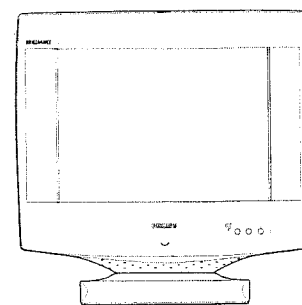


Service
Service
Service

CM8800



TY 00



Service Manual

Horizontal frequencies
30 - 86 kHz

Contents

Page

1.	Technical data	2
2.	Connection facilities and control function	3
3.	Warning and Notes	5
4.	Mechanical Instructions	6
5.	Wiring diagram	7
6.	Alignment locations	8
7.	Electrical Instructions	9
	<i>Electrical diagrams and PWB layout</i>	<i>Diagram PWB</i>
	Block diagram	11
	Waveform & PWB for Video	12
	Video Panel (Diagram A)	13
	Main Panel (Diagram B)	15, 16
	Main Panel (Power supply) (Diagram C)	17
	PFC & Audio Panel (Diagram D)	18
	Main Panel (Digital control) (Diagram E)	19
	Moire & Control Panel (Diagram F)	20
8.	Repair tips	21
9.	Exploded view	22
10.	Spare parts list	23



PHILIPS

1. Technical data

General

- Mains voltage	: AC 90-264 V
- Mains frequency	: 50-60 Hz
- Power consumption	: 100 W (typical)
	: 115 W (max.)
- Operating temperature	: 0 °C to 40 °C
- Weight	: 21.2 kg
- Dimension (WxHxD)	: 440 x 454 x 450 mm

Sync. signal

- Sync. polarity	: Positive or Negative
- Vertical frequency	: 50-160 Hz
- Horizontal frequency	: 30-86 kHz

Image geometry

- Total geometrical distortion of the image (pincushion and barrel distance)	: 3.0 mm max.
- Horizontal tilt (rotation)	: <= 2.5 mm max.
- Image non-linearity (according IEC 107-73,74)	: 5 % max. horizontal 5 % max. vertical

Picture tube

- Size	: 17 inch
- Light transmission	: 42 %
- Deflection angle	: 90 degrees
- EHT voltage	: 25 +/- 0.3 kVolt
- Pitch	: 0.26 mm
- Phosphor	: Medium short persistence (P22)

Video

- Dot rate	: 167 MHz
- Video signal	: 0.7 Vpp linear/75 ohm
- Image size	: 300 +/- 3 mm x 225 +/- 3 mm
- H-Shift range	: Total 20 +/- 5 mm min
- V-Shift range	: Total 10 +/- 2 mm min

Power Management

Power Management Definition						
VESA DPMS				Power Saving Status		
Mode	Video	H-Sync	V-Sync	Power Used	Power Saving	LED color
ON	Active	Yes	Yes	Normal	0 %	Green
Stand-by	Blanked	No	Yes	< 15 Watts	> 85 %	Yellow
Suspend	Blanked	Yes	No	< 15 Watts	> 85 %	Yellow
OFF	Blanked	No	No	< 2.5 Watts	> 97.5 %	Amber

Note: The video will be blanked and the power LED color will change into following colors whenever the monitor goes into power management status.

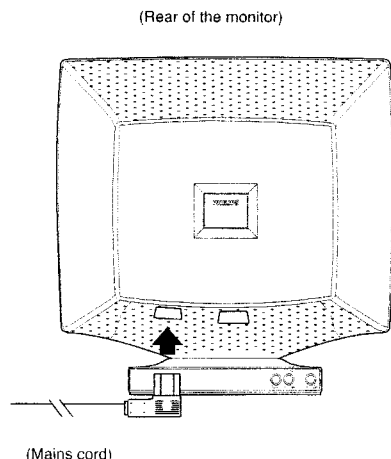
This monitor is Energy Star compliant and TCO '95 power management when used with a computer equipped with DPMS.
PHILIPS is a partner in the EPA's Energy Star Computer Program.



Resolution modes and sync. polarities

Mode ID	Mode	Resolution	Horizontal	Vertical	Sync. polarity	
		dots x line	Freq. (kHz)	Freq. (Hz)	H	V
M01	VGA	640 x 400	31.5	70	-	+
M02	VGA	640 x 480	31.5	60	-	-
M03	MAC II	640 x 480	35.0	66.7	Sync on Green	
M04	VGA	640 x 480	37.5	75	-	-
M05	SVGA	800 x 600	53.7	85	+	+
M06	SVGA	800 x 600	37.8	60	+	+
M07	SVGA	800 x 600	46.9	75	+	+
M08	QUADRA	832 x 624	49.7	75	-	-
M09		1024 x 768	68.7	85	+	+
M10	EVGA	1024 x 768	56.6	70	+/-	+/-
M11	MAC 19"	1024 x 768	60.0	75	-	-
M12	VESA	1024 x 768	60.0	75	+	+
M13	MAC 21"	1152 x 870	68.7	75	+/-	+/-
M14		1280 x 1024	64.0	60	Sync on Green	
M15	VESA/75	1280 x 1024	80.0	75	+	+
M16		1600 x 1280	79.2	60	+/-	+/-

1. Connection to the mains



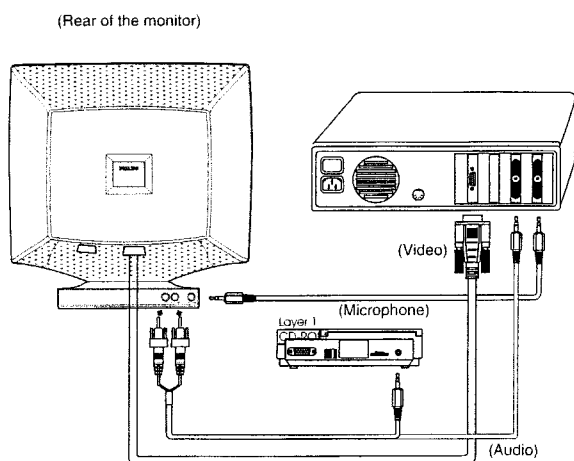
This monitor is set to operate at a mains supply of 100-240 volts AC. If the Mains voltage in your home is different from this, consult your dealer. Connect one end of the mains cord to the mains socket at the rear of monitor, and the other end to the mains supply.

2. Connection to the computer

NOTE: Please be sure the AC power to your computer is "OFF" before connecting or disconnecting any display peripheral. Failure to do so may cause serious personal injury as well as permanent damage to your computer equipments.

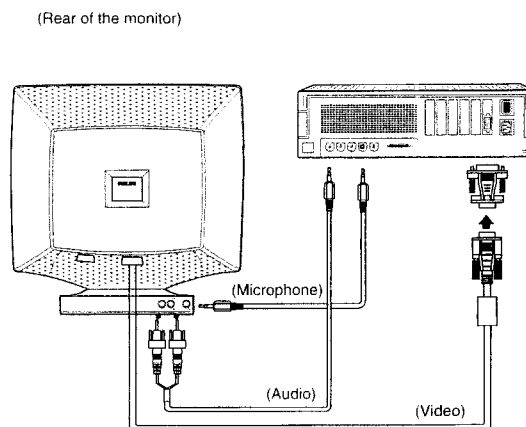
2.1 IBM PC, PC/XT, PC/AT, PS/2, or the compatibles:

- Connect the fixed 15-pin D-sub connector of the video signal cable to the computer at the video connector on the video card, and fix it firmly with the screws on the plug.
- Connect the audio cable to the input of audio connector, which located at the rear of monitor according to the following:
 - The red audio plug should be connector to the red audiophone connector.
 - The white audio plug should be connector to the white audiophone connector.
- Connect the other end of audio cable to the audio connector of media card at the rear of computer or CD-ROM according to the preceding description.
- Connect one end of the microphone cable (pulg with RCA type) to the microphone connector at the rear of the monitor.
- Connect the other end of the microphone cable (mini jack plug) to the microphone connector at the rear of the computer.



2.2 Apple Macintosh series:

- Connect the 15-pin D-sub adapter to the signal cable and secured by screws.
- Connect the 15-pin D-sub adapter to the computer.
- Fix both screws of connector firmly.
- Connect one end of audio cable (plug with RCA type) to the audio connectors at the rear of monitor according to the preceding description.
- Connect the other end of audio cable (mini jack plug) to the audio connector at the rear of computer.
- Connect one end of the microphone cable (pulg with RCA type) to the microphone connector at the rear of the monitor.
- Connect the other end of the microphone cable (mini jack plug) to the microphone connector at the rear of the computer.

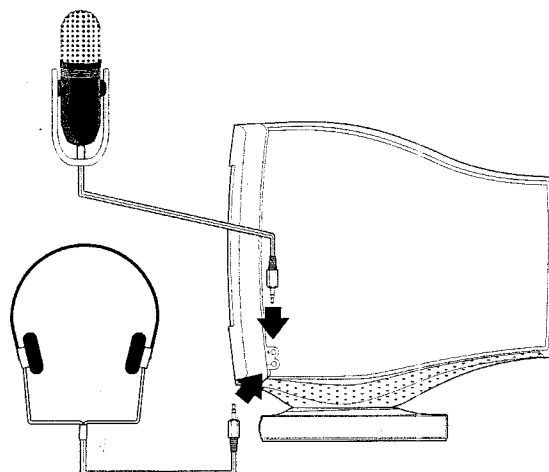


2.3 Earphone Connection:

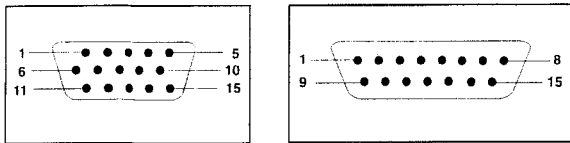
- Connect your earphone plug (must be minitype) to the earphone connector on the right-hand side of the monitor.
- The speakers will be switched off when earphone is plugged in.

2.4 External Microphone Connection :

- Connect your microphone plug to the microphone connector on the right-hand side of the monitor.
- The internal microphone will be switched off when external microphone is plugged in.



3. Pin assignment 15 p "D" shell (3 and 2 rows)

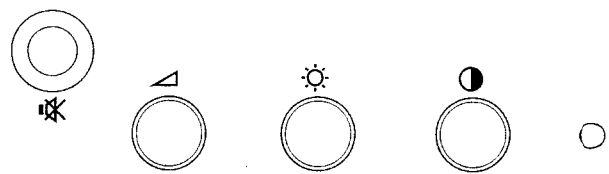
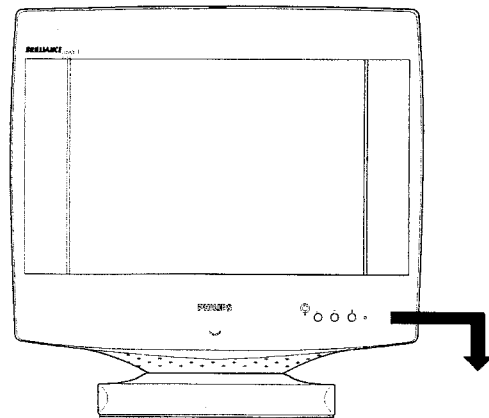


3.1 The 15 pin D-sub connector (male) of the signal cable (IBM system)

Pin No.	Assignment	Pin No.	Assignment
1	Red video input	8	Blue video ground
2	Green video input	9	No pin
3	Blue video input	10	Logic ground
4	Identical output connected to pin 10	11	Identical output connected to pin 10
5	Ground	12	Serial data line (SDA)
6	Red video ground	13	H. sync / H+V
7	Green video ground	14	V. sync (Vclk for DDC)
		15	Data clk line (SCL)

3.2 The 15 pin D-sub connector (male) of the adapter (Apple Macintosh system)

Pin No.	Assignment	Pin No.	Assignment
1	Red ground	8	Not connected
2	Red video	9	Blue video
3	Composite sync, H+V	10	Sense 2
4	Sense 0	11	Composite sync & V. sync ground
5	Green video/S.O.G	12	V. sync
6	Green ground	13	Blue video ground
7	Sense 1	14	H. sync ground
		15	H. sync



For an optimized adjustment of the picture following controls are available at the front.

① POWER (on the top of the monitor)

- Press this knob, the green LED lights and the power is on.
- Press this knob again, the green LED disappears and the power is off.

● CONTRAST

- Used to adjust the picture contrast level.

☀ BRIGHTNESS

- Used to adjust the overall screen brightness as a compensation for ambient light.

△ Volume

- Used to adjust audio volume.

⊗ Audio mute

Remark:

For brightness/contrast/volume adjustment, press the knob. It will pop out; you can then turn it to the right or left for optimum adjustment.

1. Safety Instructions for Repairs

1.1 Safety regulations require that during a repair:

- The set should be connected to the mains via an isolating transformer.
- Safety components, indicated by the symbol  should be replaced by components identical to the original ones.
- When replacing the CRT, safety goggles must be worn.

1.2 Safety regulations require also that after a repair:

- The set should be returned in its original condition.
- The cabinet should be checked for defects to avoid touching, by the customer, of inner parts.
- The insulation of the mains lead should be checked for external damage.
- The mains lead strain relief should be checked on its function.
- The cableform and EHT cable are routed correctly and fixed with the mounted cable clamps in order to avoid touching of the CRT, hot components or heat sinks.

* Thermally loaded solder joints should be checked and resoldered where necessary. This includes components like LOT, the line output transistor, fly-back capacitor.

2. Maintenance Instructions

It is recommended to have a maintenance inspection carried out periodically by a qualified service employee. The interval depends on the usage conditions.

- During the maintenance inspection the above mentioned "safety instructions for repair" should be carried out. The power supply and deflection circuitry on the chassis, the CRT panel and the neck of the CRT should be cleaned.

When cleaning the monitor on the outside:

- Always disconnect the monitor from the mains.
 - Always use a damp AND NOT WET lint-free cloth.
 - To clean the screen, apply a household glass cleaner to a cloth and then wipe the screen.
 - Do not use solvents or abrasives on the monitor.
- It might discolour the cabinet and/or affect the anti glare treatment on your screen.

3. Warnings

3.1 In order to prevent damage to ICs and transistors, all high-voltage flash-overs must be avoided. In order to prevent damage to the picture tube, the method shown in Fig 3.1 should be used to discharge the picture tube. Use a high-voltage probe and a multimeter (position DC-V). Discharge until the meter reading is 0V (after approx 30s).

3.2 ESD

All ICs and many other semiconductors are sensitive to electrostatic discharges (ESD). Careless handling during repair can drastically shorten the 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.

3.3 Be careful when taking measurements in the high-voltage section and on the picture tube panel.

3.4 Never replace modules or other components while the unit is switched on.

3.5 When making settings, use plastic rather than metal tools. This will prevent any short-circuit and the danger of a circuit becomes unstable.

3.6 After repair the wiring should be fastened once more in the cable clamps for this purpose.

3.7 Together with the deflection unit the picture tube is used as an integrated unit. Adjustment of this unit during repair is therefore not recommended.

4. Notes

The semiconductors indicated in the circuit diagram(s) and in the parts lists are completely interchangeable per position with the semiconductors in the unit, irrespective of the type indication on these semiconductors.

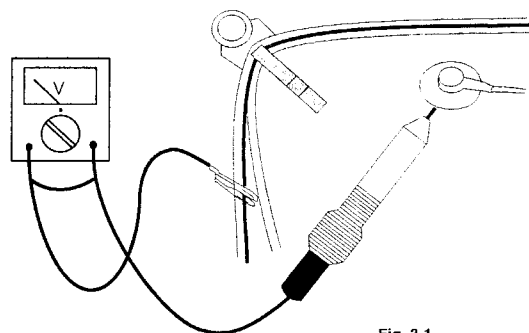


Fig. 3.1

4. Mechanical Instructions

1. Location of the Panels (see Fig. 1)

- 1.1 Deflection + Supply panel
- 1.2 Video panel
- 1.3 Power factor and audio panel
- 1.4 Moire panel
- 1.5 Control panel
- 1.6 Switch panel
- 1.7 RCA panel

2. General

To be able to perform measurements and repairs on the "circuit boards", these unit should placed in the service position first:

- Remove 4 screws.
- Release 4 plastic clamps, see Fig. 2.
- Remove back cover.
- Remove top metal shielding by 10 screws.
- Remove left side metal shielding by 3 screws.
- Release 2 plastic fixers from video panel.
- Desolder 2 joints.
- Remove video panel.
- Remove main panel by 7 screws.
- Remove bottom shielding of main panel by 3 screws.
- Desolder 12 joints from video panel.
- Place the set in service position, see Fig. 3.

3. Remark

3.1 extension cables are required for the service position.

- 4822 701 14456 (2p to 2p connector from power socket to main panel)
- 4822 701 14458 (3p to 3p connector from main panel to power factor panel)
- 4822 701 14457 (8p to 8p connector from video panel to main panel)
- 4822 701 14459 (2p to 2p connector from cancellation coil to main panel.

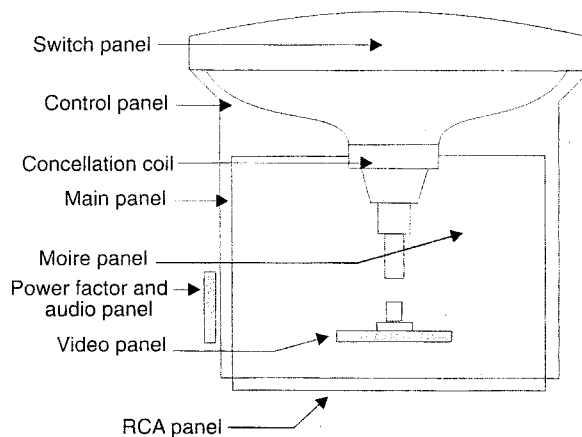


Fig. 1

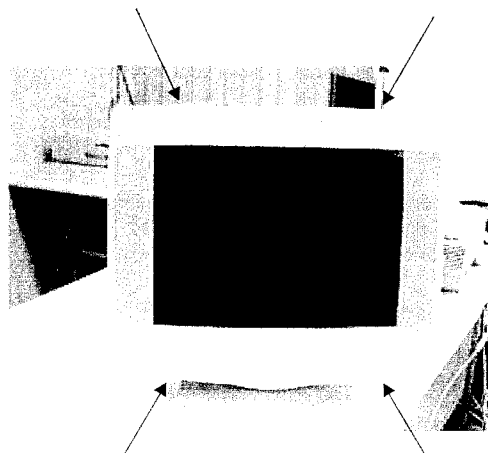


Fig. 2

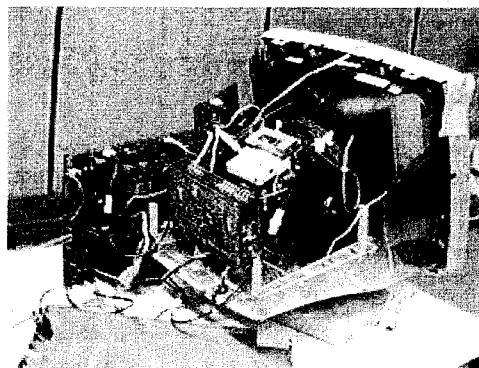
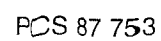


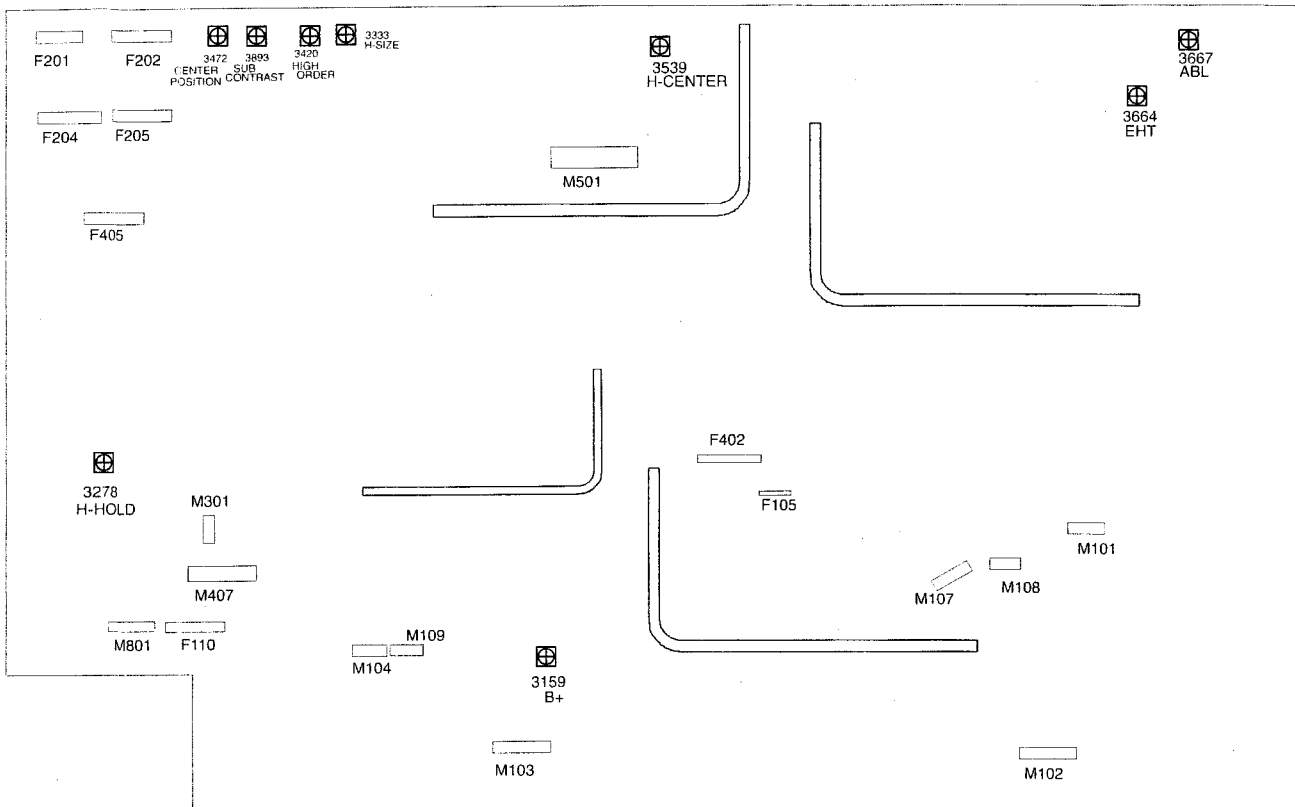
Fig. 3

CM8800 17A 7

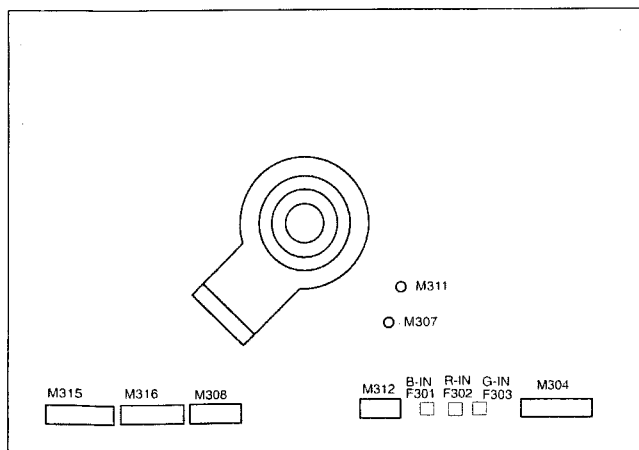


6. Alignment locations

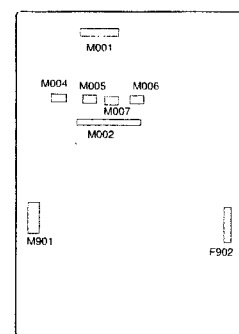
MAIN BOARD



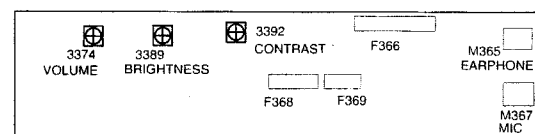
VIDEO BOARD



POWER FACTOR & AUDIO



CONTROL BOARD



0. General

When carry-out the electrical settings in many cases a video signal must be applied to the monitor. A computer with :

- ATI VGA 1024 V6-1.04/PH BETA 4 interface card
- PGA1024 (4822 212 30916)
- PGA1280 (4822 212 30917)

are used as the video signal source. The signal patterns are selected from the "service test software" package, see user guide 4822 727 19896 (ATI1024), or 4822 727 20273 (PGA 1280).

0.1 With ATI VGA1024 card:

- Installation instruction for the ATI1024 interface card.
- Place the monitor (if possible) in east-west direction.
- Place the ATI interface card into the computer.
- Select the "vsetup" file from the "utility disk" belonging to the card.
- Select "8 bits" or "16 bits" rom operation depending on your computer type.
- Select "analog monitor"
- Select the monitor type from video ROM BIOS.
- Select "MAGNAVOX CM5000" for the resolutions:

640 x 350 31.5 kHz/70 Hz
640 x 400 31.5 kHz/70 Hz
640 x 480 31.5 kHz/60 Hz
640 x 480 37.8 kHz/60 Hz
800 x 600 35.2 kHz/56 Hz
800 x 600 37.8 KHz/60 Hz
800 x 600 48.0 kHz/72 Hz
1024 x 768 35.5 kHz/87 Hz
1024 x 768 48.4 kHz/60 Hz
1024 x 768 56.0 kHz/70 Hz

- Reboot your computer again.
- Put the floppy disk containing the service test software package in the computer and select the test pattern indicated for the service setting.

0.2 With normal VGA card:

If not using the ATI card during repair or alignment, The service engineer also can use this service test software adapting with normal standard VGA adaptor and using standard VGA mode 640 x 480, 31.5 kHz/60 Hz (only) as signal source.

0.3 AC/DC Measurement:

The measurements for AC waveform and DC figure is based on 640 x 480 31.5 kHz/60 Hz resolution mode with test pattern "gray scale".

1. B+ supply voltage (3159)

- Apply a video signal in the 1024 * 768 with 56 kHz/70Hz mode.
- Select the "cross-hatch" pattern.
- Set the brightness front control and the contrast front control to the minimum position.
- Pre-set trimming potentiometer 3159 in mid-position.
- Connect a dc voltmeter between the joint of capacitor 2142 (on power supply) and ground (common ground).
- Set the B+ trimming potentiometer 3159 so that the reading on the dc voltmeter is 190 V +/- 0.5 Vdc.

2. Horizontal synchronisation (3278)

- Apply a video signal in the 1280 * 1024 with 80 kHz/75Hz mode.
- Select the "cross-hatch" pattern.

Chroma 2000 for 80kHz/75Hz timing chart

	Horizontal	Vertical
Frame border	0	0
Total size	12.504us	13.329ms

Display size	9.481us	12.804ms
Rear porch	1.837us	0.475ms
Sync width	1.067us	0.038ms
Sync polarity	+	+

- Connect a dc voltmeter between pin3 of 7481 and ground.
- Set the trimming pot-meter 3278 untill the reading of dc voltmeter is 3.45 Vdc.

3. High-voltage EHT (3664)

- Apply a video signal in the 1024 * 768 with 56 kHz/70 Hz mode.
- Select the "cross-hatch" pattern.
- Set the H-width control at minimum position (OSD scale reach to 0).
- Set the brightness front control and the contrast front control to the minimum position.
- Turn off the power.
- Connect a "high-voltage voltmeter" between the high-voltage connection of the picture tube and earth.
- Turn on the power.
- Set the EHT trimming potentiometer 3664 so that the "high-voltage voltmeter" reads 25.0 kV +/- 0.3 kV.
- Turn off the power.
- Remove the "high-voltage voltmeter" from the picture tube.
- Turn on the power again.

4. Horizontal raster centering (3539)

- Apply a video signal (e.g. crosshatch) in the 1024 * 768 with 56 kHz/70 Hz mode.
- Adjust pot-meter 3539 for the correct horizontal center of the whole raster.

5. Focus setting

- Apply a video signal in the 1024 * 768 with 56 kHz/70 Hz mode.
- Select the "@" pattern.
- Set the brightness front control to mid-position and contrast front control to maximum position.
- Adjust focus pot-meters (top of LOT) F1 for horizontal focus and F2 for vertical focus so that the picture at 2/3 of the diagonal lines (from center to four corners) of the displayed screen is as sharp as possible.

6. Factory mode service alignment with CM8800 service kit(4822 701 14455)

- This kit includes a adapt board with RS232 connector and a disk with "RS232.exe" files. (A RS232 pin to pin cable is needed when aligns, it is not included in this kit.)
- An auxiliary PC and monitor is needed when aligns.
- The end of RS232 connector connects to the auxiliary PC with RS232 port at COM1. The other end connects to monitor cable F201.
- Turn on the auxiliary PC and Run "RS232.exe".
- The alignment reference table will show on the auxiliary monitor screen, see next page.
- Alignment:
 - Press "F6" to read data of tuning frequency first.
 - Select tuning item.
 - Press "+", "-", or "Tab" key to change value.
 - Press "F3" to save aligned value.
- Note:
 - Item 12 (Color-index): Value=1, color temperature 9300K. Value=2, color temperature 6500K.
 - Item 19 (H+V/SOG): Ignore.
 - Item 20 (DEGAUSS): Press "+" or "-" key to degauss.

CM8800 17A Alignment through RS-232 Com1 Port

Esc : Quit
 Tab : Key in data
 +/- : Increase/ Decrease
 Cursor key : Select Function
 F3 : Save DATA to EEPROM
 F4/F5 : Power Saving On/Off (Now is ON)
 F6 : Read Data H_Freq: xx.xKHz(xxx), V_Freq: xx.xHz(xxx)
 Select : VALUE:

01:H-SHIFT	02:H-SIZE	03:V-SHIFT	04:V-SIZE
05:TRAPEZOID	06:PIN/BARREL	07:SIDE-PIN	08:PARALLELOGRAM
09:ROTATION	10:H-MOIRE	11: V-MOIRE	12: COLOR-INDEX
13:R-GAIN	14:G-GAIN	15:B-GAIN	16:R-CUTOFF
17:G-CUTOFF	18:B-CUTOFF	19:H+V/SOG	20:DEGAUSS

7. Adjustment of cut-off

- VG2 setting (screen, bottom on the LOT).
- Set the contrast front control to minimum position.
- Set the brightness front control to center mechanical position.
- * Apply a video signal in the 1024 * 768 with 56 kHz/70 Hz mode.
- * Select the full white pattern.
- Set VG2 pot-meter (screen) to minimum.
- Using VG2 setting knob, increasing VG2 voltage until any color among red, green, blue becomes "just visible".
- Adjust rgb cut off by service kit.
- Adjust r, g, b cut off to the "two remaining" colors to the same light output level, so that an optimal background (raster) color is obtained.

- Remark: color temperature

9300 K: X=0.281 +/- 0.02
 Y=0.311 +/- 0.02

6500 K: X=0.313 +/- 0.02
 Y=0.329 +/- 0.02

8. White "D"

- Apply 1024*768 56k/70 Hz full white pattern.
- Set the contrast front control to the maximum position.
- Set the brightness front control to center mechanical position.
- Adjust RGB gain so that an optimal display color (White "D") is obtained by service kit.
- Apply square white pattern adjust sub-contrast 3893 to get light output 40 +/- 2 FL for 9300 K.(35 +/- 2FL for 6500 K).
- Apply full white pattern,adjust ABL 3667 to get light output 26 +/- 2 FL.

9. Picture geometry setting (factory pre-set modes)

- Set brightness front control and the contrast front control in the mechanical central position.
- Apply a video signal with cross-hatch pattern.
- Apply a video signal in the 1280 * 1024 with 64 kHz/60 Hz mode.

9.1 Horizontal geometry

- Adjust the H-width to 288 mm (only for 64k/60hz and 80k/75hz and 79.3k/60hz) for others mode should be 300mm.
- Adjust the H-phase to center position.

9.2 Vertical geometry

- Adjust vertical size to 230 mm (only for 64k/60hz and 80k/75hz and 79.3k/60hz) for others mode should be 225 mm.

- Adjust V-phase to center position.

9.3 Pincushion-barrel distortion

- Adjust the pincushion-barrel to straight vertical lines of the left and right edge.

9.4 Trapezium distortion

- Adjust the trapezium to get optimal vertical line.

9.5 Parallelogram distortion

- Adjust parallelogram to get optimal vertical line.

9.6 Unbalance pincushion distortion

- Adjust unbalance-pincushion to get optimal vertical line.

9.7 Store the preset result

- Repeat the procedure 9.1 to 9.6 until all the preset timing has been adjusted completely.

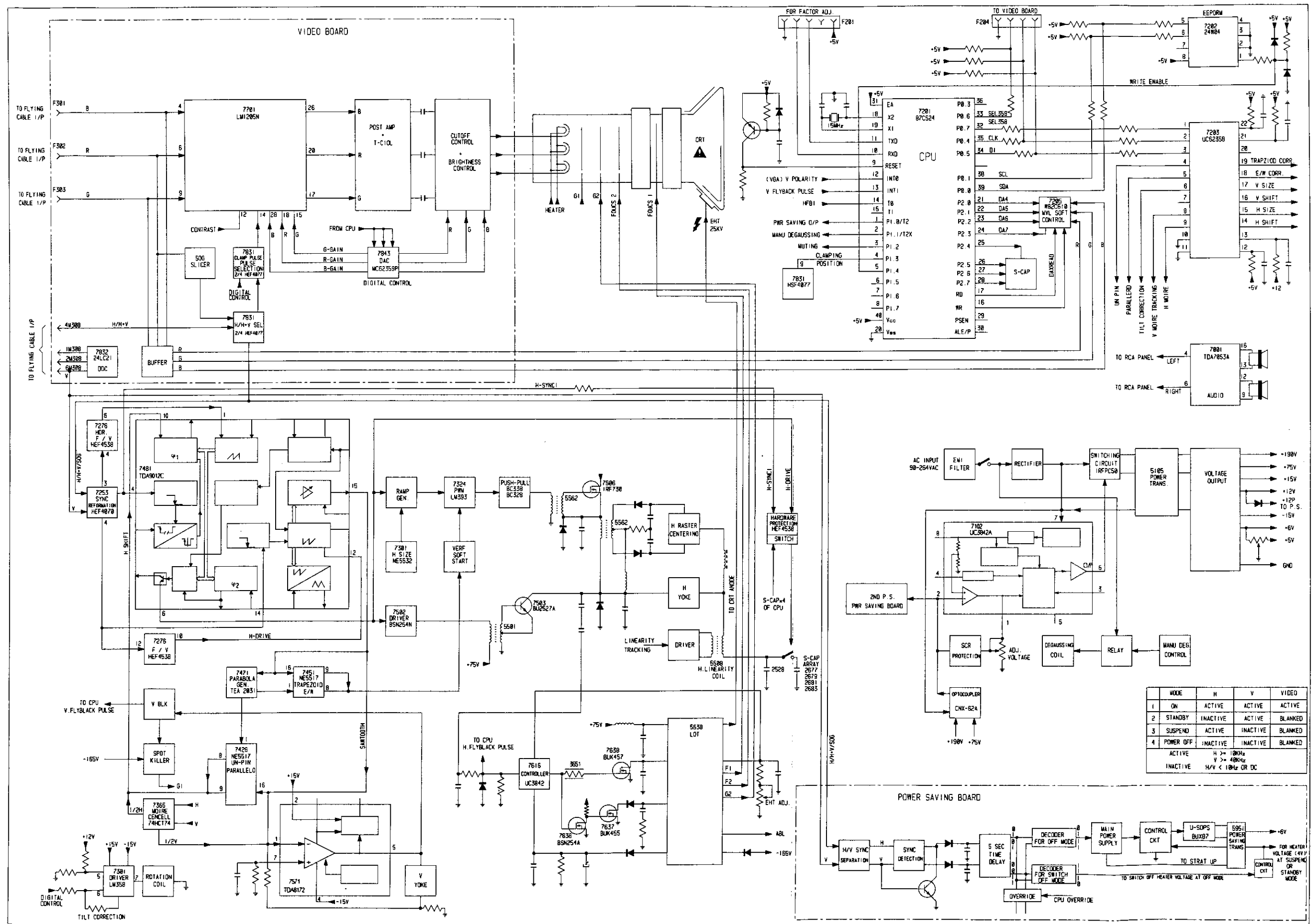
9.9 High order correction (3420)

- Adjust 3420 to get optimal vertical line.

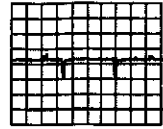
Block diagram

CM8800 17A

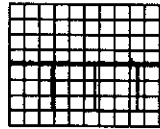
11



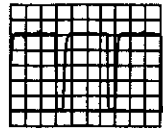
A49 7841-3

0.5V/div AC
5us/div

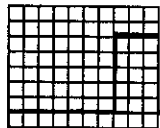
A57 F283-14

1V/div AC
5ms/div

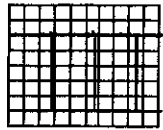
A50 7841-5

1V/div AC
5us/div

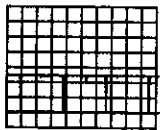
A58 7041-5

1V/div AC
5ms/div

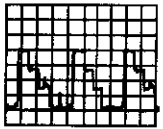
A51 7841-10

1V/div AC
5ms/div

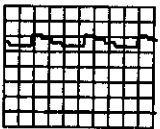
A59 7041-7

1V/div AC
5ms/div

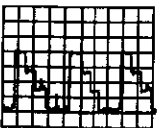
A52 F283-1

0.2V/div AC
5us/div

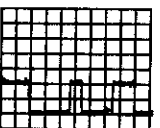
A60 7291-B

1V/div AC
5us/div

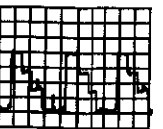
A53 F283-2

0.2V/div AC
5us/div

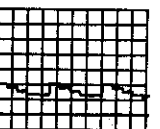
A61 7291-C

0.2V/div AC
5us/div

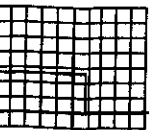
A54 F286-3

0.2V/div AC
5us/div

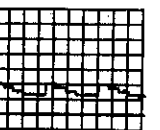
A62 7252-E

1V/div AC
5us/div

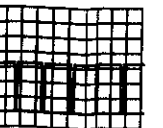
A55 F283-12

2V/div AC
5ms/div

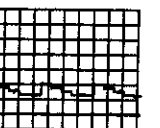
A63 7262-E

1V/div AC
5us/div

A56 F283-13

1V/div AC
10us/div

A64 7272-E

1V/div AC
5us/div

36451

7781 D 5	3840 E 3	3798 B 5	3733 D 4	2833 D 7	2743 B 8	F301 E 5
7711 C 1	3848 E 3	3791 A 7	3734 A 2	2834 C 7	2744 B 8	F302 E 5
7712 B 7	3849 D 1	3792 A 7	3735 B 7	2835 D 8	2745 E 4	F303 E 8
7713 C 1	3855 E 7	3794 B 5	3736 B 2	2836 C 7	2746 A 5	F305 C 3
7714 A 2	3850 E 7	3795 A 7	3737 A 2	2837 C 7	2747 B 3	M304 E 7
7715 A 2	3857 E 7	3796 B 5	3738 A 2	2838 E 7	2748 A 4	M307 D 4
7716 C 5	3858 E 6	3797 A 6	3739 B 2	2839 E 7	2749 C 5	M308 E 4
7717 E 4	3859 E 6	3798 A 6	3740 C 5	2840 D 1	2750 E 2	M309 D 4
7718 B 5	3860 E 6	3799 B 5	3741 E 5	2841 D 1	2751 A 3	M311 C 4
7721 B 8	3861 A 7	3800 E 1	3742 D 5	2842 D 7	2752 B 4	M312 E 5
7722 C 7	3862 D 6	3801 D 7	3743 E 5	2843 D 7	2753 E 6	M315 E 2
7723 A 5	3871 C 7	3802 E 3	3744 C 5	2844 D 6	2754 E 6	M316 E 3
7724 A 3	3872 D 7	3803 E 3	3745 B 6	2845 C 7	2751 D 8	2701 D 5
7725 A 3	3874 D 5	3804 D 4	3746 B 6	2846 C 7	2752 B 5	2702 B 5
7726 C 5	3875 C 6	3805 C 4	3747 B 6	2851 E 7	2753 B 5	2703 D 5
7727 E 5	5781 D 4	3806 D 7	3748 A 5	2852 E 7	2766 B 7	2704 D 5
7728 C 5	5782 C 7	3807 B 7	3749 C 5	2853 E 6	2767 B 5	2705 D 5
7731 C 6	5711 C 2	3808 D 1	3750 E 5	2854 E 6	2768 A 6	2706 D 6
7732 B 7	5712 A 1	3809 D 1	3751 B 7	2855 E 6	2769 C 6	2707 D 6
7733 B 6	5721 A 4	3811 B 7	3752 C 6	2856 B 7	2771 A 7	2708 D 6
7734 A 6	5722 A 3	3812 D 2	3753 A 5	2857 E 7	2772 C 5	2709 D 6
7735 A 7	5723 A 7	3813 D 5	3754 A 4	2858 E 4	2773 A 6	2710 C 5
7736 C 8	5731 B 6	3814 D 6	3757 C 5	2859 E 4	2891 E 1	2711 C 5
7737 E 5	5732 A 6	3815 D 6	3758 C 5	2781 C 6	2882 D 7	2712 D 5
7738 D 8	5801 B 1	3816 C 7	3759 C 5	3762 E 6	2883 E 2	2713 D 6
7801 D 3	5802 C 2	3817 C 8	3768 B 6	3769 D 4	2884 E 1	2714 D 6
7822 C 1	5803 B 1	3819 C 7	3761 A 3	3764 B 7	2885 E 2	2715 D 5
7823 C 1	5804 E 1	3819 B 7	3762 A 3	3765 C 5	2886 E 2	2716 C 6
7831 C 1	5812 D 1	3820 D 1	3763 E 4	3766 E 4	2887 E 3	2717 D 5
7832 D 1	5813 D 2	3821 D 7	3764 A 3	3767 E 4	2888 B 4	2718 C 5
7834 C 1	5831 D 7	3822 D 6	3765 C 5	3768 E 4	2889 C 4	2719 D 6
7835 D 2	6702 B 2	3823 C 1	3766 B 4	3769 E 5	2810 C 4	2720 E 4
7841 C 8	6711 B 2	3824 D 6	3767 A 3	3710 E 6	2811 B 7	2721 D 5
7843 D 8	6712 B 2	3825 D 1	3768 A 3	3711 E 5	2812 C 6	2722 E 4
7844 A 7	6721 B 4	3826 C 1	3769 B 4	3712 D 5	2813 E 3	2723 B 1
	6722 A 4	3827 C 1	3770 E 6	3713 B 7	2814 C 1	2724 B 1
	6731 A 5	3828 C 1	3771 E 6	3714 C 1	2815 A 1	2725 C 5
	6732 B 5	3829 E 4	3772 D 8	3715 B 1	2816 E 2	2726 D 7
	6801 B 1	3830 E 5	3773 E 5	3716 B 1	2817 D 4	2727 B 1
	6802 B 1	3831 C 1	3774 C 6	3717 B 1	2818 E 8	2728 A 1
	6803 D 6	3832 C 2	3775 B 8	3718 B 1	2819 B 5	2729 B 2
	6804 D 4	3833 E 8	3776 B 8	3719 C 5	2820 B 5	2730 D 5
	6805 C 1	3834 E 8	3777 B 8	3720 C 5	2822 D 7	2731 A 2
	6823 D 1	3835 B 1	3778 C 6	3721 C 6	2823 C 1	2732 B 3
	6824 D 2	3836 A 6	3779 C 6	3722 B 7	2824 D 2	2733 E 5
	6825 D 2	3837 C 1	3780 C 6	3723 C 7	2825 D 1	2734 E 4
	6826 D 2	3838 C 1	3781 C 6	3724 B 1	2826 D 1	2736 E 4
	6827 D 1	3839 B 6	3782 B 7	3726 A 2	2827 D 1	2737 E 5
	6828 D 1	3841 D 1	3783 C 7	3728 C 5	2828 C 7	2738 E 5
	6829 E 1	3842 D 2	3784 B 6	3729 C 5	2829 C 1	2739 B 1
	6830 E 1	3843 E 3	3785 A 7	3730 D 5	2830 C 2	2740 A 6
	6831 A 7	3844 D 2	3786 C 5	3731 A 2	2831 C 6	2741 E 5
	6833 C 7	3845 D 1	3789 C 6	3732 A 2	2832 C 6	2742 B 6

7

6

5

4

3

2

1

A

B

C

D

E

A

B

C

D

E

7

6

5

4

3

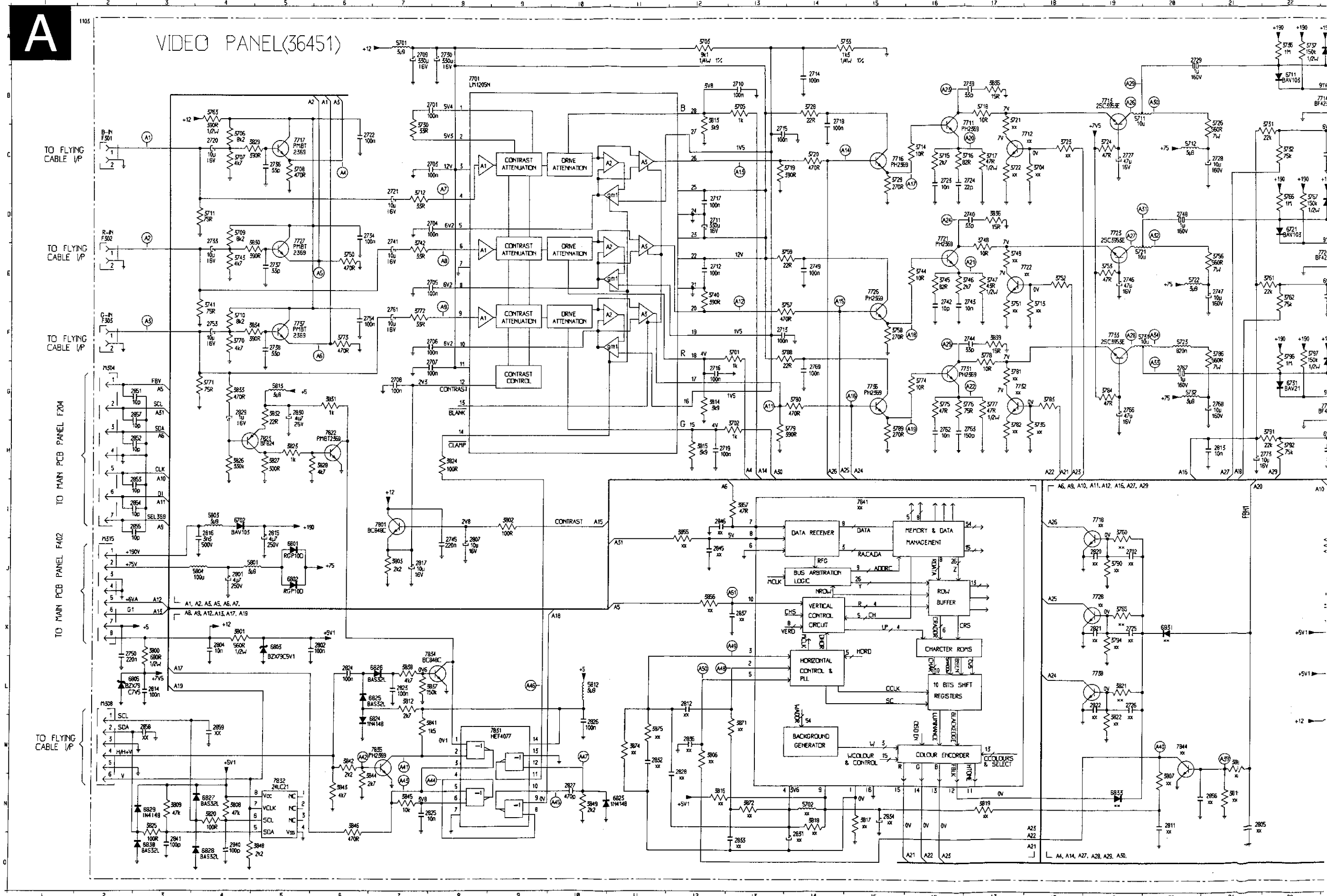
2

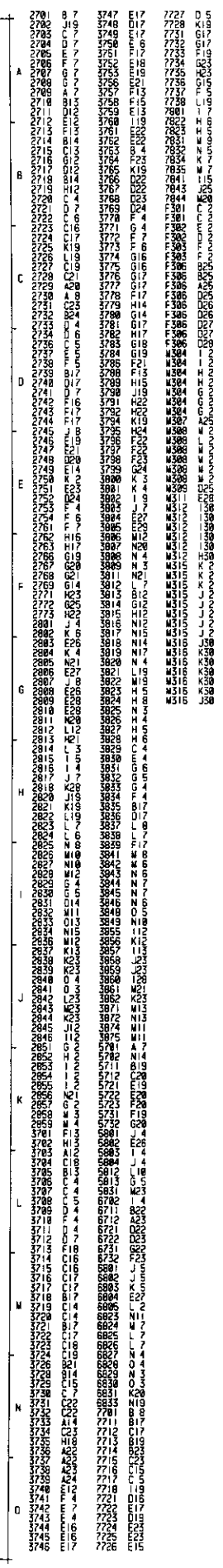
1

Video

A

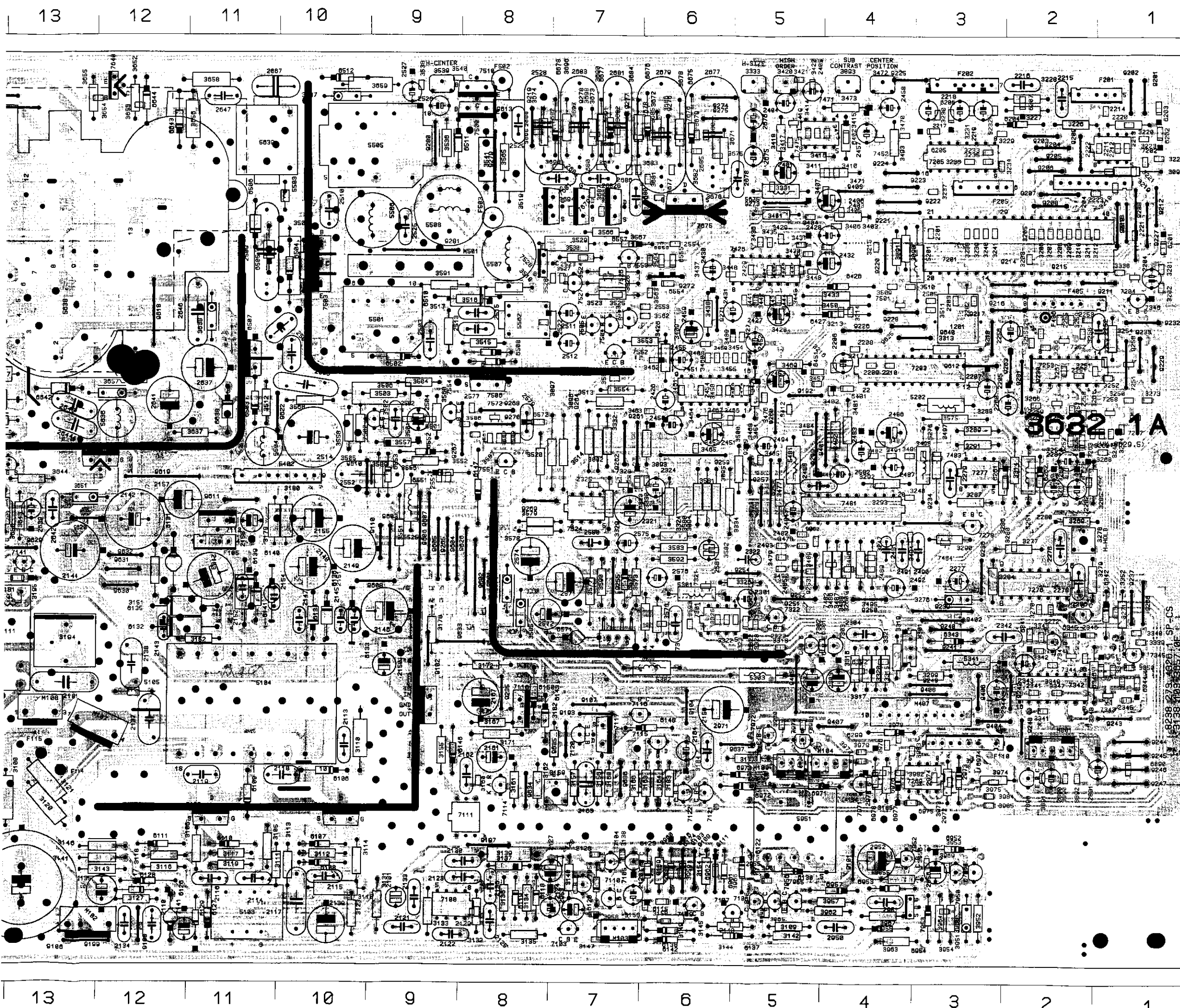
VIDEO PANEL(36451)





5V/div AC
5 μ s/div

F105 F 11	2217 A 3	2582 E 4	3144 J 6	3281 E 2	3464 D 6	3593 G 6	3967 J 4	6346 G 1	7341 G 2	9230 D 2
F106 E 16	2218 A 3	2601 C 15	3145 J 5	3282 E 2	3465 E 6	3601 D 16	3968 J 3	6401 D 4	7342 G 2	9231 D 2
F110 H 3	2219 A 3	2602 D 14	3146 J 2	3283 E 2	3466 D 6	3602 C 15	3969 J 1	6402 B 4	7343 H 1	9232 C 1
F114 H 13	2220 A 1	2603 D 15	3147 J 7	3284 G 3	3467 D 6	3603 C 16	3972 H 4	6425 C 1	7344 G 2	9233 D 1
F115 H 13	2221 B 1	2617 E 15	3149 J 6	3285 E 2	3468 D 5	3604 C 15	3973 J 3	6427 C 1	7345 H 1	9234 F 3
F201 A 2	2222 B 1	2617 E 15	3150 J 6	3286 E 3	3469 D 5	3605 C 15	3974 H 3	6451 D 5	7346 C 1	9235 G 1
F202 A 3	2223 B 2	2618 F 15	3151 F 12	3287 E 3	3470 A 4	3606 C 15	3975 J 3	6501 E 9	7426 C 5	9236 F 3
F204 B 1	2251 D 2	2619 E 15	3152 G 11	3288 E 3	3471 B 5	3607 D 15	3976 H 4	6502 D 9	7451 D 5	9237 F 1
F205 B 3	2252 C 1	2620 E 16	3153 J 8	3289 C 3	3472 A 4	3608 D 15	3978 H 4	6503 D 11	7452 A 4	9238 C 1
F402 E 11	2253 C 2	2621 B 15	3154 J 6	3290 F 3	3473 A 4	3609 D 15	3979 H 4	6504 C 10	7471 A 5	9239 G 3
F405 C 1	2254 D 2	2622 E 15	3155 H 9	3291 E 3	3474 D 5	3610 D 15	3980 H 5	6505 B 11	7475 A 5	9240 G 3
F406 C 2	2255 C 2	2623 E 15	3156 H 7	3292 E 4	3475 D 5	3611 D 15	3981 H 5	6506 B 11	7481 F 1	9241 G 3
F502 A 8	2256 C 2	2624 D 15	3157 J 7	3293 E 4	3476 D 5	3612 D 15	3982 H 4	6507 D 11	7482 F 1	9242 H 2
F503 B 8	2257 D 2	2625 B 16	3158 J 8	3294 E 4	3477 E 5	3613 E 15	3983 H 4	6508 D 8	7483 E 3	9243 H 1
J1 F 16	2258 E 2	2626 B 16	3160 H 8	3295 E 4	3478 F 5	3614 E 15	3984 J 3	6509 D 8	7484 F 3	9244 H 1
J1 F 16	2259 D 2	2627 E 14	3161 H 8	3296 E 4	3479 F 5	3615 E 16	3985 J 3	6510 C 9	7501 C 4	9245 H 1
M101 G 14	2260 D 2	2628 E 15	3162 H 8	3297 E 4	3480 F 5	3620 E 14	3986 J 3	6511 E 9	7502 E 9	9246 H 1
M102 J 13	2276 F 2	2629 C 15	3163 J 6	3298 E 4	3481 D 4	3621 E 15	3987 J 3	6512 A 10	7503 C 10	9247 J 1
M103 J 7	2277 F 3	2630 C 15	3164 H 8	3299 E 4	3482 E 4	3622 F 14	3988 J 3	6513 J 11	7504 D 7	9248 H 2
M104 H 4	2278 F 2	2631 B 16	3165 J 7	3300 E 4	3483 E 4	3623 F 14	3989 J 3	6514 J 11	7505 D 7	9249 G 3
M107 H 13	2279 E 3	2632 D 11	3167 H 8	3301 G 4	3484 E 5	3624 F 15	3990 J 3	6515 H 12	7506 D 8	9250 G 4
M108 H 13	2280 E 2	2633 B 15	3168 J 7	3302 G 4	3485 E 5	3625 E 15	3991 G 4	6516 C 8	7507 A 8	9251 G 5
M109 H 5	2281 E 2	2634 B 15	3169 J 6	3303 G 4	3486 F 4	3626 D 15	3992 G 4	6517 C 8	7508 A 8	9252 F 5
M301 G 4	2282 E 2	2640 D 14	3171 H 8	3304 G 4	3487 F 4	3627 D 15	3993 G 4	6518 C 8	7509 A 8	9253 F 5
M407 H 3	2301 G 5	2641 D 12	3172 H 8	3305 G 4	3488 F 4	3628 D 15	3994 G 4	6519 C 8	7510 A 8	9254 F 6
M501 C 10	2302 G 5	2642 F 13	3173 H 8	3306 G 4	3489 F 4	3629 C 15	3995 G 4	6520 C 8	7511 A 8	9255 F 6
M801 H 2	2303 G 4	2643 D 13	3174 H 8	3307 G 4	3490 F 5	3630 C 16	3996 G 4	6521 C 8	7512 A 8	9256 F 6
1101 G 14	2304 G 4	2644 E 13	3175 F 11	3308 G 4	3491 E 4	3631 C 15	3997 G 4	6522 C 8	7513 A 8	9257 F 6
1111 F 13	2321 F 7	2645 A 14	3176 F 10	3309 G 4	3492 E 4	3632 C 15	3998 G 4	6523 C 8	7514 A 8	9258 D 6
1201 C 3	2322 F 5	2646 D 11	3182 H 7	3310 G 4	3493 A 4	3633 E 12	3999 G 4	6524 C 8	7515 A 8	9259 E 6
2101 G 14	2323 G 5	2647 A 11	3183 H 7	3311 G 4	3494 F 4	3634 E 12	4000 G 4	6525 C 8	7516 A 8	9260 E 6
2102 G 14	2324 E 6	2648 A 11	3184 H 7	3312 G 4	3495 F 4	3635 E 12	4001 G 4	6526 C 8	7517 A 8	9261 E 6
2103 H 14	2325 E 6	2649 A 11	3185 H 7	3313 G 4	3496 F 4	3636 E 12	4002 G 4	6527 C 8	7518 A 8	9262 E 6
2104 H 14	2326 E 6	2650 A 11	3186 H 7	3314 G 4	3497 F 4	3637 E 12	4003 G 4	6528 C 8	7519 A 8	9263 E 6
2105 I 15	2327 E 6	2651 A 11	3187 H 7	3315 G 4	3498 F 4	3638 E 12	4004 G 4	6529 C 8	7520 A 8	9264 E 6
2106 I 16	2328 E 6	2652 A 11	3188 H 7	3316 G 4	3499 F 4	3639 E 12	4005 G 4	6530 C 8	7521 A 8	9265 F 6
2107 I 16	2329 E 6	2653 A 11	3189 H 7	3317 G 4	3500 F 4	3640 E 12	4006 G 4	6531 C 8	7522 A 8	9266 F 6
2108 J 15	2330 E 6	2654 A 11	3190 H 7	3318 G 4	3501 F 4	3641 E 12	4007 G 4	6532 C 8	7523 A 8	9267 E 6
2109 H 14	2331 E 6	2655 A 11	3191 H 7	3319 G 4	3502 F 4	3642 E 12	4008 G 4	6533 C 8	7524 A 8	9268 D 6
2110 J 12	2332 E 6	2656 A 11	3192 H 7	3320 G 4	3503 F 4	3643 E 12	4009 G 4	6534 C 8	7525 A 8	9269 D 6
2111 J 13	2333 E 6	2657 A 11	3193 H 7	3321 G 4	3504 F 4	3644 E 12	4010 G 4	6535 C 8	7526 A 8	9270 E 6
2112 I 14	2334 E 6	2658 A 11	3194 H 7	3322 G 4	3505 F 4	3645 E 12	4011 G 4	6536 C 8	7527 A 8	9271 D 6
2113 H 10	2335 E 6	2659 A 11	3195 H 7	3323 G 4	3506 F 4	3646 E 12	4012 G 4	6537 C 8	7528 A 8	9272 C 6
2114 J 11	2336 E 6	2660 A 11	3196 H 7	3324 G 4	3507 F 4	3647 E 12	4013 G 4	6538 C 8	7529 A 8	9273 B 6
2115 J 10	2337 E 6	2661 A 11	3197 H 7	3325 G 4	3508 F 4	3648 E 12	4014 G 4	6539 C 8	7530 A 8	9274 A 6
2116 J 11	2338 E 6	2662 A 11	3198 H 7	3326 G 4	3509 F 4	3649 E 12	4015 G 4	6540 C 8	7531 A 8	9275 A 6
2117 J 10	2339 E 6	2663 A 11	3199 H 7	3327 G 4	3510 F 4	3650 E 12	4016 G 4	6541 C 8	7532 A 8	9276 A 6
2118 H 11	2340 E 6	2664 A 11	3200 H 7	3328 G 4	3511 F 4	3651 E 12	4017 G 4	6542 C 8	7533 A 8	9277 A 7
2119 H 11	2341 E 6	2665 A 11	3201 H 7	3329 G 4	3512 F 4	3652 E 12	4018 G 4	6543 C 8	7534 A 8	9278 A 7
2120 J 7	2342 E 6	2666 A 11	3202 H 7	3330 G 4	3513 F 4	3653 E 12	4019 G 4	6544 C 8	7535 A 8	9279 B 8
2121 J 9	2343 E 6	2667 A 11	3203 H 7	3331 G 4	3514 F 4	3654 E 12	4020 G 4	6545 C 8	7536 A 8	9280 B 8
2122 J 8	2344 E 6	2668 A 11	3204 H 7	3332 G 4	3515 F 4	3655 E 12	4021 G 4	6546 C 8	7537 A 8	9281 C 9
2123 J 8	2345 E 6	2669 A 11	3205 H 7	3333 G 4	3516 F 4	3656 E 12	4022 G 4	6547 C 8	7538 A 8	9282 C 9
2124 J 7	2346 E 6	2670 A 11	3206 H 7	3334 G 4	3517 F 4	3657 E 12	4023 G 4	6548 C 8	7539 A 8	9283 E 9
2125 J 8	2347 E 6	2671 A 11	3207 H 7	3335 G 4	3518 F 4	3658 E 12	4024 G 4	6549 C 8	7540 A 8	9284 E 9
2126 J 7	2348 E 6	2672 A 11	3208 H 7	3336 G 4	3519 F 4	3659 E 12	4025 G 4	6550 C 8	7541 A 8	9285 E 9
2127 J 7	2349 E 6	2673 A 11	3209 H 7	3337 G 4	3520 F 4	3660 E 12	4026 G 4	6551 C 8	7542 A 8	9286 E 9
2128 J 7	2350 E 6	2674 A 11	3210 H 7	3338 G 4	3521 F 4	3661 E 12	4027 G 4	6552 C 8	7543 A 8	9287 E 9
2129 J 8	2351 E 6	2675 A 11	3211 H 7	3339 G 4	3522 F 4	3662 E 12	4028 G 4	6553 C 8	7544 A 8	9288 E 9
2130 J 8	2352 E 6	2676 A 11	3212 H 7	3340 G 4	3523 F 4	3663 E 12	4029 G 4	6554 C 8	7545 A 8	9289 E 9
2131 J 9	2353 E 6	2677 A 11	3213 H 7	3341 G 4	3524 F 4	3664 E 12	4030 G 4	6555 C 8	7546 A 8	9290 E 9
2132 J 9	2354 E 6	2678 A 11	3214 H 7	3342 G 4	3525 F 4	3665 E 12	4031 G 4	6556 C 8	7547 A 8	9291 E 9
2133 J 9	2355 E 6	2679 A 11	3215 H 7	3343 G 4	3526 F 4	3666 E 12	4032 G 4	6557 C 8	7548 A 8	9292 E 9
2134 J 12	2356 E 6	2680 A 11	3216 H 7	3344 G 4	3527 F 4	3667 E 12	4033 G 4	6558 C 8	7549 A 8	9293 E 9
2135 J 12	2357 E 6	2681 A 11	3217 H 7	3345 G 4	3528 F 4	3668 E 12	4034 G 4	6559 C 8	7550 A 8	9294 E 9
2136 J 8	2358 E 6	2682 A 11	3218 H 7	3346 G 4	3529 F 4	3669 E 12	4035 G 4	6560 C 8	7551 A 8	9295 E 9
2137 H 12	2359 E 6	2683 A 11	3219 H 7	3347 G 4	3530 F 4	3670 E 12	4036 G 4	6561 C 8	7552 A 8	9296 E 9
2138 G 12	2360 E 6	2684 A 11	3220 H 7	3348 G 4	3531 F 4	3671 E 12	4037 G 4	6562 C 8	7553 A 8	9297 E 9
2139 J 10	2361 E 6	2685 A 11	3221 H 7	3349 G 4	3532 F 4	3672 E 12	4038 G 4	6563 C 8	7554 A 8	9298 E 9
2140 J 5	2362 E 6	2686 A 11	3222 H 7	3350 G 4	3533 F 4	3673 E 12	4039 G 4	6564 C 8	7555 A 8	9299 E 9
2141 J 12	2363 E 6	2687 A 11	3223 H 7	3351 G 4	3534 F 4	3674 E 12	4040 G 4	6565 C 8	7556 A 8	9300 E 9
2142 F 12	2364 E 6	2688 A 11	3224 H 7	3352 G 4	3535 F 4	3675 E 12	4041 G 4	6566 C 8	7557 A 8	9301 E 9
2143 G 12	2365 E 6	2689 A 11	3225 H 7	3353 G 4	3536 F 4	3676 E 12	4042 G 4	6567 C 8	7558 A 8	9302 E 9
2144 F 12	2366 E 6	2690 A 11	3226 H 7	3354 G 4	3537 F 4	3677 E 12	4043 G 4	6568 C 8	7559 A 8	9303 E 9
2145 G 10	2367 E 6	2691 A 11	3227 H 7	3355 G 4	3538 F 4	3678 E 12	4044 G 4	6569 C 8	7560 A 8	9304 E 9
2146 G 9	2368 E 6	2692 A 11	3228 H 7	3356 G 4	3539 F 4	3679 E 12	4045 G 4	6570 C 8	7561 A 8	9305 E 9
2147 G 10	2369 E 6	2693 A 11	3229 H 7	3357 G 4	3540 F 4	3680 E 12	4046 G 4	6571 C 8	7562 A 8	9306 E 9
2148 F 10	2370 E 6	2694 A 11	3230 H 7	3358 G 4	3541 F 4	3681 E 12	4047 G 4	6572 C 8	7563 A 8	9307 E 9
2149 F 10	2371 E 6	2695 A 11	3231 H 7	3359 G 4	3542 F 4	3682 E 12	4048 G 4	6573 C 8	7564 A 8	9308 E 9
2150 G 9	2372 E 6	2696 A 11	3232 H 7	3360 G 4	3543 F 4	3683 E 12	4049 G 4	6574 C 8	7565 A 8	9309 E 9
2151 G 10	2373 E 6	2697 A 11	3233 H 7	3361 G 4	3544 F 4	3684 E 12	4050 G 4	6575 C 8	7566 A 8	9310 E 9
2152 G 11	2374 E 6	2698 A 11	3234 H 7	3362 G 4	3545 F 4	3685 E 12	4051 G 4	6576 C 8	7567 A 8	9311 E 9
2153 F 11	2375 E 6	2699 A 11	3235 H 7	3363 G 4	3546 F 4	3686 E 12	4052 G 4	6577 C 8	7568 A 8	9312 E 9
2154 G 11	2376 E 6	2700 A 11	3236 H 7	3364 G 4	3547 F 4	3687 E 12	4053 G 4	6578 C 8	7569 A 8	9313 E 9
2155 F 10	2377 E 6	2701 A 11	3237 H 7	3365 G 4	3548 F 4	3688 E 12	4054 G 4	6579 C 8	7570 A 8	9314 E 9
2156 H 6	2378 E 6	2702 A 11	3238 H 7	3366 G 4	3549 F 4	3689 E 12	4055 G 4	6580 C 8	7571 A 8	9315 E 9
2157 E 11	2379 E 6	2703 A 11	3239 H 7	3367 G 4	3550 F 4	3690 E 12	4056 G 4	6581 C 8	7572 A 8	9316 E 9
2158 F 11	2380 E 6	2704 A 11	3240 H 7	3368 G 4	3551 F 4	3691 E 12	4057 G 4	6582 C 8	7573 A 8	9317 E 9
2159 H 8	2381 E 6	2705 A 11	3241 H 7	3369 G 4	3552 F 4	369				

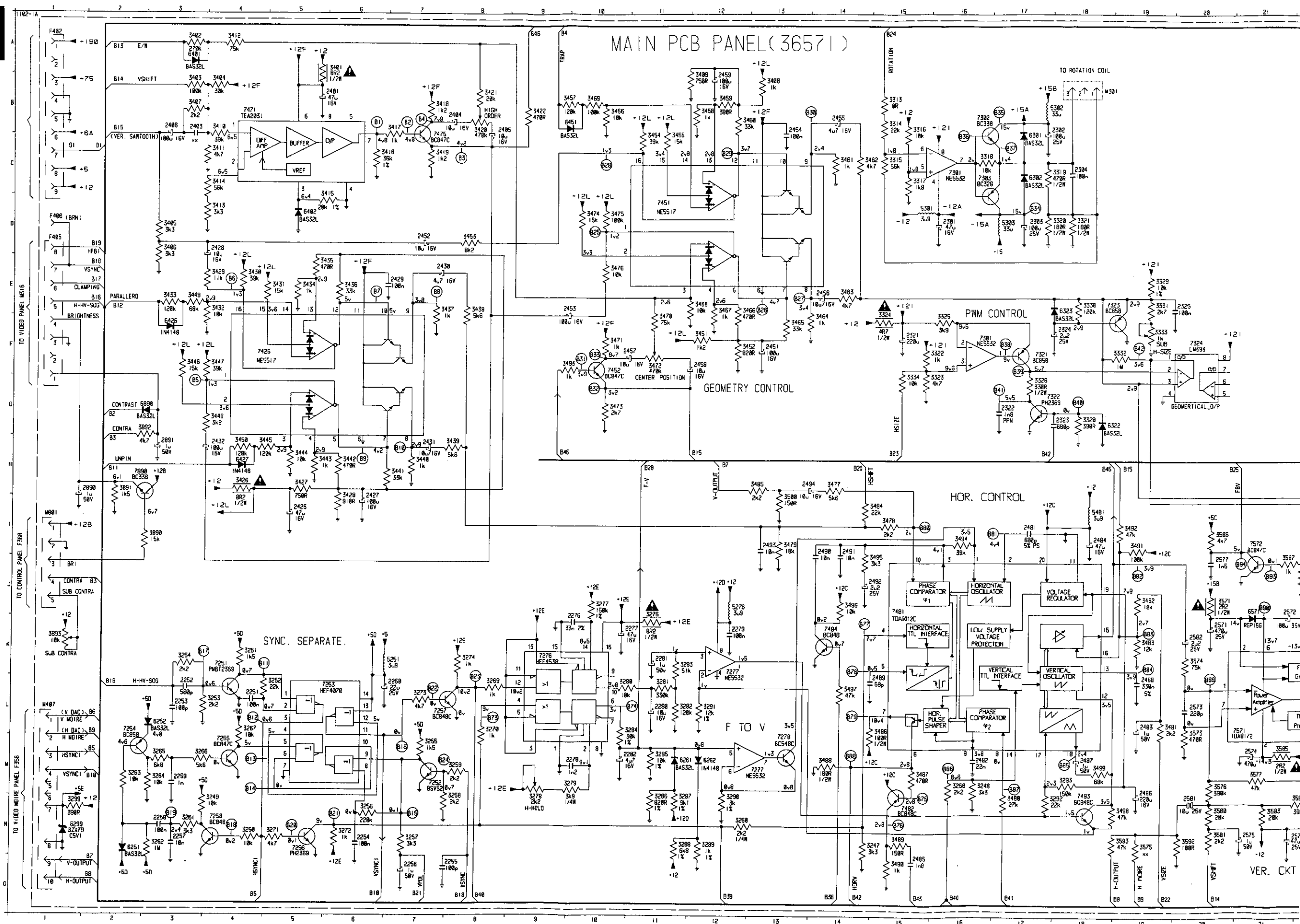


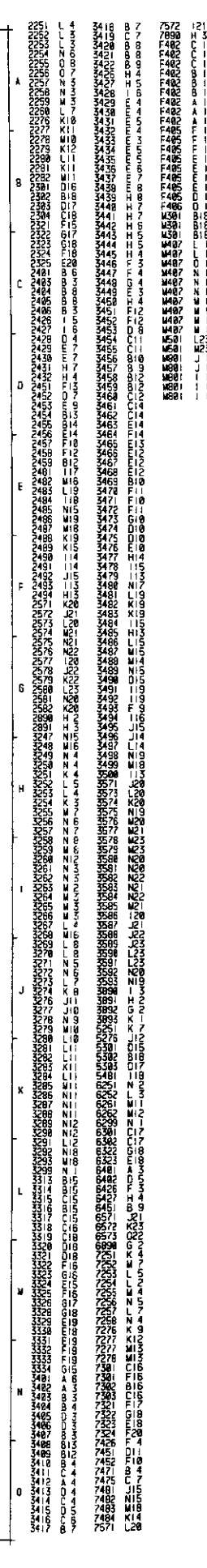
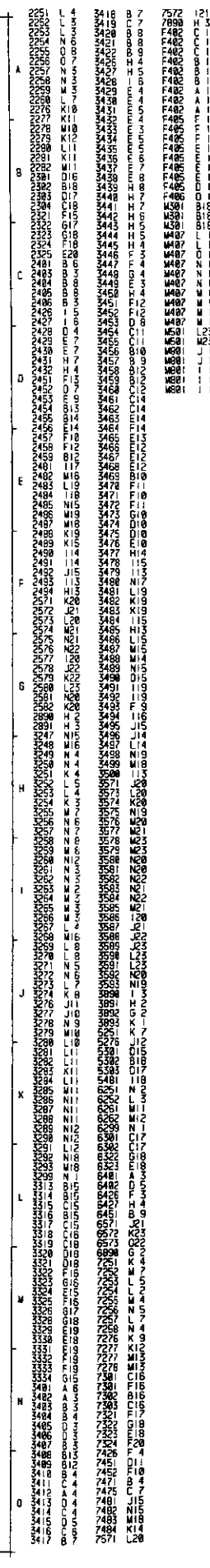
A
B
C
D
E
F
G
H
I
J

8632.1 A

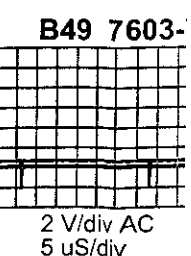
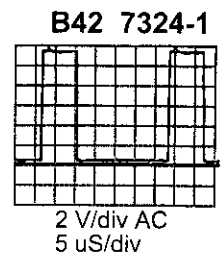
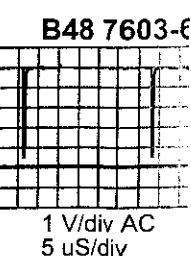
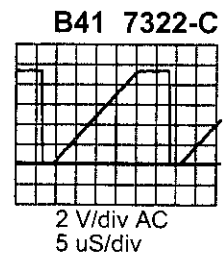
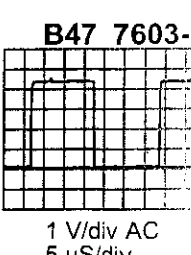
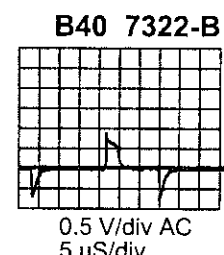
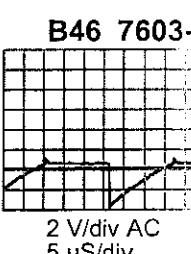
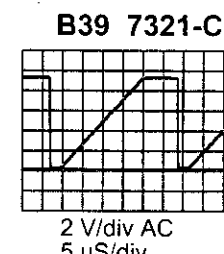
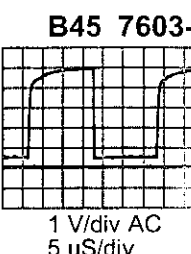
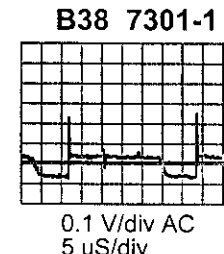
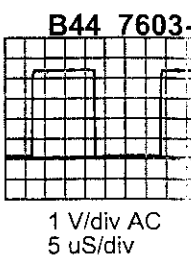
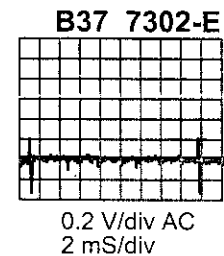
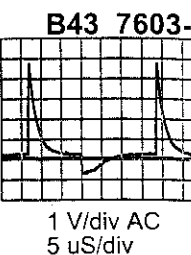
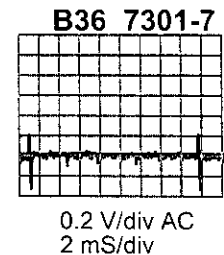
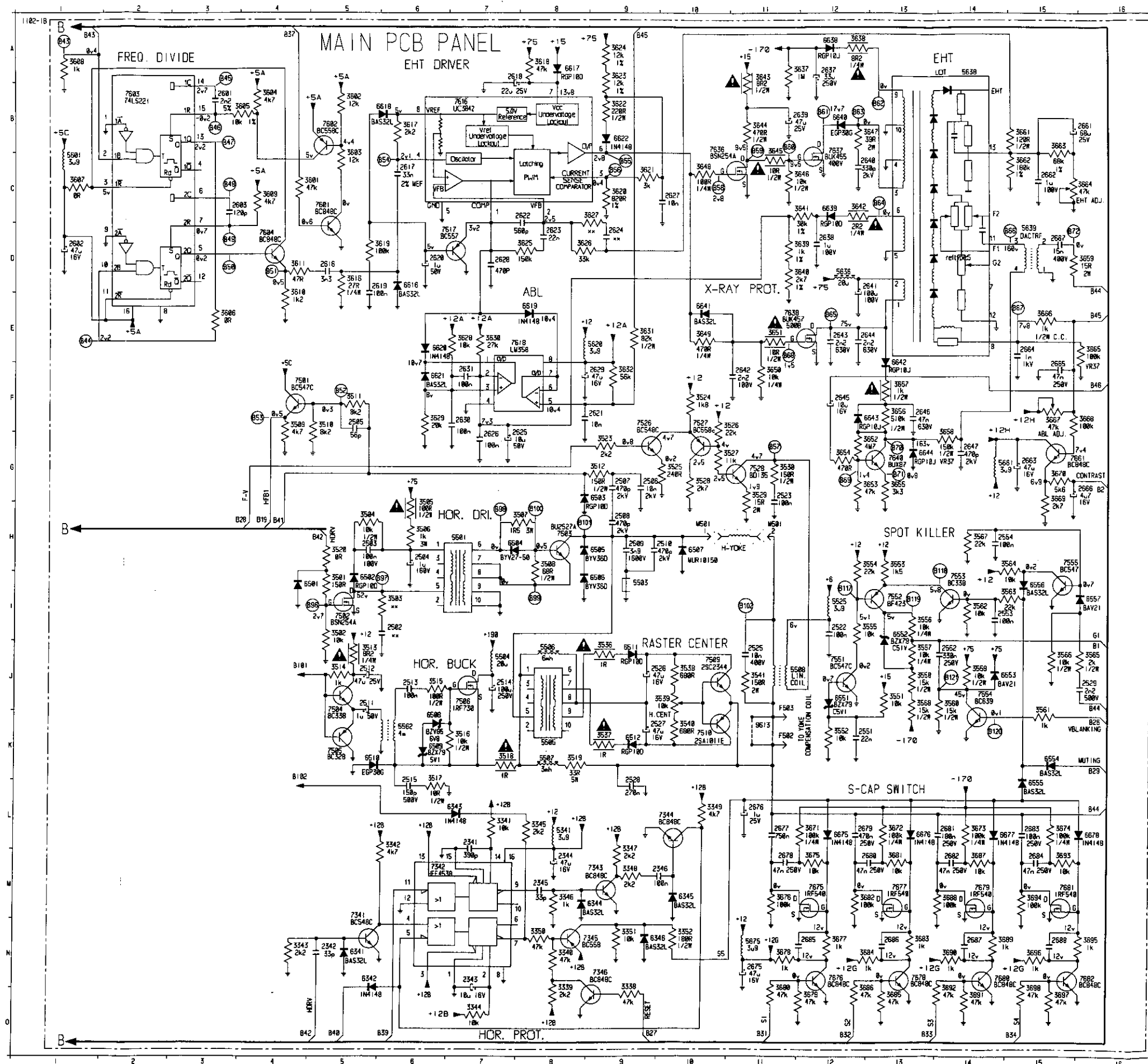
8298 273 4926 1 SP-CS
3138 108 367 0E

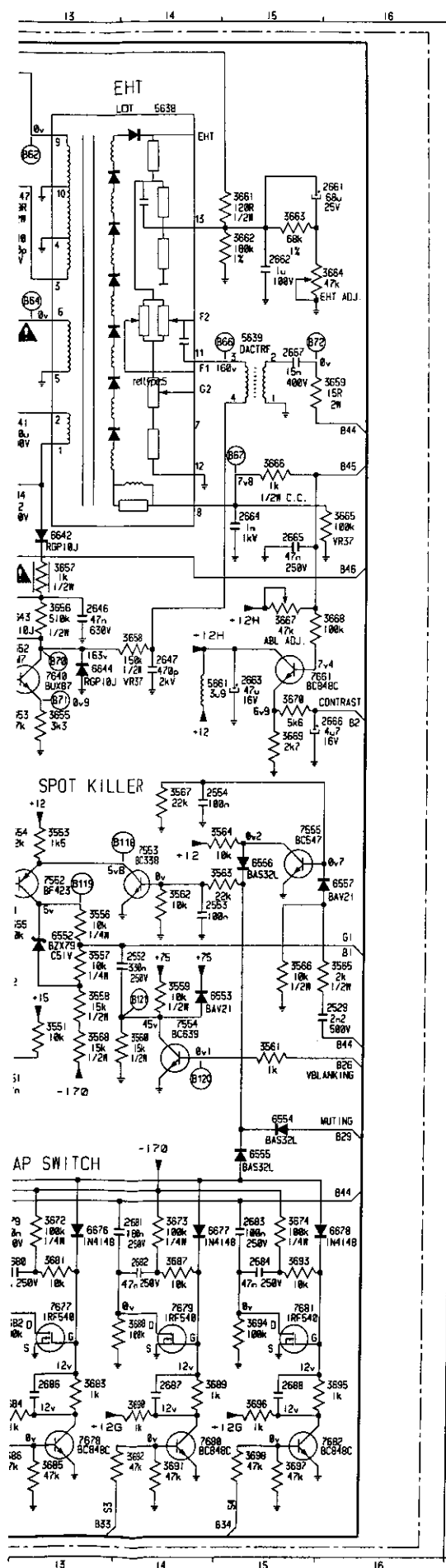
B1



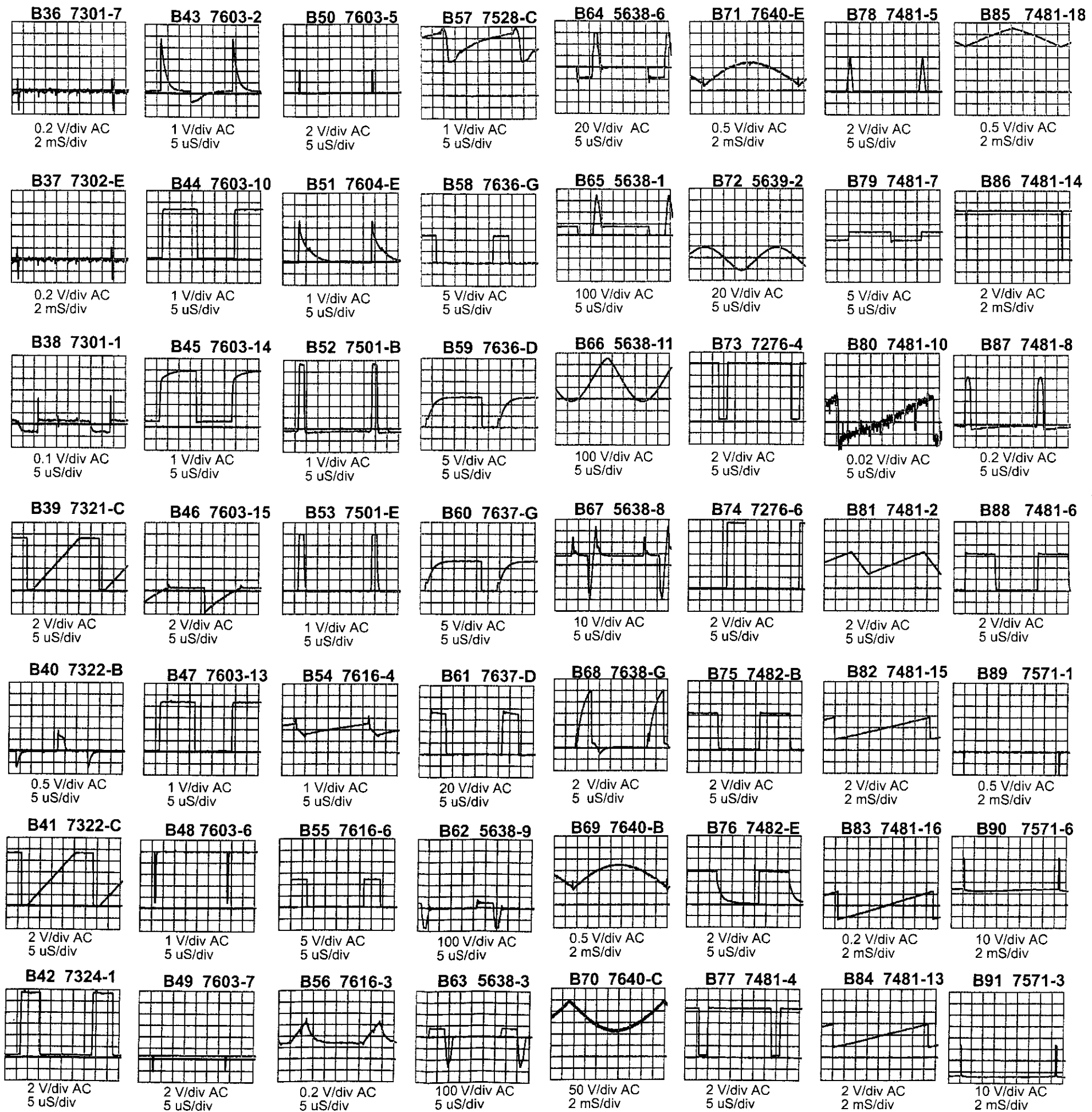


B2

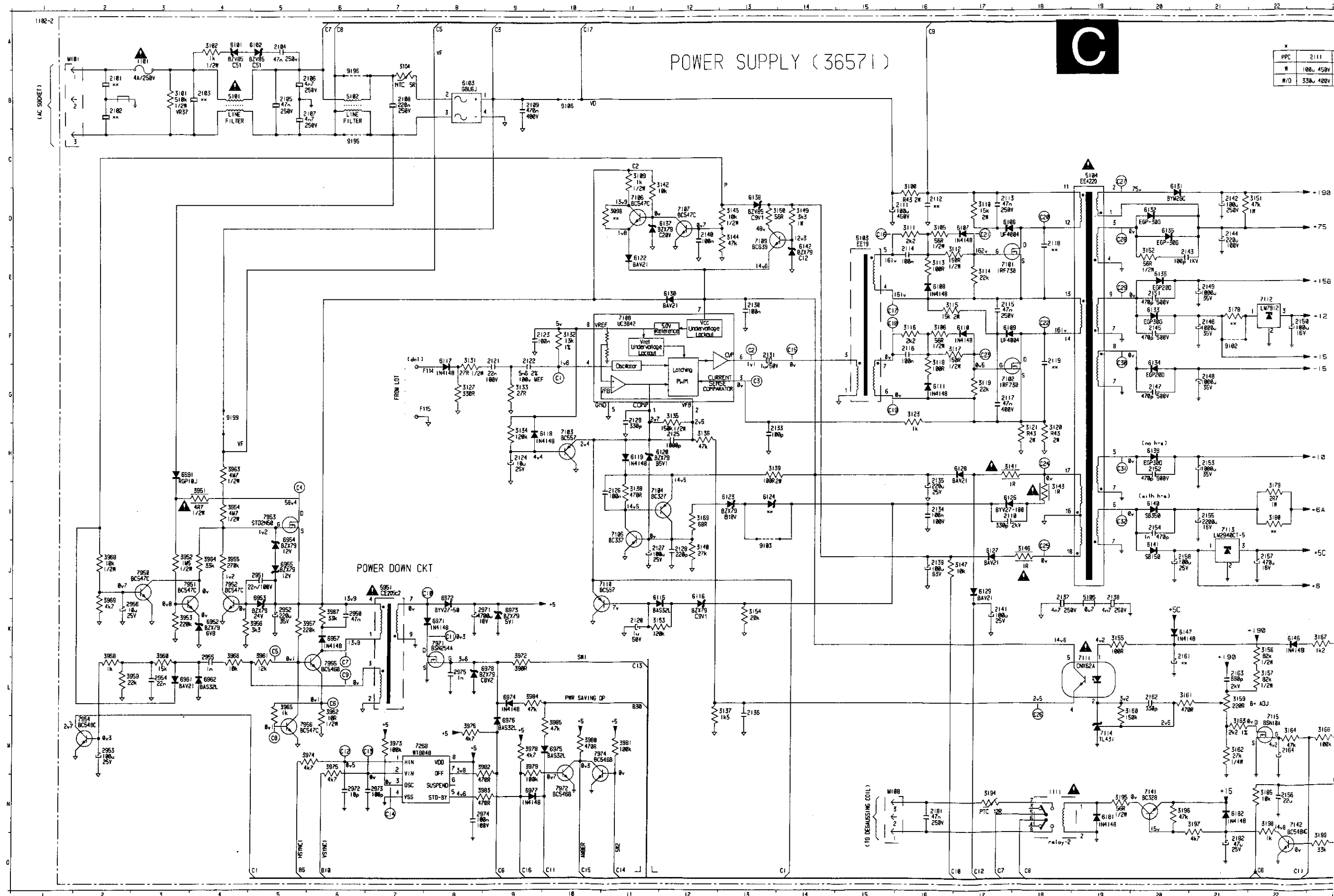




Deflection



C



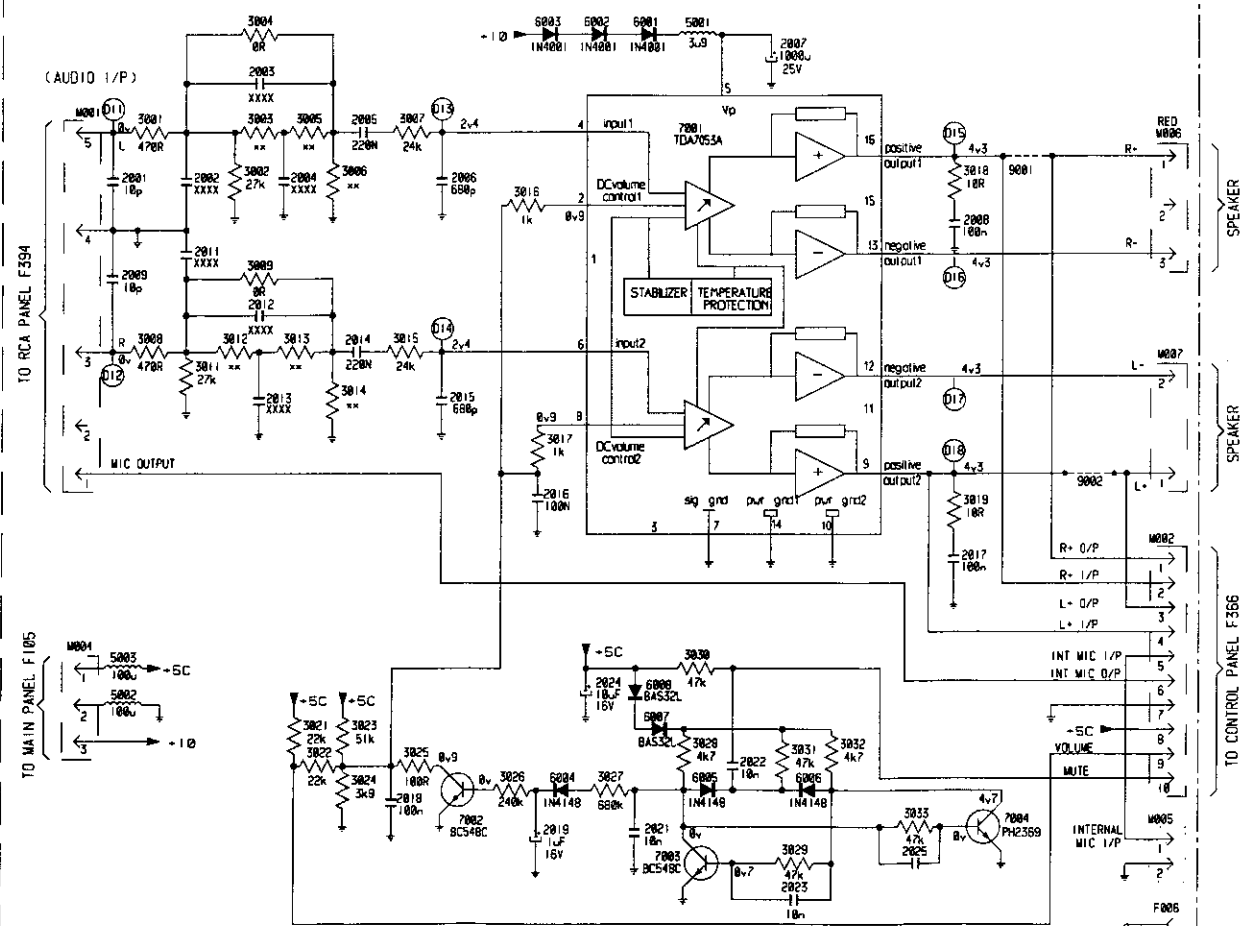
D

PFC & AUDIO PANEL(36401)

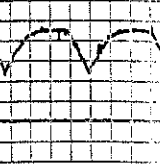
PFC CKT

AUDIO CKT

(AUDIO I/P)

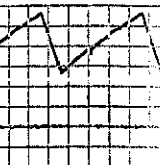


D1 7903



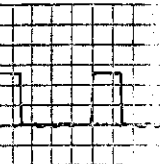
0.2 V/div AC
2 mS/div

D2 7903



0.5 V/div AC
5 uS/div

D3 7910



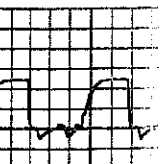
5 V/div AC
5 uS/div

D4 7910



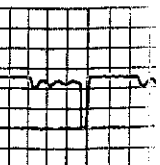
0.1 V/div AC
5 uS/div

D5 7901



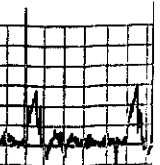
5 V/div AC
5 uS/div

D6 7901

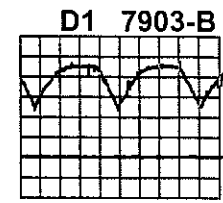
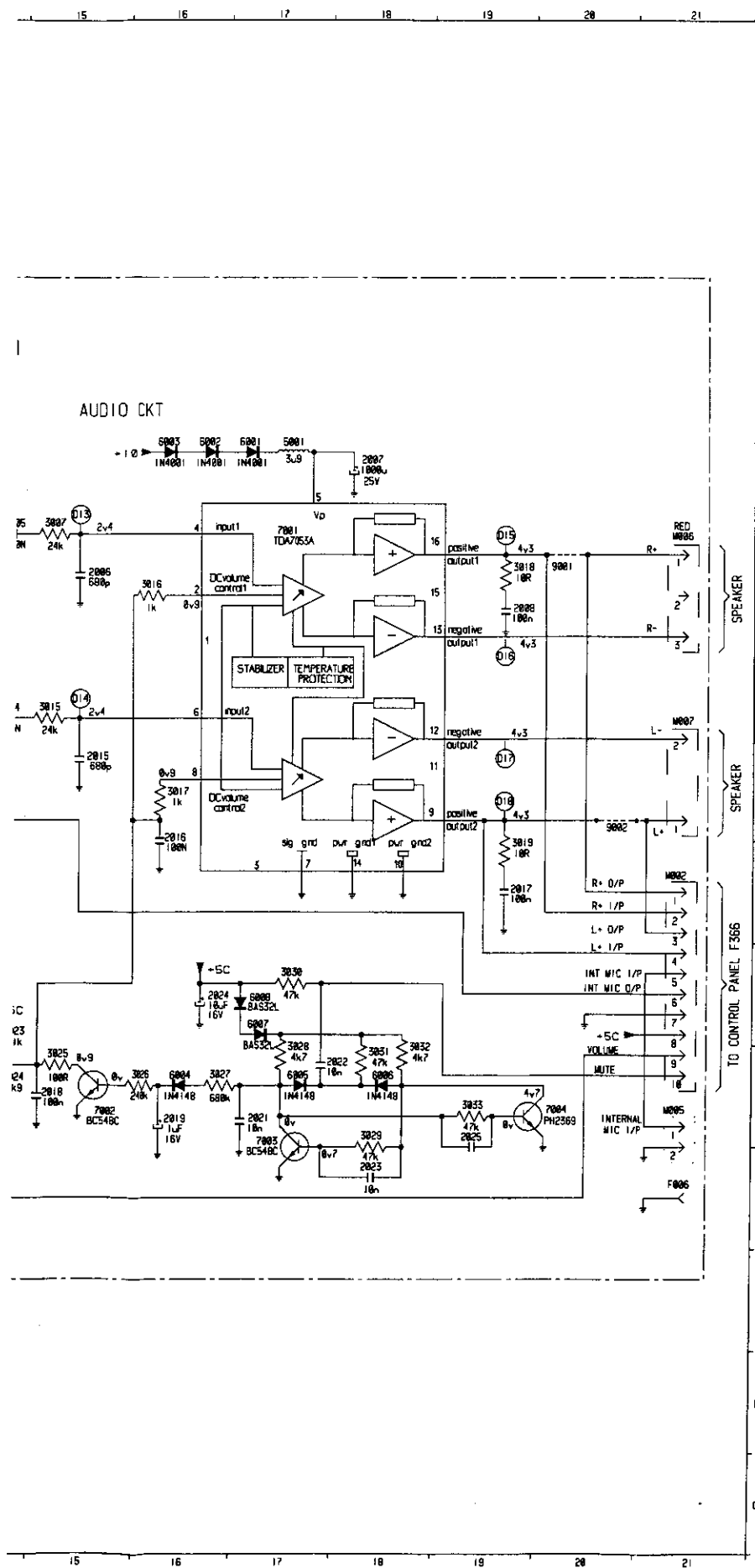


50 V/div AC
5 uS/div

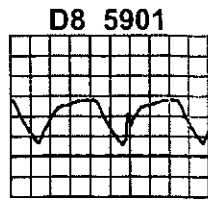
D7 7901



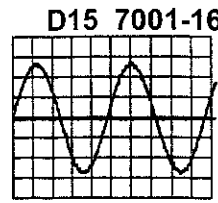
0.02 V/div AC
5 uS/div



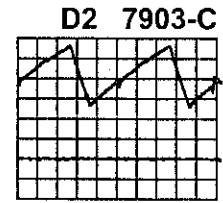
0.2 V/div AC
2 mS/div



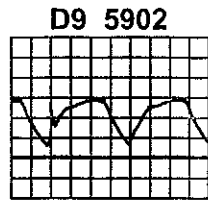
50 V/div AC
2 mS/div



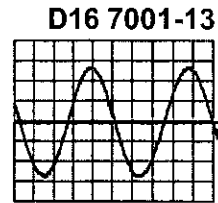
0.1 V/div AC
200 uS/div



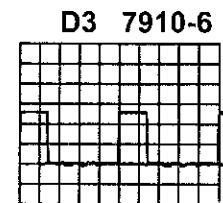
0.5 V/div AC
5 uS/div



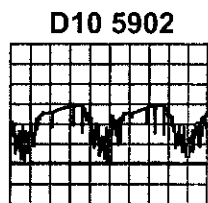
50 V/div AC
2 mS/div



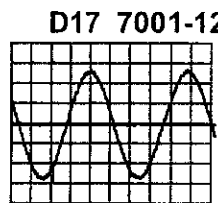
0.1 V/div AC
200 uS/div



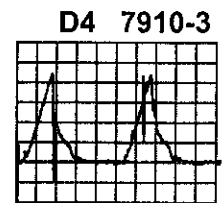
5 V/div AC
5 uS/div



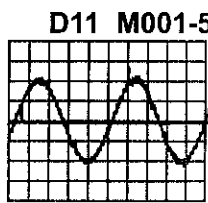
50 V/div AC
2 mS/div



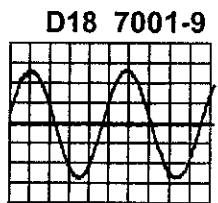
0.1 V/div AC
200 uS/div



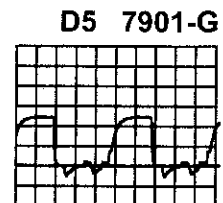
0.1 V/div AC
5 uS/div



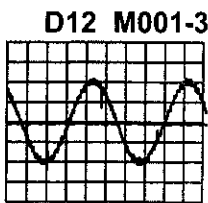
0.05 V/div AC
200 uS/div



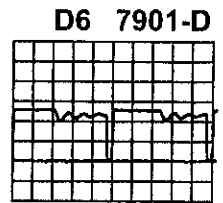
0.1 V/div AC
200 uS/div



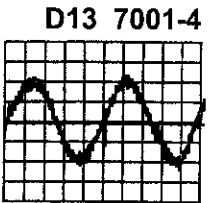
5 V/div AC
5 uS/div



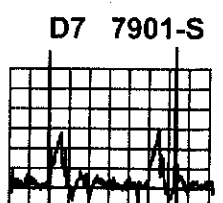
0.05 V/div AC
200 uS/div



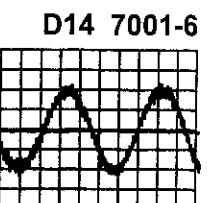
50 V/div AC
5 uS/div



0.02 V/div AC
200 uS/div



0.02 V/div AC
5 uS/div

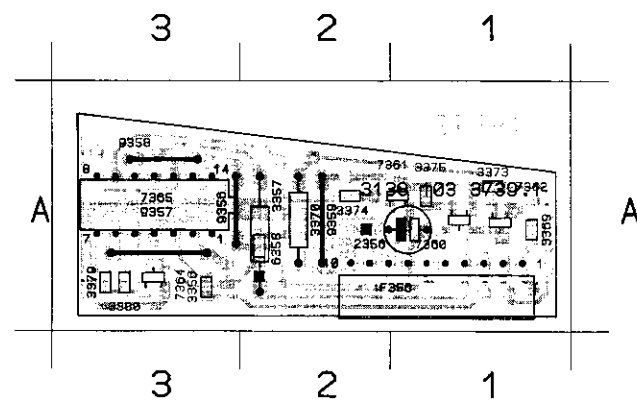


0.02 V/div AC
200 uS/div

Moire pwb (37391)

37391

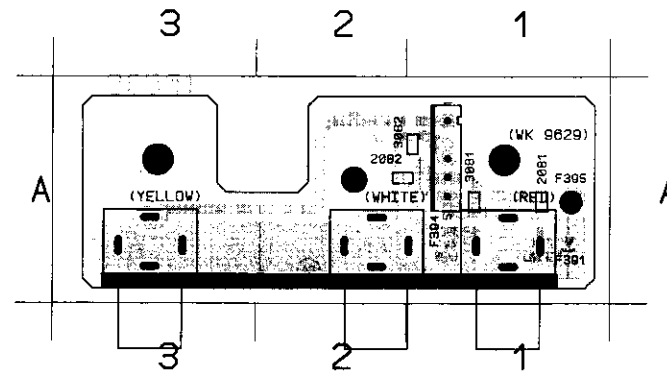
9355 A 3	7308 A 1	3374 A 2	3356 A 3
9357 A 3	7301 A 1	3375 A 1	3357 A 2
9358 A 3	7302 A 1	3376 A 3	3359 A 1



RCA jack pwb (36551)

36551

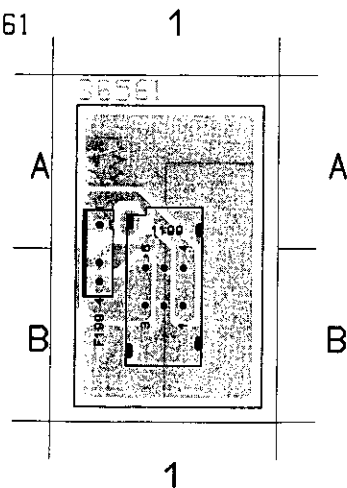
3082 A 1	2082 A 1	F305 A 1	F301 A 1
3081 A 1	2081 A 1	F304 A 1	



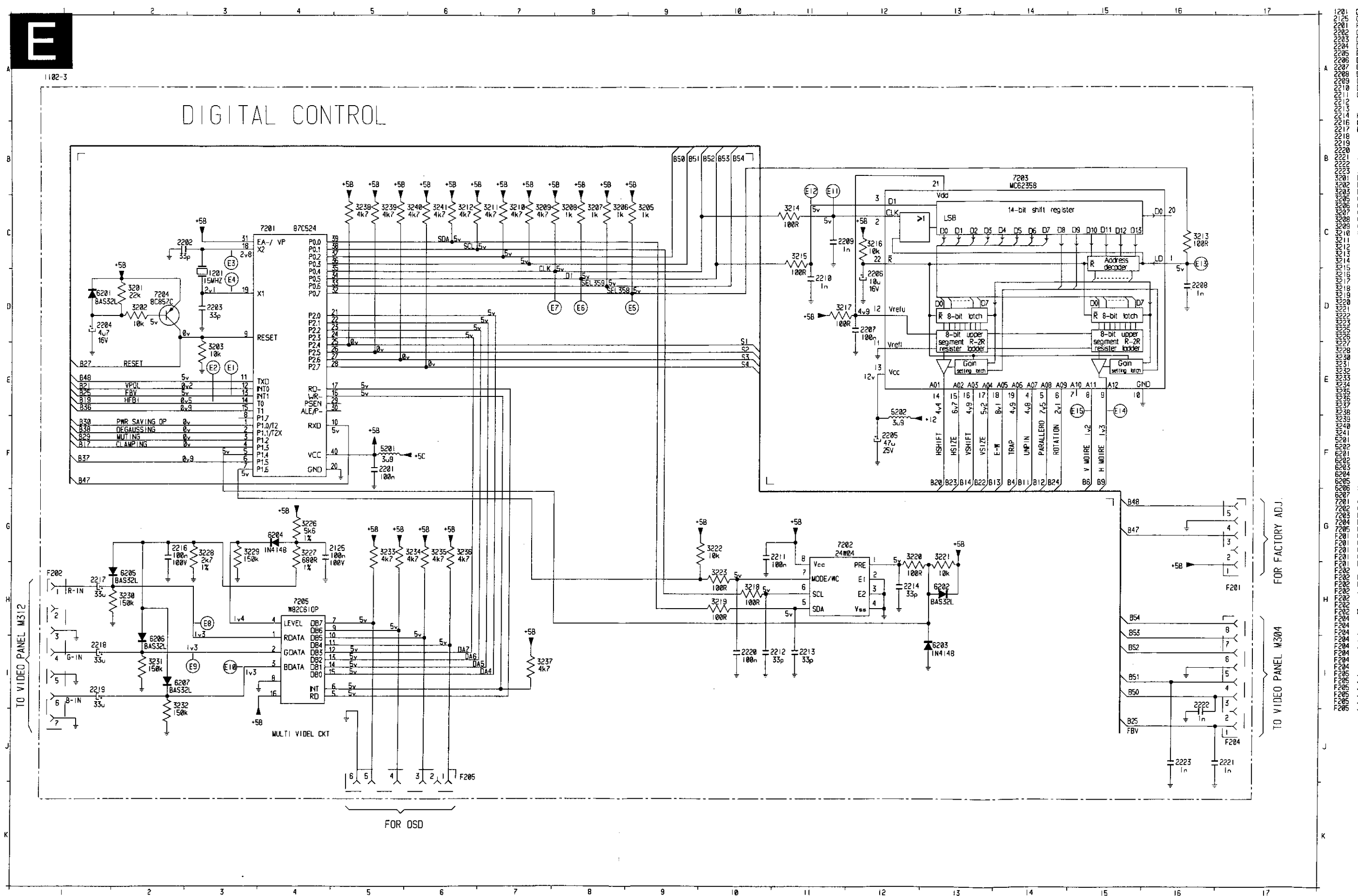
Power knob pwb (36561)

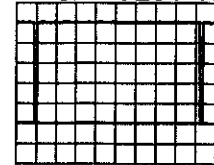
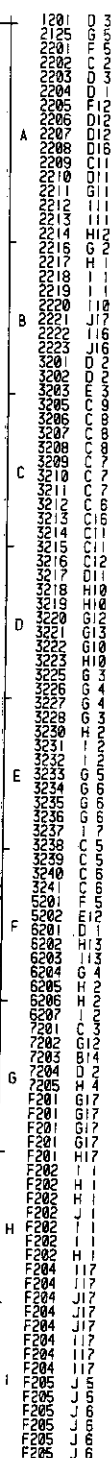
36561

F100 A 1
1100 B 1

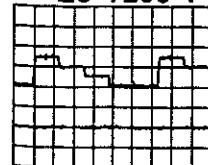


E

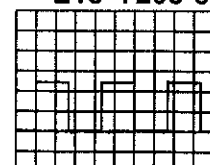




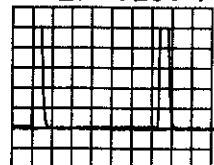
1 V/div AC
2 mS/div



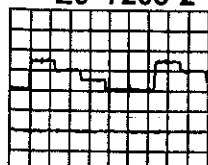
0.5 V/div AC
5 μ S/div



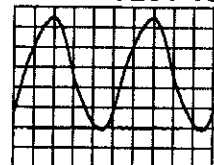
1 V/div AC
10 mS/div



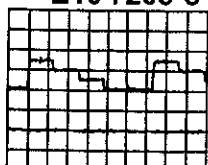
1 V/div AC
5 μ S/div



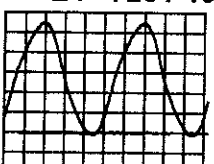
0.5 V/div AC
5 μ S/div



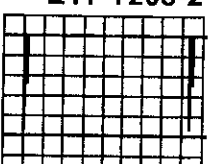
1 V/div AC
50 μ S/div



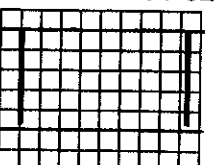
0.5 V/div AC
5 μ S/div



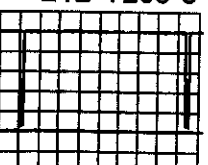
1 V/div AC
50 μ S/div



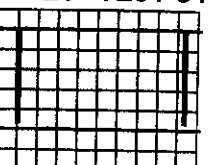
1 V/div AC
2 mS/div



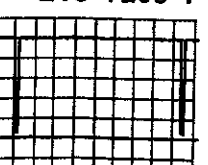
1 V/div AC
2 mS/div



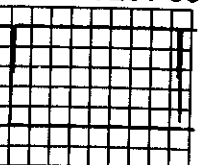
1 V/div AC
2 mS/div



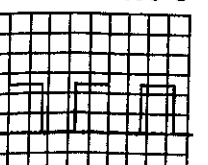
1 V/div AC
2 mS/div



1 V/div AC
2 mS/div

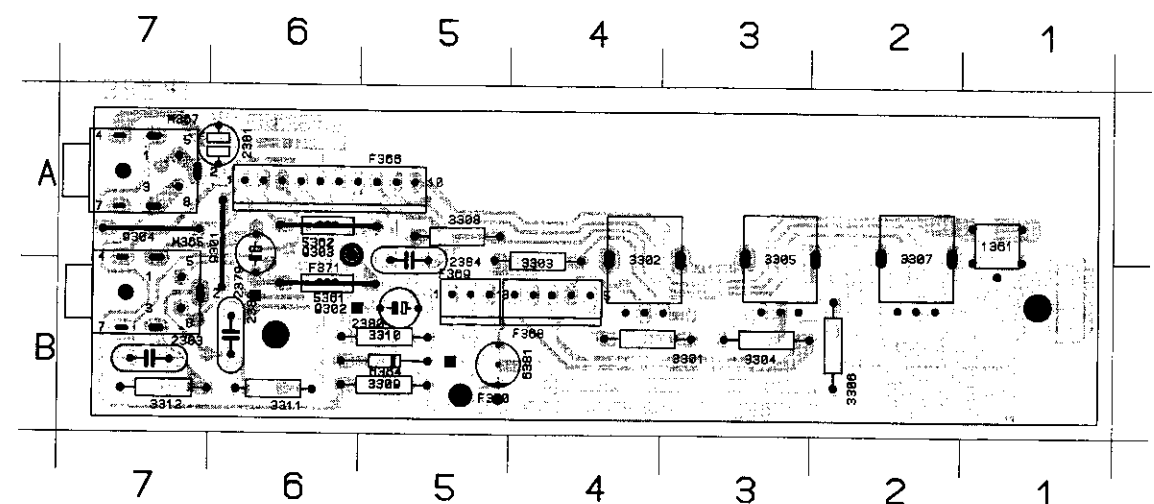


1 V/div AC
2 mS/div

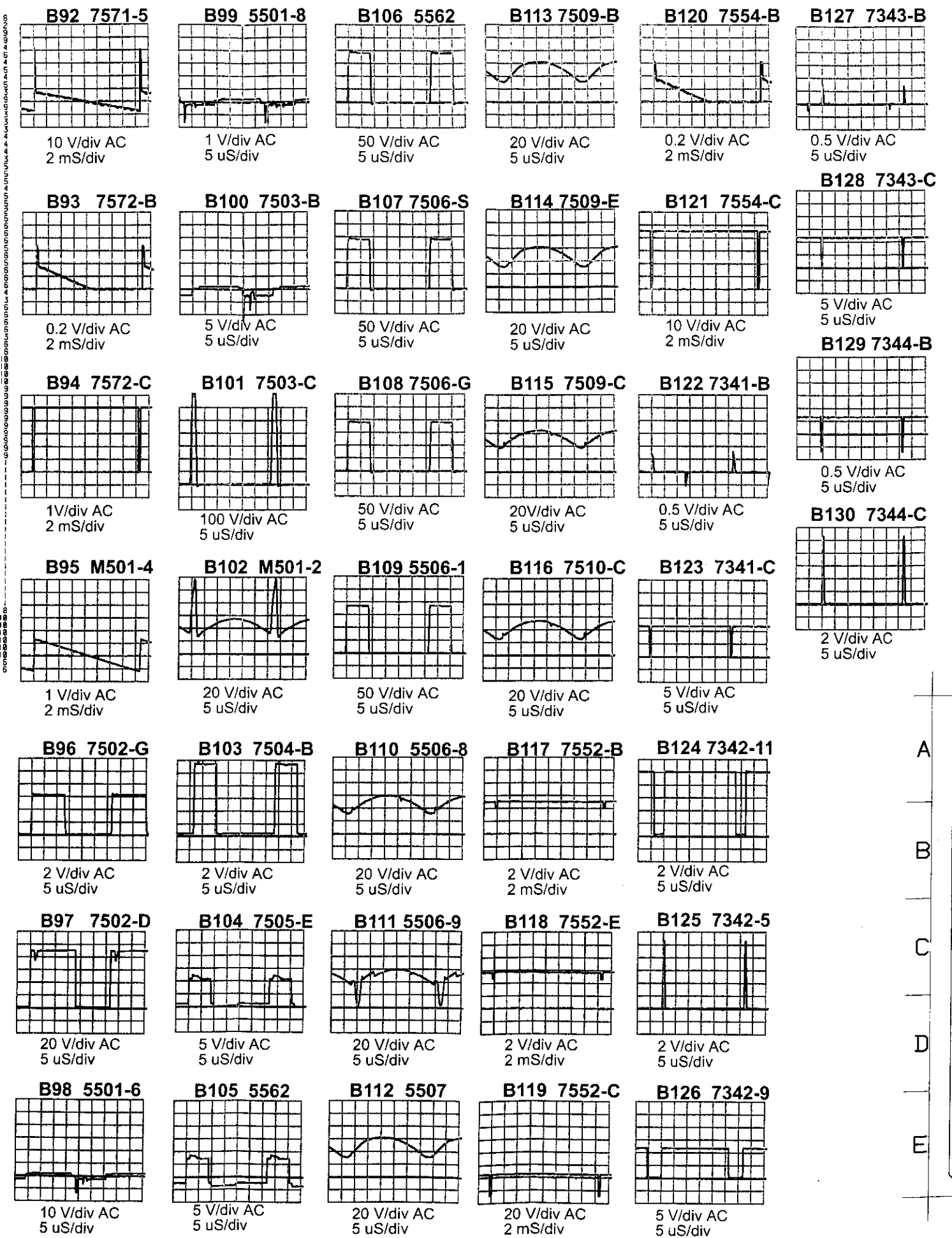
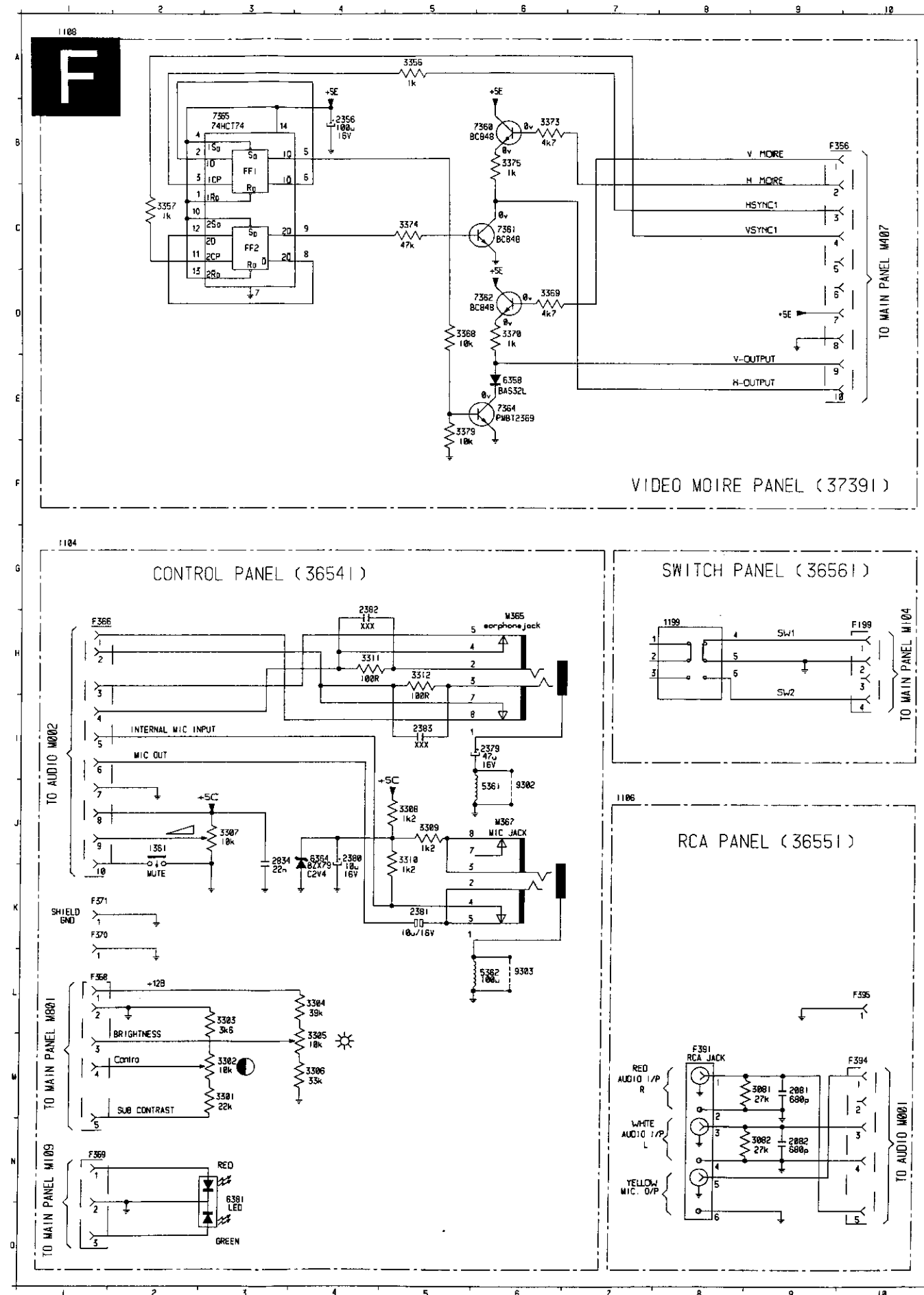


V/div AC
10 mS/div

9303 A 5	9304 B 8	3311 B 8	3307 B 2	3303 B 4	2383 B 7	2379 A 0	F371 A 8	F305 A 1
9304 A 7	9301 B 5	3312 B 7	3308 A 5	3304 B 3	2384 B 5	2388 B 5	M305 B 7	F308 B 8
	9301 B 8	5301 B 5	3309 B 5	3305 B 3	3301 B 4	2381 A 8	M307 A 7	F309 B 8
	9302 B 5	5302 A 5	3310 B 8	3306 B 2	3302 B 3	2382 B 6	1301 A 1	F309 B 8



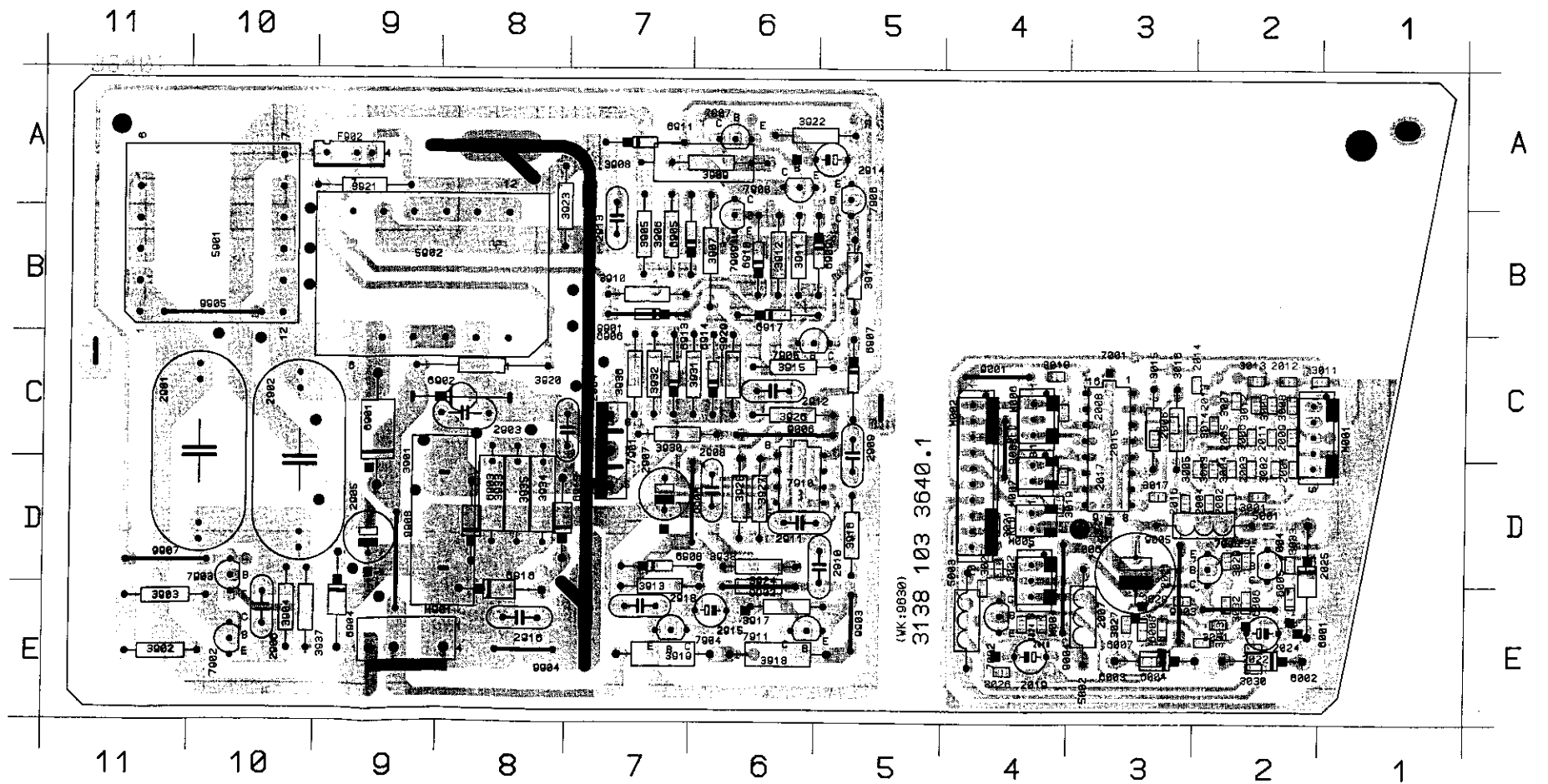
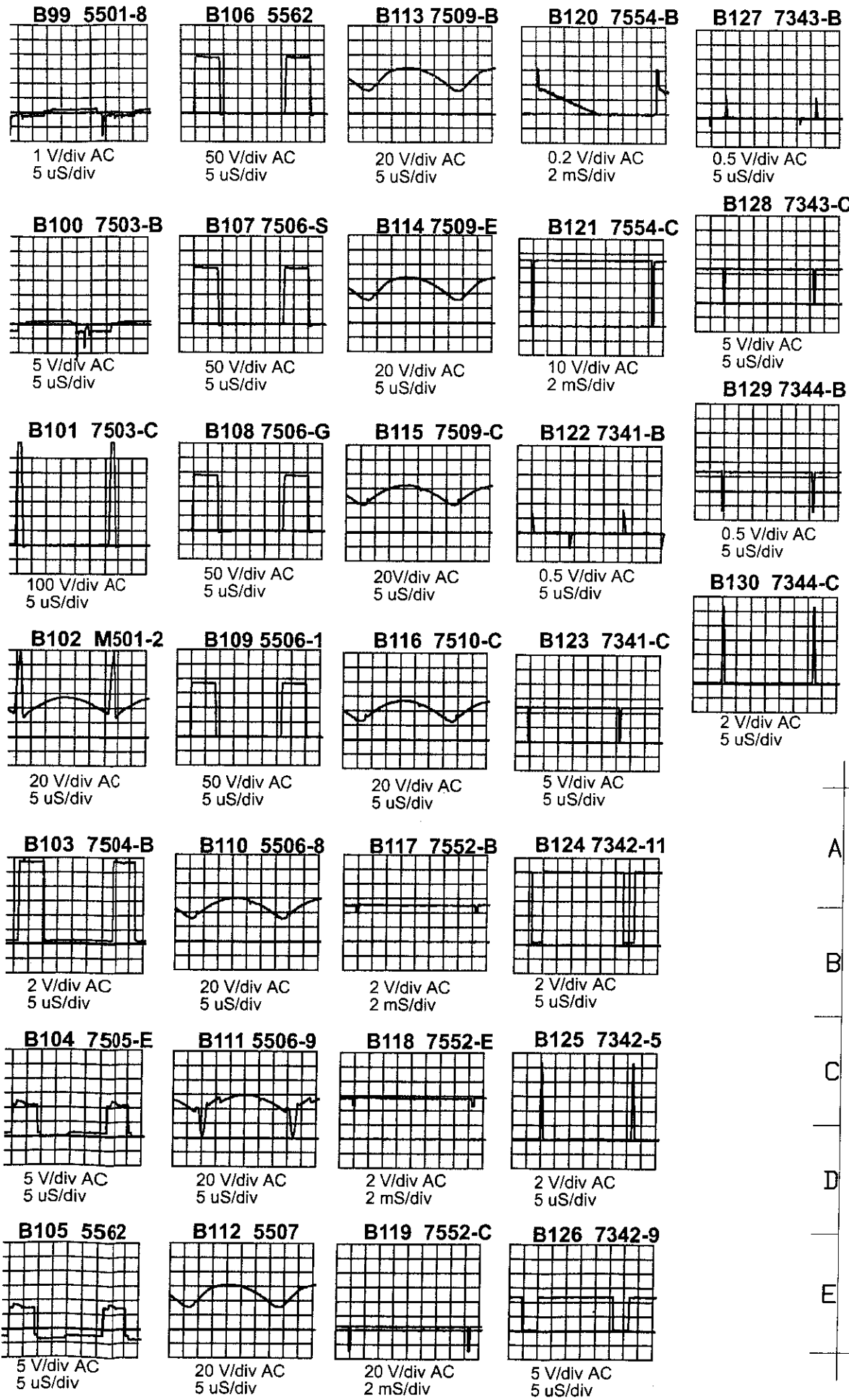
Moire



PFC pwb

36401

9905 D 6	0008 E 3	3007 A 5	2012 C 6	F005 D 3
9907 D 10	0001 C 9	3008 A 5	2013 B 7	F002 A 9
0008 E 9	0002 C 8	3009 A 5	2014 A 5	M001 C 2
	0003 D 8	3010 B 7	2015 E 6	M002 C 4
	0004 E 9	3011 B 5	2016 E 9	M004 D 4
	0005 A 7	3012 B 5	2018 E 7	M005 D 4
	0006 B 7	3013 E 7	3001 D 2	M006 C 4
	0007 C 5	3014 B 5	3002 C 2	M007 D 4
	0008 D 0	3015 C 5	3003 C 2	M001 E 9
	0009 B 5	3016 D 5	3004 D 2	2001 C 2
	0010 B 6	3017 E 5	3005 D 2	2002 D 2
	0011 A 7	3018 E 5	3006 C 2	2003 C 2
	0013 C 7	3019 E 7	3007 C 2	2004 D 2
	0014 C 8	3020 C 8	3008 C 2	2005 C 2
	0015 D 8	3021 A 9	3009 C 2	2006 C 3
	0016 E 8	3022 A 5	3011 C 1	2007 D 3
	0017 B 5	3023 B 8	3012 C 2	2008 C 4
	7001 C 3	3024 E 6	3013 C 2	2009 C 2
	7002 E 4	3025 C 5	3014 C 3	2011 C 2
	7003 D 2	3027 C 5	3015 C 3	2012 C 2
	7004 D 2	3028 D 5	3016 D 3	2013 C 2
	7001 C 7	3029 C 5	3017 D 3	2014 C 2
	7002 E 10	3030 C 5	3018 C 4	2015 C 3
	7003 D 10	3031 C 5	3019 D 4	2016 D 3
	7004 E 7	3032 C 7	3021 D 4	2017 D 4
	7005 C 5	3033 D 8	3022 D 4	2018 E 4
	7006 A 5	3034 D 8	3023 E 2	2019 E 4
	7007 A 5	3035 D 8	3024 E 4	2021 D 3
	7008 A 5	3036 C 7	3025 D 4	2022 E 2
	7009 B 5	3037 D 10	3026 E 4	2023 D 2
	7010 C 5	3038 D 5	3027 E 3	2024 E 2
	7011 E 5	5001 D 3	3028 E 3	2025 D 2
	0001 C 4	5002 D 3	3029 D 2	2001 D 10
	0002 D 4	5003 D 4	3030 E 2	2002 D 10
	0003 E 2	5001 B 11	3031 E 2	2003 C 8
	0004 D 4	5002 C 8	3032 E 2	2004 C 7
	0005 D 3	6001 E 2	3033 D 2	2005 D 9
	0006 C 5	6002 E 2	3001 D 9	2006 E 10
	0001 B 7	6003 C 3	3002 E 11	2007 D 7
	0002 E 8	6004 E 3	3003 E 10	2008 D 6
	0003 E 5	6005 D 2	3004 D 10	2009 D 5
	0004 E 8	6006 E 2	3005 A 7	2010 D 5
	0005 B 10	6007 E 3	3006 A 7	2011 D 6



0. Warning

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. When repairing, make sure that you are connected with the same potential as the mass of the unit via a wrist wrap with resistance. Keep components and tools also at the same potential !

1. Servicing of SMDs (Surface Mounted Devices)

1.1 General cautions on handling and storage

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

- 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. 10.1A)

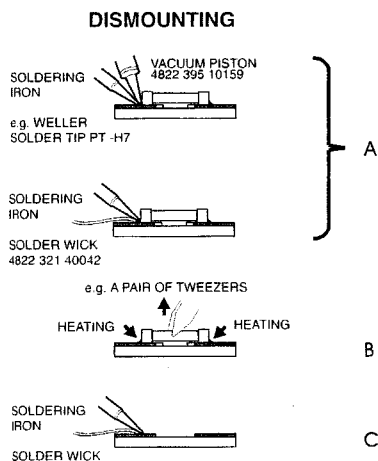


Fig. 10.1

- 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. 10.1 B).
- Remove the excess solder on the solder lands by means of litz wire or a solder sucker (see Fig. 10.1C).

1.3 Caution on removal

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

1.4 Attachment of SMDs

- 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. 10.2A).
- Next complete the soldering of the terminals of the component (see Fig. 10.2B).

MOUNTING

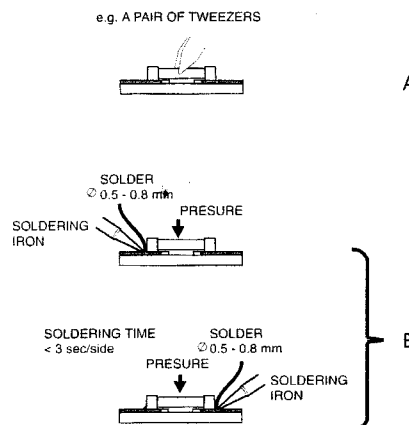


Fig. 10.2

2. Caution when attaching SMDs

- 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.
- Keep the SMD's body in contact with the printed board when soldering.
- The soldering iron to be used (approx. 30 W) should preferably be equipped with a thermal control (soldering temperature: 225 to 250 °C).
- Soldering should not be done outside the solder land.
- Soldering flux (of rosin) may be used, but should not be acidic.
- After soldering, let the SMD cool down gradually at room temperature.
- The quantity of solder must be proportional 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. 10.3).

EXAMPLES

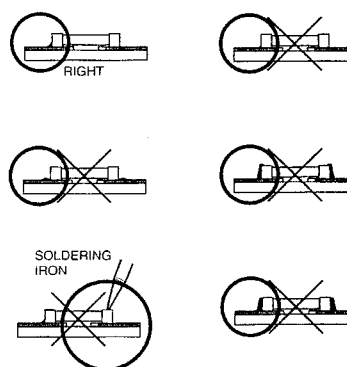
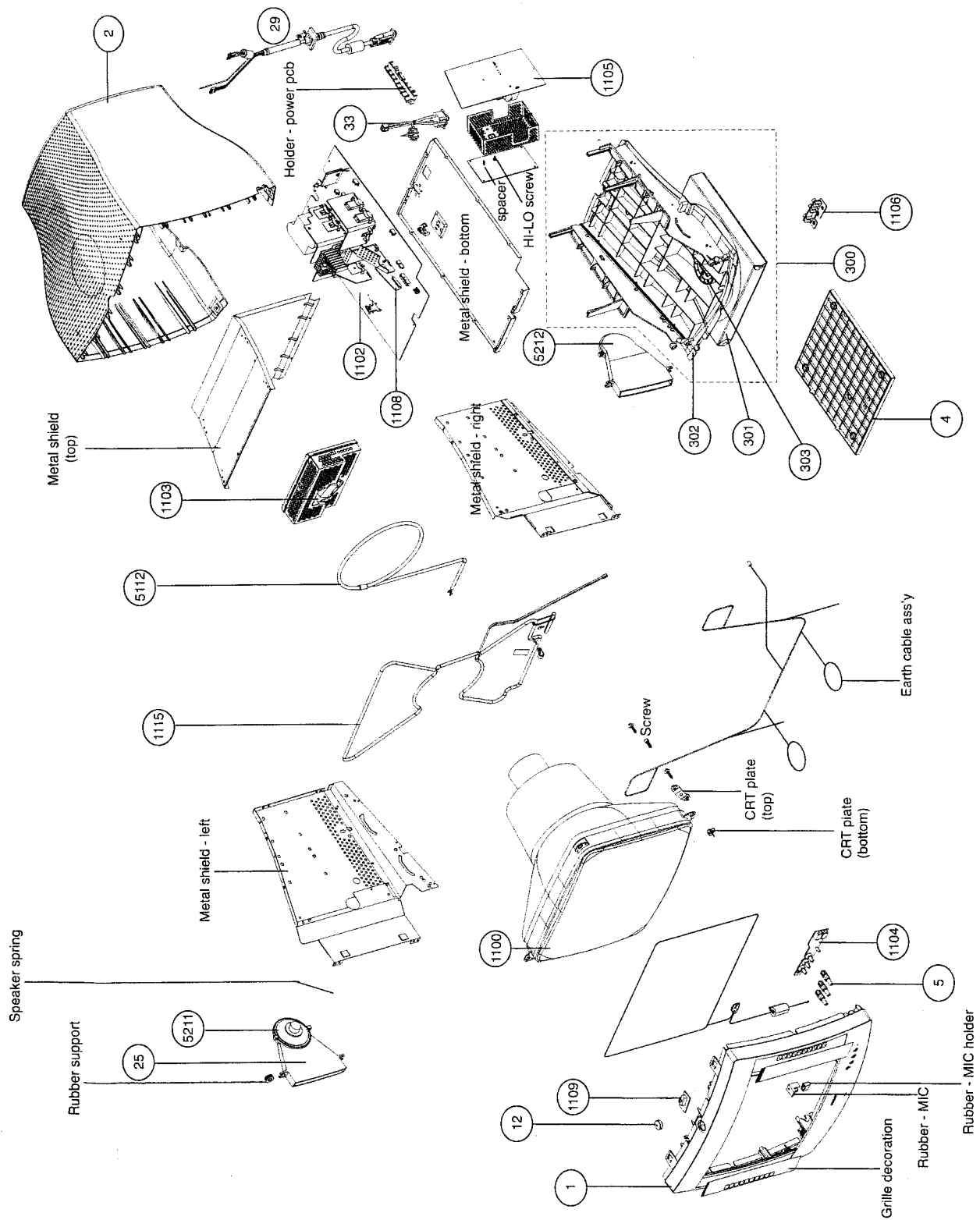


Fig. 10.3

9. Exploded view



Spare parts list

17A8808Q/00C

23

Parts indicated on exploded view:

Model: 17A8808Q/00C

1	4822 459 04392	FRONT CABINET ASSY
2	4822 426 10317	BACK COVER ASSY
4	4822 442 00639	COVER ASSY
5	4822 410 10867	ROTARY KNOB ASSY
12	4822 410 10851	POWER KNOB
25	4822 240 10171	SPEAKER-INTER FACE
29	4822 320 11689	INTERFACE CABLE
33	4822 265 10778	AC INLET ASSY
300	4822 442 00637	BOTTOM PLATE ASSY
301	4822 442 00638	BOTTOM PLATE
302	4822 462 10824	PEDESTAL
303	4822 417 11332	LOCK-PEDESTAL CRT17"
1100A	4822 131 11186	M41KSX183X14(T)
1102	4822 212 10703	MAIN PWB ASSY
1103	4822 212 10704	VIDEO PWB ASSY
1104	4822 212 10705	CONTROL PWB ASSY
1105	4822 212 10706	PFC/AUDIO PWB ASSY
1106	4822 212 10707	RCA JACK PWB ASSY
1108	4822 701 14391	MOIRE CONTROL PWB ASSY
1109	4822 701 14392	POWER KNOB PWB ASSY
1115A	4822 157 11063	DEGAUSSING COIL ASSY
5112	4822 157 10652	ROTATION COIL
5211	4822 240 30642	LOUD SPEAKER
5212	4822 240 30642	LOUD SPEAKER

Various

4822 600 10476	CARTON
4822 466 11381	CUSHION-LEFT
4822 466 11382	CUSHION-RIGHT
4822 466 11383	CUSHION-BOTTO M
4822 459 04393	FRONT CABINET
4822 381 11805	LENS POWER
4822 410 10848	MUTE KNOB
4822 426 10318	BACK COVER
4822 701 20046	AC INLET
4822 242 30337	WM-55A103 (MICRO PHONE)
4822 502 21358	SCREW, STEEL
4822 600 10409	BAG, PLASTIC
4822 736 14734	DIRECTIONS FOR USE (D.F.U.)
4822 701 12903	P.E. BAG (SET)
4822 526 20183	SPOILER
4822 157 71486	COIL
4822 157 10653	CANCELLATION COIL

Accessories

1219A	4822 321 22552	CORD, MAINS
	4822 321 62261	AUDIO CABLE
	4822 320 11691	MIC.PHONE CABLE
	4822 736 14735	USER'S MANUAL (FOR SOFTWARE CONTROL DISK ASSY)
4822 701 14179		COLORIFIC SOFTWARE DISK ASSY
4822 701 14181		COLORIFIC USER'S MANUAL
4822 701 14182		COLOTIFIC OS. DISK 1
4822 701 14183		COLOTIFIC OS. DISK 2
4822 701 14184		COLOTIFIC OS. DISK 3

1102 Main panel

Various

1102	4822 212 10703	MAIN PWB ASSY
------	----------------	---------------

1101A	4822 070 34002	FUSE, 218004.(4A)
	4822 265 30375	4P
	4822 492 71337	SPRING
	4822 265 31207	5P
	4822 265 31206	4P
	4822 265 31209	3P
	4822 265 41402	10P MALE
	4822 265 10779	CON BM V SP
		M3.96 63735 B
	4822 265 30891	2 P.
	4822 265 31231	3 P MALE
	4822 265 10781	CON BM V 4P
		M2.5
	5322 255 44217	40-DIP-S-LO
1111A	4822 280 70378	RELAY
1201	4822 242 81162	KD0037FCA
	4822 492 62076	FOR TRANSISTORS
	4822 466 93161	PLATE, MICA
	5322 390 20011	VET SILIC.P4 20GR



1212	4822 209 15038	87C52 WITH PROGR.ASSY
------	----------------	-----------------------



2104	4822 121 70556	47nF 20% 250V
2105	4822 121 70556	47nF 20% 250V
2106	4822 126 14073	4N7 20% 250V
2107	4822 126 14073	4N7 20% 250V
2108	4822 121 70446	220nF 20% 250V
2109	5322 121 44279	820nF 5% 400V
2110	4822 126 11254	330pF 10% 2KV
2111	4822 124 11517	450V 100U 20%
2113	4822 121 43908	47nF 10% 250V
2114	4822 121 43696	100nF 100V

2115	4822 121 43908	47nF 10% 250V
2116	4822 121 43696	100nF 100V
2117	4822 121 43516	47nF 400V
2120	4822 124 22669	1uF 20% 50V
2121	4822 121 43694	22nF 100V
2122	4822 121 10576	5.6nF 2% 100V
2123	4822 121 43696	100nF 100V
2124	4822 124 42136	10uF 25V
2125	4822 121 70565	1nF 100V
2126	4822 126 13196	100nF 10% 25V
2127	4822 124 42145	100uF 20% 25V
2128	4822 122 33575	220pF 5% 50V
2129	5322 122 31863	330pF 5% 50V
2130	4822 121 43696	100nF 100V
2131	4822 124 11864	1U 20% 50V
2133	4822 121 70565	1nF 100V
2134	4822 121 43696	100nF 100V
2135	4822 124 42149	220uF 20% 25V
2137	4822 126 14074	250V
2138	4822 126 14074	250V

2139	4822 124 40255	100uF 20% 63V
2140	4822 126 13196	100uF 10% 25V
2141	4822 124 40207	100uF 20% 25V
2142	4822 124 80834	100uF 20% 250V
2143	4822 122 33654	100pF 1KV
2144	4822 124 80538	220uF 20% 100V
2145	4822 122 33646	470pF 10% 500V
2146	4822 124 80721	1000uF 35V
2147	4822 122 33646	470pF 10% 500V
2148	4822 124 80721	1000uF 35V

2149	4822 124 80721	1000uF 35V
2150	4822 124 42145	100uF 20% 25V
2151	4822 122 33646	470pF 10% 500V
2152	4822 122 33646	470pF 10% 500V
2153	4822 124 80721	1000uF 35V
2154	4822 122 33646	470pF 10% 500V
2155	4822 124 81285	2200uF 20% 16V
2156	4822 121 43694	22nF 100V
2157	4822 124 40198	470uF 20% 16V
2158	4822 124 42145	100uF 20% 25V
2162	5322 122 32335	330pF 10% 100V
2163	4822 126 12269	680pF 10%R(HR) 2KV
2167	4822 124 42172	1000uF 16V
2181	4822 121 70556	47nF 20% 250V
2182	4822 124 80132	47uF 20% 25V
2201	4822 126 13196	100nF 10% 25V
2202	5322 122 32659	33pF 5% 50V
2203	5322 122 32659	33pF 5% 50V
2204	4822 124 41659	4.7uF 20% 25V
2205	4822 124 80132	47uF 20% 25V

2206	4822 124 22686	10uF 16V
2207	4822 126 13196	100nF 10% 25V
2208	5322 122 34123	1nF 10% 50V
2209	5322 122 34123	1nF 10% 50V

2210	5322 122 34123	1nF 10% 50V
2211	4822 126 13196	100nF 10% 25V
2212	5322 122 32659	33pF 5% 50V
2213	5322 122 32659	33pF 5% 50V
2214	5322 122 32659	33pF 5% 50V
2215	4822 121 43696	100nF 100V

2216	4822 121 43696	100nF 100V
2217	4822 124 40272	33uF 20% 16V
2218	4822 124 40272	33uF 20% 16V
2219	4822 124 40272	33uF 20% 16V
2220	4822 126 13196	100nF 10% 25V
2221	5322 122 34123	1nF 10% 50V
2222	5322 122 34123	1nF 10% 50V
2223	5322 122 34123	1nF 10% 50V
2251	4822 126 13196	100nF 10% 25V
2252	5322 122 32336	560pF 10% 100V

2253	5322 122 32531	100pF 5% 50V
2254	4822 126 13196	100nF 10% 25V
2255	5322 122 32531	100pF 5% 50V
2256	4822 124 22669	1uF 20% 50V
2257	5322 122 34098	10nF 10% 63V
2258	4822 126 13196	100nF 10% 25V
2259	5322 122 34123	1nF 10% 50V
2260	4822 124 42199	22uF 20% 50V
2276	4822 126 13607	33N 2% 100V
2277	4822 124 22681	47uF 20% 16V

2278	4822 121 70453	1.2nF 5% 100V
2279	4822 121 43696	100nF 100V
2280	4822 124 22686	10uF 16V
2281	4822 124 22669	1uF 20% 50V
2282	4822 124 41659	4.7uF 20% 25V
2301	4822 124 22681	47uF 20% 16V
2302	4822 124 42145	100uF 20% 25V
2303	4822 124 42145	100uF 20% 25V
2304	4822 121 43696	100nF 100V
2321	4822 124 42149	220uF 20% 25V

2322	4822 121 51166	1.8nF 2% 250V
2323	5322 126 10184	680P 5% 50V.
2324	4822 124 42031	2.2uF 20% 25V
2325	4822 126 13196	100nF 10% 25V
2341	4822 122 33172	390pF 5% 50V
2342	5322 122 32072	33pF 2% 100V
2343	4822 124 22686	10uF 16V
2344	4822 124 22681	47uF 20% 16V
2345	5322 122 32659	33pF 5% 50V
2346	4822 126 13196	100nF 10% 25V

2401	4822 124 22681	47uF 20% 16V
2404	4822 124 22686	10uF 16V
2405	4822 124 22686	10uF 16V
2406	4822 124 22678	100uF 20% 16V
2426	4822 124 22681	47uF 20% 16V
2427	4822 124 22678	100uF 20% 16V
2428	4822 124 22686	10uF 16V
2429	4822 126 13196	100nF 10% 25V
2430	4822 124 41659	4.7uF 20% 25V
2431	4822 124 22686	10uF 16V

2432	4822 124 22678	100uF 20% 16V
2451	4822 124 22678	100uF 20% 16V
2452	4822 124 22686	10uF 16V
2453	4822 124 22678	100uF 20% 16V
2454	4822 126 13196	100nF 10% 25V
2455	4822 124 41659	4.7uF 20% 25V
2456	4822 124 22686	10uF 16V
2457	4822 124 22686	10uF 16V
2458	4822 124 22686	10uF 16V
2459	4822 124 22678	100uF 20% 16V

2481	5322 121 51214	680pF 1% 400V
2482	5322 122 32654	22nF 10% 63V
2483	4822 124 22669	1uF 20% 50V
2484	4822 124 22681	47uF 20% 16V
2485	4822 126 10847	1.8nF 10% 63V
2486	5322 124 41817	220uF 16V
2487	4822 124 22669	1uF 20% 50V
2488	4822 121 43713	330nF 100V
2489	4822 122 33514	68pF 5% 50V
2490	4822 126 13606	10N 2% 100V

2491	4822 126 13606	10N 2% 100V
2492	4822 124 42031	2.2uF 20% 25V
2493	5322 122 34098	10nF 10% 63V
2494	4822 124 22686	10uF 16V
2503	4822 121 43696	100nF 100V
2504	4822 124 42162	1uF 160V
2505	5322 122 32661	56pF 5% 50V
2506	4822 126 12651	10nF 20% 2K
2507	4822 126 12627	470pF 10%R(HR) 2KV

2508	4822 126 12267	470pF 10%R(HR) 2KV
2509	4822 121 70147	3.9nF 5% 1.6KV
2510	4822 126 12267	470pF 10%R(HR) 2KV

2511	4822 124 22669	1uF 20% 50V
2512	4822 124 80132	47uF 20% 25V
2513	4822 121 43696	100nF 100V
2514	4822 124 80834	100uF 20% 250V

2515	4822 126 13249	150pF 10% Y5P 500V
2522	4822 126 13196	100nF 10% 25V
2523	4822 126 13196	100nF 10% 25V
2525	4822 121 42004	10nF 10% 400V

2526	4822 124 22681	47uF 20% 16V
2527	4822 124 22681	47uF 20% 16V
2528	4822 121 70412	270nF 5% 250V
2529	4822 126 10206	2.2nF 10% 500V
2551	5322 122 32654	22nF 10% 63V
2552	4822 121 43916	330nF 10% 250V
2553	4822 126 13196	100nF 10% 25V
2554	4822 126 13196	100nF 10% 25V
2571	4822 124 42144	470uF 63V
2572	4822 124 22336	100uF 20% 40V

3096	5322 116 51882	0Ω 1/4W	3227	4822 117 12583	680Ω 1% 0.25W.	3349	4822 051 20472	4k7 5% 0.1W	3497	4822 050 24703	47k 1% 0.6W
3097	5322 116 51882	0Ω 1/4W				3350	4822 051 20473	47k 5% 0.1W	3498	4822 051 20473	47k 5% 0.1W
3099	5322 116 51882	0Ω 1/4W	3228	4822 050 22702	2k7 1% 0.6W	3351	4822 117 10833	10k 1% 0.1W	3499	4822 051 20683	68k 5% 0.1W
3100	4822 116 82453	0Ω 1/4 5%	3229	4822 051 20154	150k 5% 0.1W	3352	4822 050 21801	180Ω 1% 0.6W	3500	4822 116 83868	150Ω 5% 0.5W
3101	4822 053 21514	510k 5% 0.5W	3230	4822 051 20154	150k 5% 0.1W	3401▲	4822 052 11828	8Ω 2 5% 0.5W	3501	4822 117 10353	150Ω 1% 0.1W
3102	4822 050 21002	1k 1% 0.6W	3231	4822 051 20154	150k 5% 0.1W	3402	4822 051 20274	270k 5% 0.1W	3502	4822 117 10833	10k 1% 0.1W
3104	4822 116 30469	5Ω 15%	3232	4822 051 20154	150k 5% 0.1W	3403	4822 116 52234	100k 5% 0.5W	3504	4822 050 21003	10k 1% 0.6W
3105	4822 050 25609	56Ω 1% 0.6W	3233	4822 051 20472	4k7 5% 0.1W	3404	4822 051 20303	30k 5% 0.1W	3505▲	4822 052 11101	100Ω 5% 0.5W
3106	4822 050 25609	56Ω 1% 0.6W	3234	4822 051 20472	4k7 5% 0.1W	3405	4822 051 20332	3k3 5% 0.1W	3506	4822 117 11646	1k 5% 3W
3109	4822 050 21002	1k 1% 0.6W	3235	4822 051 20472	4k7 5% 0.1W	3406	4822 051 20332	3k3 5% 0.1W	3507	4822 117 10294	1.5Ω 5% 3W
3110	4822 117 12576	15k 5% 2W	3236	4822 051 20472	4k7 5% 0.1W	3407	4822 117 11449	2k2 1% 0.1W	3508	4822 050 26809	68Ω 1% 0.6W
3111	4822 050 22202	2k2 1% 0.6W	3237	4822 051 20472	4k7 5% 0.1W	3408	4822 051 20102	1k 5% 0.1W	3509	4822 051 20472	4k7 5% 0.1W
3112	4822 050 21501	150Ω 1% 0.6W	3238	4822 051 20472	4k7 5% 0.1W	3410	4822 051 20393	39k 5% 0.1W	3510	4822 051 20822	8k2 5% 0.1W
3113	4822 050 21001	100Ω 1% 0.6W	3239	4822 051 20472	4k7 5% 0.1W	3411	4822 051 20472	4k7 5% 0.1W	3511	4822 051 20822	8k2 5% 0.1W
3114	4822 050 22203	22k 1% 0.6W	3240	4822 051 20472	4k7 5% 0.1W	3412	4822 051 20753	75k 5% 0.1W	3512	4822 050 21501	1k8 1% 0.6W
3115	4822 117 12577	15k 5% 2W	3241	4822 051 20472	4k7 5% 0.1W	3413	4822 051 20332	3k3 5% 0.1W	3513▲	4822 052 10828	8Ω 2 5% 0.33W
3116	4822 050 22202	2k2 1% 0.6W	3247	4822 051 20332	3k3 5% 0.1W	3414	4822 051 20563	56k 5% 0.1W	3514	4822 050 11002	1k 1% 0.4W
3117	4822 050 21501	150Ω 1% 0.6W	3248	4822 051 20332	3k3 5% 0.1W	3415	4822 050 22003	20k 1% 0.6W	3515	4822 050 21001	100Ω 1% 0.6W
3118	4822 050 21001	100Ω 1% 0.6W	3249	4822 117 10833	10k 1% 0.1W	3416	4822 050 23603	36k 1% 0.6W	3516	4822 050 21003	10k 1% 0.6W
3119	4822 050 22203	22k 1% 0.6W	3250	4822 117 10833	10k 1% 0.1W	3417	4822 051 20102	1k 5% 0.1W	3517	4822 117 10442	10Ω 5%
3123	4822 050 11002	1k 1% 0.4W	3251	4822 117 11139	1k5 1% 0.1W	3418	4822 116 52207	1k2 5% 0.5W	3518▲	4822 052 10108	1Ω 5% 0.33W
3127	4822 050 23301	330Ω 1% 0.6W	3252	4822 051 20223	22k 5% 0.1W	3419	4822 051 20122	1k2 5% 0.1W	3519	4822 117 11637	33Ω 5% 5W
3131	4822 050 22709	27Ω 1% 0.6W	3253	4822 117 11449	2k2 1% 0.1W	3420	4822 100 11598	470k 30%lin 0.1W	3520	5322 116 51882	0Ω 1/4W
3132	4822 117 10039	13k 1% 0.25W	3254	4822 050 22202	2k2 1% 0.6W	3421	4822 051 20203	20k 5% 0.1W	3523	4822 050 22202	2k2 1% 0.6W
3133	4822 050 22709	27Ω 1% 0.6W	3255	4822 117 11139	1k5 1% 0.1W	3422	4822 051 20471	470Ω 5% 0.1W	3524	4822 050 21802	1k8 1% 0.6W
3134	4822 050 11204	120k 1% 0.4W	3256	4822 051 20224	220k 5% 0.1W	3426▲	4822 052 11828	8Ω 2 5% 0.5W	3525	4822 051 20241	240Ω 5% 0.1W
3135	4822 050 21504	150k 1% 0.6W	3257	4822 051 20332	3k3 5% 0.1W	3428	4822 051 20911	910Ω 5% 0.1W	3526	4822 050 22203	22k 1% 0.6W
3136	4822 050 24703	47k 1% 0.6W	3258	4822 117 11449	2k2 1% 0.1W	3429	4822 051 20113	11k 5% 0.1W	3527	4822 051 20113	11k 5% 0.1W
3137	4822 050 21502	1k5 1% 0.6W	3259	4822 117 11449	2k2 1% 0.1W	3430	4822 051 20393	39k 5% 0.1W	3528	4822 051 20272	2k7 5% 0.1W
3138	4822 051 20471	470Ω 5% 0.1W	3260	4822 050 22202	2k2 1% 0.6W	3431	4822 051 20153	15k 5% 0.1W	3529	4822 117 11638	15Ω 2W
3139	4822 117 12578	RESISTOR, FIXED	3261	4822 051 20332	3k3 5% 0.1W	3432	4822 117 10833	10k 1% 0.1W	3530	4822 050 21501	150Ω 1% 0.6W
3140	4822 050 22703	27k 1% 0.6W	3262	4822 051 20105	1M 5% 0.1W	3433	4822 050 11204	120k 1% 0.4W	3536▲	4822 052 10108	1Ω 5% 0.33W
3141▲	4822 052 10108	1Ω 5% 0.33W	3263	4822 117 10833	10k 1% 0.1W	3434	4822 051 20102	1k 5% 0.1W	3537▲	4822 052 10108	1Ω 5% 0.33W
3142	4822 050 21003	10k 1% 0.6W	3264	4822 117 10833	10k 1% 0.1W	3435	4822 051 20471	470Ω 5% 0.1W	3538	4822 051 20681	680Ω 5% 0.1W
3143▲	4822 052 10108	1Ω 5% 0.33W	3265	4822 051 20682	68k 5% 0.1W	3436	4822 051 20333	33k 5% 0.1W	3539	4822 100 11141	10k 30%lin 0.1W
3144	4822 051 20473	47k 5% 0.1W	3266	4822 051 20562	56k 5% 0.1W	3437	4822 051 20102	1k 5% 0.1W	3540	4822 051 20681	680Ω 5% 0.1W
3145	4822 050 21003	10k 1% 0.6W	3267	4822 117 10833	10k 1% 0.1W	3438	4822 116 52289	5k6 5% 0.5W	3541	4822 117 11588	150Ω 5% 2W
3146▲	4822 052 10108	1Ω 5% 0.33W	3268	4822 117 11449	2k2 1% 0.1W	3439	4822 051 20562	5k6 5% 0.1W	3551	4822 050 21003	10k 1% 0.6W
3147	4822 117 10833	10k 1% 0.1W	3269	4822 050 11002	1k 1% 0.4W	3440	4822 051 20102	1k 5% 0.1W	3552	4822 117 10833	10k 1% 0.1W
3150	4822 051 20569	56Ω 5% 0.1W	3270	4822 051 20102	1k 5% 0.1W	3441	4822 051 20333	33k 5% 0.1W	3553	4822 050 21502	1k5 1% 0.6W
3151	4822 117 12579	47k 5% 1W	3271	4822 051 20472	4k7 5% 0.1W	3442	4822 051 20471	470Ω 5% 0.1W	3554	4822 050 22203	22k 1% 0.6W
3152	4822 050 25609	56Ω 1% 0.6W	3272	4822 051 20102	1k 5% 0.1W	3443	4822 051 20102	1k 5% 0.1W	3555	4822 117 10833	10k 1% 0.1W
3153	4822 051 20124	120k 5% 0.1W	3273	4822 051 20472	4k7 5% 0.1W	3444	4822 117 10833	10k 1% 0.1W	3556	4822 050 21003	10k 1% 0.6W
3154	4822 050 22003	20k 1% 0.6W	3274	4822 051 20102	1k 5% 0.1W	3445	4822 051 20124	120k 5% 0.1W	3557	4822 050 21003	10k 1% 0.6W
3155	4822 050 21001	100Ω 1% 0.6W	3276▲	4822 052 11828	8Ω 2 5% 0.5W	3446	4822 051 20153	15k 5% 0.1W	3558	4822 050 21503	15k 1% 0.6W
3156	4822 117 12581	82k 5% 0.5W	3277	4822 050 21504	150k 1% 0.6W	3447	4822 051 20393	39k 5% 0.1W	3559	4822 050 21003	10k 1% 0.6W
3157	4822 117 12581	82k 5% 0.5W	3278	4822 100 11391	330Ω 30%lin 0.1W	3448	4822 051 20392	3k9 5% 0.1W	3560	4822 050 21503	15k 1% 0.6W
3159	4822 100 11562	220Ω 30%	3279	4822 050 13902	3k9 1% 0.4W	3449	4822 051 20683	68k 5% 0.1W	3561	4822 051 20102	1k 5% 0.1W
3160	4822 051 20154	150k 5% 0.1W	3280	4822 117 10833	10k 1% 0.1W	3450	4822 050 11204	120k 1% 0.4W	3562	4822 051 10833	10k 1% 0.1W
3161	4822 050 24701	470Ω 1% 0.6W	3281	4822 051 20334	330k 5% 0.1W	3451	4822 116 52207	1k2 5% 0.5W	3563	4822 051 20223	22k 5% 0.1W
3162	4822 050 22703	27k 1% 0.6W	3282	4822 051 20124	120k 5% 0.1W	3452	4822 051 20821	820Ω 5% 0.1W	3564	4822 117 10833	10k 1% 0.1W
3163	4822 050 12202	2k2 1% 0.4W	3283	4822 051 20513	51k 5% 0.1W	3453	4822 051 20822	8k2 5% 0.1W	3565	4822 050 22002	2k 1% 0.6W
3164	4822 050 24703	47k 1% 0.6W	3284	4822 117 11533	30k 1% 0.4W	3454	4822 051 20393	39k 5% 0.1W	3566	4822 050 21003	10k 1% 0.6W
3166	4822 116 52234	100k 5% 0.5W	3285	4822 116 80678	10k 1%	3455	4822 051 20153	15k 5% 0.1W	3567	4822 051 20223	22k 5% 0.1W
3167	4822 116 52207	1k2 5% 0.5W	3286	4822 117 12584	820Ω 1%	3456	4822 117 10833	10k 1% 0.1W	3568	4822 050 21503	15k 1% 0.6W
3168	4822 050 21504	82k 5% 0.1W	3287	4822 050 19102	9k1 1% 0.4W	3457	4822 051 20124	120k 5% 0.1W	3571▲	4822 052 11228	2Ω 2 5% 0.5W
3171	4822 116 82958	100Ω 5% 1W	3288	4822 050 26802	6k8 1% 0.6W	3458	4822 051 20102	1k 5% 0.1W	3573	4822 050 24701	470Ω 1% 0.6W
3172	4822 050 24708	4k7 1% 0.6W	3289	4822 116 80394	1k	3459	4822 051 20391	390Ω 5% 0.1W	3574	4822 050 17503	75k 1% 0.4W
3177	4822 050 24701	470Ω 1% 0.6W	3290	4822 050 23002	3k 1% 0.6W	3460	4822 051 20333	33k 5% 0.1W	3576	4822 051 20394	390k 5% 0.1W
3179	4822 117 12582	2Ω 7 5% 1W	3291	4822 116 80287	12k	3461	4822 051 20102	1k 5% 0.1W	3577	4822 050 24703	47k 1% 0.6W
3182	4822 050 11002	1k 1% 0.4W	3292	4822 050 22203	22k 1% 0.6W	3462	4822 051 20472	4k7 5% 0.1W	3578	4822 050 23309	33Ω 1% 0.6W
3183	4822 050 21001	100Ω 1% 0.6W	3293	4822 051 20154	150k 5% 0.1W	3463	4822 051 20472	4k7 5% 0.1W	3579	4822 050 23309	33Ω 1% 0.6W
3184	4822 051 20472	4k7 5% 0.1W	3299	4822 050 13901	390Ω 1% 0.4W	3464	4822 051 20102	1k 5% 0.1W	3580	4822 050 22003	20k 1% 0.6W
3185	4822 050 21003	10k 1% 0.6W	3313	5322 116 51882	0Ω 1/4W	3465	4822 051 20333	33k 5% 0.1W	3581	4822 050 22202	2k2 1% 0.6W
3194	4822 116 40265	12Ω PTC 25% 276V	3314	4822 050 22203	22k 1% 0.6W	3466	4822 051 20471	470Ω 5% 0.1W	3582	4822 051 20393	39k 5% 0.1W
3195	4822 050 25609	56Ω 1% 0.6W	3315	4822 051 20563	56k 5% 0.1W	3467	4822 051 20102	1k 5% 0.1W	3583	4822 050 22003	20k 1% 0.6W
3196	4822 051 20473	47k 5% 0.1W	3316	4822 050 21003	10k 1% 0.6W	3468	4822 050 21003	10k 1% 0.6W	3584	4822 050 22201	220Ω 1% 0.6W
3197	4822 051 20472	4k7 5% 0.1W	3317	4822 050 21802	1k8 1% 0.6W	3469	4822 116 52234				

Spare parts list

17A8808Q/00C

25

3623	4822 116 80287	12k	3973	4822 116 52234	100k 5% 0.5W	6148	4822 130 34197	BZX79-C12 (COL)	7104	4822 130 40854	BC327
3624	4822 116 80287	12k	3974	4822 050 24702	4k7 1% 0.6W	6150	4822 130 30621	1N4148 (COL)	7105	4822 130 41344	BC337-40
3625	4822 051 20154	150k 5% 0.1W	3975	4822 051 20472	4k7 5% 0.1W	6181	4822 130 80446	BAS32L	7106	4822 130 44503	BC547C
3626	4822 116 52271	33k 5% 0.5W	3976	4822 051 20472	4k7 5% 0.1W	6182	4822 130 80446	BAS32L	7107	4822 130 44503	BC547C
3628	4822 050 21003	10k 1% 0.6W				6201	4822 130 80446	BAS32L	7108	4822 209 33432	UC3842BN
3629	4822 051 20203	20k 5% 0.1W	3978	4822 051 20472	4k7 5% 0.1W	6202	4822 130 80446	BAS32L	7109	4822 130 41053	BC639
3630	4822 050 22703	27k 1% 0.6W	3979	4822 051 20104	100k 5% 0.1W				7110	4822 130 42231	BC557C
3631	4822 117 12581	82k 5% 0.5W	3980	4822 051 20471	470Ω 5% 0.1W	6203	4822 130 80446	BAS32L	7111▲	4822 130 80908	CNX62A
			3981	4822 051 20104	100k 5% 0.1W	6204	4822 130 30621	1N4148 (COL)	7112	4822 209 81726	MC7812CT
3632	4822 050 25603	56k 1% 0.6W	3982	4822 051 20471	470Ω 5% 0.1W	6205	4822 130 80446	BAS32L			
3637	4822 050 21005	1M 1% 0.6W	3983	4822 051 20471	470Ω 5% 0.1W	6206	4822 130 80446	BAS32L	7113	5322 209 72487	LM2940CT
3638▲	4822 052 10828	80Ω 5% 0.33W	3984	4822 051 20473	47k 5% 0.1W	6207	4822 130 80446	BAS32L			
3639	4822 116 80394	RESISTOR, FIXED	3985	4822 051 20473	47k 5% 0.1W	6251	4822 130 80446	BAS32L	7114	4822 209 81397	TL431CLP
						6252	4822 130 80446	BAS32L	7115	4822 130 63365	BSN10A
3640	4822 050 22702	2K7 1% 0.6W				6261	4822 130 80446	BAS32L	7116	4822 130 44503	BC547C
3641	4822 117 11533	30k 1% 0.4W				6262	4822 130 30621	1N4148 (COL)	7117	4822 130 63131	IRF530
3642▲	4822 052 10228	212Ω 5% 0.33W	5101▲	4822 157 10292	14mH (LINE FILTER)	6299	4822 130 34233	BZX79-C5V1	7118	5322 209 72487	LM2940CT
3643▲	4822 052 11828	82Ω 5% 0.5W	5102	4822 157 10292	14mH				7120	4822 130 41087	BC638
3644	4822 050 24701	470Ω 1% 0.6W	5103	4822 146 10671	POWER DRIVER TRANSFORMER	6301	4822 130 80446	BAS32L	7121	4822 130 44196	BC548C
3645▲	4822 052 11109	10Ω 5% 0.5W	5104▲	4822 146 10672	POWER TRANSFORMER EE4220	6302	4822 130 80446	BAS32L	7122	4822 130 44196	BC548C
			5105	4822 526 10522	BEAD, FERRITE	6322	4822 130 80446	BAS32L	7141	4822 130 44104	BC328
3646	4822 050 21003	10k 1% 0.6W	5201	4822 157 63863	3.9μH 10%	6323	4822 130 80446	BAS32L	7142	4822 130 44196	BC548C
3647	4822 117 11531	39Ω 5% 2W	5202	4822 157 63863	3.9μH 10%	6341	4822 130 80446	BAS32L			
3648	4822 050 21001	100Ω 1% 0.6W	5251	4822 157 63863	3.9μH 10%	6342	4822 130 30621	1N4148 (COL)	7201	4822 209 33394	P87C52EBPN (please use item "1212" for spare parts ordering.)
3649	4822 050 24701	470Ω 1% 0.6W	5276	4822 157 63863	3.9μH 10%	6343	4822 130 30621	1N4148 (COL)			
3650	4822 050 21003	10k 1% 0.6W	5301	4822 157 63863	3.9μH 10%	6344	4822 130 80446	BAS32L	7202	4822 209 15027	ST24W04B6 8P (This is empty IC, please use item "1212" for spare parts ordering.)
3651▲	4822 052 11109	10Ω 5% 0.5W				6345	4822 130 80446	BAS32L			
3652	4822 050 24705	4M7 1% 0.6W	5302	4822 157 63211	COIL	6346	4822 130 80446	BAS32L			
3653	4822 051 20473	47k 5% 0.1W	5303	4822 157 63211	COIL	6401	4822 130 80446	BAS32L			
3654	4822 051 20471	470Ω 5% 0.1W	5341	4822 157 63863	3.9μH 10%	6402	4822 130 80446	BAS32L			
3655	4822 050 23302	3K3 1% 0.6W	5481	4822 157 63863	3.9μH 10%	6426	4822 130 30621	1N4148 (COL)			
			5501	4822 142 40346	TRANSFORMER	6427	4822 130 30621	1N4148 (COL)			
3656	4822 053 21514	510k 5% 0.5W	5504	4822 157 71372	COIL	6451	4822 130 80446	BAS32L			
3657▲	4822 052 11102	1k 5% 0.5W	5505	4822 148 60317	TRANSFORMER	6502	4822 130 31607	RGP10D	7203	4822 209 33938	M62358P
3658	4822 053 21154	150k 5% 0.5W	5506	4822 157 71509	6mH	6503	4822 130 31607	RGP10D	7204	5322 130 42756	BC857C
3659	4822 117 11638	15Ω 2W	5507	4822 157 71511	3mH	6504	5322 130 32184	BYV27-50	7205	4822 209 15039	P82C610
3661	4822 050 21201	120Ω 1% 0.6W	5508	4822 157 70605	COIL	6505	4822 130 83854	BYV36D	7251	4822 209 73852	WM8T2369
3662	4822 050 21804	180k 1% 0.6W				6506	4822 130 83854	BYV36D	7252	5322 130 44336	BSV52
3663	4822 116 82967	68k 0.125							7253	4822 209 10265	HEF4070BP
3664	4822 100 11392	47k 30%min 0.1W				6507	4822 130 82584	MUR10150E	7254	4822 130 42513	BC858C
3665	4822 053 21104	100k 5% 0.5W				6508	4822 130 34278	BZX79-C6V8 (COL)	7255	5322 130 42755	BC847C
3666	4822 117 11635	1k 0.5W				6509	4822 130 34233	BZX79-C5V1	7256	4822 130 41594	PH2369
						6510	4822 130 83128	EGP30G	7257	5322 130 42136	BC848C
3667	4822 101 11257	47k 30%LIN	5525	4822 157 63863	3.9μH 10%	6511	4822 130 31607	RGP10D			
3668	4822 051 20104	100k 5% 0.1W	5562	4822 148 81272	TRANSFORMER	6512	4822 130 31607	RGP10D	7258	5322 130 42136	BC848C
3669	4822 050 12702	2K7 1% 0.4W	5601	4822 157 63863	3.9μH 10%	6551	4822 130 34233	BZX79-C5V1	7269	4822 209 15041	WT8048N2
3670	4822 116 52289	5k6 5% 0.5W	5620	4822 157 63863	3.9μH 10%	6552	4822 130 34257	BZX79-C51 (COL)	7276	5322 209 10422	HEF4538BP
3671	4822 116 52234	100k 5% 0.5W	5636	4822 157 71372	COIL	6553	4822 130 30842	BAV21 (COL)	7277	5322 209 86234	NE5532N
3672	4822 116 52234	100k 5% 0.5W	5638▲	4822 140 10591	L.O.T.	6554	4822 130 80446	BAS32L	7278	4822 130 44196	BC548C
3673	4822 116 52234	100k 5% 0.5W				6555	4822 130 80446	BAS32L	7301	5322 209 86234	NE5532N
3674	4822 116 52234	100k 5% 0.5W	5639	4822 146 10673	TRANSFORMER				7302	4822 130 44121	BC338
3675	4822 117 10833	10k 1% 0.1W	5661	4822 157 63863	3.9μH 10%	6556	4822 130 80446	BAS32L	7303	4822 130 44104	BC328
3676	4822 051 20104	100k 5% 0.1W	5675	4822 157 63863	3.9μH 10%	6557	4822 130 30842	BAV21 (COL)	7321	4822 130 42513	BC858C
			5951▲	4822 146 10674	ZERO POWER TRANSFORMER	6571	5322 130 31969	RGP15G	7322	4822 130 41594	PH2369
						6572	4822 130 80446	BAS32L			
3677	4822 051 20102	1k 5% 0.1W				6573	4822 130 34197	BZX79-C12 (COL)	7323	4822 130 42513	BC858C
3678	4822 050 11002	1k 1% 0.4W	6101	5322 130 31931	BZV85-C51	6616	4822 130 80446	BAS32L	7324	4822 209 80797	LM393N
3679	4822 051 20473	47k 5% 0.1W	6102	5322 130 31931	BZV85-C51	6617	4822 130 31607	RGP10D	7341	4822 130 44196	BC548C
3680	4822 051 20473	47k 5% 0.1W	6103	4822 130 10741	GBU6J	6618	4822 130 80446	BAS32L	7342	5322 209 10422	HEF4538BP
3681	4822 117 10833	10k 1% 0.1W	6106	4822 130 10742	UF4004	6619	4822 130 80446	BAS32L	7343	5322 130 42136	BC848C
3682	4822 051 20104	100k 5% 0.1W	6107	4822 130 30621	1N4148 (COL)	6620	4822 130 30621	1N4148 (COL)	7344	5322 130 42136	BC848C
3683	4822 051 20102	1k 5% 0.1W	6108	4822 130 30621	1N4148 (COL)				7345	5322 130 60068	BC558C
3684	4822 050 11002	1k 1% 0.4W	6109	4822 130 10742	UF4004	6621	4822 130 80446	BAS32L	7346	4822 130 44196	BC548C
3685	4822 051 20473	47k 5% 0.1W	6110	4822 130 30621	1N4148 (COL)	6622	4822 130 30621	1N4148 (COL)	7426	4822 209 63807	NE5517N
3686	4822 051 20473	47k 5% 0.1W	6111	4822 130 30621	1N4148 (COL)	6638	4822 130 31393	RGP10J	7451	4822 209 63807	NE5517N
			6115	4822 130 80446	BAS32L	6639	4822 130 31607	RGP10D			
3687	4822 117 10833	10k 1% 0.1W	6116	4822 130 30862	BZX79-C9V1 (COL)	6640	4822 130 83128	EGP30G			
3688	4822 051 20104	100k 5% 0.1W					5322 390 20011	VET SILIC.P4 20GR	7452	5322 130 42755	BC847C
3689	4822 051 20102	1k 5% 0.1W	6117	4822 130 30621	1N4148 (COL)	6641	4822 130 30621	1N4148 (COL)	7471	4822 209 31125	TA2031A
3690	4822 050 11002	1k 1% 0.4W	6118	4822 130 30621	1N4148 (COL)	6642	4822 130 31393	RGP10J	7475	5322 130 42755	BC847C
3691	4822 051 20473	47k 5% 0.1W	6119	4822 130 30621	1N4148 (COL)	6643	4822 130 31393	RGP10J	7481	4822 209 90177	BC9102C
3692	4822 051 20473	47k 5% 0.1W	6120	4822 130 34233	BZX79-B	6644	4822 130 31393	RGP10J	7482	5322 130 42136	BC848C
3693	4822 117 10833	10k 1% 0.1W	6122	4822 130 30842	BAV21 (COL)	6675	4822 130 30621	1N4148 (COL)	7483	5322 130 42136	BC848C
3694	4822 051 20104	100k 5% 0.1W	6123	4822 130 31024	BZX79-B	6676	4822 130 30621	1N4148 (COL)	7484	5322 130 42136	BC848C
3695	4822 051 20102	1k 5% 0.1W	6126	4822 130 31982	BYV27-100				7501	5322 130 42755	BC847C
3696	4822 050 11002	1k 1% 0.4W	6127	4822 130 30842	BAV21 (COL)	6677	4822 130 30621	1N4148 (COL)	7502	4822 130 63081	BN254A
			6128	4822 130 30842	BAV21 (COL)	6678	4822 130 30621	1N4148 (COL)	7503	4822 130 63627	BU2527AF
3697	4822 051 20473	47k 5% 0.1W	6129	4822 130 30842	BAV21 (COL)						
3698	4822 051 20473	47k 5% 0.1W				6679	4822 130 30621	1N4148 (COL)	7504	4822 130 44121	BC338
3890	4822 051 20153	15k 5% 0.1W	6130	4822 130 30842	BAV21 (COL)	6680	4822 130 80446	BAS32L	7505	4822 130 44104	BC328
3891	4822 117 11139	1k5 5% 0.1W	6131	5322 130 10709	BYM26C	6951	4822 130 31393	RGP10J	7506	5322 130 62262	IRF730
3892	4822 051 20472	4k7 5% 0.1W	61								

7601	5322 130 42136	BC848C
7602	5322 130 60068	BC558C
7603	5322 209 86059	SN74LS221N
7604	4822 130 44196	BC548C
7616	4822 209 33432	UC3842BN
7617	4822 130 42231	BC557C
7618	4822 209 70672	LM358N
7636	4822 130 63081	BSN254A
7637	4822 130 63702	BUK455-400B
7638	4822 130 63703	BUK457-500B
	5322 390 20011	VET SILIC.P4 20GR
7640	4822 130 70025	BUX87P
7661	4822 130 44196	BC548C
7675	5322 130 60684	IRF540
7676	5322 130 42136	BC848C
7677	5322 130 60684	IRF540
7678	5322 130 42136	BC848C
7679	5322 130 60684	IRF540
7680	5322 130 42136	BC848C
7681	5322 130 60684	IRF540
7682	5322 130 42136	BC848C
7890	4822 130 44121	BC338
7950	4822 130 44503	BC547C
7951	4822 130 44503	BC547C
7952	4822 130 44503	BC547C
7953	4822 130 10744	STD2N50-1
7954	4822 130 44196	BC548C
7955	4822 130 44461	BC546B
7956	4822 130 44503	BC547C
7971	4822 130 63081	BSN254A
7972	4822 130 44461	BC546B
7974	4822 130 44461	BC546B

1103 Video panel

Various

1103	4822 212 10704	VIDEO PWB ASS'Y
	4822 265 10782	887 BM M 6P M2.50 RED B CONNECTOR, ELEC
	4822 265 20366	
	4822 265 10783	CON. BM H 7P. M2.50
	4822 265 41454	8P
	4822 265 20707	2P
	4822 255 70263	CONNECTOR, PICT
	4822 265 41419	6P
	4822 265 41416	7P
	5322 255 40958	8-DIP-S-LC
	5322 390 20011	VET SILIC.P4 20GR

-II-

2810	4822 126 14075	2KV 10N
2701	4822 126 13196	100nF 10% 25V
2703	4822 126 13196	100nF 10% 25V
2704	4822 126 13196	100nF 10% 25V
2705	4822 126 13196	100nF 10% 25V
2706	4822 126 13196	100nF 10% 25V
2707	4822 126 13196	100nF 10% 25V
2708	4822 126 13196	100nF 10% 25V
2709	4822 124 40849	330µF 20% 16V
2710	4822 126 13196	100nF 10% 25V
2711	4822 124 81131	330µF 20% 16V
2712	4822 126 13196	100nF 10% 25V
2713	4822 126 13196	100nF 10% 25V
2714	4822 126 13196	100nF 10% 25V
2715	4822 126 13196	100nF 10% 25V
2716	4822 126 13196	100nF 10% 25V
2717	4822 126 13196	100nF 10% 25V
2718	4822 126 13196	100nF 10% 25V
2719	4822 126 13196	100nF 10% 25V
2720	4822 124 80104	10µF 20% 16V
2721	4822 124 80104	10µF 20% 16V
2722	4822 126 13196	100nF 10% 25V
2723	5322 122 34098	10nF 10% 63V
2724	5322 122 32658	22pF 5% 50V
2727	4822 124 40433	47µF 20% 25V
2728	4822 124 42165	10µF 160V
2729	4822 124 80606	1µF 20% 160V
2730	4822 124 81131	330µF 20% 16V
2731	5322 122 34098	10nF 10% 63V
2732	4822 252 60127	DSP201M
2733	4822 124 80235	10µF 16V
2734	4822 126 13196	100nF 10% 25V
2736	5322 122 32659	33pF 5% 50V
2737	5322 122 32659	33pF 5% 50V
2738	5322 122 32659	33pF 5% 50V

2739	5322 122 32659	33pF 5% 50V
2740	5322 122 32659	33pF 5% 50V
2741	4822 124 80104	10µF 20% 16V
2742	5322 122 32448	10pF 5% 50V
2743	5322 122 34098	10nF 10% 63V
2744	5322 122 32659	33pF 5% 50V
2745	4822 126 14076	220N 25V. P8020
2746	4822 124 40433	47µF 20% 25V
2747	4822 124 42165	10µF 160V
2748	4822 124 80606	1µF 20% 160V
2749	4822 126 13196	100nF 10% 25V
2750	4822 126 14076	220N 25V. P8020
2751	5322 122 34098	10nF 10% 63V
2752	4822 252 60127	DSP201M
2753	4822 124 80235	10µF 16V
2754	4822 126 13196	100nF 10% 25V
2761	4822 124 80104	10µF 20% 16V
2762	5322 122 34098	10nF 10% 63V
2763	5322 122 33538	150pF 2% 63V
2766	4822 124 40433	47µF 20% 25V
2767	4822 124 80606	1µF 20% 160V
2768	4822 124 42165	10µF 160V
2769	4822 126 13196	100nF 10% 25V
2771	5322 122 34098	10nF 10% 63V
2772	4822 252 60127	DSP201M
2773	4822 124 80104	10µF 20% 16V
2801	4822 124 42155	4.7µF 250V
2802	4822 126 13196	100nF 10% 25V
2803	5322 122 34098	10nF 10% 63V
2804	5322 122 34098	10nF 10% 63V
2806	4822 122 33968	1nF 5% 500V
2807	4822 124 80104	10µF 20% 16V
2808	4822 126 13993	3.3nF 10% 500V
2809	4822 122 33968	1nF 5% 500V
2813	5322 122 34098	10nF 10% 63V
2814	4822 126 13196	100nF 10% 25V
2815	4822 124 42155	4.7µF 250V
2816	4822 126 13993	3.3nF 10% 500V
2817	4822 124 80104	10µF 20% 16V
2818	5322 122 34123	1nF 10% 50V
2823	4822 126 13196	100nF 10% 25V
2824	4822 126 13196	100nF 10% 25V
2825	5322 122 34098	10nF 10% 63V
2826	4822 126 13196	100nF 10% 25V
2827	5322 122 32268	470pF 10% 50V
2829	4822 124 22669	1µF 20% 50V
2830	4822 124 41659	4.7µF 20% 25V
2838	5322 122 34123	1nF 10% 50V
2839	5322 122 34123	1nF 10% 50V
2840	5322 122 32531	100pF 5% 50V
2841	5322 122 32531	100pF 5% 50V
2842	4822 126 13196	100nF 10% 25V
2843	4822 124 40433	47µF 20% 25V
2844	4822 124 80104	10µF 20% 16V
2853	5322 122 32448	10pF 5% 50V
2854	5322 122 32448	10pF 5% 50V
2855	5322 122 32448	10pF 5% 50V
3701	4822 051 20102	1k 5% 0.1W
3702	4822 050 11002	1k 1% 0.4W
3703	4822 050 19102	9k1 1% 0.4W
3705	4822 050 11002	1k 1% 0.4W
3706	4822 051 20822	8k2 5% 0.1W
3707	4822 051 20472	4k7 5% 0.1W
3708	4822 051 20471	470Ω 5% 0.1W
3709	4822 051 20822	8k2 5% 0.1W
3710	4822 051 20822	8k2 5% 0.1W
3711	4822 051 20759	75Ω 5% 0.1W
3712	4822 051 20339	33Ω 5% 0.1W
3714	4822 051 20109	10Ω 5% 0.1W
3715	4822 051 20272	2k7 5% 0.1W
3716	4822 051 20829	82Ω 5% 0.1W
3717	4822 050 24709	47Ω 1% 0.6W
3718	4822 051 20109	10Ω 5% 0.1W
3719	4822 051 20391	390Ω 5% 0.1W
3720	4822 051 20471	470Ω 5% 0.1W
3724	4822 050 24709	47Ω 1% 0.6W
3726	4822 117 12586	560Ω 5% 7W.
3728	4822 051 20229	22Ω 5% 0.1W
3729	4822 051 20271	270Ω 5% 0.1W
3730	4822 051 20339	33Ω 5% 0.1W
3731	4822 051 20223	22k 5% 0.1W
3732	4822 050 17503	75k 1% 0.4W
3733	4822 050 11302	1k3 1% 0.4W
3734	4822 117 10833	10k 1% 0.1W
3736	4822 050 21005	1M 1% 0.6W
3737	4822 050 21504	150k 1% 0.6W
3738	4822 050 21804	180k 1% 0.6W
3739	4822 116 52195	47Ω 5% 0.5W
3740	4822 051 20391	390Ω 5% 0.1W
3741	4822 051 20759	75Ω 5% 0.1W
3742	4822 051 20339	33Ω 5% 0.1W

3743	4822 051 20472	4k7 5% 0.1W
3744	4822 051 20109	10Ω 5% 0.1W
3745	4822 051 20829	82Ω 5% 0.1W
3746	4822 051 20272	2k7 5% 0.1W
3747	4822 050 24709	47Ω 1% 0.6W
3748	4822 050 21009	10Ω 1% 0.6W
3750	4822 051 20471	470Ω 5% 0.1W
3753	4822 051 20479	47Ω 5% 0.1W
3756	4822 117 12586	560Ω 5% 7W.
3757	4822 051 20471	470Ω 5% 0.1W
3758	4822 051 20271	270Ω 5% 0.1W
3759	4822 051 20229	22Ω 5% 0.1W
3761	4822 051 20223	22k 5% 0.1W
3762	4822 050 17503	75k 1% 0.4W
3763	4822 050 23901	390Ω 1% 0.6W
3764	4822 117 10833	10k 1% 0.1W
3766	4822 051 20105	1M 5% 0.1W
3767	4822 050 21504	150k 1% 0.6W
3768	4822 050 21804	180k 1% 0.6W
3769	4822 116 52195	47Ω 5% 0.5W
3770	4822 051 20472	4k7 5% 0.1W
3771	4822 051 20759	75Ω 5% 0.1W
3772	4822 051 20339	33Ω 5% 0.1W
3773	4822 051 20471	470Ω 5% 0.1W
3774	4822 051 20109	10Ω 5% 0.1W
3775	4822 051 20272	2k7 5% 0.1W
3776	4822 051 20759	75Ω 5% 0.1W
3777	4822 050 24709	47Ω 1% 0.6W
3778	4822 051 20109	10Ω 5% 0.1W
3779	4822 051 20391	390Ω 5% 0.1W
3780	4822 051 20471	470Ω 5% 0.1W
3784	4822 051 20479	47Ω 5% 0.1W
3786	4822 117 12586	560Ω 5% 7W.
3788	4822 051 20229	22Ω 5% 0.1W
3789	4822 051 20271	270Ω 5% 0.1W
3791	4822 050 22203	22k 1% 0.6W
3792	4822 050 17503	75k 1% 0.4W
3795	4822 117 10833	10k 1% 0.1W
3796	4822 050 21005	1M 1% 0.6W
3797	4822 050 21504	150k 1% 0.6W
3798	4822 050 21804	180k 1% 0.6W
3799	4822 116 52195	47Ω 5% 0.5W
3800	4822 050 26801	680Ω 1% 0.6W
3801	4822 050 25601	560Ω 1% 0.6W
3802	4822 050 21001	100Ω 1% 0.6W
3803	4822 050 22202	2k2 1% 0.6W
3804	4822 050 21502	1k5 1% 0.6W
3805	4822 116 80548	15k 5% 0.5W
3808	4822 051 20473	47k 5% 0.1W
3809	4822 051 20473	47k 5% 0.1W
3812	4822 051 20272	2k7 5% 0.1W
3813	4822 051 20392	3k9 5% 0.1W
3814	4822 051 20392	3k9 5% 0.1W
3815	4822 051 20392	3k9 5% 0.1W
3820	4822 051 20101	100Ω 5% 0.1W
3823	4822 051 20102	1k 5% 0.1W
3824	4822 051 20101	100Ω 5% 0.1W
3825	4822 051 20101	100Ω 5% 0.1W
3826	4822 051 20334	330k 5% 0.1W
3827	4822 051 20331	330Ω 5% 0.1W
3828	4822 051 20472	4k7 5% 0.1W
3829	4822 051 20391	390Ω 5% 0.1W
3830	4822 051 20391	390Ω 5% 0.1W
3831	4822 051 20102	1k 5% 0.1W
3832	4822 116 52186	22Ω 5% 0.5W
3833	4822 051 20471	470Ω 5% 0.1W
3834	4822 051 20391	390Ω 5% 0.1W
3835	4822 051 20159	15Ω 5% 0.1W
3836	4822 051 20159	15Ω 5% 0.1W
3837	4822 051 20154	150k 5% 0.1W
3838	4822 051 20472	4k7 5% 0.1W
3839	4822 051 20159	15Ω 5% 0.1W
3841	4822 117 11139	1k5 1% 0.1W
3842	4822 117 11449	2k2 1% 0.1W
3843	4822 051 20472	4k7 5% 0.1W
3844	4822 051 20272	2k7 5% 0.1W
3845	4822 117 10833	10k 1% 0.1W
3846	4822 050 24701	470Ω 1% 0.6W
3848	4822 117 11449	2k2 1% 0.1W
3849	4822 117 11449	2k2 1% 0.1W
3858	4822 051 20101	100Ω 5% 0.1W
3859	4822 051 20101	100Ω 5% 0.1W
3860	4822 051 20101	100Ω 5% 0.1W
3862	4822 117 10833	10k 1% 0.1W
5701	4822 157 63863	3.9μH 10%
5711	4822 157 71412	COIL
5712	4822 157 63863	3.9μH 10%
5721	4822 157 71412	COIL
5722	4822 157 63863	3.9μH 10%
5723	4822 157 71026	0.82μH 20%
5731	4822 157 70603	COIL
5732	4822 157 63863	3.9μH 10%

3310	4822 116 52207	1k2 5% 0.5W
3311	4822 050 21001	100Ω 1% 0.6W
3312	4822 050 21001	100Ω 1% 0.6W



6364	4822 130 31253	BZX79-C2V4
6381	4822 130 83789	L-59YGC

1105 PFC/AUDIO panel

Various

1105	4822 212 10706	PFC/AUDIO PWB ASS'Y
	4822 265 10779	CON BM V SP M3.96 63735 B
	4822 265 41423	10P
	4822 265 31209	3P
	4822 265 10286	2P
	4822 267 31838	2 P
	4822 265 31207	5P
	4822 267 31839	3 P
	4822 492 62076	FOR TRANSISTORS PLATE, MICA
	4822 466 93161	5322 390 20011 VET SILIC.P4 20GR
	4822 325 10176	INSULATOR, PLAS



2001	5322 122 32448	10pF 5% 50V
2005	4822 126 14076	220N 25V. P8020
2006	5322 126 10184	680P 5% 50V.
2007	4822 124 80721	1000μF 35V
2008	4822 126 13196	100nF 10% 25V
2009	5322 122 32448	10pF 5% 50V
2014	4822 126 14076	220N 25V. P8020
2015	5322 126 10184	680P 5% 50V.
2016	4822 126 13196	100nF 10% 25V
2017	4822 126 13196	100nF 10% 25V
2018	4822 126 13196	100nF 10% 25V
2019	4822 124 22669	1μF 20% 50V
2021	5322 122 34098	10nF 10% 63V
2022	5322 122 34098	10nF 10% 63V
2023	5322 122 34098	10nF 10% 63V
2024	4822 124 22686	10μF 16V
2901	4822 121 43641	470nF 5% 400V
2903	4822 126 12269	680pF 10%R(HR) 2KV
2905	4822 124 11865	1U 20% 450V
2906	4822 121 43694	22nF 100V
2907	4822 124 42149	220μF 20% 25V
2908	4822 121 43696	100nF 100V
2909	4822 121 43697	330nF 10% 100V
2910	4822 121 43694	22nF 100V
2911	4822 121 70565	1nF 100V
2912	4822 121 43693	10nF 100V
2913	4822 121 43696	100nF 100V
2914	4822 124 22669	1μF 20% 50V
2915	4822 124 22669	1μF 20% 50V
2918	5322 122 32311	470pF 10% 100V



3001	4822 051 20471	470Ω 5% 0.1W
3002	4822 051 20273	27k 5% 0.1W
3004	4822 051 20008	0Ω JUMP. (0805)
3007	4822 051 20243	24k 5% 0.1W
3008	4822 051 20471	470Ω 5% 0.1W
3009	4822 051 20008	0Ω JUMP. (0805)
3011	4822 051 20273	27k 5% 0.1W
3015	4822 050 22403	24k 1% 0.6W
3016	4822 050 11002	1k 1% 0.4W
3017	4822 051 20102	1k 5% 0.1W
3018	4822 051 20109	10Ω 5% 0.1W
3019	4822 051 20109	10Ω 5% 0.1W
3021	4822 051 20223	22k 5% 0.1W
3022	4822 051 20223	22k 5% 0.1W
3023	4822 051 20513	51k 5% 0.1W
3024	4822 051 20392	3k9 5% 0.1W
3025	4822 051 20101	100Ω 5% 0.1W
3026	4822 117 11445	240k 5% 0.1W
3027	4822 051 20684	680k 5% 0.1W
3028	4822 051 20472	4k7 5% 0.1W
3029	4822 051 20473	47k 5% 0.1W
3030	4822 051 20473	47k 5% 0.1W
3031	4822 051 20473	47k 5% 0.1W
3032	4822 051 20472	4k7 5% 0.1W
3033	4822 051 20473	47k 5% 0.1W

3901	4822 117 12587	1k2 5% 5W.
3902	4822 050 24704	470k 1% 0.6W
3903	4822 050 24704	470k 1% 0.6W
3904	4822 050 22402	2k4 1% 0.6W
3905	4822 051 53904	390k 1% 0.125W

3906	4822 050 22004	200k 1% 0.6W
3907	4822 050 26803	68k 1% 0.6W
3913	4822 050 11204	120k 1% 0.4W
3914	4822 050 18209	82Ω 1% 0.4W
3915	4822 050 23301	330Ω 1% 0.6W
3916	4822 116 52234	100k 5% 0.5W
3917	4822 116 80395	RESISTOR, FIXED
3918	4822 117 12588	180k 1% 0.5W.
3919	4822 117 12589	200k 1% 0.5W
3922	4822 050 21502	1k5 1% 0.6W

3923	4822 050 11503	15k 1% 0.4W
3926	4822 050 24702	4k7 1% 0.6W
3927	4822 050 22202	2k2 1% 0.6W
3928	4822 116 52271	33k 5% 0.5W
3929	4822 050 21203	12k 1% 0.6W
3930	4822 050 11002	1k 1% 0.4W
3931	4822 050 21501	150Ω 1% 0.6W
3932	4822 050 24708	4117 1% 0.6W
3933	4822 116 83004	33Ω 10% 0.5W
3934	4822 116 83004	33Ω 10% 0.5W

3935	4822 116 83004	33Ω 10% 0.5W
3936	4822 050 12702	2k7 1% 0.4W
3937	4822 050 26202	6k2 1% 0.6W

5001	4822 157 63863	3.9μH 10%
5002	4822 157 53519	COIL
5003	4822 157 53519	COIL
5901	4822 157 11066	PFC CHOKE EI-33
5902	4822 157 11067	PFC CHOKE EI-35



6001	4822 130 31438	1N4001
6002	4822 130 31438	1N4001
6003	4822 130 31438	1N4001
6004	4822 130 80446	BAS32L
6005	4822 130 80446	BAS32L
6006	4822 130 80446	BAS32L
6007	4822 130 80446	BAS32L
6008	4822 130 80446	BAS32L
6901	5322 130 10709	BYM26C
6902	5322 130 10709	BYM26C
6903	4822 130 31607	RGP10D

6904	4822 130 31393	RGP10J
6905	4822 130 34257	BZX79-C51 (COL)
6907	4822 130 30621	1N4148 (COL)
6908	4822 130 30621	1N4148 (COL)
6911	4822 130 34142	BZX79-C33 (COL)
6913	4822 130 30621	1N4148 (COL)
6914	4822 130 30621	1N4148 (COL)
6915	4822 130 31607	RGP10D
6916	4822 130 31607	RGP10D



7001	4822 209 13706	TDA7053A
7002	4822 130 44196	BC548C
7003	4822 130 44196	BC548C
7004	4822 130 41594	PH2369
7901	4822 130 10745	STW15NA50
7902	4822 130 44196	BC548C
7903	4822 130 44196	BC548C
7904	5322 130 60068	BC558C
7905	5322 130 60068	BC558C
7906	4822 130 44196	BC548C
7910	4822 209 90116	UC3843AN

1106 RCA JACK panel

Various

1106	4822 212 10707	RCA JACK PWB ASS'Y
	4822 265 10785	CON BM CINCH H 3P F RDWHYE B



2081	5322 126 10184	680P 5% 50V.
2082	5322 126 10184	680P 5% 50V.



3081	4822 051 20273	27k 5% 0.1W
3082	4822 051 20273	27k 5% 0.1W

1108 Moire control panel

Various

1108	4822 701 14391	MOIRE CONTROL PWB ASSY
	4822 267 51372	10 P.



2356	4822 124 22678	100μF 20% 16V
------	----------------	---------------



3356	4822 051 20102	1k 5% 0.1W
3357	4822 050 11002	1k 1% 0.4W
3369	4822 051 20472	4k7 5% 0.1W
3370	4822 050 11002	1k 1% 0.4W
3373	4822 051 20472	4k7 5% 0.1W
3374	4822 051 20473	47k 5% 0.1W
3375	4822 051 20102	1k 5% 0.1W
3379	4822 117 10833	10k 1% 0.1W
3380	4822 117 10833	10k 1% 0.1W



6358	4822 130 80446	BAS32L
------	----------------	--------



7360	5322 130 42136	BC848C
7361	5322 130 42136	BC848C
7362	5322 130 42136	BC848C
7364	4822 209 73852	PMBT2369
7365	5322 209 11109	74HCT74N

1109 Power knob panel

Various

1109	4822 701 14392	POWER KNOB PWB ASSY
	4822 276 13813	SWITCH PUSH 2P 2POS.