



LG

COLOR MONITOR **SERVICE MANUAL**

CHASSIS NO. : CA-133

FACTORY MODEL: 500EJ

MODEL: StudioWorks 500E (500EJ-ALM)
StudioWorks 500G (500EJ-AL**A)**

() **Same model for Service

CAUTION

BEFORE SERVICING THE UNIT,
READ THE **SAFETY PRECAUTIONS** IN THIS MANUAL.



*Same looking with new chassis.

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SPECIFICATIONS

1. PICTURE TUBE

Size	: 15 inch (Flat Square Tube)
Deflection Angle	: 90°
Neck Diameter	: 29.1 mm
Dot Pitch	: 0.28 mm
Face Treatment	: AR-ASC (Anti-Reflection and Anti-Static Coating) AG(Anti-Glare)
Low Radiation	: MPR-II, NON MPR II

2. SIGNAL

2-1. Horizontal & Vertical Sync

- 1) Input Voltage Level : Low= 0~1.2V, High= 2.5~5.5V
- 2) Sync Polarity : Positive or Negative

2-2. Video Input Signal

- 1) Voltage Level : 0 ~ 0.7 Vp-p
- a) Color 0, 0 : 0 Vp-p
- b) Color 7, 0 : 0.467 Vp-p
- c) Color 15, 0 : 0.7 Vp-p
- 2) Input Impedance : 75 Ω
- 3) Video Color : R, G, B Analog
- 4) Signal Format : Refer to the Timing Chart

2-3. Signal Connector

15-pin D-Sub Connector (Attached Type)

2-4. Scanning Frequency

- Horizontal : 30 ~ 54 kHz
- Vertical : 50 ~ 120 Hz

3. POWER SUPPLY

3-1. Power Range

AC 100~240V (Free Voltage), 50/60Hz, 1.0A Max.

3-2. Power Consumption

MODE	POWER CONSUMPTION	LED COLOR
MAX	75 W	GREEN
NORMAL (ON)	63 W	GREEN
STAND-BY	less than 15 W	AMBER
SUSPEND		
OFF	less than 5 W	AMBER

4. DISPLAY AREA

- 4-1. Active Video Area :
- 285 x 215 mm (11.22" x 8.46") - Max Image Size
- 270 x 200 mm (10.63" x 7.87") - Preset Image Size

- 4-2. Display Color : Full Colors

- 4-3. Display Resolution : 1024 x 768 / 60Hz
(Non-Interlace)

- 4-4. Video Bandwidth : 65 MHz

5. ENVIRONMENT

- 5-1. Operating Temperature: 10°C ~ 40°C
(Ambient)

- 5-2. Relative Humidity : 10%~ 90%
(Non-condensing)

- 5-3. Altitude : 3,000 m

6. DIMENSIONS (with TILT/SWIVEL)

- Width : 356.0 mm (14.01")
- Depth : 395.0 mm (14.37")
- Height : 371.0 mm (14.61")

7. WEIGHT (with TILT/SWIVEL)

- Net Weight : 11.5 kg (25.36 lbs)
- Gross Weight : 13.7 kg (30.21 lbs)

SAFETY PRECAUTIONS

SAFETY-RELATED COMPONENT WARNING!

There are special components used in this color monitor which are important for safety. **These parts are marked  on the schematic diagram and the replacement parts list.** It is essential that these critical parts should be replaced with the manufacturer's specified parts to prevent X-radiation, shock, fire, or other hazards. Do not modify the original design without obtaining written permission from manufacturer or you will void the original parts and labor guarantee.

CAUTION: No modification of any circuit should be attempted.

Service work should be performed only after you are thoroughly familiar with all of the following safety checks and servicing guidelines.

SAFETY CHECK

Care should be taken while servicing this color monitor because of the high voltage used in the deflection circuits. These voltages are exposed in such areas as the associated flyback and yoke circuits.

FIRE & SHOCK HAZARD

An isolation transformer must be inserted between the color monitor and AC power line before servicing the chassis.

- In servicing, attention must be paid to the original lead dress specially in the high voltage circuit. If a short circuit is found, replace all parts which have been overheated as a result of the short circuit.
- All the protective devices must be reinstalled per the original design.
- Soldering must be inspected for the cold solder joints, frayed leads, damaged insulation, solder splashes, or the sharp points. Be sure to remove all foreign materials.

IMPLOSION PROTECTION

All used display tubes are equipped with an integral implosion protection system, but care should be taken to avoid damage and scratching during installation. Use only same type display tubes.

X-RADIATION

The only potential source of X-radiation is the picture tube. However, when the high voltage circuitry is operating properly there is no possibility of an X-radiation problem. The basic precaution which must be exercised is keep the high voltage at the factory recommended level; the normal high voltage is about 24.5kV. The following steps describe how to measure the high voltage and how to prevent X-radiation.

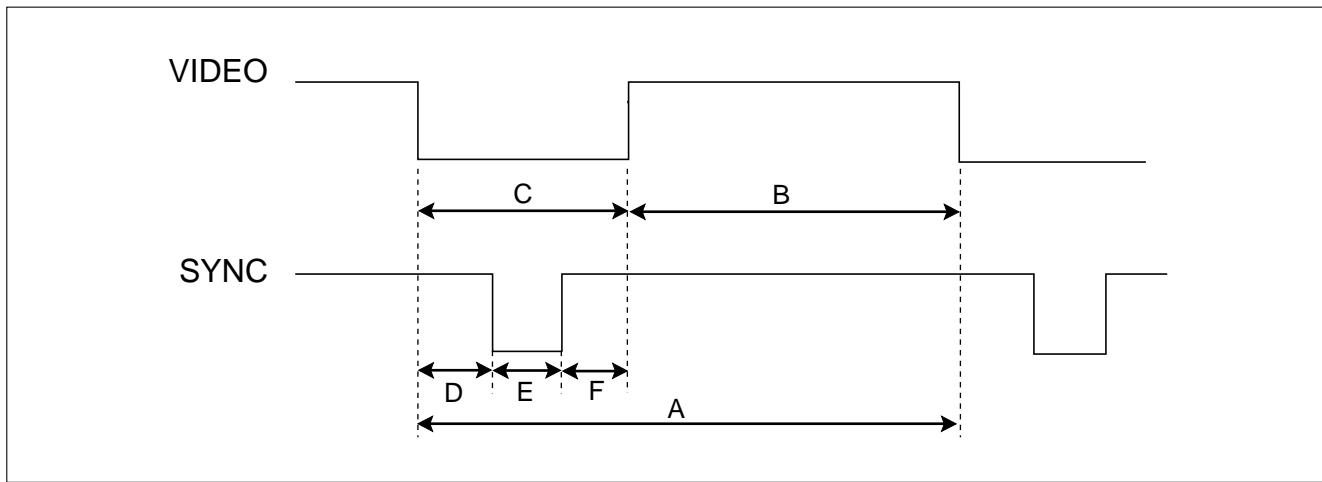
Note : It is important to use an accurate high voltage meter calibrated periodically.

- To measure the high voltage, use a high impedance high voltage meter, connect (-) to chassis and (+) to the CDT anode cap.
- Set the brightness control to maximum point at full white pattern.
- Measure the high voltage. The high voltage meter should be indicated at the factory recommended level.
- If the meter indication exceeds the maximum level, immediate service is required to prevent the possibility of premature component failure.
- To prevent X-radiation possibility, it is essential to use the specified picture tube.

CAUTION:

Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

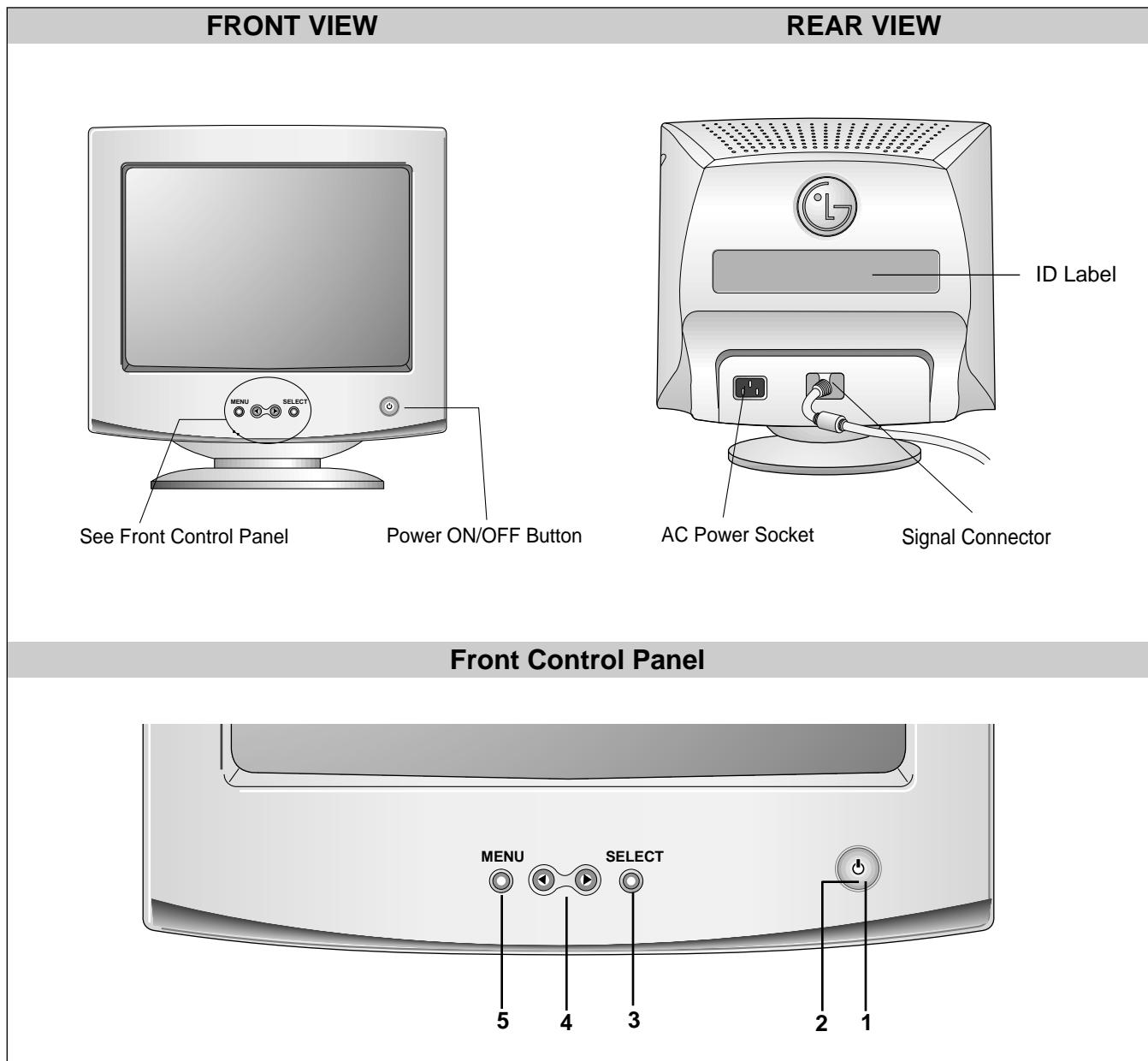
TIMING CHART



<< Dot Clock (**MHz**), Horizontal Frequency (**kHz**), Vertical Frequency (**Hz**), Horizontal etc... (**μs**), Vertical etc... (**ms**) >>

Mode	H/V Sort	Sync Polarity	Frequency	Total Period (E)	Video Active Time (A)	Blanking Time (B)	Sync Duration (D)	Back Porch (C)	Front Porch (F)	Resolution
1	H	-	31.47	31.78	25.42	6.36	3.81	1.91	0.64	640x480
	V	-	59.94	16.684	15.254	1.430	0.063	1.049	0.318	60Hz
2	H	+	37.50	26.67	20.32	6.35	2.03	3.81	0.51	640x480
	V	+	74.99	13.335	12.802	0.533	0.080	0.427	0.026	75Hz
3	H	+	48.363	20.667	15.574	4.923	2.092	2.462	0.369	1024x768
	V	+	60.004	16.666	15.880	0.786	0.124	0.600	0.062	60Hz
4	H	+	53.68	18.63	14.22	4.41	1.14	2.70	0.57	800x600
	V	+	85.07	11.755	11.178	0.577	0.056	0.503	0.018	85Hz

OPERATING INSTRUCTIONS



1. Power ON/OFF Button

Use this button to turn the monitor on or off.

2. Power Indicator

This indicator lights up green when the monitor operates normally; in DPMS (Energy Saving) mode, - stand-by, suspend, or power off mode - its color changes to orange, and if abnormal or damaging circuit turns out orange blink.

3. SELECT Button

Use this button to enter a selection in the on screen display.

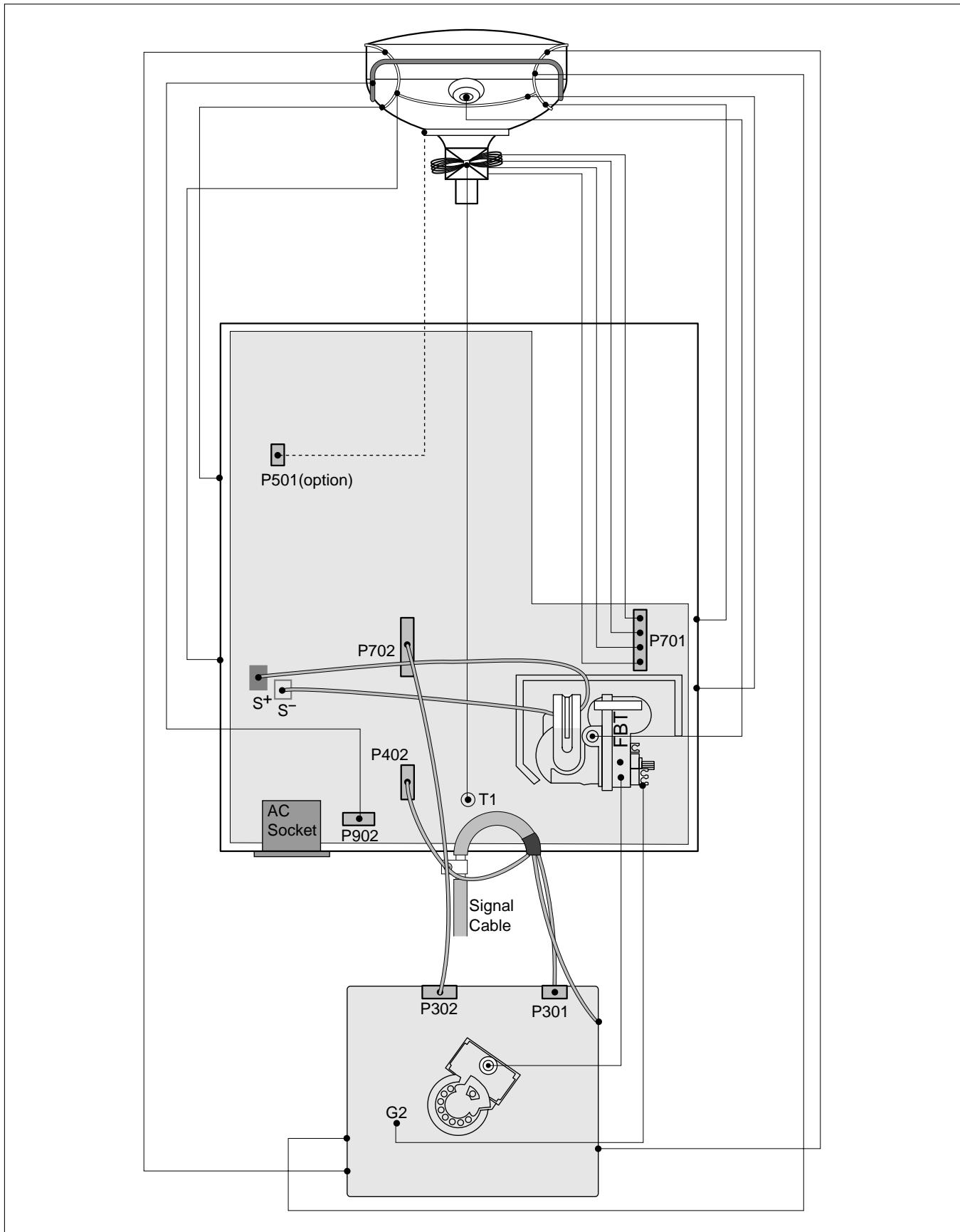
4. SET Button

Use these buttons to choose or adjust items in the on screen display.

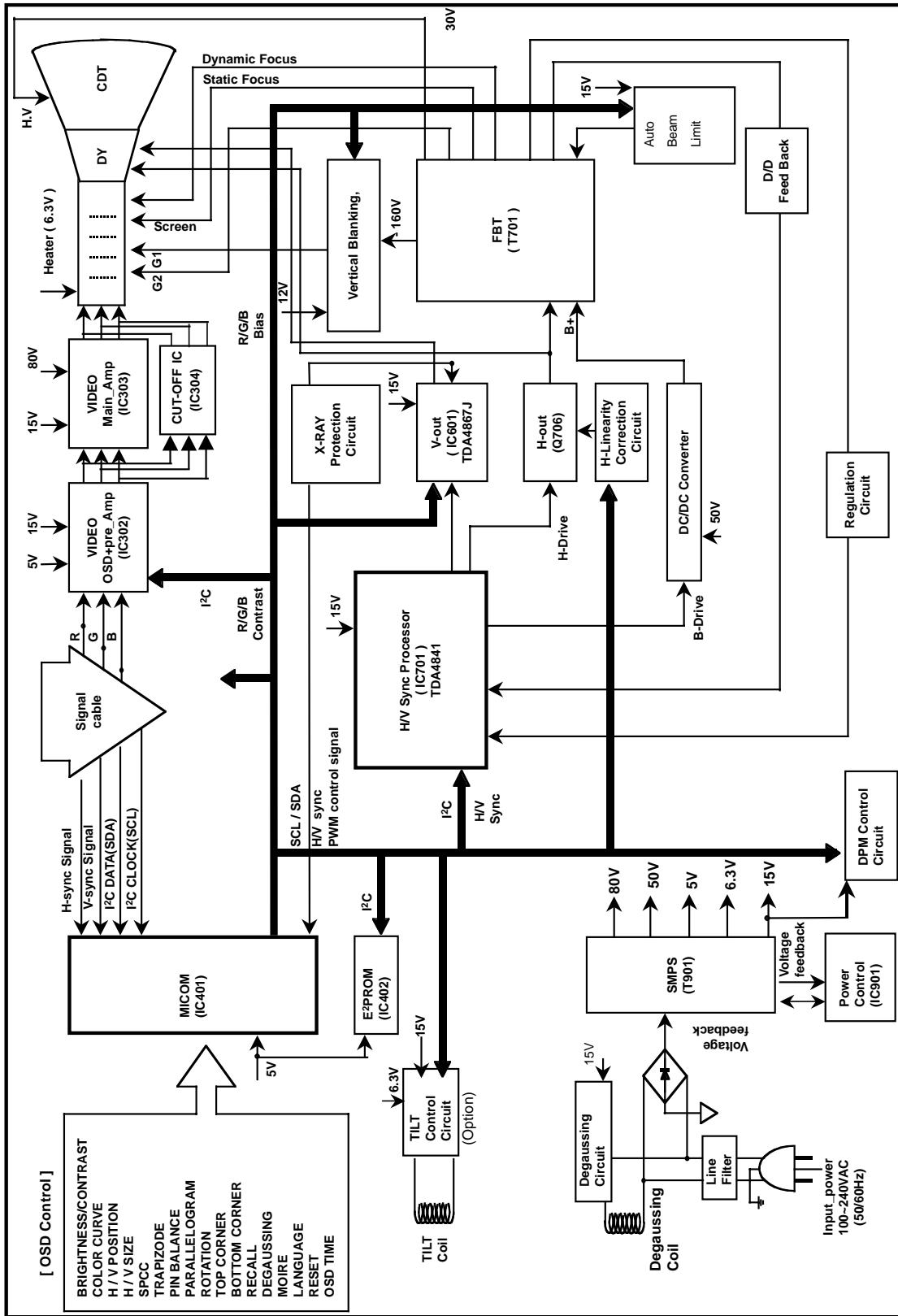
5. MENU Button

Use this button to enter or exit the on screen display.

WIRING DIAGRAM



BLOCK DIAGRAM



DESCRIPTION OF BLOCK DIAGRAM

1. Line Filter & Associated Circuit

This is used for suppressing noise of power input line flowing into the monitor and/or some noise generated in the monitor flowing out through the power input line. That is to say, this circuit prevents interference between the monitor and other electric appliance.

2. Degaussing Circuit Coil.

The degaussing circuit consists of the degaussing coil, the PTC(Positive Temperature Coefficient) thermistor (TH901), and the relay(RL901). This circuit eliminates abnormal color of the screen automatically by degaussing the shadow mask in the CRT during turning on the power switch. When you need to degaussing in using the monitor, select DEGAUSS on the OSD menu.

3. SMPS(Switching Mode Power Supply).

This circuit is working of 90~264V AC(50/60Hz).

The operation procedure is as below:

- 1) AC input voltage is rectified and smoothed by the bridge diodes(D900) and the capacitor.
- 2) The rectified voltage(DC) is applied to the primary coil of the transformer(T901).
- 3) The control IC(IC901) generates switching pulse to turn on and off the primary coil of the transformer (T901) repeatedly.
- 4) Depending on turn ratio of the transformer, the secondary voltage appears at the secondary coils of the transformer(T901).
- 5) These secondary voltage are rectified by each diode (D941,D951,D961,D971,D942) and operate other circuit.(horizontal and vertical deflection, video amplifier,...etc.)

4. X-ray Protection Circuit

When the high voltage reaches to 29kV in an abnormal state), voltage of IC401(MICOM) pin 35 come to about 2.5V.

Then MICOM control IC701 (Deflection controller) to stop horizontal drive pulse and stop horizontal deflection.

5. Microprocessor Control Circuit

The operating procedure of MICOM(Microprocessor) and its associating circuit is as follow:

- 1) Horizontal and Vertical sync signals are supplied from the signal cable.
- 2) Microprocessor(IC401) discriminates the operating mode from the sync polarity and resolution.
- 3) The Micom sets operating mode and offers the controlled data.(H-Size,H-Position,V-Size,...)
- 4) The controlled data of each mode is stored in itself.
- 5) User can adjust screen condition by each OSD function. the data of the adjusted condition is stored in EEPROM(IC402).

6. Horizontal and Vertical Oscillation

This circuit generates the horizontal pulse and the vertical pulse by taking the H and V sync signal.

This circuit consists of the H/V processor(IC701) and the associate circuit.

7. D/D(DC to DC) Converter

This circuit supplies DC voltage to the horizontal deflection output circuit by increasing DC 50V which is the secondary voltage of the SMPS in accordance with the input horizontal sync signal.

8. Side-Pincushion & Trapezoid Correction Circuit

This circuit improves the side-pincushion and the trapezoid distortion of the screen by mixing parabola and saw-tooth wave to output of the horizontal deflection D/D converter which is used for the supply voltage (B+) of the deflection circuit.

9. Horizontal Deflection Output Circuit

This circuit makes the horizontal deflection by supplying the saw-tooth current to the horizontal deflection yoke.

10. High Voltage Output & FBT(Flyback Transformer)

The high voltage output circuit is used for generating pulse to the primary coil of the FBT(Flyback Transformer(T701)). A boosted voltage about 24.5kV appears at the secondary of the FBT and it is supplied to the anode, focus, and screen voltage of the CRT.

11. H-Linearity Correction Circuit

This circuit corrects the horizontal linearity for each horizontal sync frequency.

12. Vertical Output Circuit

This circuit takes the vertical ramp wave from the IC701 and performs the vertical deflection by supplying the saw-tooth current to the vertical deflection yoke.

13. H & V Blanking and Brightness Control

Blanking circuit eliminates retrace line by supplying negative pulse to the G1 of the CRT. And Brightness control uses the R/G/B cut-off DC Level by IIC line.

14. Image Rotation(Tilt)Circuit-Option

This circuit corrects the tilts of the screen by supplying the image rotation signal to the tilt which is attached near the deflection yoke of the CRT.

15. Video Pre-AMP Circuit

This circuit amplifies the analog video signal from 0-0.7V to 0-4V. It is operated by taking the clamp,R,G,B drive and contrast signal from the MICOM(IC401).

16. Video Output AMP Circuit

This circuit amplifies the video signal which comes from the video pre-amp circuit and amplifies it to apply the CRT cathode.

ADJUSTMENT

GENERAL INFORMATION

All adjustment are thoroughly checked and corrected when the monitor leaves the factory, but sometimes several adjustments may be required.

Adjustment should be following procedure and after warming up for a minimum of 30 minutes.

- Alignment appliances and tools.
 - IBM compatible PC.
 - Programmable Signal Generator.
(eg. VG-819 made by Astrodesign Co.)
 - EPROM or EEPROM with saved each mode data.
 - Alignment Adaptor and Software.
 - Digital Voltmeter.
 - White Balance Meter.
 - Luminance Meter.
 - High-voltage Meter.

AUTOMATIC AND MANUAL DEGAUSSING

The degaussing coil is mounted around the CDT so that automatic degaussing when turn on the monitor. But a monitor is moved or faced in a different direction, become poor color purity cause of CDT magnetized, then press DEGAUSS on the OSD menu.

ADJUSTMENT PROCEDURE & METHOD

- Install the cable for adjustment such as Figure 1 and run the alignment program on the DOS for IBM compatible PC.
- Set external Brightness and Contrast volume to max position.

1. Checked for B⁺ Voltage.

- 1) Display cross hatch pattern at Mode 4.
- 2) Check D961 voltage to $50V \pm 1V$ with.

2. Adjustment for High-Voltage.

- 1) Display cross hatch pattern at Mode 4.
- 2) DIST.ADJ → CTRL PWM → High Voltage Command.
- 3) Adjust High Voltage to $24.5kV \pm 0.1 kVdc$.
- 4) Press Enter Key.

3. Adjustment for Factory Mode (Preset Mode).

- 1) Display cross hatch pattern at Mode 1.
- 2) Run alignment program for 500EJ on the IBM compatible PC.
- 3) EEPROM → ALL CLEAR → Y(Yes) command.
<Caution> Do not run this procedure unless the EEPROM is changed. All data in EEPROM (mode data and color data) will be erased.
- 4) Power button of the monitor turn off → turn on.
- 5) COMMAND → PRESET START → Y(Yes) command.
- 6) DIST. ADJ → CTRL RWM → TILT Command.

- 7) DIST. ADJ. → BALANCE command.
- 8) Adjust parallelogram as arrow keys to be the best condition.
- 9) Adjust balance of pin-balance as arrow keys to be the best condition.
- 10) DIST. ADJ. → FOS. ADJ command.
- 11) Adjust V-SIZE as arrow keys to $200 \pm 2mm$.
- 12) Adjust V-POSITION as arrow keys to center of the screen.
- 13) Adjust H-SIZE as arrow keys to $270 \pm 2mm$.
- 14) Adjust H-POSITION as arrow keys to center of the screen.
- 15) Adjust S-PCC (Side-Pincushion) as arrow keys to be the best condition.
- 16) Adjust TRAPEZOID as arrow keys to be the best condition.
- 17) Save of the Mode 1.
- 18) Display from Mode 2 to 4 and repeat above from number 10) to 17)
- 19) PRESET EXIT → Y (Yes) command.

4. Adjustment for White Balance and Luminance.

- 1) Set the White Balance Meter.
- 2) Press the DEGAUSS on the OSD menu for demagnetization of the CDT.
- 3) COLOR ADJ. → LUMINANCE command of the alignment program.
- 4) Set Brightness and Contrast to Max position.
- 5) Display color 0,0 pattern at Mode 4.
- 6) COLOR ADJ. → BIAS ADJ. → COLOR No. → 1 command of the alignment program.
- 7) Check whether green color or not at R-BIAS and G-BIAS to min position and G-BIAS to 127(7F) position. Sub-Brightness to 205(CD) position. Adjust G2 (screen) command to $0.4 \pm 0.05FL$ of the raster luminance.
- 8) Adjust R-BIAS and G-BIAS command to $x=0.283 \pm 0.005$ and $y=0.298 \pm 0.005$ on the White Balance Meter with PC arrow keys.
- 9) Adjust SUB-Brightness command to $0.4 \pm 0.1FL$ of the raster luminance.
- 10) Adjust repeat number 8).
- 11) After push the "ENTER" key.
- 11-1) COMMAND → PRESET START → Y(Yes) command.
- 12) Display color 15,0 full white pattern at Mode 4.
- 13) DRIVE ADJ. → No 1. command.
- 14) Set Brightness and Contrast to Max position.
- 15) Set SUB-CONTRAST Max 127(7F) (decimal) position.
- 16) Set B-DRIVE to 80(50) at DRIVE of the alignment program.

- 17-1) Adjust R-DRIVE and B-DRIVE command to white balance $x=0.283\pm0.003$ and $y=0.298\pm0.003$ on the White Balance Meter with PC arrow keys.
- 17-2) Display color 15,0 window pattern (70x70mm) at mode 4.
- 18) Adjust SUB-CONTRAST command to $50\pm2FL$.
- 19) Display color 15,0 full white pattern at Mode 4.
- 20) Set Brightness and Contrast to Max position.
- 21) COLOR ADJ. → LUMINANCE → ABL command.
- 22) Adjust ABL to $32\pm1FL$ of the luminance.
- 23) After push the "ENTER" key, and "COMMAND → PRESET EXIT → Y(Yes)" command.
- 24) Exit from the program.

5. Input EDID Data.

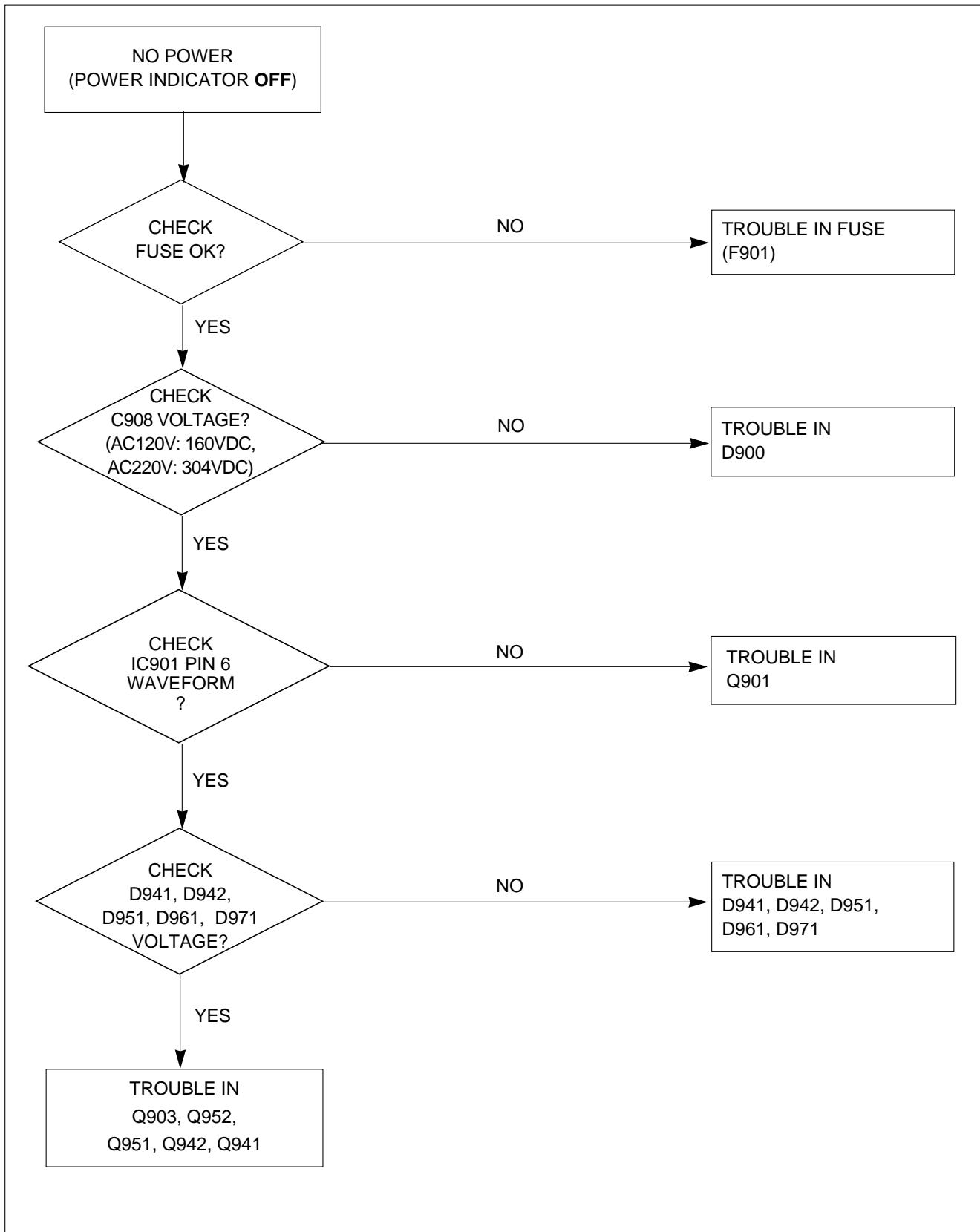
- 1) Display color 15,0 cross hatch pattern at Mode 4.
- 2) EEPROM → Write EDID command and confirm "EDID Write OK!!" message of monitor.
- 3) Exit from the alignment program.
- 4) Power switch OFF/ON for EDID data save.

6. Adjustment for Focus.

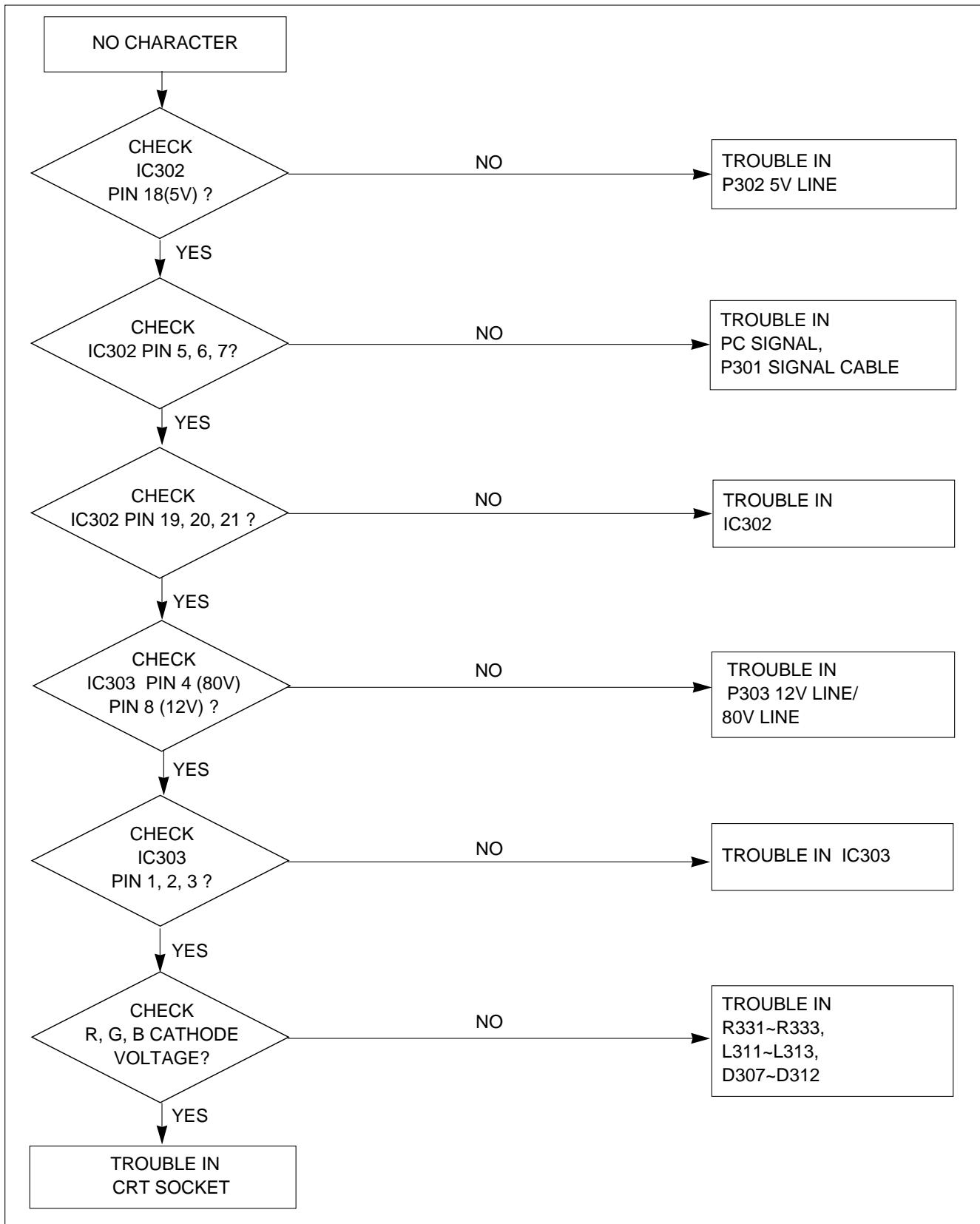
- 1) Set the Brightness and Contrast to max position.
- 2) Display H character in full screen at Mode 4.
- 3) Adjust two Focus control on the FBT that focus should be the best condition.

TROUBLESHOOTING GUIDE

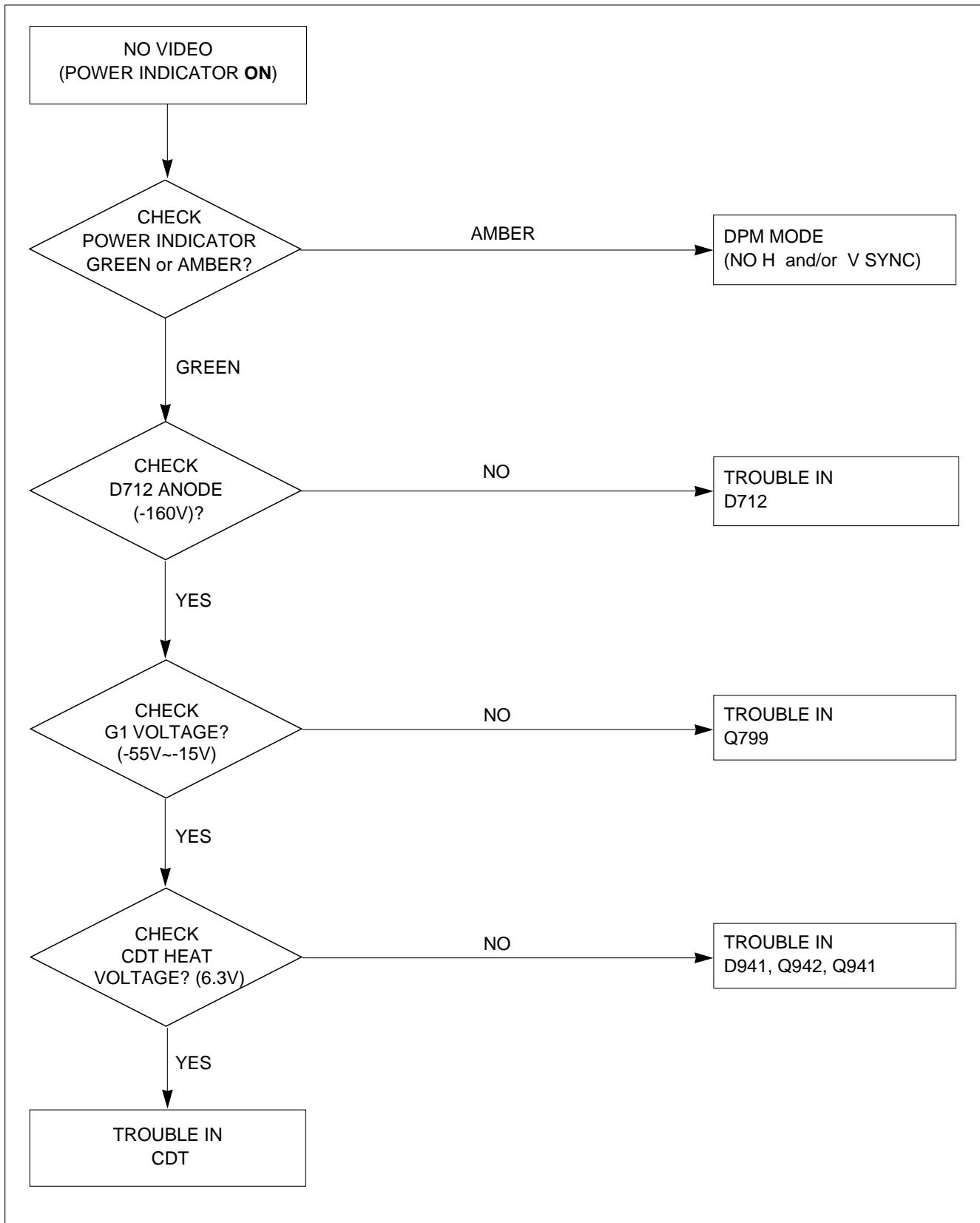
1. NO POWER



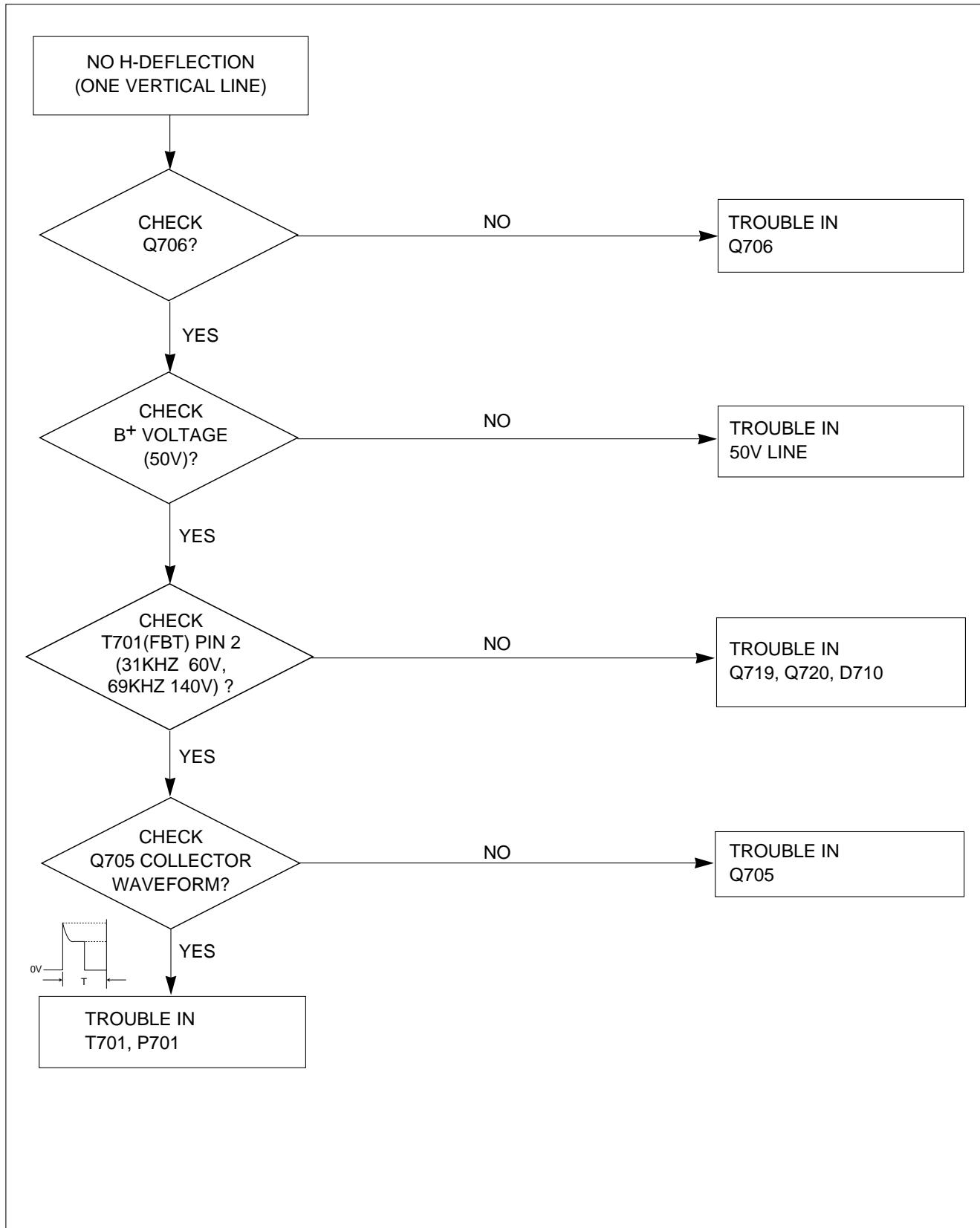
2. NO CHARACTER



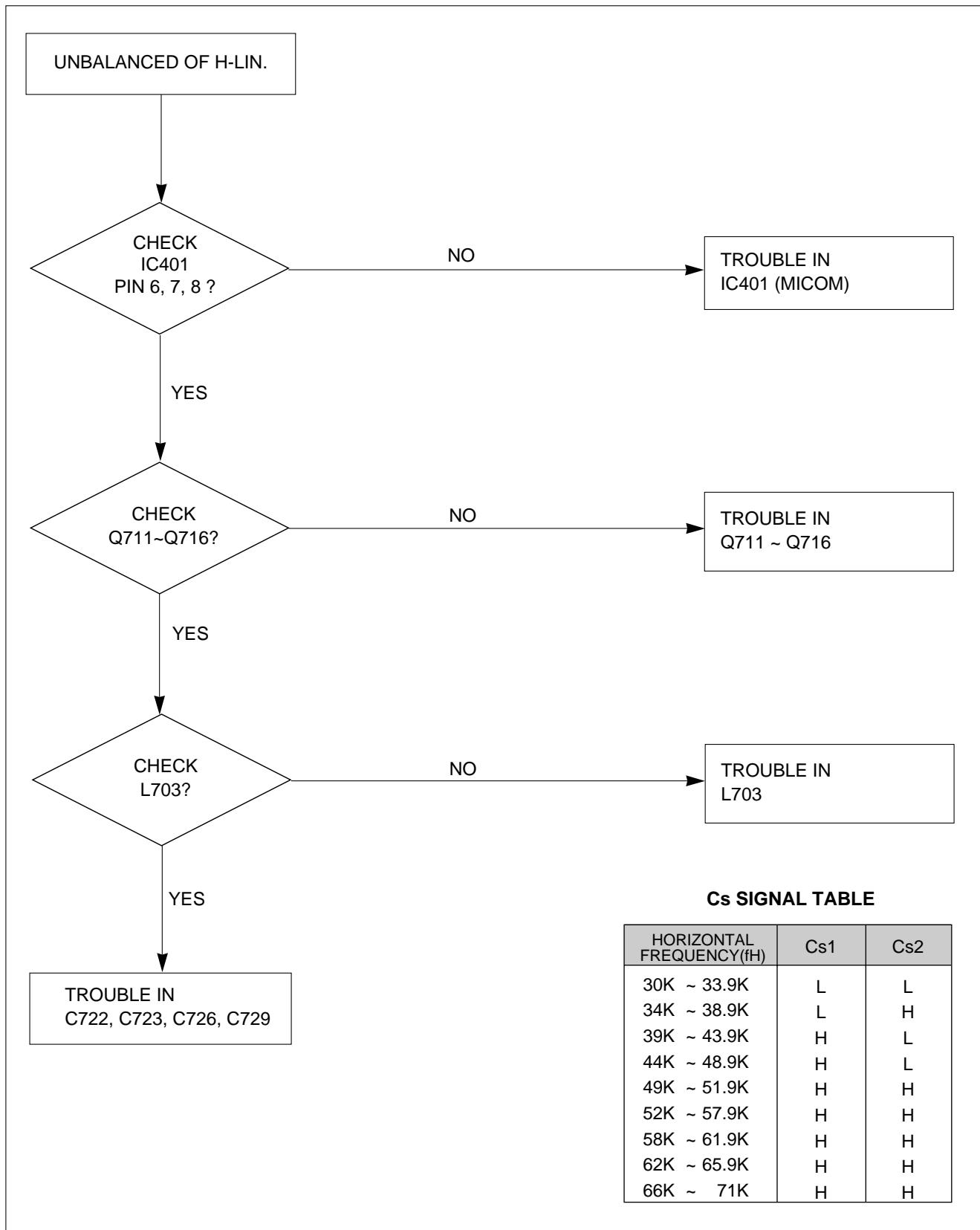
3. NO RASTER



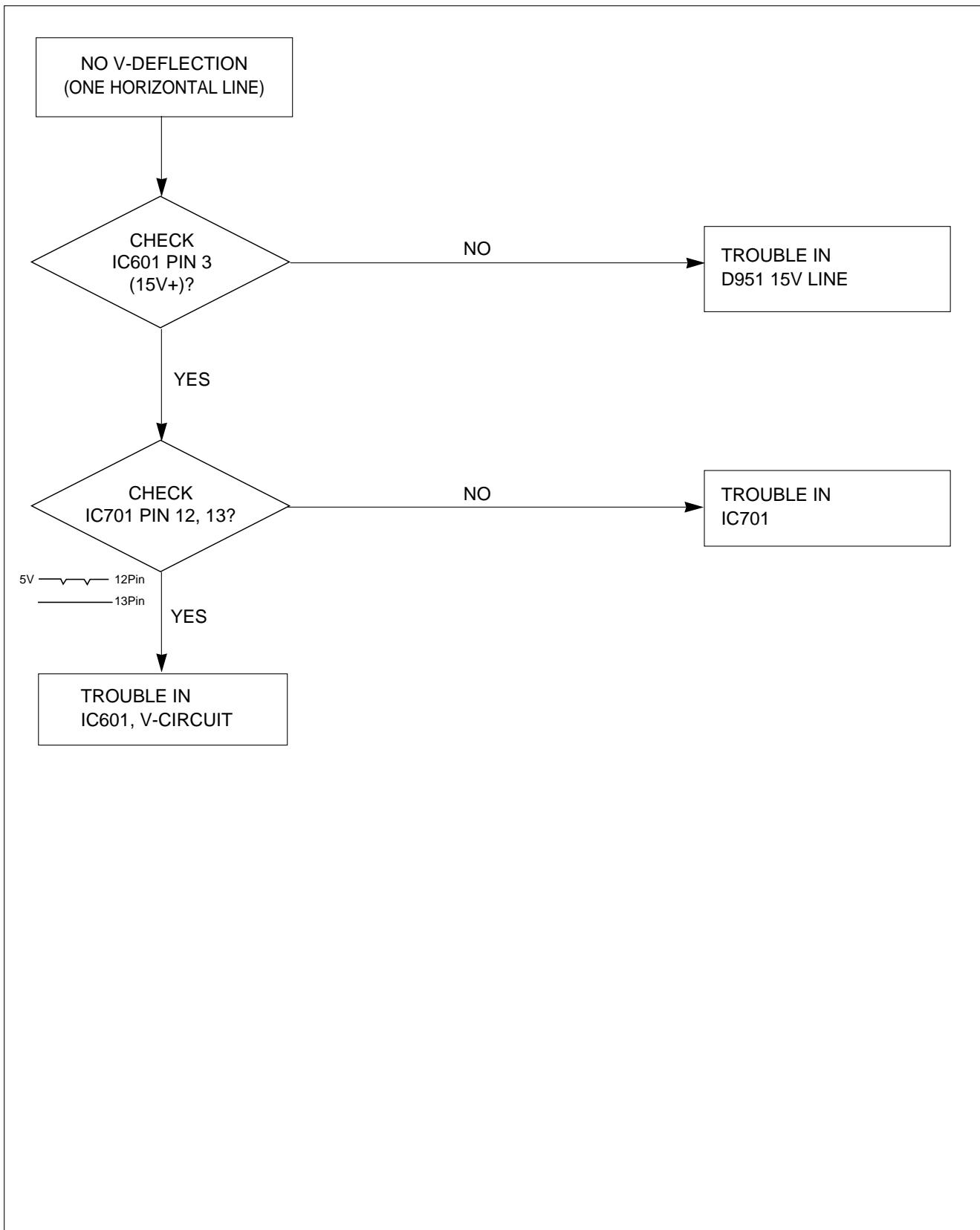
4. NO HORIZONTAL DEFLECTION



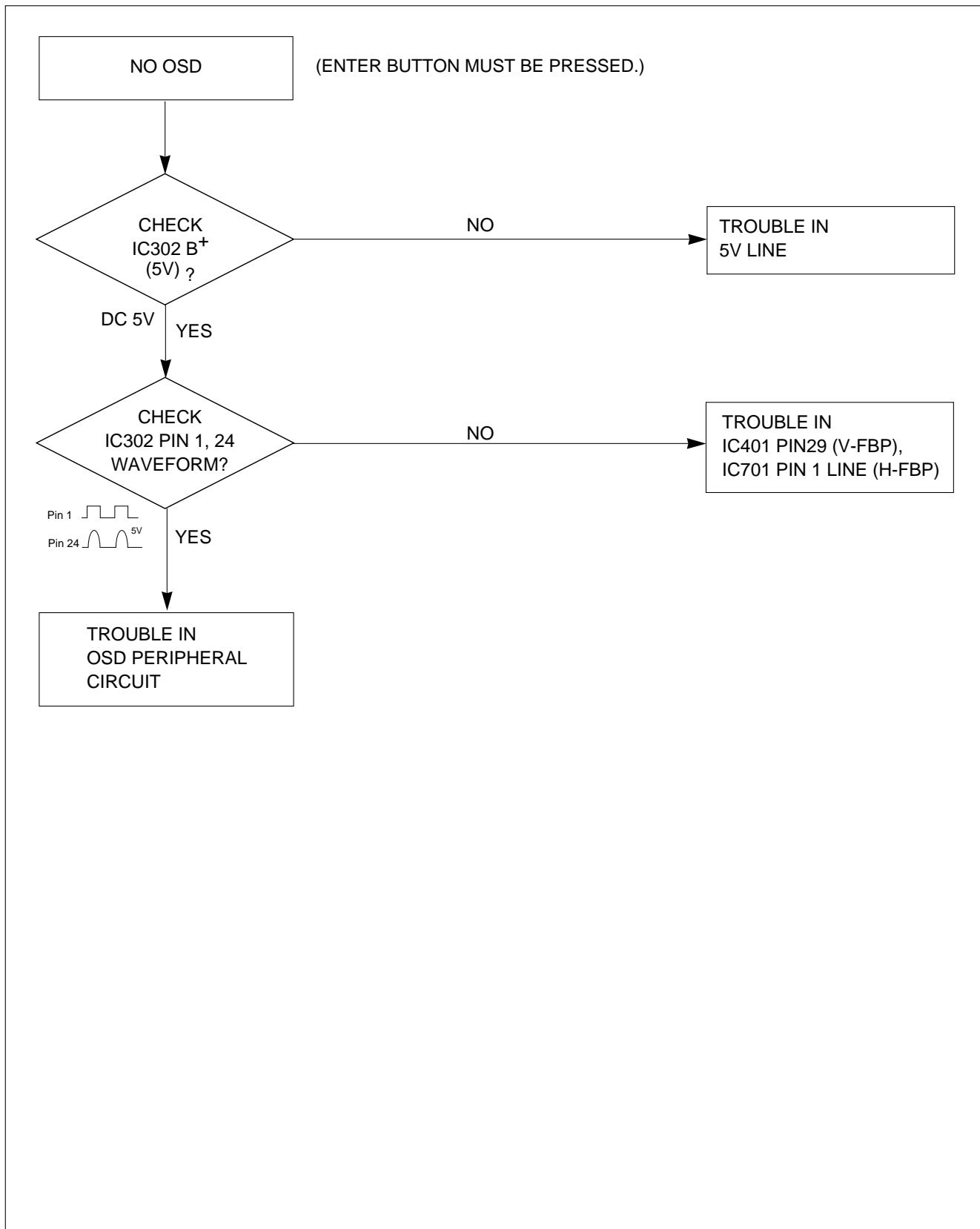
5. TROUBLE IN H-LINEARITY



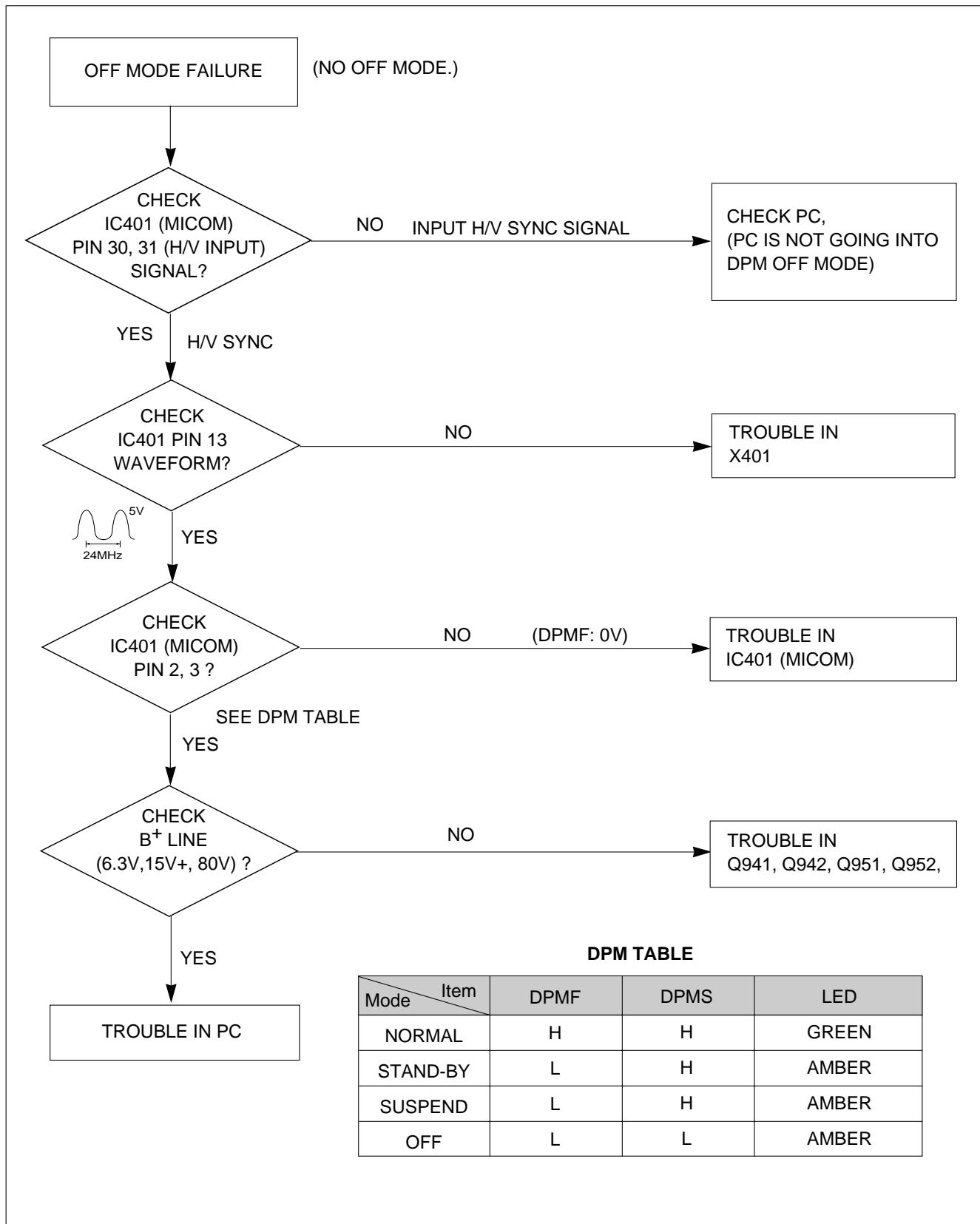
6. NO VERTICAL DEFLECTION



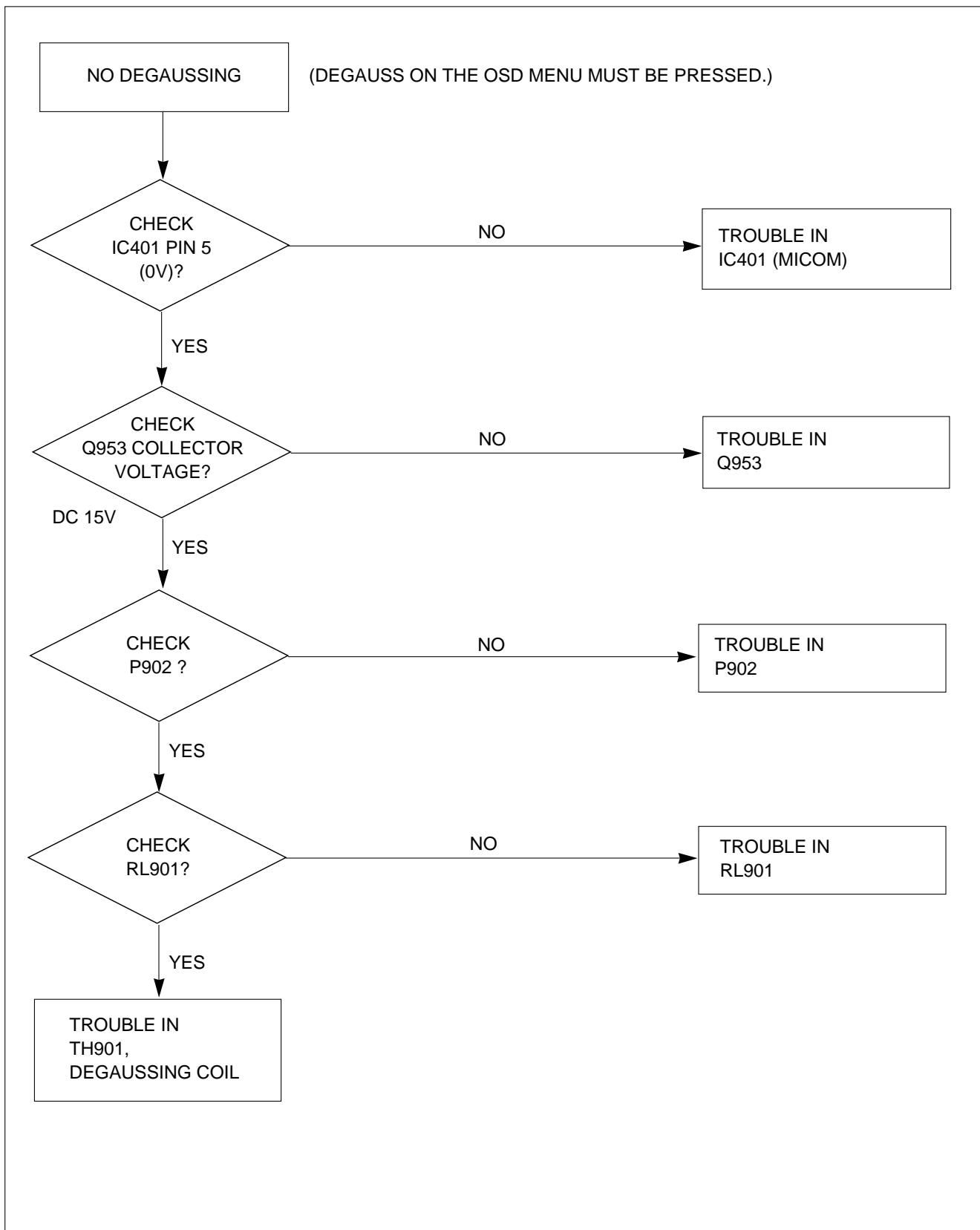
7. TROUBLE IN OSD



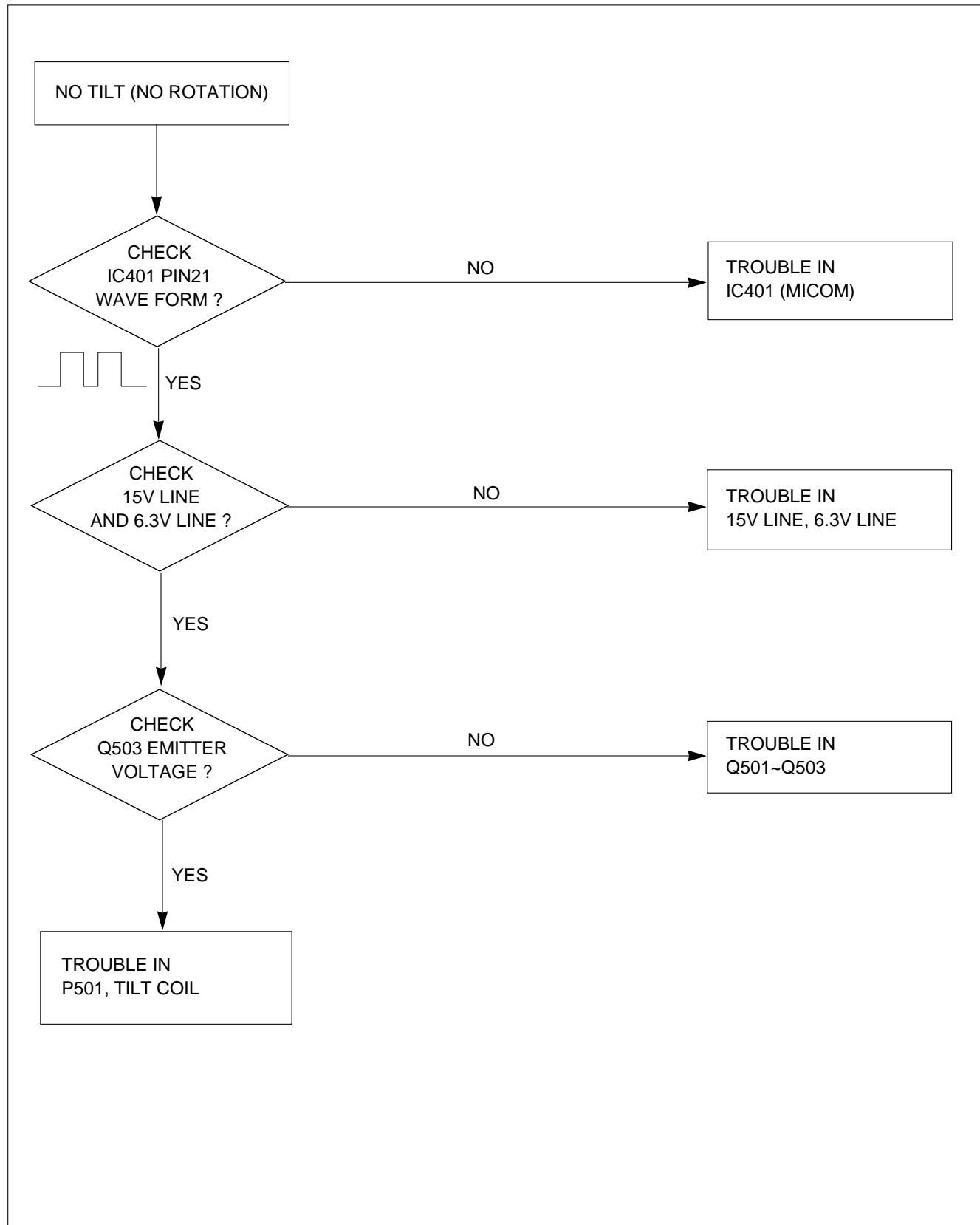
8. TROUBLE IN DPM



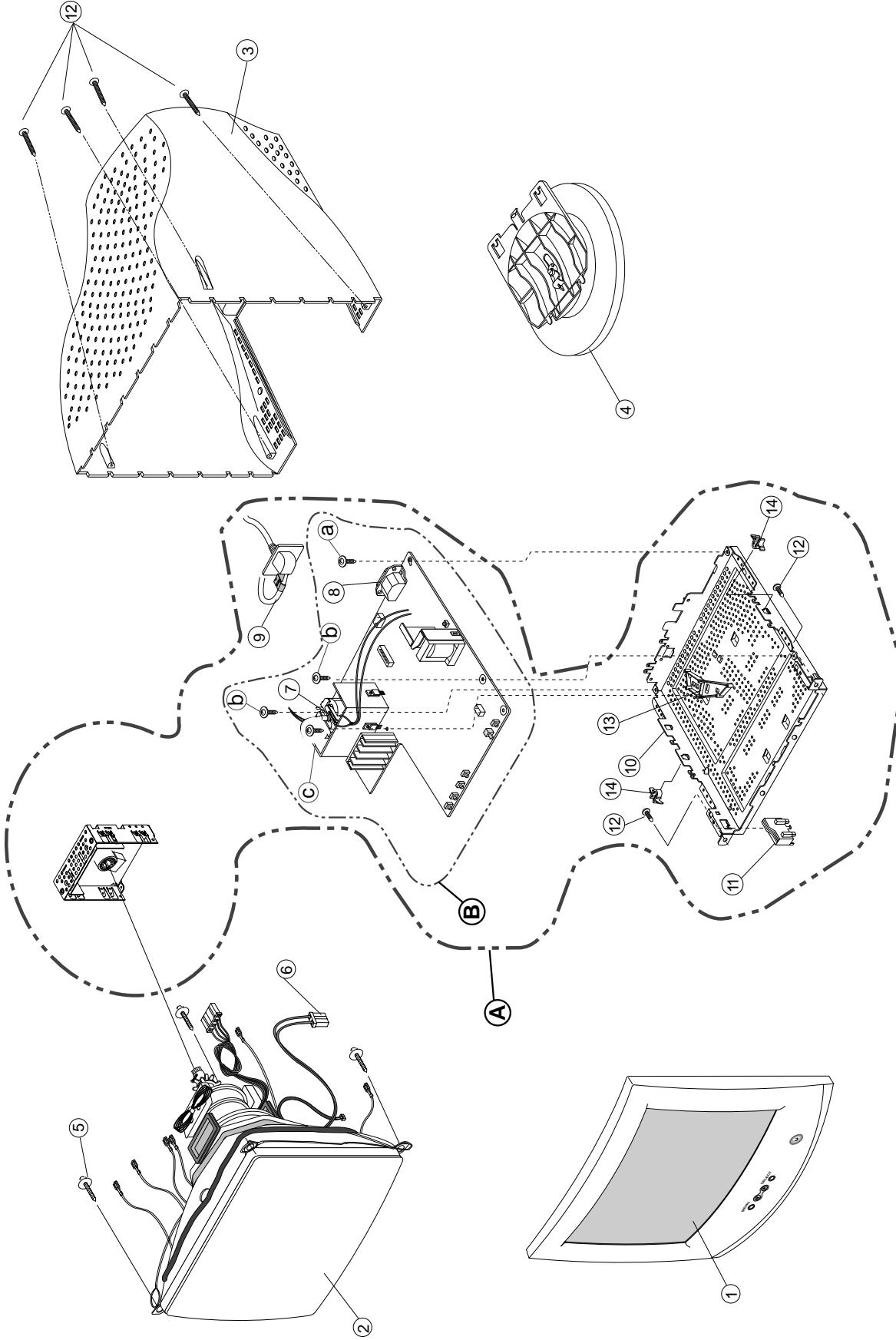
9. NO DEGAUSSING



10. NO TILT (NO ROTATION)



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

Ref. No.	Part No.	Description
1	3091TKB036V	CABINET ASSEMBLY, CB553H BRAND B031 MPR-II - For Europe, India(500E)
	3091TKB036Z	CABINET ASSEMBLY, CB553H BRAND B031 NON-MPR-II LG LOGO RED - For Chile, Mexico, Brazil, Panama(500G)
	3091TKB036W	CABINET ASSEMBLY, CB553H BRAND B031 NON-MPR-II - For Australia, Indonesia, Southeast Asia, India, Europe(500G)
	3091TKB036Y	CABINET ASSEMBLY, CB553H BRAND B031 MPR-II LG LOGO RED - For Mexico(500E)
2	2423GB0A81Z	CDT(CIRC), M36LBL803X 00NLLW LG-PHILIPS DISPLAYS 70KHZ 29.1 MM - For Europe(500E)
	2423GB0A59A	CDT(CIRC), M36LBL503X 34RLLD LG-PHILIPS DISPLAYS 54KHZ 29.1 MM - For Brazil(500G)
	6318L15004A	CDT(CIRC), M36LBL503X00NLLW LG-PHILIPS 54KHZ 29.1MM FST GLARE - For Indonesia, Southeast Asia, Europe, panama(500G)
	2423GB0A8AW	CDT(CIRC), M36LBL803X 31NLLA LG-PHILIPS DISPLAYS 54KHZ 29.1 MM - For Mexico(500E)
	2423GB0A58A	CDT(CIRC), M36LBL503X 34NLLD LG-PHILIPS DISPLAYS 54KHZ 29.1 MM - For Mexico(500G)
	6318L15011A	CDT(CIRC), M36LBL803X 34KLLM LG-PHILIPS 54KHZ 29.1MM FST NON-MPR SEMI-ITC - For India(500E)
3	3809TKB021A	BACK COVER ASSY, CB563 B024 ABS 85964
4	3043TKK071B	TIILT SWIVEL ASSEMBLY, KCB563C B046, T051 HIPS 85964 SP LOCAL - For Europe(500E)
4	3043TKK071A	TIILT SWIVEL ASSEMBLY, CB563 T051 B046 HIPS 85964 - For Australia, Chile(500G), India(500E)
5	339-002D	SCREW ASSY, PHP+5*30BP(FZMY)+GW18
6	6140TC3006B	COIL,DEGAUSSING, 75D-437 KWANGSUNG CB563G NT
7	6174T11004B	FBT (FLY BACK TRANSFORMER), 1056A,CB553J(54K) JUNGWOO 15"
8	6620TKB002A	SOCKET(CIRC),POWER, BAE EUN AC UNIVERSAL 3PIN BLACK
	or 6620TKB002B	SOCKET(CIRC),POWER, SA-4S HUA JIE AC UNIVERSAL 3PIN BLACK
9	6850TA9012A	CABLE,D-SUB, UL20276-9C(5.8MM) AT 1560MM GRAY(85964) T710BJ DM
10	4950TKS155K	METAL, SHIELD BOTTOM "H"CHASSIS
11	4810TKK154A	BRACKET, CB773D SUPPORTER CDT(L)
12	332-102F	SCREW, PTP+4*20BP(MSWR/FZMY)
13	4810TKK204C	BRACKET, H-CHASSIS HOLDER FBT, A-CKD
14	4930TKK031C	HOLDER, PCB FIX , PC+ABS
A	3313T15086C	MAIN TOTAL ASSEMBLY, 500EJ BRAND LGEDI CA-133 - For Europe(500E)
	3313T15086K	MAIN TOTAL ASSEMBLY, 500EJ BRAND CA-132 - For Mexico(500G)
	3313T15086D	MAIN TOTAL ASSEMBLY, 500EJ BRAND CA-133 NON-MPR LGEDI - For Australia, Chile, panama(500G)
	3313T15086N	MAIN TOTAL ASSEMBLY, 500EJ BRAND CA-133 - For Indonesia, Southeast Asia, Europe(500G)
	3313T15086E	MAIN TOTAL ASSEMBLY, 500EJ BRAND CA-133 SKYWAY(MX) - For Mexico(500G)
	3313T15086G	MAIN TOTAL ASSEMBLY, 500EJ BRAND CA-133 NON-MPR(IL) - For India(500G)
	3313T15086H	MAIN TOTAL ASSEMBLY, 500EJ BRAND CA-133 MPR(IL) - For India(500E)
	3313T15086F	MAIN TOTAL ASSEMBLY, 500EJ BRAND CA-133 NON-MPR(SP) - For Brazil(500G)
B	6871TMT412C	PWB(PCB) ASSEMBLY,MAIN, 500EJ KLRDMD BRAND CA-133 TOTAL - For Europe(500E)
	6871TMT412K	PWB(PCB) ASSEMBLY,MAIN, 500EK PLPAAA BRAND CA-132 TOTAL - For Mexico(500G)
	6871TMT412D	PWB(PCB) ASSEMBLY,MAIN, 500EJ KLEUAD BRAND CA-133 TOTAL - For Australia, Chile, Panama(500G)
	6871TMT412N	PWB(PCB) ASSEMBLY,MAIN, 500EJ KLIDAD BRAND CA-133 TOTAL - For Indonesia, Southeast Asia, Europe(500G)
	6871TMT412E	PWB(PCB) ASSEMBLY,MAIN, 500EJ PLMXMA BRAND CA-133 TOTAL - For Mexico(500E)
	6871TMT412G	PWB(PCB) ASSEMBLY,MAIN, 500EJ KLINAL BRAND CA-133 TOTAL - For India(500G)
	6871TMT412H	PWB(PCB) ASSEMBLY,MAIN, 500EJ KLINML BRAND CA-133 TOTAL - For India(500E)
	6871TMT412F	PWB(PCB) ASSEMBLY,MAIN, 500EJ KLBRAS BRAND CA-133 TOTAL - For Brazil(500G)
a	332-112F	SCREW,DRAWING, D3.5 L10.0 MSWR/FZMY +SW3.5+RW3.5
b	4001TKK004E	SCREW ASSEMBLY, TAPTITE P TYPE D3.0 L10.0 MSWR/FZMY SW3+RW10
c	332-095A	SCREW, PZP+3*8 (MSWR/FZMY)

REPLACEMENT PARTS LIST

CAUTION: BEFORE REPLACING ANY OF THESE COMPONENTS,
READ CAREFULLY THE **SAFETY PRECAUTIONS** IN THIS MANUAL.

* NOTE : **S** SAFETY Mark **⚠**
AL ALTERNATIVE PARTS

DATE: 2003. 05. 24.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
CAPACITORS				
		C301	0CQ1021N419	1000P 100V J POLY NI TP
		C302	0CE106CF638	10UF SHL,SD 16V M FM5 TP 5
		C303	0CC5600K415	56P 50V J NP0 TP
		C304	0CC5600K415	56P 50V J NP0 TP
		C305	0CE476CF638	47UF SHL,SD 16V M FM5 TP 5
		C306	0CZTFT001M	ECQB1H103JF3 MATSUSHITA 50V
		C308	0CK1020K515	1000PF 50V K B TR
		C309	0CK1040K945	0.1UF 50V Z F TR
		C311	0CK1040K945	0.1UF 50V Z F TR
		C312	0CK1040K945	0.1UF 50V Z F TR
		C313	0CK1040K945	0.1UF 50V Z F TR
		C314	0CC4700W405	47PF 500V J SL TP
		C315	0CE476CF638	47UF SHL,SD 16V M FM5 TP 5
		C317	0CK1040K945	0.1UF 50V Z F TR
		C318	0CK1040K945	0.1UF 50V Z F TR
		C319	0CK1040K945	0.1UF 50V Z F TR
		C320	0CK10202515	1000PF D 2KV 10% TR B(Y5P)
		C321	0CE225CK638	2.2UF SHL,SD 50V M FM5 TP 5
		C323	0CE476CF638	47UF SHL,SD 16V M FM5 TP 5
		C324	0CK1040K945	0.1UF 50V Z F TR
		C325	181-288B	MKT 100V 104JTR PHS26104
		C326	0CC2200W415	22PF 500V J NP0 TR
		C327	181-288B	MKT 100V 104JTR PHS26104
		C328	0CE226CN638	22UF SHL,SD 100V M FM5 TP 5
		C329	181-288B	MKT 100V 104JTR PHS26104
		C330	181-288B	MKT 100V 104JTR PHS26104
		C331	181-288G	MKT 100V 334JTR PHS26334
		C332	181-288G	MKT 100V 334JTR PHS26334
		C333	181-288G	MKT 100V 334JTR PHS26334
		C334	181-288B	MKT 100V 104JTR PHS26104
		C335	181-288B	MKT 100V 104JTR PHS26104
		C339	0CK1520W515	1500P 500V K B TS
		C340	181-288B	MKT 100V 104JTR PHS26104
		C341	0CK10202515	1000PF D 2KV 10% TR B(Y5P)
		C344	181-288B	MKT 100V 104JTR PHS26104
		C346	0CK10302940	0.01M 2KV Z F S
		C372	0CK1040K945	0.1UF 50V Z F TR
		C401	0CK1040K945	0.1UF 50V Z F TR
		C402	0CE476CF638	47UF SHL,SD 16V M FM5 TP 5
		C403	0CK1040K945	0.1UF 50V Z F TR
		C406	0CK1010K515	100PF 50V K B TR
		C407	0CK1010K515	100PF 50V K B TR
		C408	0CK1040K945	0.1UF 50V Z F TR
		C410	0CK1010K515	100PF 50V K B TR
		C412	0CK1040K945	0.1UF 50V Z F TR
		C501	0CE106CF638	10UF SHL,SD 16V M FM5 TP 5 - For Indonesia, Southeast Asia, Europe(500G)
		C599	0CE225CK638	2.2UF SHL,SD 50V M FM5 TP 5 - For Indonesia, Southeast Asia, Europe(500G)
		C601	0CE477EH618	470UF KMG 25V M FL TP 5
		C602	181-288B	MKT 100V 104JTR PHS26104
		C603	0CE476CK638	47UF SHL,SD 50V M FM5 TP 5
		C604	0CZTFT001V	ECQB1H473JM3 473J 50V TP5.0
		C605	0CK1020W515	1000P 500V K B TS
		C701	0CQ5621N419	5600P 100V J POLY NI TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C702	0CZTFT001M	ECQB1H103JF3 MATSUSHITA 50V
		C703	0CZTFT001Z	ECQB1H104JM3 104J 50V TP5.0
		C704	0CQ8221N519	0.0082U 100V K POLY NI TP
		C706	0CZTFT001Z	ECQB1H104JM3 104J 50V TP5.0
		C707	0CZTFT002B	ECQV1H154JZ3 154J 50V TP5.0
		C708	0CE227CH638	220UF SHL,SD 25V M FM5 TP 5
		C709	0CZTFT001P	ECQB1H153JM3 153J 50V TP5.0
		C711	0CQ5621N419	5600P 100V J POLY NI TP
		C713	0CK2210K515	220P 50V K B TS
		C714	0CE107CH638	100UF SHL,SD 25V M FM5 TP 5
		C715	181-288N	MKT 100V 103JTR PHS86103
		C716	0CK2710K515	270P 50V K B TS
		C717	0CZTFT001R	ECQB1H223JM3 223J 50V TP5.0
		C718	0CZTFT001V	ECQB1H473JM3 473J 50V TP5.0
		C719	0CZTAB001F	SHL-BP SYE / SWE 50V 3.3UF 2
		C722	181-303H	394J 31.0*23.0*16.0*20.0 250
		C724	0CN1040K949	0.1M 50V Z F TA52
		C725	0CK6810W515	680P 500V K B TS
		C726	181-482F	274JF 18.0*17.0*10.0*7.5 250
		C728	0CQ5621N419	5600P 100V J POLY NI TP
		C729	181-305V	514J 26.0*18.0*11.0*15.0 250
		C730	0CN1040K949	0.1M 50V Z F TA52
⚠		C731	181-309X	542J 31.0*17.0*10.0*20.0 1.
		C732	181-288N	MKT 100V 103JTR PHS86103
		C733	0CBZTB003K	472J 20.0*13.0*8.0*10.0 800V
		C734	0CE226CK638	22UF SHL,SD 50V M FM5 TP 5
		C737	0CK10102515	100PF D 2KV 10% B(Y5P) TR
		C739	0CE106CK638	10UF SHL,SD 50V M FM5 TP 5
		C740	0CE227EL630	220UF KMG 63V M FM5 BULK
		C741	0CZTFT002B	ECQV1H154JZ3 154J 50V TP5.0
		C742	0CE106CK638	10UF SHL,SD 50V M FM5 TP 5
		C743	0CZTFT002B	ECQV1H154JZ3 154J 50V TP5.0
		C744	0CZTAB005A	SMSHR SYE / SWE 160V 47UF 20
		C746	0CK3310W515	330P 500V K B TS
		C747	0CK1040K945	0.1UF 50V Z F TR
		C748	0CK1510W515	150PF 500V K B TR
		C749	0CE105CQ638	1UF SHL,SD 200V M FM5 TP 5
		C750	0CK1040K945	0.1UF 50V Z F TR
		C751	181-288J	MKT 100V 563JTR PHS26563
		C752	0CQ4721N419	0.0047U 100V J POLY NI TP5
		C753	0CK10301945	10000PF D 1KV Z F(Y5V) TR
		C754	0CC4700W405	47PF 500V J SL TP
		C754	0CC4700W405	47PF 500V J SL TP - For Mexico, India(500E)
		C756	0CK1010K515	100PF 50V K B TR
		C771	0CK10301945	10000PF D 1KV Z F(Y5V) TR
		C774	0CZTFT001Z	ECQB1H104JM3 104J 50V TP5.0
		C801	0CE105CK638	1UF SHL,SD 50V 20% FM5 TP 5
		C805	0CE106CK638	10UF SHL,SD 50V M FM5 TP 5
		C901	0CBZTB002A	BULK PCX2 335 224K
		C902	0CBZTB002C	BULK PCX2 335 104M
		C903	0CZTCB003D	BULK 7.5 CS E 102M 8.0 250V
		C904	0CKZTB003A	SC E 222M 10.0BW7 250V BK7.5
		C905	0CKZTB003D	SC E 222M 10.0BW7 250V BK7.5
		C906	0CZTCB003D	BULK 7.5 CS E 102M 8.0 250V

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C907	0CKZTB003C	SC E 472M 14.0BW7 250V BK7.5
		C908	181-296K	150UF SMH,HC(25.4*30) 400V M
		C909	0CK10301510	0.01M 1KV K B S
		C910	0CK10101515	100PF 1KV K B TR
		C911	0CE475CK638	4.7UF SHL,SD 50V M FM5 TP 5
		C912	0CK3310K515	330P 50V K B TS
		C913	0CE476CK638	47UF SHL,SD 50V M FM5 TP 5
		C914	0CZTFT001P	ECQB1H153JM3 153J 50V TP5.0
		C915	0CK6810K515	680P 50V K B TS
		C917	0CK1020K515	1000PF 50V K B TR
		C918	0CK1040K945	0.1UF 50V Z F TR
		C941	0CE108CD618	1000UF SHL 10V M FL TP5
		C942	0CE107CF638	1000UF SHL,SD 16V M FM5 TP 5
		C943	0CK56101515	560P 1KV K B TS
		C944	0CKZTB003C	SC E 472M 14.0BW7 250V BK7.5
		C946	0CK2710W515	270P 500V K B TS
		C951	0CE108CH630	1000UF SHL 25V M FM5 BULK
		C952	0CE227CH638	220UF SHL,SD 25V M FM5 TP 5
		C953	0CE107CF638	100UF SHL,SD 16V M FM5 TP 5
		C954	0CE108CF630	1000UF SHL 16V M FM5 BULK
		C971	0CE476CN618	47UF SHL 100V M FL TP5
		C999	0CE227CL630	220U SHL 63V M FM5
DIODEs				
		D201	0DLGP0010AB	XIAMEN G&P GP32052ME/512-ZY-
		D301	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D302	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D303	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D304	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D305	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D306	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D307	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D308	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D309	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D310	0DS124409AA	1SS244 TP ROHM KOREA
		D311	0DS124409AA	1SS244 TP ROHM KOREA
		D312	0DS124409AA	1SS244 TP ROHM KOREA
		D313	0DS124409AA	1SS244 TP ROHM KOREA
		D314	0DS124409AA	1SS244 TP ROHM KOREA
		D315	0DS124409AA	1SS244 TP ROHM KOREA
		D316	0DR140059DA	1N4005TB52 TP LITEON DO41 60
		D402	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D404	971-0054	TIN 50MM TAPING
		D512	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1 - For Indonesia, Southeast Asia, Europe(500G)
		D702	0DS124409AA	1SS244 TP ROHM KOREA
		D703	0DRTW00050A	MUR460L-1121 TIWAN SEMI BK D
		D704	0DR150001AD	DTV1500LFP SGS-THOMSON ST TO
		D705	0DRTW00089A	SRT14(1021) TIWAN SEMI TP NO
		D706	0DR150001AD	DTV1500LFP SGS-THOMSON ST TO
		D709	971-0054	TIN 50MM TAPING
		D710	0DR400409AC	UF4004 GULF TP DO41 400V 1A
		D711	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D712	0DR10009CD	RGP10G-1021 TIWAN SEMI TP DO
		D713	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D714	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D715	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D716	0DR140059DA	1N4005TB52 TP LITEON DO41 60
		D717	0DR140059DA	1N4005TB52 TP LITEON DO41 60
		D719	0DR100009DA	RGP10J TP GULF SEMICONDUCTOR
		D720	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D721	0DR100009CD	RGP10G-1021 TIWAN SEMI TP DO
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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		D722	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D723	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D724	0DR140059DA	1N4005TB52 TP LITEON DO41 60
		D730	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D731	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D801	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D802	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D900	0DRTW00071A	TS4B05G-1021 TIWAN SEMI ST N
		D902	971-0054	TIN 50MM TAPING
		D904	0DR100009CD	RGP10G-1021 TIWAN SEMI TP DO
		D905	0DD400709CB	UF4007 TP G.I DO204AL 1000V
		D906	0DR100009CD	RGP10G-1021 TIWAN SEMI TP DO
		D908	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D910	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D911	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D941	0DR100009LA	UG1D TP G.I DO204AL 200V 1A
		D942	0DR400409AC	UF4004 GULF TP DO41 400V 1A
		D951	0DRTW00044B	UG2DL-1021 TIWAN SEMI BK DO1
		D952	0DSGF00019A	1N4148 GULF TP DO35 100V 0.1
		D961	0DRGF00050A	31GF6 GULF BK DO201AD 600V 3
		D971	0DD400709CB	UF4007 TP G.I DO204AL 1000V
		ZD402	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD403	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD404	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD405	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD407	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD410	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD701	0DZ120009BF	GDZJ12B TP GRANDE DO34 0.5W
		ZD902	0DZ510009BE	GDZ5.1B TP GRANDE DO34 500MW
ICs				
		IC302	0IPRPNS025A	LM1246DDA/NA NATIONAL SEMICO
		IC303	0IPRPNS026A	LM2445TA NATIONAL SEMICONDUC
		IC304	0IPRPNS005A	LM2480NA NATIONAL SEMICONDUC
		IC401	0IZZTS2262A	SS 42PIN ST 4-KEY 500EJ
		IC402	0ISG240860A	M24C08-BN8 8DIP BK 8K SERIAL
		IC601	0IPRPPH018A	TDA4867J PHILIPS 9PIN,ST DIP
		IC701	0IPRPPH005A	TDA4841PS PHILIPS 32P,SDIP S
		IC901	0ISS384200A	KA3842B (PWM)
COILs & COREs				
		FB301	6210TCZ001J	BAS3550T0(125-022J) BO SUNG
		FB302	6210TCE003L	BAS3580T BO SUNG 3580MM AXIA
		FB303	6210TCZ001J	BAS3550T0(125-022J) BO SUNG
		FB304	6210TCZ001J	BAS3550T0(125-022J) BO SUNG
		FB305	6210TCE003P	BRS2550B BO SUNG 2550MM RADI
		FB306	6210TCE003L	BAS3580T BO SUNG 3580MM AXIA
		FB307	6210TCE003B	BRS3580B BO SUNG 3580MM RADI
		FB308	6210TCE003J	BAS2550T BO SUNG 2550MM AXIA
		FB309	6210TCE003J	BAS2550T BO SUNG 2550MM AXIA
		FB310	6210TCE003A	BRD3510B BO SUNG 3510MM RADI
		FB313	6210TCE003J	BAS2550T BO SUNG 2550MM AXIA
		FB402	971-0054	TIN 50MM TAPING
		FB403	971-0054	TIN 50MM TAPING
		FB701	6210TCE003L	BAS3580T BO SUNG 3580MM AXIA
		FB703	6210TCE003B	BRS3580B BO SUNG 3580MM RADI
		FB703	6210TCE003B	BRS3580B BO SUNG 3580MM RADI - For Mexico, India, Europe(500E)
		FB705	971-0054	TIN 50MM TAPING
		FB903	6210TCE003P	BRS2550B BO SUNG 2550MM RADI
		FB904	971-0054	TIN 50MM TAPING

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		FB905	6210TCE003P	BRS2550B BO SUNG 2550MM RADI
		FB906	6210TCE003P	BRS2550B BO SUNG 2550MM RADI
		FB921	6210TCE003A	BRD3510B BO SUNG 3510MM RADI
		FB922	6210TCE003L	BAS3580T BO SUNG 3580MM AXIA
		FB952	6210TCE003G	BRS3550B BO SUNG 3550MM RADI
		L301	971-0054	TIN 50MM TAPING
		L302	971-0054	TIN 50MM TAPING
		L303	971-0054	TIN 50MM TAPING
		L311	OLA0820K119	0.82UH K 2.3*3.4 TP
		L312	OLA0820K119	0.82UH K 2.3*3.4 TP
		L313	OLA0820K119	0.82UH K 2.3*3.4 TP
		L702	6140TBZ025D	-- H-SIZE,DR12*20-C6.0,150U
		L703	6140TYZ010F	LX31 GET DR14*15-C5.2,19.5T,
		L705	6140TBZ026C	DR15*18-C9.8 100UH 0.1*30MM
		L901	6200TZZ004A	SQE2626 NAMYANG BK L/FILTER
		L903	6210TCE003G	BRS3550B BO SUNG 3550MM RADI
TRANSISTOR				
		Q501	OTR320209AA	KTC3202-Y(KTC1959) TP KEC TO - For Indonesia, Southeast Asia, Europe(500G)
		Q502	OTR127009AA	KTA1270-Y(KTA562TM) TP KEC T - For Indonesia, Southeast Asia, Europe(500G)
		Q503	OTR319809AA	KTC3198-Y(KTC1815) TP KEC TO - For Indonesia, Southeast Asia, Europe(500G)
		Q705	OTR20009AB	KTC200-Y TP KEC TO92 NPN
		Q706	OTRTH10005A	2SC5855 TOSHIBA ST TO3P 1500
		Q707	OTR127009AA	KTA1270-Y(KTA562TM) TP KEC T
		Q708	OTR127009AA	KTA1270-Y(KTA562TM) TP KEC T
		Q709	OTR141300AB	KTD1413 BK KEC TO220I S NPN
		Q711	OTF630000AC	IRF630M BK SGS-THOMSON 200V
		Q713	OTF630000AC	IRF630M BK SGS-THOMSON 200V
		Q715	OTR319809AA	KTC3198-Y(KTC1815) TP KEC TO
		Q716	OTR319809AA	KTC3198-Y(KTC1815) TP KEC TO
		Q719	OTF630000CA	IRFS630A BK SAMSUNG 200V 6.5
		Q720	OTR390409CA	FAIRCHILD 2N3904(TA) TP TO-9
		Q799	OTRKE90019A	MPSA92 KEC TP TO92-300V -50
		Q901	OTF760000AD	SSS7N60B FAIRCHILD ST TO220F
		Q903	OTR100809AA	KSC1008C-Y TP SAMSUNG TO92
		Q941	OTR319809AA	KTC3198-Y(KTC1815) TP KEC TO
		Q942	OTR127309AA	KTA1273-Y(KTA966A) TP KEC TO
		Q951	OTR319809AA	KTC3198-Y(KTC1815) TP KEC TO
		Q952	OTR127309AA	KTA1273-Y(KTA966A) TP KEC TO
		Q953	OTR319809AA	KTC3198-Y(KTC1815) TP KEC TO
RESISTORs				
		R301	ORD0752Q609	75 1/4W(3.5% TA52
		R302	ORD0752Q609	75 1/4W(3.5% TA52
		R303	ORD0752Q609	75 1/4W(3.5% TA52
		R305	ORN6201F409	6.20K 1/6W 1% TA52
		R314	ORD1000Q609	100 1/4W(3.5% TA52
		R315	ORD1000Q609	100 1/4W(3.5% TA52
		R319	ORD4701Q609	4.70K 1/4W(3.5% TA52
		R320	ORD4701Q609	4.70K 1/4W(3.5% TA52
		R326	ORD2201Q609	2.20K 1/4W(3.5% TA52
		R327	ORD1001Q609	1K 1/4W(3.5% TA52
		R328	ORD1001Q609	1K 1/4W(3.5% TA52
		R329	ORD1001Q609	1K 1/4W(3.5% TA52
		R330	ORD1001Q609	1K 1/4W(3.5% TA52
		R331	ORD2200Q609	220 1/4W(3.5% TA52
		R332	ORD2200Q609	220 1/4W(3.5% TA52
		R333	ORD2200Q609	220 1/4W(3.5% TA52
		R334	ORD3303Q609	330K 1/4W(3.5% TA52
		R335	ORD3303Q609	330K 1/4W(3.5% TA52
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		R336	ORD3303Q609	330K 1/4W(3.5% TA52
		R337	ORD1000Q609	100 1/4W(3.5% TA52
		R338	ORD0471Q609	4.70 1/4W(3.5% TA52
		R340	ORN1002F409	10K 1/6W 1% TA52
		R341	ORD0332A609	33 OHM 1/2 W (7.0) 5% TA52
		R342	ORD0332A609	33 OHM 1/2 W (7.0) 5% TA52
		R343	ORD0332A609	33 OHM 1/2 W (7.0) 5% TA52
		R344	ORD0332Q609	33 1/4W(3.5% TA52
		R345	ORD0332Q609	33 1/4W(3.5% TA52
		R346	ORD0332Q609	33 1/4W(3.5% TA52
		R347	ORD1200Q609	120 1/4W(3.5% TA52
		R401	ORD1000Q609	100 1/4W(3.5% TA52
		R402	ORD5600Q609	560 1/4W(3.5% TA52
		R403	ORD1002Q609	10K 1/4W(3.5% TA52
		R405	ORD2001Q609	2K 1/4W(3.5% TA52
		R406	ORD2001Q609	2K 1/4W(3.5% TA52
		R407	ORD1300Q609	130 1/4W(3.5% TA52
		R408	ORD1300Q609	130 1/4W(3.5% TA52
		R409	ORD1000Q609	100 1/4W(3.5% TA52
		R411	ORD3901Q609	3.90K 1/4W(3.5% TA52
		R412	ORD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R415	ORD1801Q609	1.80K 1/4W(3.5% TA52
		R416	ORD4701Q609	4.70K 1/4W(3.5% TA52
		R417	ORD1000Q609	100 1/4W(3.5% TA52
		R418	ORD1002Q609	10K 1/4W(3.5% TA52
		R419	ORD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R420	ORD2001Q609	2K 1/4W(3.5% TA52
		R424	ORD2200Q609	220 1/4W(3.5% TA52
		R425	ORD4701Q609	4.70K 1/4W(3.5% TA52
		R426	ORD4701Q609	4.70K 1/4W(3.5% TA52
		R429	ORD1000Q609	100 1/4W(3.5% TA52
		R430	ORD1000Q609	100 1/4W(3.5% TA52
		R431	ORD1000Q609	100 1/4W(3.5% TA52
		R432	ORD1000Q609	100 1/4W(3.5% TA52
		R433	ORD1000Q609	100 1/4W(3.5% TA52
		R434	ORD1000Q609	100 1/4W(3.5% TA52
		R438	ORD1001Q609	1K 1/4W(3.5% TA52
		R439	OCN1010K519	100P 50V K B TA52
		R441	ORD2200Q609	220 1/4W(3.5% TA52
		R442	ORD2200Q609	220 1/4W(3.5% TA52
		R443	ORD0912Q609	91 OHM 1/4 W (3.4) 5% TA52
		R445	ORD5101Q609	5.10K 1/4W(3.5% TA52
		R445	ORD2201Q609	220K 1/4W(3.5% TA52 - For Indonesia, Southeast Asia, Europe(500G)
		R446	ORD1002Q609	10K 1/4W(3.5% TA52
		R447	ORD1001Q609	1K 1/4W(3.5% TA52
		R490	ORD9100Q609	910 1/4W(3.5% TA52
		R491	ORD2200Q609	220 1/4W(3.5% TA52
		R492	ORD4300Q609	430 OHM 1/4 W (3.4) 5.00% TA5
		R493	ORD7500Q609	750 OHM 1/4 W (3.4) 5% TA52
		R494	ORD1001Q609	1K 1/4W(3.5% TA52
		R495	ORD1001Q609	1K 1/4W(3.5% TA52
		R501	ORD0102A609	10 OHM 1/2 W (7.0) 5% TA52 - For Indonesia, Southeast Asia, Europe(500G)
		R508	ORD4702Q609	47K 1/4W(3.5% TA52 - For Indonesia, Southeast Asia, Europe(500G)
		R515	ORD1502Q609	15K 1/4W(3.5% TA52 - For Indonesia, Southeast Asia, Europe(500G)
		R597	ORD3902Q609	39K 1/4W(3.5% TA52 - For Indonesia, Southeast Asia, Europe(500G)
		R598	ORD5601Q609	5.60K 1/4W(3.5% TA52 - For Indonesia, Southeast Asia, Europe(500G)
		R599	ORD0202Q609	20 1/4W(3.5% TA52 - For Indonesia, Southeast Asia, Europe(500G)
		R601	ORD1000Q609	100 1/4W(3.5% TA52
		R602	ORD1000Q609	100 1/4W(3.5% TA52
		R603	ORN0390H609	0.39 1/2W 5 TA52
		R604	ORD0101A609	1 OHM 1/2 W (7.0) 5% TA52
		R605	ORD1500A609	150 OHM 1/2 W (7.0) 5% TA52

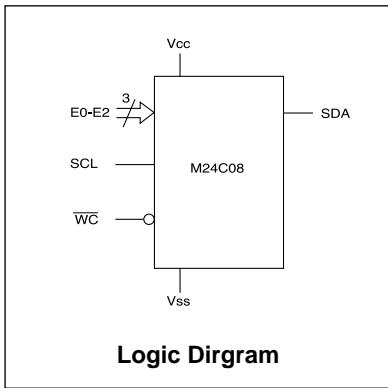
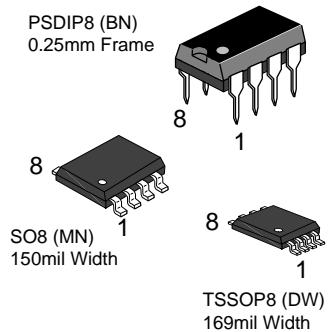
DATE: 2003. 05. 24.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
⚠		R606	ORD1000A609	100 OHM 1/2 W (7.0) 5% TA52
		R607	ORN4701F409	4.70K 1/6W 1% TA52
		R607	ORN5101F409	5.10K 1/6W 1% TA52 - For Word Wied(500G), Mexico, India(500E)
		R608	ORD2200A609	220 OHM 1/2 W (7.0) 5% TA52
		R700	971-0054	TIN 50MM TAPING
		R701	ORN3301F409	3.30K 1/6W 1% TA52
		R702	ORN6800F409	680 1/6W 1% TA52
		R703	ORD1001Q609	1K 1/4W(3.5% TA52
		R704	ORD3601Q509	3.6K OHM 1/4 W (3.4) 2% TA52
		R706	ORN2701F409	2.7K OHM 1/6 W 1.00% TA52
		R709	ORD2202Q609	22K 1/4W(3.5% TA52
		R710	ORD1000Q609	100 1/4W(3.5% TA52
		R711	ORD1000Q609	100 1/4W(3.5% TA52
		R712	ORD1500A609	150 OHM 1/2 W (7.0) 5% TA52
⚠		R713	ORD1000Q609	100 1/4W(3.5% TA52
		R714	ORD5601Q609	5.60K 1/4W(3.5% TA52
		R714-1	ORN3001F409	3K 1/6W 1% TA52
		R714-2	ORN6200F409	620 1/6W 1% TA52
		R715	ORD6202Q609	62K OHM 1/4 W (3.4) 5% TA52
		R717	ORD2702Q609	27K 1/4W(3.5% TA52
		R717	ORD3302Q609	33K 1/4W(3.5% TA52 - For Word Wied(500G), Mexico, India(500E)
		R718	ORD1602Q609	16K 1/4W(3.5% TA52
		R719	971-0054	TIN 50MM TAPING
		R721	ORD1001Q609	1K 1/4W(3.5% TA52
		R722	ORD2402Q609	24K 1/4W(3.5% TA52
		R723	ORD1001Q609	1K 1/4W(3.5% TA52
		R722	ORD2702Q609	27K 1/4W(3.5% TA52 - For Word Wied(500G), Mexico, India(500E)
		R724	ORD1001Q609	1K 1/4W(3.5% TA52
⚠		R725	ORN1501F409	1.5K 1/6W 1 TA52
		R726	ORD5102A609	51K OHM 1/2 W (7.0) 5% TA52
		R727	ORX0472K665	47 OHM 2 W 5% SF
		R728	ORD1001Q609	1K 1/4W(3.5% TA52
		R729	ORD1002Q609	10K 1/4W(3.5% TA52
		R731	ORD1002Q609	10K 1/4W(3.5% TA52
		R732	ORD1003Q609	100K 1/4W(3.5% TA52
		R733	ORD1002Q609	10K 1/4W(3.5% TA52
		R735	ORD1001Q609	1K 1/4W(3.5% TA52
		R736	ORX2201J609	2.2KOHM 1 W 5% TA52
		R737	ORN0560H609	0.56 1/2W 5 TA52
		R738	ORN0560H609	0.56 1/2W 5 TA52
		R739	ORD6800Q609	680 1/4W(3.5% TA52
		R740	ORD0271A609	2.7 OHM 1/2 W (7.0) 5% TA52
		R741	ORD1000Q609	100 1/4W(3.5% TA52
⚠		R743	ORD2702Q509	27K OHM 1/4 W (3.4) 2% TA52
		R744	ORD2200A609	220 OHM 1/2 W (7.0) 5% TA52
		R747	ORD3001Q609	3K 1/4W(3.5% TA52
		R748	ORD4702Q609	47K 1/4W(3.5% TA52
		R749	ORD2201Q609	2.20K 1/4W(3.5% TA52
		R750	ORD3001Q609	3K 1/4W(3.5% TA52
		R751	ORD0222A609	22 OHM 1/2 W (7.0) 5% TA52
		R752	ORD2201Q609	2.20K 1/4W(3.5% TA52
		R754	ORX4300K607	430 OHM 2 W 5% TA62
		R755	ORD0471Q609	4.70 1/4W(3.5% TA52
		R756	ORD2202A609	22K OHM 1/2 W (7.0) 5% TA52
		R757	971-0054	TIN 50MM TAPING
		R758	ORN1303F409	130K 1/6W 1% TA52
		R759	ORD1302Q509	13K OHM 1/4 W (3.4) 2% TA52
⚠		R760	ORD5103Q609	510K 1/4W(3.5% TA52
		R761	ORD3001Q609	3K 1/4W(3.5% TA52
		R762	ORD3001Q609	3K 1/4W(3.5% TA52
		R764	971-0054	TIN 50MM TAPING
		R765	ORD3000A609	300 OHM 1/2 W (7.0) 5% TA52

DATE: 2003. 05. 24.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R766	ORD1501Q609	1.50K 1/4W(3.5% TA52
		R769	971-0054	TIN 50MM TAPING
		R770	971-0054	TIN 50MM TAPING
		R771	ORD1501Q609	1.50K 1/4W(3.5% TA52
		R772	ORD1302Q509	13K OHM 1/4 W (3.4) 2% TA52
		R773	ORD3302A609	33K OHM 1/2 W (7.0) 5% TA52
		R778	ORD2001Q609	2K 1/4W(3.5% TA52
		R793	ORD4702Q609	47K 1/4W(3.5% TA52
		R797	ORD1501Q609	1.50K 1/4W(3.5% TA52
		R798	ORD2001Q609	2K 1/4W(3.5% TA52
		R799	ORD1502Q609	15K 1/4W(3.5% TA52
		R801	ORD3002Q609	30K 1/4W(3.5% TA52
		R802	ORD1502Q609	15K 1/4W(3.5% TA52
		R803	ORD1001Q609	1K 1/4W(3.5% TA52
		R808	971-0054	TIN 50MM TAPING
		R809	ORX0101K665	1 OHM 2 W 5% SF
		R813	ORD4302Q609	43K 1/4W(3.5% TA52
		R814	ORD1002Q609	10K 1/4W(3.5% TA52
		R816	ORN3301F409	3.30K 1/6W 1% TA52
		R818	ORN5602F409	56K 1/6W 1% TA52
		R819	ORN1203F409	120K 1/6W 1% TA52
		R901	ORD4703A609	470K OHM 1/2 W (7.0) 5% TA52
		R902	ORD0332Q609	33 1/4W(3.5% TA52
		R903	ORN1800F409	180 OHM 1/6 W 1.00% TA52
		R904	ORX3902K665	39K OHM 2 W 5% SF
		R906	ORD6200Q609	620 1/4W(3.5% TA52
		R907	ORD3902Q609	39K 1/4W(3.5% TA52
		R908	971-0054	TIN 50MM TAPING
		R910	ORX4702J609	47K OHM 1 W 5% TA52
		R911	ORD0202Q609	20 1/4W(3.5% TA52
		R912	ORN1802F409	18K 1/6W 1% TA52
		R913	ORN2701F409	2.7K OHM 1/6 W 1.00% TA52
		R915	ORD0622Q609	62 OHM 1/4 W(3.4) 5.00% TA52
		R916	ORD1002Q609	10K 1/4W(3.5% TA52
		R918	ORD1001Q609	1K 1/4W(3.5% TA52
		R923	ORD1003Q609	100K 1/4W(3.5% TA52
		R925	ORB0180K607	0.18OHM 2 W 5% TA62
		R926	ORD4301Q609	4.30K 1/4W(3.5% TA52
		R927	ORD2002Q609	20K 1/4W(3.5% TA52
		R928	ORD1800Q609	180 1/4W(3.5% TA52
		R929	ORD0332Q609	33 1/4W(3.5% TA52
		R941	ORN0220H609	0.22 1/2W 5% TA52
		R944	ORD4700A609	470 OHM 1/2 W (7.0) 5% TA52
		R945	ORD4701Q609	4.70K 1/4W(3.5% TA52
		R951	971-0054	TIN 50MM TAPING
		R952	ORD1202A609	12K OHM 1/2 W (7.0) 5.00% TA5
		R953	ORD1001A609	1K OHM 1/2 W (7.0) 5% TA52
		R954	ORD4701Q609	4.70K 1/4W(3.5% TA52
		R955	ORD4701Q609	4.70K 1/4W(3.5% TA52
		R956	ORD6802A609	68K OHM 1/2 W (7.0) 5% TA52
		R957	ORD0472A609	47 OHM 1/2 W (7.0) 5% TA52
		R960	ORD6200A609	620 OHM 1/2 W (7.0) 5.00% TA5
		R962	ORD0332Q609	33 1/4W(3.5% TA52
OTHERs				
		F1	430-858C	AFC-520 BAE EUN TA
		F2	430-858C	AFC-520 BAE EUN TA
		F901	0FZTTTH004B	TIME LAG HBC TSC 5A/250V,WAL
		RL901	6920TBA004A	G5PA-1-M OMRON 250VAC 5A 12V
		SC301	6620TBC002A	PCS629-01B PARK ELEC. 8PIN 1

DATE: 2003.05.24.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		SC901	6620TKB002A	BAE EUN AC UNIVERSAL 3PIN BL
		SG305	6918TRT005A	SSG-102-A0,1KV SMART RADIAL
		SW1	140-058B	EVQ PB2 05K MATUSHITA NON 12
		SW2	140-058B	EVQ PB2 05K MATUSHITA NON 12
		SW3	140-058B	EVQ PB2 05K MATUSHITA NON 12
		SW4	140-058B	EVQ PB2 05K MATUSHITA NON 12
		SW5	140-058B	EVQ PB2 05K MATUSHITA NON 12
		T1	5240T0B002A	W-T 480MM UL1007 AWG 24 TWI
		T1	5240T0B002A	W-T 480MM UL1007 AWG 24 TWI - For Mexico, India(500E)
		T2	5240T0B002A	W-T 480MM UL1007 AWG 24 TWI
		T2	5240T0B002A	W-T 480MM UL1007 AWG 24 TWI - For Mexico, India(500E)
⚠		T701	6174T11004B	1056A,CB553J(54K) JUNGWOO 15
		T703	6170TCZ015A	EI-19 4.45MH H-DRIVE,700BJ
		T901	6170TMZ147A	EER3541 300UH V-16PIN J-CHAS
		TH901	163-053D	J502P62C090Q290 JAHWA +/-20
		TH902	6322A00003C	8 D2 10 SEMITEC 8OHM 15% D(1
		X401	6212AA2004A	HC-49U TXC 12.0MHZ +/- 30 PP

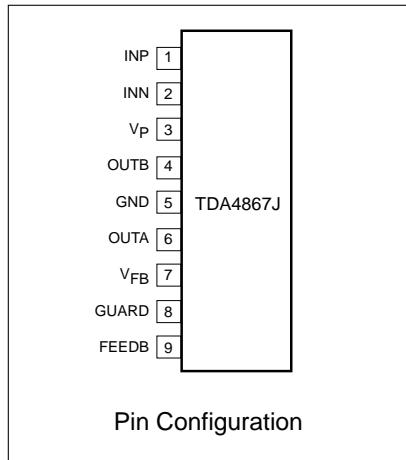
PIN CONFIGURATION

M24C08 Serial I²C BUS EEPROM

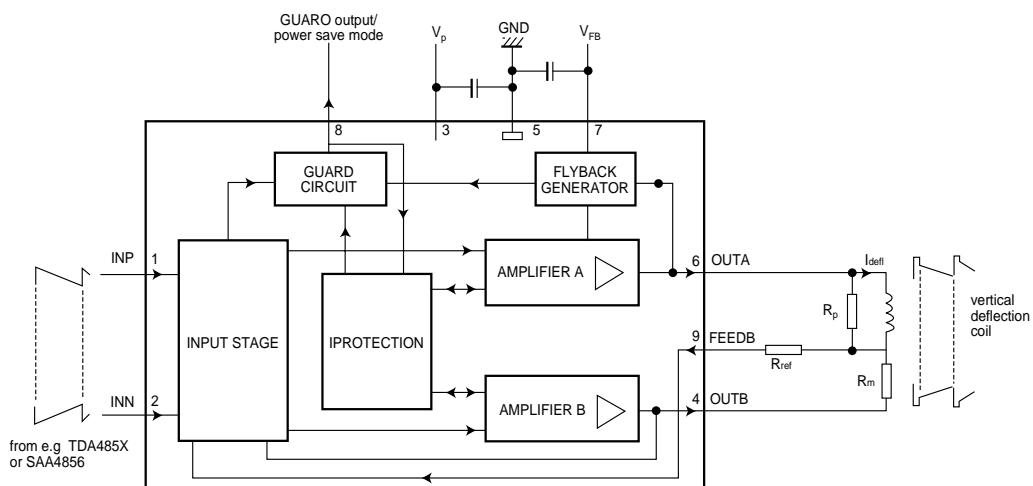


SYMBOL	DESCRIPTION
E0-E2	Chip Enable Input
SDA	Serial Data Address Input/Output
SCL	Serial Clock
WC	Write Control
Vcc	Supply Voltage
Vss	Ground

TDA4867J PHILIPS 32P, SDIP



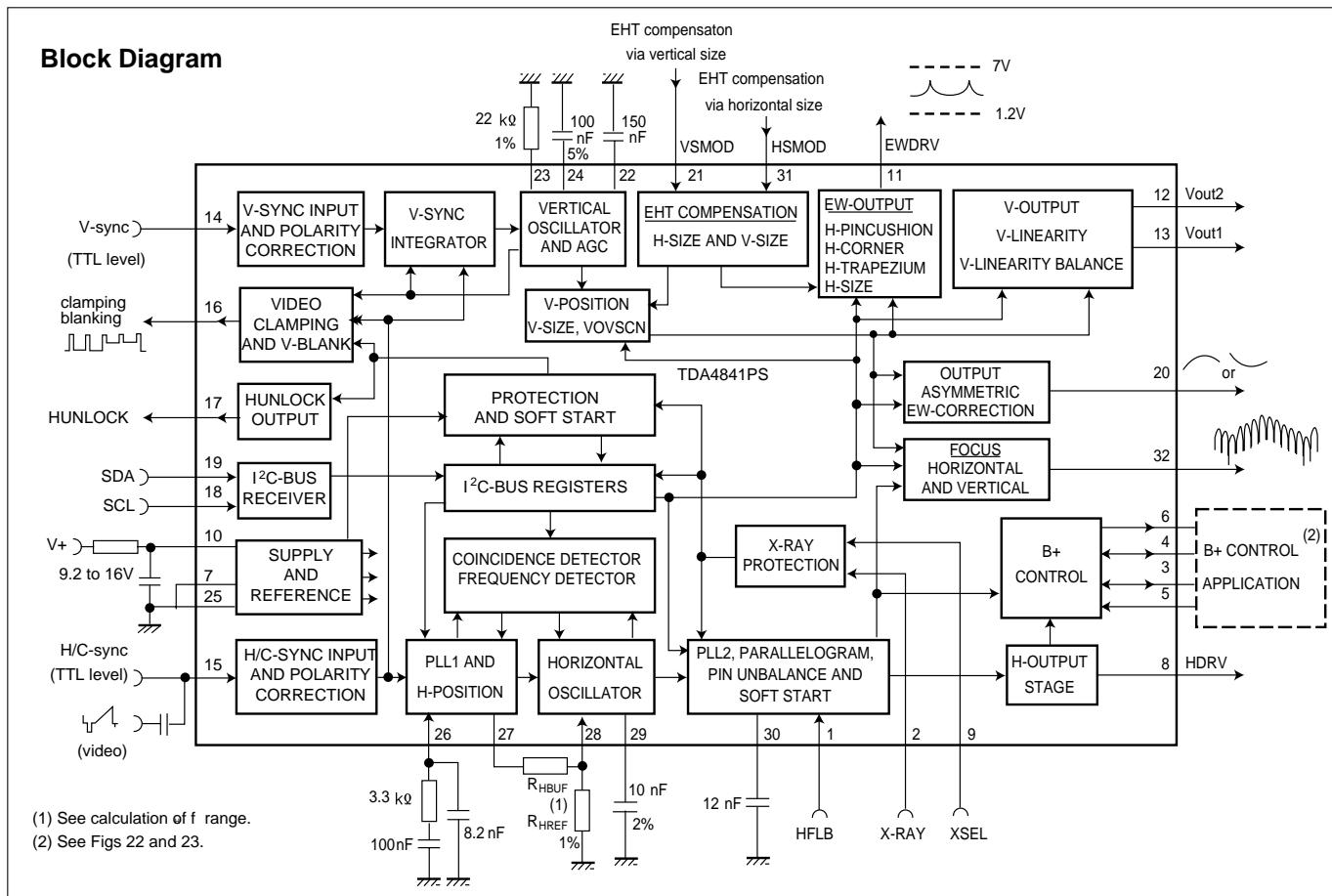
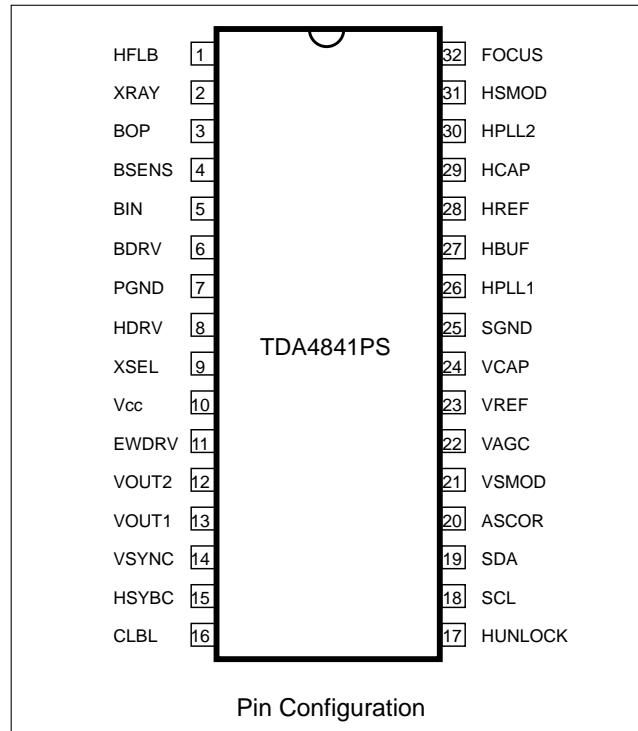
SYMBOL	PIN	DESCRIPTION
INP	1	non-inverted input
INN	2	inverted input
VP	3	supply voltage
OUTB	4	output B
GND	5	ground
OUTA	6	output A
VFB	7	flyback supply voltage
GUARD	8	guard output
FEEDB	9	feedback inpt



Block Diagram

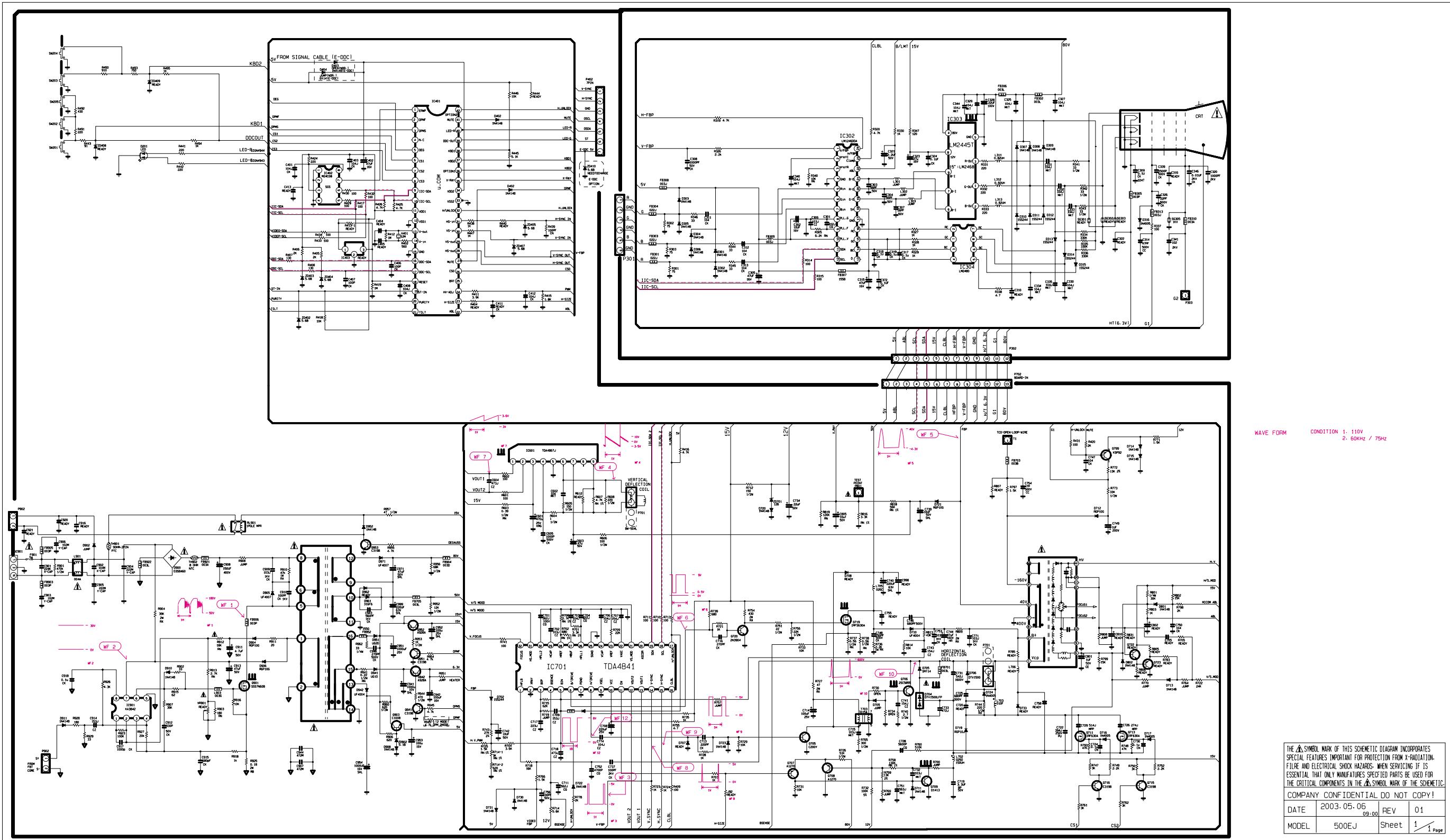
TDA4841PS

PHLIPS 32P



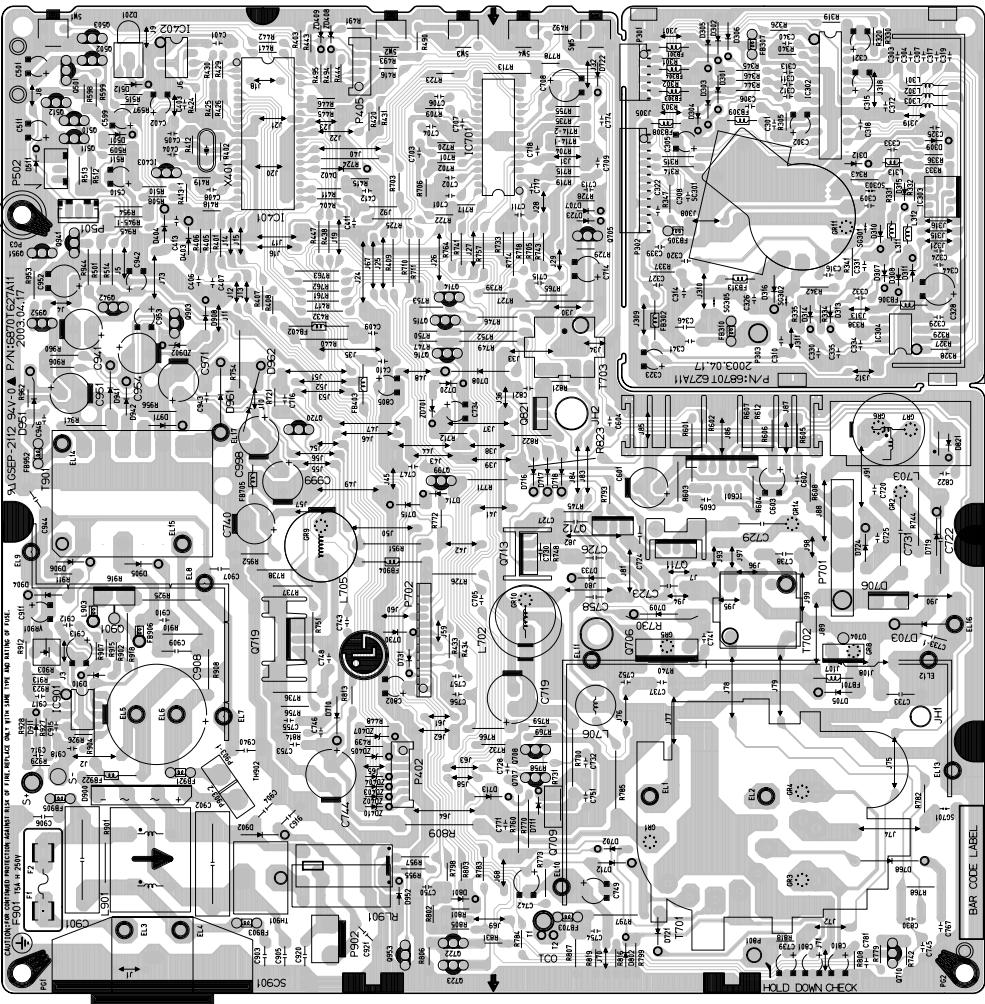
SCHEMATIC DIAGRAM

DDC-SDA IIC-SDA
 DDC-SCL IIC-SCL

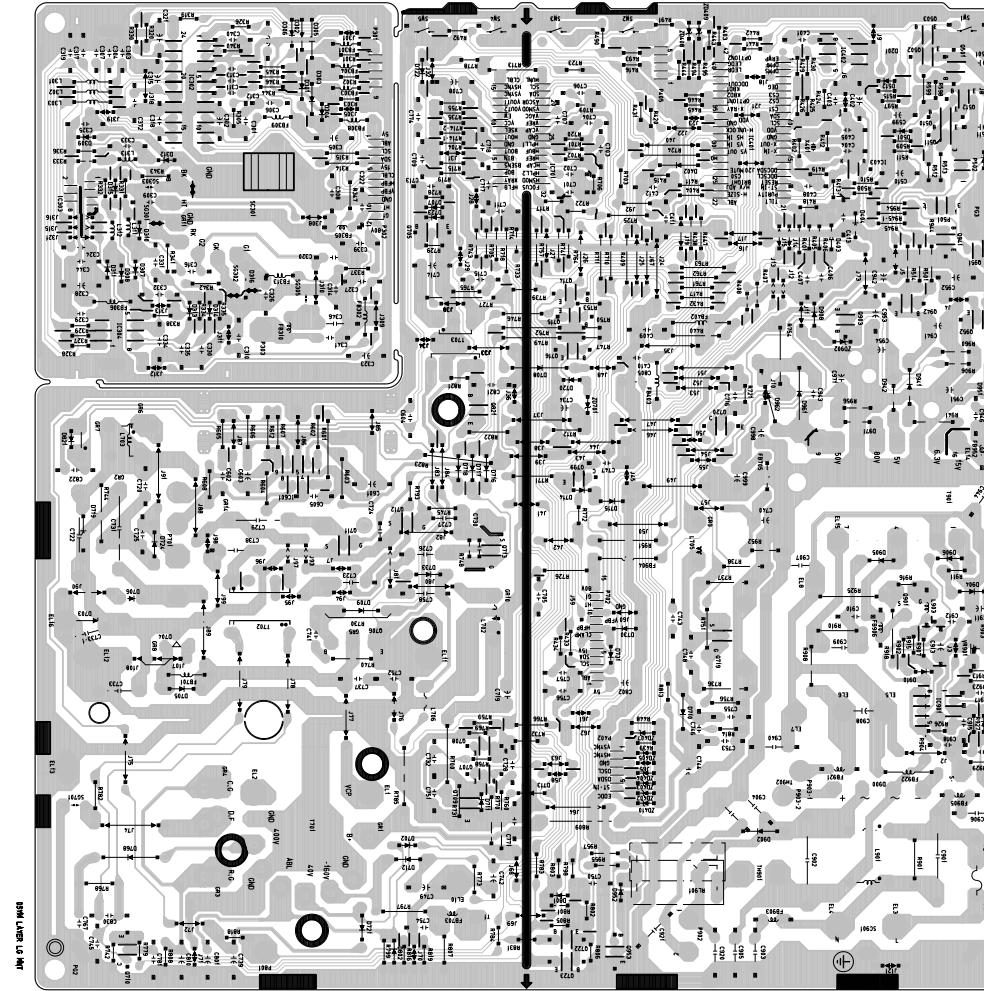


PRINTED CIRCUIT BOARD

1. MAIN BOARD (Component Side)



2. MAIN BOARD (Solder Side)





P/NO : 3828TSL092B

May. 2003
Printed in Korea