

TEAC[®]

Service Manual

CMH1575

15" Colour Computer Monitor

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Mode No.		1	2	3	4	5	6
		VGA	VESA	VESA	VESA	64K	69K
H-Resolution	[px]	720	800	800	1024	1280	1024
V-Resolution	[Lines]	400	600	600	768	1024	768
Pixelclock	[MHz]	28.33	40	49.5	78.75	110.00	94.5
H-Frequency	[kHz]	31.468	37.879	46.875	60.023	64.00	68.677
V-Frequency	[Hz]	70.090	60.316	75.000	75.029	60.00	84.997
Interlace		NONE	NONE	NONE	NONE	NONE	NONE
H-Sync-polarity		-	+	+	+	+	+
V-Sync-polarity		+	+	+	+	+	+
H-total	[us]	31.778	26.40	21.333	16.660	15.625	14.561
H-active display	[us]	26.058	20.00	16.162	13.003	11.625	10.836
H-active w/o border	[us]	25.418	20.00	16.162	13.003	11.625	10.836
H-left border	[us]	0.32	0	0	0	0	0
H-right border	[us]	0.32	0	0	0	0	0
H-blanking	[us]	5.717	6.40	5.171	3.657	4.00	3.725
H-Frontporch	[us]	0.318	1.00	0.323	0.203	0.30	0.508
H-Sync-width	[us]	3.810	3.20	1.616	1.219	1.60	1.016
H-Backporch	[us]	1.589	2.20	3.232	2.235	2.10	2.201
V-total	[ms]	14.268	16.579	13.333	13.328	16.67	11.765
V-active display	[ms]	13.156	15.840	12.800	12.795	16.00	11.183
V-active w/o border	[ms]	12.712	15.840	12.800	12.795	16.00	11.183
V-top border	[ms]	0.222	0	0	0	0	0
V-bottom border	[ms]	0.222	0	0	0	0	0
V-blanking	[ms]	1.11156	0.739	0.533	0.533	0.67	0.582
V-Frontporch	[ms]	0.159	0.026	0.021	0.017	0.031	0.015
V-Sync-width	[ms]	0.06356	0.106	0.064	0.050	0.047	0.044
V-Backporch	[ms]	0.889	0.607	0.448	0.466	0.594	0.524

8. DISPLAY SIZE

H: 270 ± 5 mm
V: 200 ± 5 mm

9. OPERATION TEMPERATURE

0-40 degree C

10. DIMENSION

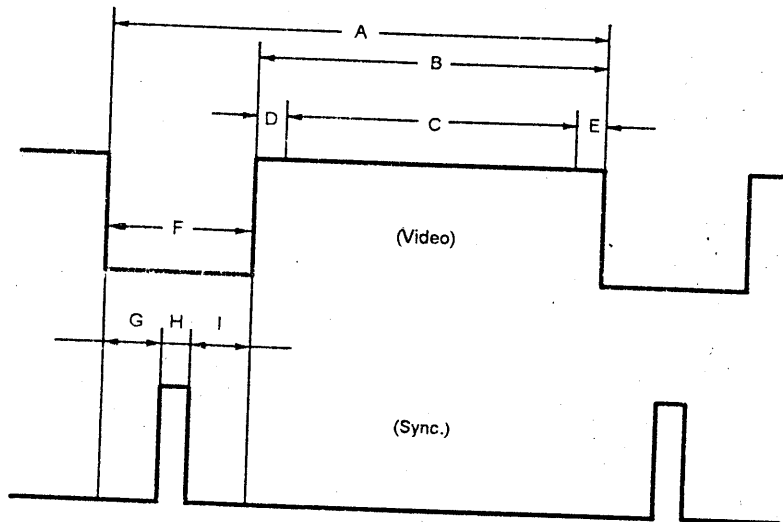
	Without Packaging	Including Packaging
Width	370 mm	492 mm
Height	373 mm	463 mm
Depth	392 mm	463 mm

11. WEIGHT

Net : 12.65 Kgs
Gross: 14 Kgs

A. SPECIFICATIONS:

- | | |
|-----------------------------|--|
| 1. SCREEN | 15" F & S, 0.28mm, Antistatic coating. |
| 2. POWER SOURCE | 120V 60Hz
220V 50Hz |
| 3. POWER CONSUMPTION | 100W (max.) |
| 4. INPUT SIGNAL | |
| VIDEO | Analog R. G. B. : 0.7Vpp (positive) |
| SYNC | TTL level, H, V separate, positive or negative polarity. |
| 5. INTERFACE | 15 Pin D type connector |
| 6. RESOLUTION | 1280 X 1024 pixels (Non-interlace) |
| 7. RECOMMENDED TIMING CHART | |



Item	Description:
A	Total time
B	Active display area including borders
C	Active display area excluding borders
D	Left/Top border
E	Right/bottom border
F	Blanking time
G	Frontporch
H	Sync-width
I	Backporch

B. IMPORTANT SAFETY INSTRUCTION

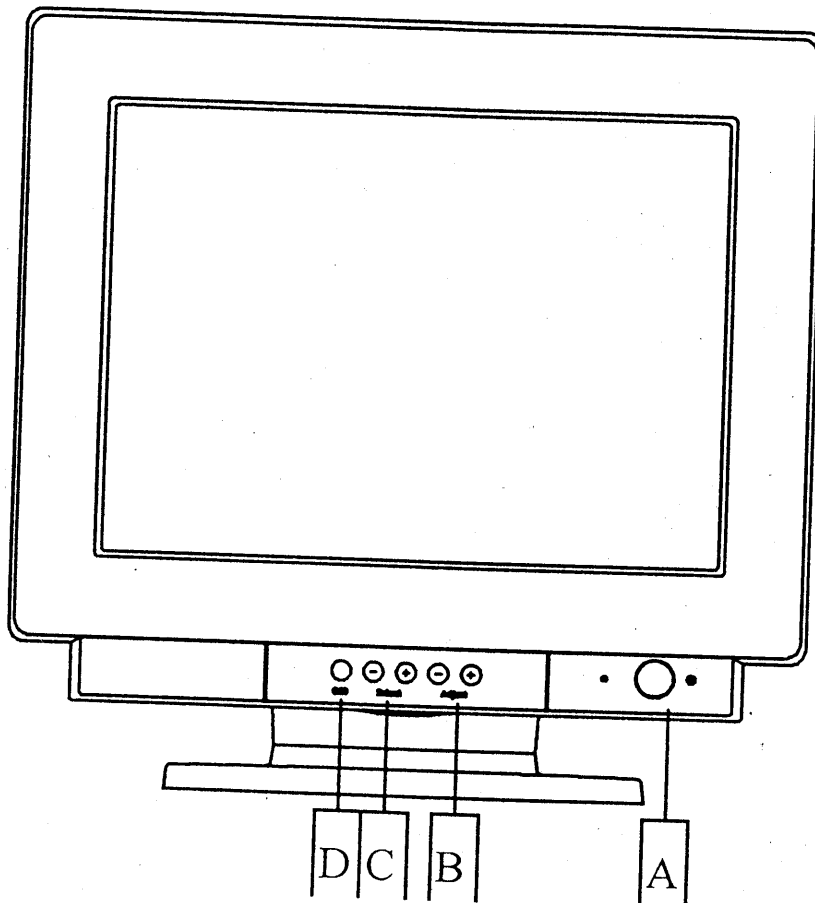
Prior to using this manual, please ensure that you have carefully followed all the procedures outlined in the user's manual for product.

1. Read all of these instructions.
2. Save these instructions for later use.
3. Follow all warnings and instructions marked on the product.
4. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
5. Do not use this product near water.
6. Do not place this product on an unstable car, stand or table. The product may fall, causing serious damage to the product.
7. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, those openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
8. This product should be operated from the type of power source indicated on the marketing label. If you are not sure of the type of power available, consult your dealer or local power company.
9. This product is equipped with a 3-wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding-type plug.
10. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
11. If an extension cord is used with this product, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord ampere rating. Also, make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
12. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
13. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to service personnel.

14. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- A. When the power cord or plug is damaged or frayed.
- B. If liquid has been spilled into the product.
- C. If the product has been exposed to rain or water.
- D. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
- E. If the product has been dropped or the cabinet has been damaged.
- F. If the product exhibits a distinct change in performance, indicating a need for service.

CONTROL LOCATION ON FRONT PANEL



A. Power Switch

B. - Adjust +

C. - Select +

D. OSD

* Outlook subject to change without prior notice.

D. CIRCUIT DESCRIPTION

1. Power circuit

The power circuit includes the start up, mode control operation, and OCP circuit. Please refer to the circuit diagram.

a) Start up circuit

The R908 and R909 provide the start up current of I901.

The turn-on and turn off thresholds of under-voltage lockout circuit in I901 are fixed internally at 16V and 10V respectively.

At start-up, C911 must be charged to 16V with a current no less than 1mA.

b) Current-mode control operation

As B+ of I901 (Pin 7) more than 16V, it has square waveform on the totem-pole output (Pin 6) which can be operated to +/- 1 Amp peak for driving the gate of MOSFET Q901. The current sensing resistor R915 senses the primary current waveform for current-mode PWM control and total output power limit.

c) OCP

As mentioned above the current sensing resistor R915 can limit the total power output. The voltage level of auxiliary power winding will drop with the secondary load increment. The auxiliary power voltage will be too low to drive the I901 at heavy overload output condition. Then the I901 will be shut down repeatedly.

be after start up

d) LED Indicator CKT

When it's power on micon. control Q911 provide voltage 5V which make green LED on ; When it's without H-syn or V-syn pulsing, micon control Q910 make amber LED on, at this moment LED will become yellow ; When it's without H-syn and V-syn pulsing micon control Q910 make LED amber.

e) Degauss CKT

Micon control Q902, Q903 and RL901 on make current pass by POR901 and ADG coil is degaussing achieved.

2. Horizontal circuit

a) Horizontal first stage circuit

The main function of this stage have horizontal synchronization, free-running oscillation, AFC and horizontal-phase adjustment.

a-1 Free-running oscillation.

Free-running oscillation is handled by the voltage decided by pin 12 of I601.

a-2 Horizontal synchronization.

If input a sync pulse to Pin 17 of I601 synchronization is achieved.

a-3 Horizontal-phase adjustment

The I601 internal circuit also has the horizontal-phase adjustment function. It is easy to add and change DC voltage to Pin 15 of I601 complete this function.

a b) Side-pin and H-size control circuit

Parabola signal from pin 36 of I601 to I701 is the side-pin control CKT. I701, Q717, Q718, Q719 complete the H-size adjusting.

- c) Horizontal pre-driver circuit and driver circuit
The main function of these stage is to supply enough energy to horizontal output circuit. Q703 are pre-driver circuit. T701 is driver circuit.
- d) Horizontal output stage circuit
Horizontal output stage circuit belongs to diode modulation type. Q704, D702, 701, C718, C719, T701, T702, C727 are main parts of this circuit.
- e) Horizontal B+ step up circuit
In order to keep the same high voltage of CRT and horizontal raster size, it must supply different B+ voltage according to different horizontal frequency. B+ voltage is positively proportional to the horizontal frequency. And the horizontal B+ step up circuit has this function. I601, Q710, Q715, Q716, D711, L701 and C744 are main parts of this circuit.
- f) Spot killer circuit
It have very bright line or dot on the CRT screen when power turns off instantaneously, The spot killer circuit can avoid this defect. The main parts of this circuit are Q711, D720, C741, I701, Pin 8-10, ZD704, ZD705.
- g) X-ray protection circuit
It will emit x-ray and It will be harmful to human body when anode voltage of CRT is too high, The x-ray protection circuit can shut down the horizontal pulse to avoid x-ray emission. ZD702, D718 are main parts of this circuit.
- h) Blanking circuit Q600 for Vert. Q701, Q712, Q713 for Hor.
3. Vertical circuit
The vertical circuit includes pre-driver circuit, output circuit and vertical-size preset circuit, and vertical f to v circuit.
- a) Vertical pre-driver circuit
- * The function of pre-driver circuit have synchronization, free-running oscillation and sawtooth pulse producer.
 - * When input a vertical sync signal to pin 34 of I601 synchronization is achieved. by I601's internal circuit.
 - * The internal circuit of I601 also has the sawtooth pulse generator.
- b) Vertical output circuit and vertical-size preset circuit
- * I602 is a vertical output IC. It implements the current amplifier function.
 - * When input a DC voltage to Pin 31 of I601, It can decide the vertical raster size. If the DC voltage is higher, the vertical raster size is larger.
4. Video circuit
The video circuit three major portions
- a) Video pre-Amp
I201 AN93B06K may control video pre-Amp by means of micro circuit.
- b) Video amplifier circuit
I201 used as a pre-AMP which include contrast control, and clamp function.
Q202+Q203, Q232+Q233, Q262+Q263 are cascodes for final-AMP VR225, VR255, VR285 are bias control.
- c) Q204, Q234, Q264 are individual buffer transistors for signal of OSD R.G.B.
- d) Q296, Q236, Q266 are individual buffer transistors for signal of OSD R.G.B. blanking.

5. MICRO CIRCUIT

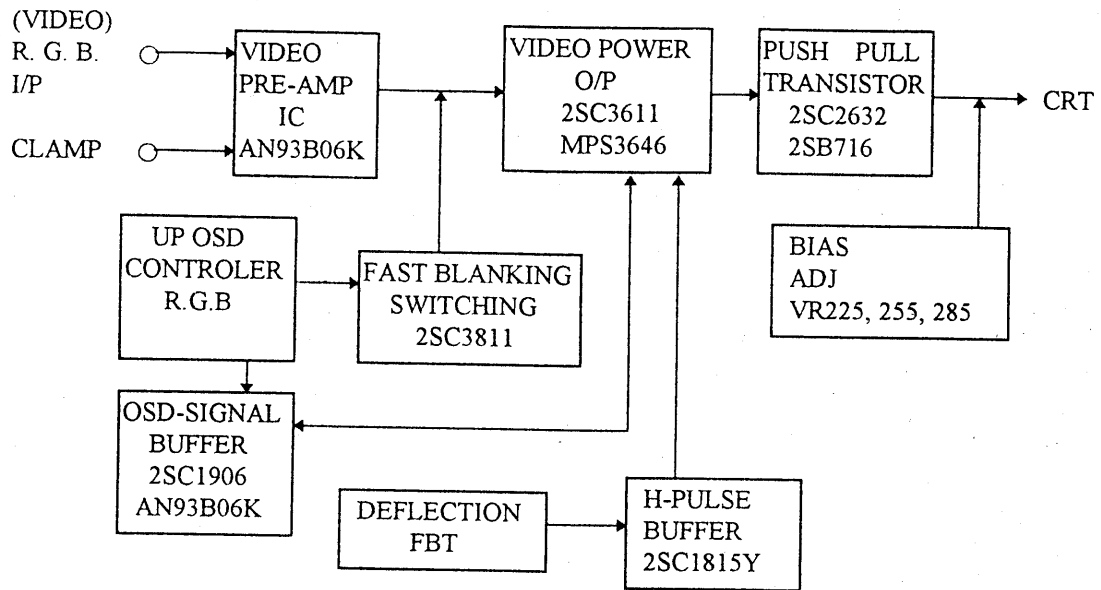
A short description of the key related IC's is given below :

- a) MCU: PHILIPS PCE84C886
- a-1 8 bits CPU
 - a-2 8K * 8 ROM
 - a-3 192 * 8 RAM
 - a-4 Twelve quasi-bi-directional I/O ports and maximum sixteen derivative I/O ports.
 - a-5 9 PWM (6-bit * 4, 7-bit * 4 and one 14-bit).
 - a-6 4 OSD outputs (R/G/B and FB).
 - a-7 One 8-bit timer/event counter (T1) and one 8-bit counter triggered by external input (T3).
 - a-8 4 single level vectored interrupts:
INTN, T1, I2C, and V-SYNC.
 - a-9 OSD features :
 - display RAM : 64 * 10 (bit)
 - character fonts : 64 (including 2 special codes)
 - character bitmap : 12 * 10
 - character size : 1H/1V, 1H/2V, 11H/3V and 1H/4V.
 - character color : 8 (character-by-character based)
 - background color : 8 (character-by-word based)
- b) EEPROM : ATMEL AT24C02 (256 * 8 bit = 2K bits)
24LC02 is an 2K bits 5V electrically erasable programmable read only memory (EEPROM) organized as 256 by 8 bits. The stored information is electrically alterable on a word-by-word basis IIC-BUS controlled.
- c) LM7805 : Power regulator (+12V -->> +5V)
- d) LM324 : OP (4 items)
- e)
- e-1 I001 84C886 is a 8 bits micro-controller and heart of the BUS controlled monitor. 84C886 has two main function. One is to detect the timing mode (by H-, V-, HP, VP) from the PC, the other is to scan the key board.
When the 84C886 detect the right timing it read the correspondent data from the EEPROM and place the data to the O/P of PWM.
After 84C886 detect which key is pressed, it show the OSD and change the PWM value, according which icon is selected.
 - e-2 84C886 comprises 9 PWMs (pulse width resolution, 6-bit * 4, 7-bit * 4 and one 14-bit) to control 9 functions. The PWMS are individually programmed using a 6-bit (7-bit) word to select an output from one of 64 (128) voltage steps. The maximum output voltage of all PWMs is set by the Vdd and there solution is approximately $(V_{dd}-0.4) / 64$ or $(V_{dd}-0.4) / 128$.
 - e-3 The system clock is provided by a 10MHz crystal connected to pin 31, 32 of I001.
R008 - R016 and C012 - C018, C010, C020 are integrators that transfer pulse width to DC voltage. R001 - R003 and C002 constructs an external R-C to program the PLL. C001 is a decoupling capacitor to stabilize the DC supply voltage for 84C886.
- f) AT24C02 contain the data of timing, factory default PWM value, CS value...et.
According to these data, 84C886 can decide the suitable PWM value for different timing.
- g) I003 LM7805 is a power regulator IC, it switches 12V to 5V to supply the whole circuit.
- h) LM324 according to the I/P (+12V) & O/P of LM7805, to generate reset signal and supply the power (+5V) of EEPROM.

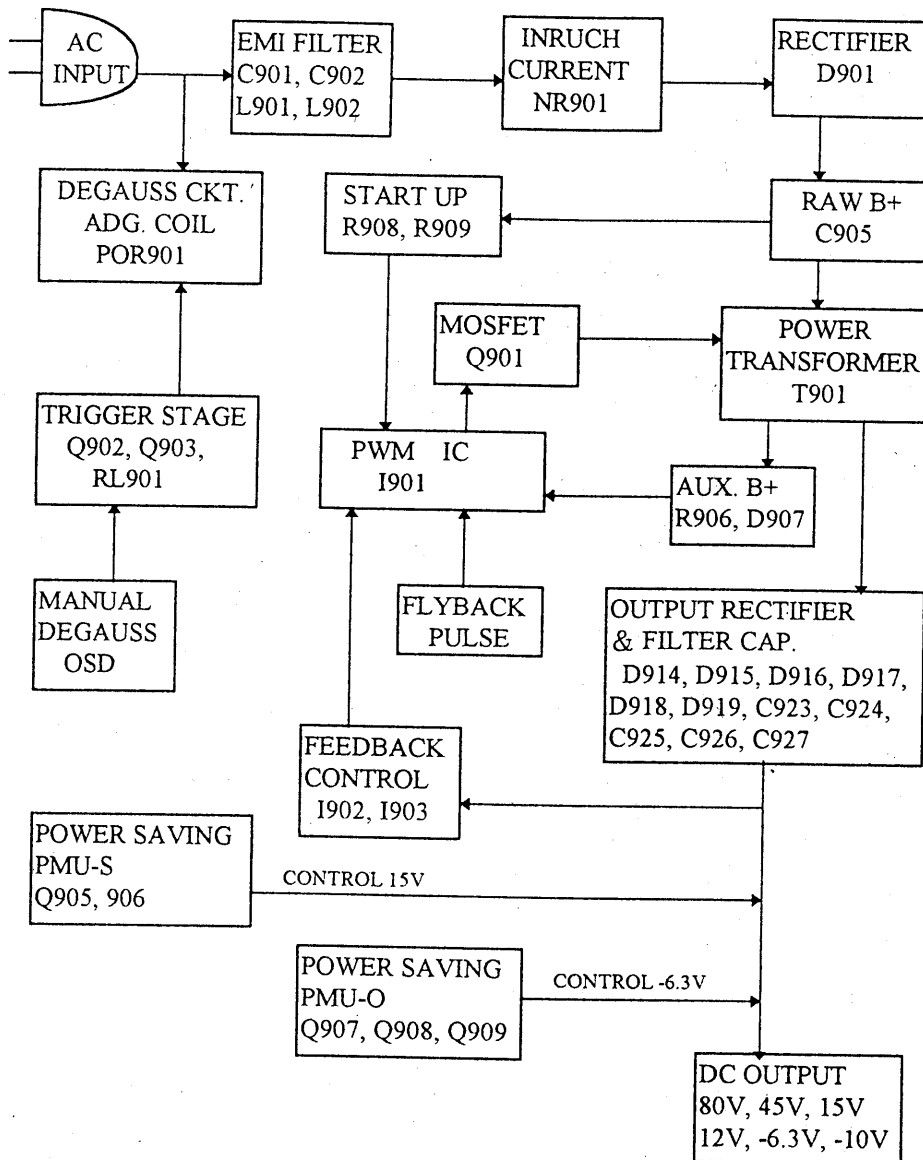
E. GENERAL ADJUSTMENT

1. B+ 14.9V adjustment : VR901
 - a) Connect the positive lead of multi-meter to D917 (--), negative lead to chassis ground.
 - b) Adjust VR901 to obtain a 14.9V reading.
2. High Voltage adjustment : VR701
 - a) Turn off the power and connect the positive lead of high voltage voltmeter to the tube anode, negative lead to Chassis Ground.
 - b) Turn on the power of display at least 15 minutes.
 - c) Adjust VR701 to obtain a 24KV reading.
3. Focus adjustment:
 - a) Display any character all over the screen.
 - b) Set contrast max. and brightness in cut off position.
 - c) Adjust focus VR until the 1/4 and 3/4 position of center Horizontal line of the picture is sharpest.
4. Background white balance adjustment: VR225, VR255, VR285
 - a) Set all bias VR to counter-clock wise max and let the raster be invisible.
 - b) Display black pattern (all video signals are disabled) and adjust SCREEN VR until the raster just appear to see which color comes out first (red, green or blue colors).
 - c) Adjust bias VR of the other 2 colors to get gray raster. (9300K + 27 M.P.C.D)
 - d) Adjust SCREEN VR to let the gray raster no larger than 0.15 FT-L.
5. White balance adjustment:
 - a) Input the mosaic pattern and set contrast SW to max..
 - b) Connect the probe of scope on G-Cathode.
 - c) Adjust VR261 to get G-color 38 Vp-p.
 - d) Adjust VR231, VR201 to get the white pattern (9300K + 27 M.P.C.D)

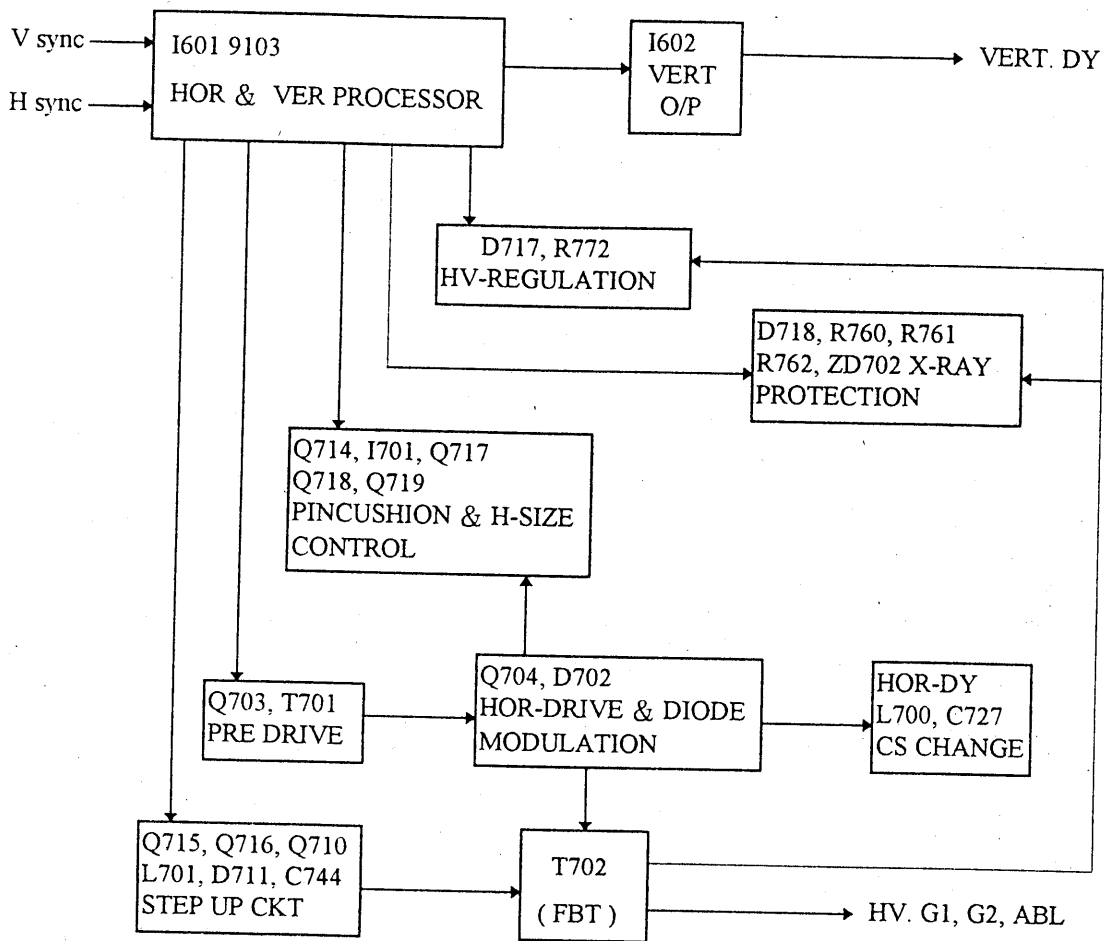
1. VIDEO DIAGRAM



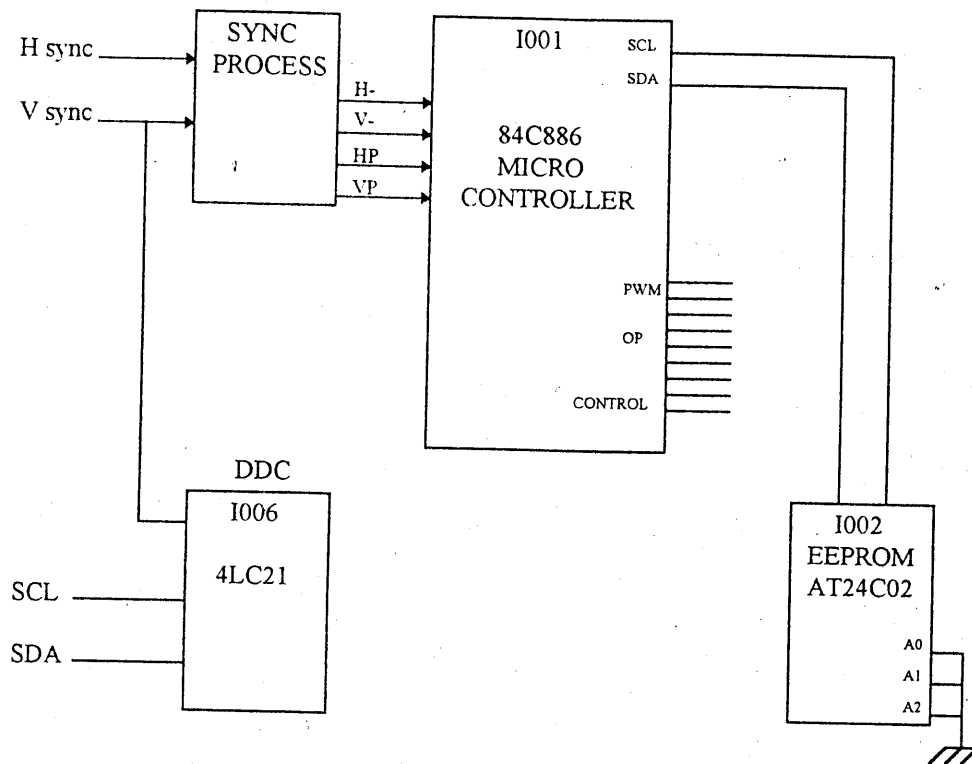
2. POWER BLOCK DIAGRAM



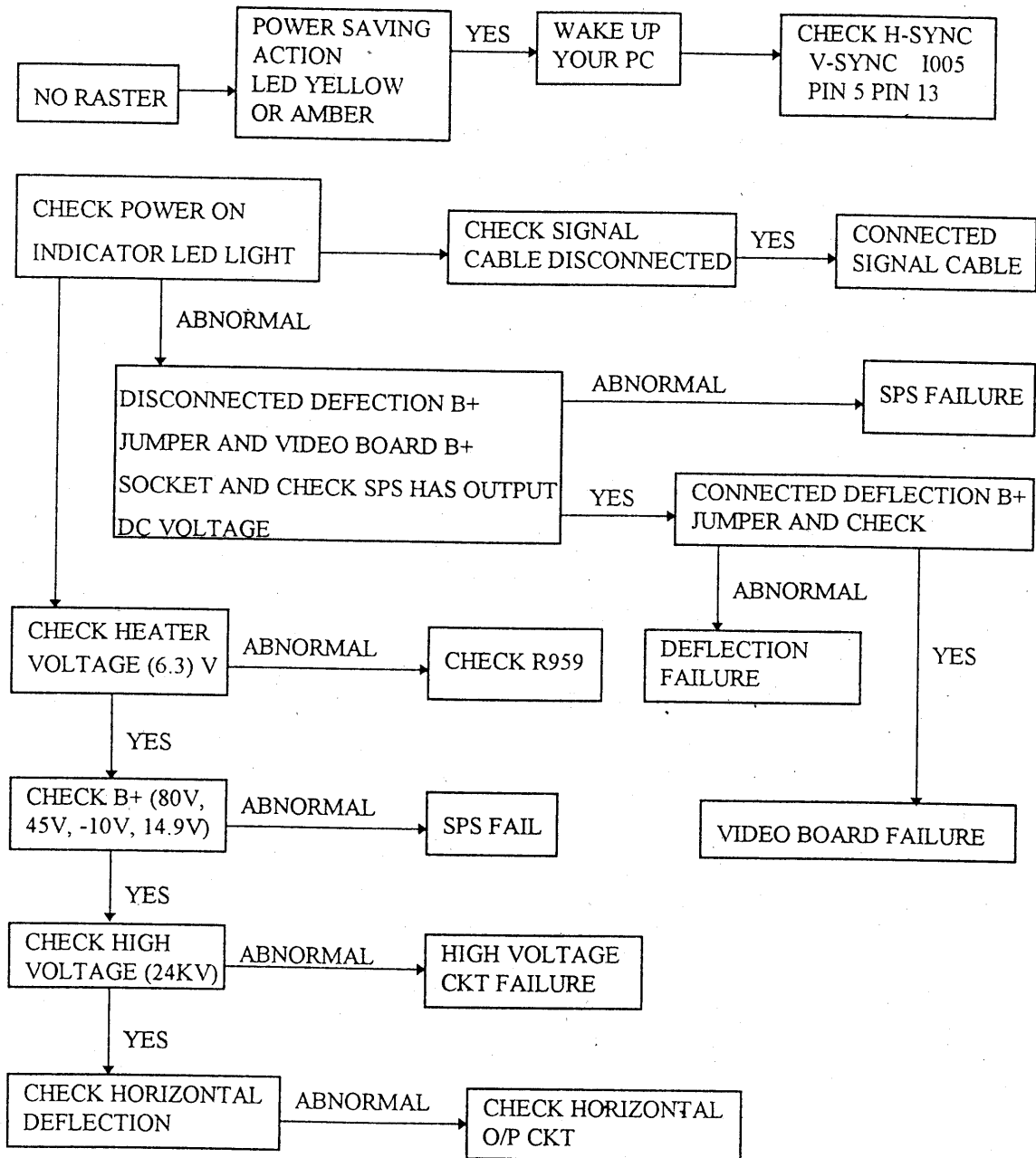
3. DEFLECTION

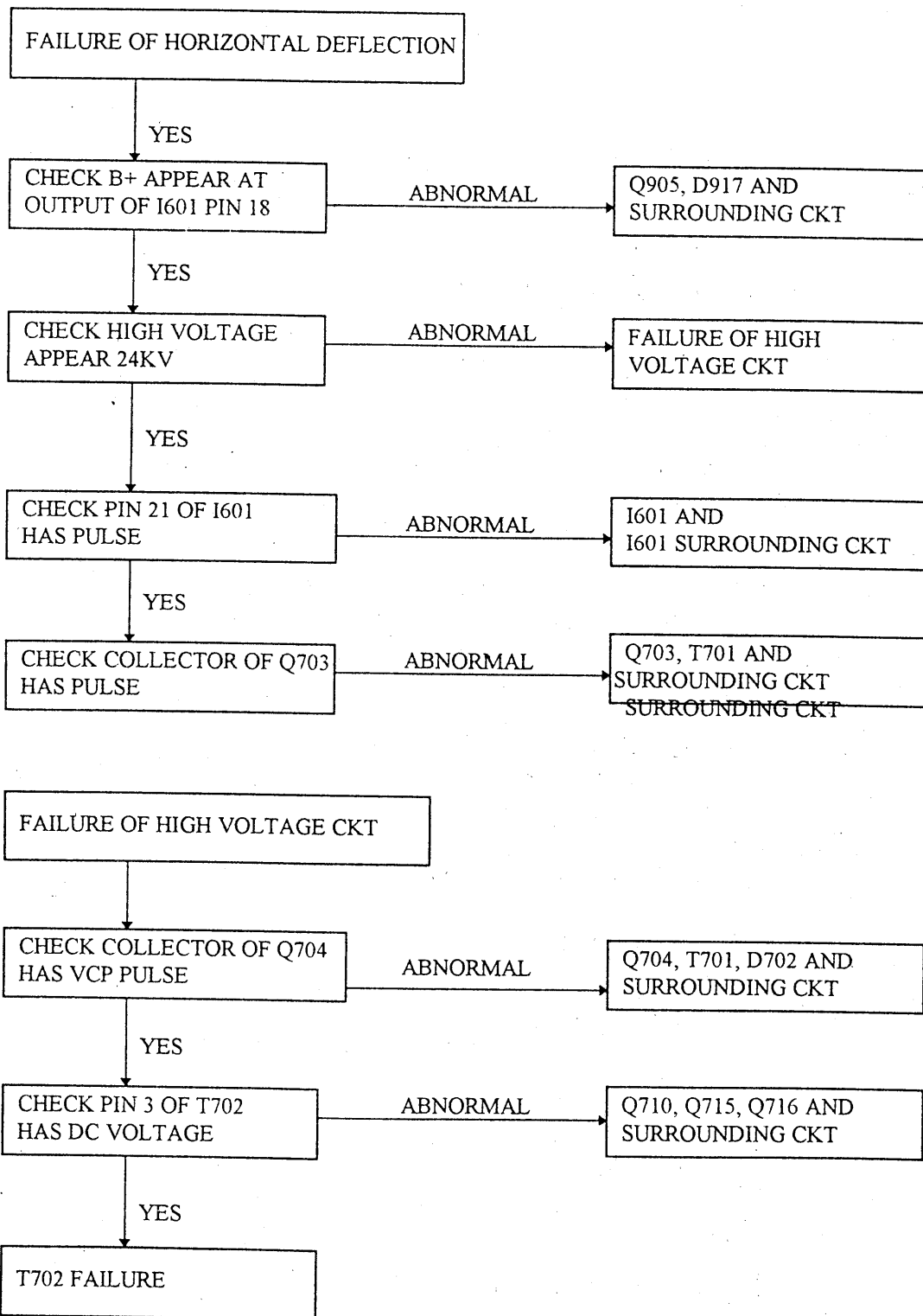


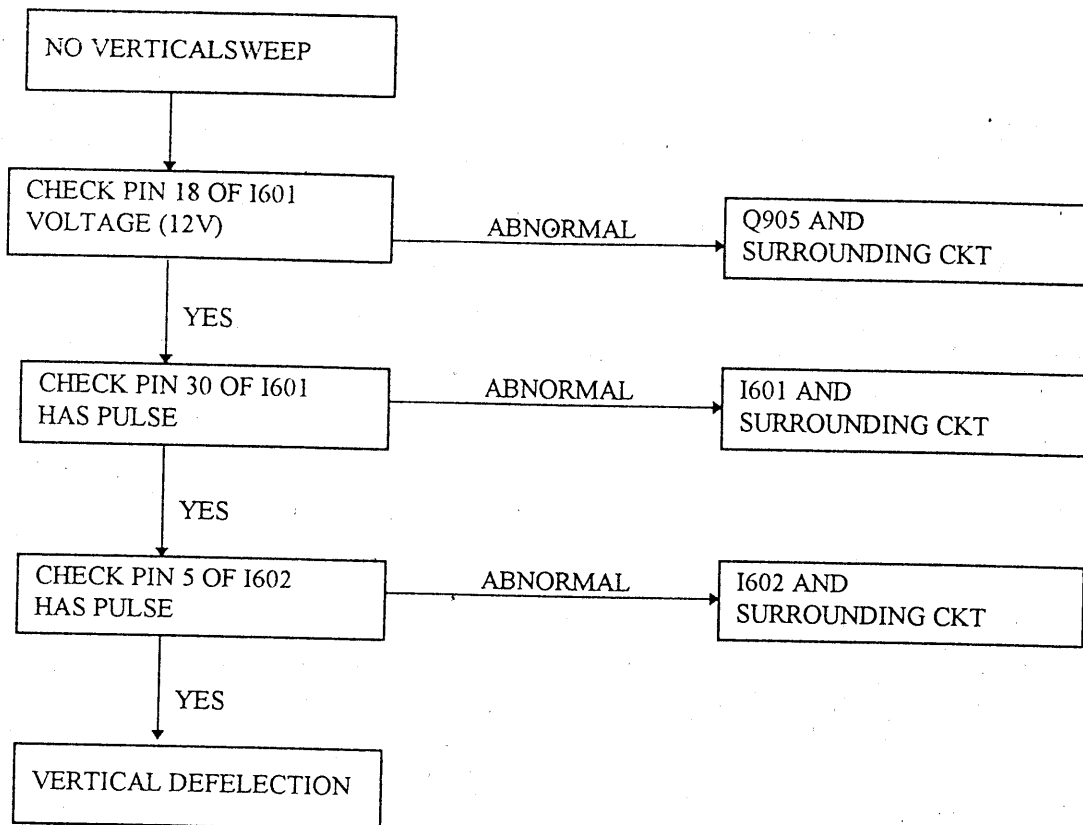
4. MICRO CIRCUIT BLOCK DIAGRAM

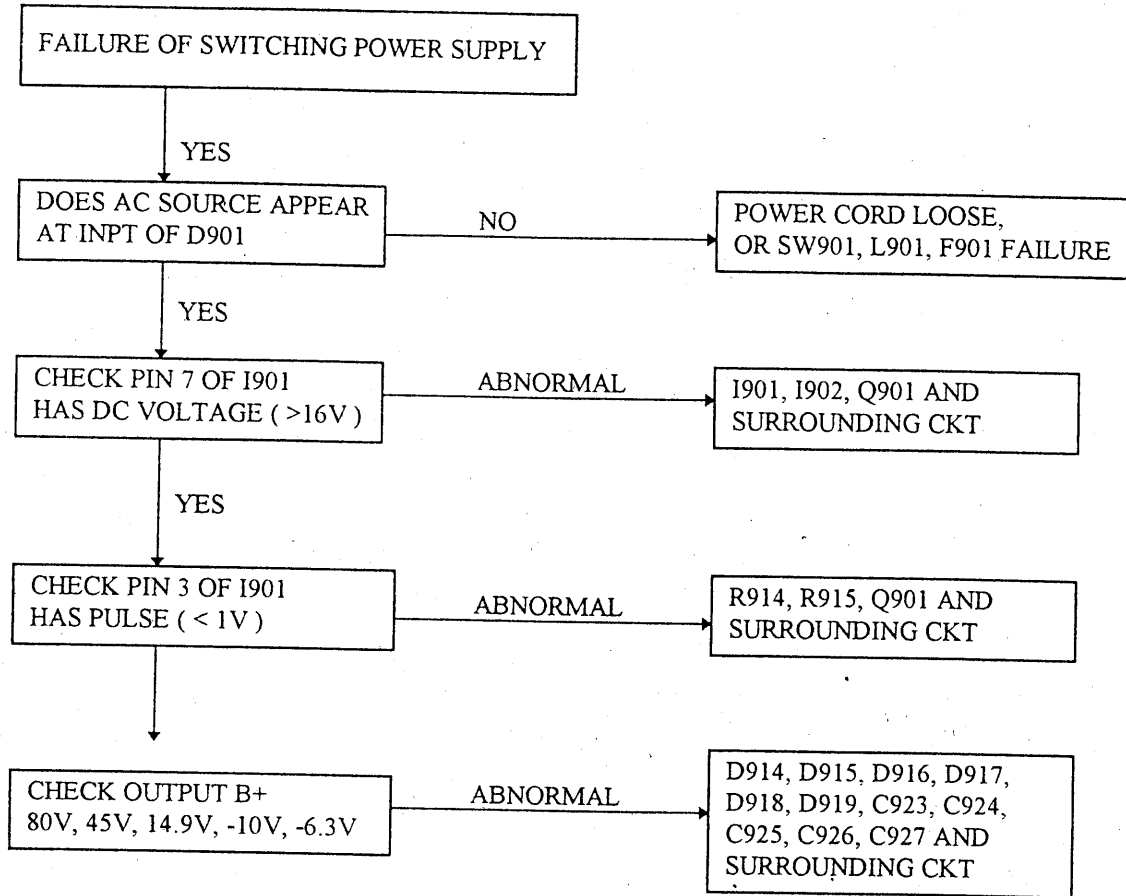


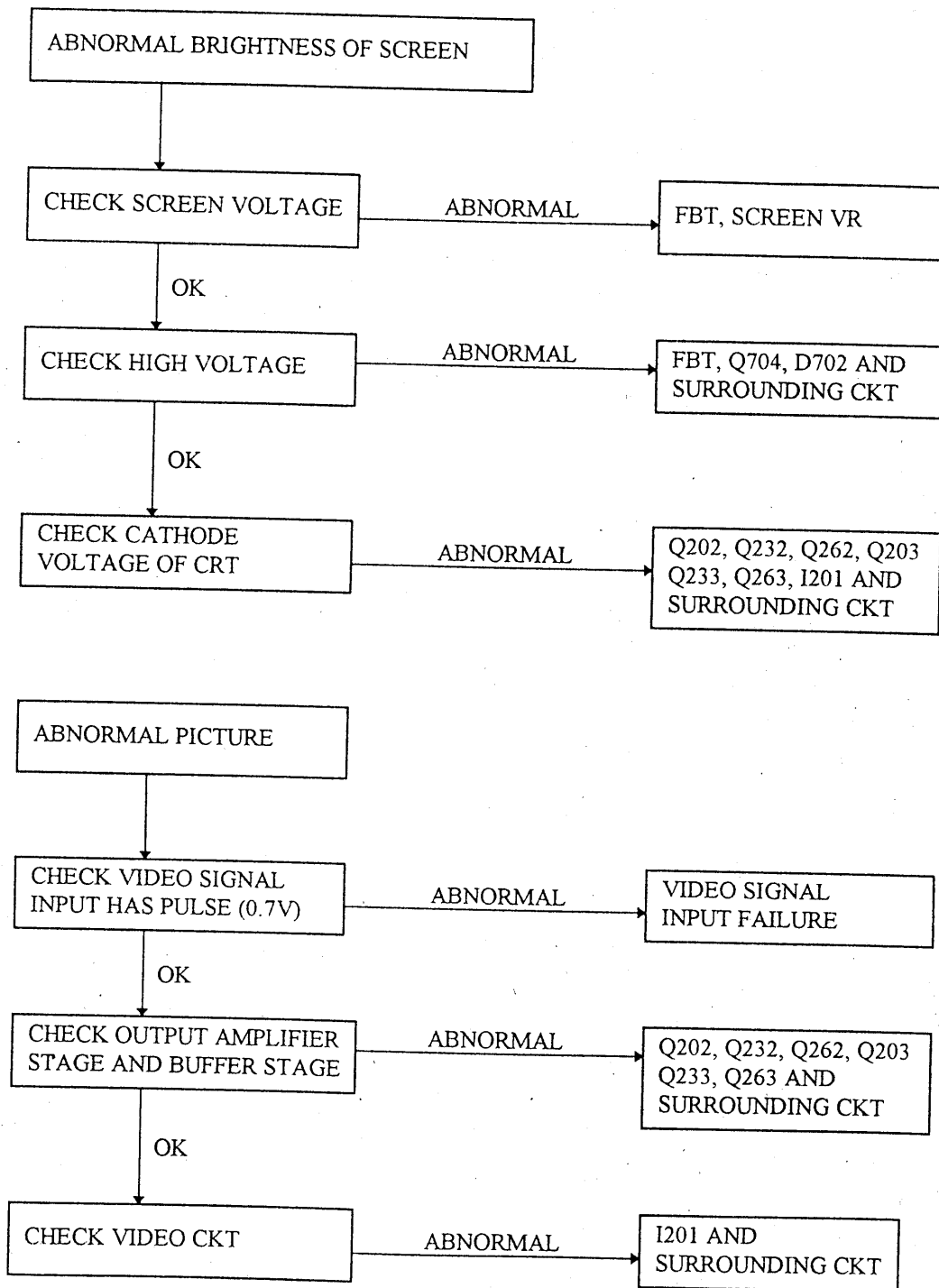
G. TROUBLE SHOOTING











KM-520S PARTS LIST

10/12/'96

	GCABA1353D8F--D	CAB-A
	GCABB1339D8F--A	CAB-B
	QACC-1092D8D-D-	AC Power Cord
	QCODS1158D8D---	Signal Cable
	QFSHC1002D8---A	Fuse Hold
	QPWB-2910D8--1-	Video Board
	QPWB-2911D8---S	Main Board
	QSOC1345D8----	CRT Socket
	QSOC1339D8---A	Second Source
	RCILG1069D8---E	Degauss Coil
	SPAKA2463D8F---	Poly Foam
	SPAKC2487D8----	Carton
	VBM36EDR320X131	CRT
	VCNCP0024-----A	DY Plug
A1	RCORF1001D8----	Core
A2	RCORF1001D8----	Core
B201	QJUM-1045D8050-	Jumper
B202	RCORA1021D8--HU	Bead Core
B231	QJUM-1045D8050-	Jumper
B232	RCORA1021D8--HU	Bead Core
B261	QJUM-1045D8050-	Jumper
B262	RCORA1021D8--HU	Bead Core
B301	RCORA1021D8--HU	Bead Core
B302	RCORA1021D8--HU	Bead Core
B303	RCORA1018T8--SA	Bead Core
B303	RCORA1018T8--HA	Second Source
B700	RCORA1004-1----	Bead Core
B701	RCORA1027D8---P	Bead Core
B901	QJUM-1045D8150-	Jumper
B902	QJUM-1045D8100-	Jumper
B903	RCORA1021D8--HU	Bead Core
B904	RCORA1018T8--S-	Bead Core
B904	RCORA1018T8--H-	Second Source
B905	RCORA1018T8--S-	Bead Core
B905	RCORA1018T8--H-	Second Source
B906	RCORA1021D8--HU	Bead Core
C001	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C002	VCLEET1HT224M-U	.22 uF, 50V, 20%, Monolithic Capacitor
C003	VCEACU1HG106M-P	10 uF, 50V, 20%, Electrolytic
C004	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C005	VCEACU1EG107M-P	100 uF, 25V, 20%, Electrolytic
C006	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C007	VCDSDU1HL561J-P	560 pF, 50V, 5%, Ceramic
C008	VCDSDU1HL100D-P	10 pF, 50V, 0.5%, Ceramic
C009	VCDSDU1HL100D-P	10 pF, 50V, 0.5%, Ceramic
C011	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C012	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C013	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C014	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C015	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C016	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C017	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C018	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C020	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C021	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C022	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C023	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C024	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C025	VCDUDU1HJ221J-P	220 pF, 50V, 5%, Ceramic
C026	VCPEHU1HG102JNP.	1000 pF, 50V, 20%, Electrolytic
C027	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic

C029	VCKBDU1HY102K-P	1000 pF, 50V, 10%, Ceramic
C030	VCKBDU1HY181K-P	180 pF, 50V, 10%, Ceramic
C130	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C201	VCEACU1CG476M-P	47 uF, 16V, 20%, Electrolytic
C202	VCKBDU1HY103K-P	.01 uF, 50V, 10%, Ceramic
C203	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C204	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C205	VCKBDU1HY101K-P	100 pF, 50V, 10%, Ceramic
C208	VCDSDU1HL121J-P	120 pF, 50V, 5%, Ceramic
C210	VCDSDU1HL181J-P	180 pF, 50V, 5%, Ceramic
C213	VCEACU2AG105M-P	1 uF, 100V, 20%, Electrolytic
C214	VCMEHF2AG104K--	.1 uF, 50V, 20%, Meta PP.
C215	VCKBDU2HY222K-P	2200 pF, 500V, 10%, Ceramic
C231	VCEACU1CG476M-P	47 uF, 16V, 20%, Electrolytic
C232	VCKBDU1HY103K-P	.01 uF, 50V, 10%, Ceramic
C233	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C235	VCKBDU1HY101K-P	100 pF, 50V, 10%, Ceramic
C234	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C238	VCDSDU1HL121J-P	120 pF, 50V, 5%, Ceramic
C240	VCDSDU1HL181J-P	180 pF, 50V, 5%, Ceramic
C243	VCEACU2AG105M-P	1 uF, 100V, 20%, Electrolytic
C244	VCMEHF2AG104K--	.1 uF, 50V, 20%, Meta PP.
C245	VCKBDU2HY222K-P	2200 pF, 500V, 10%, Ceramic
C261	VCEACU1CG476M-P	47 uF, 16V, 20%, Electrolytic
C262	VCKBDU1HY103K-P	.01 uF, 50V, 10%, Ceramic
C263	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C264	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C265	VCKBDU1HY101K-P	100 pF, 50V, 10%, Ceramic
C268	VCDSDU1HL121J-P	120 pF, 50V, 5%, Ceramic
C270	VCDSDU1HL181J-P	180 pF, 50V, 5%, Ceramic
C273	VCEACU2AG105M-P	1 uF, 100V, 20%, Electrolytic
C274	VCMEHF2AG104K--	.1 uF, 50V, 20%, Meta PP.
C275	VCKBDU2HY222K-P	2200 pF, 500V, 10%, Ceramic
C301	VCEACF1EG477M--	470 uF, 25V, 20%, Electrolytic
C303	VCEACF2AG476M--	47 uF, 100V, 20%, Electrolytic
C304	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C305	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C306	VCEACU1HG106M-P	10 uF, 50V, 20%, Electrolytic
C307	VCEACU1CG476M-P	47 uF, 16V, 20%, Electrolytic
C308	VCEACU1EG476M-P	47 uF, 25V, 20%, Electrolytic
C309	VCEACU1HG106M-P	10 uF, 50V, 20%, Electrolytic
C312	VCEACF1EG476MI-	47 uF, 25V, 20%, Electrolytic
C313	VCEACU1HG106M-P	10 uF, 50V, 20%, Electrolytic
C314	VCKBDU1HY103K-P	.01 uF, 50V, 10%, Ceramic
C315	VCKBDU2HY101K-P	100 pF, 500V, 10%, Ceramic
C316	VCKBEF3AY102K--	1000 pF, 1KV, +80%-20%, Ceramic
C317	VCKBDU1HY103K-P	.01 uF, 50V, 10%, Ceramic
C601	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C602	VCEACU1EG476M-P	47 uF, 25V, 20%, Electrolytic
C603	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C604	VCMECU1JC224J9P	.22 uF, 1600V, 5%, Meta PP.
C605	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C606	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C607	VCEACU1EG476M-P	47 uF, 25V, 20%, Electrolytic
C608	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C609	VCKBDU1HY101K-P	100 pF, 50V, 10%, Ceramic
C610	VCEACF1VG227M--	220 uF, 35V, 20%, Electrolytic
C612	VCEACF1CG108M--	100 uF, 16V, 20%, Electrolytic
C613	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C614	VCEACF1CG108M--	100 uF, 16V, 20%, Electrolytic
C615	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C616	VCMECU1JC224J9P	.22 uF, 1600V, 5%, Meta PP.
C617	VCKFDU2HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C618	VCEACU1HH105M-P	1 uF, 50V, 20%, Electrolytic

C619	VCEACU1HG474M-P	.47 uF, 50V, 20%, Electrolytic
C620	VCEACU1EG226M-P	22 uF, 25V, 20%, Electrolytic
C621	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C622	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C623	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C626	VCEACU1CG107M-P	100 uF, 16V, 20%, Electrolytic
C7A0	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C7A1	VCEACU1HG106M-P	10 uF, 50V, 20%, Electrolytic
C7A2	VCEACU1HG106M-P	10 uF, 50V, 20%, Electrolytic
C7A3	VCPPBU2AK102J9P	1000 pF, 100V, 5%, Polyester
C7A4	VCPELU1HG472J-P	4700 pF, 50V, 5%, Polyester
C7A5	VCPELU1HG472J-P	4700 pF, 50V, 5%, Polyester
C7A6	VCKBDU1HY102K-P	1000 pF, 50V, 10%, Ceramic
C7A7	VCEACU1CG227M-P	220 uF, 16V, 20%, Electrolytic
C7A8	VCMEQX2AG225K--	2.2 uF, 100V, 20%, Meta pp.
C7A9	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C700	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C701	VCPPBU2AK561J9P	560 pF, 100V, 5%, Polyester
C702	VCEACU1HG475M-P	47 uF, 50V, 20%, Electrolytic
C703	VCPELU1HG103J-P	.01 uF, 50V, 20%, Electrolytic
C704	VCPELU1HG103J-P	.01 uF, 50V, 20%, Electrolytic
C705	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C706	VCEACU1CG227M-P	220 uF, 16V, 20%, Electrolytic
C707	VCEACU1HG106M-P	10 uF, 50V, 20%, Electrolytic
C708	VCPELU1HG332J-P	3300 pF, 50V, 20%, Electrolytic
C710	VCEACU1HG106M-P	10 uF, 50V, 20%, Electrolytic
C711	VCEACU1HG106M-P	10 uF, 50V, 20%, Electrolytic
C712	VCKBDU2HY102K-P	1000 pF, 500V, 10%, Ceramic
C713	VCEACF1JG107M--	100 uF, 63V, 20%, Electrolytic
C715	VCPELU1HG223J-P	.022 uF, 50V, 20%, Electrolytic
C716	VCMECU1JC224J9P	.22 uF, 1600V, 5%, Meta PP.
C718	VCMPBF3CC512J9-	5100 pF, 1600V, 5%, Meta PP.
C719	VCPPHF2JG472J--	4700 pF, 50V, 5%, Polypropylene
C722	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C727	VCMPBF2EC334J9-	.33 uF, 250V, 5%, Meta. PP.
C728	VCMPBF2EC105J9-	1 uF, 250V, 5%, Meta. PP.
C729	VCMPBF2EC224J5-	.22 uF, 250V, 5%, Meta. PP.
C729	VCMPBF2EC224J9-	Second Source
C731	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C734	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C736	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C737	VCKBDU2HY102K-P	1000 pF, 500V, 10%, Ceramic
C738	VCEACU1CG107M-P	100 uF, 16V, 20%, Electrolytic
C739	VCEACU1CG107M-P	100 uF, 16V, 20%, Electrolytic
C741	VCEACF2EY106Y--	10 uF, 250V, 5%, Meta. PP.
C741A	VCMEHF2EG684K--	.68 uF, 250V, 10%, Meta. Polyester
C742	VCEACU1HG474M-P	.47 uF, 50V, 20%, Electrolytic
C743	VCEACU2AG106M-P	10 uF, 100V, 20%, Electrolytic
C744	VCEACF2EY226Y--	22 uF, 250V, 5%, Meta. PP.
C745	VCEACU1EG226M-P	22 uF, 25V, 20%, Electrolytic
C746	VCEACU1HG106M-P	10 uF, 50V, 20%, Electrolytic
C747	VCKBDU1HY332K-P	3300 pF, 50V, 10%, Ceramic
C748	VCENCU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C749	VCKBDU1HY222K-P	2200 pF, 50V, 10%, Ceramic
C749A	VCKBDU1HY101K-P	100 pF, 50V, 10%, Ceramic
C750	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C751	VCEACF1JG107M--	100 uF, 63V, 20%, Electrolytic
C752	VCMEHF2EG684K--	.68 uF, 250V, 10%, Meta. Polyester
C753	VCKBDU2HY681K-P	680 pF, 500V, 10%, Ceramic
C754	VCKBDU2HY102K-P	1000 pF, 500V, 10%, Ceramic
C756	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C757	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C764	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C765	VCKFDF2EY223Z--	.022 uF, 250V, +80%-20%, Ceramic

C766	VCKBDU1HY102K-P	1000 pF, 50V, 10%, Ceramic
C768	VCEACU1HG106M-P	10 uF, 50V, 20%, Electrolytic
C769	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C772	VCDSDU1HL201J-P	200 pF, 50V, 5%, Ceramic
C773	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C774	VCSFDU1HY104Z-P	.1 uF, 50V, +80%-20%, Ceramic
C777	VCPELU1HG223J-P	.022 uF, 50V, 20%, Electrolytic
C778	VCPELU1HG223J-P	.022 uF, 50V, 20%, Electrolytic
C901	VCMEBF7EG474MX-	.47 uF, 250V, 20%, Ceramic
C902	VCKFDF7BY222MX3	2200 pF, 125V, 20%, Ceramic
C903	VCKFDF7BY222MX3	2200 pF, 125V, 20%, Ceramic
C903A	VCKFDF7BY222MX3	2200 pF, 125V, 20%, Ceramic
C904	VCMEBF7EG224MX-	.22 uF, 250V, 20%, Ceramic
C905	VCEALS2GY227MX-	220 uF, 400V, 20%, Electrolytic
C905	VCEALS2GY227MI-	Second Source
C906	VCKFEF3AY103Z--	.01 uF, 1KV, +80%-20%, Ceramic
C907	VCKBEU3AB331K8P	330 pF, 1KV, +80%-20%, Ceramic
C909	VCKFDU2HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C910	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C911	VCEACU1VG476M-P	47 uF, 35V, 20%, Electrolytic
C912	VCKBDU1HY472K-P	4700 pF, 50V, 10%, Ceramic
C913	VCPPBU2AK472J9P	4700 pF, 100V, 5%, Polyester
C914	VCEACU1HG105M-P	1 uF, 50V, 20%, Electrolytic
C915	VCKBDU1HY102K-P	1000 pF, 50V, 10%, Ceramic
C916	VCKBDU1HY471K-P	470 pF, 50V, 10%, Ceramic
C917	VCKBDU1HY102K-P	1000 pF, 50V, 10%, Ceramic
C918	VCEACU1CH336MIP	33 uF, 16V, 20%, Electrolytic
C923	VCEACF2AH227MI-	220 uF, 100V, 20%, Electrolytic
C924	VCEACF2AG687M--	680 uF, 100V, 20%, Meta. PP. ic
C925	VCEACF1EG228M--	2200 uF, 25V, 20%, Electrolytic
C926	VCEACF1CG228MI-	2200 uF, 16V, 20%, Electrolytic
C927	VCEACF1CG228MI-	2200 uF, 16V, 20%, Electrolytic
C928	VCKFDF7BY222MX3	2200 pF, 125V, 20%, Ceramic
C929	VCKFDF7BY222MX3	2200 pF, 125V, 20%, Ceramic
C931	VCEACU1EG107M-P	100 uF, 25V, 20%, Electrolytic
C932	VCEACU1EH227MIP	220 uF, 25V, 20%, Electrolytic
C933	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
C935	VCEACU1HG474M-P	.47 uF, 50V, 20%, Electrolytic
C940	VCKFDU1HY103Z-P	.01 uF, 50V, +80%-20%, Ceramic
D003	VSD1N4148-----U	Protect Diode
D005	VSD1N4148-----U	General Diode
D007	VSD1N4148-----U	General Diode
D025	VSD1N4148-----U	General Diode
D200	VSD1N4148-----U	General Diode
D201	VSD1N4531-----U	General Diode
D203	VSD1N4148-----U	General Diode
D204	VSD1N4148-----U	General Diode
D205	VSD1N4148-----U	General Diode
D206	VSD1SS83-----U	General Diode
D208	VSD1N4148-----U	General Diode
D230	VSD1N4148-----U	General Diode
D231	VSD1N4531-----U	General Diode
D233	VSD1N4148-----U	General Diode
D234	VSD1N4148-----U	General Diode
D235	VSD1N4148-----U	General Diode
D236	VSD1SS83-----U	General Diode
D238	VSD1N4148-----U	General Diode
D260	VSD1N4148-----U	General Diode
D261	VSD1N4531-----U	General Diode
D263	VSD1N4148-----U	General Diode
D264	VSD1N4148-----U	General Diode
D265	VSD1N4148-----U	Protect Diode
D266	VSD1SS83-----U	General Diode
D268	VSD1N4148-----U	General Diode

D301	VSD1N4148-----U	General Diode
D302	VSD1N4148-----U	General Diode
D303	VSD1N4148-----U	General Diode
D304	VSDRGP10G-----U	General Diode
D600	VSD1N4001-----U	General Diode
D701	VSDUF4001-----U	General Diode
D702	VSDC021M-15--V-	Modulation Diode
D702	VSDFMP-3FU---2-	Second Source
D703	VSDRGP10M-----U	Rectified Diode
D706	VSD1N4148-----U	General Diode
D707	VSD1N4148-----U	General Diode
D709	VSDRGP10M-----U	Rectified Diode
D711	VSD31DF2-----	Rectifier Diode
D714	VSD1N4148-----U	General Diode
D715	VSD1N4148-----U	General Diode
D716	VSD1N4148-----U	General Diode
D717	VSD1N4148-----U	General Diode
D718	VSDRGP10G-----U	Rectified Diode
D719	VSD1N4148-----U	General Diode
D720	VSDRGP10G-----U	Rectified Diode
D721	VSDRGP10G-----U	Rectified Diode
D723	VSD1N4148-----U	General Diode
D725	VSD1N4148-----U	General Diode
D730	VSD1N4148-----U	General Diode
D731	VSD1N4531-----U	General Diode
D733	VSD1N4148-----U	General Diode
D734	VSD1N4531-----U	General Diode
D735	VSD1N4148-----U	General Diode
D736	VSD1N4148-----U	General Diode
D737	VSD1N4148-----U	General Diode
D738	VSD1N4148-----U	General Diode
D740	VSD1N4148-----U	General Diode
D741	VSD1N4148-----U	General Diode
D742	VSD1N4002-----U	General Diode
D901	RSRCB1048D8----	Power Rectifier Diode
D905	VSDBYV26E-----U	Rectified Diode
D906	VSDLYHER107---U	Rectified Diode
D907	VSDBYV95A-----U	Rectified Diode
D908	VSD1N4148-----U	General Diode
D909	VSD1N4148-----U	General Diode
D910	VSD1N4148-----U	General Diode
D911	VSD1N4148-----U	General Diode
D912	VSD1N4148-----U	General Diode
D913	VSD1N4148-----U	General Diode
D914	VSDBYT56J-----H	Rectified Diode
D915	VSDLYHER305---H	Rectified Diode
D915	VSDRU4ALFL1---H	Second Source
D916	VSDLYHER305---H	Rectified Diode
D916	VSDRU4ALFL1---H	Second Source
D917	VSDBYT56D-----H	Rectified Diode
D918	VSDBYT56D-----H	Rectified Diode
D919	VSDBYT56D-----H	Rectified Diode
D922	VSPL59YGC118L--	LED
D922	VSP5-235YYGTF--	Second Source
F901	QFS-D402SD82XH-	250V, 4A Fuse Fast
F902	QFS-Z202FD82X--	DC Fuse
F902	QFS-Z202FD82W--	Second Source
GND	VCNCP4201-----U	1 Pin Plug
GND2	VCNCP4201-----U	Plug
G2	RCORF1011D8----	Core
G2	RCORF1011D8--H-	Second Source
G4	RCORF1011D8----	Core
G4	RCORF1011D8--H-	Second Source
I001	VSI84C886D7A-3-	CPU

I002	VSI24LC02BP----	E PROM
I002	VSIAT24C0210PCB	Second Source
I003	VSIKA7805CT--8-	Regulator
I003	VSIMC7805CT----	Second Source
I003	VSIL7805CV---Y-	Second Source
I004	VSILM324N----T-	Operational Amp. IC
I004	VSILM324N-----	Second Source
I005	VSI74HC221P--H-	Duty Control IC
I005	VSI74HC221P--3-	Second Source
I201	VSIAN93B06K--6-	Video Pre-Amp IC
I601	VSISTV7778---Y-	H-Preamplifier IC
I601	VSIX9103-5---Y-	Second Source
I602	VSITEA8172-----	Vertical Deflection
I602	VSITDA8172-----	Second Source
I700	VSI74LS221-----	Duty Control IC
I701	VSILM324N----T-	Operational Amp. IC
I701	VSILM324N-----	Second Source
I702	VSILM358P----T-	Operational Amp. IC
I702	VSILM358N-----	Second Source
I901	VSIKA3842A---8-	Power Control IC
I902	VSP721F-GRD-	Photo Coupler
I903	VSITL431CLP----	Triac
I904	VSIKA7812CT--8-	Regulator
I904	VSIMC7812CT----	Second Source
L200	VL-EH2R2M0000-U	Peaking Inductor 2.2 uH
L202	VL-EHR82M0000-U	Peaking Inductor, .82 uH
L230	VL-EH2R2M0000-U	Peaking Inductor 2.2 uH
L232	VL-EHR82M0000-U	Peaking Inductor, .82 uH
L260	VL-EH2R2M0000-U	Peaking Inductor 2.2 uH
L262	VL-EHR82M0000-U	Peaking Inductor, .82 uH
L700	RCILL1112D8----	H-Linear Coil
L701	RCHO-2685D8---A	Chock
L703	RCHO-2706D8----	Aux h-Linear Coil
L704	RCHO-2689D8---A	Chock
L901	RCILF1079D8---A	Line Filter
L902	RCILF1079D8---A	Line Filter
NR901	VSHHCK103D8----	Thermistor
POR901	VSQDGC2R14M----	PTC
POR901	VSQ96683-----	Second Source
P002	VCNCP0904REJST-	4 Pin Plug
P201	VCNCP4229-J----	9 Pin Plug
P202	VCNCP4239SE----	9 Pin Plug
P203	VCNCP4238SE----	8 Pin Plug
Q001	VST2SC1815Y---P	SW Transistor
Q001	VST2SC1815Y--8P	SW Transistor
Q002	VST2SC1815Y---P	SW Transistor
Q002	VST2SC1815Y--8P	SW Transistor
Q003	VST2SC1815Y---P	SW Transistor
Q003	VST2SC1815Y--8P	SW Transistor
Q004	VST2SC1815Y---P	SW Transistor
Q004	VST2SC1815Y--8P	SW Transistor
Q005	VST2SC1815Y---P	SW Transistor
Q005	VST2SC1815Y--8P	SW Transistor
Q006	VST2SC1815Y---P	SW Transistor
Q006	VST2SC1815Y--8P	SW Transistor
Q008	VST2SC1815Y---P	SW Transistor
Q008	VST2SC1815Y--8P	SW Transistor
Q200	VST2SC3611---6-	Driver Transistor
Q201	VSTMPS3646----P	Pre-Drive Transistor
Q202	VST2SC2631---6P	Buffer Transistor
Q203	VST2SB716D---HP	Buffer Transistor
Q204	VST2SC1906----P	OSD Pre-Drive Transistor
Q206	VST2SC3811QR-6P	OSD Blanking Control Transistor
Q230	VST2SC3611---6-	Driver Transistor

Q231	VSTMPS3646----	P	Pre-Drive Transistor
Q232	VST2SC2631---	6P	Buffer Transistor or
Q233	VST2SB716D---	HP	Buffer Transistor
Q234	VST2SC1906----	P	OSD Pre-Drive Transistor
Q236	VST2SC3811QR-	6P	OSD Blanking Control Transistor
Q260	VST2SC3611---	6-	Driver Transistor
Q261	VSTMPS3646----	P	Pre-Drive Transistor
Q262	VST2SC2631---	6P	Buffer Transistor or
Q263	VST2SB716D---	HP	Buffer Transistor
Q264	VST2SC1906----	P	OSD Pre-Drive Transistor
Q266	VST2SC3811QR-	6P	OSD Blanking Control Transistor
Q301	VST2SC1815Y---	P	ABL Control Transistor
Q301	VST2SC1815Y--	8P	Second Source
Q302	VST2SC1815Y---	P	Blanking Control Transistor
Q302	VST2SC1815Y--	8P	Second Source
Q600	VSTMPSA06----	MP	Blanking Transistor
Q700	VST2N7000-----	P	SW Mos
Q701	VST2SC1213C---	P	Buffer Transistor
Q703	VST2SD669AC----		H Pre-Amp Transistor
Q704	VSTBU2522AF--	3-	H-Output Drive
Q710	VSTIRFS730---	8-	Step Up Mos
Q710	VSTIRF730FI--	Y-	Second Source
Q711	VST2SB716D---	HP	SW Transistor
Q712	VSTMPSA06----	MP	Blanking Transistor
Q713	VSTMPSA06----	MP	Blanking Transistor
Q714	VST2SA673C----	P	Buffer Transistor
Q715	VST2SC1213C---	P	Buffer Transistor
Q716	VST2SA673C----	P	Buffer Transistor
Q717	VST2SD669AC----		H-Size Control Transistor
Q718	VST2SB716D---	HP	SW Transistor
Q719	VST2SB861C-----		H-Size Control Transistor
Q721	VSTIRF630-----	8-	SW Mos
Q722	VST2SC1815Y---	P	SW Transistor
Q722	VST2SC1815Y--	8P	SW Transistor
Q726	VST2SC1815Y---	P	SW Transistor
Q726	VST2SC1815Y--	8P	SW Transistor
Q727	VSTDTC114ES--	RP	SW Transistor
Q901	VST2SK2038---	D-	Power Mos Switch Transistor
Q901	VST2SK727-01-	V-	Second Source
Q902	VST2SC1815Y---	P	SW Transistor
Q902	VST2SC1815Y--	8P	SW Transistor
Q903	VST2SC1815Y---	P	SW Transistor
Q903	VST2SC1815Y--	8P	SW Transistor
Q905	VST2SB1041R----		SW Transistor
Q906	VST2SC1815Y---	P	SW Transistor
Q906	VST2SC1815Y--	8P	SW Transistor
Q907	VSTDTC114ES--	RP	SW Transistor
Q908	VST2SA1015Y---	P	P-N-P Transistor
Q909	VST2SC1162C----		SW Transistor
Q910	VST2SC1815Y---	P	SW Transistor
Q910	VST2SC1815Y--	8P	SW Transistor
Q911	VST2SC1815Y---	P	SW Transistor
Q911	VST2SC1815Y--	8P	SW Transistor
RL701	RRLYD1078D8DZJ-		Cs Relay
RL901	RRLYD1075D8DZG-		Degauss Relay
R001	VRMPTV4--	106J-U	10M ohm, 1/4W, 5%, Metal Film
R002	VRMPTV4--	565J-U	5.6M ohm, 1/4W, 5%, Metal Film
R003	VRMPTV4--	133J-U	13K ohm, 1/4W, 5%, Metal Film
R004	VRMPTV4--	101J-U	100 ohm, 1/4W, 5%, Metal Film
R005	VRMPTV4--	101J-U	100 ohm, 1/4W, 5%, Metal Film
R006	VRMPTV4--	472J-U	4.7K ohm, 1/4W, 5%, Metal Film
R007	VRMPTV4--	472J-U	4.7K ohm, 1/4W, 5%, Metal Film
R008	VRMPTV4--	103J-U	10K ohm, 1/4W, 5%, Metal Film
R009	VRMPTV4--	103J-U	10K ohm, 1/4W, 5%, Metal Film

R010	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R011	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R012	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R013	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R014	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R015	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R017	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R018	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R019	VRMPTV4--472J-U	4.7K ohm, 1/4W, 5%, Metal Film
R020	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R021	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R022	VRMPTV4--1102F-U	11K ohm, 1/4W, 1%, Metal Film
R023	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R024	VRMPTV4--753J-U	75K ohm, 1/4W, 5%, Metal Film
R025	VRMPTV4--753J-U	75K ohm, 1/4W, 5%, Metal Film
R026	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R027	VRMPTV4--753J-U	75K ohm, 1/4W, 5%, Metal Film
R028	VRMPTV4--753J-U	75K ohm, 1/4W, 5%, Metal Film
R029	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R030	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R031	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R032	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R033	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R034	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R035	VRMPTV4--472J-U	4.7K ohm, 1/4W, 5%, Metal Film
R036	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R037	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R038	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R039	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R040	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R041	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R042	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R043	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R044	VRMPTV4--223J-U	22K ohm, 1/4W, 5%, Metal Film
R045	VRMPTV4--183J-U	18K ohm, 1/4W, 5%, Metal Film
R046	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R047	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R048	VRMPTV4--392J-U	3.9K ohm, 1/4W, 5%, Metal Film
R050	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R051	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R052	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R053	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R054	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R055	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R056	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R058	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R059	VRMPTV4--303J-U	30K ohm, 1/4W, 5%, Metal Film
R060	VRMPTV4--223J-U	22K ohm, 1/4W, 5%, Metal Film
R061	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R062	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R063	VRMPTV4--104J-U	100K ohm, 1/4W, 5%, Metal Film
R064	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R065	VRMPTV4--753J-U	75K ohm, 1/4W, 5%, Metal Film
R066	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R067	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R073	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R074	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R075	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R076	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R078	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R081	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R082	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R083	VRMPTV4--471J-U	470 ohm, 1/4W, 5%, Metal Film
R084	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film

R085	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R086	VRMPTV4--472J-U	4.7K ohm, 1/4W, 5%, Metal Film
R087	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R088	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R089	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R090	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R091	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R092	VRMPTV4--472J-U	4.7K ohm, 1/4W, 5%, Metal Film
R093	VRMPTV4--153J-U	15K ohm, 1/4W, 5%, Metal Film
R094	QJUM-1045D8050-	Jumper
R095	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R097	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R098	VRMPTV4--513J-U	51K ohm, 1/4W, 5%, Metal Film
R099	VRMPTV4--154J-U	150K ohm, 1/4W, 5%, Metal Film
R200	VRMPTV6--183J-U	18K ohm, 1/6W, 5%, Metal Film
R201	VRMPTV6--750J-U	75 ohm, 1/6W, 5%, Metal Film
R202	VRMPTV6--242J-U	2.4K ohm, 1/6W, 5%, Metal Film
R203	VRMPTV4--390J-U	39 ohm, 1/4W, 5%, Metal Film
R204	VRMPTV6--102J-U	1K ohm, 1/6W, 5%, Metal Film
R205	VRMPTV6--101J-U	390 ohm, 1/6W, 5%, Metal Film
R206	VRMPTV6--391J-U	390 ohm, 1/6W, 5%, Metal Film
R207	VRMPTV6--220J-U	22 ohm, 1/6W, 5%, Metal Film
R208	VRNMJ05--122J--	1.2K ohm, 5W, 5%, Metal Oxide Film
R212	QJUM-1045D8050-	Jumper
R213	VRMPTV6--560J-U	56 ohm, 1/6W, 5%, Metal Film
R214	VRMPTV6--101J-U	390 ohm, 1/6W, 5%, Metal Film
R215	VRMPTV4--910J-U	910 ohm, 1/4W, 5%, Metal Film
R216	VRMPTV6--302J-U	3K ohm, 1/6W, 5%, Metal Film
R217	VRMPTV6--220J-U	22 ohm, 1/6W, 5%, Metal Film
R218	VRMPTV6--220J-U	22 ohm, 1/6W, 5%, Metal Film
R220	VRMPTV4--105J-U	1M ohm, 1/4W, 5%, Metal Film
R221	VRMPTV6--101J-U	390 ohm, 1/6W, 5%, Metal Film
R223	VRMPTV4--203J-U	20K ohm, 1/4W, 5%, Metal Film
R226	VRMPTV6--303J-U	30K ohm, 1/6W, 5%, Metal Film
R227	VRMPTV2--101J-U	100 ohm, 1/2W, 5%, Carbon Composition Resistor
R228	VRMPTV6--122J-U	1.2K ohm, 1/6W, 5%, Metal Film
R229	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R230	VRMPTV6--183J-U	18K ohm, 1/6W, 5%, Metal Film
R231	VRMPTV6--750J-U	75 ohm, 1/6W, 5%, Metal Film
R232	VRMPTV6--242J-U	2.4K ohm, 1/6W, 5%, Metal Film
R233	VRMPTV4--390J-U	39 ohm, 1/4W, 5%, Metal Film
R234	VRMPTV6--102J-U	1K ohm, 1/6W, 5%, Metal Film
R235	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R236	VRMPTV6--391J-U	390 ohm, 1/6W, 5%, Metal Film
R237	VRMPTV6--220J-U	22 ohm, 1/6W, 5%, Metal Film
R238	VRNMJ05--122J--	1.2K ohm, 5W, 5%, Metal Oxide Film
R242	QJUM-1045D8050-	Jumper
R243	VRMPTV6--270J-U	27 ohm, 1/6W, 5%, Metal Film
R244	VRMPTV6--101J-U	390 ohm, 1/6W, 5%, Metal Film
R245	VRMPTV4--910J-U	910 ohm, 1/4W, 5%, Metal Film
R246	VRMPTV6--302J-U	3K ohm, 1/6W, 5%, Metal Film
R247	VRMPTV6--220J-U	22 ohm, 1/6W, 5%, Metal Film
R248	VRMPTV6--220J-U	22 ohm, 1/6W, 5%, Metal Film
R250	VRMPTV4--105J-U	1M ohm, 1/4W, 5%, Metal Film
R251	VRMPTV6--101J-U	390 ohm, 1/6W, 5%, Metal Film
R253	VRMPTV4--203J-U	20K ohm, 1/4W, 5%, Metal Film
R256	VRMPTV6--303J-U	30K ohm, 1/6W, 5%, Metal Film
R257	VRMPTV2--101J-U	100 ohm, 1/2W, 5%, Carbon Composition Resistor
R258	VRMPTV6--122J-U	1.2K ohm, 1/6W, 5%, Metal Film
R259	VRMPTV6--101J-U	390 ohm, 1/6W, 5%, Metal Film
R260	VRMPTV6--183J-U	18K ohm, 1/6W, 5%, Metal Film
R261	VRMPTV6--750J-U	75 ohm, 1/6W, 5%, Metal Film
R262	VRMPTV6--242J-U	2.4K ohm, 1/6W, 5%, Metal Film
R263	VRMPTV4--390J-U	39 ohm, 1/4W, 5%, Metal Film

R264	VRMPTV6--102J-U	1K ohm, 1/6W, 5%, Metal Film
R265	VRMPTV6--101J-U	390 ohm, 1/6W, 5%, Metal Film
R266	VRMPTV6--391J-U	390 ohm, 1/6W, 5%, Metal Film
R267	VRMPTV4--220J-U	22 ohm, 1/4W, 5%, Metal Film
R268	VRNMJ05--122J--	1.2K ohm, 5W, 5%, Metal Oxide Film
R272	QJUM-1045D8100-	Jumper
R273	VRMPTV6--270J-U	27 ohm, 1/6W, 5%, Metal Film
R274	VRMPTV6--101J-U	390 ohm, 1/6W, 5%, Metal Film
R275	VRMPTV4--910J-U	910 ohm, 1/4W, 5%, Metal Film
R276	VRMPTV6--302J-U	3K ohm, 1/6W, 5%, Metal Film
R277	VRMPTV6--220J-U	22 ohm, 1/6W, 5%, Metal Film
R278	VRMPTV6--220J-U	22 ohm, 1/6W, 5%, Metal Film
R280	VRMPTV4--105J-U	1M ohm, 1/4W, 5%, Metal Film
R281	VRMPTV6--101J-U	390 ohm, 1/6W, 5%, Metal Film
R283	VRMPTV4--203J-U	20K ohm, 1/4W, 5%, Metal Film
R286	VRMPTV6--303J-U	30K ohm, 1/6W, 5%, Metal Film
R287	VRMPTV2--101J-U	100 ohm, 1/2W, 5%, Carbon Composition Resistor
R288	VRMPTV4--122J-U	1.2K ohm, 1/4W, 5%, Metal Film
R289	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R300	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R301	VRCMTV2--102J-U	1K ohm, 1/2W, 5%, Carbon Film
R302	VRCMTV2--304J-U	300K ohm, 1/2W, 5%, Carbon Film
R303	VRCMTV2--334J-U	330K ohm, 1/2W, 5%, Carbon Film
R304	VRMPTV6--104J-U	100K ohm, 1/6W, 5%, Metal Film
R305	VRMPTV6--102J-U	1K ohm, 1/6W, 5%, Metal Film
R306	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R307	VRMPTV4--393J-U	39K ohm, 1/4W, 5%, Metal Film
R308	VRCMTV2--471J-U	470 ohm, 1/2W, 5%, Carbon Film
R309	VRMPTV6--153J-U	15K ohm, 1/6W, 5%, Metal Film
R310	VRMPTV4--681J-U	680 ohm, 1/4W, 5%, Metal Film
R311	VRMPTV6--202J-U	2K ohm, 1/6W, 5%, Metal Film
R312	VRMPTV6--101J-U	390 ohm, 1/6W, 5%, Metal Film
R313	VRMPTV6--303J-U	30K ohm, 1/6W, 5%, Metal Film
R314	VRMPTV6--101J-U	390 ohm, 1/6W, 5%, Metal Film
R317	VRMPTV4--751J-U	750 ohm, 1/4W, 5%, Metal Film
R320	VRMPTV2--101J-U	100 ohm, 1/2W, 5%, Carbon Composition Resistor
R321	VRMPTV2--564J-U	560K ohm, 1/2W, 5%, Carbon Composition Resistor
R600	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R601	VRMPTV4--223J-U	22K ohm, 1/4W, 5%, Metal Film
R602	VRMPTV4--623J-U	62K ohm, 1/4W, 5%, Metal Film
R604	VRMPTV4--223J-U	22K ohm, 1/4W, 5%, Metal Film
R605	VRMPTV4--623J-U	62K ohm, 1/4W, 5%, Metal Film
R605A	VRMPTV4--334J-U	330K ohm, 1/4W, 5%, Metal Film
R606	VRMPTV4--274J-U	270K ohm, 1/4W, 5%, Metal Film
R606A	VRMPTV4--104J-U	100K ohm, 1/4W, 5%, Metal Film
R607	VRMPTV4-3602F-U	36K ohm, 1/4W, 1%, Metal Film
R608	VRMPTV4-4892F-U	48.9K ohm, 1/4W, 1%, Metal Film
R609	VRMPTV4-3602F-U	36K ohm, 1/4W, 1%, Metal Film
R610	VRMPTV4-2402F-U	24K ohm, 1/4W, 1%, Metal Film
R611	VRMPTV4--562J-U	5.6K ohm, 1/4W, 5%, Metal Film
R612	VRMPTV4--302J-U	3K ohm, 1/4W, 5%, Metal Film
R613	VRMPTV4--562J-U	5.6K ohm, 1/4W, 5%, Metal Film
R614	VRMPTV4--302J-U	3K ohm, 1/4W, 5%, Metal Film
R615	VRNMK01--1R0J--	1 ohm, 1W, 5%, Metal Oxide Film
R617	VRFPK02--100J-U	10 ohm, 1/2W, 5%, Carbon Film
R618	VRCMTV2--1R0J-U	1 ohm, 1/2W, 5%, Carbon Film
R619	VRCMTV2--1R5J-U	1.5 ohm, 1/2W, 5%, Carbon Film
R620	VRCMTV2--471J-U	470 ohm, 1/2W, 5%, Carbon Film
R621	VRMPTV4--152J-U	1.5K ohm, 1/4W, 5%, Metal Film
R622	VRMPTV4--181J-U	180 ohm, 1/4W, 5%, Metal Film
R623	VRMPTV4--222J-U	2.2K ohm, 1/4W, 5%, Metal Film
R7A0	VRMPTV4--104J-U	100K ohm, 1/4W, 5%, Metal Film
R7A1	VRMPTV4--682J-U	6.8K ohm, 1/4W, 5%, Metal Film
R7A2	VRMPTV4--684J-U	680K ohm, 1/4W, 5%, Metal Film

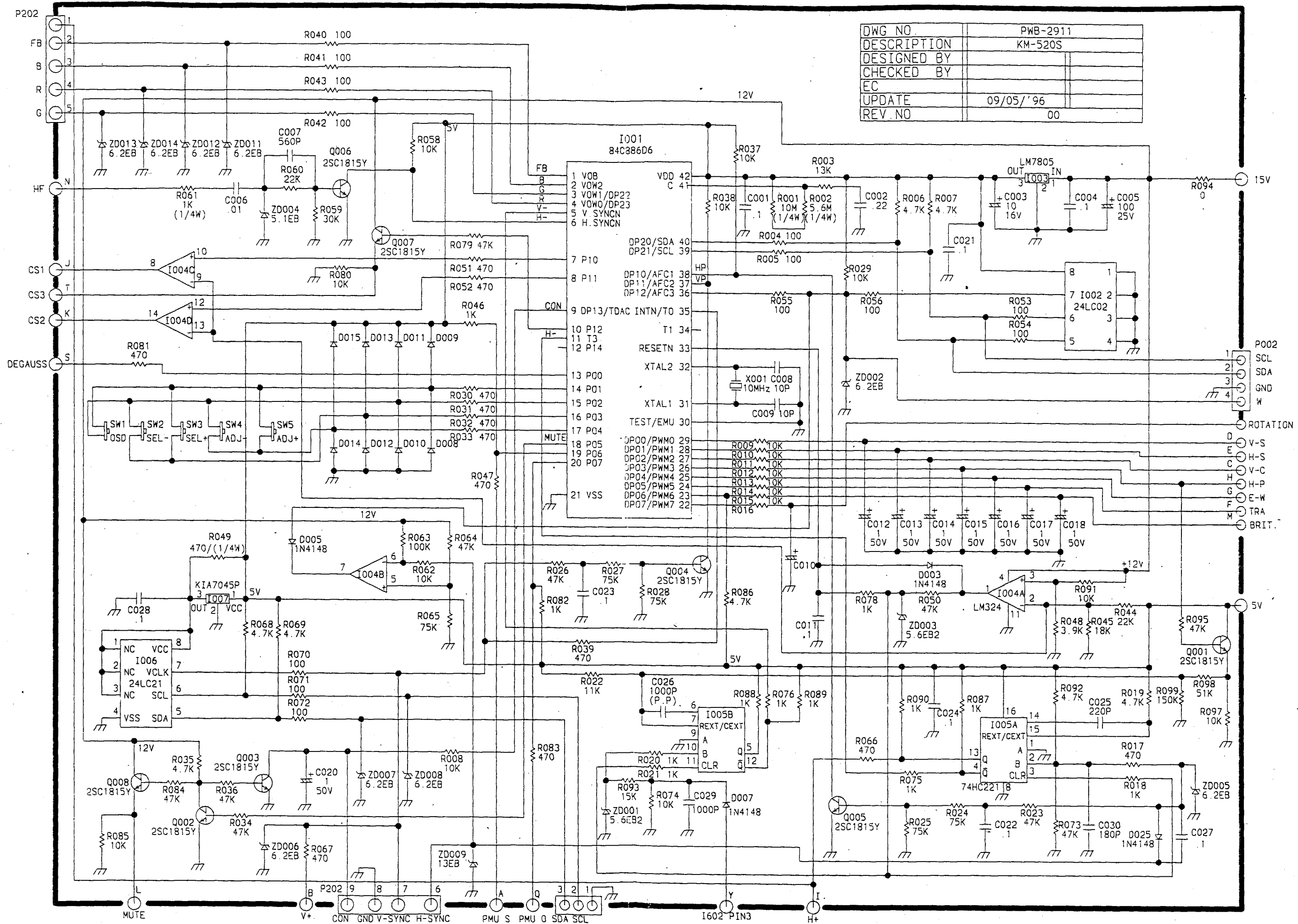
R7A3	VRMPTV4--222J-U	2.2K ohm, 1/4W, 5%, Metal Film
R7A4	VRMPTV4--122J-U	1.2K ohm, 1/4W, 5%, Metal Film
R7A5	VRMPTV4-9310F-U	9.3K ohm, 1/4W, 1%, Metal Film
R7A6	VRMPTV4--392J-U	3.9K ohm, 1/4W, 5%, Metal Film
R7A7	VRMPTV4--221J-U	220 ohm, 1/4W, 5%, Metal Film
R7A8	VRMPTV4--222J-U	2.2K ohm, 1/4W, 5%, Metal Film
R7A9	VRMPTV4--104J-U	100K ohm, 1/4W, 5%, Metal Film
R7C3	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R7C4	VRMPTV4--202J-U	2K ohm, 1/4W, 5%, Metal Film
R7C5	QJUM-1045D8100-	Jumper
R7C7	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R7F2	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R7F3	VRMPTV4--563J-U	56K ohm, 1/4W, 5%, Metal Film
R7F4	VRMPTV4--203J-U	20K ohm, 1/4W, 5%, Metal Film
R701	VRMPTV4--223J-U	22K ohm, 1/4W, 5%, Metal Film
R702	VRMPTV4--223J-U	22K ohm, 1/4W, 5%, Metal Film
R703	VRMPTV4--223J-U	22K ohm, 1/4W, 5%, Metal Film
R704	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R705	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R706	VRMPTV4--623J-U	62K ohm, 1/4W, 5%, Metal Film
R707	VRMPTV4--124J-U	120K ohm, 1/4W, 5%, Metal Film
R711	VRMPTV4--104J-U	100K ohm, 1/4W, 5%, Metal Film
R712	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R713	VRMPTV4-7501F-U	7.5K ohm, 1/4W, 1%, Metal Film
R714	VRMPTV4--182J-U	1.8K ohm, 1/4W, 5%, Metal Film
R715	VRMPTV4-1502F-U	15K ohm, 1/4W, 1%, Metal Film
R716	VRMPTV4-1802F-U	18K ohm, 1/4W, 1%, Metal Film
R717	VRMPTV4--363J-U	36K ohm, 1/4W, 5%, Metal Film
R718	VRMPTV4--363J-U	36K ohm, 1/4W, 5%, Metal Film
R719	VRMPTV4--472J-U	4.7K ohm, 1/4W, 5%, Metal Film
R720	VRMPTV4--124J-U	120K ohm, 1/4W, 5%, Metal Film
R721	VRMPTV4--332J-U	3.3K ohm, 1/4W, 5%, Metal Film
R724	VRMPTV4--124J-U	120K ohm, 1/4W, 5%, Metal Film
R724A	VRMPTV4--105J-U	1M ohm, 1/4W, 5%, Metal Film
R725	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R726	VRMPTV4--472J-U	4.7K ohm, 1/4W, 5%, Metal Film
R727	VRMPTV4--822J-U	8.8K ohm, 1/4W, 5%, Metal Film
R728	VRMPTV4--303J-U	30K ohm, 1/4W, 5%, Metal Film
R729	VRMPTV4--472J-U	4.7K ohm, 1/4W, 5%, Metal Film
R730	VRMPTV4--682J-U	6.8K ohm, 1/4W, 5%, Metal Film
R731	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R732	VRMPTV4--472J-U	4.7K ohm, 1/4W, 5%, Metal Film
R733	VRMPTV4--913J-U	91K ohm, 1/4W, 5%, Metal Film
R734	VRMPTV4--303J-U	30K ohm, 1/4W, 5%, Metal Film
R735	VRMPTV4--243J-U	24K ohm, 1/4W, 5%, Metal Film
R736	VRMPTV4--123J-U	12K ohm, 1/4W, 5%, Metal Film
R737	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R738	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R739	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R740	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R741	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R742	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R744	VRMPTV4--100J-U	10 ohm, 1/4W, 5%, Metal Film
R746	VRCMTV2--561J-U	560 ohm, 1/2W, 5%, Carbon Film
R747	VRNMK02--333J--	33K ohm, 2W, 5%, Metal Oxide Film
R748	VRMPTV4--681J-U	680 ohm, 1/4W, 5%, Metal Film
R750	VRMPTV4--332J-U	3.3K ohm, 1/4W, 5%, Metal Film
R751	VRNMK05--331J--	330 ohm, 5W, 5%, Metal Oxide Film
R752	VRNMK02--1R0J--	1 ohm, 2W, 5%, Metal Oxide Film
R753	VRCMTV2--5R6J-U	5.6 ohm, 1/2W, 5%, Carbon Film
R754	VRMPTV4--220J-U	22 ohm, 1/4W, 5%, Metal Film
R755	VRMPTV4--472J-U	4.7K ohm, 1/4W, 5%, Metal Film
R756	VRMPTV4--223J-U	22K ohm, 1/4W, 5%, Metal Film
R757	VRMPTV4--560J-U	56 ohm, 1/4W, 5%, Metal Film

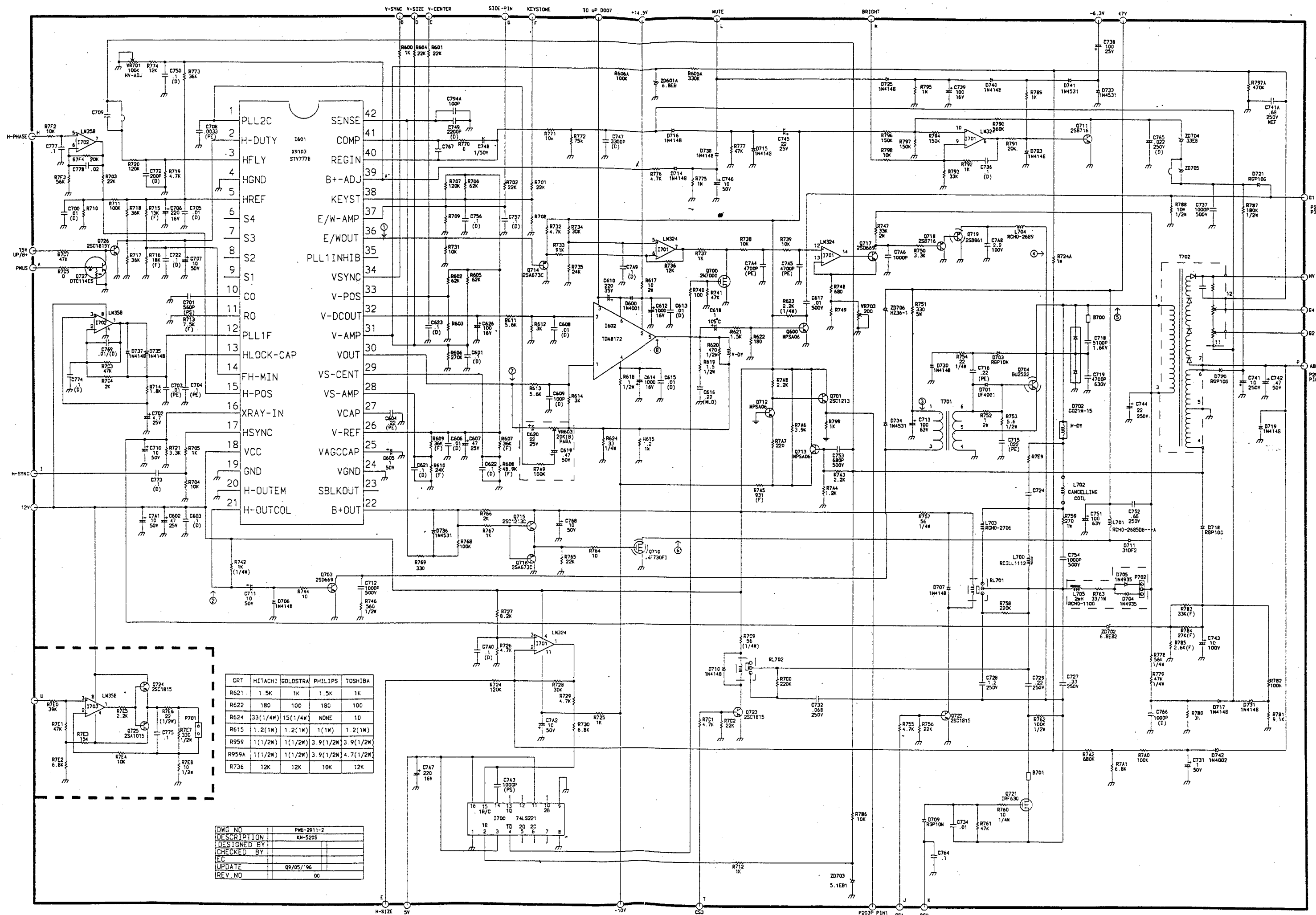
R758	VRMPTV4--224J-U	220K ohm, 1/4W, 5%, Metal Film
R759	VRNMK01--271J--	270 ohm, 1W, 5%, Metal Oxide Film
R760	VRMPTV4--100J-U	10 ohm, 1/4W, 5%, Metal Film
R761	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R762	VRCMTV2--104J-U	100K ohm, 1/2W, 5%, Carbon Film
R764	VRMPTV4--100J-U	10 ohm, 1/4W, 5%, Metal Film
R765	VRMPTV4--223J-U	22K ohm, 1/4W, 5%, Metal Film
R766	VRMPTV4--202J-U	2K ohm, 1/4W, 5%, Metal Film
R767	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R768	VRMPTV4--104J-U	100K ohm, 1/4W, 5%, Metal Film
R769	VRMPTV4--331J-U	330 ohm, 1/4W, 5%, Metal Film
R770	QJUM-1045D8100-	Jumper
R771	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R772	VRMPTV4--753J-U	75K ohm, 1/4W, 5%, Metal Film
R773	VRMPTV4--363J-U	36K ohm, 1/4W, 5%, Metal Film
R774	VRMPTV4--123J-U	12K ohm, 1/4W, 5%, Metal Film
R775	VRMPTV4--105J-U	1M ohm, 1/4W, 5%, Metal Film
R776	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R777	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R778	VRMPTV4--563J-U	56K ohm, 1/4W, 5%, Metal Film
R779	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R780	VRMPTV4--302J-U	3K ohm, 1/4W, 5%, Metal Film
R781	VRMPTV4--912J-U	9.1K ohm, 1/4W, 5%, Metal Film
R782	VRMPTV4--104J-U	100K ohm, 1/4W, 5%, Metal Film
R783	VRMPTV4-3302F-U	33K ohm, 1/4W, 1%, Metal Film
R784	VRMPTV4-2702F-U	27K ohm, 1/4W, 1%, Metal Film
R785	VRMPTV4-2611F-U	2.61K ohm, 1/4W, 1%, Metal Film
R786	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R787	VRCMTV2--184J-U	180K ohm, 1/2W, 5%, Carbon Film
R788	VRCMTV2--106J-U	10M ohm, 1/2W, 5%, Carbon Film
R789	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R790	VRMPTV4--564J-U	560K ohm, 1/4W, 5%, Metal Film
R791	VRMPTV4--203J-U	20K ohm, 1/4W, 5%, Metal Film
R792	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R793	VRMPTV4--333J-U	33K ohm, 1/4W, 5%, Metal Film
R794	VRMPTV4--154J-U	150K ohm, 1/4W, 5%, Metal Film
R795	VRMPTV4--105J-U	1M ohm, 1/4W, 5%, Metal Film
R796	VRMPTV4--154J-U	150K ohm, 1/4W, 5%, Metal Film
R797	VRMPTV4--154J-U	150K ohm, 1/4W, 5%, Metal Film
R797A	VRMPTV4--474J-U	470K ohm, 1/4W, 5%, Metal Film
R798	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R799	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R901	VRCMTV2--564J-U	560K ohm, 1/2W, 5%, Carbon Film
R902	VRLCP05--333JX-	33K ohm, 5W, 5%, Cement Film
R903	VRNMK03--222J--	2.2K ohm, 3W, 5%, Metal Oxide Film
R904	VRNMK03--222J--	2.2K ohm, 3W, 5%, Metal Oxide Film
R906	VRNMK01--120J--	12 ohm, 1W, 5%, Metal Oxide Film
R908	VRNMK02--823J--	82K ohm, 2W, 5%, Metal Oxide Film
R909	VRNMK02--823J--	82K ohm, 2W, 5%, Metal Oxide Film
R911	VRMPTV4--4R7J-U	4.7 ohm, 1/4W, 5%, Metal Film
R912	VRCMTV2--120J-U	12 ohm, 1/2W, 5%, Carbon Film
R913	VRMPTV4--104J-U	100K ohm, 1/4W, 5%, Metal Film
R914	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R915	VRLK02--R20J--	.2 ohm, 2W, 5%, Wire Wound Fixed
R916	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R918	VRMPTV4--101J-U	100 ohm, 1/4W, 5%, Metal Film
R919	VRMPTV4--183G-U	18K ohm, 1/4W, 1%, Metal Film
R920	VRMPTV4--154J-U	150K ohm, 1/4W, 5%, Metal Film
R921	VRMPTV4--332J-U	3.3K ohm, 1/4W, 5%, Metal Film
R922	VRMPTV4--332J-U	3.3K ohm, 1/4W, 5%, Metal Film
R923	VRMPTV4--272J-U	2.7K ohm, 1/4W, 5%, Metal Film
R924	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R925	VRMPTV4--223J-U	22K ohm, 1/4W, 5%, Metal Film
R926	VRCMTV2--101J-U	100 ohm, 1/2W, 5%, Carbon Film

R927	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R928	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R929	VRMPTV4--104J-U	100K ohm, 1/4W, 5%, Metal Film
R951	VRNMK02--472J--	4.7K ohm, 2W, 5%, Metal Oxide Film
R953	VRMPTV4--102J-U	1K ohm, 1/4W, 5%, Metal Film
R954	VRCMTV2--821J-U	820 ohm, 1/2W, 5%, Carbon Film
R955	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R957	VRMPTV4--473J-U	47K ohm, 1/4W, 5%, Metal Film
R958	VRMPTV4--242J-U	2.4K ohm, 1/4W, 5%, Metal Film
R959	VRCMTV2--3R9J-U	3.9 ohm, 1/2W, 5%, Carbon Film
R959A	VRCMTV2--3R9J-U	3.9 ohm, 1/2W, 5%, Carbon Film
R960	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R961	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R962	VRCMTV2--681J-U	680 ohm, 1/2W, 5%, Carbon Film
R963	VRMPTV4--153J-U	15K ohm, 1/4W, 5%, Metal Film
R964	VRMPTV4--103J-U	10K ohm, 1/4W, 5%, Metal Film
R965	VRMPTV4--103J-U	10 ohm, 1/4W, 5%, Metal Film
R966	VRMPTV4--221J-U	220 ohm, 1/4W, 5%, Metal Film
R967	VRMPTV4--331J-U	330 ohm, 1/4W, 5%, Metal Film
R970	VRMPTV4--122J-U	1.2K ohm, 1/4W, 5%, Metal Film
R971	VRMPTV4--152J-U	1.5K ohm, 1/4W, 5%, Metal Film
R972	VRMPTV4--332J-U	3.3K ohm, 1/4W, 5%, Metal Film
R976	VRFPK01--R47J--	.47 ohm, 1W, 5%, Fusing Resistor
SO901	QSOCP1312D8----	AC Inlet
SO902	VCNCP0012-----U	Degauss Plug
SW901	QSW-P1265D8----	Power Switch
S100	QSW-A1084D8----	Tack SW
T701	RTRND1069D8---A	Pre-Amp Drive
T702	DFBTEC047-151BB	FBT
T901	RCVTP3110D8---A	Power Converter
VR201	RVRSV6022D8103-	SUB-Cont-B
VR225	RVRSV6022D8203-	B-Bias
VR231	RVRSV6022D8103-	SUB-Cont-R
VR255	RVRSV6022D8203-	R-Bias
VR261	RVRSV6022D8103-	SUB-Cont-G
VR285	RVRSV6022D8203-	G-Bias
VR603	RVRSV6022D8203-	Parallelgram-Adj
VR701	RVRSV6022D8104-	HV-Adj
VR701	RVRSV6023D8104-	Second Source
VR703	RVRSH6022D8201-	H-Size Adj
VR901	RVRSH6022D8501-	B+-Adj
X001	RCRSL1122D8--C-	Crystal
ZD001	VSZRD5.6EB2---U	Zener
ZD002	VSZRD6.2EB----U	Zener
ZD002	VSZMTZJ6.2B---U	Second Source
ZD003	VSZRD5.6EB2---U	Zener
ZD004	VSZRD5.1EB----U	Zener
ZD005	VSZRD6.2EB----U	Zener
ZD005	VSZMTZJ6.2B---U	Second Source
ZD006	VSZRD6.2EB----U	Zener
ZD006	VSZMTZJ6.2B---U	Second Source
ZD009	VSZRD13EB-----U	Zener
ZD010	VSZRD6.2EB----U	Zener
ZD010	VSZMTZJ6.2B---U	Second Source
ZD011	VSZRD6.2EB----U	Zener
ZD011	VSZMTZJ6.2B---U	Second Source
ZD012	VSZRD6.2EB----U	Zener
ZD012	VSZMTZJ6.2B---U	Second Source
ZD013	VSZRD6.2EB----U	Zener
ZD013	VSZMTZJ6.2B---U	Second Source
ZD301	VSZRD5.1EB1---U	Zener
ZD302	VSZRD9.1EB2---U	Zener
ZD601A	VSZRD6.8EB2---U	Zener
ZD702	VSZRD6.8EB2---U	Zener

ZD703	VSZRD5.1EB1---U	Zener
ZD704	VSZRD33EB-----U	Zener
ZD705	QJUM-1045D8100-	Jumper
ZD706	VSZHZ36-1-----U	Zener
ZD903	VSZRD8.2EB2---U	Zener

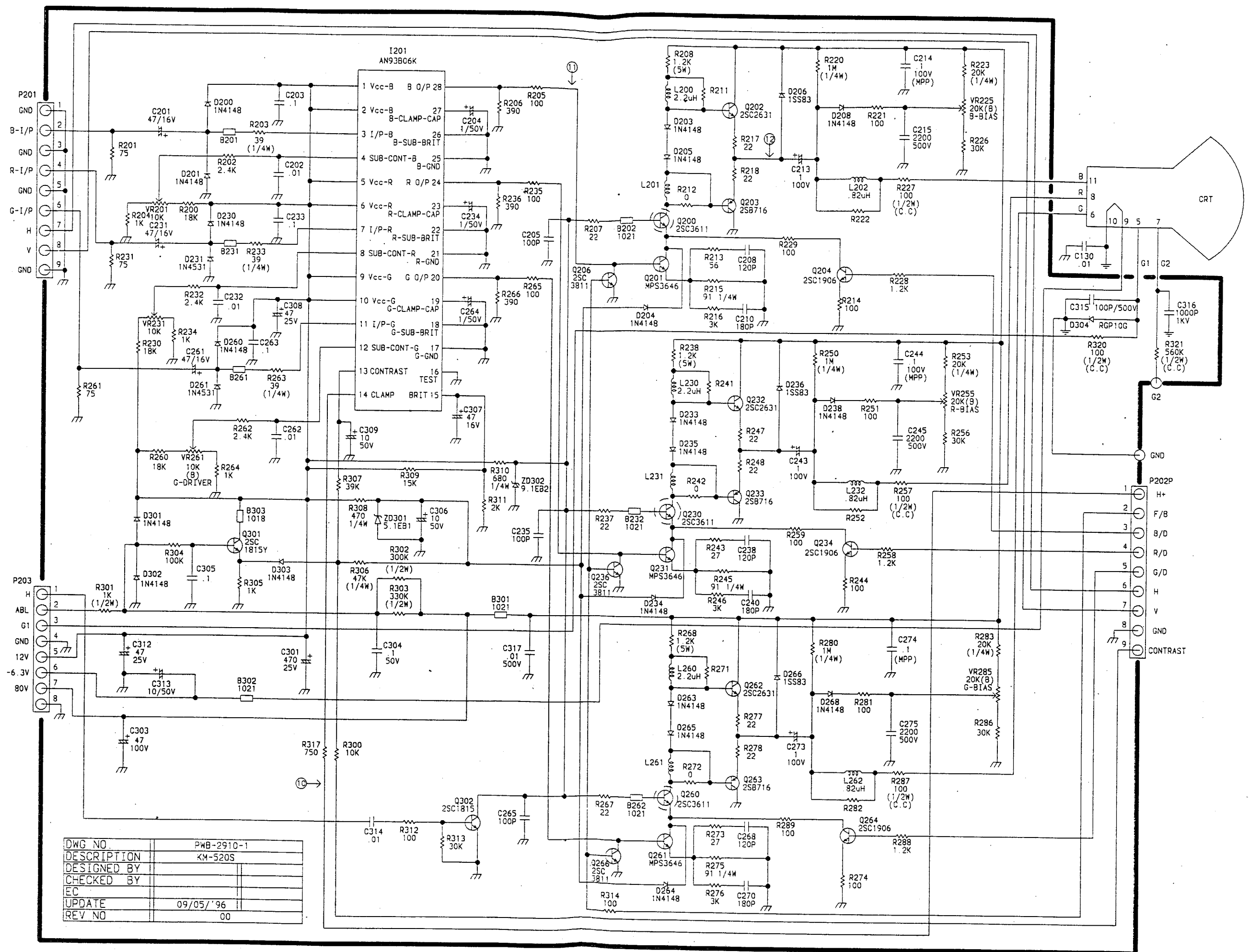
DWG NO.	PWB-2911
DESCRIPTION	KM-520S
DESIGNED BY	
CHECKED BY	
EC	
UPDATE	09/05/'96
REV. NO	00



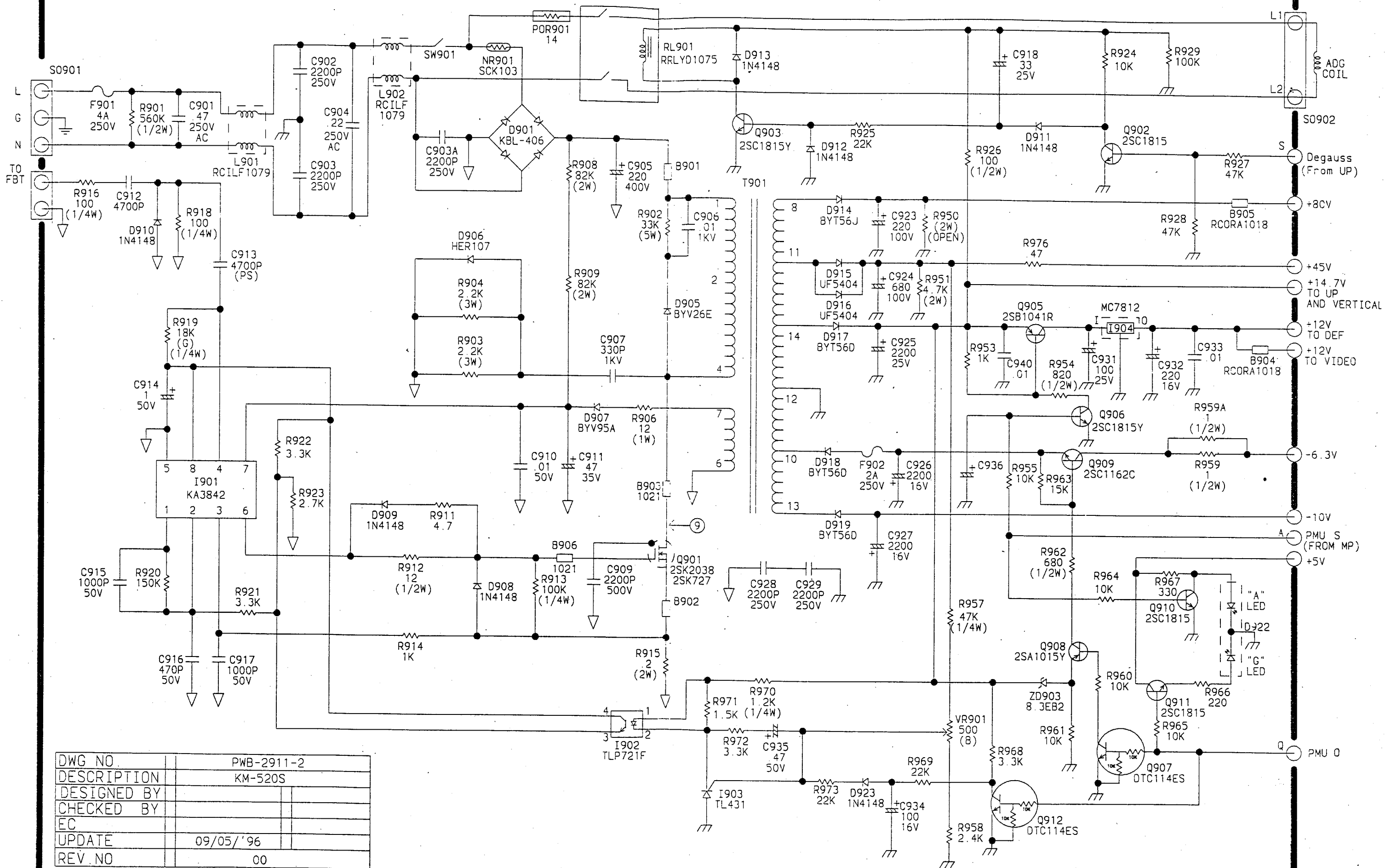


	CRT	HITACHI	GOLDSTRA	PHILIPS	TOSHIBA
R621	1.5K	1K	1.5K	1K	
R622	180	100	180	100	
R624	33(1/4W)	15(1/4W)	NONE	10	
R615	1.2(1W)	1.2(1W)	1(1W)	1.2(1W)	
R959	1(1/2W)	1(1/2W)	3.9(1/2W)	3.9(1/2W)	
R959A	1(1/2W)	1(1/2W)	3.9(1/2W)	4.7(1/2W)	
R736	12K	12K	10K	12K	

DWG NO	PWB-2911-2
DESCRIPTION	KW-5205
DESIGNED BY	
CHECKED BY	
EC	
UPDATE	09/05/96
REV. NO	00



DWG NO.	PWB-2910-1
DESCRIPTION	KM-520S
DESIGNED BY	
CHECKED BY	
EC	
UPDATE	09/05/'96
REV NO	00



DWG NO.	PWB-2911-2
DESCRIPTION	KM-520S
DESIGNED BY	
CHECKED BY	
EC	
UPDATE	09/05/'96
REV. NO	00

KM-520

