

HITACHI **SERVICE MANUAL**

YK**No.0023E****CM2085ME**
CM2085MU**C6M Chassis**

For Service Manuals Contact
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CAUTION: Before servicing this chassis, it is important that the service technician should read the "Safety Precautions" and "Product Safety Notice" in this Service Manual.

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SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

ULTRAHIGH RESOLUTION COLOR DISPLAY MONITOR

December 1988

YOKOHAMA WORKS

SAFETY PRECAUTIONS

NOTICE: Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis or picture tube.

The following precautions should be observed.

1. Do not install, remove, or handle the picture tube in any manner unless shatterproof goggles are worn.
People not so equipped should be kept away while picture tubes are handled.
Keep picture tube away from the body while handling.
2. When replacing a chassis in the monitor, all the protective devices must be put back in place, such as, barriers, non-metallic knobs, adjustment and compartment shields, and isolation resistor-capacitor, etc.
3. When service is required, observe the original lead dress. Extra precaution should be taken to assure correct lead dress in the high voltage circuitry area.
4. Always use the manufacturer's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacturer's. Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
5. Before returning a serviced monitor to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the monitor by the manufacturer has become defective, or inadvertently defeated during servicing.

Therefore, the following checks should be performed for continued protection of the customer and service technician.

High Voltage

This monitor is provided with a high voltage hold down circuit for clearly indicating that voltage has increased in excess of a predetermined value.

Comply with all notes described in this Service Manual regarding this hold down circuit when servicing, so that this hold down circuit may function correctly.

Service Warning

With minimum Brightness and Contrast the operating high voltage in this display is lower than 30KV.

If any component having influence on the high voltage is replaced, confirm that the high voltage with minimum Brightness and Contrast is lower than 30KV.

To measure high voltage use a high impedance high-voltage meter. (SENSITIVE RESEARCH Model: ESH or Equivalent)

Connect (—) to chassis earth and (+) to the CRT anode button. (See the following connection diagram Fig.1.)

NOTE:

- 1) Turn power switch off without fail before making the connection to the Anode button.
- 2) Before turn power switch ON, confirm the line voltage, set the "Voltage Selector".

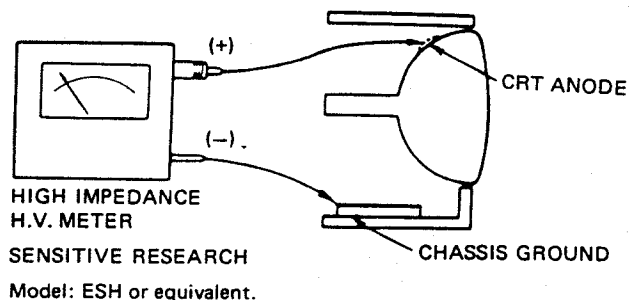


Fig. 1

X-radiation

TUBE: The primary source of X-radiation in this monitor is the picture tube. The tube utilized in this chassis is specially constructed to limit X-radiation emissions.

For continued X-radiation protection, the replacement tube must be the same type as the original, manufacturer approved type.

When troubleshooting and making test measurements in a monitor with a problem of excessive high voltage, avoid being unnecessarily close to the picture tube and the high voltage components.

Do not operate the chassis longer than is necessary to locate the cause of excessive voltage.

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CHECK OF HIGH VOLTAGE HOLD DOWN CIRCUIT

Checking of the high Voltage hold down circuit operation.

1. Turn the switch of the unit OFF.
2. Set voltage selector switch and Brightness, Contrast controls to max.
3. Connect a DC Voltmeter and an adjustment jig as shown in Fig. 2.
4. Set the adjustment VR to fully counterclockwise.
5. Turn the switch of the unit ON and gradually rotate the adjustment VR counterclockwise.

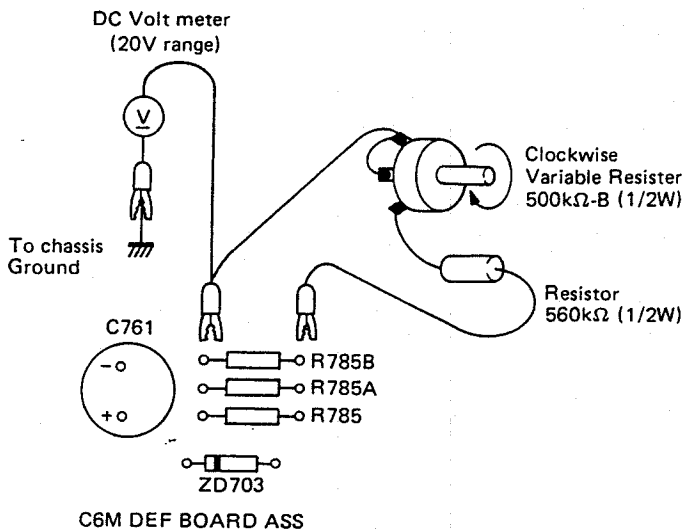


Fig. 2 Checking Circuit using jig

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the color monitor units have special safety related characteristics.

These are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with Δ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the manufacturer recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, X-radiation, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult this Service Manual.

6. Check that a reading of DC voltage-meter is less-than $12.7 \pm 0.5V$ when picture disappears.
7. Turn the switch of the unit OFF immediately after checking that the picture disappears.
8. Remove the adjusting jig and the DC voltmeter.

Note: Reading of 12.7V is approximately equivalent to 30 KV of CDT Anode High Voltage.

FEATURES

1. Wide range of scanning frequencies from 30 kHz to 64 kHz horizontal and 50 Hz to 100 Hz vertical.
2. Full compatibility with IBM VGA color graphics adaptor.
3. High resolution graphics and text from analog inputs.
4. Anti-glare screen for eye comfort.
5. Tilt and Swivel base for ease of use.
6. Dual input connector sets of BNC and DB-9.
7. Large 20 (19 V) inch diagonal screen.

Trademark acknowledgements:

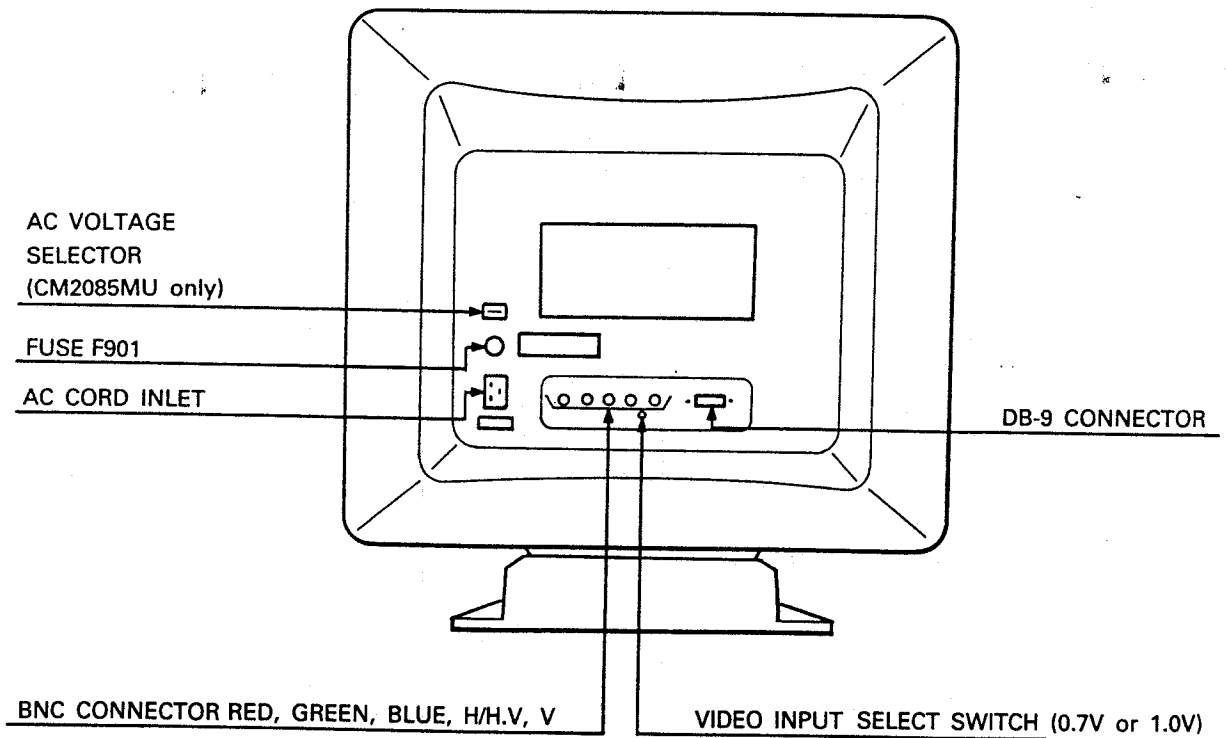
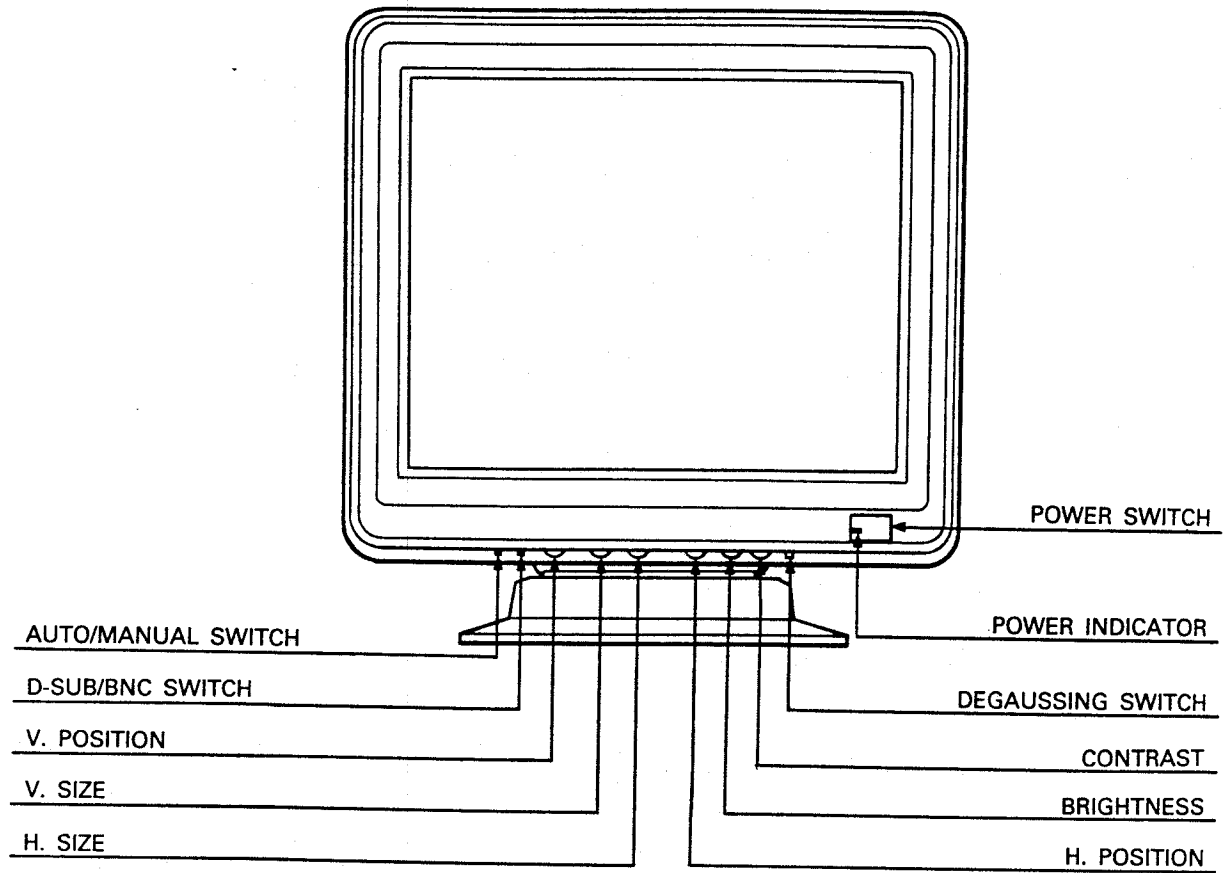
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SPECIFICATIONS

Model name	CM2085ME	CM2085MU
Destination	Europe	North America
Rated voltage	AC200 — 240V 50 Hz	AC 120V/220V 50 / 60 Hz
Power consumption	130 W	
Color Display Tube	20 (19V) inch, 90 ° in-line gun 0.31 mm tri-dot pitch Silica coated non-glare	
Horizontal frequency	30 ~ 64 kHz	
Vertical frequency	50 ~ 100 Hz	
Resolution	Up to 1280 dots by 1024 lines	
Signal inputs	Red, Green and Blue analog video H/V separate, H/V composite or sync on Green sync	
User controls	Power switch, Degauss switch Auto / Manual switch BNC / D-sub switch Video input switch (0.7 or 1.0 Vpp) Brightness, Contrast Horizontal size, position Vertical size, position	
Environment	5 ~ 35°C operating ambient temperature 10 ~ 90 % relative humidity	
Dimensions	488 (W) x 462 (H) x 494 (D) mm	
Weight	27 kg approximately	

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CONTROLS



SIGNAL TIMING CHART

	Signal		Singal 30	Signal 30A	Signal 30B
1	Input connector		D-SUB	D-SUB	D-SUB
2	Video	Type	R/G/B Analog	R/G/B Analog	R/G/B Analog
		Voltage	0.7 Vpp	0.7 Vpp	0.7 Vpp
		Set up	None	None	None
3	Video frequency		25 MHz	12.6 MHz	25.2 MHz
4	Sync	Type	H/V Composite SYNC	H/V Separate SYNC	H/V Separate SYNC
		Amp.	TTL Level (Minus)	TTL Level (H: Minus V: Plus)	TTL Level (H: Plus V: Minus)
5	Horizontal	Frequency	30.49 KHz	31.5 KHz	31.5 KHz
		Front porch	0.05 μ S (1 cl)*1	0.635 μ S (8 cl)	0.635 μ S (16 cl)
		Sync width	4.55 μ S (114 cl)	3.813 μ S (48 cl)	3.813 μ S (96 cl)
		Back porch	2.60 μ S (64 cl)	1.907 μ S (24 cl)	1.907 μ S (48 cl)
		Blanking width	7.20 μ S (180 cl)	6.35 μ S (80 cl)	6.35 μ S (160 cl)
		Display time	25.60 μ S (640 cl)	25.4 μ S (320 cl)	25.4 μ S (640 cl)
		H. period (1H)	32.80 μ S (820 cl)	31.75 μ S (400 cl)	31.75 μ S (800 cl)
6	Vertical	Frequency	60 Hz	70 Hz	70 Hz
		Front porch	0.066 mS (2 H)*2	0.413 mS (13 H)	1.21 mS (38 H)
		Sync width	0.066 mS (2 H)	0.064 mS (2 H)	0.064 mS (2 H)
		Back porch	0.787 mS (24 H)	1.05 mS (33 H)	1.84 mS (58 H)
		Blanking width	0.918 mS (28 H)	1.52 mS (48 H)	3.11 mS (98 H)
		Display time	15.74 mS (480 H)	12.70 mS (400 H)	11.11 mS (350 H)
		V. period	16.66 mS (508 H)	14.22 mS (448 H)	14.22 mS (448 H)
7	BNC/D-SUB switch S502		ON (D-SUB)	ON (D-SUB)	ON (D-SUB)
8	Scan system		Non-inter laced	Non-inter laced	Non-inter laced
9	Remarks		PGA	PS/2-1	PS/2-2

*1: cl: clock

*2: H: Horizontal line

SIGNAL TIMING CHART-2

	Signal		Signal 30C	Signal 30D	Signal 30E
1	Input connector		D-SUB	D-SUB	D-SUB
2	Video	Type	R/G/B Analog	R/G/B Analog	R/G/B Analog
		Voltage	0.7 Vpp	0.7 Vpp	0.7 Vpp
		Set up	None	None	None
3	Video frequency		25.2 MHz	25 MHz	45.5 MHz
4	Sync	Type	H/V Separate SYNC	H/V Composite SYNC	H/V Separate SYNC
		Amp.	TTL Level (H: Minus V: Minus)	TTL Level (Plus)	TTL Level (H: Plus V: Plus)
5	Horizontal	Frequency	31.5 KHz	30.49 KHz	36 KHz
		Front porch	0.635 μ S (16 cl)	0 μ S (0 cl)	0.154 μ S (7 cl)
		Sync width	3.813 μ S (96 cl)	4.60 μ S (115 cl)	3.557 μ S (162 cl)
		Back porch	1.907 μ S (48 cl)	2.60 μ S (64 cl)	1.581 μ S (72 cl)
		Blanking width	6.35 μ S (160 cl)	7.20 μ S (180 cl)	5.297 μ S (241 cl)
		Display time	25.4 μ S (640 cl)	25.60 μ S (640 cl)	22.482 μ S (1024 cl)
		H. period (1H)	31.75 μ S (800 cl)	32.80 μ S (820 cl)	27.779 μ S (1265 cl)
6	Vertical	Frequency	60 Hz	50 Hz	88.24 Hz
		Front porch	0.318 mS (10 H)	0.33 mS (10 H)	0.055 mS (2 H)
		Sync width	0.064 mS (2 H)	0.066 mS (2 H)	0.111 mS (4 H)
		Back porch	1.02 mS (32 H)	1.221 mS (37 H)	0.528 mS (19 H)
		Blanking width	1.40 mS (44 H)	1.61 mS (49 H)	0.694 mS (25 H)
		Display time	15.24 mS (480 H)	18.37 mS (560 H)	10.64 mS (383 H)
		V. period	16.64 mS (524 H)	19.98 mS (609 H)	11.33 mS (408 H)
7	BNC/D-SUB switch S502		ON (D-SUB)	ON (D-SUB)	ON (D-SUB)
8	Scan system		Non-inter laced	Non-inter laced	Non-inter laced
9	Remarks		P.S/2-3		

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SIGNAL TIMING CHART-3

	Signal		Signal 50	Signal 50A	Signal 64
1	Input connector		4 BNC	5 BNC	3 BNC
2	Video	Type	R/G/B Analog	R/G/B Analog	R/G/B Analog
		Voltage	0.7 Vpp	0.7 Vpp	0.7 Vpp
		Set up	None	None	None
3	Video frequency		64 MHz	75 MHz	107.352 MHz
4	Sync	Type	H/V Composite SYNC	H/V Separate SYNC	Sync on Green
		Amp.	TTL Level (Minus)	TTL Level (H: Plus V: Plus)	0.3 Vpp
5	Horizontal	Frequency	48.8 KHz	51.5 KHz	63.9 KHz
		Front porch	0.35 μ S (22 cl)	0.23 μ S (17 cl)	0.24 μ S (26 cl)
		Sync width	1.50 μ S (96 cl)	2.97 μ S (224 cl)	1.12 μ S (120 cl)
		Back porch	2.60 μ S (166 cl)	2.54 μ S (191 cl)	2.36 μ S (254 cl)
		Blanking width	4.45 μ S (284 cl)	5.74 μ S (432 cl)	3.72 μ S (400 cl)
		Display time	16.02 μ S (1024 cl)	13.65 μ S (1024 cl)	11.92 μ S (1280 cl)
		H. period (1H)	20.47 μ S (1308 cl)	19.41 μ S (1456 cl)	15.65 μ S (1680 cl)
6	Vertical	Frequency	60 Hz	60 Hz	60 Hz
		Front porch	0.123 mS (6 H)	0.042 mS (2 H)	0.047 mS (3 H)
		Sync width	0.123 mS (6 H)	0.077 mS (4 H)	0.047 mS (3 H)
		Back porch	0.675 mS (33 H)	1.029 mS (53 H)	0.547 mS (35 H)
		Blanking width	0.921 mS (45 H)	1.148 mS (59 H)	0.641 mS (41 H)
		Display time	15.720 mS (768 H)	15.53 mS (800 H)	16.026 mS (1024 H)
		V. period	16.64 mS (813 H)	16.67 mS (859 H)	16.67 mS (1065 H)
7	BNC/D-SUB switch S502		OFF (BNC)	OFF (BNC)	OFF (BNC)
8	Scan system		Non-inter laced	Non-inter laced	Non-inter laced
9	Remarks		HITACHI STANDARD TIMING		HITACHI STANDARD TIMING

SIGNAL TIMING CHART-4

	Signal		Signal 60	Signal 55	Signal 64A
1	Input connector		4 BNC	5 BNC	5 BNC
	Video	Type	R/G/B Analog	R/G/B Analog	R/G/B Analog
		Voltage	0.7 Vpp	1.0 Vpp	0.7 Vpp
		Set up	None	None	None
3	Video frequency		100 MHz	70 MHz	107.352 MHz
4	Sync	Type	H/V composite SYNC	H/V Separate SYNC	H/V Separate SYNC
		Amp.	TTL Level (Plus)	TTL Level (H: Minus V: Minus)	TTL Level (H: Plus V: Minus)
4	Horizontal	Frequency	60.68 KHz	54.054 KHz	63.9 KHz
		Front porch	0.24 μ S (24 cl)	0.16 μ S (12 cl)	0.24 μ S (26 cl)
		Sync width	1.12 μ S (112 cl)	1.85 μ S (128 cl)	1.12 μ S (120 cl)
		Back porch	2.32 μ S (232 cl)	1.68 μ S (116 cl)	2.36 μ S (254 cl)
		Blanking width	3.68 μ S (368 cl)	3.69 μ S (256 cl)	3.72 μ S (400 cl)
		Display time	12.80 μ S (1280 cl)	14.8 μ S (1024 cl)	11.92 μ S (1280 cl)
		H. period (1H)	16.48 μ S (1648 cl)	18.5 μ S (1280 cl)	15.65 μ S (1680 cl)
6	Vertical	Frequency	57.03 Hz	60 Hz	100 Hz
		Front porch	0.049 mS (3 H)	0 mS (0 H)	0 mS (0 H)
		Sync width	0.049 mS (3 H)	0.056 mS (3 H)	0.047 mS (3 H)
		Back porch	0.560 mS (34 H)	0.629 mS (34 H)	0.751 mS (48 H)
		Blanking width	0.659 mS (40 H)	0.685 mS (37 H)	0.798 mS (51 H)
		Display time	16.87 mS (1024 H)	16.0 mS (864 H)	9.20 mS (588 H)
		V. period	17.53 mS (1064 H)	16.67 mS (901 H)	10.0 mS (639 H)
7	BNC/D-SUB switch S502		OFF (BNC)	OFF (BNC)	OFF (BNC)
8	Scan System		Non-inter laced	Non-inter laced	Non-inter laced
9	Remarks				

DESCRIPTION OF CIRCUIT

CM2085M series monitors are developed from CM2086A series monitors with an additional function of multi-scanning. Changes are basically due to the multi-scanning functions. However, most of the circuits are different from CM2086A series except the primary side of the power supply circuit.

1. Power Supply Circuit

Power supply circuit is similar to the one used for CM2086A series display monitors. Primary circuit is almost the same as CM2086A series. Because of the multiscan system, secondary circuit of the power supply has a chopper circuit which changes supply voltages to the high voltage circuit and horizontal scanning circuit depending on the horizontal frequency to keep the high voltage at a constant. Heater power for the CRT is fed from the power supply instead of FBT. Power supply circuit has many protection systems to keep secondary damages at minimum on an occasion of a failure.

2. Deflection Circuit

This model has two separate circuits for high voltage (EHT) generation and horizontal scanning. Most of display monitors today have a single circuit which provide high voltage and horizontal scanning. Two separate circuits are to separate and keep the high voltage at a constant voltage even when the horizontal scanning frequency changes.

2.1 High voltage (EHT) generation Circuit

Basic concept of the high voltage generation is the same as the one used in TV receivers using Flyback Transformers (FBT). The difference in this monitor is that the circuit is used only for the high voltage generation and not used for horizontal scanning. There are two special features to control the high voltage to a constant voltage when the oscillation frequency changes due to Multi scanning operation. Circuit with Q713 detects the high voltage and controls output voltage of IC902 to keep the high voltage output at a constant voltage. IC902 is a chopper power supply regulator.

2.2 Horizontal deflection Circuit

Deflection system is the same as the one used in TV receivers. However, there is a dummy FBT (T702) instead of a FBT for high voltage generation. Deflection output amplifier is powered by a voltage regulator Q709 to control the horizontal size to its optimum.

2.3 Vertical deflection Circuit

IC602 is the vertical scanning output circuit which is powered by 27 volts supplied by the power supply. There are three vertical size controls for VGA sizes. V.SIZE (R639) is for the user size control.

3. Video Circuit

Three identical video circuits are provided for Red, Green and Blue channels. These video amplifiers are high performance with more than 100 MHz band width. Two sets of input with buffer circuits are provided for BNC connector input and DB-9 connector input for ease of use. The BNC connector input circuit has a switching capability between 0.7 Vp-p and 1.0 Vp-p video amplitudes to match the output of the graphics system used with the monitor. One of the two sets of input is selected by a set of three diode switches which is controlled by a front located user control switch. Video output amplifier circuit is similar to the one used in CM2086A series monitors. Contrast control circuit is an orthodox balanced amplifiers which is different from the one used in CM2086A series monitors.

4. Multi Scanning Circuit

This monitor accept three different type of synchronization signals. DB-9 connector only accept separate H and V TTL level sync. When the front mounted user selectable AUTO/MANUAL switch is set for AUTO, polarization of the sync signal is the same as VGA convention. Otherwise the polarization of the sync signal does not matter. BNC input accepts (1) H and V separate TTL sync, (2) H/V composite TTL sync and (3) sync on green video signal. When more than one type of sync signals are present, the monitor puts priority to (1) then (2) then (3).

TTL sync signals are passed through the video board to the sync board. Sync on green signal is buffered through Q401, Q402 and Q403 then to the sync board.

Q404, Q405, Q406, Q407 and Q409 make selection of the type of sync input to sync buffer Q501.

ADJUSTMENTS

When adjusting the monitor, receive a full screen white pattern set to 20 ft-L unless otherwise specified.

1. Power supply voltage check.

When the monitor is working normally the voltages at A and F connectors are as follow.

A1	127 $\pm$ 0.5 V
A4	75 $\pm$ 1.0 V
F2	6.3 V (6.0 ~ 6.4 V, CRT heater)
F5	12 $\pm$ 0.5 V
F6	27 $\pm$ 1.0 V

- (1) Receive signal 64 with full screen white pattern.
- (2) Adjust R909 to obtain 141 $\pm$ 0.5 V at the cathode of D920.
- (3) Adjust R777 so that A1 voltage is 127 $\pm$ 1 V.
- (4) Adjust screen voltage control on the Flyback transformer so that the voltage at G2 terminal on the CRT socket board is 550 $\pm$ 10 V.

2. Sync and deflection circuit

2.1 Horizontal oscillation (R522 and R525)

- (1) Receive signal 64 with full screen "H" characters.
- (2) Switch ON S701 to cut the sync input to IC701 pin ⑧.
- (3) Connect a frequency counter to TP701.
- (4) Adjust H.HOLD (R522) to 63.9 $\pm$ 0.1 kHz.
- (5) Receive signal 30D with full screen "H" characters.
- (6) Adjust H.HOLD2 (R525) to 30.5 $\pm$ 0.2 kHz.
- (7) Receive signal 64 and check the frequency counter reading whether it is within the tolerance above.
- (8) Switch off S701 and check the synchronization.

Note: Unless you have a frequency counter capable for the measurement, do not try to adjust.

2.2 Vertical oscillation (R603)

- (1) Receive signal 64 with a full screen "H" characters.
- (2) Switch ON S701 to cut the sync input to IC701, pin ⑦.
- (3) Connect a frequency counter to TP601 or pin ① of M-connector.
- (4) Adjust R603 to 55 $\pm$ 1 Hz.
- (5) Switch off S701 and check for the synchronization with signals 30D and 64A.

2.3 Horizontal size (R772, R710)

- (1) Receive signal 64 with a full screen white pattern.
- (2) Set horizontal size control R710 fully clockwise (Maximum).
- (3) Adjust the horizontal size to 350 $\pm$ 1 mm by Sub-horizontal size control R772.
- (4) If necessary adjust side pin-cushion correction control R658 then adjust the size again.

2.4 Side pin-cushion correction (R658, R628)

- (1) Set R628 fully clockwise looking from copper side of the board so that the screen becomes pin-cushion shape.

- (2) Receive signal 30C with full screen white pattern.
- (3) Turn R628 gradually until the correction movement starts.
- (4) Adjust R658 so that the side pin correction is at the best. i.e., both side lines become straight.
- (5) Receive signal 64 with a full screen white pattern.
- (6) If necessary adjust side pin-cushion by R628.
- (7) Check whether the side pin-cushion is within 3 mm on both sides with signals 64, 55 and 30C. However, the horizontal size is different with each signal.

2.5 Horizontal position (R740)

- (1) Receive signal 64 with blanked pattern (Black screen).
- (2) Adjust brightness control R463 so that you can see the back raster. If you can not see the back raster, adjust BKG controls (either R314, R344 or R374).
- (3) Adjust horizontal center control (R740) so that the back raster comes to the center of the bezel opening.
- (4) If you have changed BKG control settings go to the white balance adjustment.

2.6 Blanking adjustment (R791)

- (1) Receive signal 64 with a full screen white pattern
- (2) Adjust R791 so that the blanking edge ends 1 mm inside of the left hand side of raster.

2.7 Vertical size adjustment (R639)

- (1) Receive signal 30C with a full screen white pattern. (D-SUB Input only).
- (2) Set S501 (Auto/Manual) switch to Manual position. (OFF)
- (3) Set the vertical size to 270 $\pm$ 1 mm with R639.
- (4) Receive signal 30A and check the vertical size shrink to about 80 ~ 90% of the size with 30C signal.
- (5) Change S501 (Auto/Manual) switch to Auto. (ON)
- (6) Vertical size becomes to $\pm$ 1 mm from the size of step (3) measurement. If not adjust R656.
- (7) Receive signal 30B and set S501 (Auto/Manual) switch to Manual and see the size shrinks to about 70% of step (3).
- (8) Change S501 (Auto/Manual) switch to Auto.
- (9) Vertical size becomes to $\pm$ 1 mm from the size of step (3) measurement. If not adjust R657.

3. Video circuit.

Prior to the video circuit adjustment, all sync and deflection circuit adjustment must be completed. The monitor must have been warmed up for more than 60 minutes. Video signal must have 75 Ω impedance and correct voltage at the monitor input terminal.

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Adjustment pre-setting.

R463	Brightness	Mechanical center
R462	Contrast	Fully clockwise (Brighter)
R451	Sub-Brightness	Mechanical center
R445	Sub-Contrast	Mechanical center
R215	Red Sub-Drive	Ten o'clock derection
R245	Green Sub-Drive	Ten o'clock derection
R275	Blue Sub-Drive	Ten o'clock derection
R302	Red Drive	Mechanical Center
R332	Green Drive	Mechanical Center
R362	Blue Drive	Mechanical Center
R314	Red BKG	Fully Anti-clockwise
R344	Green BKG	Fully anti-clockwise
R374	Blue BKG	Fully anti-clockwise
S301	0.7 V / 1.0 V	OFF, 0.7 V side
S501	Manual / Auto	OFF, Manual side
S502	BNC / D-Sub	OFF, BNC side

3.1 Cut off adjustment

- (1) Receive signal 64 with a blank pattern (Black) through BNC connectors.
- (2) Connect a high impedance voltmeter (More than 1,000 M Ω) to Screen (G2) terminal on the CRT neck board ass'y. Adjust screen voltage control on the FBT to obtain 550 ± 10 V.
- (3) Push in S601 (Cut off switch) on sync PWB.
- (4) Turn Red, Green and Blue BKG controls gradually until faint lines come up on the CRT screen at the same level.
- (5) Push and out S601.

3.2 White balance adjustment

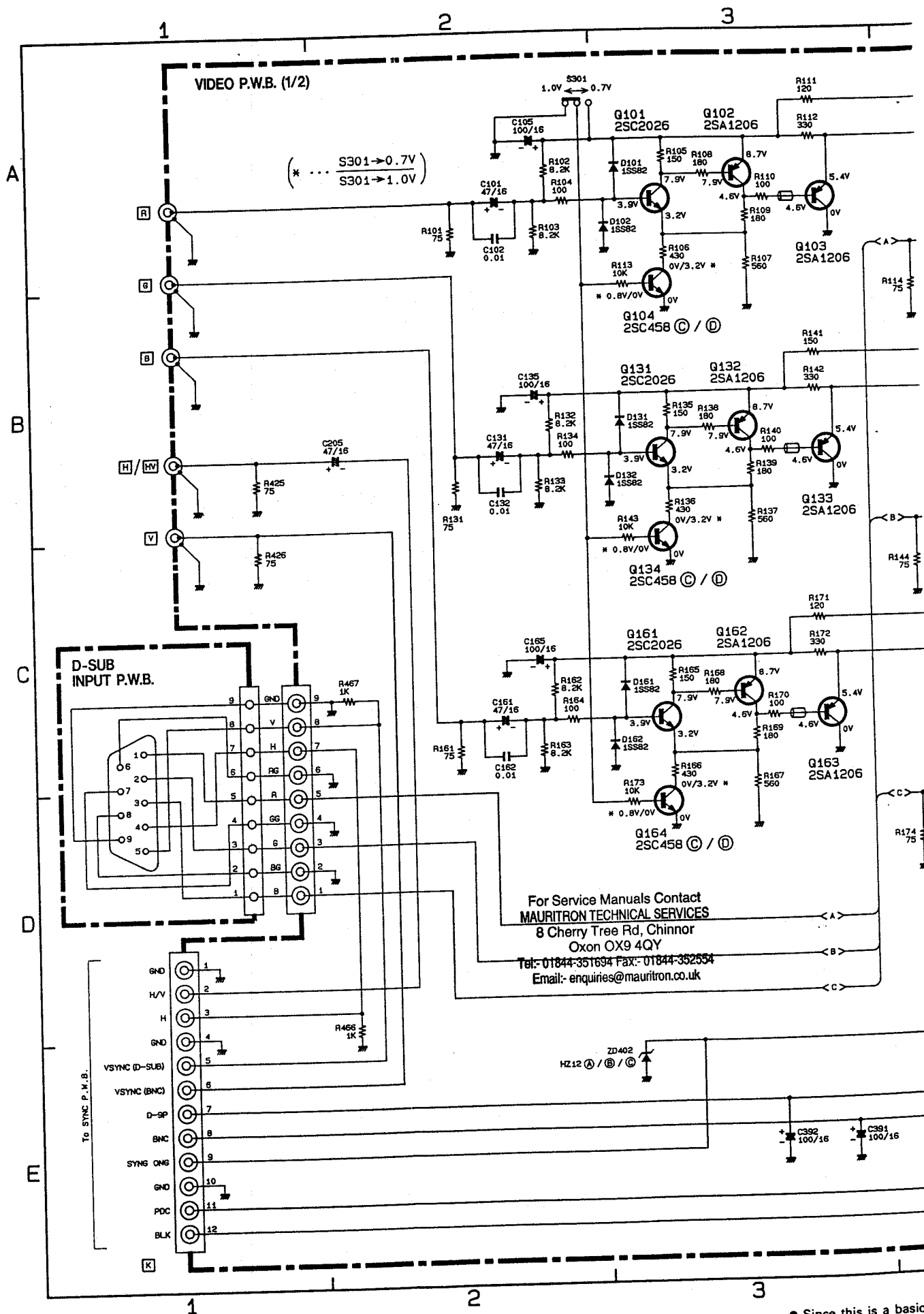
- (1) Receive signal 64 with a full screened white pattern.
- (2) Set user Brightness control fully clockwise.
- (3) Adjust the screen brightness to 20 ft-L at the center of screen by adjusting user Contrast control. If it can not be achieved, adjust sub-contrast control as well.
- (4) Adjust high intensity white balance by Green and Blue Drive adjustment to read CIE coordinate $X = 0.281 \pm 0.01$, $Y = 0.311 \pm 0.01$ using Minolta Color Analyzer II.
- (5) Adjust user contrast control to get 5 ± 0.5 ft-L. If it is not obtained, adjust Sub-Contrast control, too.
- (6) Adjust to the CIE coordinate shown in step (4) using Sub-Drive controls. Do not move the weakest color's Sub-Drive control but use two controls only unless it is absolutely necessary.
- (7) Adjust user Contrast control to 25 ± 1 ft-L and check for the CIE color coordinate. If it is not right, go back to step (4).

3.3 Brightness adjustment

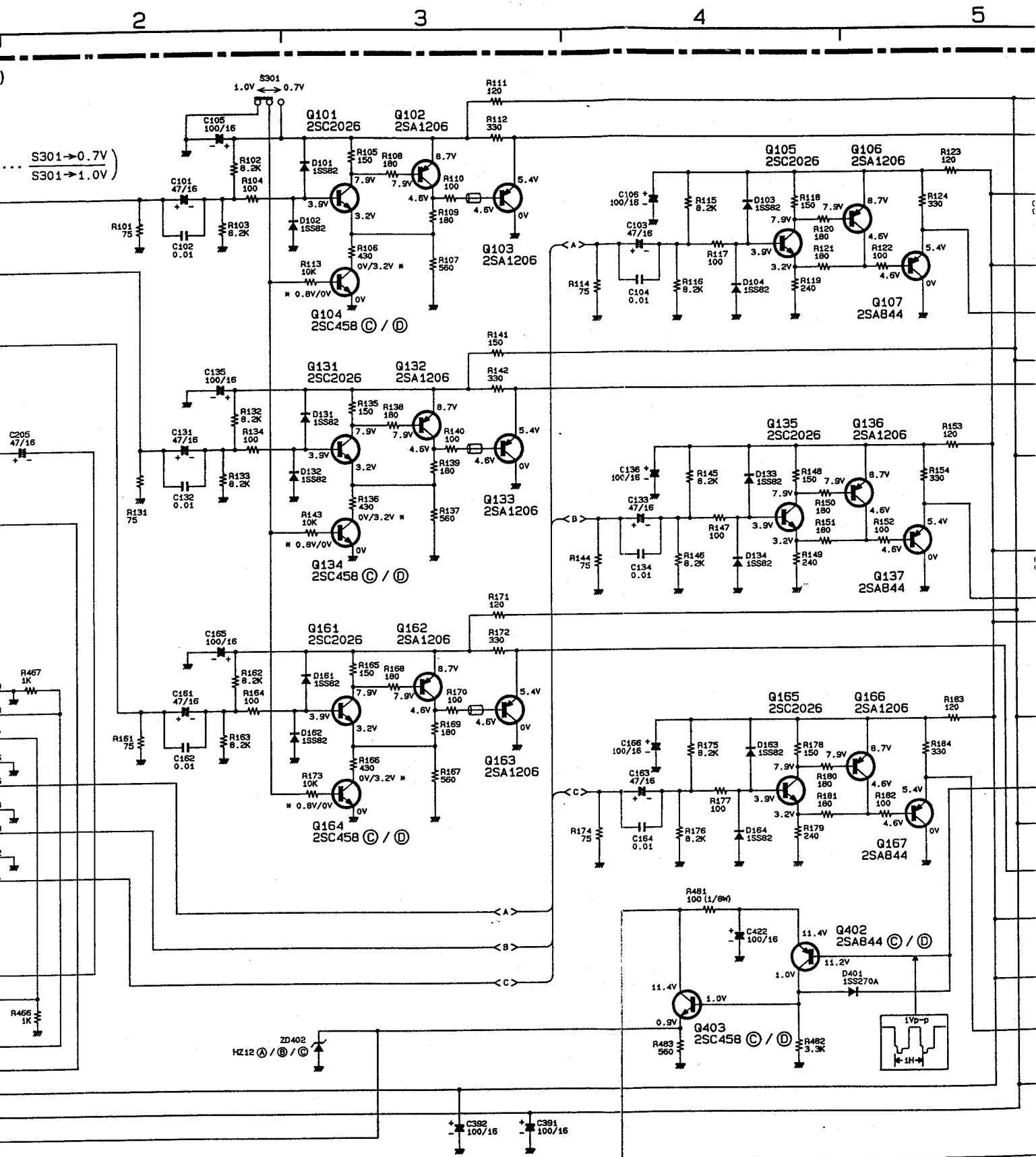
- (1) White balance must have been adjusted prior to this adjustment.
- (2) Receive signal 64 with 32 stair step pattern.
- (3) Set user Brightness and Contrast control at their maximum (full clockwise, brighter side).
- (4) Ambient light measured on the surface of CRT must be lower than 50 Lux.
- (5) Set S501, S502 and S301 to OFF. (Manual, BNC and 0.7 V)
- (6) Adjust Sub-Brightness control (R451) so that the first step of the 32 step signal can just be seen.
- (7) Receive signal 64 with 50 x 50 mm white pattern. (Center of the Screen)
- (8) Adjust Sub-Contrast control so that the brightness becomes 45 ± 2 ft-L.

4.1 Focus adjustment

- (1) Receive signal 64 with a full screen "E" characters.
- (2) Set user Contrast control (R462) to its maximum.
- (3) Set user Brightness control (R463) so that the background raster is just diminished.
- (4) Adjust Focus control on the FBT so that focus at the middle points between the center of the screen and the four corners to its best. This is to make the focus for the full screen area even.

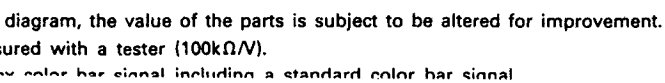


BASIC CIRCUIT DIAGRAM



- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improv
- All DC voltage to be measured with a tester (100kΩ/V).
- With a signal as a complex color bar signal including a standard color bar signal

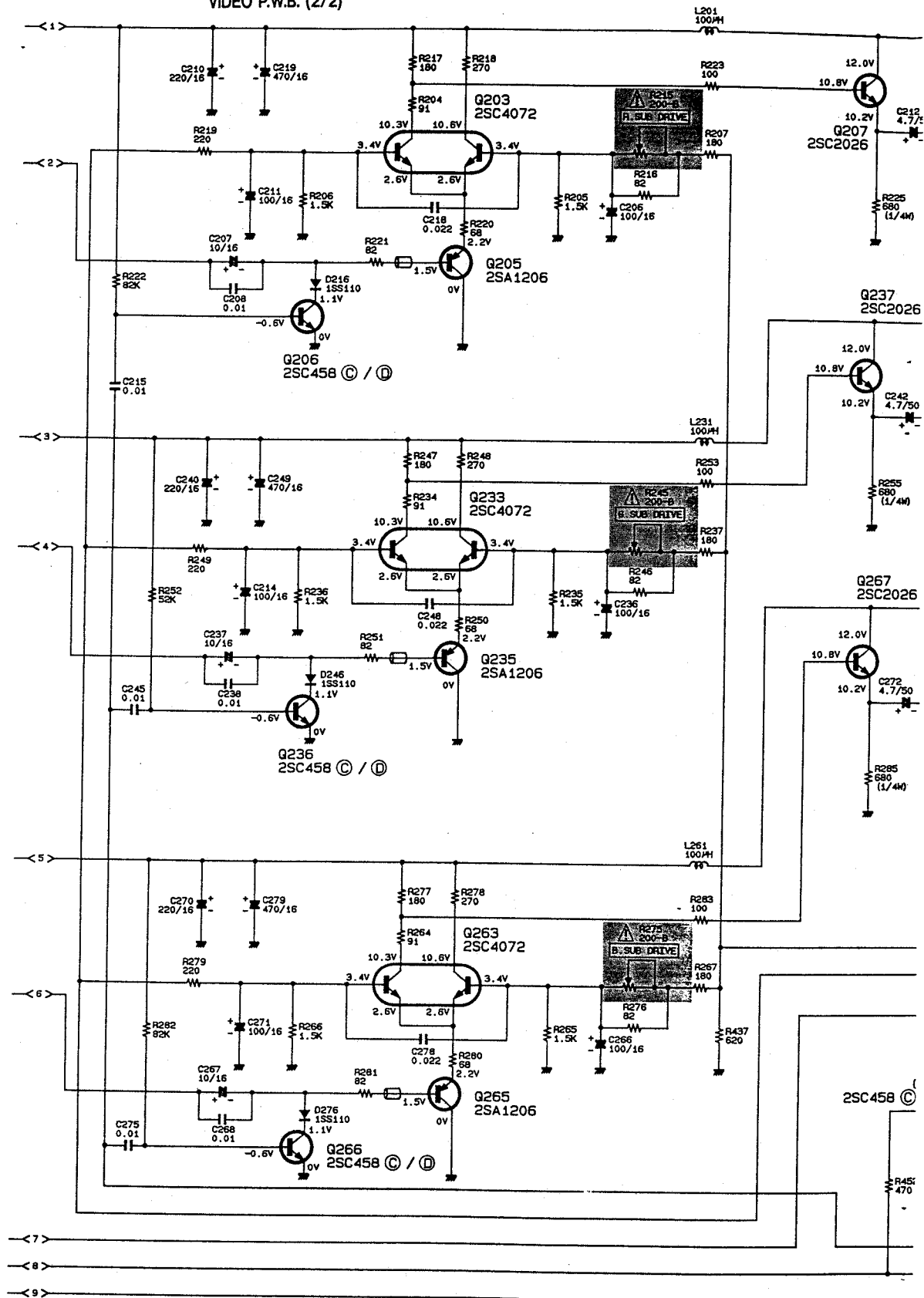
AGRAM



1

2

VIDEO P.W.B. (2/2)



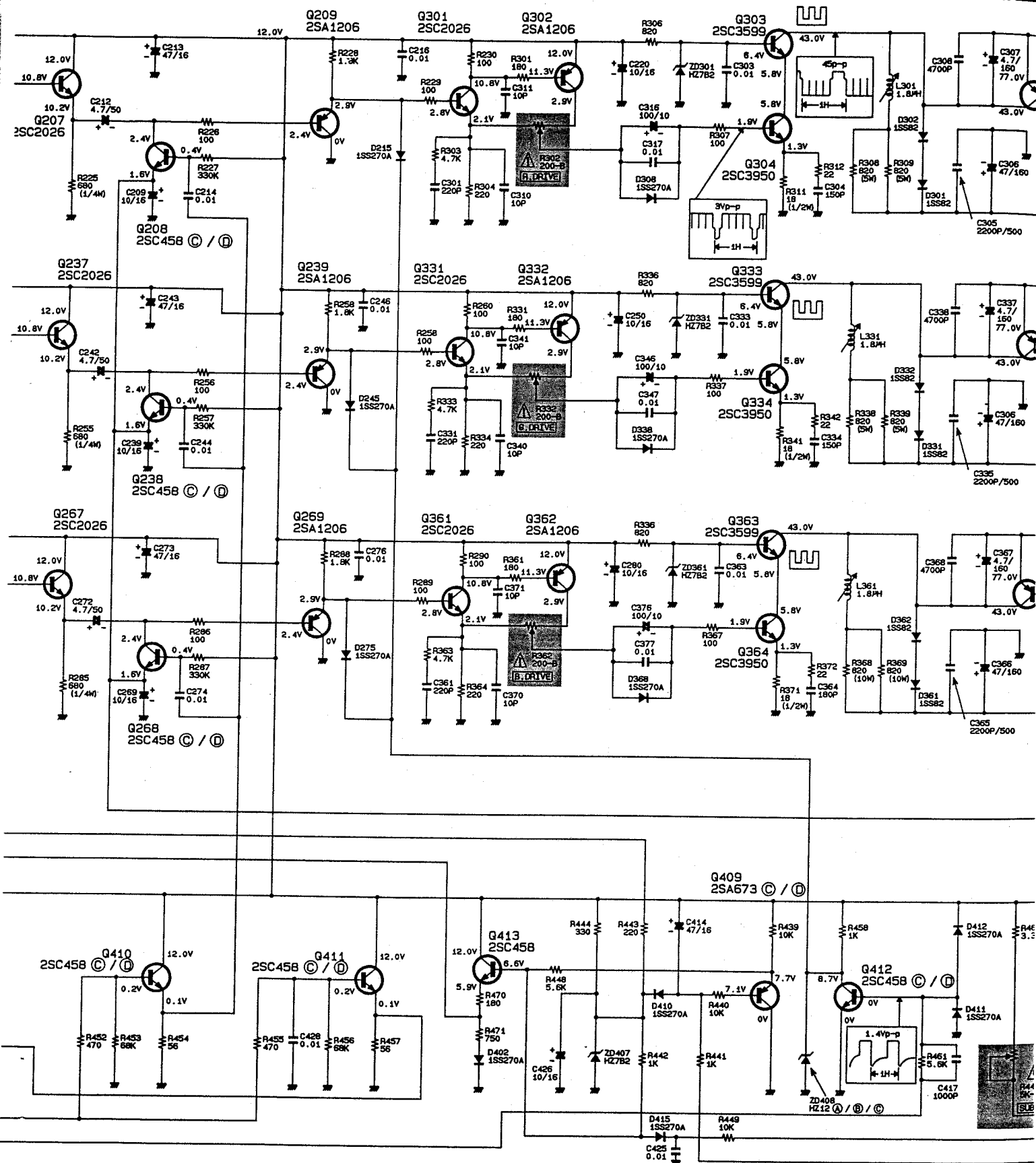
1

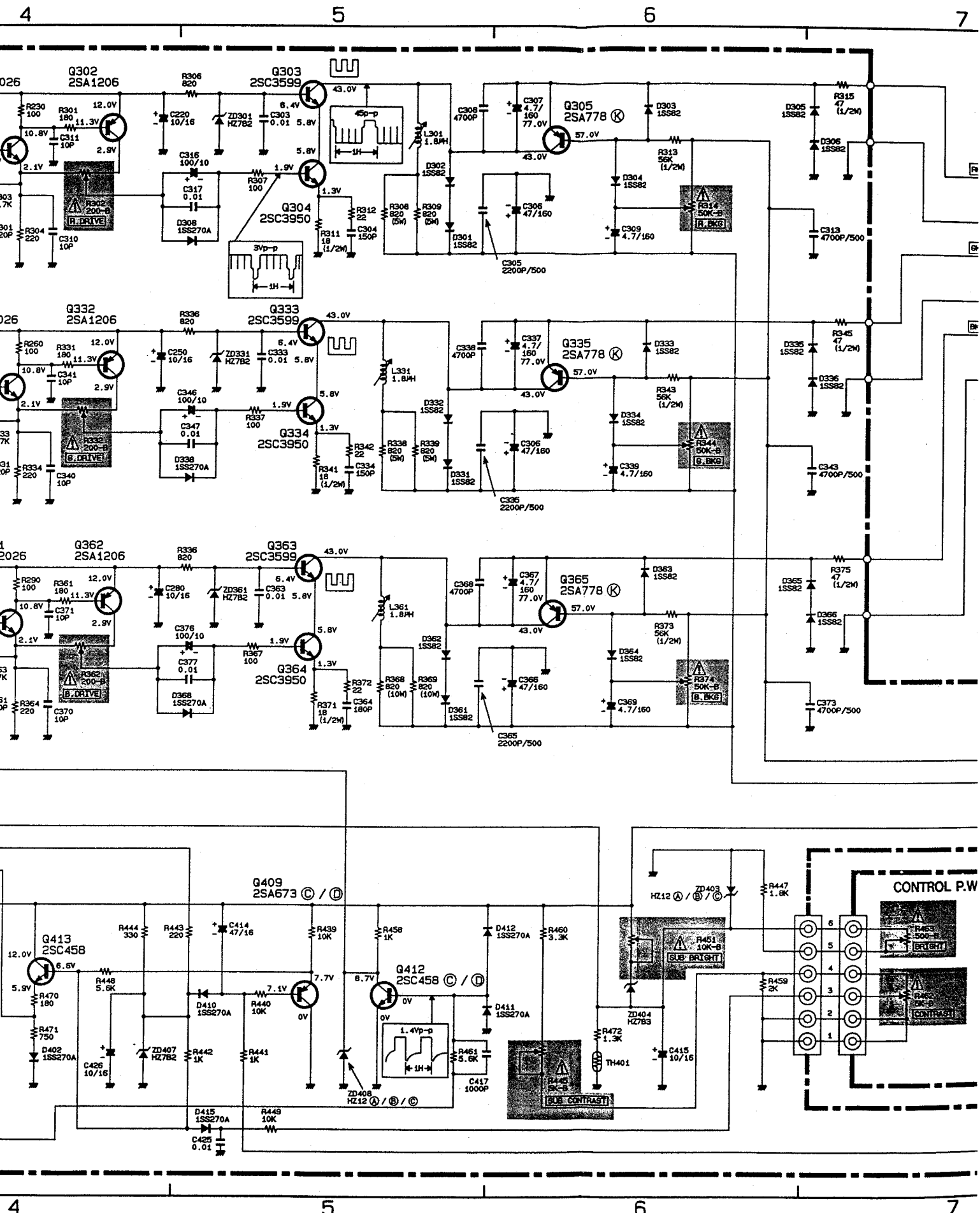
2

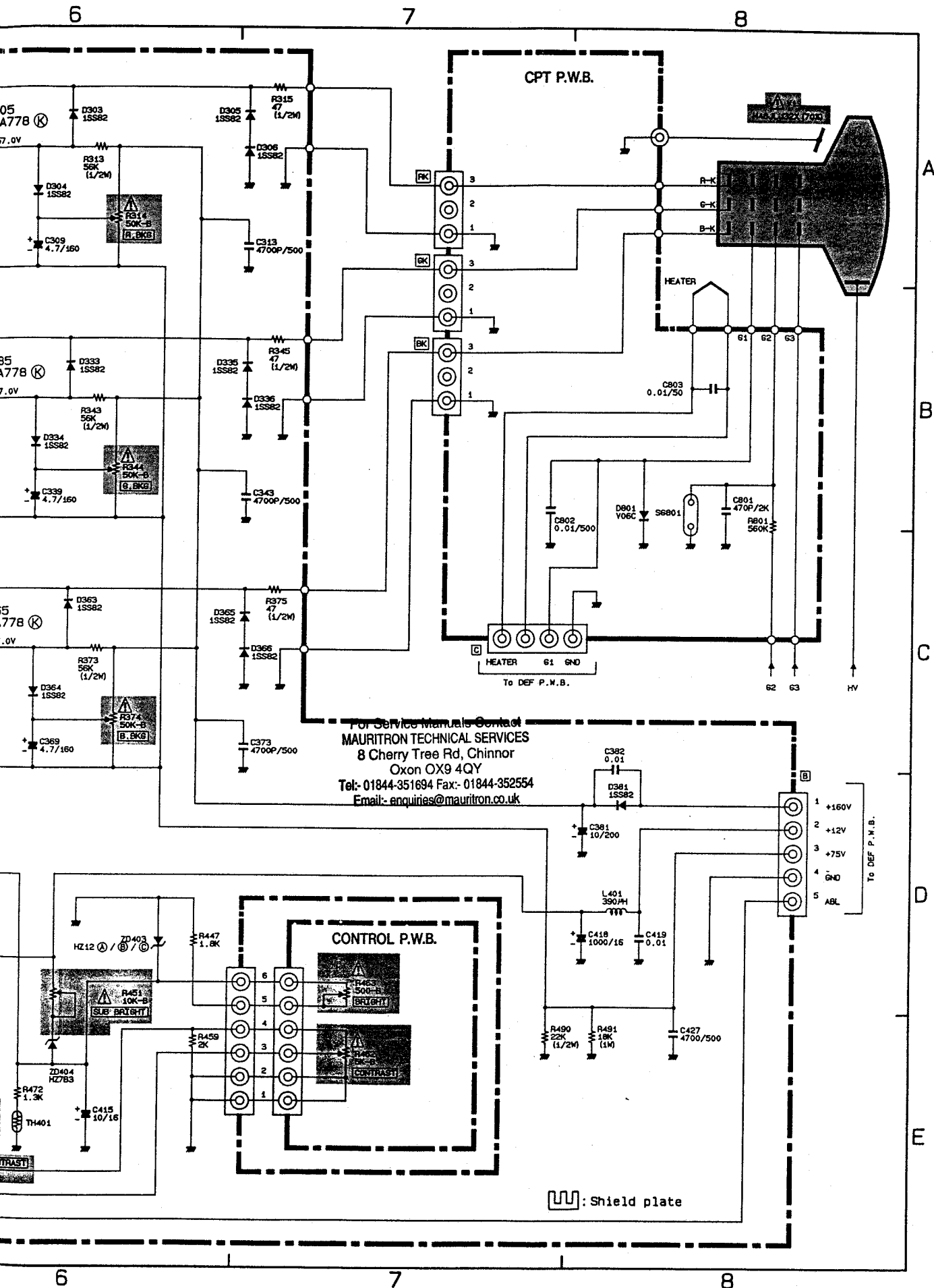
3

4

5



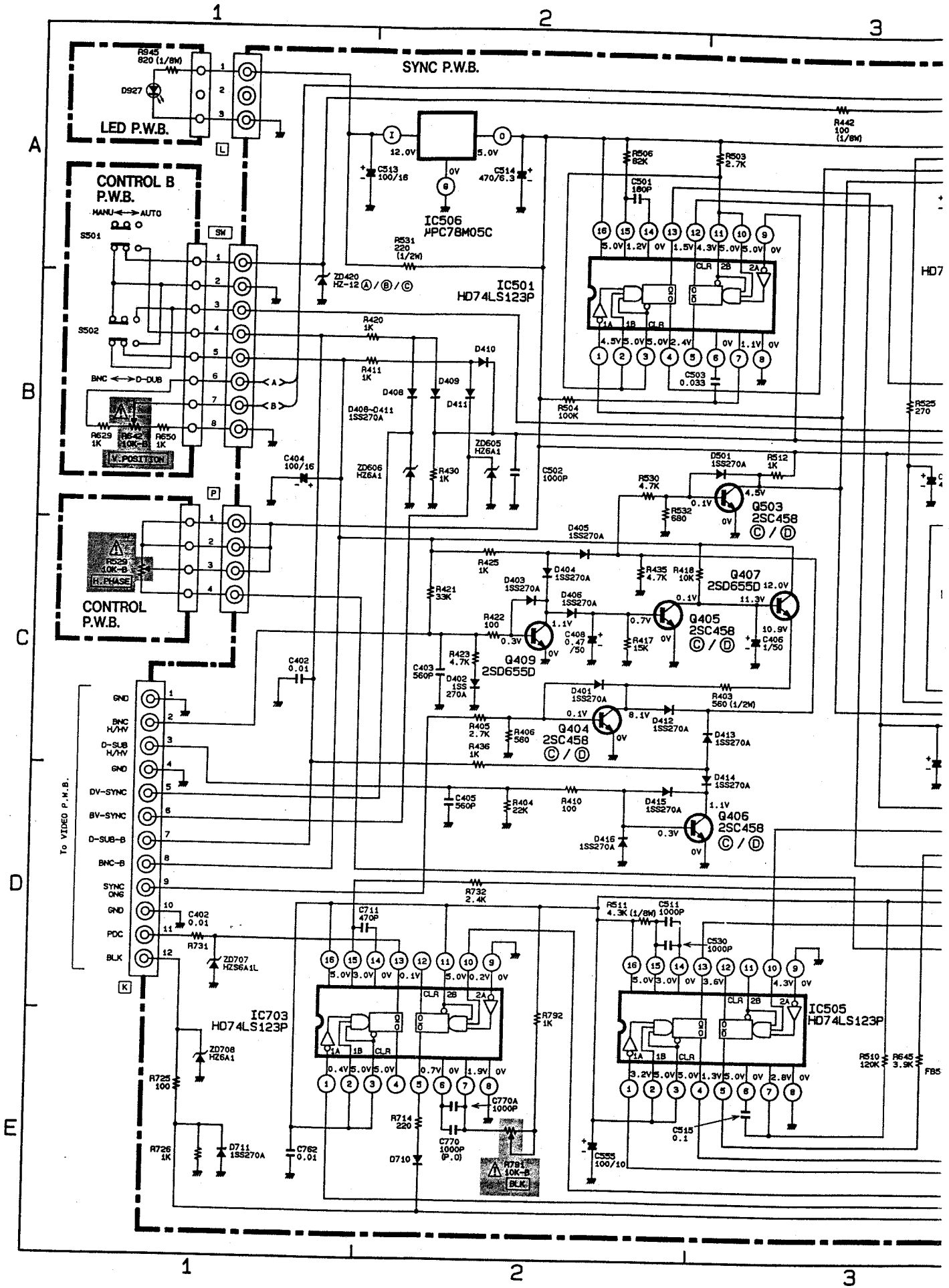




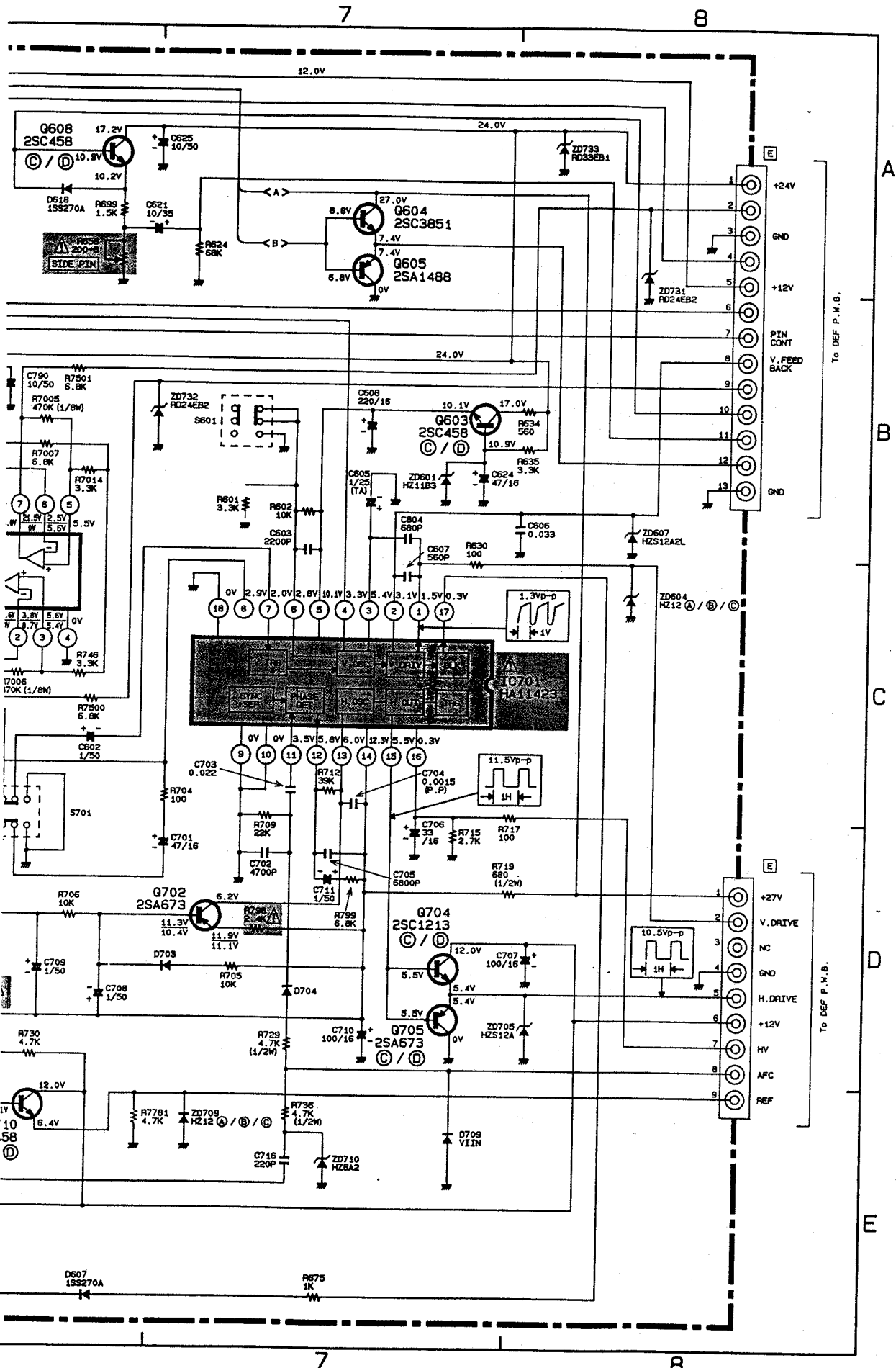
In circuit diagram, the value of the parts is subject to be altered for improvement.

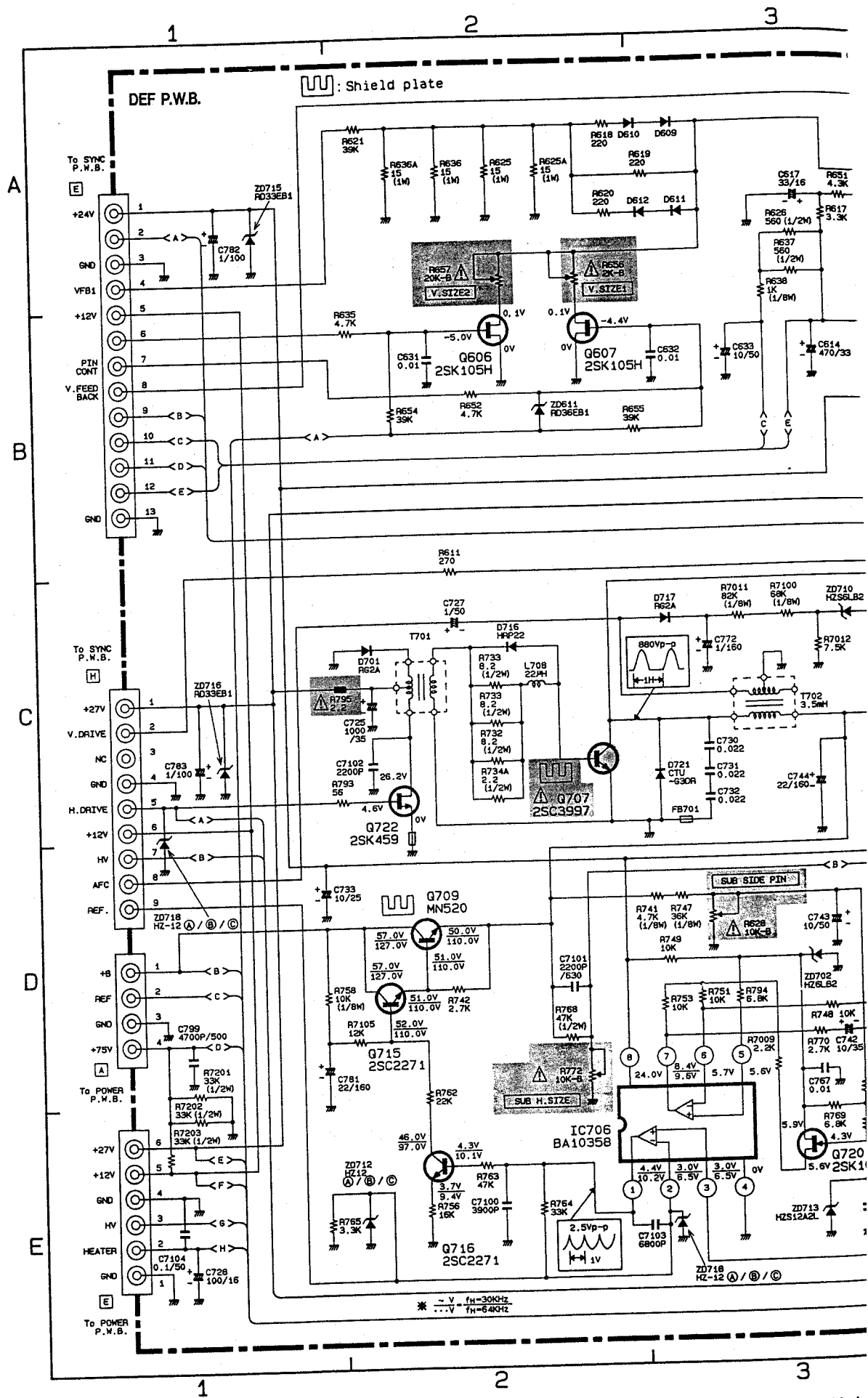
Measured with a tester (100kΩ/V).

Complex color bar signal including a standard color bar signal.

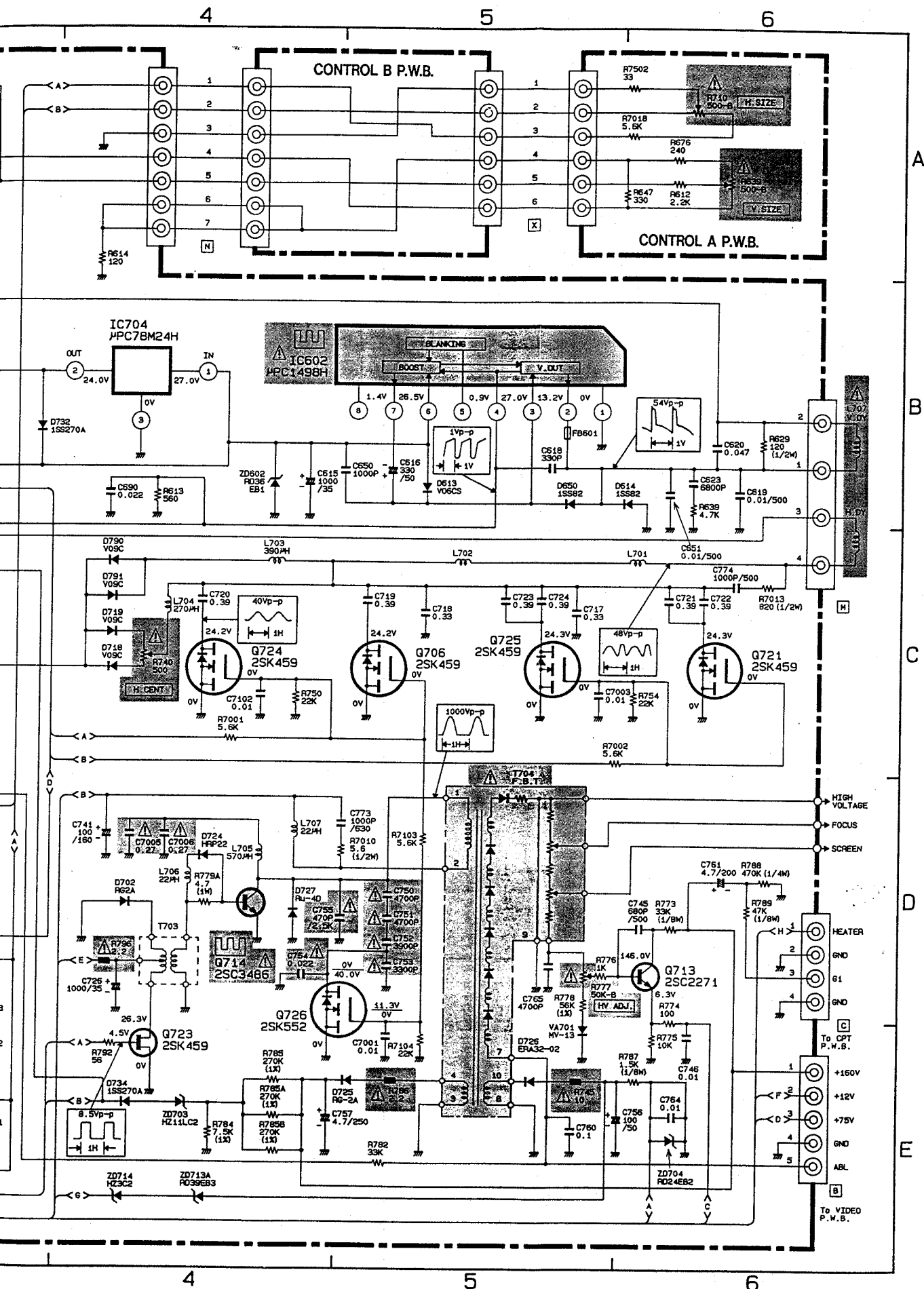


PRODUCT SAFETY NOTE: Components marked with a Δ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver though improper servicing.

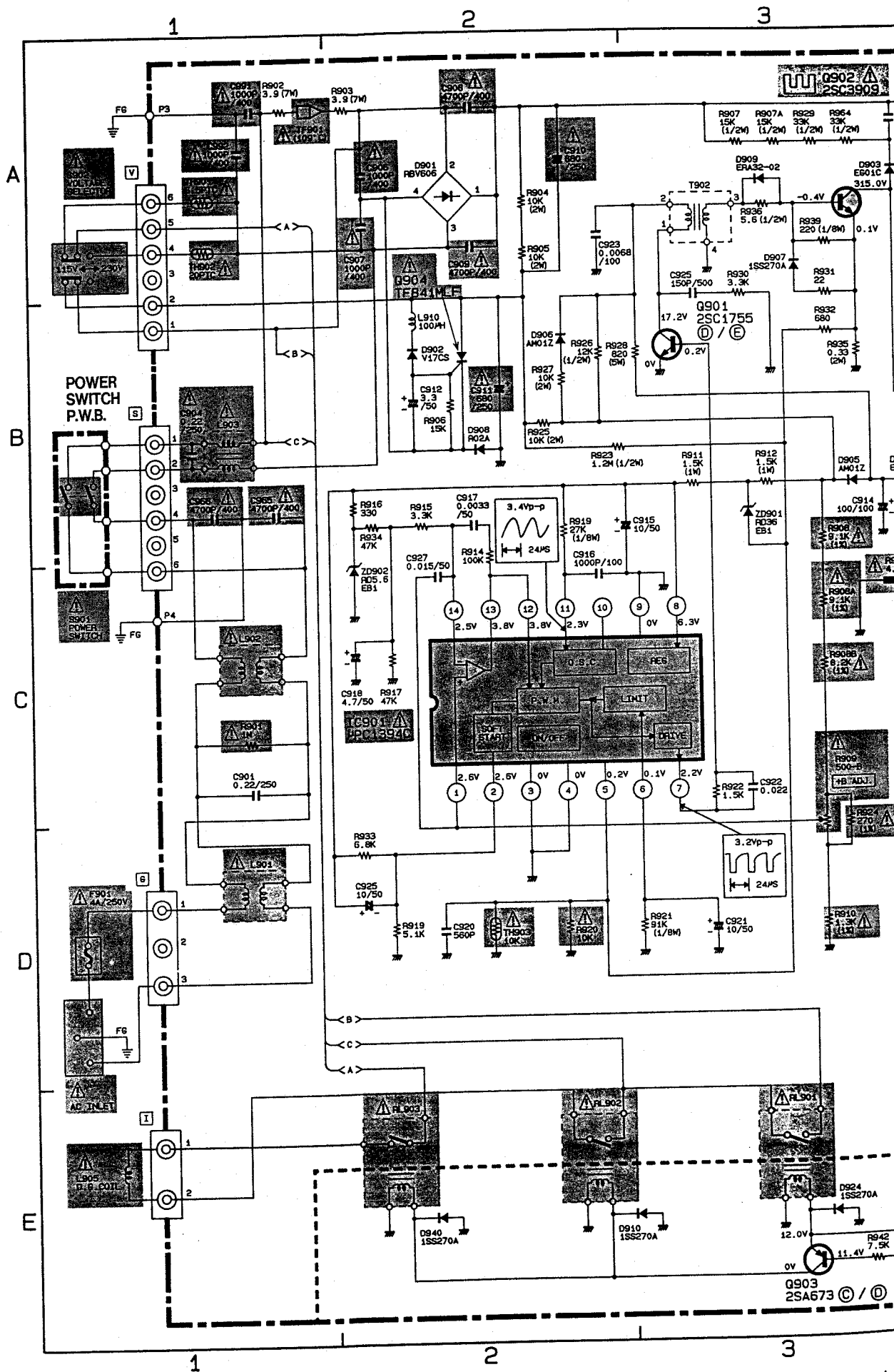




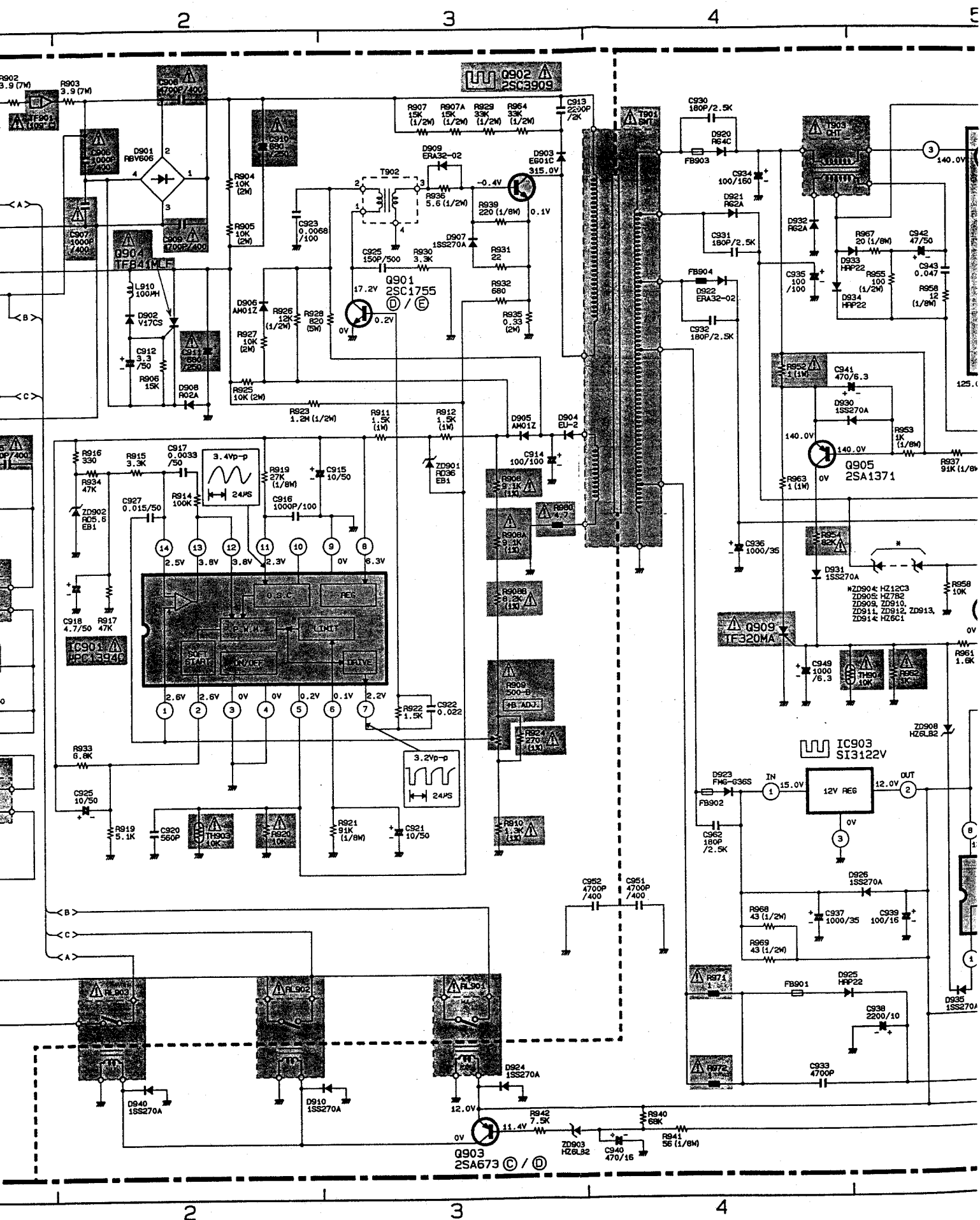




is circuit diagram, the value of the parts is subject to be altered for improvement.
be measured with a tester (100k Ω /V).
a complex color bar signal including a standard color bar signal



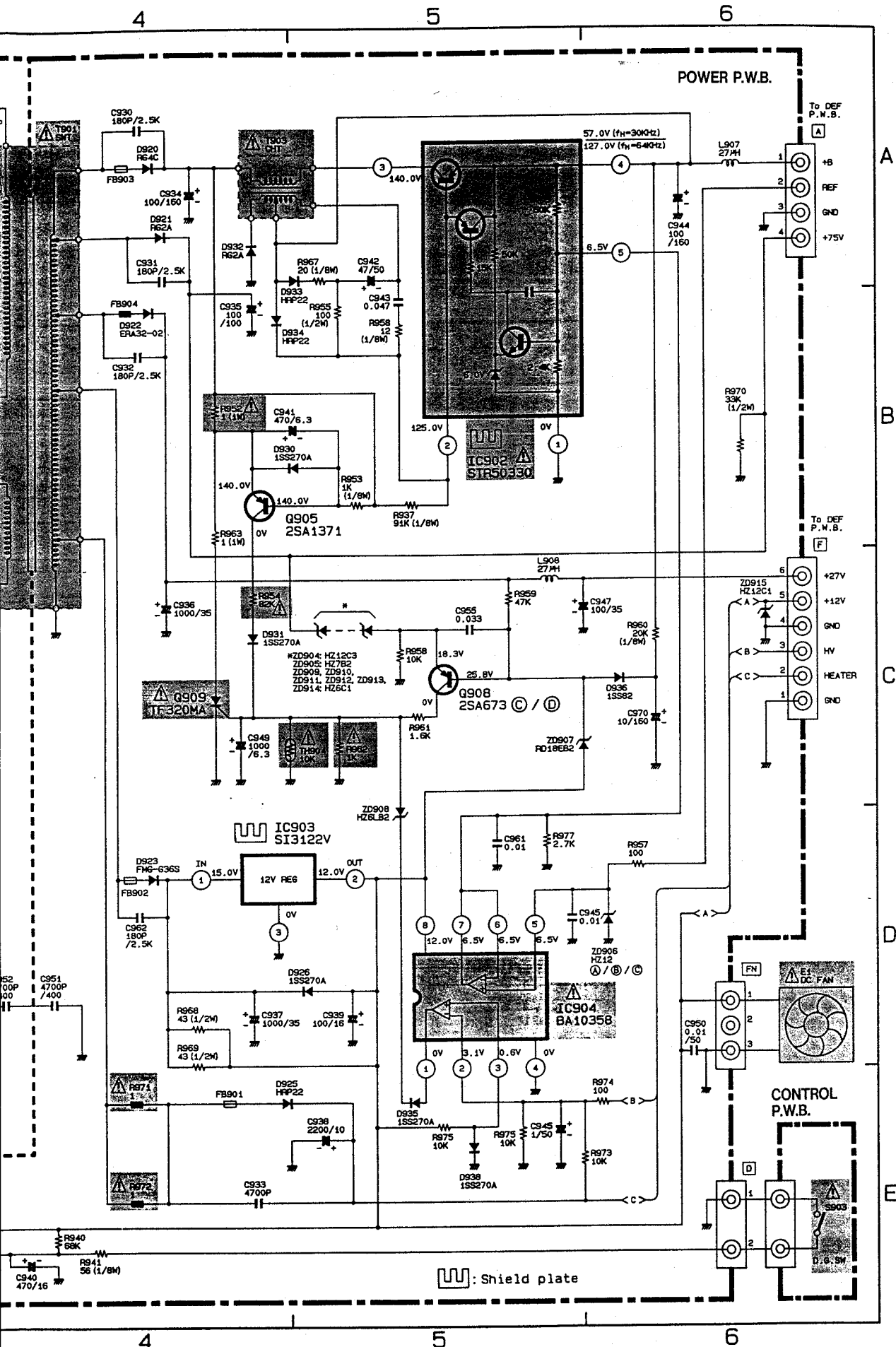
- Since this is a basic circ
- All DC voltage to be m



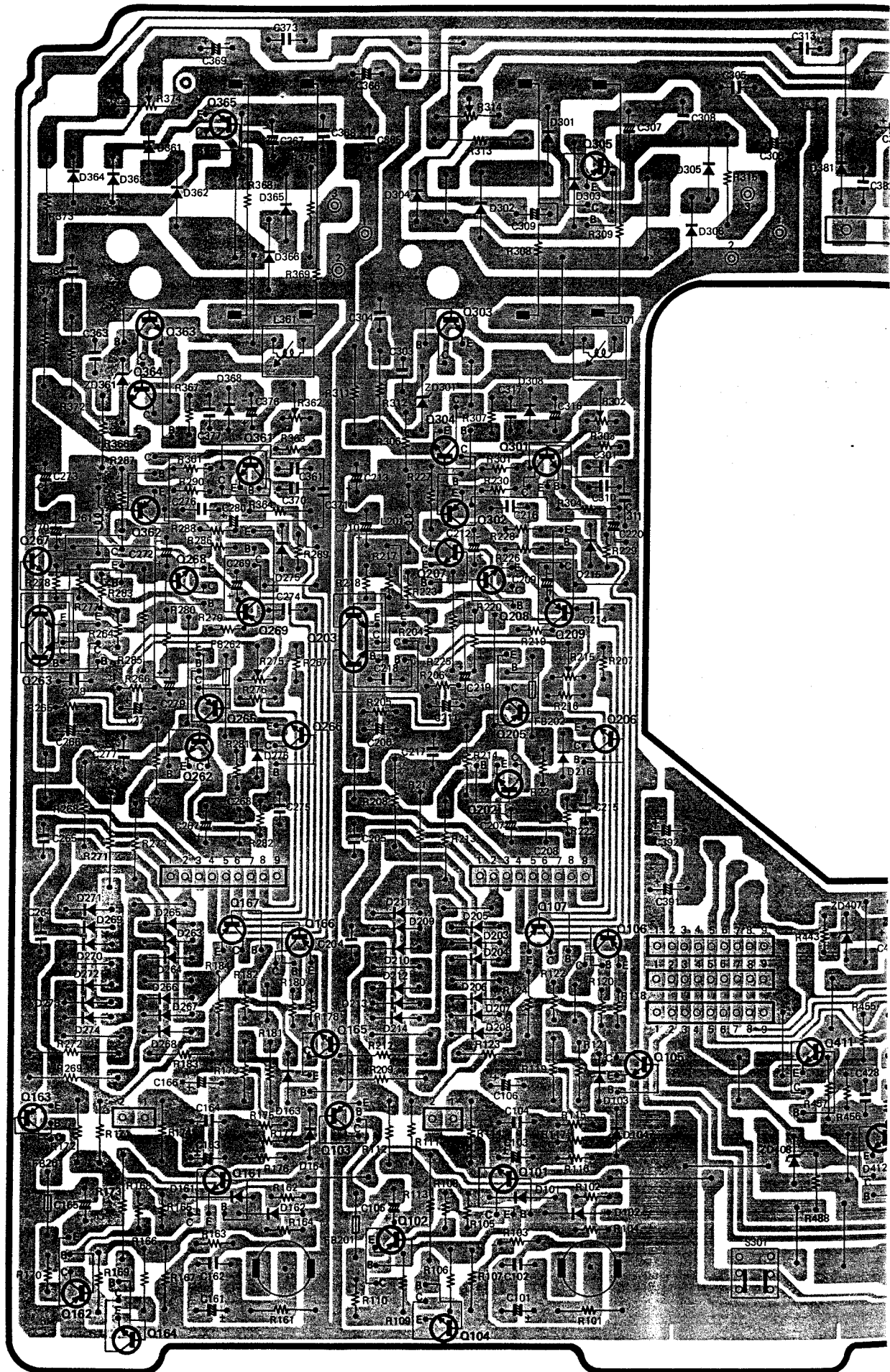
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improve
- All DC voltage to be measured with a tester (100kΩ/V).

Voltage taken on a complex color bar signal including a standard color bar signal.

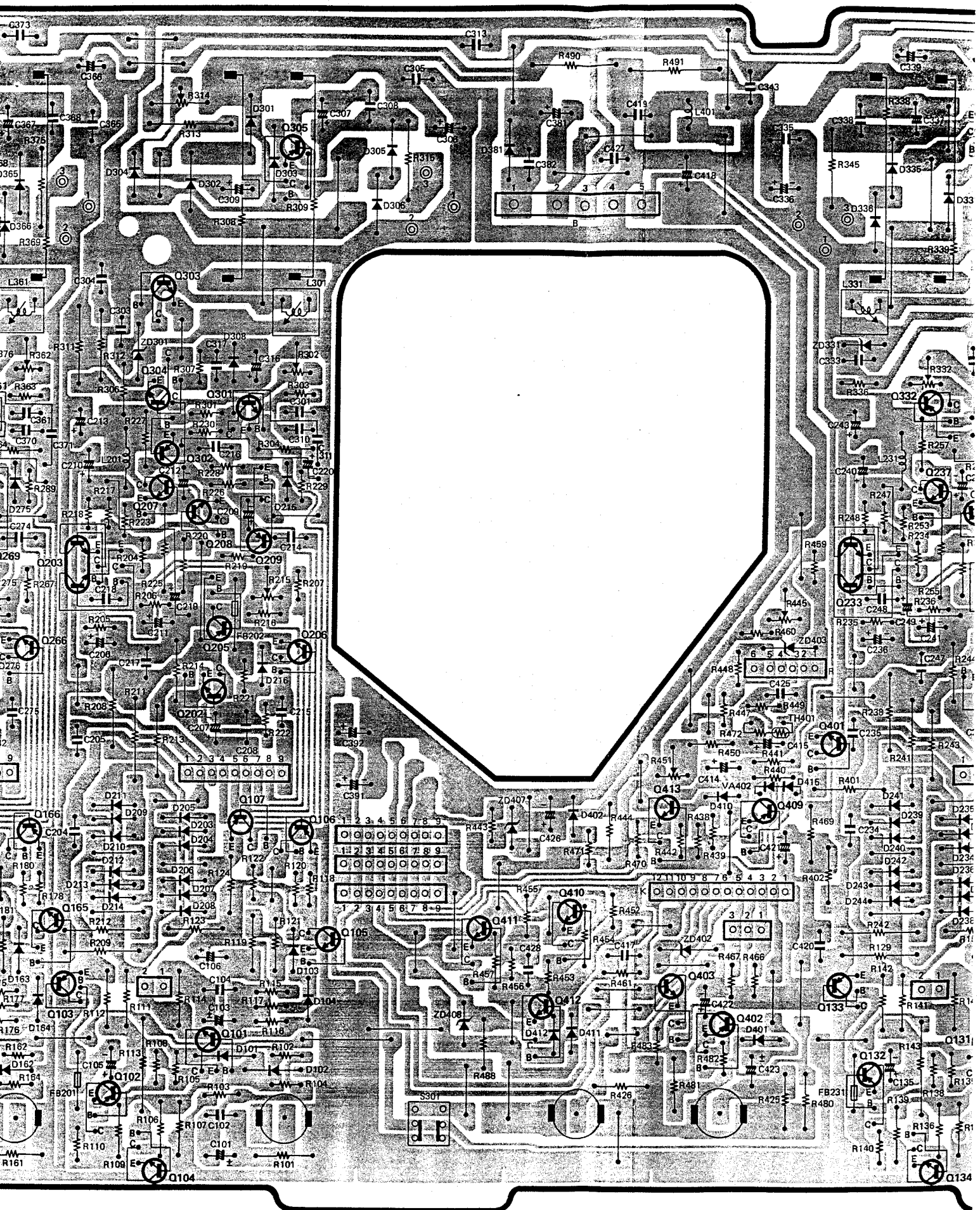
PRODUCT SAFETY NOTE: Components marked with a Δ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver though improper servicing.



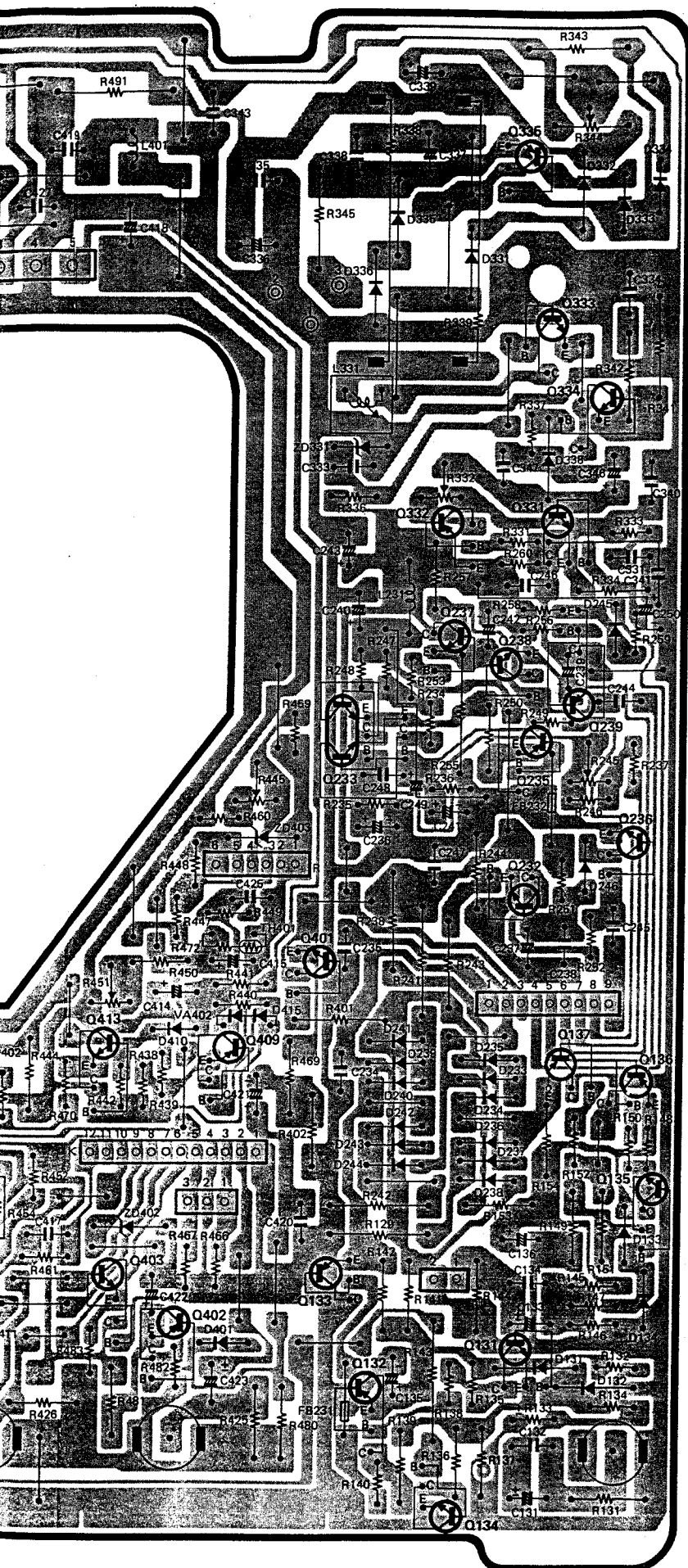
gram, the value of the parts is subject to be altered for improvement.
d with a tester (100k Ω /V).
color bar signal including a standard color bar signal.



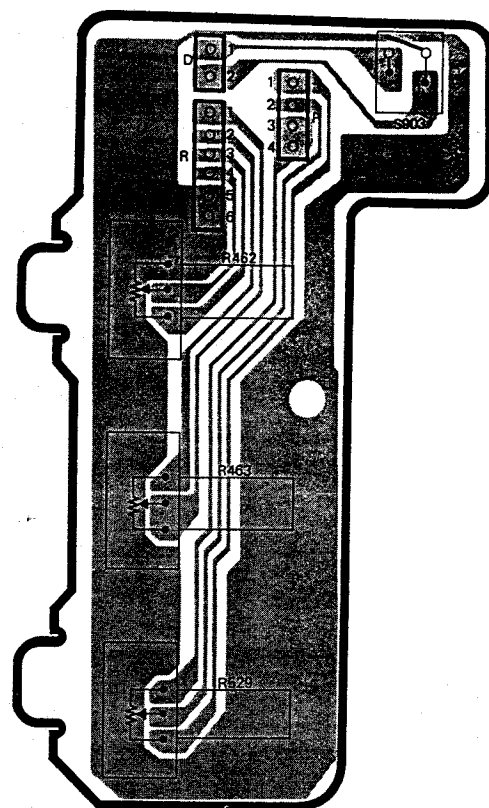
PRINTED WIRING BOARD



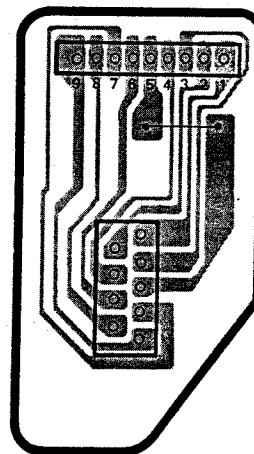
PRINTED WIRING BOARD

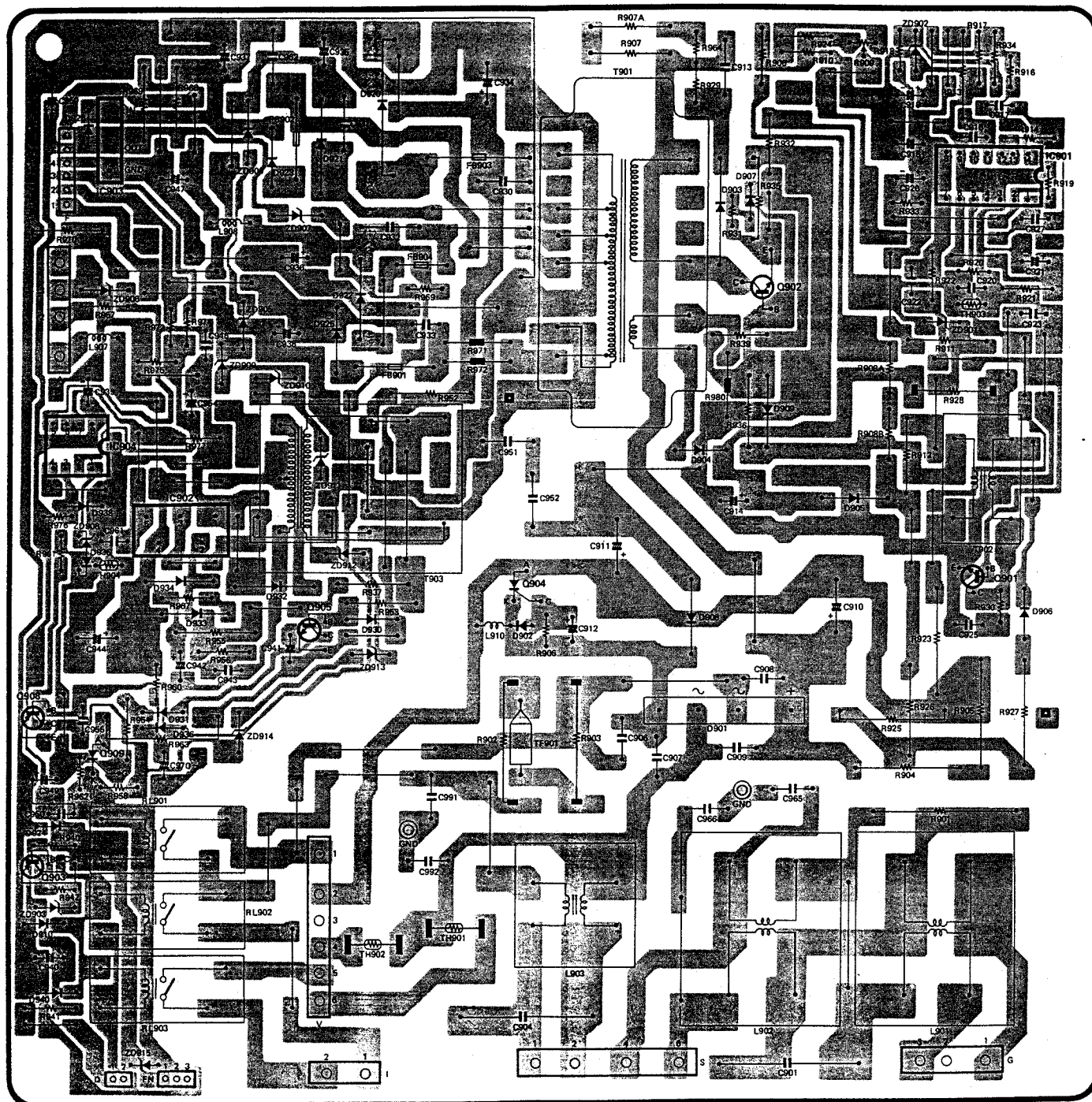


CONTROL P.W.B.



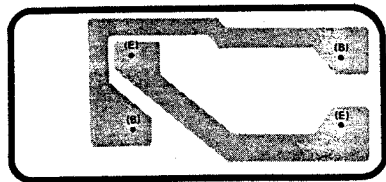
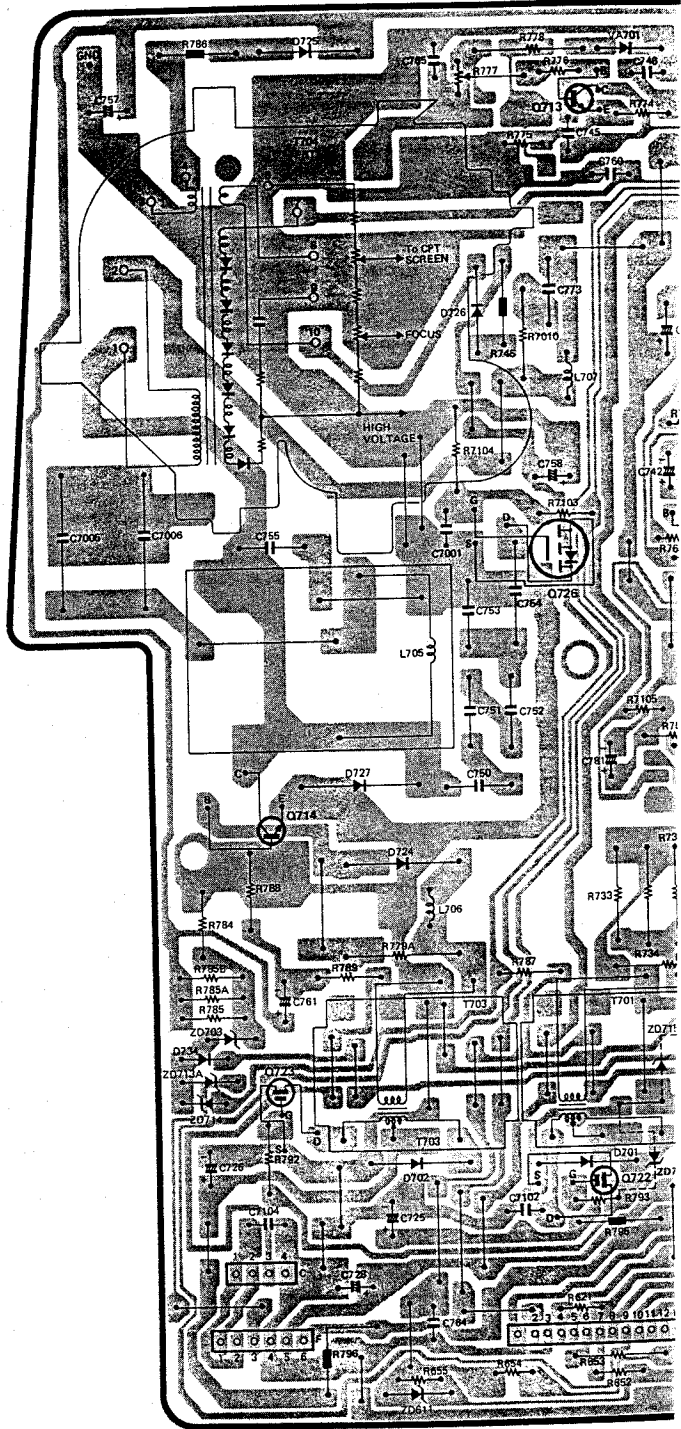
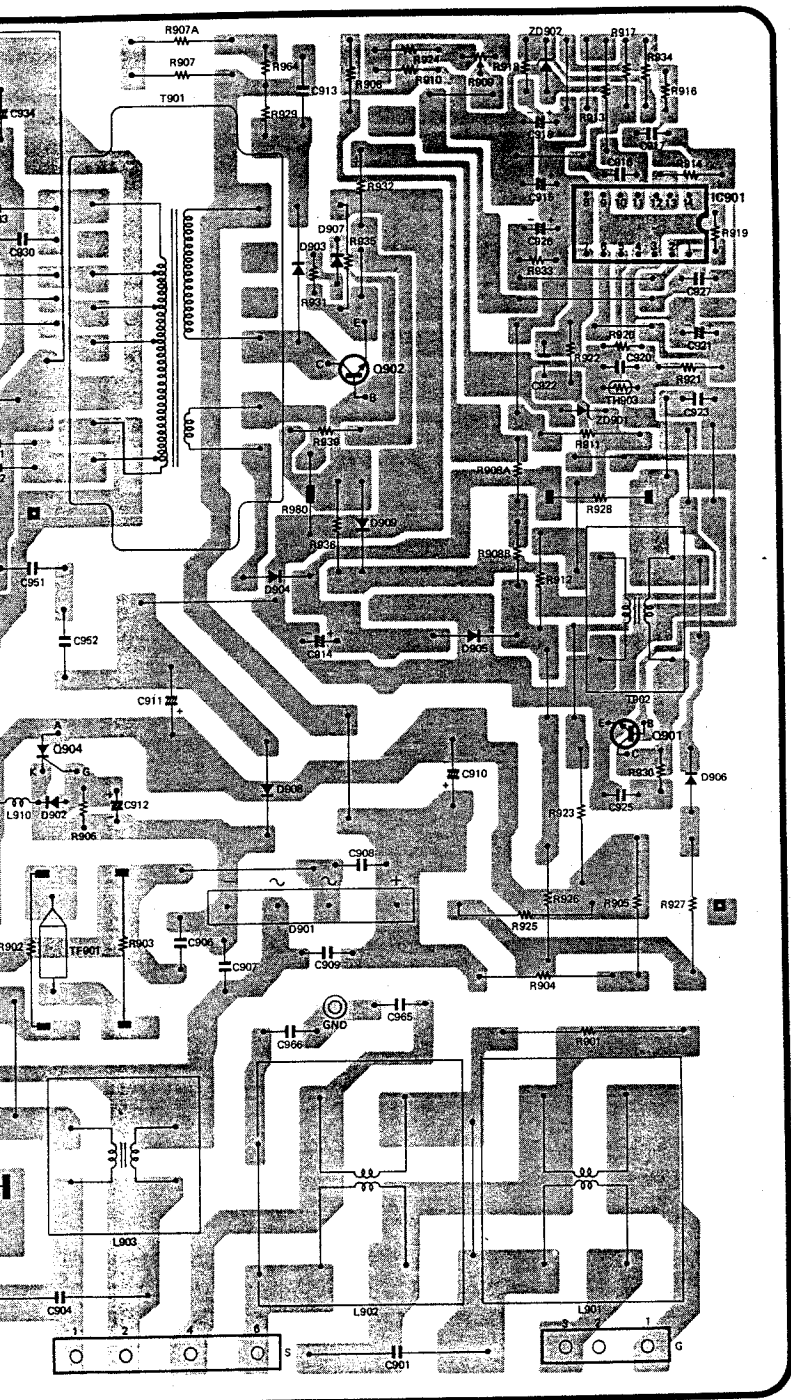
D-SUB INPUT P.W.B.

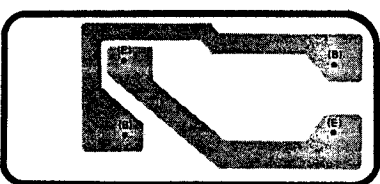
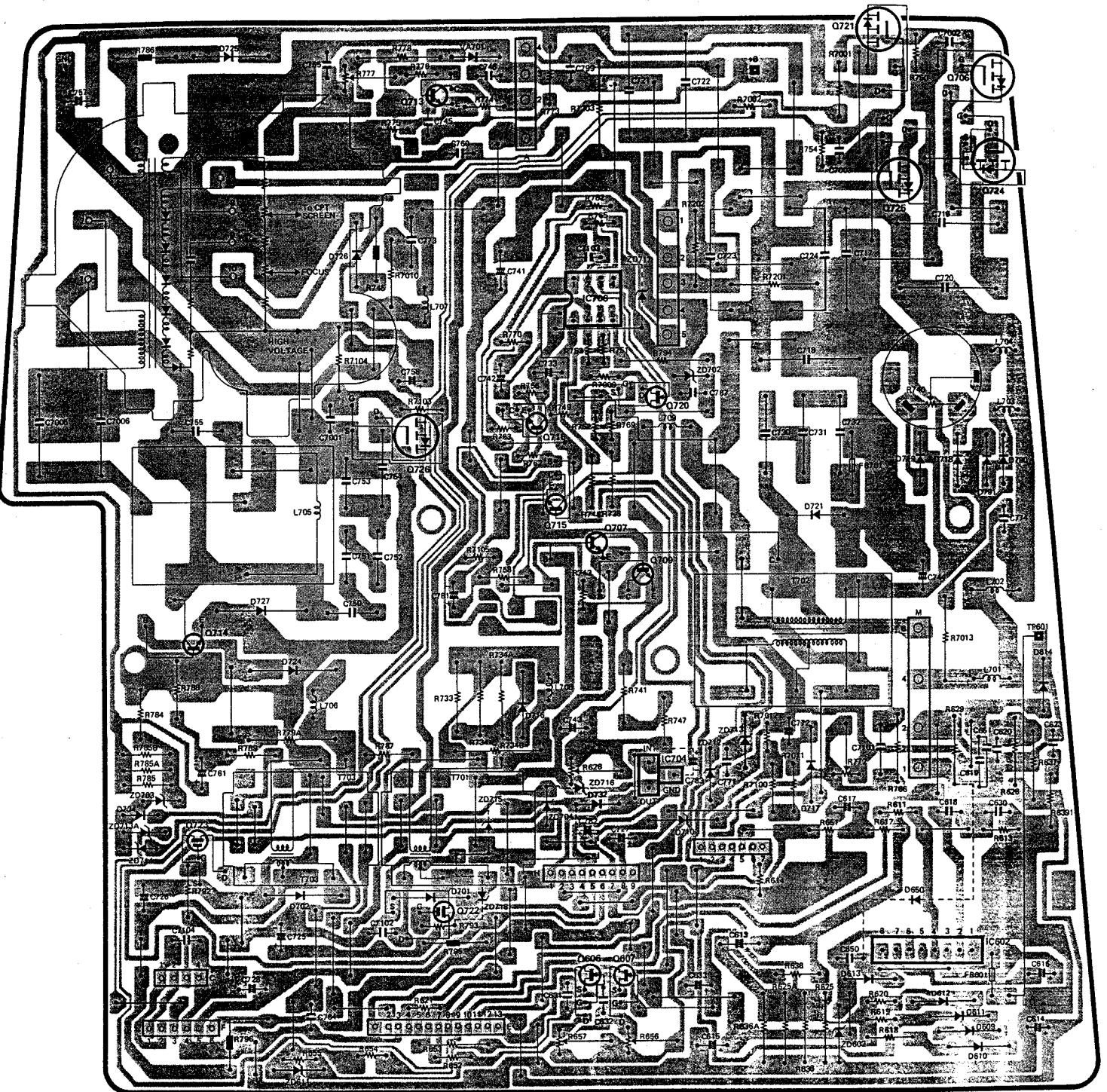




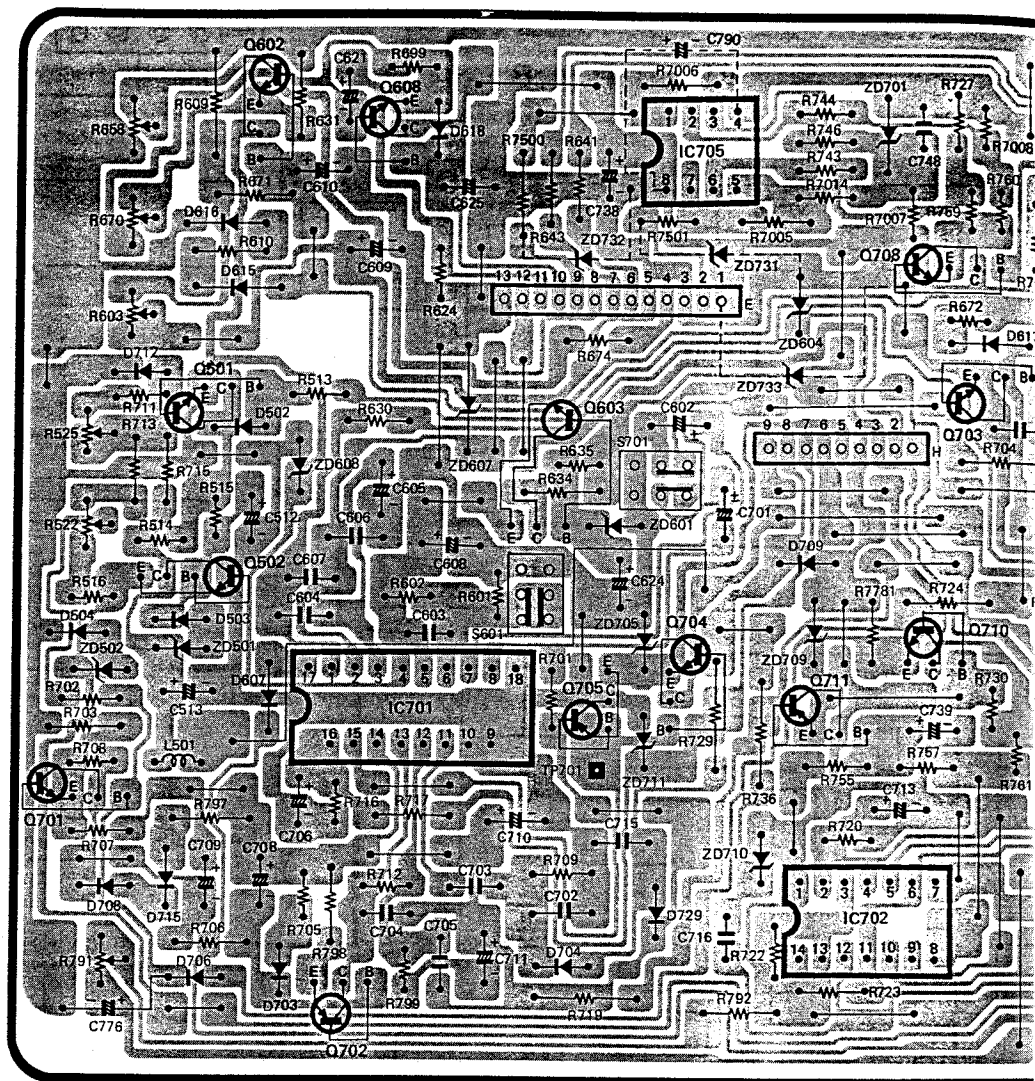
For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

DEF P.W.B.

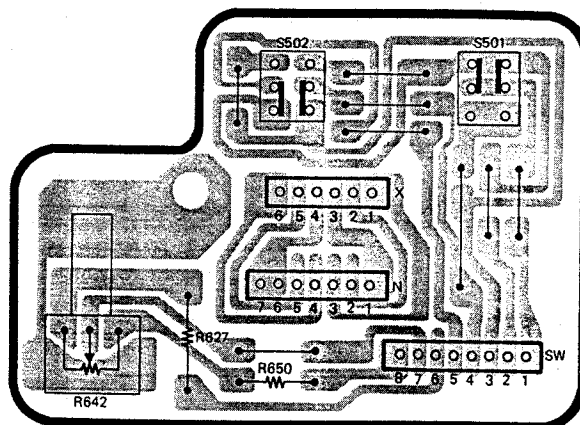




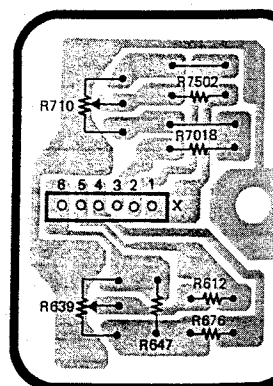
SYNC P.W.B.

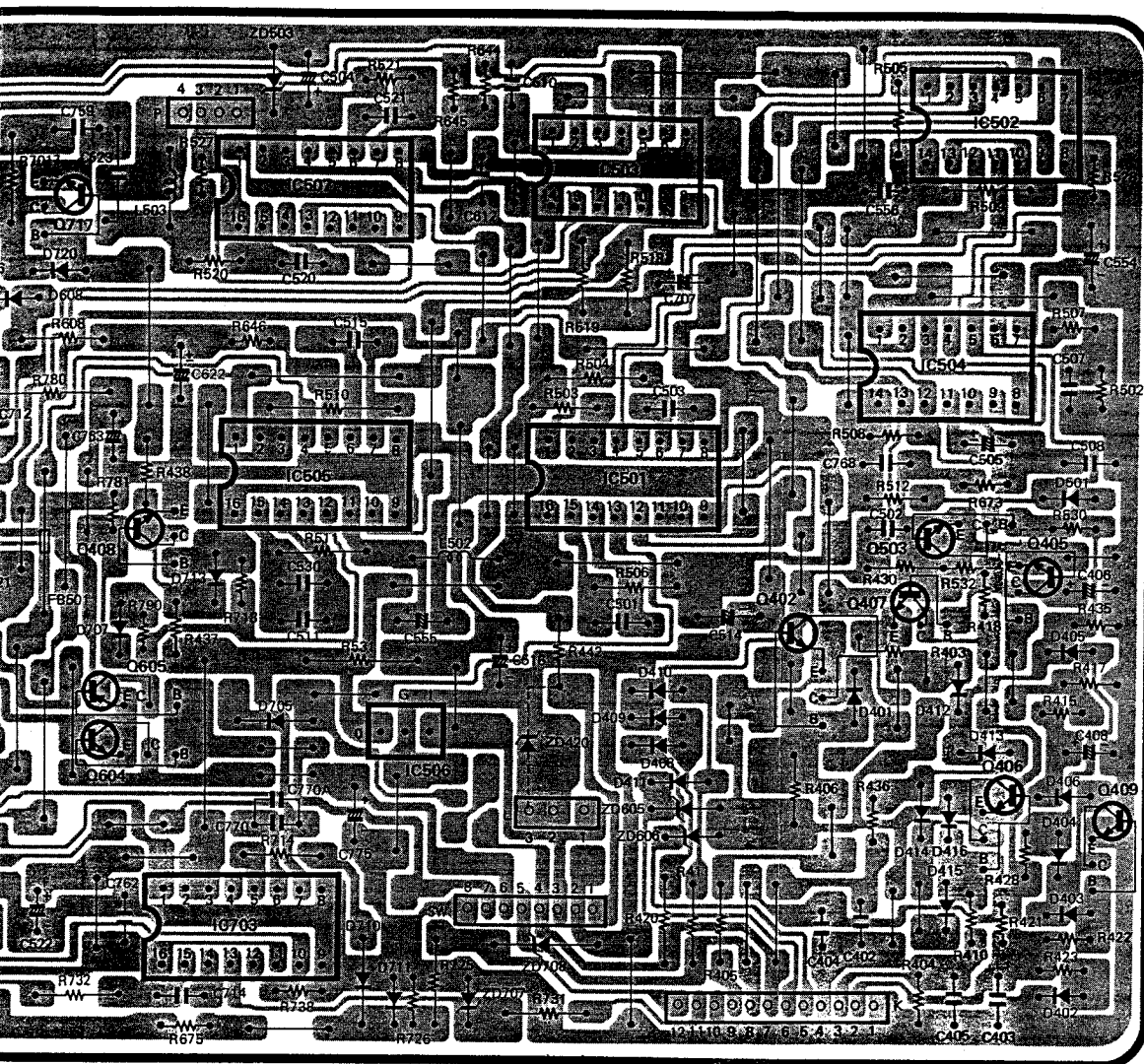


CONTROL B P.W.B.

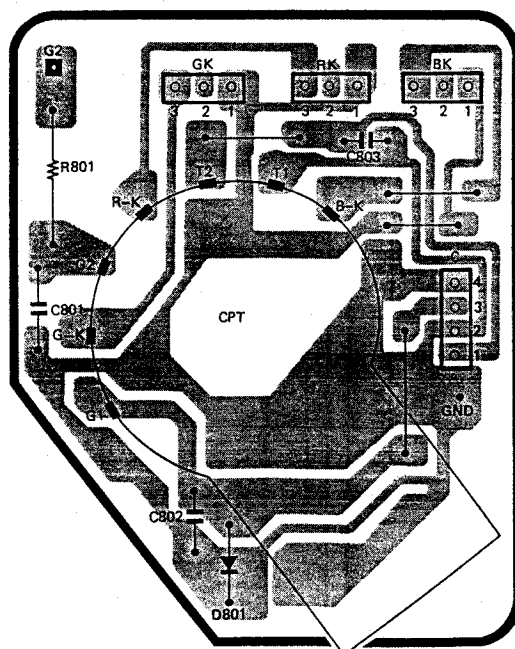


CONTROL A P.W.B.

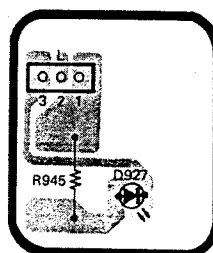




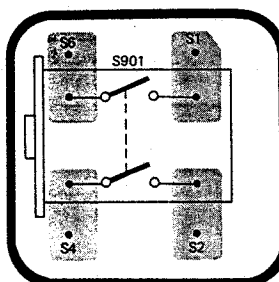
CPT P.W.B.

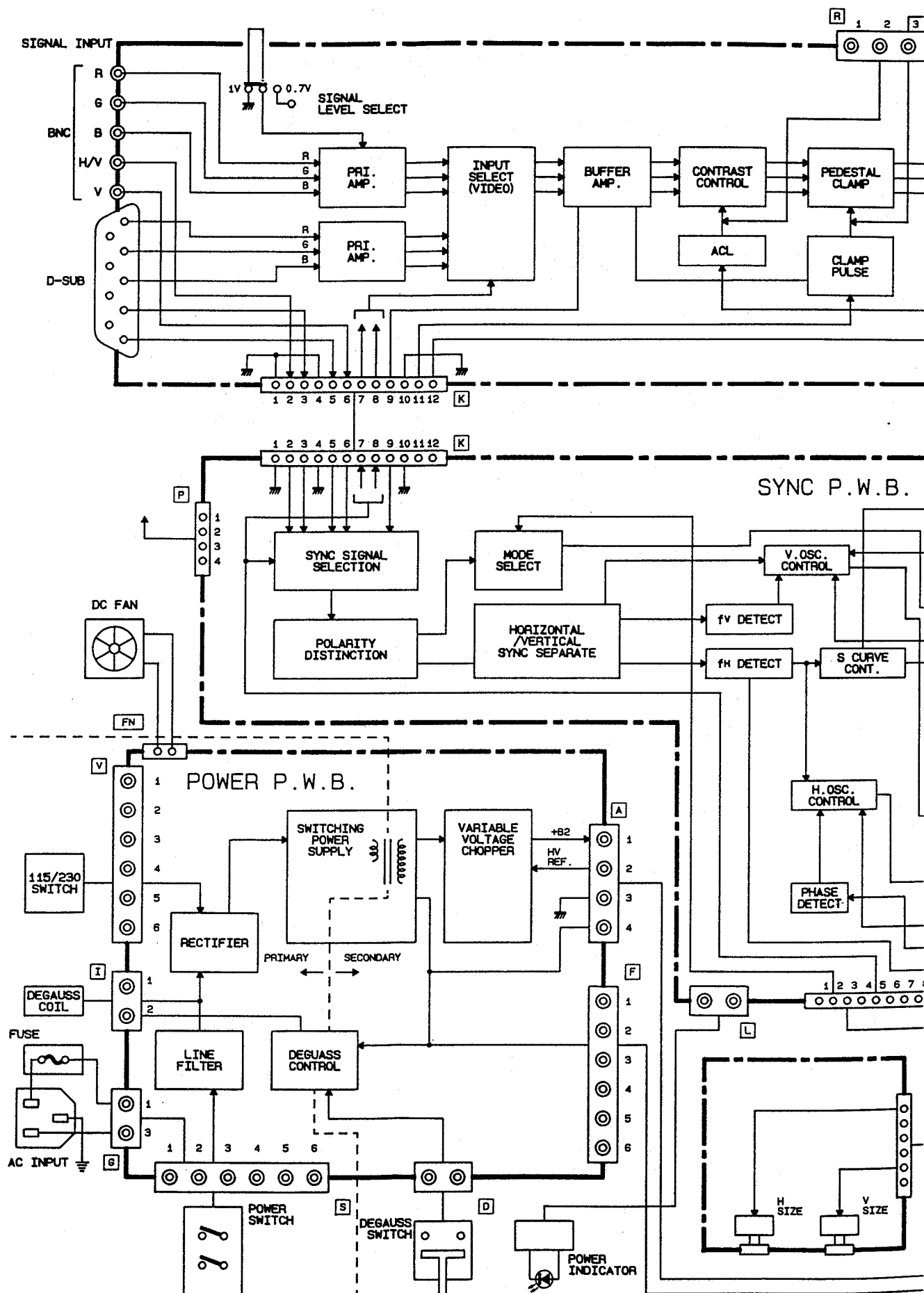


LED P.W.B.



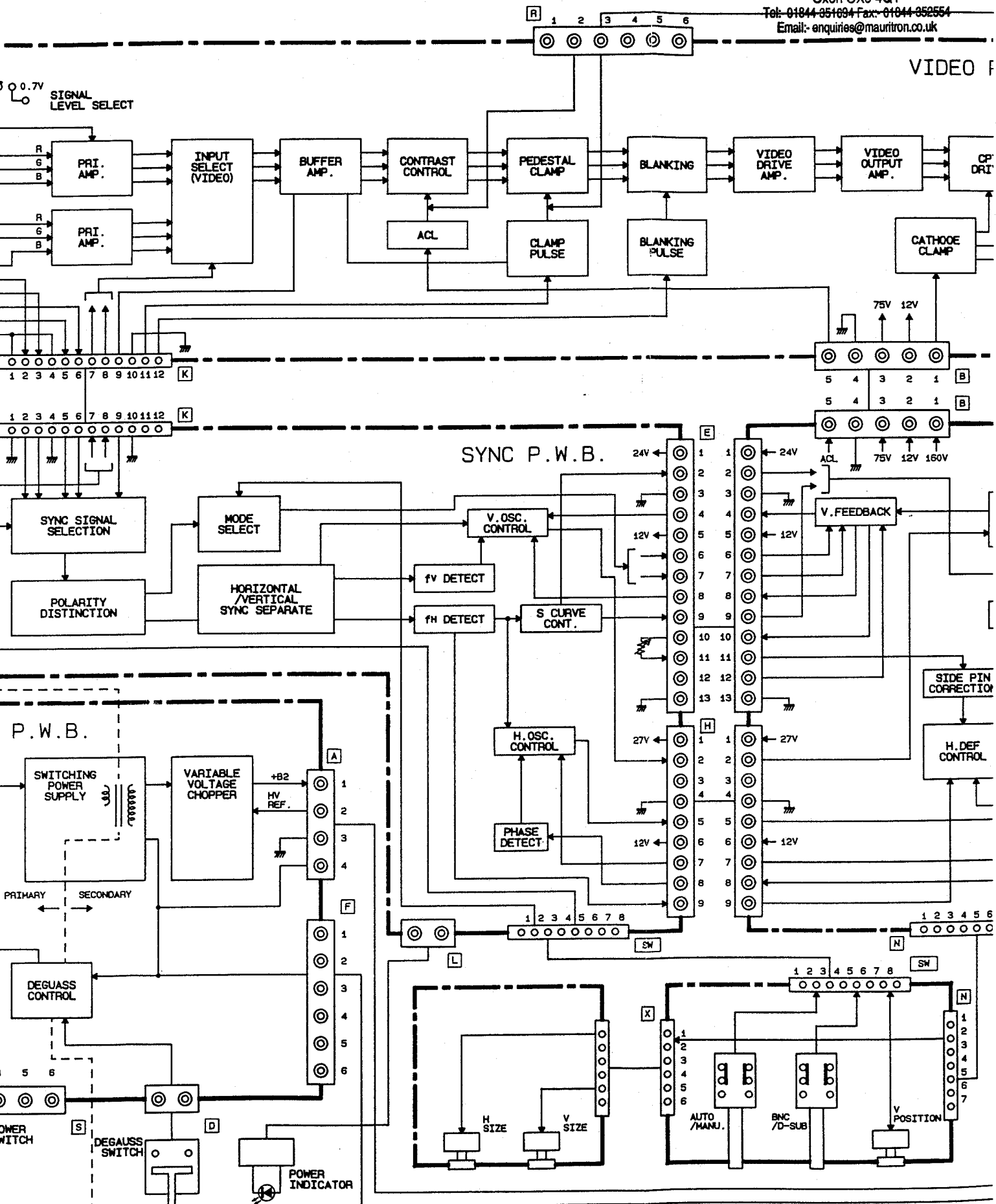
POWER SW P.W.B.

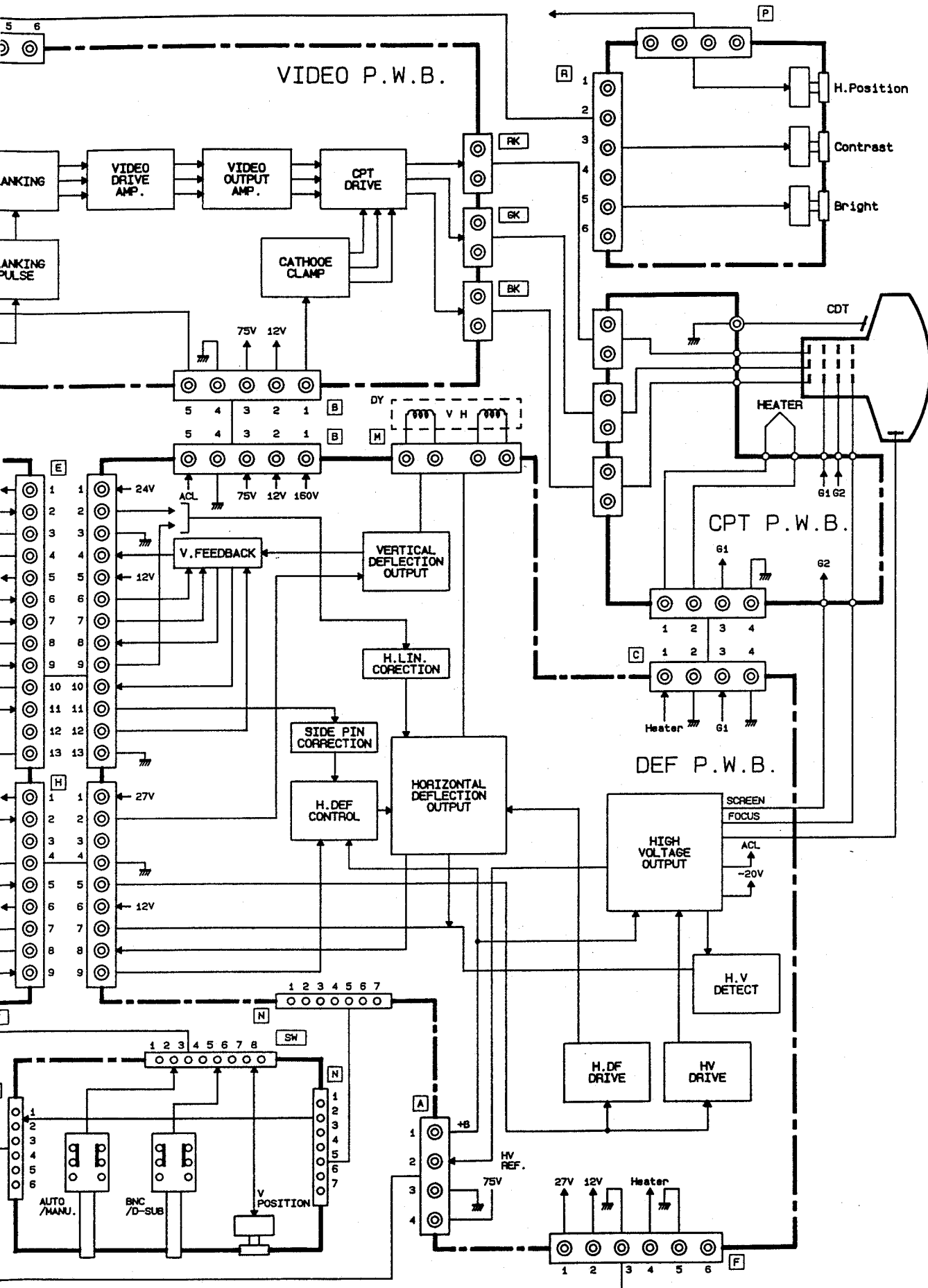




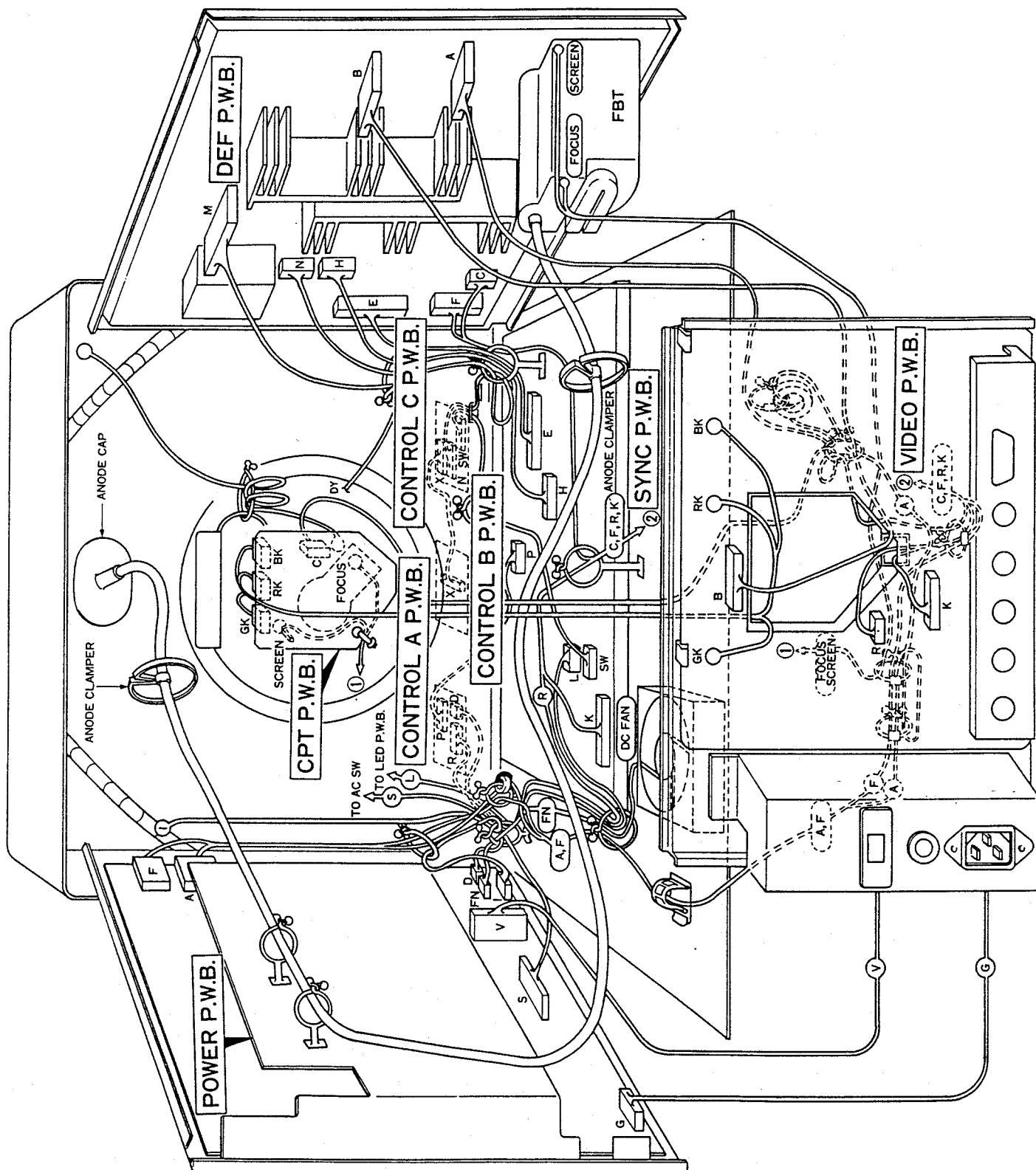
BLOCK DIAGRAM

For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel: 01844 351094 Fax: 01844 352554
Email: enquiries@mauritron.co.uk





WIRING DIAGRAM



PRODUCT SAFETY NOTE: Components marked with a Δ have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
C336	0258127	EL 47MF $\pm 20\%$ 100V	C511	0276811	PF 1000PF $\pm 5\%$ 50V
C337	0255505	EL 4.7MF 160V	C512	0800009	EL 4.7MF 25V
C338	0244565	CD 4700PF $\pm 100\%$ 500V	C513	0800049	EL 100MF 16V
C339	0255505	EL 4.7MF 160V	C514	0800072	EL 470MF 6.3V
C340	0248640	CD 10PF $\pm 0.25\%$ 50V	C515	0274675	PF 0.1MF $\pm 5\%$ 50V
C341	0248666	CD 18PF $\pm 5\%$ 50V	C516	0800049	EL 100MF 16V
C343	0244509	CD 4700PF $\pm 10\%$ 500V	C520	0244139	CD 1000PF $\pm 10\%$ 50V
C346	0254017	EL 100MF 10V	C521	0244139	CD 1000PF $\pm 10\%$ 50V
C347	0244171	CD 0.01MF $\pm 20\%$ 50V	C522	0800072	EL 470MF 6.3V
C361	0248692	CD 220PF $\pm 5\%$ 50V	C523	0244105	CD 2200PF $\pm 10\%$ 50V
C363	0244171	CD 0.01MF $\pm 20\%$ 50V	C530	0274651	PF 1000PF $\pm 5\%$ 50V
C364	0248690	CD 180PF $\pm 5\%$ 50V	C554	0800041	EL 47MF 16V
C365	0244505	CD 2200PF $\pm 10\%$ 500V	C555	0800048	EL 100MF 10V
C366	0258127	EL 47MF $\pm 20\%$ 100V	C556	0244171	CD 0.01MF $\pm 20\%$ 50V
C367	0255505	EL 4.7MF 160V	C602	0252468	CE 1MF 50V
C368	0244565	CD 4700PF $\pm 100\%$ 500V	C603	0244105	CD 2200PF $\pm 10\%$ 50V
C369	0255505	EL 4.7MF 160V	C604	0244117	CD 680PF $\pm 10\%$ 50V
C370	0248640	CC 10PF $\pm 0.25\%$ 50V	C605	0292716	TA 1MF $\pm 10\%$ 20V
C371	0248668	CD 22PF $\pm 5\%$ 50V	C606	0274769	PF 0.033MF $\pm 10\%$ 50V
C373	0244509	CD 4700PF $\pm 10\%$ 500V	C607	0248698	CD 560PF $\pm 5\%$ 50V
C376	0254017	EL 100MF 10V	C608	0800058	EL 220MF 16V
C377	0244171	CD 0.01MF $\pm 20\%$ 50V	C609	0800049	EL 100MF 16V
C381	0255028	EL 10MF 200V	C610	0800015	EL 10MF 16V
C382	0244171	CD 0.01MF $\pm 20\%$ 50V	C612	0244171	CD 0.01MF $\pm 20\%$ 50V
C391	0800049	EL 100MF 16V	C613	0254524F	EL 2200MF $\pm 20\%$ 25V
C392	0800049	EL 100MF 16V	C614	0255009F	EL 470MF $\pm 20\%$ 35V
C402	0244171	CD 0.01MF $\pm 20\%$ 50V	C615	0255010	EL 1000MF $\pm 20\%$ 35V
C403	0244115	CD 560PF $\pm 10\%$ 50V	C616	0258114	CE 330MF 50V
C404	0800049	EL 100MF 16V	C617	0254503	CE 33MF 16V
C405	0244115	CD 560PF $\pm 10\%$ 50V	C618	0248696	CD 330PF $\pm 5\%$ 50V
C406	0800003	EL 1MF 50V	C619	0244571	CD 0.01MF $\pm 100\%$ 500V
C408	0800001	EL 0.47MF 50V	C620	0275821	PF 0.047MF $\pm 10\%$ 100V
C414	0800041	EL 47MF 16V	C621	0255002R	EL 10MF $\pm 20\%$ 35V
C415	0800015	EL 10MF 16V	C622	0252452	CE 47MF 16V
C417	0244139	CD 1000PF $\pm 10\%$ 50V	C623	0275816	PF 6800PF $\pm 10\%$ 100V
C418	0254509	EL 1000MF 16V	C624	0800041	EL 47MF 16V
C419	0244171	CD 0.01MF $\pm 20\%$ 50V	C625	0800018	EL 10MF 50V
C420	0248684	CD 100PF $\pm 5\%$ 50V	C630	0274667	PF 0.022MF $\pm 5\%$ 50V
C421	0800005	EL 2.2MF 50V	C631	0244171	CD 0.01MF $\pm 20\%$ 50V
C422	0800049	EL 100MF 16V	C632	0244171	CD 0.01MF $\pm 20\%$ 50V
C423	0252452	CE 47MF 16V	C633	0258108	EL 10MF 50V
C425	0244171	CD 0.01MF $\pm 20\%$ 50V	C650	0244101	CD 1000PF $\pm 10\%$ 50V
C426	0800015	EL 10MF 16V	C651	0244571	CD 0.01MF $\pm 100\%$ 500V
C427	0244509	CD 4700PF $\pm 10\%$ 500V	C7001	0244171	CD 0.01MF $\pm 20\%$ 50V
C428	0244116	CD 180PF $\pm 10\%$ 50V	C7002	0244171	CD 0.01MF $\pm 20\%$ 50V
C501	0244116	CD 180PF $\pm 10\%$ 50V	C7003	0244171	CD 0.01MF $\pm 20\%$ 50V
C502	0244139	CD 1000PF $\pm 10\%$ 50V	Δ C7005	0299931	PP 0.27MF $\pm 10\%$ 200V
C503	0276829	PF 0.033MF $\pm 5\%$ 50V	Δ C7006	0299931	PP 0.27MF $\pm 10\%$ 200V
C504	0800073	EL 470MF 10V	C701	0252452	CE 47MF 16V
C505	0252468	CE 1MF 50V	C702	0274759	PF 4700PF $\pm 10\%$ 50V
C507	0274763	PF 0.01MF $\pm 10\%$ 50V	C703	0274767	PF 0.022MF $\pm 10\%$ 50V
C508	0244171	CD 0.01MF $\pm 20\%$ 50V	C704	0299005	PP 0.0015MF $\pm 2\%$ 100V
C510	0244171	CD 0.01MF $\pm 20\%$ 50V	C705	0274661	PF 6800PF $\pm 5\%$ 50V

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
C706	0800032	EL 33MF 16V	C764	0274663	PF 0.01MF $\pm 5\%$ 50V
C707	0800049	EL 100MF 16V	C765	0244109	CD 4700PF $\pm 10\%$ 50V
C708	0800003	EL 1MF 50V	C767	0244171	CD 0.01MF $\pm 20\%$ 50V
C709	0800003	EL 1MF 50V	C768	0244171	CD 0.01MF $\pm 20\%$ 50V
C710	0800049	EL 100MF $\pm 20\%$ 16V	C770	0299001	PP 1000PF $\pm 2\%$ 100V
C7101	0299973	PP 2200PF $\pm 5\%$ 630V	C770A	0276217	PF 1000PF $\pm 5\%$ 50V
C7102	0244505	CD 2200PF $\pm 10\%$ 500V	C771	0274675	PF 0.1MF $\pm 5\%$ 50V
C7103	0276821	PF 6800PF $\pm 5\%$ 50V	C772	0255502	EL 1MF $\pm 20\%$ 160V
C7104	0274675	PF 0.1MF $\pm 5\%$ 50V	C773	0299610F	PP 1000PF $\pm 5\%$ 630V
C711	0800003	EL 1MF 50V	C774	0244501	CD 1000PF $\pm 10\%$ 500V
C712	0244171	CD 0.01MF $\pm 20\%$ 50V	C775	0255002R	EL 10MF $\pm 20\%$ 35V
C713	0800003	EL 1MF 50V	C776	0258105	EL 2.2MF 50V
C714	0244118	CD 470PF $\pm 10\%$ 50V	C781	0255507	EL 22MF 160V
C715	0274759	PF 4700PF $\pm 10\%$ 50V	C782	0800004	EL 1MF 100V
C716	0244230	CD 220PF $\pm 10\%$ 50V	C783	0800004	EL 1MF 100V
C717	0299932	PP CON 0.33MF/200V $\pm 10\%$	C790	0800018	EL 10MF 50V
C718	0299932	PP CON 0.33MF/200V $\pm 10\%$	C799	0244565	CD 4700PF $\pm 100\%$ 500V
C719	0299933	PP 0.39MF $\pm 10\%$ 200V	C801	0244202	CD 470PF $\pm 10\%$ 2KV
C720	0299933	PP 0.39MF $\pm 10\%$ 200V	C802	0244571	CD 0.01MF $\pm 100\%$ 500V
C721	0299933	PP 0.39MF $\pm 10\%$ 200V	C803	0244171	CD 0.01MF $\pm 20\%$ 50V
C722	0299933	PP 0.39MF $\pm 10\%$ 200V	Δ C901	0279698	PLASTIC CAPACITOR
C723	0299933	PP 0.39MF $\pm 10\%$ 200V	Δ C904	0279698	PLASTIC CAPACITOR
C724	0299933	PP 0.39MF $\pm 10\%$ 200V	Δ C906	0249395	CD 4700PF $\pm 100\%$
C725	0255010	EL 1000MF $\pm 20\%$ 35V	Δ C907	0249395	CD 4700PF $\pm 100\%$
C726	0255010	EL 1000MF $\pm 20\%$ 35V	Δ C908	0249395	CD 4700PF $\pm 100\%$
C727	0252468	CE 1MF 50V	Δ C909	0249395	CD 4700PF $\pm 100\%$
C728	0254505	EL 100MF $\pm 20\%$ 16V	Δ C910	0258642	EL 680MF $\pm 20\%$ 250V
C730	0299984	PP 0.022MF $\pm 5\%$ 630V	Δ C911	0258642	EL 680MF $\pm 20\%$ 250V
C731	0299984	PP 0.022MF $\pm 5\%$ 630V	C912	0258106	EL 3.3MF 50V
C732	0299984	PP 0.022MF $\pm 5\%$ 630V	C913	0244215	CD 2200PF $\pm 10\%$ 2KV
C733	0255002	EL 10MF $\pm 20\%$ 35V	C914	0258128	EL 100MF $\pm 20\%$ 100V
C738	0255004R	EL 33MF $\pm 20\%$ 35V	C915	0258108	EL 10MF 50V
C739	0800015	EL 10MF 16V	C916	0299001	PP 0.001MF $\pm 2\%$ 100V
C741	0253138	EL 100MF 160V	C917	0274657	PF 0.0033MF $\pm 5\%$ 50V
C742	0255002R	EL 10MF $\pm 20\%$ 35V	C918	0258107	EL 4.7MF $\pm 20\%$ 50V
C743	0258108	EL 10MF 50V	C920	0248698	CD 560PF $\pm 5\%$ 50V
C744	0255507	EL 22MF 160V	C921	0258108	EL 10MF 50V
C745	0243511	CD 680PF $\pm 10\%$ 500V	C922	0274667	PF 0.022MF $\pm 5\%$ 50V
C746	0274663	PF 0.01MF $\pm 5\%$ 50V	C923	0275816	PF 6800PF $\pm 10\%$ 100V
C748	0244171	CD 0.01MF $\pm 20\%$ 50V	C925	0247858	CD 150PF $\pm 5\%$ 500V
Δ C750	0299977	PP 4700PF $\pm 5\%$ 630V	C926	0258108	EL 10MF 50V
Δ C751	0299977	PP 4700PF $\pm 5\%$ 630V	C927	0274665	PF 0.015MF $\pm 5\%$ 50V
Δ C752	0299976	PP 3900PF $\pm 5\%$ 630V	C930	0243839	CD 180PF $\pm 10\%$ 2.5KV
Δ C753	0299975	PP 3300PF $\pm 5\%$ 630V	C931	0243839	CD 180PF $\pm 10\%$ 2.5KV
Δ C754	0299984	PP 0.022MF $\pm 5\%$ 630V	C932	0243839	CD 180PF $\pm 10\%$ 2.5KV
Δ C755	0243824	CD 470PF $\pm 10\%$ 2.5KV	C933	0244565	CD 4700PF $\pm 100\%$ 500V
C757	0255027	EL 4.7MF $\pm 20\%$ 200V	C934	0253138	EL 100MF 160V
C758	0258112	EL 100MF 50V	C935	0258128	EL 100MF $\pm 20\%$ 100V
C759	0274675	PF 0.1MF $\pm 5\%$ 50V	C936	0255010	EL 1000MF $\pm 20\%$ 35V
C760	0274675	PF 0.1MF $\pm 5\%$ 50V	C937	0255010	EL 1000MF $\pm 20\%$ 35V
C761	0255027	EL 4.7MF $\pm 20\%$ 200V	C938	0254022	CE 2200MF 10V
C762	0244171	CD 0.01MF $\pm 20\%$ 50V	C939	0254519	EL 100MF $\pm 20\%$ 25V
C763	0252806	EL 0.22MF 50V	C940	0800044	CE 470MF $\pm 20\%$ 16V

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
C941	0800072	EL 470MF 6.3V	R137	0100059	CF 560 OHM $\pm 5\%$ 1/8W
C942	0800044	CE 47MF 50V	R138	0700031	CF 180 OHM $\pm 5\%$ 1/16W
C943	0274671	PF 0.047MF 50V	R139	0100047	CF 180 OHM $\pm 5\%$ 1/8W
C944	0253138	EL 100MF 160V	R140	0700027	CF 100 OHM $\pm 5\%$ 1/16W
C946	0244171	CD 0.01MF $\pm 20\%$ 50V	R141	0100043	CF 120 OHM $\pm 5\%$ 1/8W
C947	0255006	EL 100MF 35V	R142	0100053	CF 330 OHM $\pm 5\%$ 1/8W
C949	0800079	EL 1000MF $\pm 20\%$ 6.3V	R143	0700054	CF 10K OHM $\pm 5\%$ 1/16W
C950	0244171	CD 0.01MF $\pm 20\%$ 50V	R144	0100038	CF 75 OHM $\pm 5\%$ 1/8W
C951	0249394	CD 4700PF $\pm 20\%$	R145	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W
C952	0249394	CD 4700PF $\pm 20\%$	R146	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W
C954	0258104	EL 1MF 50V	R147	0700027	CF 100 OHM $\pm 5\%$ 1/16W
C955	0276235	PF 0.033MF $\pm 5\%$ 50V	R148	0700029	CF 150 OHM $\pm 5\%$ 1/16W
C959	0254504	EL 47MF $\pm 20\%$ 16V	R149	0100050	CF 240 OHM $\pm 5\%$ 1/8W
C961	0244171	CD 0.01MF $\pm 20\%$ 50V	R150	0700031	CF 180 OHM $\pm 5\%$ 1/16W
C962	0243839	CD 180PF $\pm 10\%$ 2.5KV	R151	0100047	CF 180 OHM $\pm 5\%$ 1/8W
Δ C965	0249395	CD 4700PF $\pm 100\%$	R152	0700027	CF 100 OHM $\pm 5\%$ 1/16W
Δ C966	0249395	CD 4700PF $\pm 100\%$	R153	0100043	CF 120 OHM $\pm 5\%$ 1/8W
C970	0255506	EL 10MF 160V	R154	0100053	CF 330 OHM $\pm 5\%$ 1/8W
Δ C991	0249394	CD 4700PF $\pm 20\%$	R161	0100038	CF 75 OHM $\pm 5\%$ 1/8W
Δ C992	0249394	CD 4700PF $\pm 20\%$	R162	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W
RESISTORS			R163	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W
R101	0100038	CF 75 OHM $\pm 5\%$ 1/8W	R164	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R102	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W	R165	0700029	CF 150 OHM $\pm 5\%$ 1/16W
R103	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W	R166	0100056	CF 430 OHM $\pm 5\%$ 1/8W
R104	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R167	0100059	CF 560 OHM $\pm 5\%$ 1/8W
R105	0700029	CF 150 OHM $\pm 5\%$ 1/16W	R168	0700031	CF 180 OHM $\pm 5\%$ 1/16W
R106	0100056	CF 430 OHM $\pm 5\%$ 1/8W	R169	0100047	CF 180 OHM $\pm 5\%$ 1/8W
R107	0100059	CF 560 OHM $\pm 5\%$ 1/8W	R170	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R108	0700031	CF 180 OHM $\pm 5\%$ 1/16W	R171	0100043	CF 120 OHM $\pm 5\%$ 1/8W
R109	0100047	CF 180 OHM $\pm 5\%$ 1/8W	R172	0100053	CF 330 OHM $\pm 5\%$ 1/8W
R110	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R173	0700054	CF 10K OHM $\pm 5\%$ 1/16W
R111	0100043	CF 120 OHM $\pm 5\%$ 1/8W	R174	0100038	CF 75 OHM $\pm 5\%$ 1/8W
R112	0100053	CF 330 OHM $\pm 5\%$ 1/8W	R175	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W
R113	0700054	CF 10K OHM $\pm 5\%$ 1/16W	R176	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W
R114	0100038	CF 75 OHM $\pm 5\%$ 1/8W	R177	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R115	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W	R178	0700029	CF 150 OHM $\pm 5\%$ 1/16W
R116	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W	R179	0100050	CF 240 OHM $\pm 5\%$ 1/8W
R117	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R180	0700031	CF 180 OHM $\pm 5\%$ 1/16W
R118	0700029	CF 150 OHM $\pm 5\%$ 1/16W	R181	0100047	CF 180 OHM $\pm 5\%$ 1/8W
R119	0100050	CF 240 OHM $\pm 5\%$ 1/8W	R182	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R120	0700031	CF 180 OHM $\pm 5\%$ 1/16W	R183	0100043	CF 120 OHM $\pm 5\%$ 1/8W
R121	0100047	CF 180 OHM $\pm 5\%$ 1/8W	R184	0100053	CF 330 OHM $\pm 5\%$ 1/8W
R122	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R204	0187040	CF 91 OHM $\pm 5\%$ 1/16W
R123	0100043	CF 120 OHM $\pm 5\%$ 1/8W	R205	0700043	CF 1.5K OHM $\pm 5\%$ 1/16W
R124	0100053	CF 330 OHM $\pm 5\%$ 1/8W	R206	0700043	CF 1.5K OHM $\pm 5\%$ 1/16W
R131	0100038	CF 75 OHM $\pm 5\%$ 1/8W	R207	0700031	CF 180 OHM $\pm 5\%$ 1/16W
R132	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W	R208	0113744	CF 560 OHM $\pm 5\%$ 1/2W
R133	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W	R209	0113744	CF 560 OHM $\pm 5\%$ 1/2W
R134	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R211	0113744	CF 560 OHM $\pm 5\%$ 1/2W
R135	0700029	CF 150 OHM $\pm 5\%$ 1/16W	R212	0113744	CF 560 OHM $\pm 5\%$ 1/2W
R136	0100056	CF 430 OHM $\pm 5\%$ 1/8W	R213	0700027	CF 100 OHM $\pm 5\%$ 1/16W
			R214	0100061	CF 680 OHM $\pm 5\%$ 1/8W
			Δ R215	0150132	VR 200 OHM-B

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R216	0700026	CF 82 OHM $\pm 5\%$ 1/16W	R279	0700032	CF 220 OHM $\pm 5\%$ 1/16W
R217	0100047	CF 180 OHM $\pm 5\%$ 1/8W	R280	0100037	CF 68 OHM $\pm 5\%$ 1/8W
R218	0100051	CF 270 OHM $\pm 5\%$ 1/8W	R281	0700026	CF 82 OHM $\pm 5\%$ 1/16W
R219	0700032	CF 220 OHM $\pm 5\%$ 1/16W	R282	0700066	CF 82K OHM $\pm 5\%$ 1/16W
R220	0100037	CF 68 OHM $\pm 5\%$ 1/8W	R283	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R221	0700026	CF 82 OHM $\pm 5\%$ 1/16W	R285	0114151	CF 680 OHM $\pm 5\%$ 1/4W
R222	0700066	CF 82K OHM $\pm 5\%$ 1/16W	R286	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R223	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R287	0100125	CF 330K OHM $\pm 5\%$ 1/8W
R225	0114151	CF 680 OHM $\pm 5\%$ 1/4W	R288	0700044	CF 1.8K OHM $\pm 5\%$ 1/16W
R226	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R289	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R227	0100125	CF 330K OHM $\pm 5\%$ 1/8W	R290	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R228	0700044	CF 1.8K OHM $\pm 5\%$ 1/16W	R301	0700031	CF 180 OHM $\pm 5\%$ 1/16W
R229	0700027	CF 100 OHM $\pm 5\%$ 1/16W	Δ R302	0150132	VR 200 OHM-B
R230	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R303	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W
R234	0187040	CF 91 OHM $\pm 5\%$ 1/16W	R304	0100049	CF 220 OHM $\pm 5\%$ 1/8W
R235	0700043	CF 1.5K OHM $\pm 5\%$ 1/16W	R306	0700039	CF 820 OHM $\pm 5\%$ 1/16W
R236	0700043	CF 1.5K OHM $\pm 5\%$ 1/16W	R307	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R237	0700031	CF 180 OHM $\pm 5\%$ 1/16W	R308	0144017	MF 820 OHM $\pm 5\%$ 10W
R238	0113744	CF 560 OHM $\pm 5\%$ 1/2W	R309	0144017	MF 820 OHM $\pm 5\%$ 10W
R239	0113744	CF 560 OHM $\pm 5\%$ 1/2W	R311	0113707	CF 18 OHM $\pm 5\%$ 1/2W
R241	0113744	CF 560 OHM $\pm 5\%$ 1/2W	R312	0114049	CF 22 OHM $\pm 5\%$ 1/4W
R242	0113744	CF 560 OHM $\pm 5\%$ 1/2W	R313	0113793	CF 56K OHM $\pm 5\%$ 1/2W
R243	0700027	CF 100 OHM $\pm 5\%$ 1/16W	Δ R314	0151341	VR 50K OHM-B
R244	0100061	CF 680 OHM $\pm 5\%$ 1/8W	R315	0113717	CF 47 OHM $\pm 5\%$ 1/2W
Δ R245	0150132	VR 200 OHM-B	R331	0700031	CF 180 OHM $\pm 5\%$ 1/16W
R246	0700026	CF 82 OHM $\pm 5\%$ 1/16W	Δ R332	0150132	VR 200 OHM-B
R247	0100047	CF 180 OHM $\pm 5\%$ 1/8W	R333	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W
R248	0100051	CF 270 OHM $\pm 5\%$ 1/8W	R334	0100049	CF 220 OHM $\pm 5\%$ 1/8W
R249	0700032	CF 220 OHM $\pm 5\%$ 1/16W	R336	0700039	CF 820 OHM $\pm 5\%$ 1/16W
R250	0100037	CF 68 OHM $\pm 5\%$ 1/8W	R337	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R251	0700026	CF 82 OHM $\pm 5\%$ 1/16W	R338	0144017	MF 820 OHM $\pm 5\%$ 10W
R252	0700066	CF 82K OHM $\pm 5\%$ 1/16W	R339	0144017	MF 820 OHM $\pm 5\%$ 10W
R253	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R341	0113707	CF 18 OHM $\pm 5\%$ 1/2W
R255	0114151	CF 680 OHM $\pm 5\%$ 1/4W	R342	0114049	CF 22 OHM $\pm 5\%$ 1/4W
R256	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R343	0113793	CF 56K OHM $\pm 5\%$ 1/2W
R257	0100125	CF 330K OHM $\pm 5\%$ 1/8W	Δ R344	0151341	VR 50K OHM-B
R258	0700044	CF 1.8K OHM $\pm 5\%$ 1/16W	R345	0113717	CF 47 OHM $\pm 5\%$ 1/2W
R259	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R361	0700031	CF 180 OHM $\pm 5\%$ 1/16W
R260	0700027	CF 100 OHM $\pm 5\%$ 1/16W	Δ R362	0150132	VR 200 OHM-B
R264	0187040	CF 91 OHM $\pm 5\%$ 1/16W	R363	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W
R265	0700043	CF 1.5K OHM $\pm 5\%$ 1/16W	R364	0100049	CF 220 OHM $\pm 5\%$ 1/8W
R266	0700043	CF 1.5K OHM $\pm 5\%$ 1/16W	R366	0700039	CF 820 OHM $\pm 5\%$ 1/16W
R267	0700031	CF 180 OHM $\pm 5\%$ 1/16W	R367	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R268	0113744	CF 560 OHM $\pm 5\%$ 1/2W	R368	0144017	MF 820 OHM $\pm 5\%$ 10W
R269	0113744	CF 560 OHM $\pm 5\%$ 1/2W	R369	0144017	MF 820 OHM $\pm 5\%$ 10W
R271	0113744	CF 560 OHM $\pm 5\%$ 1/2W	R371	0113707	CF 18 OHM $\pm 5\%$ 1/2W
R272	0113744	CF 560 OHM $\pm 5\%$ 1/2W	R372	0114047	CF 18 OHM $\pm 5\%$ 1/4W
R273	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R373	0113793	CF 56K OHM $\pm 5\%$ 1/2W
R274	0100061	CF 680 OHM $\pm 5\%$ 1/8W	Δ R374	0151341	VR 50K OHM-B
Δ R275	0150132	VR 200 OHM-B	R375	0113717	CF 47 OHM $\pm 5\%$ 1/2W
R276	0700026	CF 82 OHM $\pm 5\%$ 1/16W	R401	0700041	CF 1K OHM $\pm 5\%$ 1/16W
R277	0100047	CF 180 OHM $\pm 5\%$ 1/8W	R402	0100049	CF 220 OHM $\pm 5\%$ 1/8W
R278	0100051	CF 270 OHM $\pm 5\%$ 1/8W	R403	0113744	CF 560 OHM $\pm 5\%$ 1/2W

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R404	0700058	CF 22K OHM $\pm 5\%$ 1/16W	R481	0114137	CF 180 OHM $\pm 5\%$ 1/4W
R405	0700046	CF 2.7K OHM $\pm 5\%$ 1/16W	R482	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W
R406	0700037	CF 560 OHM $\pm 5\%$ 1/16W	R483	0700037	CF 560 OHM $\pm 5\%$ 1/16W
R410	0700046	CF 2.7K OHM $\pm 5\%$ 1/16W	R490	0113783	CF 22K OHM $\pm 5\%$ 1/2W
R411	0100065	CF 1K OHM $\pm 5\%$ 1/8W	R491	0110175	MF 18K OHM $\pm 5\%$ 1W
R415	0700066	CF 82K OHM $\pm 5\%$ 1/16W	R502	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W
R417	0700056	CF 15K OHM $\pm 5\%$ 1/16W	R503	0700046	CF 2.7K OHM $\pm 5\%$ 1/16W
R418	0700054	CF 10K OHM $\pm 5\%$ 1/16W	R504	0100113	CF 100K OHM $\pm 5\%$ 1/8W
R420	0100065	CF 1K OHM $\pm 5\%$ 1/8W	R505	0700046	CF 2.7K OHM $\pm 5\%$ 1/16W
R421	0700061	CF 33K OHM $\pm 5\%$ 1/16W	R506	0700066	CF 82K OHM $\pm 5\%$ 1/16W
R422	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R507	0700041	CF 1K OHM $\pm 5\%$ 1/16W
R423	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W	R508	0700054	CF 10K OHM $\pm 5\%$ 1/16W
R425	0100038	CF 75 OHM $\pm 5\%$ 1/8W	R509	0700046	CF 2.7K OHM $\pm 5\%$ 1/16W
R426	0100038	CF 75 OHM $\pm 5\%$ 1/8W	R510	0100115	CF 120K OHM $\pm 5\%$ 1/8W
R428	0700041	CF 1K OHM $\pm 5\%$ 1/16W	R511	0119622	MF 4.3K OHM 1/8W
R430	0700041	CF 1K OHM $\pm 5\%$ 1/16W	R512	0700041	CF 1K OHM $\pm 5\%$ 1/16W
R435	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W	R513	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W
R436	0700041	CF 1K OHM $\pm 5\%$ 1/16W	R514	0700041	CF 1K OHM $\pm 5\%$ 1/16W
R437	0187060	CF 620 OHM $\pm 5\%$ 1/16W	R515	0700059	CF 27K OHM $\pm 5\%$ 1/16W
R437	0700036	CF 470 OHM $\pm 5\%$ 1/16W	R516	0187078	CF 3.6K OHM $\pm 5\%$ 1/16W
R438	0700041	CF 1K OHM $\pm 5\%$ 1/16W	R518	0700043	CF 1.5K OHM $\pm 5\%$ 1/16W
R438	0700051	CF 5.6K OHM $\pm 5\%$ 1/16W	R519	0700043	CF 1.5K OHM $\pm 5\%$ 1/16W
R439	0700054	CF 10K OHM $\pm 5\%$ 1/16W	R520	0700032	CF 220 OHM $\pm 5\%$ 1/16W
R440	0700054	CF 10K OHM $\pm 5\%$ 1/16W	R521	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W
R441	0700041	CF 1K OHM $\pm 5\%$ 1/16W	Δ R522	0150110	VR 500 OHM-B
R442	0700041	CF 1K OHM $\pm 5\%$ 1/16W	Δ R525	0150109	VR 200 OHM-B RS-6
R443	0700032	CF 220 OHM $\pm 5\%$ 1/16W	R527	0700058	CF 22K OHM $\pm 5\%$ 1/16W
R444	0100053	CF 330 OHM $\pm 5\%$ 1/8W	R528	0700032	CF 220 OHM $\pm 5\%$ 1/16W
Δ R445	0150137	VR 10K OHM-B	Δ R529	0159932	VR 10K OHM-B
R447	0187068	CF 1.3K OHM $\pm 5\%$ 1/16W	R530	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W
R448	0700038	CF 680 OHM $\pm 5\%$ 1/16W	R531	0113733	CF 220 OHM $\pm 5\%$ 1/2W
R449	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W	R532	0700038	CF 680 OHM $\pm 5\%$ 1/16W
R450	0700051	CF 5.6K OHM $\pm 5\%$ 1/16W	R601	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W
Δ R451	0150137	VR 10K OHM-B	R602	0700054	CF 10K OHM $\pm 5\%$ 1/16W
R452	0700036	CF 470 OHM $\pm 5\%$ 1/16W	Δ R603	0150113	VR 5K OHM-B RS-6
R453	0700065	CF 68K OHM $\pm 5\%$ 1/16W	R608	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W
R454	0113719	CF 56 OHM $\pm 5\%$ 1/2W	R609	0113742	CF 470 OHM $\pm 5\%$ 1/2W
R455	0700036	CF 470 OHM $\pm 5\%$ 1/16W	R610	0700054	CF 10K OHM $\pm 5\%$ 1/16W
R456	0700065	CF 68K OHM $\pm 5\%$ 1/16W	R611	0700033	CF 270 OHM $\pm 5\%$ 1/16W
R457	0113719	CF 56 OHM $\pm 5\%$ 1/8W	R612	0700045	CF 2.2K OHM $\pm 5\%$ 1/16W
R458	0700041	CF 1K OHM $\pm 5\%$ 1/16W	R613	0700037	CF 560 OHM $\pm 5\%$ 1/16W
R459	0187072	CF 2K OHM $\pm 5\%$ 1/16W	R614	0700028	CF 120 OHM $\pm 5\%$ 1/16W
R460	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W	R617	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W
R461	0700051	CF 5.6K OHM $\pm 5\%$ 1/16W	R618	0700032	CF 220 OHM $\pm 5\%$ 1/16W
Δ R462	0159828	VR 5K OHM-B	R619	0700032	CF 220 OHM $\pm 5\%$ 1/16W
Δ R463	0159825	VR 500 OHM-B	R620	0700032	CF 220 OHM $\pm 5\%$ 1/16W
R466	0700041	CF 1K OHM $\pm 5\%$ 1/16W	R621	0700062	CF 39K OHM $\pm 5\%$ 1/16W
R467	0700041	CF 1K OHM $\pm 5\%$ 1/16W	R624	0700065	CF 68K OHM $\pm 5\%$ 1/16W
R469	0100043	CF 120 OHM $\pm 5\%$ 1/8W	R625	0110101	MF 15 OHM $\pm 5\%$ 1W
R470	0700031	CF 180 OHM $\pm 5\%$ 1/16W	R625A	0110101	MF 15 OHM $\pm 5\%$ 1W
R471	0187062	CF 750 OHM $\pm 5\%$ 1/16W	R626	0113744	CF 560 OHM $\pm 5\%$ 1/2W
R472	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W	R627	0700041	CF 1K OHM $\pm 5\%$ 1/16W
R480	0100129	CF 470K OHM $\pm 5\%$ 1/8W	Δ R628	0150216	VR 10K OHM-B

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R629	0113727	CF 120 OHM $\pm 5\%$ 1/2W	R704	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R630	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R705	0700054	CF 10K OHM $\pm 5\%$ 1/16W
R631	0700053	CF 8.2K OHM $\pm 5\%$ 1/16W	R706	0700054	CF 10K OHM $\pm 5\%$ 1/16W
R634	0100059	CF 560 OHM $\pm 5\%$ 1/8W	R707	0187098	CF 24K OHM $\pm 5\%$ 1/16W
R635	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W	R708	0700059	CF 27K OHM $\pm 5\%$ 1/16W
R636	0110101	MF 15 OHM $\pm 5\%$ 1W	R709	0700059	CF 27K OHM $\pm 5\%$ 1/16W
R636A	0110101	MF 15 OHM $\pm 5\%$ 1W	Δ R710	0159825	VR 500 OHM-B
R637	0113744	CF 560 OHM $\pm 5\%$ 1/2W	R7100	0100109	CF 68K OHM $\pm 5\%$ 1/8W
R638	0100065	CF 1K OHM $\pm 5\%$ 1/8W	R7103	0700051	CF 5.6K OHM $\pm 5\%$ 1/16W
Δ R639	0159825	VR 500 OHM-B	R7104	0700058	CF 22K OHM $\pm 5\%$ 1/16W
R6391	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W	R7105	0100091	CF 12K OHM $\pm 5\%$ 1/8W
R641	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W	R711	0700021	CF 33 OHM $\pm 5\%$ 1/16W
Δ R642	0159932	VR 10K OHM-B	R712	0700062	CF 39K OHM $\pm 5\%$ 1/16W
R643	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W	R713	0187072	CF 2K OHM $\pm 5\%$ 1/16W
R644	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W	R714	0700032	CF 220 OHM $\pm 5\%$ 1/16W
R645	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W	R715	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W
R646	0700048	CF 3.9K OHM $\pm 5\%$ 1/16W	R716	0700046	CF 2.7K OHM $\pm 5\%$ 1/16W
R647	0700034	CF 330 OHM $\pm 5\%$ 1/16W	R717	0100041	CF 100 OHM $\pm 5\%$ 1/8W
R650	0700041	CF 1K OHM $\pm 5\%$ 1/16W	R718	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W
R651	0187080	CF 4.3K OHM $\pm 5\%$ 1/16W	R719	0113746	CF 680 OHM $\pm 5\%$ 1/2W
R652	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W	R720	0700041	CF 1K OHM $\pm 5\%$ 1/16W
R653	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W	R7201	0113787	CF 33K OHM $\pm 5\%$ 1/2W
R654	0700062	CF 39K OHM $\pm 5\%$ 1/16W	R7202	0113787	CF 33K OHM $\pm 5\%$ 1/2W
R655	0700062	CF 39K OHM $\pm 5\%$ 1/16W	R7203	0113787	CF 33K OHM $\pm 5\%$ 1/2W
Δ R656	0150213	VR 2K OHM-B	R721	0700058	CF 22K OHM $\pm 5\%$ 1/16W
Δ R657	0150217	VR 20K OHM-B	R722	0700041	CF 1K OHM $\pm 5\%$ 1/16W
Δ R658	0150109	VR 200 OHM-B RS-6	R723	0700041	CF 1K OHM $\pm 5\%$ 1/16W
Δ R670	0150116	VR 50K OHM-B	R724	0700061	CF 33K OHM $\pm 5\%$ 1/16W
R671	0700063	CF 47K OHM $\pm 5\%$ 1/16W	R725	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R672	0700054	CF 10K OHM $\pm 5\%$ 1/16W	R726	0700041	CF 1K OHM $\pm 5\%$ 1/16W
R673	0700059	CF 27K OHM $\pm 5\%$ 1/16W	R727	0187106	CF 51K OHM $\pm 5\%$ 1/16W
R674	0700056	CF 15K OHM $\pm 5\%$ 1/16W	R728	0700056	CF 15K OHM $\pm 5\%$ 1/16W
R675	0700041	CF 1K OHM $\pm 5\%$ 1/16W	R729	0113766	CF 4.7K OHM $\pm 5\%$ 1/2W
R676	0700032	CF 220 OHM $\pm 5\%$ 1/16W	R730	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W
R699	0700043	CF 1.5K OHM $\pm 5\%$ 1/16W	R731	0700027	CF 100 OHM $\pm 5\%$ 1/16W
R7001	0700051	CF 5.6K OHM $\pm 5\%$ 1/16W	R732	0187074	CF 2.4K OHM $\pm 5\%$ 1/16W
R7002	0700051	CF 5.6K OHM $\pm 5\%$ 1/16W	R733	0113698	CF 8.2 OHM $\pm 5\%$ 1/2W
R7005	0100129	CF 470K OHM $\pm 5\%$ 1/8W	R734	0113698	CF 8.2 OHM $\pm 5\%$ 1/2W
R7006	0100129	CF 470K OHM $\pm 5\%$ 1/8W	R734A	0113698	CF 8.2 OHM $\pm 5\%$ 1/2W
R7007	0700052	CF 6.8K OHM $\pm 5\%$ 1/16W	R734B	0113686	CF 2.7 OHM $\pm 10\%$ 1/2W
R7008	0700065	CF 68K OHM $\pm 5\%$ 1/16W	R736	0113766	CF 4.7K OHM $\pm 5\%$ 1/2W
R7009	0700045	CF 2.2K OHM $\pm 5\%$ 1/16W	R738	0700039	CF 820 OHM $\pm 5\%$ 1/16W
R701	0700054	CF 10K OHM $\pm 5\%$ 1/16W	Δ R740	0162626	VR 500 OHM-B RA-20
R7010	0113694	CF 5.6 OHM $\pm 5\%$ 1/2W	R741	0100105	CF 47K OHM $\pm 5\%$ 1/8W
R7011	0100111	CF 82K OHM $\pm 5\%$ 1/8W	R742	0700046	CF 2.7K OHM $\pm 5\%$ 1/16W
R7012	0187086	CF 7.5K OHM $\pm 5\%$ 1/16W	R743	0700054	CF 10K OHM $\pm 5\%$ 1/16W
R7013	0113748	CF 820 OHM $\pm 5\%$ 1/2W	R744	0700054	CF 10K OHM $\pm 5\%$ 1/16W
R7014	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W	Δ R745	0119514	FR 10 OHM $\pm 5\%$ 1/4W
R7016	0100081	CF 4.7K OHM $\pm 5\%$ 1/8W	R746	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W
R7017	0700064	CF 56K OHM $\pm 5\%$ 1/16W	R747	0100102	CF 36K OHM $\pm 5\%$ 1/8W
R7018	0700051	CF 5.6K OHM $\pm 5\%$ 1/16W	R748	0700054	CF 10K OHM $\pm 5\%$ 1/16W
R702	0700046	CF 2.7K OHM $\pm 5\%$ 1/16W	R749	0700054	CF 10K OHM $\pm 5\%$ 1/16W
R703	0119607	MF 1K OHM 1/8W	R750	0700058	CF 22K OHM $\pm 5\%$ 1/16W

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R7500	0700052	CF 6.8K OHM $\pm 5\%$ 1/16W	Δ R901	0179639	MG 1M OHM $\pm 5\%$ 1W
R7501	0700052	CF 6.8K OHM $\pm 5\%$ 1/16W	R902	0147624	WW 3.9 OHM $\pm 10\%$ 7W
R7502	0700021	CF 33 OHM $\pm 5\%$ 1/16W	R903	0147624	WW 3.9 OHM $\pm 10\%$ 7W
R751	0700054	CF 10K OHM $\pm 5\%$ 1/16W	R904	0110269	MF 10K OHM $\pm 5\%$ 2W
R752	0700054	CF 10K OHM $\pm 5\%$ 1/16W	R905	0110269	MF 10K OHM $\pm 5\%$ 2W
R753	0700054	CF 10K OHM $\pm 5\%$ 1/16W	R906	0700056	CF 15K OHM $\pm 5\%$ 1/16W
R754	0700058	CF 22K OHM $\pm 5\%$ 1/16W	R907	0113778	CF 15K OHM $\pm 5\%$ 1/2W
R755	0700058	CF 22K OHM $\pm 5\%$ 1/16W	R907A	0113778	CF 15K OHM $\pm 5\%$ 1/2W
R756	0187094	CF 16K OHM $\pm 5\%$ 1/16W	Δ R908	0119630	MF 9.1K OHM $\pm 1\%$ 1/8W
R757	0700049	CF 4.7K OHM $\pm 5\%$ 1/16W	Δ R908A	0119630	MF 9.1K OHM $\pm 1\%$ 1/8W
R758	0100089	CF 10K OHM $\pm 5\%$ 1/8W	Δ R908B	0119629	MF 8.2K OHM $\pm 1\%$ 1/8W
R759	0700066	CF 82K OHM $\pm 5\%$ 1/16W	Δ R909	0150110	VR 500 OHM-B
R760	0700063	CF 47K OHM $\pm 5\%$ 1/16W	Δ R910	0119610	MF 1.3K OHM $\pm 5\%$ 1/8W
R761	0700041	CF 1K OHM $\pm 5\%$ 1/16W	R911	0110149	MF 1.5K OHM $\pm 5\%$ 1W
R762	0700058	CF 22K OHM $\pm 5\%$ 1/16W	R912	0110149	MF 1.5K OHM $\pm 5\%$ 1W
R763	0700063	CF 47K OHM $\pm 5\%$ 1/16W	R913	0119641	MF 27K OHM $\pm 1\%$ 1/8W
R764	0700061	CF 33K OHM $\pm 5\%$ 1/16W	R914	0700067	CF 100K OHM $\pm 5\%$ 1/16W
R765	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W	R916	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W
R766	0113791	CF 47K OHM $\pm 5\%$ 1/2W	R917	0119647	MF 47K OHM $\pm 1\%$ 1/8W
R769	0700052	CF 6.8K OHM $\pm 5\%$ 1/16W	R918	0700034	CF 330 OHM $\pm 5\%$ 1/16W
R770	0700051	CF 5.6K $\pm 5\%$ 1/16W	R919	0187082	CF 5.1K OHM $\pm 5\%$ 1/16W
Δ R772	0150216	VR 10K OHM-B	Δ R920	0700054	CF 10K OHM $\pm 5\%$ 1/16W
R773	0100101	CF 33K OHM $\pm 5\%$ 1/8W	R921	0100112	CF 91K OHM $\pm 5\%$ 1/8W
R774	0700027	CF 100 OHM $\pm 5\%$ 1/16W	R922	0100069	CF 1.5K OHM $\pm 5\%$ 1/8W
R775	0700054	CF 10K OHM $\pm 5\%$ 1/16W	R923	0179543	MG 1.2M OHM $\pm 5\%$ 1/2W
R776	0700041	CF 1K OHM $\pm 5\%$ 1/16W	Δ R924	0119593	MF 270 OHM $\pm 1\%$ 1/8W
Δ R777	0150219	VR 50K OHM-B	R925	0110269	MF 10K OHM $\pm 5\%$ 2W
Δ R778	0119649	MF 56K OHM $\pm 1\%$ 1/8W	R926	0113776	CF 12K OHM $\pm 5\%$ 1/2W
R7781	0700063	CF 47K OHM $\pm 5\%$ 1/16W	R927	0110269	MF 10K OHM $\pm 5\%$ 2W
R779A	0190179	WW 4.7 OHM $\pm 10\%$ 1W	R928	0147586	WW 820 OHM $\pm 5\%$ 5W
R780	0700064	CF 56K OHM $\pm 5\%$ 1/16W	R929	0113787	CF 33K OHM $\pm 5\%$ 1/2W
R781	0700066	CF 82K OHM $\pm 5\%$ 1/16W	R930	0700047	CF 3.3K OHM $\pm 5\%$ 1/16W
R782	0700061	CF 33K OHM $\pm 5\%$ 1/16W	R931	0700018	CF 22 OHM $\pm 5\%$ 1/6W
Δ R784	0119628	MF 7.5K OHM $\pm 1\%$ 1/8W	Δ R932	0700038	CF 680 OHM $\pm 5\%$ 1/16W
Δ R785	0179611	MG 270K OHM $\pm 5\%$ 1/8W	R933	0700052	CF 6.8K OHM $\pm 5\%$ 1/16W
Δ R785A	0179611	MG 270K OHM $\pm 5\%$ 1/8W	R934	0119647	MF 47K OHM $\pm 1\%$ 1/8W
Δ R785B	0179611	MG 270K OHM $\pm 5\%$ 1/8W	Δ R935	0101413	MF 0.33 OHM $\pm 5\%$ 2W
Δ R786	0119505	FR 2.2 OHM $\pm 5\%$ 1/4W	R936	0113694	CF 5.6 OHM $\pm 5\%$ 1/2W
R787	0100069	CF 1.5K OHM $\pm 5\%$ 1/8W	R937	0100112	CF 91K OHM $\pm 5\%$ 1/8W
R788	0114297	CF 470K OHM $\pm 5\%$ 1/4W	R939	0100049	CF 220 OHM $\pm 5\%$ 1/8W
R789	0100105	CF 47K OHM $\pm 5\%$ 1/8W	R940	0700065	CF 68K OHM $\pm 5\%$ 1/16W
R790	0700054	CF 10K OHM $\pm 5\%$ 1/16W	R941	0100035	CF 56 OHM $\pm 5\%$ 1/8W
Δ R791	0150114	VR 10K OHM-B	R942	0187086	CF 7.5K OHM $\pm 5\%$ 1/16W
R792	0700041	CF 1K OHM $\pm 5\%$ 1/16W	R945	0114153	CF 820 OHM $\pm 5\%$ 1/4W
R792	0700041	CF 1K OHM $\pm 5\%$ 1/16W	Δ R952	0119722	MF 1 OHM $\pm 5\%$ 1W
R793	0700024	CF 56 OHM $\pm 5\%$ 1/16W	R953	0100065	CF 1K OHM $\pm 5\%$ 1/8W
R794	0700052	CF 6.8K OHM $\pm 5\%$ 1/16W	Δ R954	0100111	CF 82K OHM $\pm 5\%$ 1/8W
Δ R795	0119505	FR 2.2 OHM $\pm 5\%$ 1/4W	R955	0113725	CF 100 OHM $\pm 5\%$ 1/2W
Δ R796	0119505	FR 2.2 OHM $\pm 5\%$ 1/4W	R956	0100019	CF 12 OHM $\pm 5\%$ 1/8W
Δ R797	0119607	MF 1K OHM $\pm 1\%$ 1/8W	R957	0700027	CF 100 OHM $\pm 5\%$ 1/16W
Δ R798	0119616	MF 2.4K OHM $\pm 1\%$ 1/8W	R958	0700054	CF 10K OHM $\pm 5\%$ 1/16W
R799	0700052	CF 6.8K OHM $\pm 5\%$ 1/16W	R959	0700063	CF 47K OHM $\pm 5\%$ 1/16W
R801	0179556	MG 560K OHM $\pm 5\%$ 1/8W	R960	0100096	CF 20K OHM $\pm 5\%$ 1/8W

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R961	0187070	CF 1.6K OHM $\pm 5\%$ 1/16W	Q137	2321321	TR 2SA844D/E
Δ R962	0700041	CF 1K OHM $\pm 5\%$ 1/16W	Q161	2321631	TR 2SC2026
R963	0190171	WW 1 OHM $\pm 10\%$ 1W	Q162	2325541	TR 2SA1206
R964	0113787	CF 33K OHM $\pm 5\%$ 1/2W	Q163	2325541	TR 2SA1206
R967	0100024	CF 20 OHM $\pm 5\%$ 1/8W	Q164	2320596	TR 2SC458C/D
R968	0113716	CF 43 OHM $\pm 5\%$ 1/2W	Q165	2321631	TR 2SC2026
R969	0113716	CF 43 OHM $\pm 5\%$ 1/2W	Q166	2325541	TR 2SA1206
R970	0113787	CF 33K OHM $\pm 5\%$ 1/2W	Q167	2321321	TR 2SA844D/E
R971	0119512	FR 1 OHM $\pm 5\%$ 1/4W	Q202	2321631	TR 2SC2026
R972	0119512	FR 1 OHM $\pm 5\%$ 1/4W	Q203	2312681	TR 2SC4072
R973	0700054	CF 10K OHM $\pm 5\%$ 1/16W	Q205	2325541	TR 2SA1206
R974	0700027	CF 100 OHM $\pm 5\%$ 1/16W	Q206	2320596	TR 2SC458C/D
R975	0700054	CF 10K OHM $\pm 5\%$ 1/16W	Q207	2321631	TR 2SC2026
R976	0700054	CF 10K OHM $\pm 5\%$ 1/16W	Q208	2320596	TR 2SC458C/D
R977	0700046	CF 2.7K OHM $\pm 5\%$ 1/16W	Q209	2325541	TR 2SA1206
R980	0119687	FR 4.7 OHM $\pm 5\%$ 1/4W	Q232	2321631	TR 2SC2026
ICs			Q233	2312681	TR 2SC4072
IC501	2362352	IC HD74LS123P	Q235	2325541	TR 2SA1206
IC502	2361071	IC HD74LS74AP	Q236	2320596	TR 2SC458C/D
IC503	2366771	IC HD74LS38P	Q237	2321631	TR 2SC2026
IC504	2461881	IC HD74LS86P	Q238	2320596	TR 2SC458C/D
IC505	2916901	IC HD74HC123AP	Q239	2325541	TR 2SA1206
IC506	2364842	IC UPC78M05H	Q262	2321631	TR 2SC2026
IC507	2362352	IC HD74LS123P	Q263	2312681	TR 2SC4072
Δ IC602	2917361	IC UPC1498H	Q265	2325541	TR 2SA1206
Δ IC701	2364181	IC HA11423	Q266	2320596	TR 2SC458C/D
IC702	2366771	IC HD74LS38P	Q267	2321631	TR 2SC2026
IC703	2362352	IC HD74LS123P	Q268	2320596	TR 2SC458C/D
IC704	2364845	IC UPC78M24H	Q269	2325541	TR 2SA1206
IC705	2917641	IC BA10358	Q301	2321631	TR 2SC2026
IC706	2917641	IC BA10358	Q302	2325541	TR 2SA1206
Δ IC901	2366721	IC UPC1394C	Q303	2326422	TR 2SC3599 D/E
Δ IC902	2381681	IC STR50330	Q304	2327471	TR 2SC3950
IC903	2369672	IC SI-3122V	Q305	2321111	TR 2SA778A K
Δ IC904	2917641	IC BA10358	Q331	2321631	TR 2SC2026
TRANSISTORS			Q332	2325541	TR 2SA1206
Q101	2321631	TR 2SC2026	Q333	2326422	TR 2SC3599 D/E
Q102	2325541	TR 2SA1206	Q334	2327471	TR 2SC3950
Q103	2325541	TR 2SA1206	Q335	2321111	TR 2SA778A K
Q104	2320596	TR 2SC458C/D	Q361	2321631	TR 2SC2026
Q105	2321631	TR 2SC2026	Q362	2325541	TR 2SA1206
Q106	2325541	TR 2SA1206	Q363	2326422	TR 2SC3599 D/E
Q107	2321321	TR 2SA844D/E	Q364	2327471	TR 2SC3950
Q131	2321631	TR 2SC2026	Q365	2321111	TR 2SA778A K
Q132	2325541	TR 2SA1206	Q401	2320596	TR 2SC458C/D
Q133	2325541	TR 2SA1206	Q402	2321322	TR 2SA844E
Q134	2320596	TR 2SC458C/D	Q403	2320596	TR 2SC458C/D
Q135	2321631	TR 2SC2026	Q404	2320596	TR 2SC458C/D
Q136	2325541	TR 2SA1206	Q405	2320596	TR 2SC458C/D
			Q406	2320596	TR 2SC458C/D
			Q407	2321871	TR 2SD655D
			Q408	2320596	TR 2SC458C/D
			Q409	2320637	TR 2SA673C/D

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
Q409	2321871	TR 2SD655D	D132	2331912	DI 1SS82
Q410	2320596	TR 2SC458C/D	D133	2331912	DI 1SS82
Q411	2320596	TR 2SC458C/D	D134	2331912	DI 1SS82
Q412	2320596	TR 2SC458C/D	D161	2331912	DI 1SS82
Q413	2320596	TR 2SC458C/D	D162	2331912	DI 1SS82
Q501	2320596	TR 2SC458C/D	D163	2331912	DI 1SS82
Q502	2320596	TR 2SC458C/D	D164	2331912	DI 1SS82
Q503	2320596	TR 2SC458C/D	D203	2333104	DI 1SS110(A)Y
Q602	2320596	TR 2SC458C/D	D204	2333104	DI 1SS110(A)Y
Q603	2320596	TR 2SC458C/D	D205	2333104	DI 1SS110(A)Y
Q604	2327451	TR 2SC3851	D206	2333104	DI 1SS110(A)Y
Q605	2327461	TR 2SA1488	D207	2333104	DI 1SS110(A)Y
Q606	2324081	TR 2SK105H	D208	2333104	DI 1SS110(A)Y
Q607	2324081	TR 2SK105H	D209	2333104	DI 1SS110(A)Y
Q608	2320596	TR 2SC458C/D	D210	2333104	DI 1SS110(A)Y
Q701	2320596	TR 2SC458C/D	D211	2333104	DI 1SS110(A)Y
Q702	2320637	TR 2SA673C/D	D212	2333104	DI 1SS110(A)Y
Q703	2320596	TR 2SC458C/D	D213	2333104	DI 1SS110(A)Y
Q704	2320647	TR 2SC1213C/D	D214	2333104	DI 1SS110(A)Y
Q705	2320637	TR 2SA673C/D	D215	2337341	DI 1SS270A
Q706	2312061	TR 2SK459	D216	2333104	DI 1SS110(A)Y
Δ Q707	2312051	TR 2SC3997	D233	2333104	DI 1SS110(A)Y
Q708	2320596	TR 2SC458C/D	D234	2333104	DI 1SS110(A)Y
Δ Q709	2324795	TR MN520	D235	2333104	DI 1SS110(A)Y
Q710	2320596	TR 2SC458C/D	D236	2333104	DI 1SS110(A)Y
Q711	2320637	TR 2SA673C/D	D237	2333104	DI 1SS110(A)Y
Q713	2321993	TR 2SC2271 (E)	D238	2333104	DI 1SS110(A)Y
Δ Q714	2325611	TR 2SC3486	D239	2333104	DI 1SS110(A)Y
Q715	2321993	TR 2SC2271 (E)	D240	2333104	DI 1SS110(A)Y
Q716	2321993	TR 2SC2271 (E)	D241	2333104	DI 1SS110(A)Y
Q717	2320596	TR 2SC458C/D	D242	2333104	DI 1SS110(A)Y
Q720	2324081	TR 2SK105H	D243	2333104	DI 1SS110(A)Y
Q721	2312061	TR 2SK459	D244	2333104	DI 1SS110(A)Y
Q722	2312061	TR 2SK459	D245	2337341	DI 1SS270A
Q723	2312061	TR 2SK459	D246	2333104	DI 1SS110(A)Y
Q724	2312061	TR 2SK459	D263	2333104	DI 1SS110(A)Y
Q725	2312061	TR 2SK459	D264	2333104	DI 1SS110(A)Y
Q726	2328021	TR 2SK552	D265	2333104	DI 1SS110(A)Y
Q901	2323281	TR 2SC1755D/E	D266	2333104	DI 1SS110(A)Y
Δ Q902	2326981	TR 2SC3909	D267	2333104	DI 1SS110(A)Y
Q903	2320637	TR 2SA673C/D	D268	2333104	DI 1SS110(A)Y
Δ Q904	2328231	TF 841MLF(THERMISTOR)	D269	2333104	DI 1SS110(A)Y
Q905	2326821	TR 2SA1371 E/F	D270	2333104	DI 1SS110(A)Y
Q908	2320637	TR 2SA673C/D	D271	2333104	DI 1SS110(A)Y
Δ Q909	2322162	THYRISTOR SILICON TF320M-A	D272	2333104	DI 1SS110(A)Y
DIODES			D273	2333104	DI 1SS110(A)Y
D101	2331912	DI 1SS82	D274	2333104	DI 1SS110(A)Y
D102	2331912	DI 1SS82	D275	2337341	DI 1SS270A
D103	2331912	DI 1SS82	D276	2333104	DI 1SS110(A)Y
D104	2331912	DI 1SS82	D301	2331912	DI 1SS82
D131	2331912	DI 1SS82	D302	2331912	DI 1SS82
			D303	2331912	DI 1SS82
			D304	2331912	DI 1SS82

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
D305	2331912	DI 1SS82	D617	2337341	DI 1SS270A
D306	2331912	DI 1SS82	D618	2337341	DI 1SS270A
D308	2337341	DI 1SS270A	D650	2331912	DI 1SS82
D331	2331912	DI 1SS82	D701	2337091	DI RG2A
D332	2331912	DI 1SS82	D702	2337091	DI RG2A
D333	2331912	DI 1SS82	D703	2337341	DI 1SS270A
D334	2331912	DI 1SS82	D704	2337341	DI 1SS270A
D335	2331912	DI 1SS82	D705	2337341	DI 1SS270A
D336	2331912	DI 1SS82	D706	2337341	DI 1SS270A
D338	2337341	DI 1SS270A	D707	2337341	DI 1SS270A
D361	2331912	DI 1SS82	D708	2337341	DI 1SS270A
D362	2331912	DI 1SS82	D709	2330564	DI V11N
D363	2331912	DI 1SS82	D710	2337341	DI 1SS270A
D364	2331912	DI 1SS82	D711	2337341	DI 1SS270A
D365	2331912	DI 1SS82	D712	2337341	DI 1SS270A
D366	2331912	DI 1SS82	D713	2337341	DI 1SS270A
D368	2337341	DI 1SS270A	D715	2337341	DI 1SS270A
D381	2331912	DI 1SS82	D716	2337571	DIODE HRP22
D401	2337341	DI 1SS270A	D717	2337091	DI RG2A
D401	2337341	DI 1SS270A	D718	2330551	DI V09C
D402	2337341	DI 1SS270A	D719	2330551	DI V09C
D402	2337341	DI 1SS270A	D720	2337341	DI 1SS270A
D403	2337341	DI 1SS270A	D721	2336401	DI CTU-G3DR
D404	2337341	DI 1SS270A	D724	2337571	DIODE HRP22
D405	2337341	DI 1SS270A	D725	2337091	DI RG2A
D406	2337341	DI 1SS270A	D726	2338561	DI ERA32-02
D408	2337341	DI 1SS270A	D727	2337371	DI RU 4DS
D409	2337341	DI 1SS270A	D729	2337341	DI 1SS270A
D410	2337341	DI 1SS270A	D732	2337341	DI 1SS270A
D410	2337341	DI 1SS270A	D734	2337341	DI 1SS270A
D411	2337341	DI 1SS270A	D790	2330551	DI V09C
D411	2337341	DI 1SS270A	D791	2330551	DI V09C
D412	2337341	DI 1SS270A	D801	2330256	DI V06CS
D412	2337341	DI 1SS270A	Δ D901	2339711	RBV-606
D413	2337341	DI 1SS270A	D902	2331472	DI V-17CS
D414	2337341	DI 1SS270A	D903	2338531	DI EG01C
D415	2337341	DI 1SS270A	D904	2335261	DI EU-2
D415	2337341	DI 1SS270A	D905	2339491	DI AM01Z
D416	2337341	DI 1SS270A	D906	2339491	DI AM01Z
D501	2337341	DI 1SS270A	D907	2337341	DI 1SS270A
D502	2337341	DI 1SS270A	D908	2331991	DI R02A
D503	2337341	DI 1SS270A	D909	2338561	DI ERA32-02
D504	2337341	DI 1SS270A	D910	2337341	DI 1SS270A
D607	2337341	DI 1SS270A	D920	2337991	DI RG4C
D608	2337341	DI 1SS270A	D921	2337091	DI RG2A
D609	2333173	DI 1N34A/1K34A	D922	2338561	DI ERA32-02
D610	2333173	DI 1N34A/1K34A	D923	2338932	DI FMG-G36S
D611	2333173	DI 1N34A/1K34A	D924	2337341	DI 1SS270A
D612	2333173	DI 1N34A/1K34A	D925	2337571	DIODE HRP22
D613	2330256	DI V06CS	D926	2337341	DI 1SS270A
D614	2331912	DI 1SS82	D927	2332912	LED SLR55MC5F
D615	2337341	DI 1SS270A	D930	2337341	DI 1SS270A
D616	2337341	DI 1SS270A	D931	2337341	DI 1SS270A

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
D932	2337091	DI RG2A	ZD906	2331845	ZD HZ12(B)2
D933	2337571	DIODE HRP22	ZD907	2334253	ZD RD18EB2
D934	2337571	DIODE HRP22	ZD908	2339022	ZD HZS6B2L
D935	2337341	DI 1SS270A	ZD909	2331807	ZD HZ-6C1
D936	2331912	DI 1SS82	ZD910	2331807	ZD HZ-6C1
D938	2337341	DI 1SS270A	ZD911	2331807	ZD HZ-6C1
D940	2337341	DI 1SS270A	ZD912	2331807	ZD HZ-6C1
ZD301	2331811	ZD HZ7(A)1	ZD913	2331807	ZD HZ-6C1
ZD331	2331811	ZD HZ7(A)1	ZD914	2331807	ZD HZ-6C1
ZD361	2331811	ZD HZ7(A)1	ZD915	2331847	ZD HZ-12C1
ZD402	2331154	ZD HZ12(A)/(B)/(C)	TRANSFORMERS		
ZD403	2331154	ZD HZ12(A)/(B)/(C)	Δ T701	2260271	H-DRIVE TRANSFORMER
ZD407	2331815	ZD HZ7(B)2	Δ T702	2163932	CHOKE TRANSFORMER
ZD408	2331154	ZD HZ12(A)/(B)/(C)	Δ T703	2260271	H-DRIVE TRANSFORMER
ZD420	2331154	ZD HZ12(A)/(B)/(C)	Δ T704	2435043	FLYBACK TRANSFORMER
ZD501	2339072	ZD HZS9A2L	Δ T901	2272831	SWITCHING TRANSFORMER
ZD502	2339072	ZD HZS9A2L	Δ T902	2260071	TRANSFORMER
ZD503	2339011	ZD HZS6A1L	Δ T903	2214372	CHOPPER TRANSFORMER
ZD601	2339113	ZD HZS11B3L	FUSES		
ZD602	2334322	ZD RD36EB1	Δ F901	2720404	FUSE 4A (for CM2085ME)
ZD604	2331154	ZD HZ12(A)/(B)/(C)		2720963	FUSE 4A (for CM2085MU)
ZD605	2331801	ZD HZ6(A)1	Δ TF901	2720821	TEMPERATURE FUSE
ZD606	2331801	ZD HZ6(A)1	COILS		
ZD607	2339132	ZD HZS12A2L	L201	2122956	LAL AXIAL COIL 100 UH
ZD608	2339132	ZD HZS12A2L	L231	2322956	LAL AXIAL COIL 100 UH
ZD611	2334322	ZD RD36EB1	L261	2122956	LAL AXIAL COIL 100 UH
ZD701	2332221	ZD HZ6L-B2	L301	2142774	IFC COIL
ZD702	2339022	ZD HZS6B2L	L331	2142774	IFC COIL
Δ ZD703	2332841	ZD HZ11LC2	L361	2142774	IFC COIL
ZD704	2334283	ZD RD24EB2	L401	2120483	FILTER COIL 390 UH
ZD705	2339132	ZD HZS12A2L	L501	2120482	FILTER COIL 100 UH $\pm 10\%$
ZD707	2339011	ZD HZS6A1L	L502	2122956	LAL AXIAL COIL 100 UH $\pm 10\%$
ZD708	2331801	ZD HZ6(A)1	L503	2122969	LAL AXIAL COIL 1 MH
ZD709	2339132	ZD HZS12A2L	L701	2165921	LINEARITY COIL
ZD710	2339011	ZD HZS6A1L	L702	2165941	LINEARITY COIL
ZD710	2339022	ZD HZS6B2L	L703	2124001	FILTER COIL 390 UH
ZD711	2339132	ZD HZS12A2L	L704	2120488	FILTER COIL 270 UH
ZD712	2339132	ZD HZS12A2L	Δ L705	2164861	DUMMY DY
ZD713	2339132	ZD HZS12A2L	L706	2122094	FILTER COIL 22 UH
Δ ZD713A	2334334	ZD RD39EB3	L707	2122094	FILTER COIL 22 UH
ZD731	2334283	ZD RD24EB2	L708	2122094	FILTER COIL 22 UH
ZD732	2334283	ZD RD24EB2	Δ L901	2122111	PAL LINE FILTER (for CM2085ME)
ZD733	2334312	ZD RD33EB1	Δ L901	2122112	LINE FILTER (for CM2085MU)
Δ ZD714	2331773	ZD HZ-3A3	Δ L902	2122111	PAL LINE FILTER (for CM2085ME)
ZD715	2334312	ZD RD33EB1	Δ L902	2122112	LINE FILTER (for CM2085MU)
ZD716	2334312	ZD RD33EB1	Δ L903	2122693	LINE FILTER
ZD717	2331154	ZD HZ12(A)/(B)/(C)	Δ L905	2164082	DEGAUSSING COIL
ZD718	2331154	ZD HZ12(A)/(B)/(C)			
ZD901	2334322	ZD RD36EB1			
ZD902	2334132	ZD RD5.6EB1			
ZD903	2332221	ZD HZ6L-B2			
ZD904	2331849	ZD HZ-12C3			
ZD905	2331815	ZD HZ-7B2			

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
L907	2122125	FIXED COIL		8815126	LOCKING WASHER 4
L908	2122125	FIXED COIL		3268081	KNOB (POWER SW)
L910	2122956	LAL AXIAL COIL 100 UH		3268921	PUSH SWITCH KNOB B
SWITCH				3262067	VR KNOB
				3702369	TILT STAND LOWER
S301	2631811	PUSH LOCK SWITCH		4519512	TAPPING SCREW 4 x 16 MM
S501	2632311	PUSH SWITCH		4616824	RUBBER FOOT
S502	2632311	PUSH SWITCH		3702354	TILT STAND (UPPER)
S601	2632891	PUSH SW		3702931	TILT CAP
S701	2632891	PUSH SW		3704341	TILT SLIDER
Δ S901	2633152	POWER SWITCH		3704351	TILT SUPPORTER
Δ S902	2620662	AC SELECTOR SWITCH		4519504	3 x 8 SELF TAPPING SCREW BLACK
S903	2631725	KEY SWITCH		3721832	RASTENNER
MISCELLANEOUS				4525071	U NUT
				3706621	INSULATE SHEET C68
				3742921	PLASTIC RIVET
				3733241	LEAD CLAMP
				3734531	LEAD CLAMP
				4319371	M3 x 8 WASHER BASED TAPPING SCREW
	3016691	BEZEL		3768541	CABLE CLAMP
	3462391	REA COVER		2995641	AMP-IN 3J SUB-MINI
	4519513	4 x 16 B-TAPPING SCREW (BLACK)	E009	2995642	AMP-IN 3J SUB-MINI
	4520883	M3 x 12 SCREW WITH WASHER	E010	2995643	AMP-IN 3J SUB-MINI
	8815124	WASHER, LOCK 3MM	E011	2771461	MAGNET
	8821234	3 NUT	E05	2521131	DC FAN FBK-08A12L
	8711420	PAN HEAD SCREW-3MMDX 20MM	Δ E1	2963914	POWER CORD 10A (EUROPE)
	8811234	WASHER 3MMD	E1	2901761	3J SUB MINI MICRO CONNECTOR WITH TUBE
	8711425	PAN HEAD SCREW-3MMDX 25MM	E101		
E905	4520883	M3 x 12 SCREW WITH WASHER	E103	2993135	6J MICRO CONNECTOR L680
E906	4520883	M3 x 12 SCREW WITH WASHER	E104	2953702	FUSE HOLDER (for CM2085ME)
E924	4298312	HEAT SINK (P) C6M	E104	2951011	FUSE HOLDER (for CM2085MU)
E927	4298304	VERTICAL IC HEAT SINK	E105	2991388	6J MINI CONNECTOR
	4520881	M3 x 8 SCREW (WITH WASHER)	E107	2964058	3J MINI CONNECTOR WITH DOUBLE WIRE
	4860371	CDT ASSY			
	3268751	PUSH SWITCH KNOB A 2085M	E109	2901651	MINI CONNECTOR 4J WITH CORE
	3704371	LED HOLDER	E109A	2788161	FERRITE RING CORE
	3727702	PWB PLASTIC HOLDER	E120	2993391	3JC-B MICRO CONNECTOR
	4525701	3 x 8 E TIGHT SCREW WITH KNURL	E201	2969852	MICRO CONNECTOR V 12P
	3734391	PWB SPACER 8	E203	2969845	MICRO CONNECTOR V 6P
	3734531	LEAD CLAMP	E204	2969861	MICRO CONNECTOR H 2P
	4519505	3 x 16 B TIGHT TAPPING SCREW	E205	2969865	MICRO CONNECTOR H 6P
	4522881	3 x 8 CE KNURL SCREW	E206	2969841	MICRO CONNECTOR V 2P
	3733241	LEAD CLAMP	E207	2969842	MICRO CONNECTOR V 3P
	8711308	2.6 x 8 TAPPING SCREW	E208	2969843	MICRO CONNECTOR V 4P
	4519506	3 x 8 B TIGHT TAPPING SCREW	E210	2992504	9J MICRO BOARD-IN L130
	8811114	3 SPRING WASHER	E211	2992501	9J MICRO BOARD-IN L100
	8813124	WASHER	E212	2992506	9J MICRO BOARD-IN L160
	4130711	NUT-4U NUT	E220	2901641	MICRO CONNECTOR 9J C-B
	3706481	COVER FOR ADJUSTMENT	E404	2981551	9J D TYPE SUB CONNECTOR
	3763752	SK BINDER	E405	2672091	BNC PIN-JACK
	3717062	CABLE CRIP	E501	2969852	MICRO CONNECTOR V 12P
	4520782	M5 x 12 SCREW	E502	2969846	MICRO CONNECTOR V 7P
	0649092	WASHER			
	4319361	M4 x 12 CE KNURL TAPPING SCREW			
	8711608	4 x 8 PAN HEAD SCREW			

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
E504	2969848	MICRO CONNECTOR V 9P	FB901	2123463	FERRITE BEADS 0.2MH
E505	2969843	MICRO CONNECTOR V 4P	FB902	2123463	FERRITE BEADS 0.2MH
E506	2663822	3P SUB MINI PLUG-PIN	FB903	2123463	FERRITE BEADS 0.2MH
E507	2969853	MICRO CONNECTOR V 13P	FB904	2123461	FERRITE BEADS 0.8MH
E508	2969847	MICRO CONNECTOR V 8P	N001	3763751	SK BINDER
E509	2990651	6J MICRO BOARD-IN L100	N001	4298322	HEAT SINK (VIDEO)
E601	2969848	MICRO CONNECTOR V 9P	N001	4519506	3 x 8 B TIGHT TAPPING SCREW
E602	2969847	MICRO CONNECTOR V 8P	N002	4520883	M3 x 12 SCREW WITH WASHER
E701	2969853	MICRO CONNECTOR V 13P	N002	4526501	SCREW
E702	2969846	MICRO CONNECTOR V 7P	N004	3763751	SK BINDER
E705	2663825	6P SUB MINI-PLUG PIN	N100	3705231	ANODE CLAMPER 2086
E707	2661753	4P PIN PLUG WITH BASE	N102	3737101	PATH LOCK
E708	2665272	6P PLUG PIN WITH BASE	N106	3763751	SK BINDER
E711	3742061	TRS BUSH	N107	4615219	HS TUBE
E712	2771893	FERRITE BEADS CORE	N109	3731081	PURSE LOCK
E714	2786301	TRS SHEET	N401	4522951	HEXAGON SCREW
E715	2786281	MICA SHEET	N402	8813124	WASHER
E801	2663822	3P SUB MINI PLUG-PIN	N403	8821114	NUT 3
E802	2663822	3P SUB MINI PLUG-PIN	Δ RL901	2640336	RELAY
E803	2663822	3P SUB MINI PLUG-PIN	Δ RL902	2640336	RELAY
E804	2663823	4P SUB MINI PLUG-PIN	Δ RL903	2640336	RELAY
E814	2667121	PLUG-PIN (H)	TH401	2340361	THERMISTOR 112103-3
E815	2953341	CRT SOCKET	Δ TH901	2340521	PTC THERMISTOR
E816	2680575	BS TERMINAL	Δ TH902	2340821	200V PTC THERMISTOR
E901	2786281	MICA SHEET	Δ TH903	2340361	THERMISTOR 112103-3
Δ E901	2994991	AC INLET WITH FILTER	Δ TH904	2340361	THERMISTOR 112103-3
E902	2786301	TRS SHEET	Δ VA402	2340333	VARISTOR MV13
E907	2787532	INSULATION PLATE	VA701	2340333	VARISTOR MV13
E908	2782511	INSULATION PLATE FOR TRS	Δ V1	2357651	CDT M48JLJ32X
E911	2969841	MICRO CONNECTOR V 2P	Δ U1	2442554	DY-C90-20CD ASS
E912	2969842	MICRO CONNECTOR V 3P			
E913	2663131	2P PLUG PIN WITH BASE			
E914	2663132	3P PLUG PIN WITH BASE			
E916	2663135	6P PLUG PIN WITH BASE			
E917	2665272	6P PLUG PIN WITH BASE			
E918	2661943	L TYPE PLUG PIN 4P			
E919	2786211	MICA SHEET			
E920	2663925	6P SUB MINI-PLUG PIN			
E921	2900966	LEAD WITH TERMINAL			
E922	2900967	LEAD WITH TERMINAL			
E923	4306491	HEAT SINK (C6M POWER)			
E930	4297521	HEAT SINKING JIG STOPPER 1			
E931	4297522	HEAT SINKING JIG STOPPER 2			
E973	2969842	MICRO CONNECTOR V 3P			
FB201	2123461	FERRITE BEADS 0.8MH			
FB202	2123461	FERRITE BEADS 0.8MH			
FB231	2123461	FERRITE BEADS 0.8MH			
FB232	2123461	FERRITE BEADS 0.8MH			
FB261	2123461	FERRITE BEADS 0.8MH			
FB262	2123461	FERRITE BEADS 0.8MH			
FB501	2123465	FERRITE BEADS 0.4MH			
FB601	2123465	FERRITE BEADS 0.4MH			
FB701	2123465	FERRITE BEADS 0.4MH			