8k2 2% 0,25W
3048	4822 101 11188	2k 30%LIN 0,1W
3049	4822 051 20183	18k 5% 0,1W
3050	4822 051 10272	2k7 2% 0,25W
3051	4822 051 10563	56k 2% 0,25W
3052	4822 051 10102	1k 2% 0,25W
3053	4822 116 52233	10k 5% 0,5W
3055	4822 051 10103	10k 2% 0,25W
3056	4822 051 10471	470Ω 2% 0,25W
3058	4822 051 10472	4k7 2% 0,25W
3060	4822 051 10471	470Ω 2% 0,25W
3061	4822 051 10124	120k 2% 0,25W
3062	4822 051 10563	56k 2% 0,25W
3063	4822 051 10272	2k7 2% 0,25W
3064	4822 051 10224	220k 2% 0,25W
3065	4822 051 10124	120k 2% 0,25W
3066	4822 051 10824	820k 2% 0,25W
3081	4822 051 10569	56Ω 2% 0,25W
3105	4822 053 11121	120Ω 5% 2W
3106	4822 051 10561	560Ω 2% 0,25W
3107	4822 051 10102	1k 2% 0,25W
3108	4822 051 10561	560Ω 2% 0,25W
3109	4822 051 10562	5k6 2% 0,25W
3110	4822 051 10562	5k6 2% 0,25W
3112	4822 051 10562	5k6 2% 0,25W
3113	4822 051 10562	5k6 2% 0,25W
3115[5]	4822 051 10301	300Ω 2% 0,25W
3115	4822 051 10331	330Ω 2% 0,25W
3117[6]	4822 051 10561	560Ω 2% 0,25W
3117	4822 051 10681	680Ω 2% 0,25W
3119	4822 051 10562	5k6 2% 0,25W
3120	4822 051 10562	5k6 2% 0,25W
3121[5]	4822 051 10272	2k7 2% 0,25W
3121[6]	4822 051 10562	5k6 2% 0,25W
3122	4822 051 10122	1k2 2% 0,25W
3123	4822 051 10561	560Ω 2% 0,25W
3124	4822 051 10008	jumper
3125	4822 051 10102	1k 2% 0,25W
3126	4822 051 10102	1k 2% 0,25W
3127	4822 051 10152	1k5 2% 0,25W
3128	4822 051 10182	1k8 2% 0,25W
3150	4822 051 10103	10k 2% 0,25W
3151	4822 051 20222	2k2 5% 0,1W
3152	4822 051 10103	10k 2% 0,25W
3153	4822 051 10103	10k 2% 0,25W
3154	4822 051 10103	10k 2% 0,25W
3200	4822 051 10331	330Ω 2% 0,25W
3201	4822 051 10331	330Ω 2% 0,25W
3202	4822 051 10563	56k 2% 0,25W
3203	4822 051 10563	56k 2% 0,25W
3204	4822 101 11191	10k 30% 0,1W
3205	4822 052 10229	22Ω 5% 0,33W
3206	4822 051 10478	4Ω7 5% 0,25W
3207	4822 051 10223	22k 2% 0,25W
3208	4822 051 10272	2k7 2% 0,25W
3209	4822 051 10333	33k 2% 0,25W
3210	4822 050 11002	1k 1% 0,4W
3211	4822 051 10101	100Ω 2% 0,25W
3213	4822 116 52233	10k 5% 0,5W
3214	4822 051 10102	1k 2% 0,25W
3215	4822 051 10102	1k 2% 0,25W
3216	4822 051 10101	100Ω 2% 0,25W

Jumper

4010.. 4205	4822 051 10008	jumper

5010	4822 157 53302	
5010[6]	4822 157 61898	
5035	4822 157 53534	0,34µH 5%
5036[6]	4822 157 53609	0,36µH 5%
5036	4822 157 63824	0,36µH 5%
5037	4822 157 53537	1,35µH 5%
5038	4822 157 63076	1,2µH 5%
5039	4822 152 20678	33µH 10%
5080	4822 157 53539	0,27µH 5%
5103	4822 157 52511	0,83µH
5104	4822 157 63077	0,25µH 5%
5105	4822 157 52511	0,83µH
5042	4822 157 53634	5,6µH 10%
5042[6]	4822 157 62767	
5150	4822 157 63845	2,7µH

6037	4822 130 80888	BA682
6038	4822 130 80888	BA682
6039	4822 130 30621	1N4148
6040	4822 130 80446	LL4148
6041	4822 130 80446	LL4148
6042	4822 130 80446	LL4148
6043	4822 130 80446	LL4148
6106	4822 130 80888	BA682
6107	4822 130 80888	BA682
6108	4822 130 80888	BA682
6109	4822 130 80446	LL4148
6150	4822 130 80888	BA682
6151	4822 130 80888	BA682
6220	4822 130 81015	LLZ-C10

7000	4822 209 72812	TDA2549/C4
7030	5322 130 42012	BC858
7031	4822 130 61207	BC848
7035	4822 130 44121	BC338
7040	5322 130 42012	BC858
7100	4822 209 63059	TDA3856/V3
7101	4822 209 63784	TDA3857/V3
7102	4822 130 61207	BC848
7104	4822 130 61207	BC848
7150	4822 130 61207	BC848
7151	4822 130 61207	BC848
7200	4822 209 63967	TDA8417/V3
7220	4822 209 63734	TDA8425/V7
7232	5322 130 41982	BC848B
7233	4822 130 42513	BC858C

5) system BGDK
6) system BGLI
7) system BG

Nicam IF/sound module

[7]	4822 212 30071	IF NICAM BG
[8]	4822 212 30068	IF NICAM I

Various

1010[7]	4822 242 72554	OFWG3254
1010[8]	4822 242 72553	OFWJ3251
1042[7]	4822 242 72211	5,5MWHz
1042[8]	4822 153 30025	6MHz
1100	4822 242 70485	5,74MHz
1105[7]	4822 242 70714	5,5MHz
1105[8]	4822 242 71713	6,0MHz
1116[7]	4822 242 72301	TH316BOM-20800DAF
1116[8]	4822 242 72303	TH316BQM
1127[7]	4822 242 81187	11.7MHz
1127[8]	4822 242 81188	13.104MHz
1138	4822 242 81189	17.472MHz
1191	4822 071 54001	fuse T400mA
1200	4822 242 80208	10MHz

⊣⊢

2011	4822 124 41506	47µF 20% 16V
2012	4822 124 41577	4,7µF 20% 50V
2013	4822 122 31797	22nF 10% 63V
2014	4822 122 31797	22nF 10% 63V
2015	5322 121 42498	680nF 5% 63V
2016	4822 122 31784	4,7nF 10% 50V
2017	4822 122 33496	100nF 10% 63V
2042	4822 122 32139	12pF 5% 63V
2044	4822 122 31797	22nF 10% 63V
2047	4822 122 33496	100nF 10% 63V
2049	4822 122 33496	100nF 10% 63V
2050	4822 124 40849	330µF 20% 16V
2071	4822 122 31972	39pF 5% 50V
2072	4822 124 40435	10µF 20% 50V
2073	4822 122 31981	33nF 50V
2075	4822 122 31797	22nF 10% 63V
2076	4822 124 41407	0,47µF 20% 63V
2077	4822 122 31916	5,6nF 10% 63V
2100	4822 124 40242	1µF 20% 63V
2101	4822 122 31746	1000pF 5% 50V
2102	4822 122 31746	1000pF 5% 50V
2102	4822 122 32765	820pF 10% 63V
2104	4822 122 31784	4,7nF 10% 50V
2106	4822 124 41576	2,2µF 20% 50V
2107	4822 124 41576	2,2µF 20% 50V
2108	4822 122 32862	10nF 80% 50V
2109	4822 124 41509	33µF 20% 35V
2110	4822 122 31947	100nF 20% 63V
2116	5322 122 31647	1nF 10% 63V
2119	4822 124 40198	470µF 20% 16V
2122	4822 122 32862	10nF 80% 50V
2123	4822 122 31768	180pF 5% 50V
2124	4822 122 31768	180pF 5% 50V
2125	4822 122 32597	6,8nF 10% 63V
2126	5322 122 31647	1nF 10% 63V
2127	5322 122 31647	1nF 10% 63V
2128	4822 122 31808	150pF 10% 50V
2129	4822 122 32862	10nF 80% 50V
2130	4822 122 31808	150pF 10% 50V
2131	4822 122 31766	120pF 5% 50V
2132	4822 122 32862	10nF 80% 50V
2133	4822 121 41854	150nF 5% 63V
2134	5322 122 31647	1nF 10% 63V
2135	4822 122 32862	10nF 80% 50V
2136	4822 122 31808	150pF 10% 50V
2137	4822 122 31947	100nF 20% 63V
2138	4822 122 32862	10nF 80% 50V
2140	4822 121 42408	220nF 5% 63V
2141	4822 122 31784	4,7nF 10% 50V
2143	5322 122 31647	1nF 10% 63V
2150	4822 122 32863	22nF 80% 50V
2151	4822 124 41506	47µF 20% 16V
2160	4822 122 31765	100pF 5% 50V
2161	4822 122 31765	100pF 5% 50V
2168	4822 122 31947	100nF 20% 63V
2169	4822 124 41506	47µF 20% 16V
2170[7]	4822 122 31782	15nF 10% 50V
2170[8]	4822 122 31916	5,6nF 10% 63V
2171[7]	4822 122 31981	33nF 50V
2171[8]	5322 122 31648	12nF 10% 50V
2173	4822 122 31773	560pF 5% 50V
2174	4822 122 33498	2,7nF 10% 63V
2175	4822 122 32999	2,2N 5%
2176	4822 121 51252	470nF 5% 63V
2177	4822 122 32863	22nF 80% 50V
2180[7]	4822 122 31782	15nF 10% 50V
2180[8]	4822 122 31916	5,6nF 10% 63V
2181	5322 122 31648	12nF 10% 50V
2181	4822 122 31981	33nF 50V
2183	4822 122 31773	560pF 5% 50V
2184	4822 122 33498	2,7nF 10% 63V
2185	4822 122 32999	2,2nF 5%
2186	4822 121 51252	470nF 5% 63V
2187	4822 122 32863	22nF 80% 50V
2188	4822 124 41506	47µF 20% 16V
2189	4822 122 32863	22nF 80% 50V
2190	4822 122 31947	100nF 20% 63V
2191	4822 124 41643	100µF 20% 16V
2193	4822 124 40849	330µF 20% 16V
2194	4822 122 31947	100nF 20% 63V
2198	4822 121 51252	470nF 5% 63V
2200	4822 121 51252	470nF 5% 63V
2201	4822 121 51252	470nF 5% 63V
2202	4822 122 31766	120pF 5% 50V
2203	4822 124 41509	33µF 20% 35V
2204	4822 124 41509	33µF 20% 35V
2205	4822 122 31947	100nF 20% 63V
2207	4822 121 51252	470nF 5% 63V
2209	4822 121 51252	470nF 5% 63V
2210	4822 124 41577	4,7µF 20% 50V
2211	4822 121 42408	220nF 5% 63V
2213	4822 124 40195	150µF 20% 16V
2214	4822 122 31947	100nF 20% 63V
2215	4822 124 41506	47µF 20% 16V
2216	4822 122 31981	33nF 50V
2217	5322 121 42498	680nF 5% 63V
2218	4822 124 41643	100µF 20% 16V
2219	5322 121 42498	680nF 5% 63V
2220	4822 122 31916	5,6nF 10% 63V
2223	4822 122 31916	5,6nF 10% 63V
2224	4822 122 31981	33nF 50V
2225	4822 122 31782	15nF 10% 50V
2226	4822 122 31782	15nF 10% 50V

□

3012	4822 051 10562	5k6 2% 0,25W
3013	4822 051 10273	27k 2% 0,25W
3014	4822 051 10823	82k 2% 0,25W
3015	4822 051 10104	100k 2% 0,25W
3016	4822 100 11819	100k 30% 0,1W
3019	4822 051 10473	47k 2% 0,25W
3020	4822 051 10273	27k 2% 0,25W
3021	4822 051 20183	18k 5% 0,1W
3030	4822 051 10223	22k 2% 0,25W
3035	4822 051 10472	4k7 2% 0,25W
3041	4822 051 10221	220Ω 2% 0,25W
3042[7]	4822 051 10151	150Ω 2% 0,25W
3042[8]	4822 051 10101	100Ω 2% 0,25W
3044	4822 051 10271	270Ω 2% 0,25W
3047	4822 050 21001	100Ω 1% 0,6W
3052	4822 051 10102	1k 2% 0,25W
3055	4822 051 10103	10k 2% 0,25W
3056	4822 051 10471	470Ω 2% 0,25W
3058	4822 051 10682	6k8 2% 0,25W
3071	4822 051 10124	120k 2% 0,25W
3072	4822 051 10471	470Ω 2% 0,25W
3073	4822 051 10824	820k 2% 0,25W
3074	4822 051 10563	56k 2% 0,25W
3075	4822 051 10272	2k7 2% 0,25W
3076	4822 051 10224	220k 2% 0,25W
3077	4822 051 10124	120k 2% 0,25W
3078	4822 051 10102	1k 2% 0,25W
3079	4822 051 10101	100Ω 2% 0,25W
3100	4822 051 10561	560Ω 2% 0,25W
3101	4822 051 10331	330Ω 2% 0,25W
3102	4822 051 10681	680Ω 2% 0,25W
3105	4822 051 10561	560Ω 2% 0,25W
3106	4822 051 10561	560Ω 2% 0,25W
3107	4822 051 10122	1k2 2% 0,25W
3108	4822 051 20222	2k2 5% 0,1W
3109	4822 053 11121	120Ω 5% 2W
3110	4822 051 10102	1k 2% 0,25W
3116	4822 051 10471	470Ω 2% 0,25W
3122	4822 051 10471	470Ω 2% 0,25W
3123	4822 051 10332	3k3 2% 0,25W
3124	4822 051 10332	3k3 2% 0,25W
3125	4822 051 10223	22k 2% 0,25W
3127	4822 051 10104	100k 2% 0,25W
3128	4822 051 10223	22k 2% 0,25W
3129	4822 051 10103	10k 2% 0,25W
3130	4822 051 10223	22k 2% 0,25W
3131	4822 051 10392	3k9 2% 0,25W
3133	4822 051 10333	33k 2% 0,25W
3134	4822 051 10103	10k 2% 0,25W
3135	4822 051 10103	10k 2% 0,25W
3136	4822 051 10104	100k 2% 0,25W
3137	4822 051 10104	100k 2% 0,25W
3138	4822 051 10105	1M 5% 0,25W
3139	4822 051 10273	27k 2% 0,25W
3140	4822 051 10824	820k 2% 0,25W
3141	4822 051 10152	1k5 2% 0,25W
3142	4822 051 10103	10k 2% 0,25W
3143	4822 051 10102	1k 2% 0,25W
3150	4822 052 10278	2Ω7 5% 0,33W
3158	4822 051 10473	47k 2% 0,25W
3159	4822 051 10473	47k 2% 0,25W
3160	4822 051 10331	330Ω 2% 0,25W
3161	4822 051 10331	330Ω 2% 0,25W
3168	4822 052 10278	2Ω7 5% 0,33W
3170[7]	4822 051 10682	6k8 2% 0,25W
3170[8]	4822 051 20183	18k 5% 0,1W
3171[7]	4822 051 10122	1k2 2% 0,25W
3171[8]	4822 051 10332	3k3 2% 0,25W
3172	4822 051 10472	4k7 2% 0,25W
3173	4822 051 10472	4k7 2% 0,25W
3177[7]	4822 051 10682	6k8 2% 0,25W
3177[8]	4822 051 10472	4k7 2% 0,25W
3180[7]	4822 051 10682	6k8 2% 0,25W
3180[8]	4822 051 20183	18k 5% 0,1W
3181[7]	4822 051 10122	1k2 2% 0,25W
3181[8]	4822 051 10332	3k3 2% 0,25W
3182	4822 051 10472	4k7 2% 0,25W
3183	4822 051 10472	4k7 2% 0,25W
3188	4822 052 10109	10Ω 5% 0,33W
3190	4822 051 10471	470Ω 2% 0,25W
3200	4822 101 11191	10k 30% 0.1W
3201	4822 051 10822	8k2 2% 0,25W
3202	4822 051 10512	5k1 2% 0,25W
3203	4822 051 10563	56k 2% 0,25W
3204	4822 051 10563	56k 2% 0,25W

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Nicam IF/sound module

3205	4822 052 10229	22Ω 5% 0,33W
3206	4822 051 10331	330Ω 2% 0,25W
3208	4822 051 10331	330Ω 2% 0,25W
3209	4822 051 10103	10k 2% 0,25W
3210	4822 051 10102	1k 2% 0,25W
3213	4822 051 10478	4Ω7 5% 0,25W
3214	4822 051 10223	22k 2% 0,25W
3215	4822 051 10272	2k7 2% 0,25W
3216	4822 051 10333	33k 2% 0,25W
3217	4822 051 10102	1k 2% 0,25W
3218	4822 051 10101	100Ω 2% 0,25W

Jumper

4000[7]	4822 051 10393	39k 2% 0,25W
4000[8]	4822 051 10392	3k9 2% 0,25W

5010	4822 157 53302	
5035	4822 157 53534	0,34µH 5%
5036	4822 157 63824	0,36µH 5%
5042	4822 157 62767	
5042	4822 157 53634	5,6µH 10%
5101	4822 157 52511	0,83µH
5102	4822 157 52511	0,83µH
5103	4822 157 63077	0.25µH 5%
5123	4822 157 50975	1 mH
5124	4822 157 50975	1 mH

6070	4822 130 80446	LL4148
6071	4822 130 80446	LL4148
6072	4822 130 80446	LL4148
6075	4822 130 80446	LL4148
6127	5322 130 34953	BB405B
6134	5322 130 31684	BB809
6140	4822 130 80446	LL4148
6190	4822 130 80446	LL4148
6191	4822 130 80954	LLZ-C5V6
6225	4822 130 81015	LLZ-C10

7000	4822 209 72812	TDA2549/C4
7035	4822 130 44121	BC338
7073	5322 130 42012	BC858
7078	4822 130 42513	BC858C
7100	4822 209 63784	TDA3857/V3
7106	4822 130 61207	BC848
7108	5322 130 42012	BC858
7120	4822 209 30909	TDA8732/C1
7133	4822 130 61207	BC848
7150	4822 209 30914	SAA7280/M2
7160	4822 130 61207	BC848
7161	4822 130 61207	BC848
7168	4822 209 73236	TDA1543/N2
7170	4822 209 83163	LM833N
7180	4822 209 83163	LM833N
7190	5322 130 41983	BC858B
7191	4822 130 44121	BC338
7200	4822 209 30147	TDA8415
7213	4822 209 63734	TDA8425/V7
7217▲	5322 130 41982	BC848B

7) BG

8) I

TXT module

9	4822 212 30062	IVT TXT europe
10	4822 212 30063	IVT TXT nordic
11	4822 212 30076	TXT spain
12	4822 212 30077	TXT east-europe
13	4822 212 30078	TXT europe
14	4822 212 30079	TXT nordic

Connectors

	4822 265 40469	BTB AU 6P
	4822 265 40471	BTB AU 8P

Various

1800	4822 242 81191	27MHz
1820	4822 242 71508	6MHz
1870	4822 071 53151	Fuse 315mA

2801	4822 122 31797	22nF 10% 63V
2802	4822 122 31746	1000pF 5% 50V
2803	4822 122 31774	56pF 5% 50V
2804	4822 122 32504	15pF 5% 50V
2805	4822 122 33496	100nF 10% 63V
2806	4822 122 33496	100nF 10% 63V
2807	4822 122 33496	100nF 10% 63V
2808	4822 122 33496	100nF 10% 63V
2810	4822 122 33496	100nF 10% 63V
2820	4822 122 32504	15pF 5% 50V
2820[11]	4822 126 10324	33pF 63V
2821	4822 122 32504	15pF 5% 50V
2821[11]	4822 126 10324	33pF 63V
2823	4822 122 33496	100nF 10% 63V
2825	4822 122 31772	47pF 5% 50V
2826	4822 122 31772	47pF 5% 50V
2830	4822 122 33496	100nF 10% 63V
2832	4822 122 33496	100nF 10% 63V
2833	4822 122 33496	100nF 10% 63V
2834	4822 124 40435	10µF 20% 50V
2836	4822 122 31965	220pF 5% 63V
2850	4822 122 33496	100nF 10% 63V
2860	4822 122 31825	27pF 10% 50V
2861	4822 122 33496	100nF 10% 63V
2862	4822 122 31774	56pF 5% 50V
2863	4822 122 33496	100nF 10% 63V
2870	4822 124 41643	100µF 20% 16V
2871	4822 124 41506	47µF 20% 16V
2872	4822 124 40272	33µF 20% 16V

3802	4822 051 10273	27k 2% 0,25W
3803	4822 051 10103	10k 2% 0,25W
3804	4822 051 10122	1k2 2% 0,25W
3805	4822 051 10122	1k2 2% 0,25W
3806	4822 051 10221	220Ω 2% 0,25W
3809	4822 116 52176	10Ω 5% 0,5W
3810	4822 116 52207	1k 2 5% 0,5W
3811	4822 051 10122	1k2 2% 0,25W
3812	4822 051 10122	1k2 2% 0,25W
3813	4822 051 10122	1k2 2% 0,25W
3814	4822 051 10122	1k2 2% 0,25W
3815	4822 116 52207	1k 2 5% 0,5W
3816	4822 116 52207	1k 2 5% 0,5W
3817	4822 051 10122	1k2 2% 0,25W
3818	4822 051 10122	1k2 2% 0,25W
3819	4822 051 10122	1k2 2% 0,25W
3820	4822 051 10471	470Ω 2% 0,25W
3821	4822 051 10102	1k 2% 0,25W
3822	4822 051 10103	10k 2% 0,25W
3823	4822 051 10105	1M 5% 0,25W
3824	4822 051 20222	2k2 5% 0,1W
3825	4822 051 20222	2k2 5% 0,1W
3826	4822 116 52175	100Ω 5% 0,5W
3827	4822 116 52175	100Ω 5% 0,5W
3830	4822 051 10829	82Ω 2% 0,25W
3831	4822 051 10821	820Ω 2% 0,25W
3832	4822 051 10102	1k 2% 0,25W
3833	4822 051 10102	1k 2% 0,25W
3834	4822 051 10681	680Ω 2% 0,25W
3835	4822 051 10103	10k 2% 0,25W
3836	4822 051 10473	47k 2% 0,25W
3837	4822 051 10102	1k 2% 0,25W
3838	4822 051 10473	47k 2% 0,25W
3839	4822 051 10151	150Ω 2% 0,25W
3840	4822 051 10228	2Ω2 5% 0,25W
3842	4822 051 10561	560Ω 2% 0,25W
3850	4822 116 52206	120Ω 5% 0,5W
3851	4822 051 10102	1k 2% 0,25W
3852	4822 051 10102	1k 2% 0,25W
3853	4822 116 52206	120Ω 5% 0,5W
3854	4822 051 10102	1k 2% 0,25W
3855	4822 051 10102	1k 2% 0,25W
3856	4822 116 52206	120Ω 5% 0,5W
3857	4822 051 10102	1k 2% 0,25W
3858	4822 051 10102	1k 2% 0,25W
3860	4822 051 10272	2k7 2% 0,25W
3861	4822 051 10562	5k6 2% 0,25W
3862	4822 051 10333	33k 2% 0,25W
3863	4822 051 10223	22k 2% 0,25W
3864	4822 051 10103	10k 2% 0,25W
3865	4822 051 10392	3k9 2% 0,25W
3866	4822 051 10272	2k7 2% 0,25W
3867	4822 116 52206	120Ω 5% 0,5W
3868	4822 051 10101	100Ω 2% 0,25W
3869	4822 051 10821	820Ω 2% 0,25W
3870	4822 050 24701	470Ω 1% 0,6W
3871	4822 050 22201	220Ω 1% 0,6W
3872	4822 051 10331	330Ω 2% 0,25W
3873	4822 051 10271	270Ω 2% 0,25W
3874	4822 051 10181	180Ω 2% 0,25W
3890[9]	4822 051 10102	1k 2% 0,25W
3890[13]	4822 051 10103	10k 2% 0,25W
3890[14]	4822 051 10153	15k 2% 0,25W
3890[10]	4822 051 10272	2k7 2% 0,25W
3890[11]	4822 051 10562	5k6 2% 0,25W
3890[12]	4822 051 10822	8k2 2% 0,25W

Jumper

4801.. 4862	4822 051 10008	jumper

5800	4822 157 53302	
5801	4822 152 20677	
5834	4822 157 53001	27µH 10%
5870	4822 157 51157	3.3µH

6800	4822 130 82921	LLZ-F3V9
6840	4822 130 80446	LL4148
6850	4822 130 80446	LL4148
6851	4822 130 80446	LL4148
6852	4822 130 80446	LL4148
6860	4822 130 80446	LL4148
6870	4822 130 80905	LLZ-F5V1
6871	4822 130 81227	LLZ-F5V6

7800	4822 209 31214	SAA5246P/E
7800[12]	4822 209 31215	SAA5246P/H
7810	4822 209 61805	HY6264P-15
7810[11]	4822 209 72681	MSM5165AL-12RS
7820[12]	4822 209 30281	PCF84C81A/097

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TXT module

7820[9,10]	4822 209 31069	PCF84C81A/098
7820[11]	4822 209 62479	MAB8461/W196
7821	4822 130 61207	BC848
7822	4822 130 61207	BC848
7831	4822 130 42513	BC858C
7833	5322 130 42136	BC848C
7850	5322 130 42136	BC848C
7851	5322 130 42136	BC848C
7852	5322 130 42136	BC848C
7860	4822 130 61207	BC848
7861	5322 130 60159	BC846B
7862	5322 130 42136	BC848C
7863	4822 130 61207	BC848
7870	4822 130 41344	BC337-40
7871	5322 130 42012	BC858
7872	4822 130 41344	BC337-40

9) IVT Europe BGLI
10) IVT Nordic
11) CCT Spain
12) CCT Europe BGDK
13) CCT Europa BGLI
14) CCT Nordic

PIP module

4822 212 23605 PIP module

Connectors

4822 265 30828	5p female
4822 265 40472	10p female
4822 265 40503	5p male

Various

1155	4822 320 40051	delay line DL711
1201	4822 242 70304	8,867238 MHz
1212	4822 242 70736	7,159090 MHz

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2103	4822 122 32444	33pF 5% 50V
2105	4822 122 31766	120pF 5% 50V
2118	4822 122 31775	680pF 5% 50V
2119	4822 122 31808	150pF 10% 50V
2120	4822 122 31807	1200pF 5% 50V
2125	4822 122 32863	22nF 80% 50V
2155	4822 122 32862	10nF 80% 50V
2158	4822 122 32862	10nF 80% 50V
2160	4822 124 40242	1µF 20% 63V
2161	4822 124 41576	2,2µF 20% 50V
2162	4822 122 32893	100nF 80% 50V
2171	4822 122 31961	68pF 5% 63V
2172	4822 126 11175	22pF 5% 50V
2176	4822 126 11175	22pF 5% 50V
2177	4822 122 31961	68pF 5% 63V
2180	4822 122 31768	180pF 5% 50V
2181	4822 122 31768	180pF 5% 50V
2185	4822 122 32863	22nF 80% 50V
2187	4822 122 32863	22nF 80% 50V
2189	4822 122 31746	1000pF 5% 50V
2196	4822 122 32893	100nF 80% 50V
2197	4822 122 31385	22pF 50V
2201	4822 122 31746	1000pF 5% 50V
2202	4822 125 50045	20pF
2211	4822 122 31746	1000pF 5% 50V
2212	4822 125 50045	20pF
2220	5322 121 42661	330nF 5% 63V
2222	4822 122 32542	47nF 10% 63V
2227	5322 122 31842	330pF 5% 63V
2230	4822 124 40242	1µF 20% 63V
2232	4822 124 41678	22µF 20% 25V
2234	4822 122 33496	100nF 10% 63V
2235	4822 124 41578	6,8µF 20% 50V
2238	4822 121 42937	2.7nF 1% 250V
2239	4822 122 32893	100nF 80% 50V
2250	4822 121 51115	270nF 10% 63V
2251	5322 122 31647	1nF 10% 63V
2255	4822 122 31766	120pF 5% 50V
2260	4822 122 32893	100nF 80% 50V
2270	4822 122 32893	100nF 80% 50V
2340	4822 124 41506	47µF 20% 16V
2345	4822 124 41506	47µF 20% 16V
2350	4822 124 40849	330µF 20% 16V
2351	4822 124 41643	100µF 20% 16V
2380	4822 122 32927	220nF
2381	4822 122 32927	220nF
2382	4822 122 32927	220nF
2383	4822 122 32927	220nF
2384	4822 122 32927	220nF
2385	4822 122 32927	220nF
2390	4822 122 32893	100nF 80% 50V
2399	4822 122 31746	1000pF5%50V
2404	4822 122 31965	220pF 5% 63V
2405	4822 122 32862	10nF 80% 50V
2409	4822 122 31965	220pF 5% 63V
2410	4822 122 32862	10nF 80% 50V
2413	4822 122 31765	100pF 5% 50V
2414	4822 122 32862	10nF 80% 50V
2415	4822 122 31965	220pF 5% 63V
2430	4822 122 32893	100nF 80% 50V
2432	4822 122 32893	100nF 80% 50V
2434	4822 122 32893	100nF 80% 50V
2438	4822 121 42472	10nF 10% 50V
2439	4822 121 41856	22nF 5% 250V
2440	4822 122 31965	220pF 5% 63V
2441	4822 122 31727	470pF 5% 63V
2442	4822 124 40242	1µF 20% 63V
2446	4822 122 32893	100nF 80% 50V
2448	4822 122 32893	100nF 80% 50V
2450	4822 122 32856	8,2nF 10% 63V
2455	4822 122 31972	39pF 5% 50V
2459	4822 124 41997	470µF 10V
2466	4822 122 32893	100nF 80% 50V

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2444	4822 051 10224	220k 2% 0,25W
3103	4822 051 10821	820Ω 2% 0,25W
3104	4822 051 10821	820Ω 2% 0,25W
3105	4822 051 10362	3k6 2% 0,25W
3106	4822 116 52233	10k 5% 0,5W
3107	4822 051 10103	10k 2% 0,25W
3108	4822 051 10103	10k 2% 0,25W
3155	4822 051 10391	390Ω 2% 0,25W
3156	4822 051 10122	1k2 2% 0,25W
3157	4822 100 11391	330Ω 30% LIN
3158	4822 051 10759	75Ω 2% 0,25W
3170	4822 051 10112	1k1 2% 0,25W
3175	4822 051 10621	620Ω 2% 0,25W
3196	4822 050 11002	1k 1% 0,4W
3200	4822 051 10103	10k 2% 0,25W
3201	4822 051 10103	10k 2% 0,25W
3202	4822 051 10103	10k 2% 0,25W
3211	4822 051 10103	10k 2% 0,25W
3212	4822 051 10103	10k 2% 0,25W
3214	4822 051 10102	1k 2% 0,25W
3220	4822 051 10512	5k1 2% 0,25W
3221	4822 116 52233	10k 5% 0,5W
3222	4822 051 10008	jumper
3227	4822 116 52299	7k5 5% 0,5W
3228	4822 051 10472	4k7 2% 0,25W
3231	4822 051 10682	6k8 2% 0,25W
3232	4822 051 10229	22Ω 2% 0,25W
3233	4822 051 10471	470Ω 2% 0,25W
3234	4822 051 10361	360Ω 2% 0,25W
3235	4822 051 10122	1k2 2% 0,25W
3236	4822 051 10471	470Ω 2% 0,25W
3237	4822 051 10332	3k3 2% 0,25W
3238	4822 051 10333	33k 2% 0,25W
3239	4822 100 11319	4k7 30% LIN
3241	4822 051 10271	270Ω 2% 0,25W
3242	4822 050 11002	1k 1% 0,4W
3250	4822 051 10911	910Ω 2% 0,25W
3265	4822 051 10104	100k 2% 0,25W
3270	4822 051 10103	10k 2% 0,25W
3275	4822 051 10103	10k 2% 0,25W
3276	4822 051 10102	1k 2% 0,25W
3330	4822 051 20008	0Ω 5% 0,1W
3335	4822 051 10271	270Ω 2% 0,25W
3336	4822 051 10432	4k3 2% 0,25W
3337	4822 051 10122	1k2 2% 0,25W
3338	4822 051 10332	3k3 2% 0,25W
3340	4822 051 10202	2k 2% 0,25W
3341	4822 052 10229	22Ω 5% 0,33W
3345	4822 052 10229	22Ω 5% 0,33W
3353	4822 052 10568	5Ω6 5% 0,33W

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PIP module

3354	4822 051 10271	270Ω 2% 0,25W
3390	4822 051 10151	150Ω 2% 0,25W
3391	4822 051 10181	180Ω 2% 0,25W
3394	4822 051 10151	150Ω 2% 0,25W
3395	4822 051 10181	180Ω 2% 0,25W
3398	4822 051 10151	150Ω 2% 0,25W
3399	4822 051 10181	180Ω 2% 0,25W
3404	4822 051 10431	430Ω 2% 0,25W
3405	4822 051 10361	360Ω 2% 0,25W
3410	4822 051 10391	390Ω 2% 0,25W
3411	4822 051 10471	470Ω 2% 0,25W
3412	4822 051 10751	750Ω 2% 0,25W
3414	4822 051 10471	470Ω 2% 0,25W
3416	4822 051 10182	1k8 2% 0,25W
3434	4822 051 10473	47k 2% 0,25W
3436	4822 051 10473	47k 2% 0,25W
3437	4822 051 10101	100Ω 2% 0,25W
3438	4822 051 10513	51k 2% 0,25W
3440	4822 116 52222	390Ω 5% 0,5W
3441	4822 051 10519	51Ω 2% 0,25W
3442	4822 051 10919	91Ω 2% 0,25W
3444	4822 116 52175	100Ω 5% 0,5W
3446	4822 116 52175	100Ω 5% 0,5W
3448	4822 051 10392	3k9 2% 0,25W
3450	4822 051 10471	470Ω 2% 0,25W
3452	4822 051 10471	470Ω 2% 0,25W
3454	4822 051 10471	470Ω 2% 0,25W
3460	4822 116 52231	820Ω 5% 0,5W
3461	4822 116 52259	2k4 5% 0,5W
3462	4822 051 10333	33k 2% 0,25W
3463	4822 116 52299	7k5 5% 0,5W
3464	4822 051 10472	4k7 2% 0,25W
3470	4822 052 10108	1Ω 5% 0,33W
3618	4822 052 10568	5Ω6 5% 0,33W
3621	4822 051 10105	1M 5% 0,25W
3997	4822 051 10339	33Ω 2% 0,25W
3997	4822 051 10279	27Ω 2% 0,25W

Jumper

4001.. 4415	4822 051 10008	jumper

5118	4822 157 60435	10,3µH 6%
5155	4822 157 60433	7,2µH 6%
5157	4822 157 60434	9,4µH 6%
5170	4822 157 60432	10,3µH
5175	4822 157 60432	10,3µH
5190	4822 157 60432	10,3µH
5400	4822 157 50943	12µH 10%
5402	4822 157 50943	12µH 10%
5403	4822 157 52333	100µH 10%
5406	4822 157 50943	12µH 10%
5408	4822 157 50943	12µH 10%
5410	4822 157 50943	12µH 10%

6300	4822 130 80906	LLZ-C7V5

7103	5322 130 41982	BC848B
7105	5322 130 41982	BC848B
7125	4822 209 63927	TDA4554/V1
7126	4822 209 30389	TDA4510/V8
7200	5322 130 41982	BC848B
7210	5322 130 41982	BC848B
7233	5322 130 41983	BC858B
7234	5322 130 41982	BC848B
7335	5322 130 41982	BC848B
7337	5322 130 41982	BC848B
7338	5322 130 41982	BC848B
7350	4822 130 42616	BC818-40
7380	4822 209 60479	TEA5114A
7400	5322 130 41983	BC858B
7402	5322 130 41983	BC858B
7404	5322 130 41983	BC858B
7406	4822 209 62473	SDA9087
7408	4822 209 63291	SDA9088/2Ω
7410	4822 209 63644	SDA9086-3
7755	4822 209 72363	TDA2579A/N8

Control module DAS

[17]	4822 212 30036	control module
[18]	4822 212 30029	control module

Connectors

▲	4822 265 30384	mains K11
▲	4822 265 40596	mains K25
	4822 264 40207	3p male
	4822 265 30951	4p male

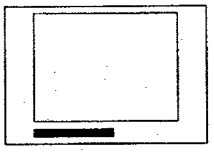
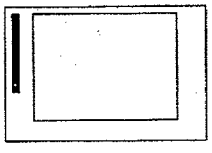
Various

▲	4822 276 12597	Mains switch
	4822 267 31014	Headphone socket
	4822 276 50354	Swith assembly
	4822 212 23667	IR receiver GP1U52YP
	4822 209 72895	LED TLUV5320
	4822 256 91766	LED holder

2233	4822 121 43526	47nF 5% 100V
2234	4822 121 43526	47nF 5% 100V
2713	5322 124 21189	100µF 20% 40V

3246	4822 116 52219	330Ω 5% 0,5W
3247	4822 116 52175	100Ω 5% 0,5W
3248	4822 116 52219	330Ω 5% 0,5W
3249	4822 116 52175	100Ω 5% 0,5W
3729	4822 116 52232	910Ω 5% 0,5W
3730	4822 116 52215	220Ω 5% 0,5W
3775	4822 116 52175	100Ω 5% 0,5W
3776[17]	4822 116 52264	5K6 5% 0,5W
3776[18]	4822 116 52289	27K 5% 0,5W
3777[17]	4822 116 52289	27K 5% 0,5W
3777[18]	4822 116 52264	5K6 5% 0,5W
3778[17]	4822 116 52233	56K 5% 0,5W
3778[18]	4822 116 52291	10K 5% 0,5W
3779[17]	4822 116 52291	10K 5% 0,5W
3779[18]	4822 116 52233	56K 5% 0,5W

17)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