



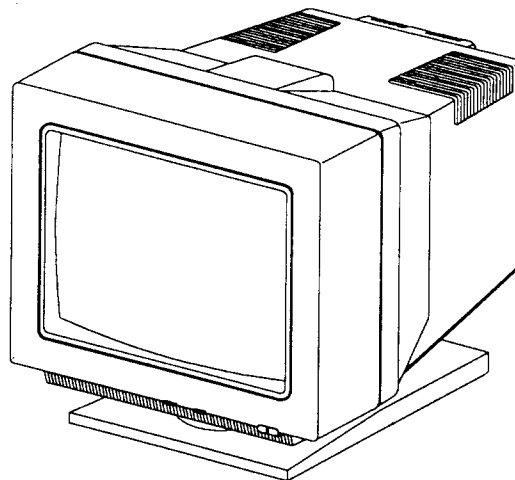
GoldStar

COLOR MONITOR SERVICE MANUAL

CAUTION

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

For Service Manuals
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**MODEL: CV430(1430/1425 PLUS)
CV431, CV432 1423
(CA-9 CHASSIS)**



GoldStar

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SPECIFICATIONS

PICTURE TUBE

Size : 14 inch
Gun : In-Line
Deflection Angle: 90°
Neck Diameter : 29.1 mm
Phosphor : R, G, B

SIGNAL

Input Signal : R, G, B ANALOG
 H-Syn., V-Syn., TTL-Level
Signal Connector: 15 Pin "D" Type

2-1 VIDEO INPUT

Amplitude : 0.69V
Signal Polarity : Positive
Rise & Fall Time : 8ns max.

2-2 VERTICAL

Amplitude (Level Low) : 0-0.4V
Amplitude (Level High) : 2.4-5.25V
Signal Polarity : Posi. or Nega.
Vert. Frequency : 60/70 Hz

2-3 HORIZONTAL

Amplitude (Level Low) : 0-0.4V
Amplitude (Level High) : 2.4-5.25V
Signal Polarity : Posi. or Nega.
Horiz. Frequency : 31.5 KHz

3. POWER SUPPLY

3-1 Power Rating : AC 98-132V
 : 60Hz, 0.9A/
 AC196-264V
 50Hz, 0.5A

4. DISPLAY AREA

4-1 Active Video Area : 247 mm × 180 mm
 [9.72" × 7.09"]

4-2 Display Character : 25 Rows × 80
 Columns

5. EXTERNAL CONTROL

PUSH-ON, Brightness, Contrast, V-Size, H-
Position, H-Size, V-Center.

6. ENVIRONMENT

6-1 Operating Temperature : 10°C~41°C
6-2 Relative Humidity : 8 to 80%
 (noncondensing)
6-3 Altitude : 10,000ft

7. DIMENSIONS

	W	D	H	With T/S
CV430	356mm	375mm	308mm	358mm
CV432	356mm	375mm	309mm	354mm
CV431	354mm	375mm	309mm	359mm

8. WEIGHT

	CV430	CV432	CV431
Net	11.5 Kg	11.5 Kg	11.5 Kg
Gross	13.5 Kg	13.5 Kg	13.5 Kg

9. RESOLUTION (Max)

640 × 480

PREFACE

SAFETY PRECAUTIONS

SAFETY-RELATED COMPONENT WARNING!

There are special components used in GoldStar color monitor which are important for safety. These parts are marked ($\triangle$) on the schematic diagram and on the replacement parts list. It is essential that these critical parts should be replaced with the manufacture's specified parts to prevent X-RADIATION, shock, fire or other hazards. Do not modify the original design without obtaining written permission from GoldStar or this 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 especially 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 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 to keep the high voltage at the factory-recommended level: the nominal high voltage is 24KV and must not exceed 30KV at zero beam current at rated voltage. 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 CRT anode button.
- Turn the brightness control fully clockwise.
- Measure the high Voltage. The high voltage meter should indicate at the factory-recommended level.
- If the upper 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.

FEATURES

CV430(1430/1425 Plus), CV432, CV431 Color Monitor has the following features:

- R.G.B Analog signal

- 30 MHz Bandwidth.

The High-Resolution CPT (Color Picture Tube) displays 80-column lines without blurring the characters.

- Displays 2000 Characters in a $8 \times 14/8 \times 16$ dot format.

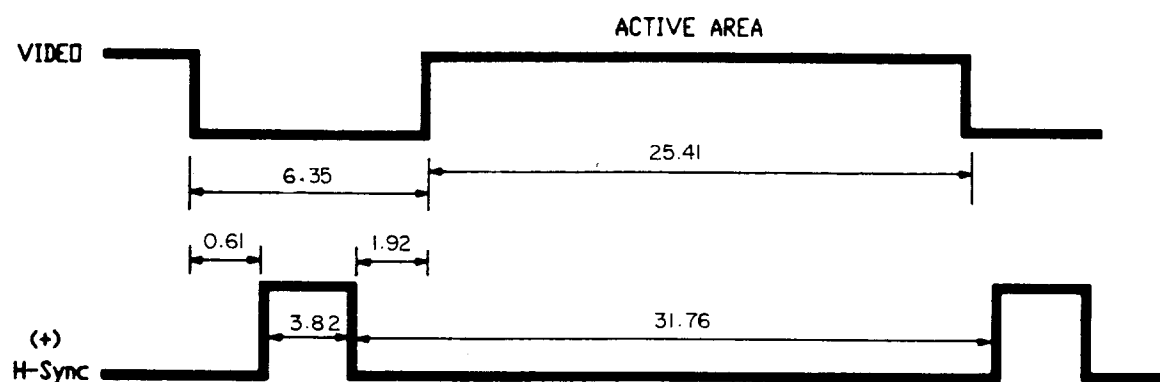
- Has its own power control and indicator using the SMPS (Switching Mode Power Supply). The SMPS in your Color Monitor automatically switches to match the power (AC 98-132V; AC 196-264V for Europe/U.K./Australia models).

- Is compatible with IBM PS/2.

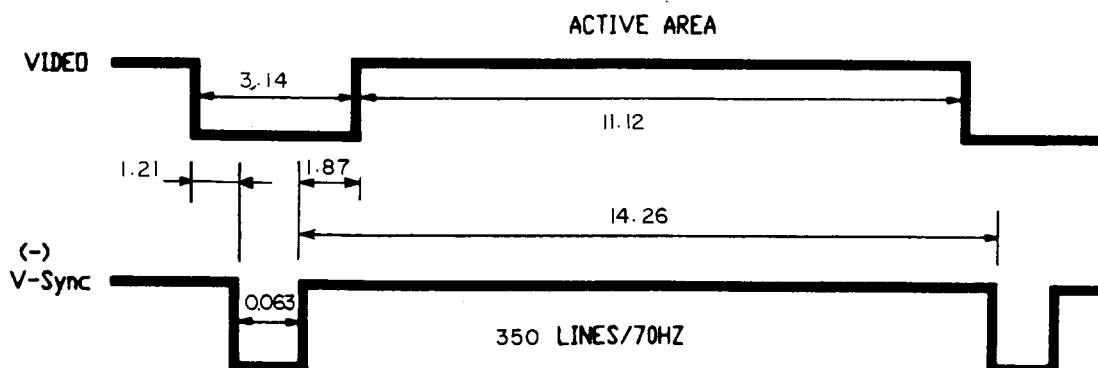
TIMING CHART

MODE 1

HORIZONTAL TIMING (unit : μs)

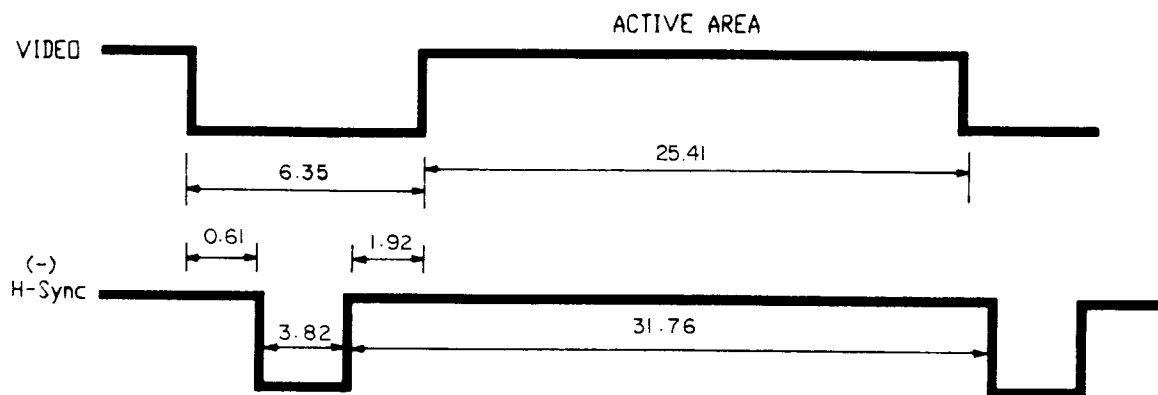


VERTICAL TIMING (unit : μs)

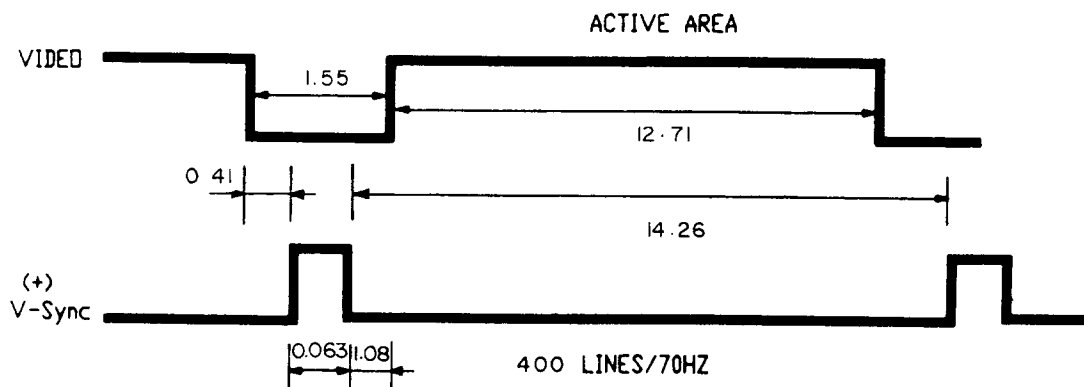


MODE 2

HORIZONTAL TIMING (unit : μs)

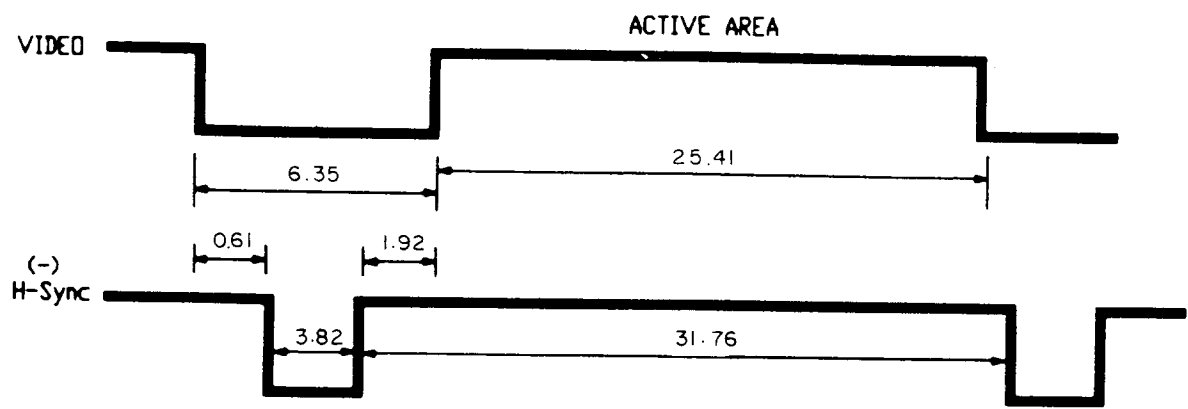


VERTICAL TIMING (unit : ms)

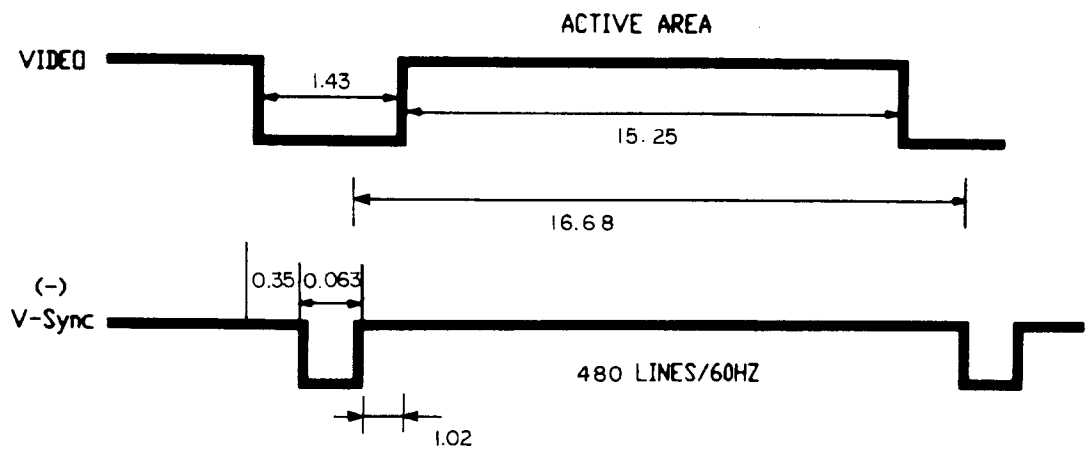


MODE 3

HORIZONTAL TIMING (unit : μ s)



VERTICAL TIMING (unit : ms)

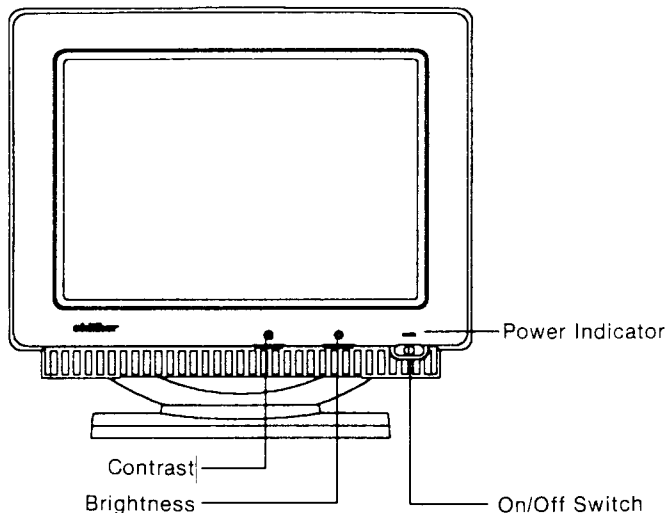


CONTROLS LOCATION

CV430(1430/1425 Plus), CV431, CV432 Color Monitor uses a 15-pin "D" type connector. The input signal is connected through the 15-pin connector.

The input signal is based on the TTL sync. and ANALOG Video. Figure 1 shows the monitor controls on the front and rear panels.

Front View (Optional)



Rear View (Optional)

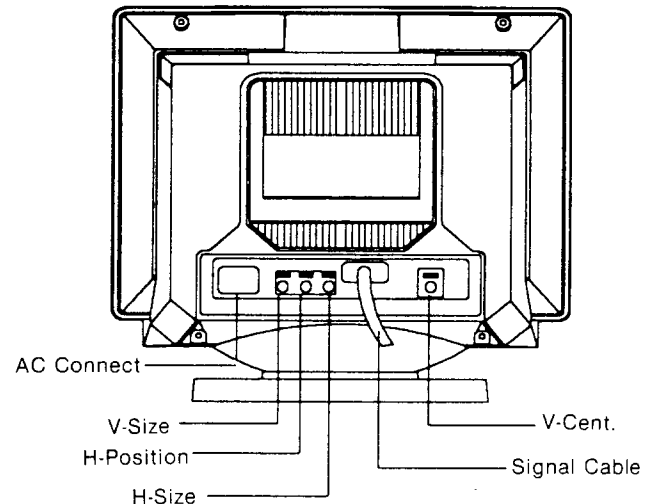


Figure 1, Monitor Controls

- **POWER (PUSH-ON)**

Push this button the POWER is ON. The Power indicator lights when the power is ON. Always turn on the monitor before turning on the computer. Push this button again the POWER is off.

- **CONTRAST (VR709)**

Adjust the display to the contrast preferred by the user.

- **BRIGHTNESS (VR710)**

Used to adjust the brightness of the screen.

- **V-SIZE (VR602)**

Turn this potentiometer to adjust the vertical size of the picture.

- **H-POSITION (VR702)**

Turn this potentiometer to adjust the Horizontal position of the picture.

- **H-SIZE (VR608)**

Turn this potentiometer to adjust the vertical size of the picture.

- **V-CENTER (VR607)**

Turn this potentiometer to adjust the vertical center of the picture.

CIRCUIT DESCRIPTION

POWER SUPPLY

The power supply is a SMPS (Switching Mode Power Supply) that consists of switching IC(IC901), SMPS transformer (T901) pulse transformer (T902), over current protection transistor (Q901) and the associated components. The primary winding of the SMPS transformer is applied the pulse by operating IC901. Therefore, rectified DC output voltage is obtained by the secondary winding of SMPS transformer T901.

POWER SUPPLY DESCRIPTIONS

This SMPS (Switching Mode Power Supply) using STR58041 obtains rectified DC 100V, 70V, 25V, 12V from AC120V, 60Hz (USA Version)/AC 220V, 50Hz (Europe version).

Power is supplied in the following procedure:

- 1) AC120V/AC220V supplied from the AC socket is rectified by D901.
- 2) Rectified voltage is supplied to the T901.
The primarily rectified voltage by D901 is supplied to PIN 6 of T901 through PIN 4 of T901.
- 3) A switching pulse is applied at PIN 2 of the IC901.
- 4) This oscillation causes IC901 to switched, and at the secondary terminal of T901, a voltage (proportional to the turn ratio) is generated.

HORIZONTAL AFC AND OSCILLATION LIMITER

The AFC circuit consists of phase detection circuit of IC701 and the associated components. The oscillation limit circuit is necessary to prevent the pulse from excessive high voltage. This circuit is located in IC701 and controls the oscillator to maintain the control signal in its correct frequency and in phase with the horizontal sync signal.

HORIZONTAL DRIVE CIRCUIT

To obtain horizontal drive pulses from IC701 PIN 12, the horizontal oscillator must be working.

Horizontal drive pulses from IC701 PIN 12 are applied to horizontal drive transformer and drive transistor Q701.

The B+ for T701 is supplied from the 12V line.

HORIZONTAL DEFLECTION OUTPUT

Horizontal drive pulses from IC701 PIN 12 are coupled through T701 to the base of horizontal output Q702. Transistor Q701 is biased on when the beam is at about mid-screen.

The charge stored in C721 causes current to flow through the horizontal yoke winding and Q702 to ground. When the beam reaches the right side of the screen, Q701 is turned off, and the current in the yoke is directed into C722 and C724.

At the same time current flows into C722 and C724 from the regulated B+ via the horizontal choke coil (L702) winding.

Due to resonance, the current then reverses and flows back through the horizontal yoke winding into C721 and C728.

X-RAY PROTECTION CIRCUIT

The X-RAY protection circuit consists of D701, R717, R721, R722, and the associated component that connected to PIN 13 of IC701. A voltage from the FBT PIN 6 is divided by R722 and R721. Under normal operating conditions, the resultant voltage (TP2) maintains the specified value.

If a malfunction causes excessive high voltage, the voltage of FBT PIN 6 is increasing and TP2 voltage is increasing. As a result, D701 is conducted when the cathode voltage of D701 is arrived as much as Zener voltage. A voltage increase at IC701 PIN 13 makes the X-RAY protection circuit conduct, and the horizontal oscillation operation no longer functional. The circuit latches as above, and it is necessary for the circuit to turn the power off for at least 30 seconds to function again.

VERTICAL OSCILLATION/DRIVE CIRCUIT

The time constant circuit that determines the vertical oscillation frequency consists of C715, R712 and R713. (IC701 PIN 16).

The vertical trigger input circuit (IC601 PIN 2) is driven by the vertical sync. negative polarity pulse from the IC701 PIN 16.

The drive circuit has a differential input stage driven by the sawtooth waveform generated at IC601 PIN 6. The negative feedback waveform at IC601 PIN 7 driven from the vertical deflection output is applied to the other input of the differential amplifier.

ADJUSTMENT

GENERAL INFORMATION

All adjustments are thoroughly checked and corrected when the monitor leaves the factory. Therefore the monitor should operate normally and produce proper color and picture upon installation. However, several minor adjustments may be required depending on the particular location in which the monitor is to operate. This monitor is shipped completely in carton. Carefully draw out the monitor from the carton and remove all packing materials. Check and adjust all the customer controls such as Brightness, and Contrast to obtain a normal picture.

HORIZONTAL HOLD ADJUSTMENT

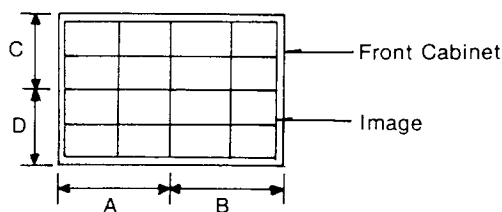
1. Display the Reverse Pattern on the monitor.
2. Disconnect H-Sync signal.
3. Turn the VR703 (H-Hold) for the screen to stand straight.

VERTICAL LINEARITY ADJUSTMENT

1. Display the Cross Hatch Pattern on the monitor.
2. Turn to the VR603, so that the vertical linearity should be best condition.

VERTICAL SIZE ADJUSTMENT

1. VERTICAL SIZE ADJUSTMENT
 - Display the MODE 3 Cross Hatch Pattern on the monitor.
 - Set the external V-Size VR(VR602) at center.
 - Adjust the VR602, and then the vertical size should be within $180 \pm 2\text{mm}$.



(Fig. 1)

VERTICAL CENTER ADJUSTMENT

1. Display the Reverse Pattern on the monitor.
2. Adjust the VR607(External VR), and then set the geometric vertical center in the screen.

SIDE PINCUSHION ADJUSTMENT

1. Display the Reverse Pattern.
2. Adjust the VR605 so as to minimize the pin-cushion distortion.

HORIZONTAL SIZE ADJUSTMENT

1. Display the Cross Hatch Pattern on the monitor.
2. Set the external H-Size VR(VR608) at center.
3. Adjust the VR606 for the Horizontal Size so as to be within $247 \pm 2\text{mm}$.
4. Then the Bright control should be set at the center, and the Contrast control should be set at the MAX.

WHITE-BALANCE ADJUSTMENT

1. THE USED INSTRUMENT
 - WHITE-BALANCE METER
 - DEGAUSSING COIL (Degauss the monitor before adjustment).
 - PHOTOMETER.
2. PREPARING ADJUSTMENT(1)
 - Connect the signal cable with PC, and display the Color 0.0 Full Pattern on the monitor.
 - Minimize the screen control of FBT.
 - Set the Sub-Bright (VR707) and the Sub-Contrast (VR708) to mechanical center.
 - Set the Contrast VR and the Bright VR to the Max.
 - Set the G and the B drive to mechanical center.
 - Minimize R,G,B Cut Off VR and turn clockwise B Cut Off VR (VR390) as much as $1/3$ (about 90°).

3. ADJUSTMENT (1)

- Turn the screen control (G2) to clockwise slowly until the brightness of B raster is 0.5~1 FL.
- Let the R Cut Off VR(VR390) be the reference, and adjust the G and the B Cut Off VR(VR350, VR370) so as to get $X = 0.282$, $Y = 0.304$.
- Adjust slowly counter-clockwise the screen VR for raster so as to disappear (Brightness VR Center; contrast VR Max).

4. ADJUSTMENT (2)

- 1) Set external Brightness VR to center and external Contrast VR to Maximum.
- 2) Display full white pattern (color 15.0) on the screen.
- 3) Turn the R drive VR(VR332) so that $X = 0.282$ and the G drive VR(VR352) so that $Y = 0.304$.
- 4) Repeat 3) until $X = 0.282 \pm 0.02$, $Y = 0.304 \pm 0.022$.
- 5) Set external Brightness VR to min. and adjust external Contrast VR until brightness is 5 FL at full white pattern (color 15.0).
- 6) Confirm $X = 0.282 \pm 0.02$, $Y = 0.304 \pm 0.022$ unless the color co-ordinate is not in spec, re-adjust R, G cut off VR (VR350, VR370) so that the pattern is white.
- 7) Repeat the number 3),4),5),6) so that the screen should be white.

BRIGHTNESS ADJUSTMENT

1. Set the external Bright VR at center and the external contrast VR at Min.
2. Display the Cut-Off Level (Color 0.0)
3. Adjust the Sub-Bright VR(VR707) until the back raster disappears.
4. Confirm that whether back raster appears or not when the Bright VR is at Max.

CONTRAST ADJUSTMENT

1. Set the external Bright VR at center and the external Contrast VR at Max.
2. Display White Pattern (Color 7.0), of which the size is 50×50 , on the monitor.
3. At the center of the screen, adjust the Sub-Contrast VR (VR708), so that the brightness should be 25 ± 4 FL.

FOCUS ADJUSTMENT

1. Set the Bright VR CENTER and the Contrast VR to Max.
2. Display the "H" character in full screen (Color 15.0)
3. Adjust Focus VR, so that the focus should be best condition.

FAIL SAFETY CHECK

USED INSTRUMENT: DC VOLTMETER.

1. Display the reverser pattern on the monitor.
2. Minimize the Contrast and the Bright VR.
So that the screen should be Cut-Off.
3. Connect DC Voltmeter between TP₂ and chassis ground.
4. The voltage of TP₂ should be 10.2V-10.9V

CONFIRMING

1. Supply the cathode of D702 (TP2) with DC 12.0 ± 0.5 - 0V, and then confirm that the monitor should be Hold Down.

(CAUTION): ALL PROCEDURE MUST BE DONE AFTER THE MONITOR IS FULLY HEAT-RUN.

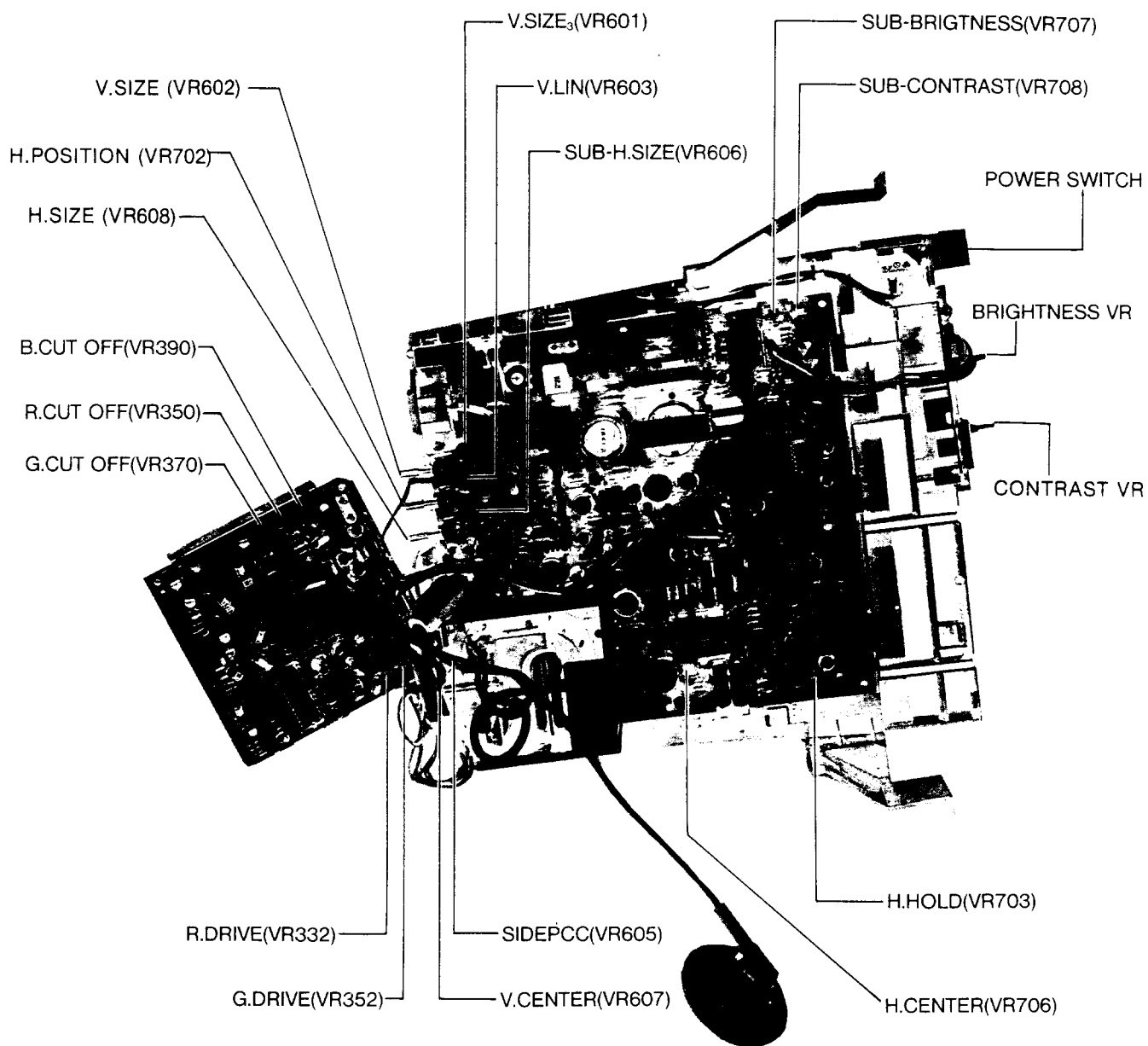
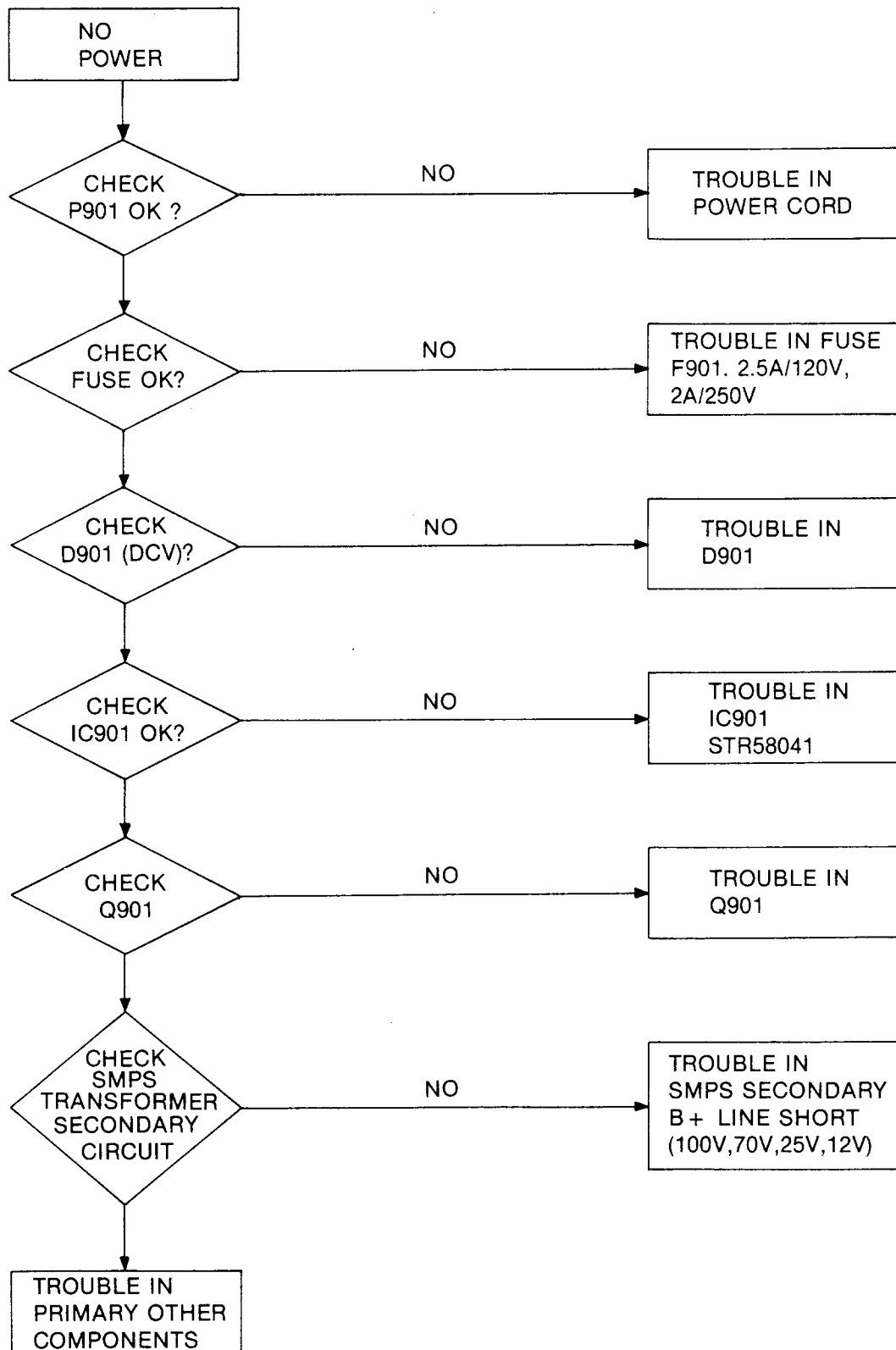


Figure 2, Chassis Important Parts

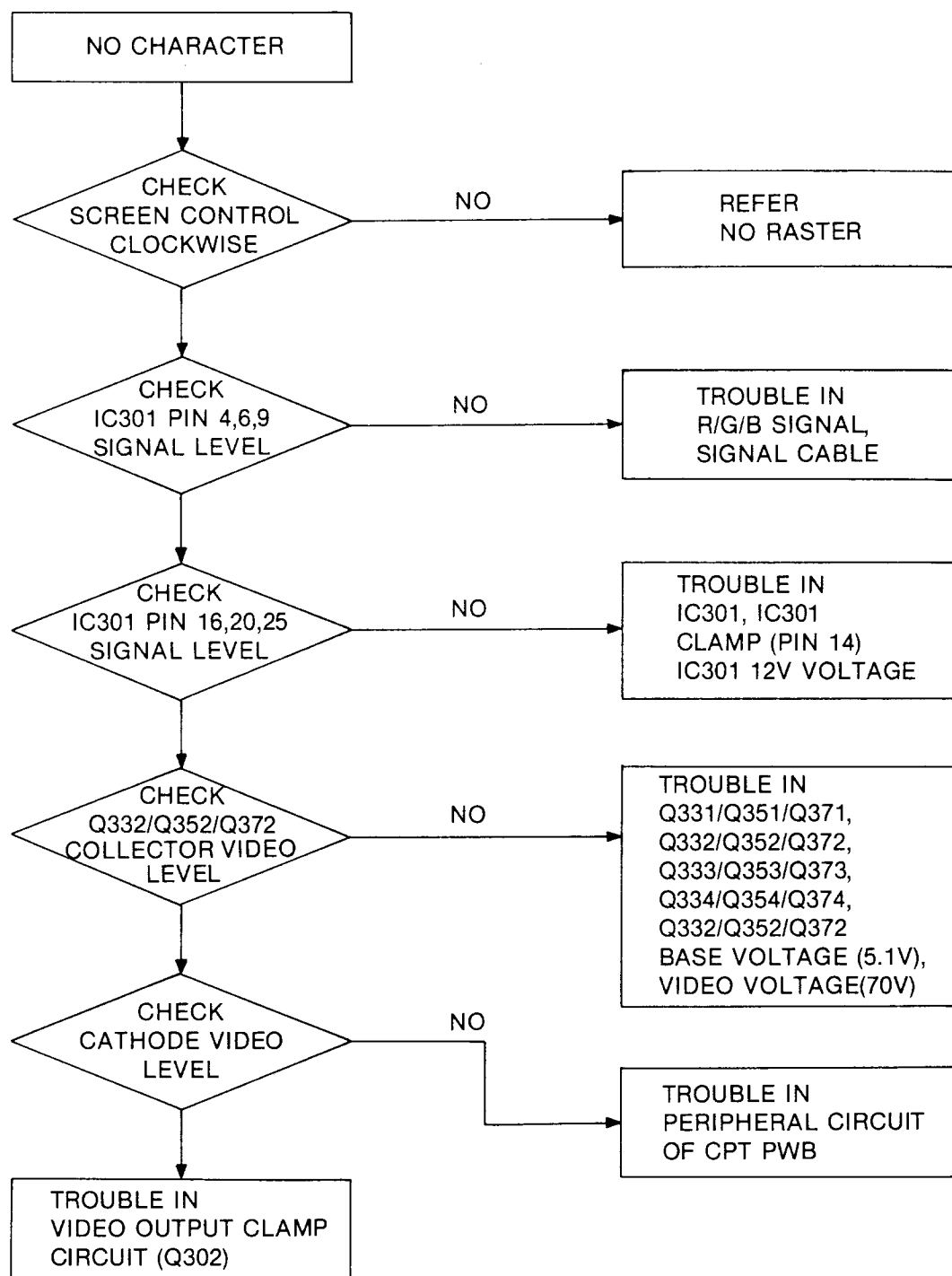
TROUBLE SHOOTING GUIDE

NO POWER

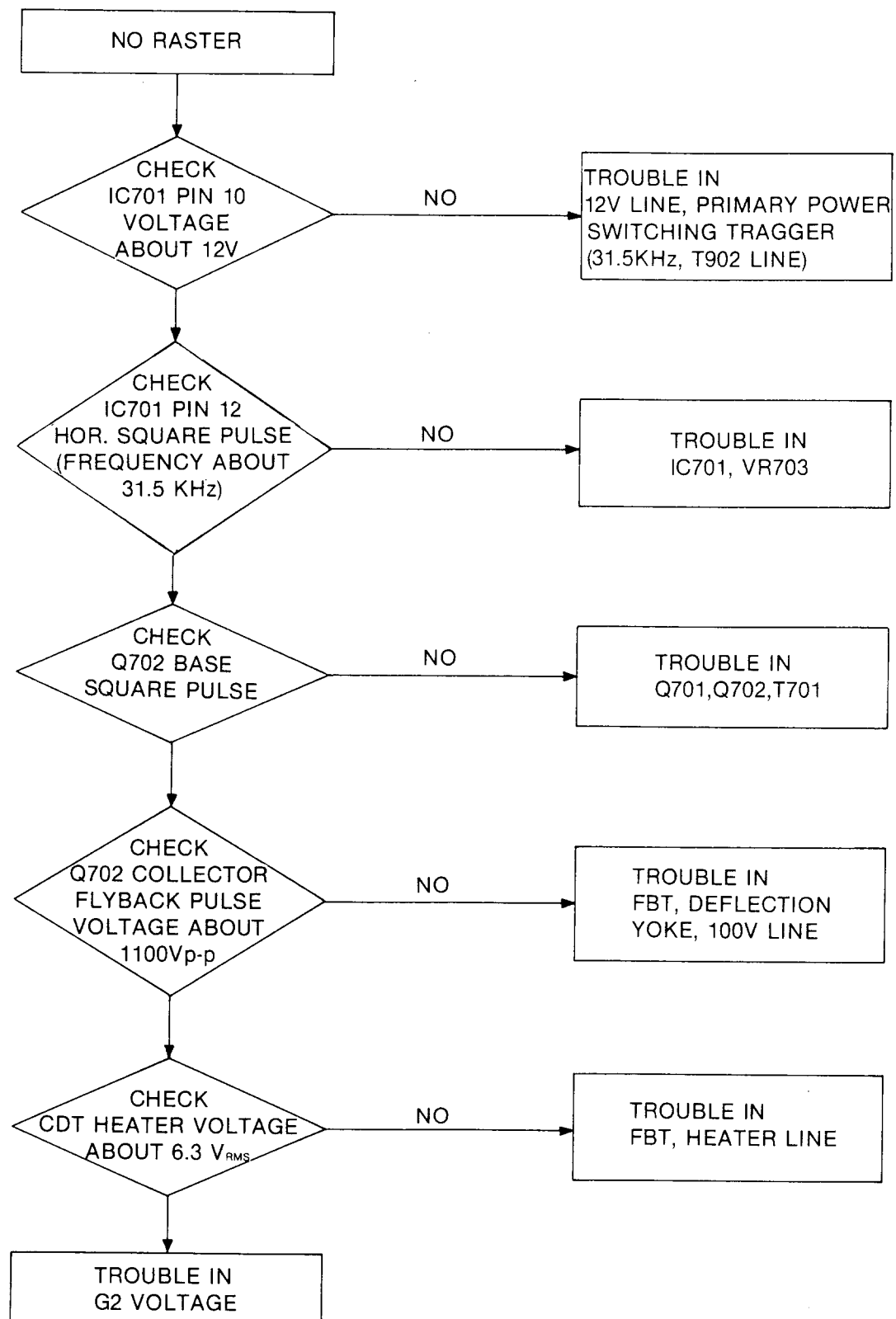


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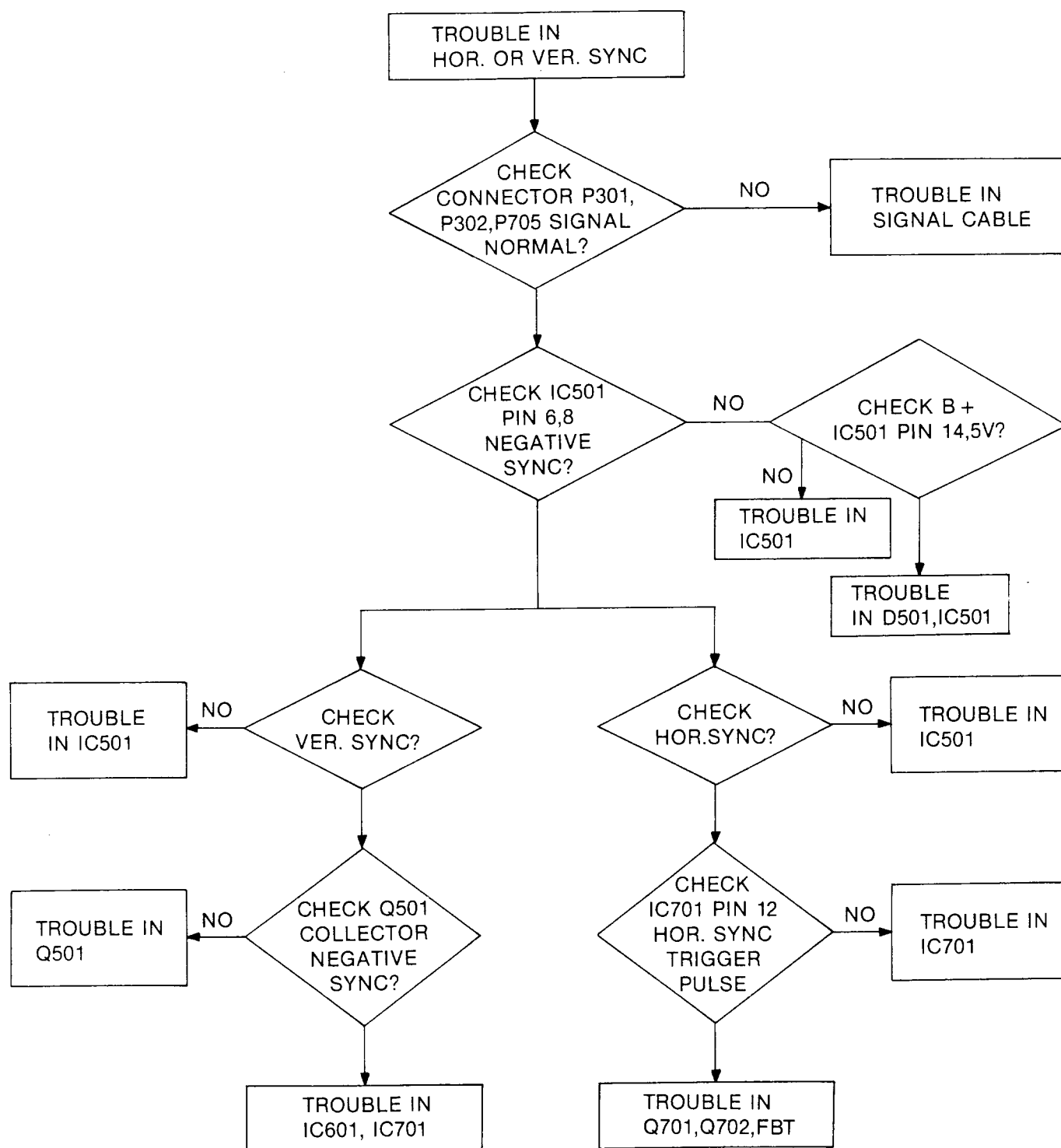
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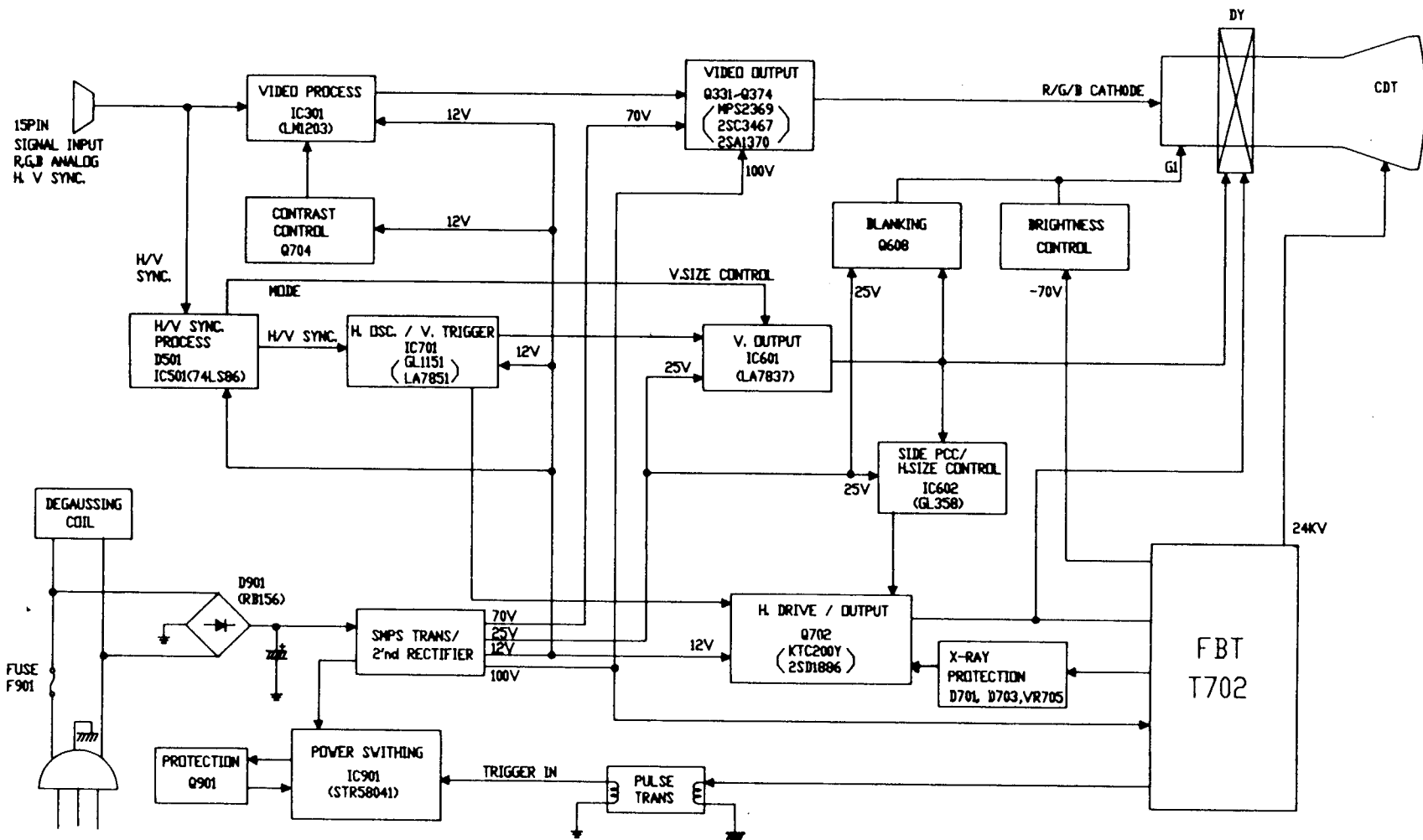


NO RASTER

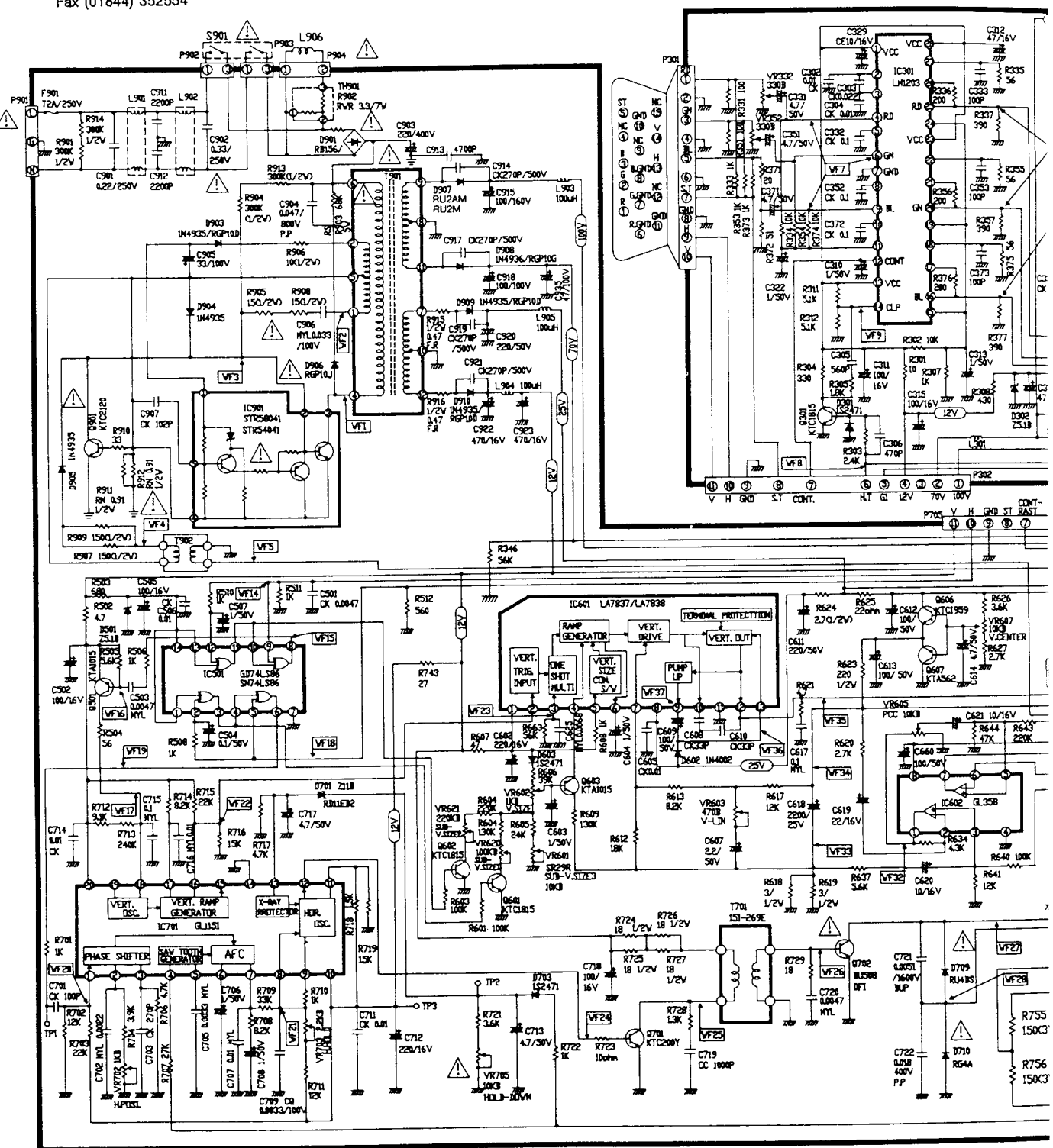


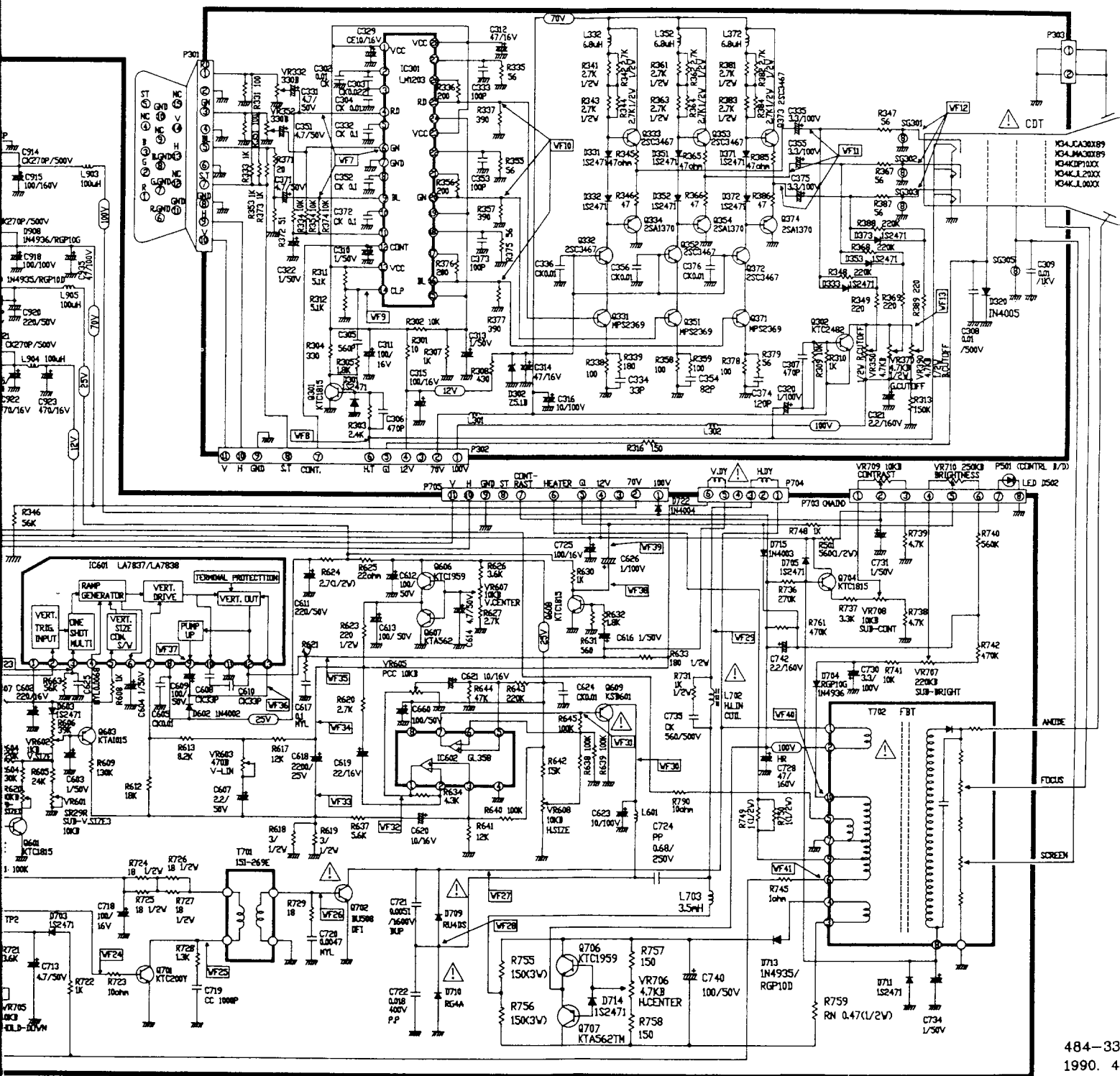
TROUBLE IN H,V SYNC





CA-9 SCHEMATIC DIAGRAM (14" HIGH VERSION)





For Service Manuals
contact
MAURITRON SERVICES
8 Cherry Tree Road, Chinnor
Oxfordshire, OX9 4QY.
Tel (01844) 351694
Fax (01844) 352554

NOTES

1. ALL RESISTORS $1/8W \pm 5\%$ VALUES
IN OHMS, $G = \pm 2\%$
 $K = 1,000\text{ohm}$ $M = 1,000,000\text{ohm}$
2. ALL CAPACITORS IN μF , $\text{PF} = 10\text{EXP}(-12)\text{F}$
3. USING M34KJL00XX AND M34KJL20XX CDT.
THE RESISTANCE OF R642 AND R736 MUST BE AS FOLLOW:
R642: 13K ohm
R736: 330K ohm
4. ACCORDING TO ALTERNATIVE USE LOCATED Q702,
THE OTHER PARTS MUST BE CHANGED AS FOLLOW:

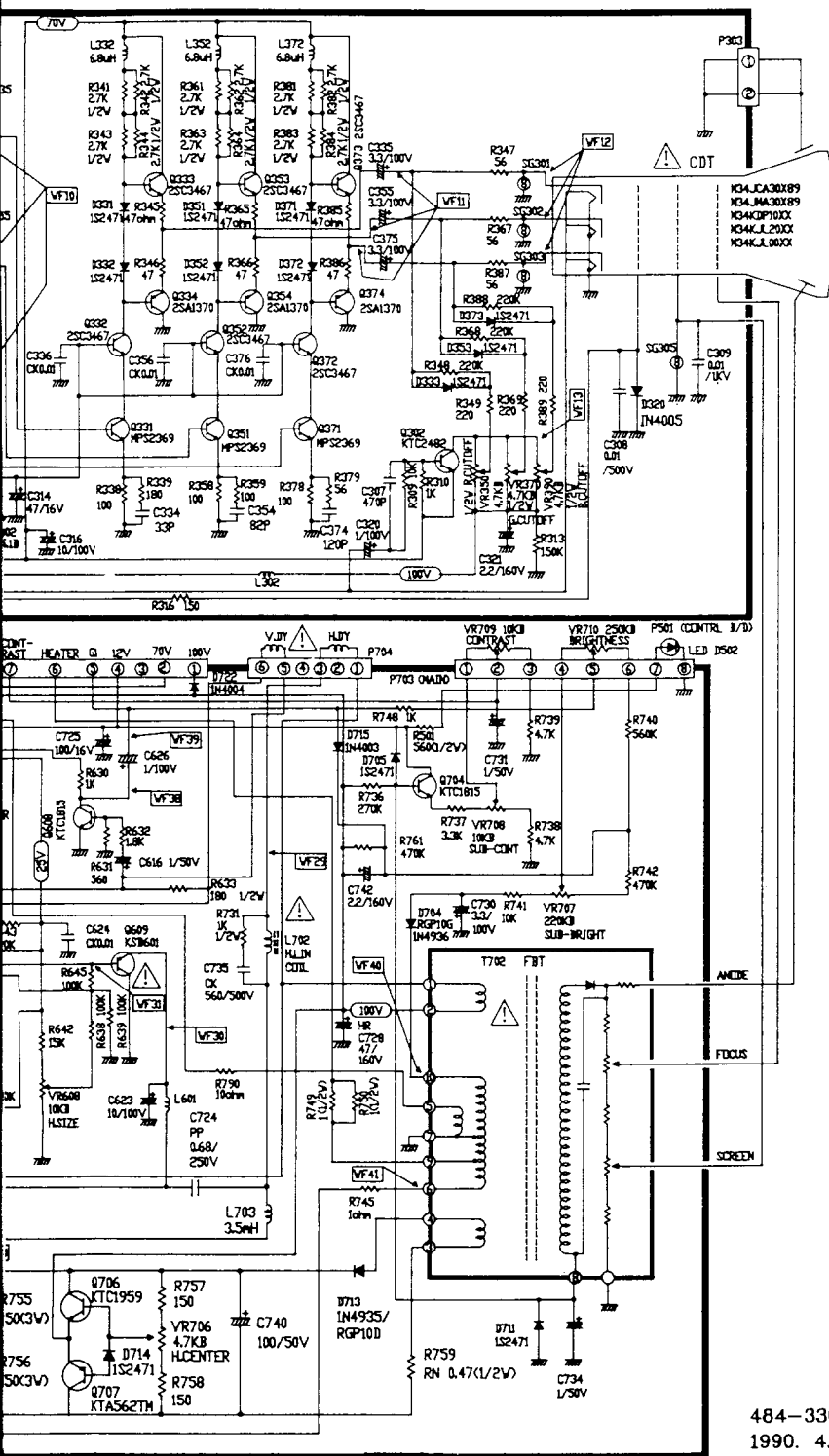
Q702	2SD1886	2SD1849
R724,725 R726,727	47(1/2W)	47(1/2W)
R728	33(1/8W)	33(1/8W)
T701	151-269D	151-269D
D712	RU4DS	NONE

IMPORTANT SAFETY NOTICE

THE $\triangle$ SYMBOL MARK OF THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION, FIRE AND ELECTRICAL SHOCK HAZARDS, WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE $\triangle$ SYMBOL MARK OF THE SCHEMATIC.

IMPORTANT AVIS SUR LA SÉCURITÉ

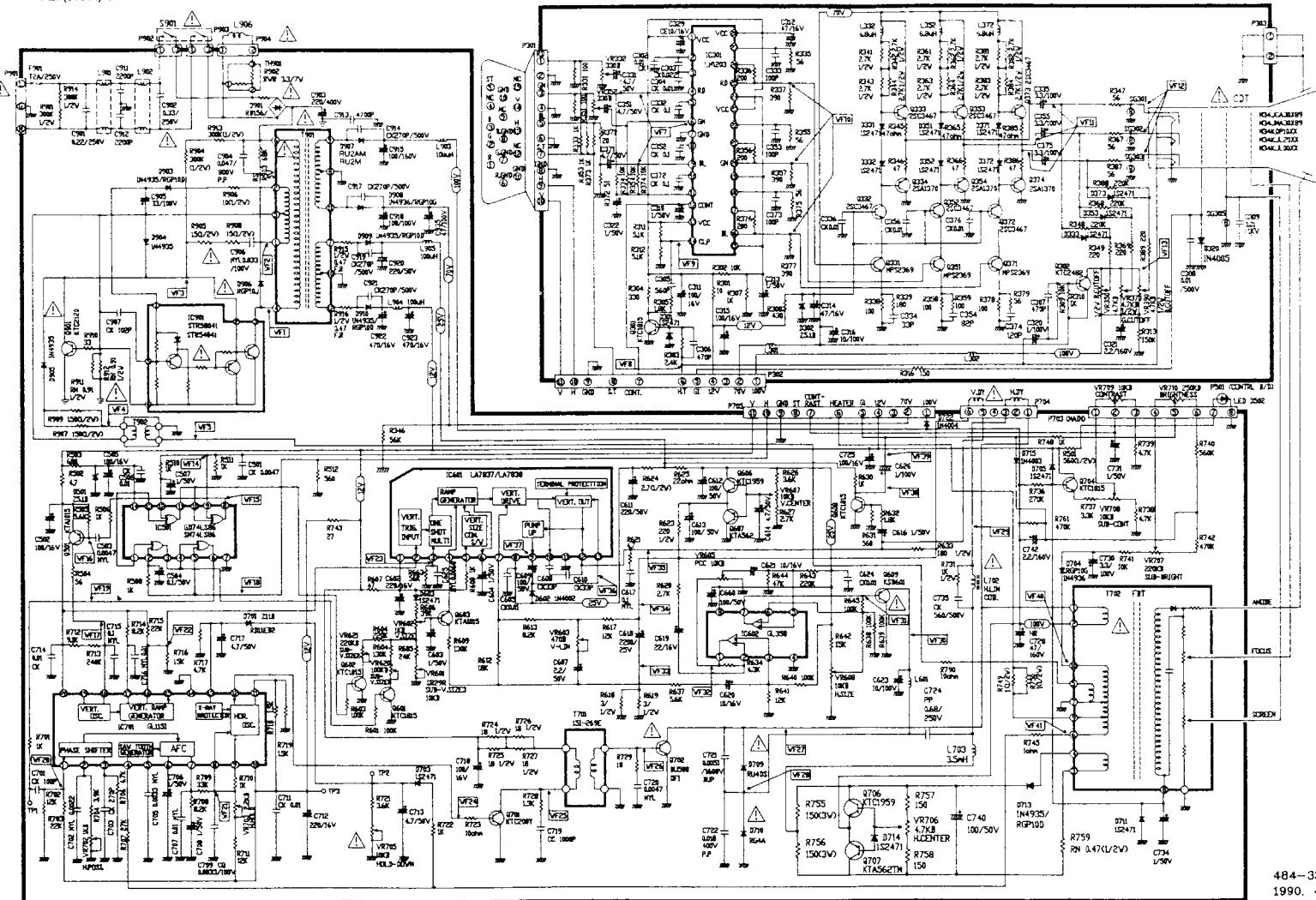
LA $\triangle$ SYMBOLE MARQUE DE CE DIAGRAMME SCHEMATIQUE COMPREND D'IMPORTANTES CARACTÉRISTIQUES SPÉCIALES CONÇUES POUR PROTÉGER DES RAYONS X, ET DES DANGERS D'INCENDIE ET DE SECOURS ÉLECTRIQUES. EN CAS DE BESOIN SI DES PIÈCES DE CETTE $\triangle$ SYMBOLE MARQUE DOIVENT ÊTRE REMPLACÉES N'UTILISEZ QUE DES PIÈCES SPÉCIFIÉES PAR LE MANUFACTURIER.



CA-9 SCHEMATIC DIAGRAM (14" HIGH VERSION NEW VGA)

FOR $L_v = 15mH$

For Service Manuals
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 8 Cherry Tree Road, Chinnor
 Oxfordshire, OX9 4QY
 Tel (01844) 351694
 Fax (01844) 352554



NOTES

1. ALL RESISTORS $1/8W \pm 5\%$ VALUES
 IN Ω MS, G $\pm 2\%$
 $K = 1,000\Omega$ M = 1,000,000 Ω
2. ALL CAPACITORS IN μF , PF = 10EXPC-12XF
3. USING M34KJL00XX AND M34KJL20XX CDT.
 THE RESISTANCE OF R642 AND R736 MUST BE AS FOLLOW:
 R642: 13K Ω pm
 R736: 330K Ω pm
4. ACCORDING TO ALTERNATIVE USE LOCATED AT 7702,
 THE OTHER PARTS MUST BE CHANGED AS FOLLOW:

7702	2SD1886	2SD1849
R724,725 R726,727	47K(1/2W)	47K(1/2W)
R728	33K(1/8W)	33K(1/8W)
T701	151-2690	151-2690
D712	RU4DS	NONE

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CA-9 SCHEMATIC DIAGRAM (14" HIGH VERSION NEW

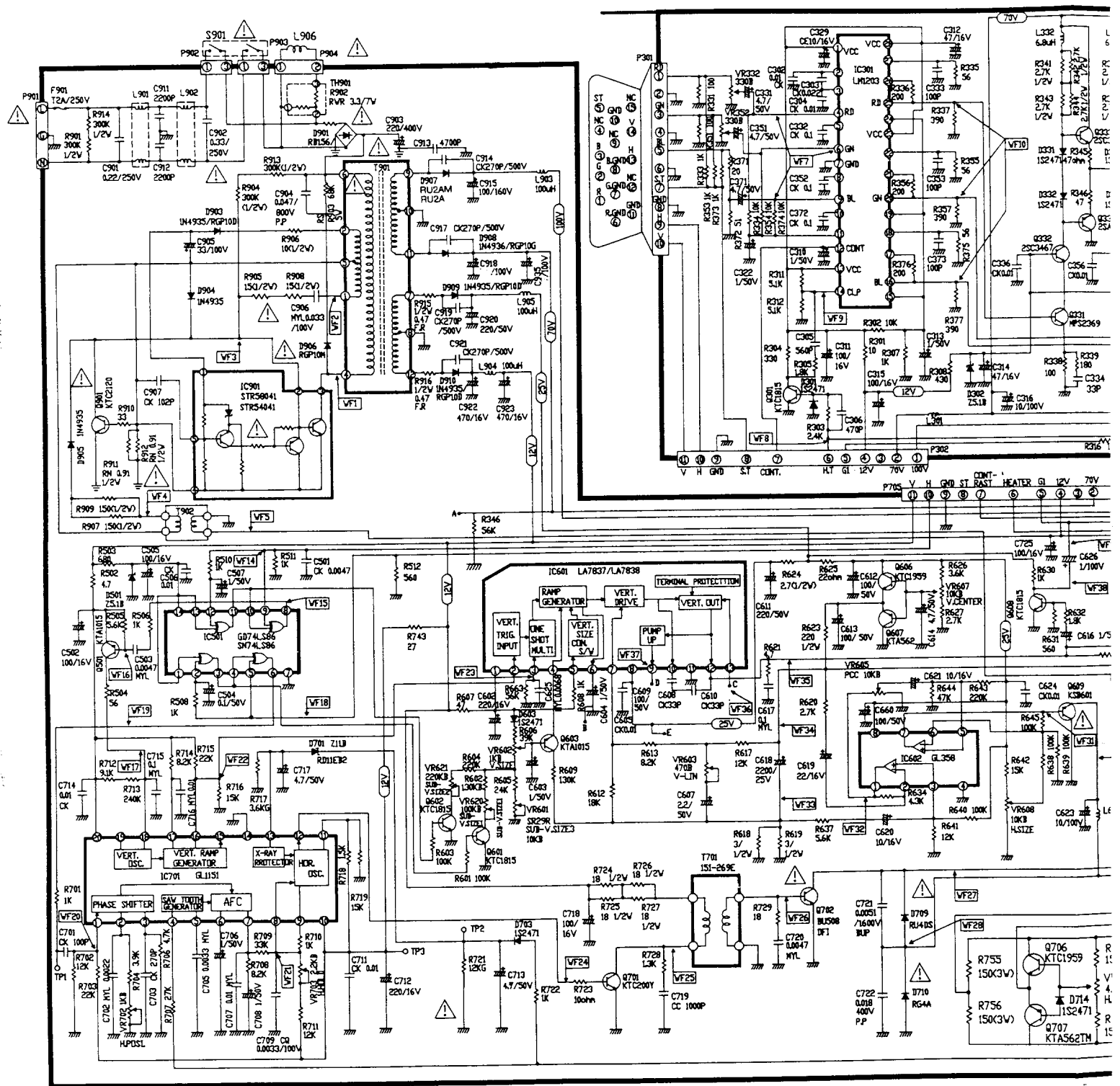
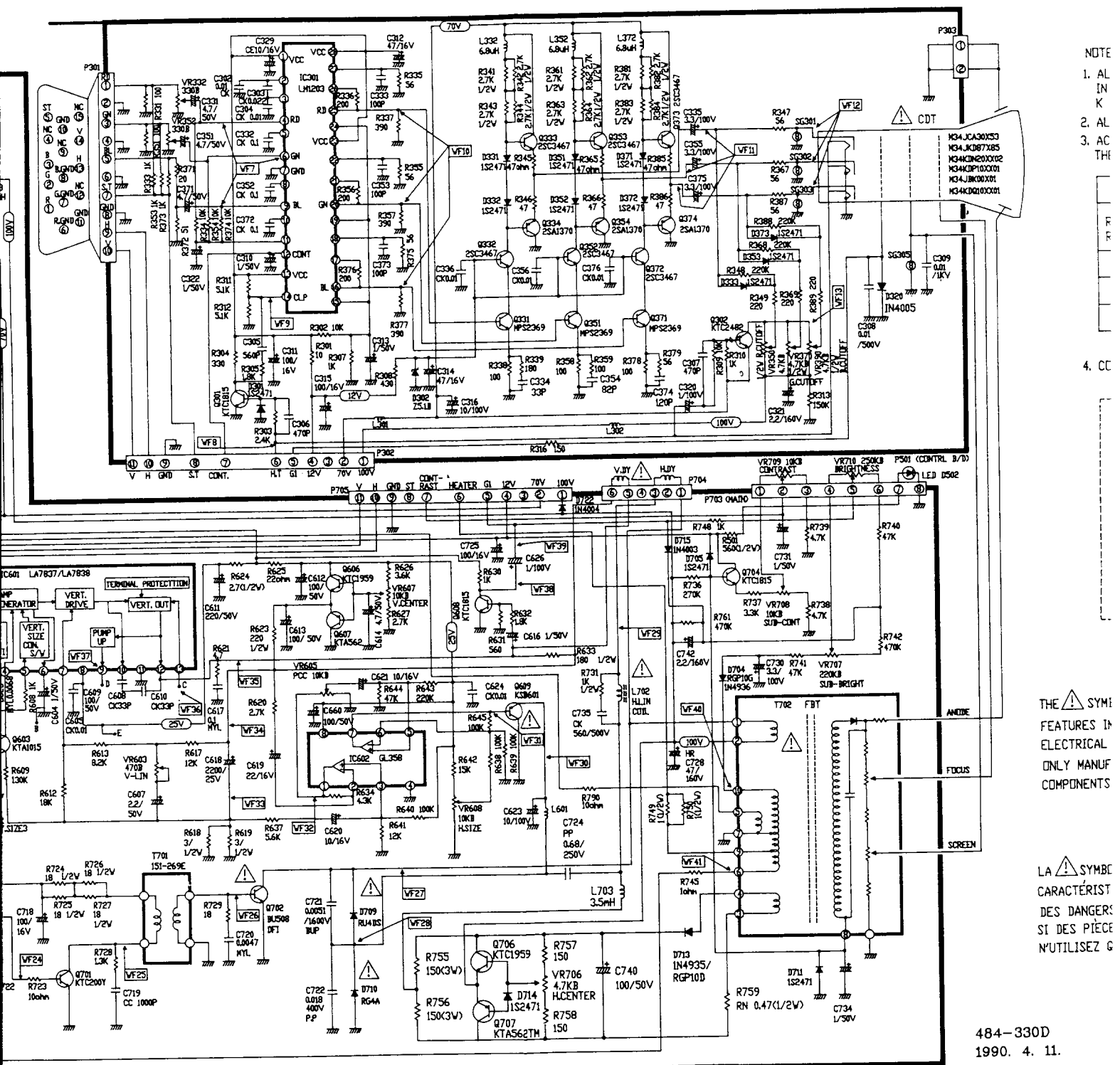
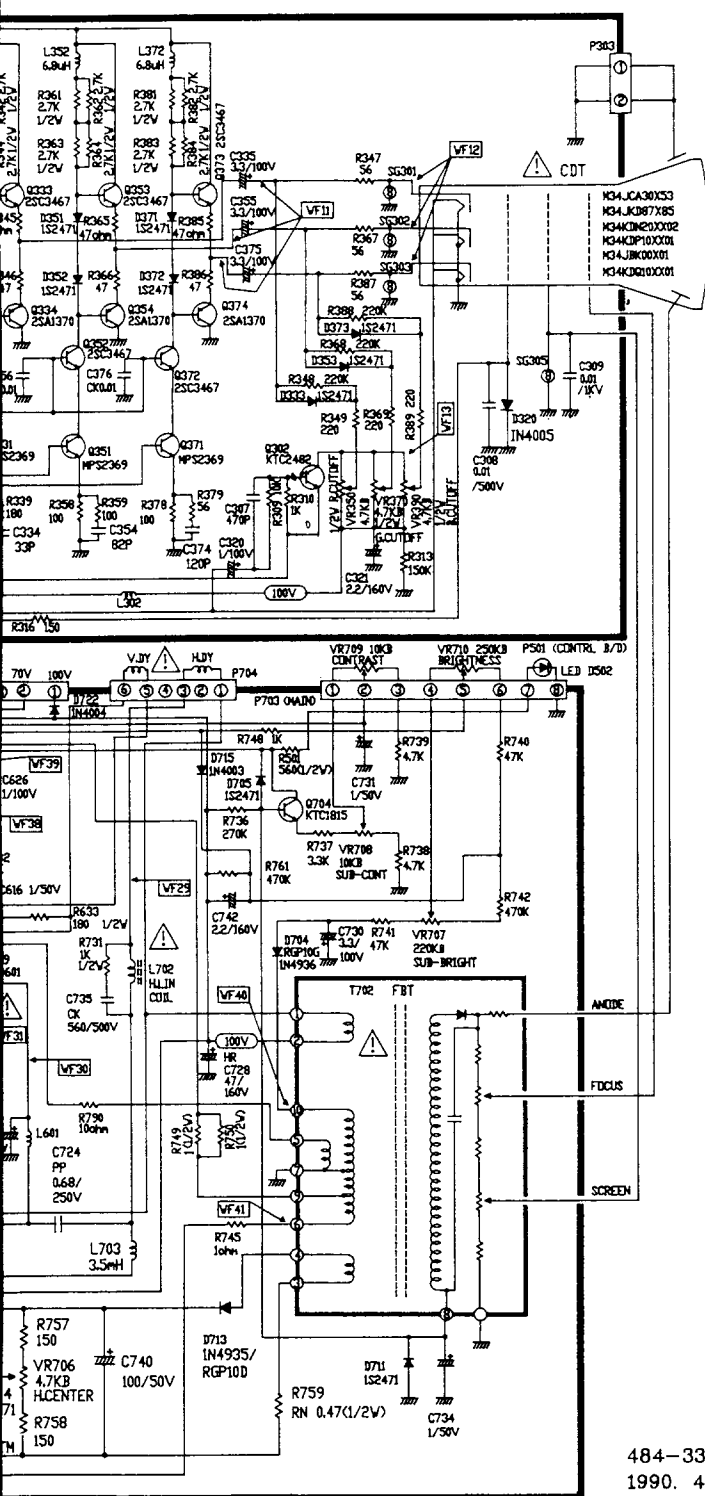


DIAGRAM (14" HIGH VERSION NEW VGA)

FOR Lh/Lv = 0.45/25mH



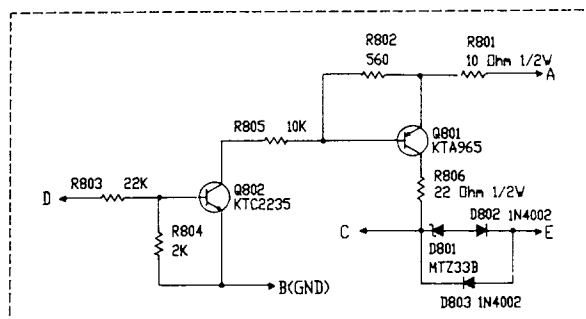


NOTES

- ALL RESISTORS 1/8W $\pm$ 5% VALUES
IN OHMS, G = $\pm$ 2%
K = 1,000ohm M = 1,000,000ohm
- ALL CAPACITORS IN uF, PF = 10EXP(-12)F
- ACCORDING TO ALTERNATIVE USE LOCATED Q702,
THE OTHER PARTS MUST BE CHANGED AS FOLLOWS

Q702	2SD1886	2SD1849
R724,725 R726,727	47(1/2W)	47(1/2W)
R728	33(1/8W)	33(1/8W)
T701	151-269D	151-269D
D712	RU4DS	NONE

- CONNECTED CIRCUIT AT A,B,C,D,E POINT.



IMPORTANT SAFETY NOTICE

THE $\triangle$ SYMBOL MARK OF THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION, FIRE AND ELECTRICAL SHOCK HAZARDS, WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE $\triangle$ SYMBOL MARK OF THE SCHEMATIC.

IMPORTANT AVIS SUR LA SÉCURITÉ

LA $\triangle$ SYMBOLE MARQUE DE CE DIAGRAMME SCHEMATIQUE COMPREND D'IMPORTANTES CARACTÉRISTIQUES SPÉCIALES CONÇUES POUR PROTÉGER DES RAYONS X, ET DES DANGERS D'INCENDIE ET DE SECOURS ÉLECTRIQUES. EN CAS DE BESOIN SI DES PIÈCES DE CETTE $\triangle$ SYMBOLE MARQUE DOIVENT ÊTRE REMPLACÉES N'UTILISEZ QUE DES PIÈCES SPÉCIFIÉES PAR LE MANUFACTURIER.

CA-9 SCHEMATIC DIAGRAM (14" HIGH VERSION NEW VGA)

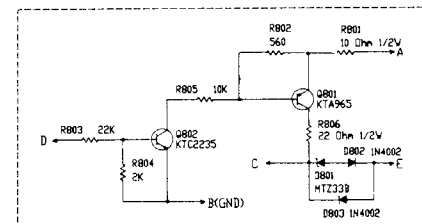
FOR LH/LV = 0.45/25MH

NOTES

- ALL RESISTORS 1/8W ± 5 VALUES
IN OHMS, G = $\pm 2\%$
K = 1,000ohm M = 1,000,000ohm
- ALL CAPACITORS IN μF , PF = 10EXP(-12)F
- ACCORDING TO ALTERNATIVE USE LOCATED Q702,
THE OTHER PARTS MUST BE CHANGED AS FOLLOWS

Q702	2SD1886	2SD1849
R724,725	470(1/2W)	470(1/2W)
R726,727		
R728	330(1/8W)	330(1/8W)
T701	151-269D	151-269D
D712	RU4DS	NONE

- CONNECTED CIRCUIT AT A,B,C,D,E POINT.



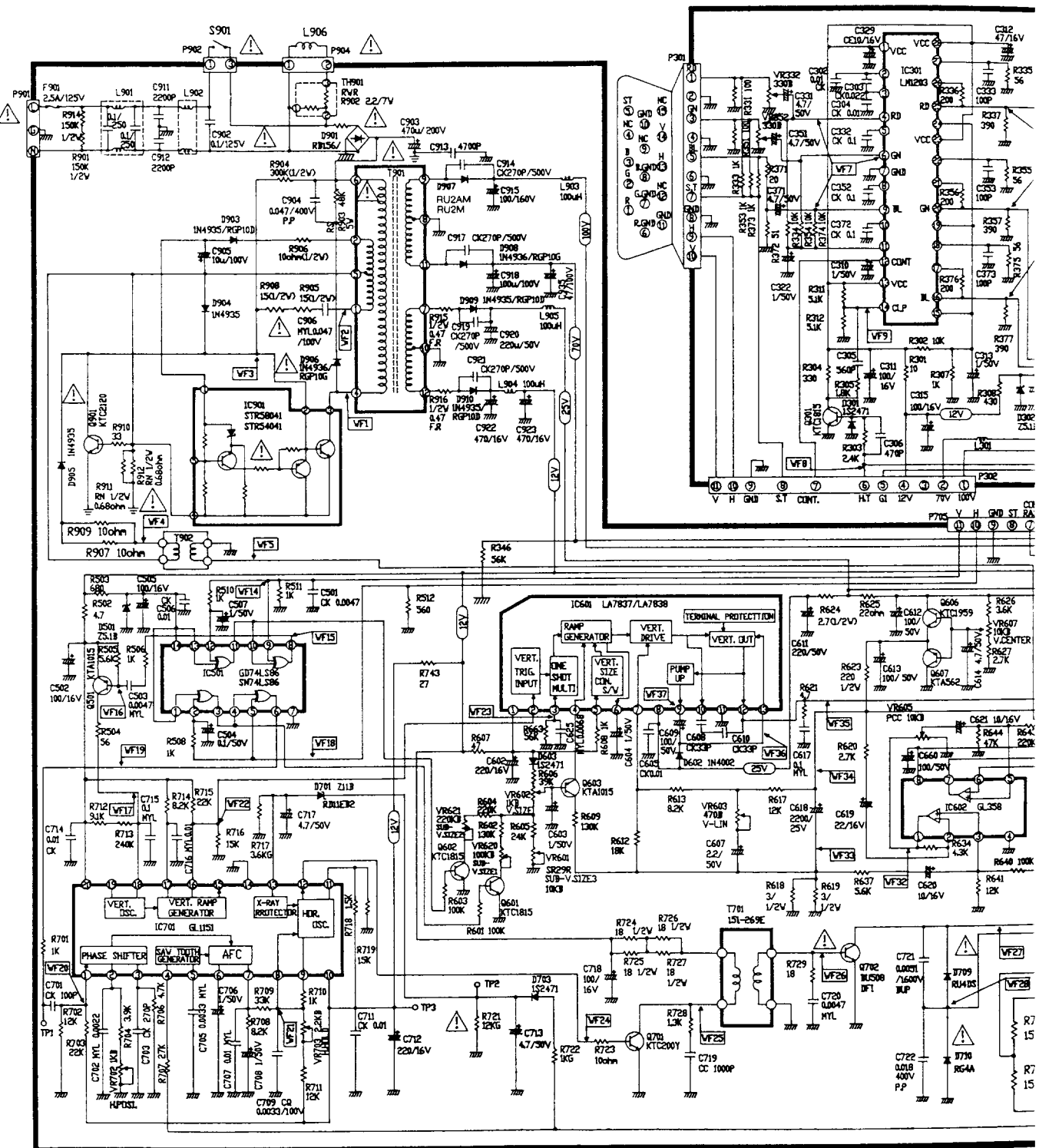
IMPORTANT SAFETY NOTICE

THE Δ SYMBOL MARK OF THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION, FIRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE Δ SYMBOL MARK OF THE SCHEMATIC.

IMPORTANT AVIS SUR LA SÉCURITÉ

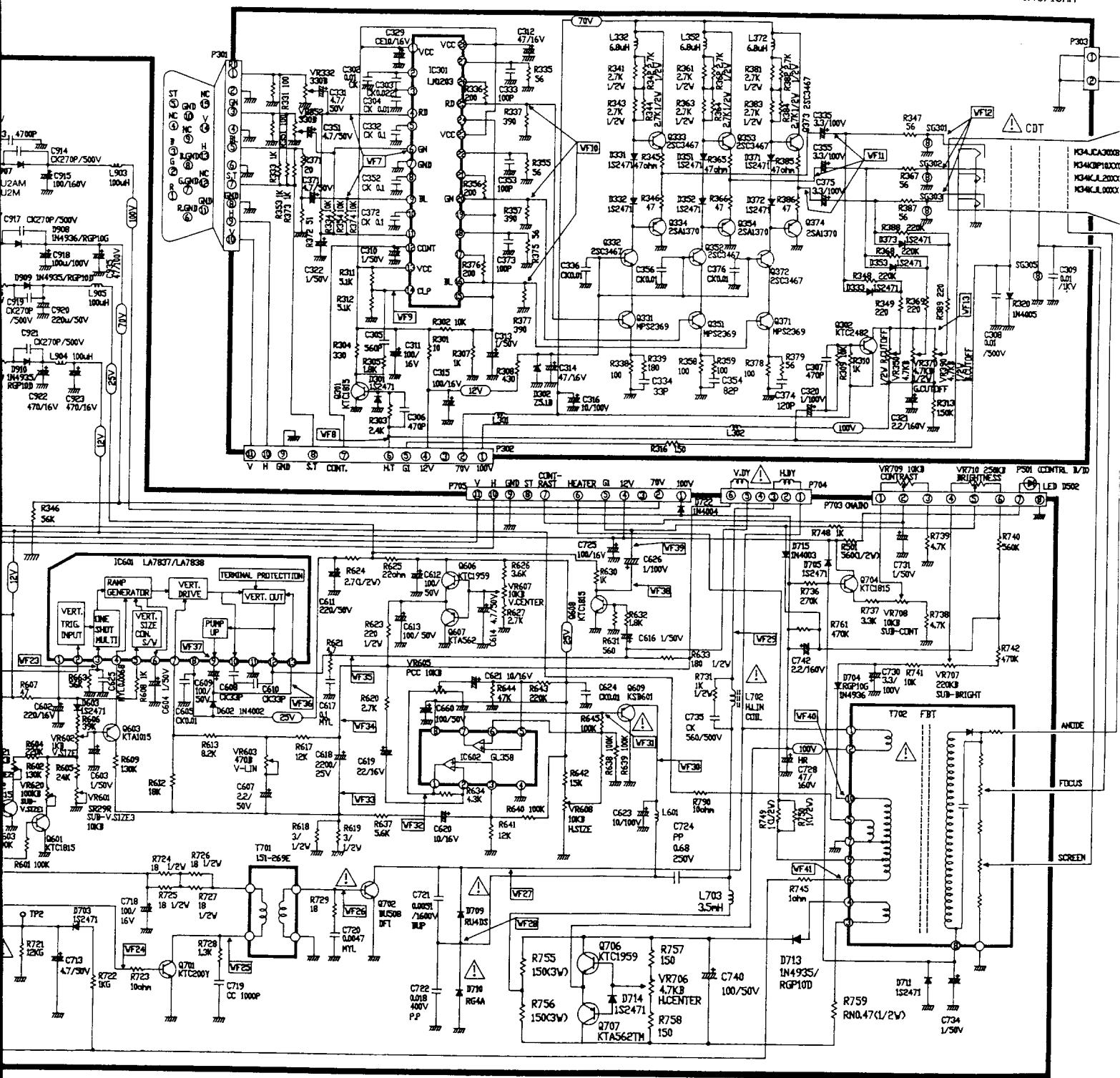
LA Δ SYMBOLE MARQUE DE CE DIAGRAMME SCHEMATIQUE COMPREND IMPORTANTES CARACTÉRISTIQUES SPÉCIALES CONÇUES POUR PROTÉGER DES RAYONS X, ET DES DANGERS D'INCENDIE ET DE SECOURS ÉLECTRIQUES. EN CAS DE BESOIN SI DES PIÈCES DE CETTE Δ SYMBOLE MARQUE DOIVENT ÊTRE REMPLACÉES N'UTILISEZ QUE DES PIÈCES SPÉCIFIÉES PAR LE MANUFACTURIER.

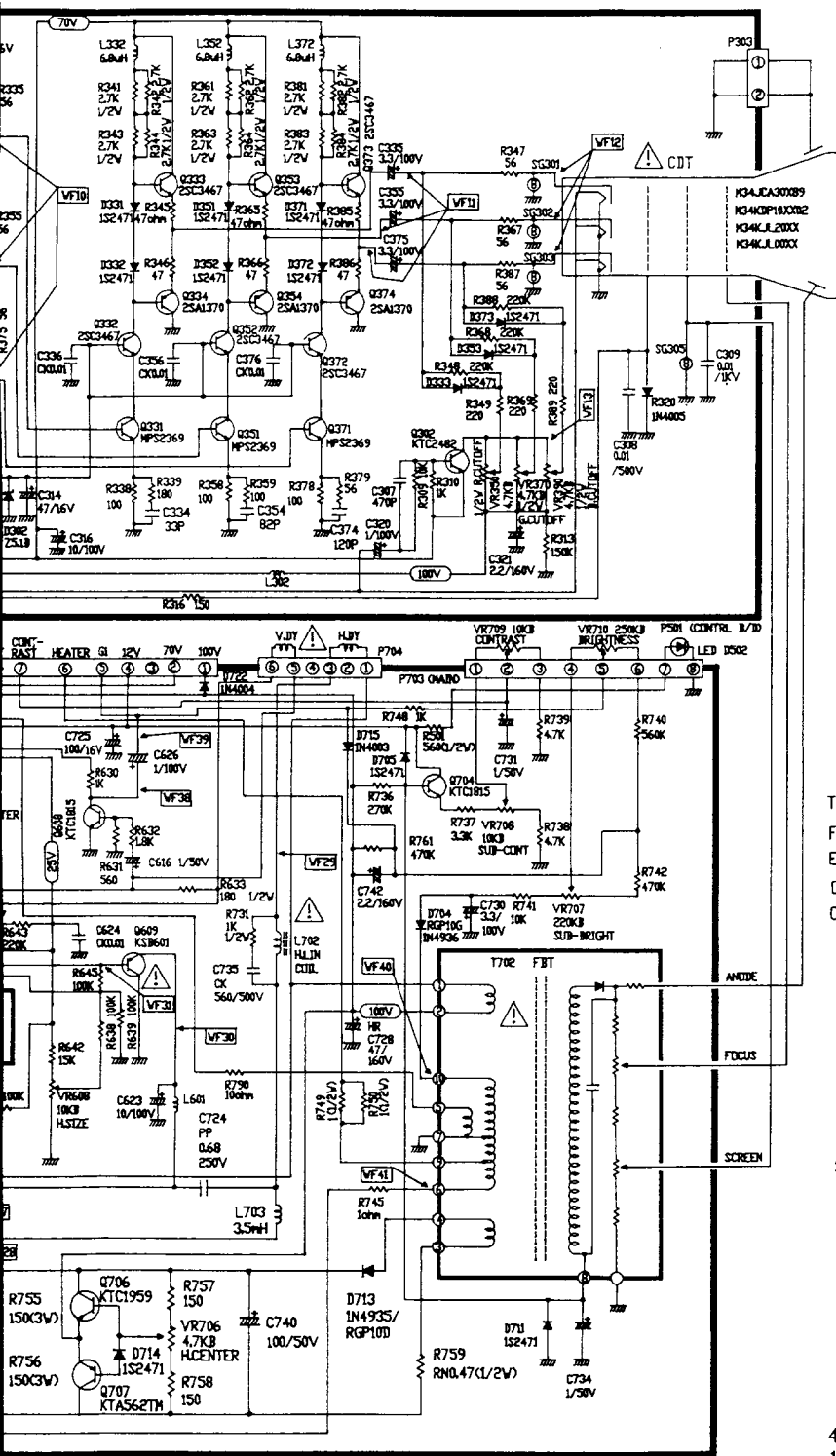
CA-9 SCHEMATIC DIAGRAM (14" LOW VERSION)



SCHEMATIC DIAGRAM (14" LOW VERSION NEW VGA)

FOR Lh/Lv = 0.45/15mH





NOTES :

1. ALL RESISTORS $1/8W \pm 5$ VALUES
IN OHMS, G = $\pm 2\%$
K = 1,000ohm M = 1,000,000ohm
2. ALL CAPACITORS IN μF , PF = $10EXP(-12)F$
3. USING M34KJL20XX AND M34KJL00XX CDT,
THE RESISTANCE OF R642 AND R736
MUST BE AS FOLLOW;
R642 : 13K ohm
R736 : 330K ohm
4. ACCORDING TO ALTERNATIVE USE LOCATED Q702,
THE OTHER PARTS MUST BE CHANGED AS FOLLOW ;

Q702	2SD1886	2SD1849
R724,725	47(1/2W)	47(1/2W)
R726,727		
R728	33(1/8W)	33(1/8W)
T701	151-269D	151-269D
D712	RU4DS	NONE

IMPORTANT SAFETY NOTICE

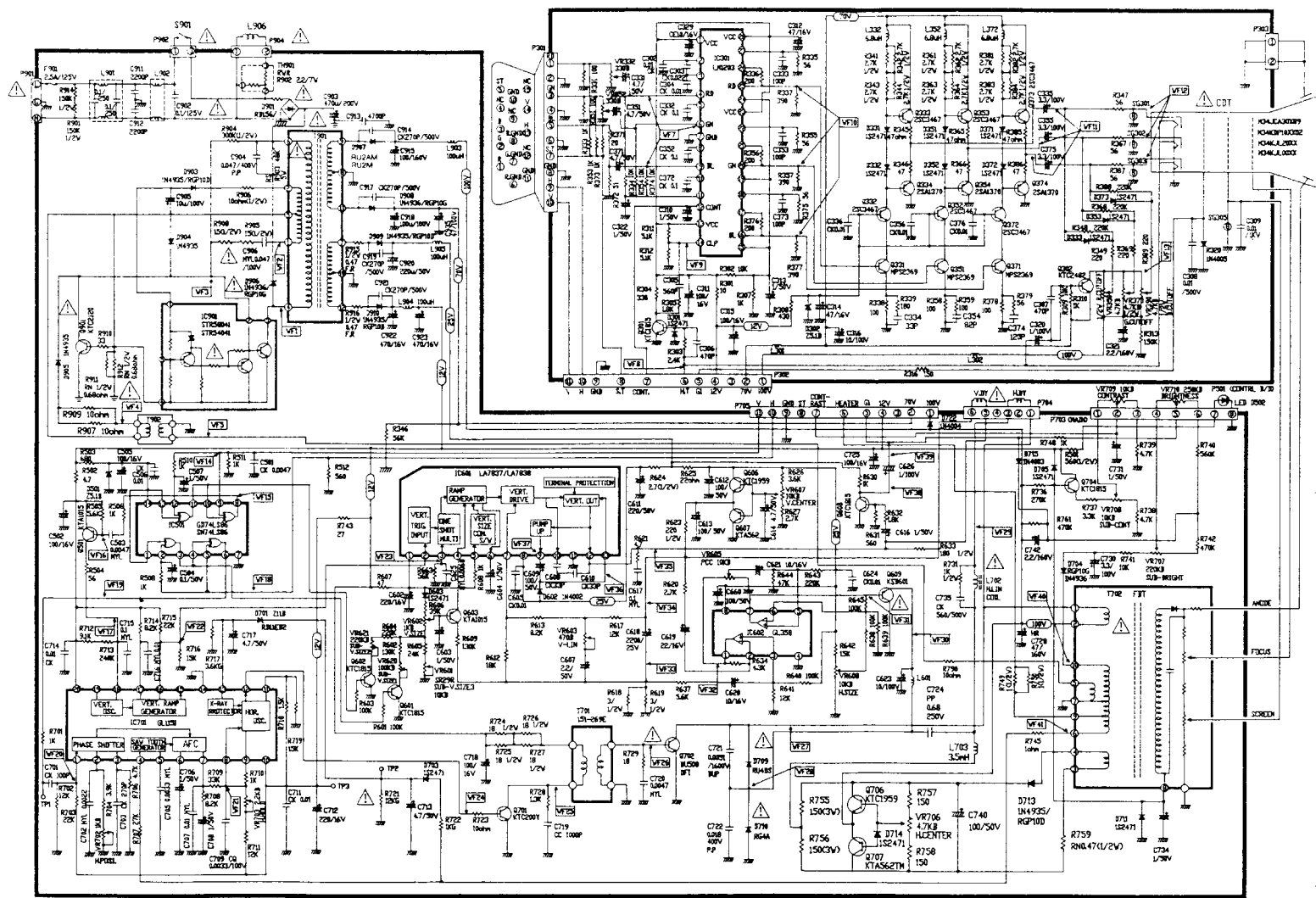
THE  SYMBOL MARK OF THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION, FIRE AND ELECTRICAL SHOCK HAZARDS, WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE  SYMBOL MARK OF THE SCHEMATIC.

IMPORTANT AVIS SUR LA SÉCURITÉ

LA  SYMBOLE MARQUE DE CE DIAGRAMME SCHEMATIQUE COMPREND D'IMPORTANTES CARACTÉRISTIQUES SPÉCIALES CONÇUES POUR PROTÉGER DES RAYONS X, ET DES DANGERS D'INCENDIE ET DE SECOURS ÉLECTRIQUES. EN CAS DE BESOIN SI DES PIÈCES DE CETTE  SYMBOLE MARQUE DOIVENT ÊTRE REMPLACÉES N'UTILISEZ QUE DES PIÈCES SPÉCIFIÉES PAR LE MANUFACTURIER.

CA-9 SCHEMATIC DIAGRAM (14" LOW VERSION NEW VGA)

FDR Lh/Lv = 0.45/15N



NOTES :

1. ALL RESISTORS 1/8W ± 5 VALUES
IN OHMS, G = $\pm 2\%$
K = 1000ohm M = 1000,000ohm
2. ALL CAPACITORS IN uF, PF = 10EXP-12UF
3. USING M34KJL20XX AND M34KJL00XX CDT,
THE RESISTANCE OF R642 AND R736
MUST BE AS FOLLOW:
R642 : 13K ohm
R736 : 330K ohm
4. ACCORDING TO ALTERNATIVE USE LOCATED Q702,
THE OTHER PARTS MUST BE CHANGED AS FOLLOW :

Q702	2SD1886	2SD1849
R724,725	47(1/2W)	47(1/2W)
R726,727		
R728	33(1/8W)	33(1/8W)
T701	15I-269D	15I-269D
D712	RU4DS	NONE

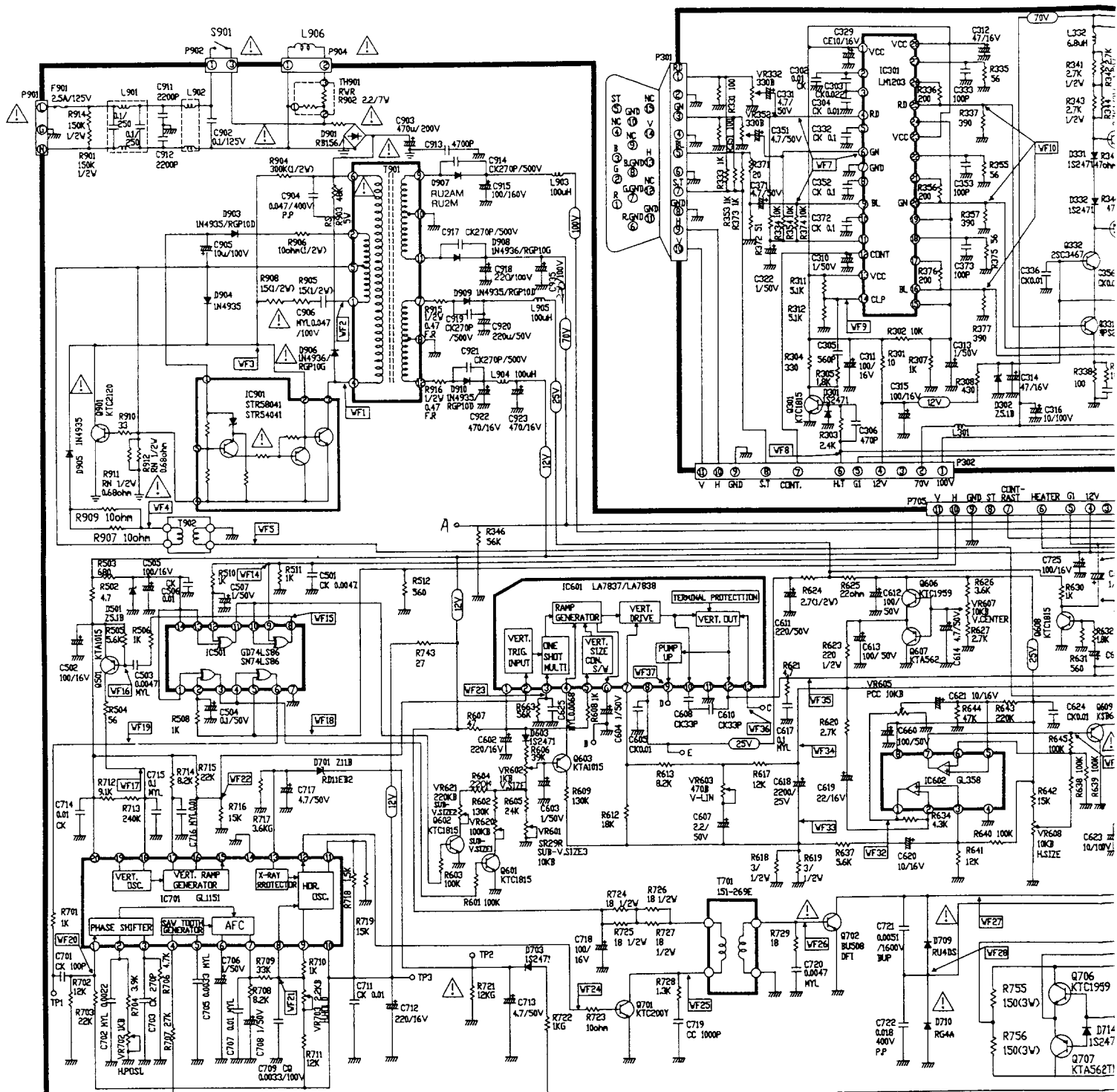
IMPORTANT SAFETY NOTICE

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IMPORTANT AVIS SUR LA SÉCURITÉ

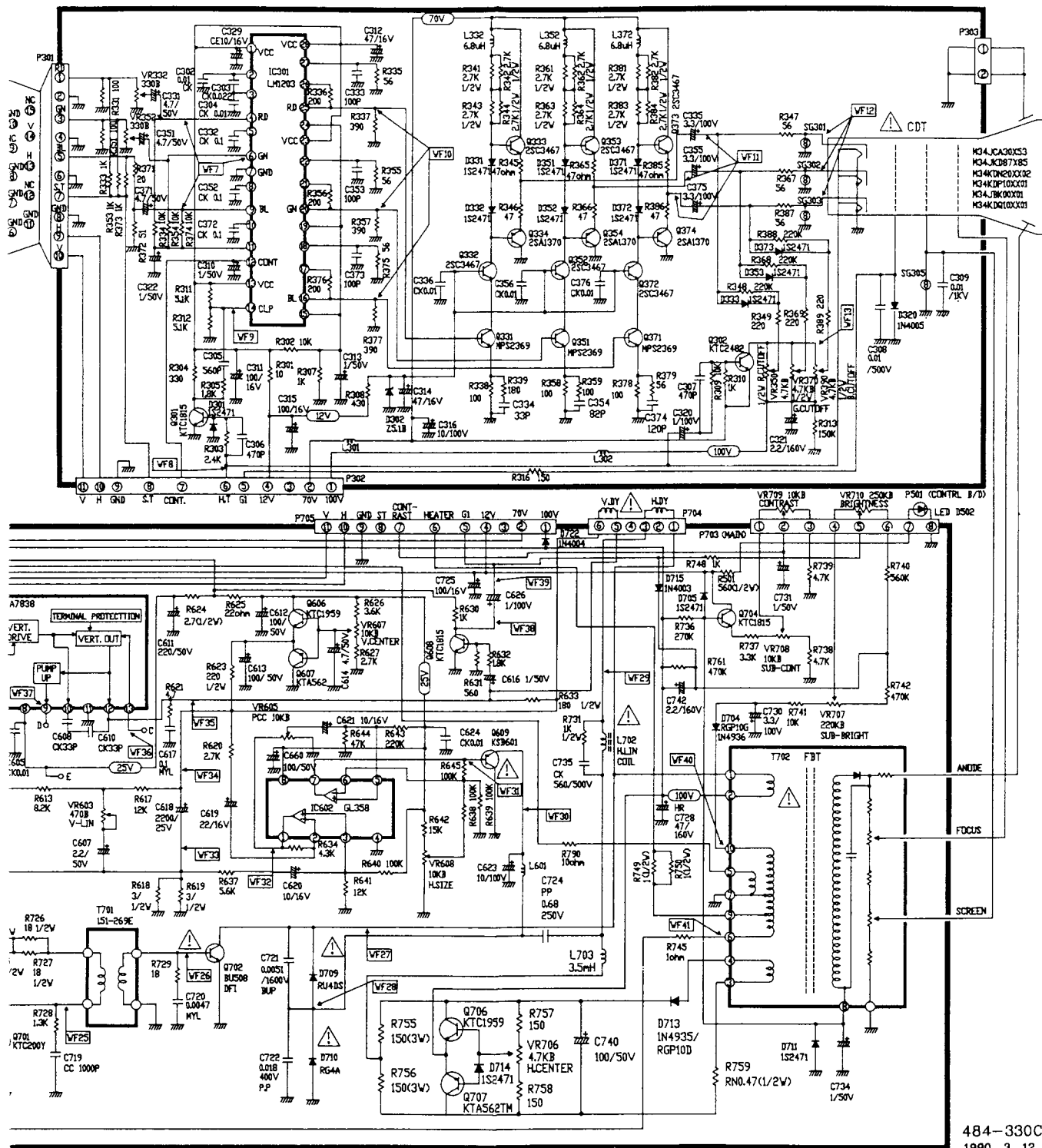
LA Δ SYMBOLE MARQUE DE CE DIAGRAMME SCHEMATIQUE COMPREND D'IMPORTANTES CARACTÉRISTIQUES SPÉCIALES CONÇUES POUR PROTÉGER DES RAYONS X, ET DES DANGERS D'INCENDIE ET DE SECOURS ÉLECTRIQUES, EN CAS DE BESOIN SI DES PIÈCES DE CETTE Δ SYMBOLE MARQUE DOIVENT ÊTRE REMPLACÉES NUTILISEZ QUE DES PIÈCES SPÉCIFIÉES PAR LE MANUFACTURIER.

CA-9 SCHEMATIC DIAGRAM (14" LOW VERSION NEW



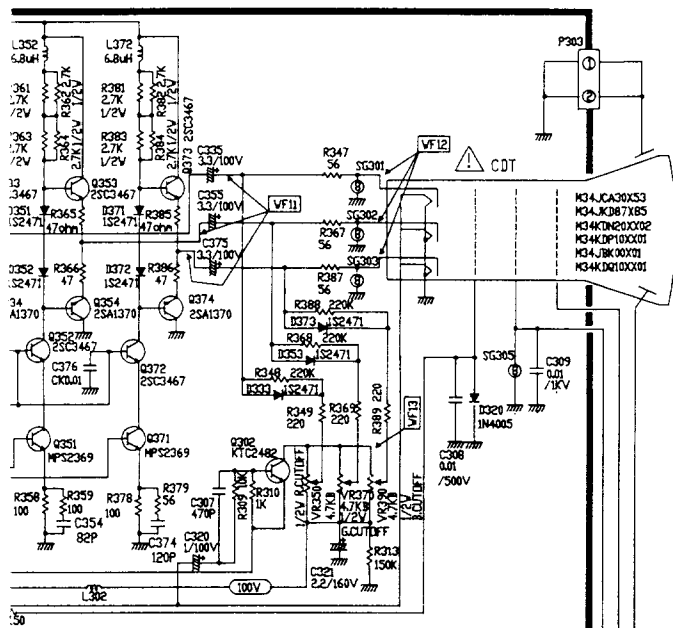
RAM (14" LOW VERSION NEW VGA)

FOR Lh/Lv = 0.45/25mH



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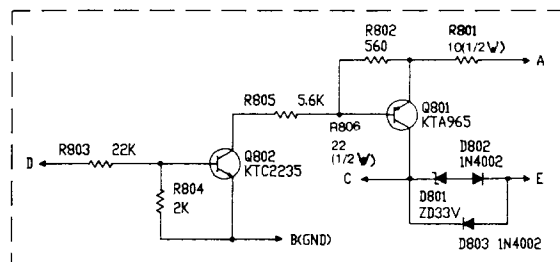


NOTES :

1. ALL RESISTORS $1/8W \pm 5$ VALUES
IN OHMS, G = $\pm 2\%$
K = 1,000ohm M = 1,000,000ohm
2. ALL CAPACITORS IN μF , PF = $10EXP(-12)F$
3. USING M34JBK00X AND M34KDQ10XX CDT,
THE RESISTANCE OF R633 MUST BE AS FOLLOW;
R633: 300 ohm(1/2W)
4. ACCORDING TO ALTERNATIVE USE LOCATED Q702,
THE OTHER PARTS MUST BE CHANGED AS FOLLOW;

Q702	2SD1886	2SD1849
R724,725	47(1/2W)	47(1/2W)
R726,727		
R728	33(1/8W)	33(1/8W)
T701	151-269D	151-269D
D712	RU4DS	NONE

5. CONNECTED CIRCUIT AT A,B,C,D,E POINT.



IMPORTANT SAFETY NOTICE

THE SYMBOL MARK OF THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION, FIRE AND ELECTRICAL SHOCK HAZARDS, WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SYMBOL MARK OF THE SCHEMATIC.

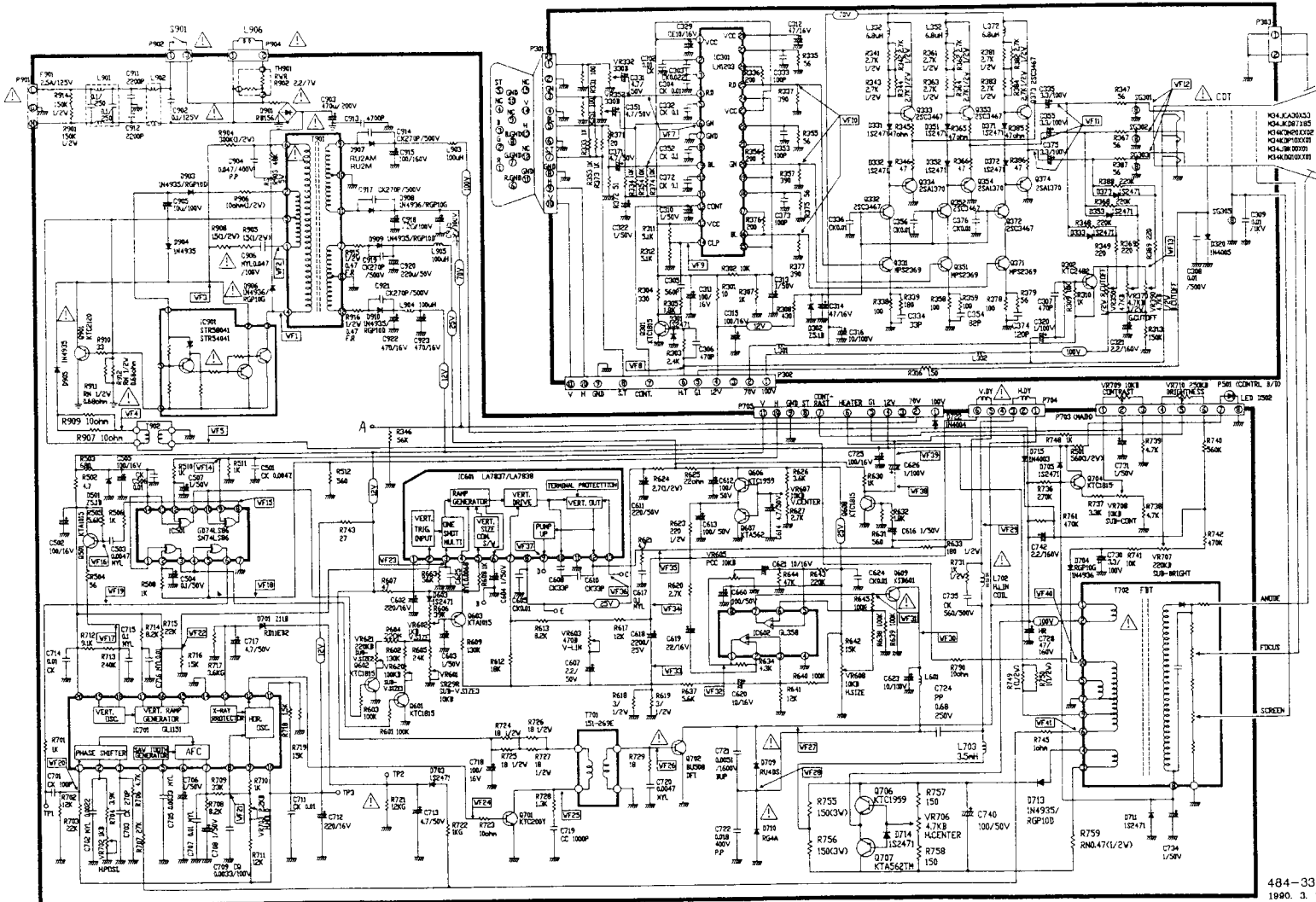
IMPORTANT AVIS SUR LA SÉCURITÉ

LA SYMBOLE MARQUE DE CE DIAGRAMME SCHEMATIQUE COMPREND D'IMPORTANTES CARACTÉRISTIQUES SPÉCIALES CONÇUES POUR PROTÉGER DES RAYONS X, ET DES DANGERS D'INCENDIE ET DE SECOURS ÉLECTRIQUES, EN CAS DE BESOIN SI DES PIÈCES DE CETTE SYMBOLE MARQUE DOIVENT ÊTRE REMPLACÉES N'UTILISEZ QUE DES PIÈCES SPÉCIFIÉES PAR LE MANUFACTURIER.

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CA-9 SCHEMATIC DIAGRAM (14" LOW VERSION NEW VGA)

FBR L_H/L_V = 0.45/25mH

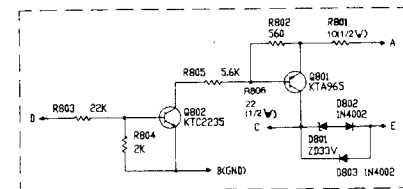


NOTES

1. ALL RESISTORS 1/8W ± 5% VALUES
IN OHMS, G = ± 2%
K = 1000ohm M = 1000000ohm
2. ALL CAPACITORS IN uF, PF = 10EXP(-12)F
3. USING M34BK00X AND M34KD01XX CDT.
THE RESISTANCE OF R633 MUST BE AS FOLLOW:
R633: 300 ohm(1/2W)
4. ACCORDING TO ALTERNATIVE USE LOCATED Q702,
THE OTHER PARTS MUST BE CHANGED AS FOLLOW:

Q702	2SD1886	2SD1849
R724,725	470(1/2W)	47(1/2W)
R726,727		
R728	330(1/8W)	330(1/8W)
T701	151-269D	151-269D
W712	RU40S	NONE

5. CONNECTED CIRCUIT AT A,B,C,D,E POINT.



IMPORTANT SAFETY NOTICE

THE Δ SYMBOL MARK OF THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION, FIRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE Δ SYMBOL MARK OF THE SCHEMATIC.

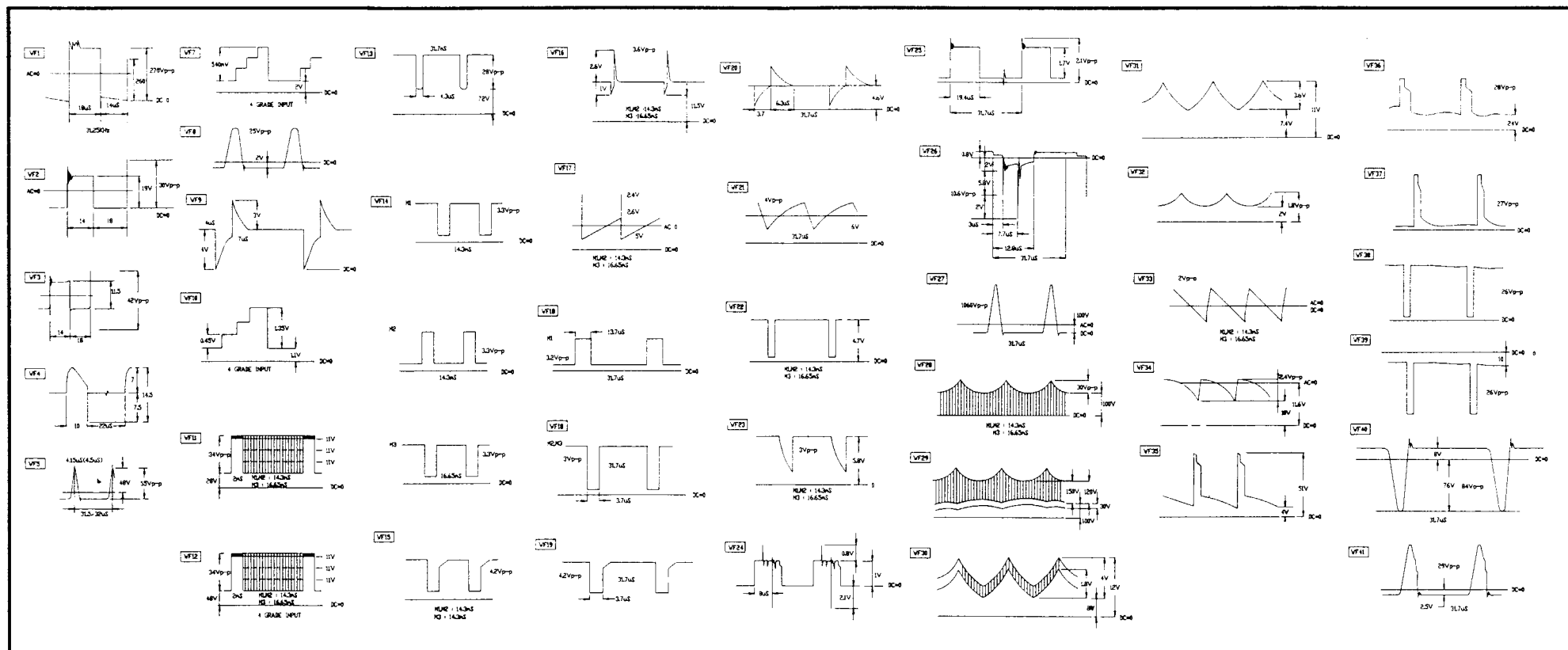
IMPORTANT AVIS SUR LA SÉCURITÉ

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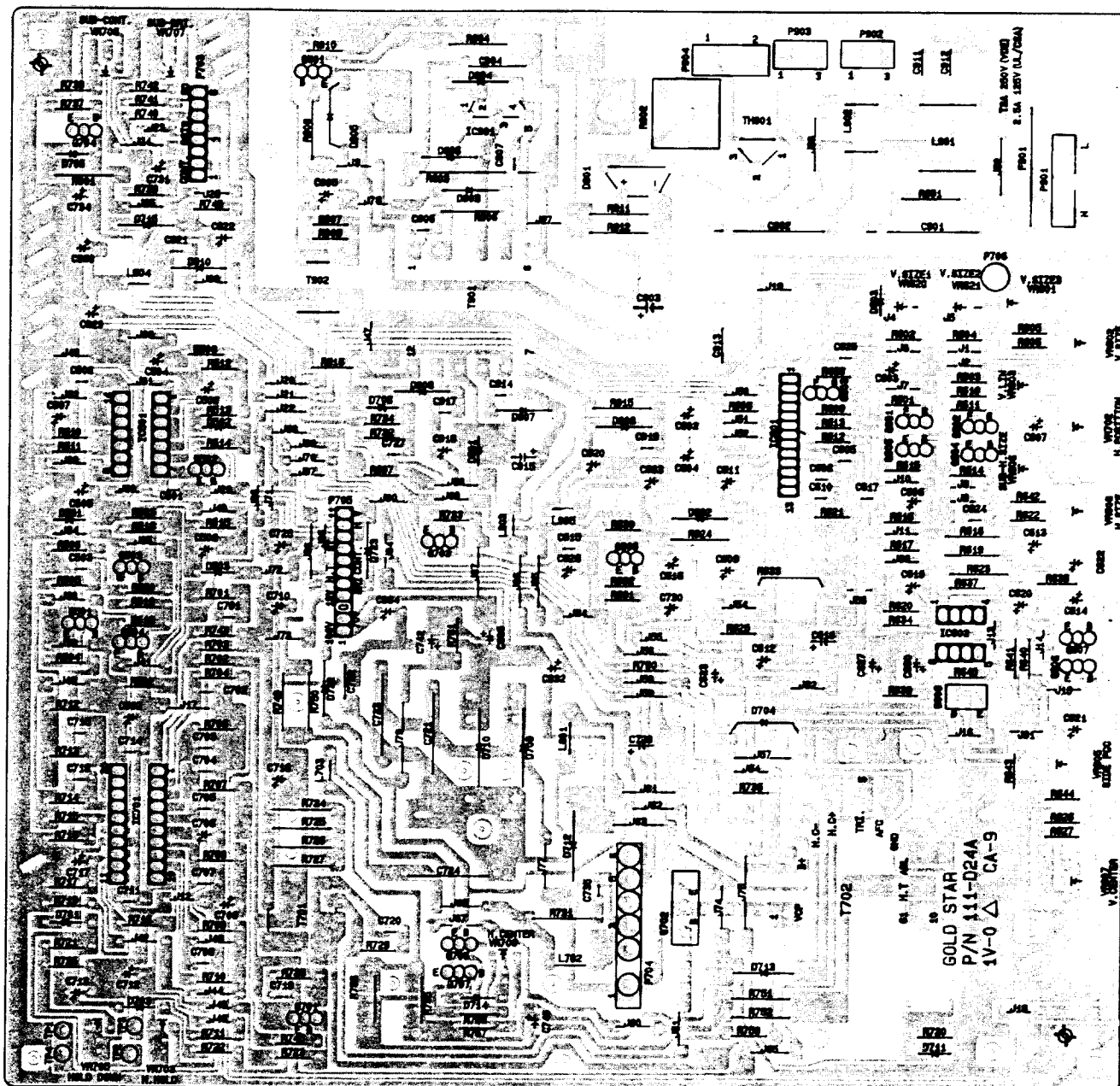
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SCHEMATIC DIAGRAM (2/2)

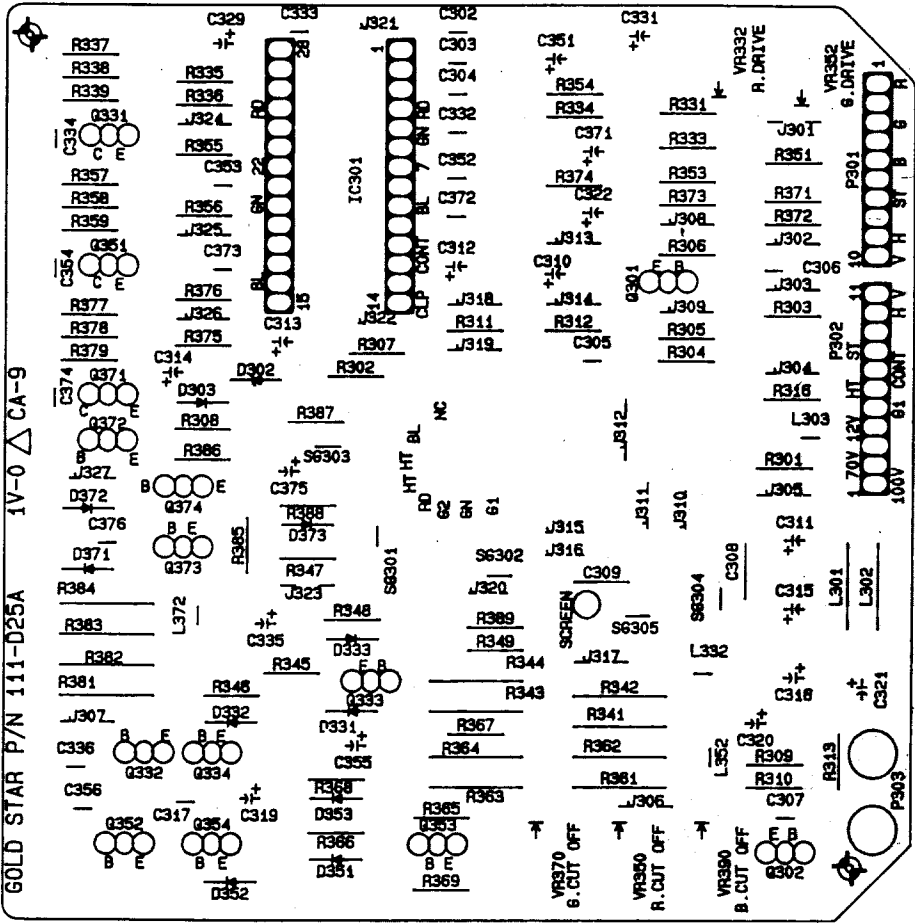
WAVE PARTS



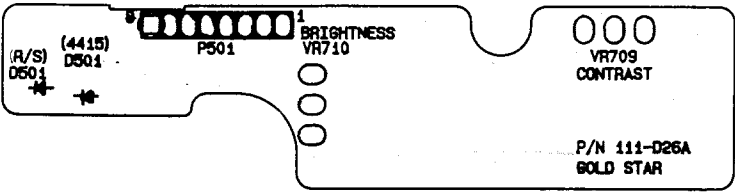
1. MAIN PCB



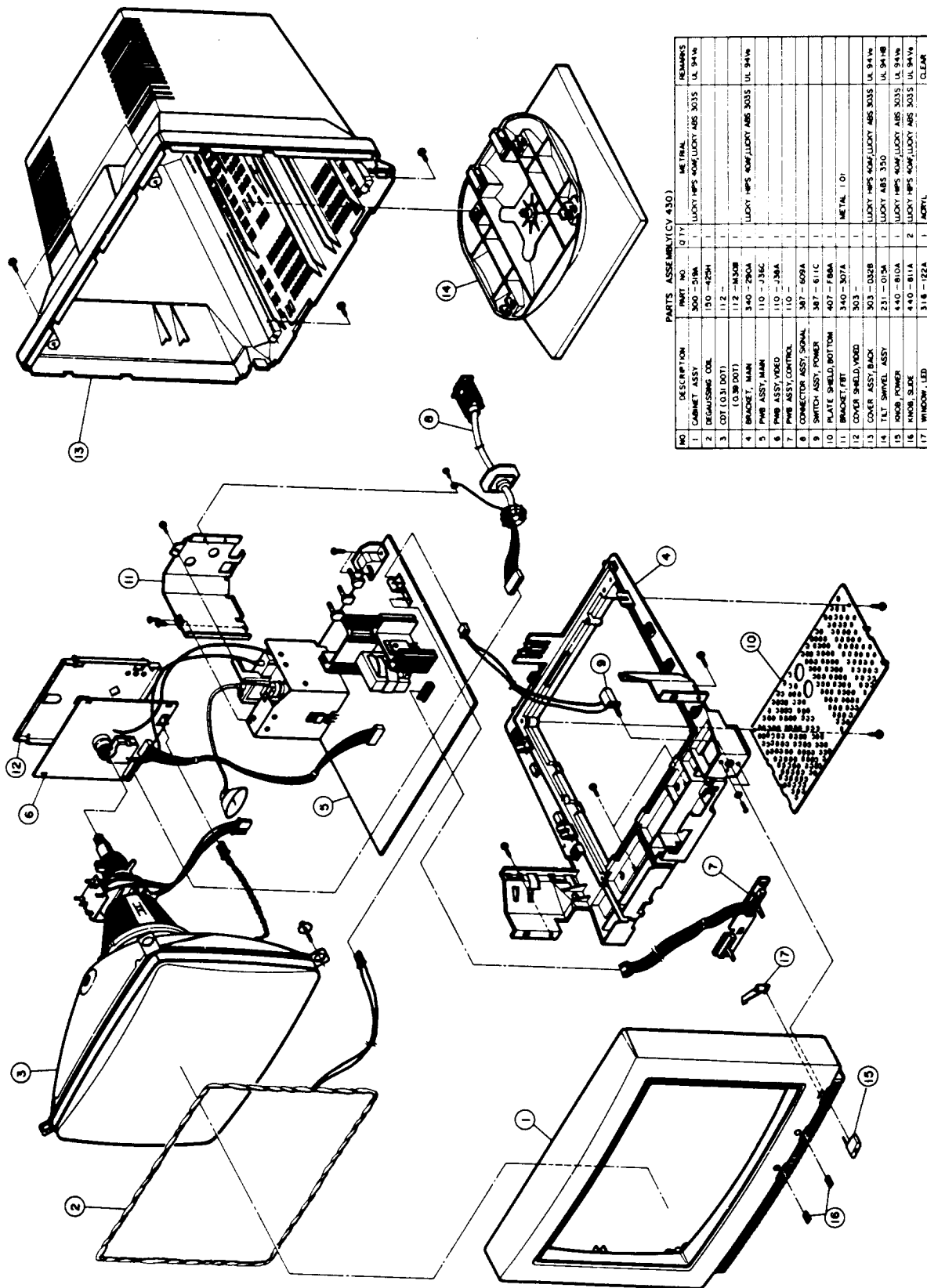
2. VIDEO PCB



3. CONTROL PCB

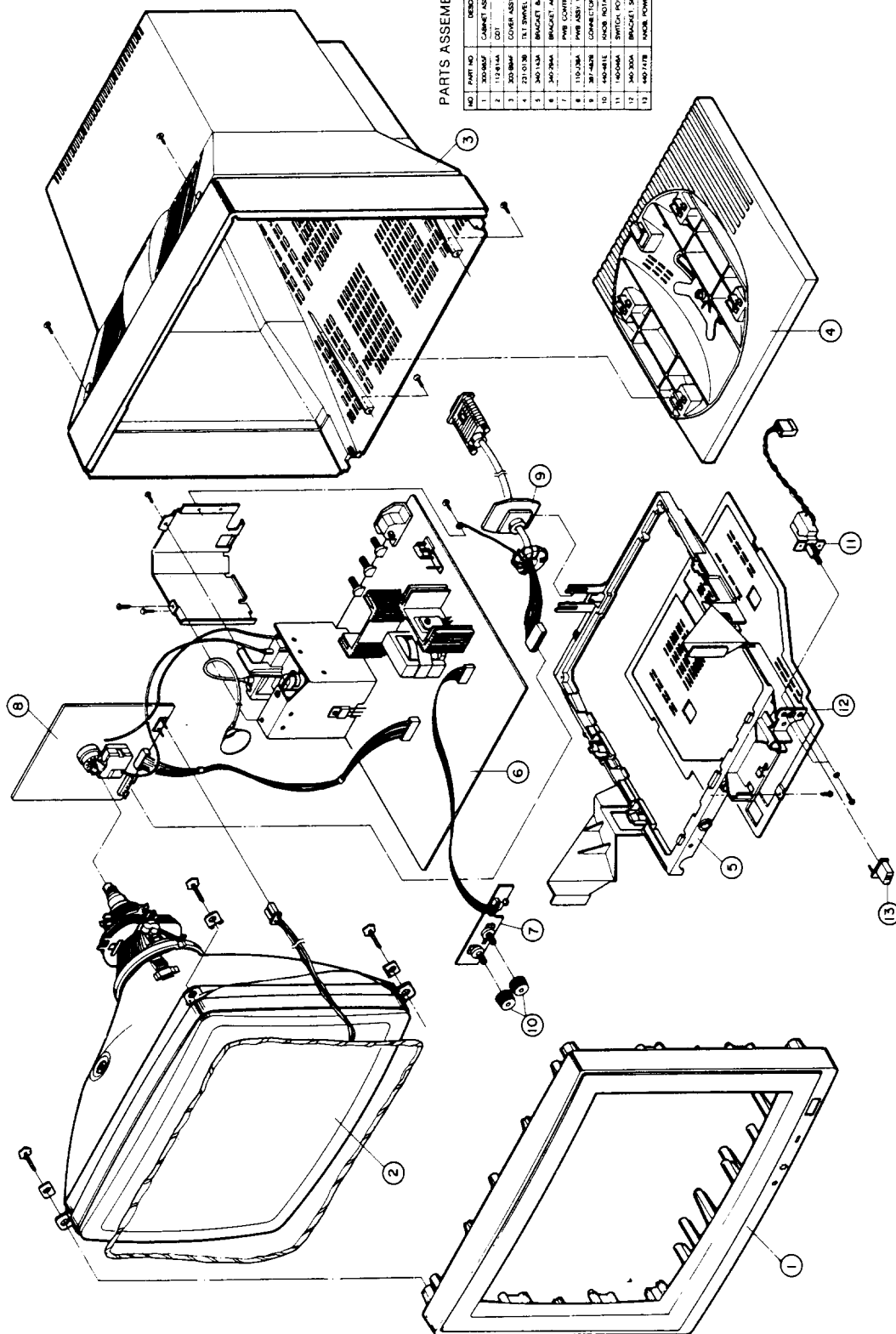


EXPLODED VIEW



PARTS ASSEMBLY (CV 430)					REMARKS
NO	DESCRIPTION	PART NO	QTY	MATERIAL	
1	CABINET ASSY	300 - 519A	1	LUCKY HPS 40W/ LUCKY ABS 3035	UL 94V0
2	DEGAUSSING COIL	150 - 425H	1		
3	CRT (O.J. DOT)	112 -	1		
4	BRACKET, MAIN	112 - M30B	1		
5	PWB ASSY, MAIN	340 - 290A	1	LUCKY HPS 40W/ LUCKY ABS 3035	UL 94V0
6	PWB ASSY, VIDEO	110 - J36C	1		
7	PWB ASSY, CONTROL	110 -	1		
8	CONNECTOR ASSY, SIGNAL	387 - 609A	1		
9	SWITCH ASSY, POWER	387 - 611C	1		
10	PLATE SHIELD, BOTTOM	407 - F86A	1		
11	BRACKET, FEET	340 - 307A	1	METAL 101	
12	COVER SHIELD, VIDEO	303 -	1		
13	COVER ASSY, BACK	303 - 032B	1	LUCKY HPS 40W/ LUCKY ABS 3035	UL 94V0
14	TILT SWIVEL ASSY	231 - 015A	1	LUCKY ABS 350	UL 94V0
15	KNOB, POWER	440 - 810A	1	LUCKY HPS 40W/ LUCKY ABS 3035	UL 94V0
16	KNOB, SLIDE	440 - 811A	2	LUCKY HPS 40W/ LUCKY ABS 3035	UL 94V0
17	WINDOW, LED	316 - 122A	1	ACRYL	CLEAR

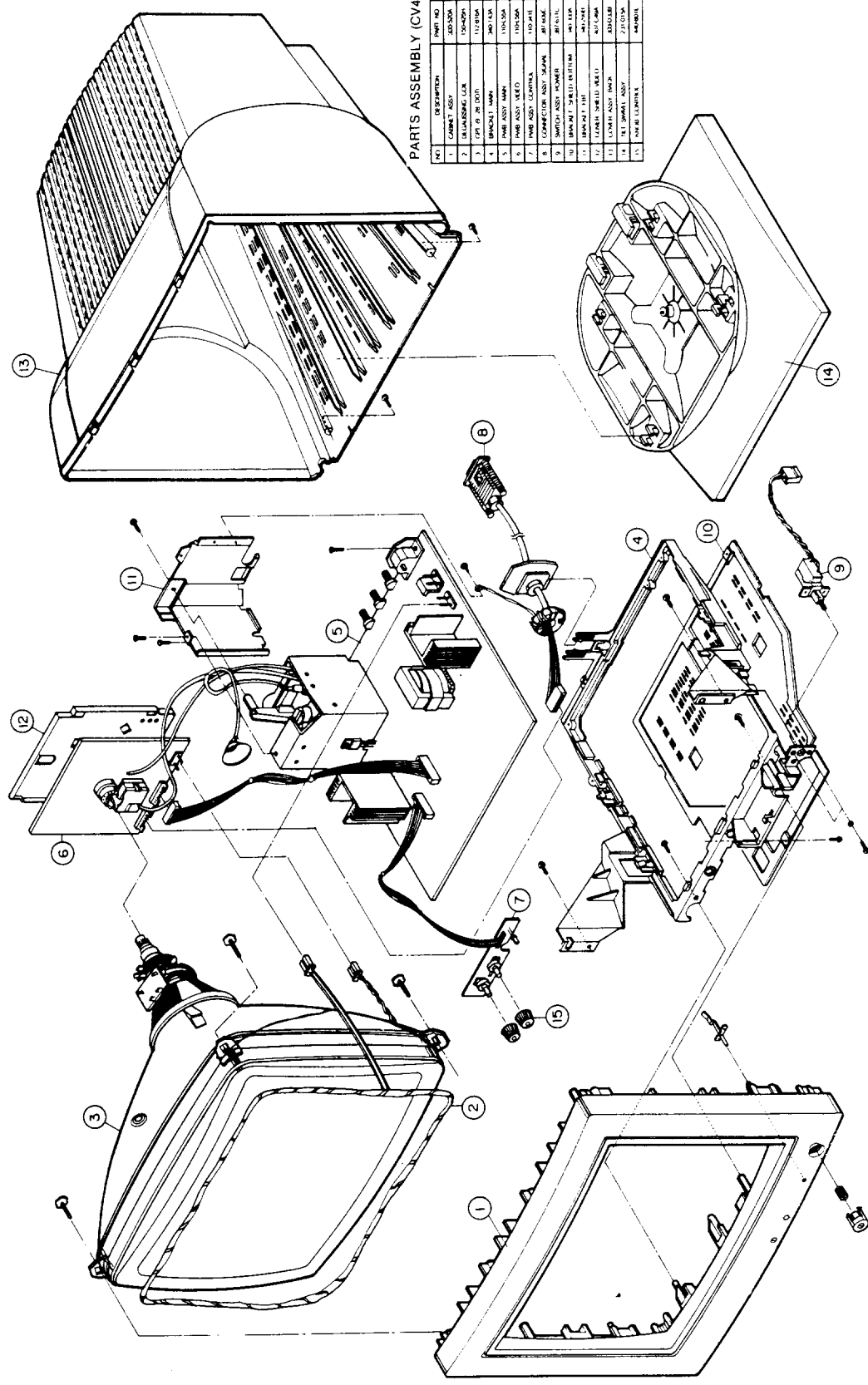
EXPLODED VIEW



PARTS ASSEMBLY (CV432)

NO	PART NO	DESCRIPTION	QTY	UNIT	REMARKS
1	300-0001	CABINET ASST	1	LUCKY AMS AF 2005	US INFO
2	12-0114	COVER ASST BACK	1	LUCKY AMS AF 2005	US INFO
3	300-0004	COVER ASST BACK	1	LUCKY AMS AF 2005	US INFO
4	21-0138	TLT SWIVEL ASST	1	LUCKY AMS AF 2005	US INFO
5	300-0138	BRACKET BASE	1	LUCKY AMS AF 2005	US INFO
6	300-0138	BRACKET ACA COVER	1	LUCKY AMS AF 2005	US INFO
7	110-0138	PWR CONTROL	1	LUCKY AMS AF 2005	US INFO
8	110-0138	PWR ASST HOLD	1	LUCKY AMS AF 2005	US INFO
9	300-0138	CONNECTOR ASST BRACKET	1	LUCKY AMS AF 2005	US INFO
10	400-0138	ACOR INSTANT	1	LUCKY AMS AF 2005	US INFO
11	400-0138	SWITCH POWER	1	LUCKY AMS AF 2005	US INFO
12	300-0138	BRACKET SHIELD	1	LUCKY AMS AF 2005	US INFO
13	400-0138	ACOR POWER PUMP	1	LUCKY AMS AF 2005	US INFO

EXPLODED VIEW



PARTS ASSEMBLY (CV431)

NO.	DESCRIPTION	PART NO.	QTY.	MATERIAL	REMARKS
1	CABINET ASSY	200300A	1	U.S. 304L	U.S. 304L
2	SCREENING GR.	100400A	1	U.S. 304L	U.S. 304L
3	TOP OF TV SET	100400A	1	U.S. 304L	U.S. 304L
4	BEZEL ASSY	200300A	1	U.S. 304L	U.S. 304L
5	SCREEN ASSY	100400A	1	U.S. 304L	U.S. 304L
6	BASE ASSY	100400A	1	U.S. 304L	U.S. 304L
7	CONTROL ASSY	100400A	1	U.S. 304L	U.S. 304L
8	CHASSIS ASSY	100400A	1	U.S. 304L	U.S. 304L
9	SWITCH ASSY	100400A	1	U.S. 304L	U.S. 304L
10	BEZEL ASSY	100400A	1	U.S. 304L	U.S. 304L
11	SCREENING GR.	100400A	1	U.S. 304L	U.S. 304L
12	SCREEN ASSY	100400A	1	U.S. 304L	U.S. 304L
13	SCREEN ASSY	100400A	1	U.S. 304L	U.S. 304L
14	SCREEN ASSY	100400A	1	U.S. 304L	U.S. 304L
15	SCREEN ASSY	100400A	1	U.S. 304L	U.S. 304L

REPLACEMENT PARTS LIST

(LOW VERSION 0.31/0.39 DOT TUBE MONITOR)

CAUTION: Before replacing any these components, read carefully the "SAFETY PRECAUTIONS", on page 3.
Do not degrade the safety of the receiver through improper servicing.

ABBREVIATIONS: Capacitors CC: Ceramic (TC), CE: Chemical, CK: Ceramic (Hi-K),
MPP: Metalized Polypropylenes, BP: Bipolar, CQ: Mylar
PE: Polyester, PP: Polypropylene
Resistors RD: Carbon Film, RS: Metal Oxide Film,
RN: Metal Film, RV: Variable, RF: Fusing

(S: Recommend Service Parts, R: Replacement Service Parts)

NOTE: ONLY $L_v = 15\text{mH}$ (0.39 DOT CDT, LOW VERSION).

REF. NO.	PART NO.	DESCRIPTION	REMARK
RESISTORS			
R301	01157049	RD, 10 ohm 1/8W	R
R302	01157121	RD, 10K ohm 1/8W	R
R303	01157106	RD, 2.4K ohm 1/8W	R
R304	01157085	RD, 330 ohm 1/8W	R
R305	01157103	RD, 1.8K ohm 1/8W	R
R307	01157097	RD, 1K ohm 1/8W	R
R308	01157088	RD, 430 ohm 1/8W	R
R309	01157121	RD, 10K ohm 1/8W	R
R310	01157097	RD, 1K ohm 1/8W	R
R311	01157114	RD, 5.1K ohm 1/8W	R
R312	01157114	RD, 5.1K ohm 1/8W	R
R313	01157149	RD, 150K ohm 1/8W	R
R316	01157077	RD, 150 ohm 1/8W	R
R331	01157073	RD, 100 ohm 1/8W	R
VR332	180-098M	SEMIFIX, SR29R 330B	S
R333	01157097	RD, 1K ohm 1/8W	R
R334	01157121	RD, 10K ohm 1/8W	R
R335	01157067	RD, 56 ohm 1/8W	R
R336	01157080	RD, 200 ohm 1/8W	R
R337	01157087	RD, 390 ohm 1/8W	R
R338	01157073	RD, 100 ohm 1/8W	R
R339	01157079	RD, 180 ohm 1/8W	R
R341	01154107	RD, 2.7K ohm 1/2W	R
R342	01154107	RD, 2.7K ohm 1/2W	R
R343	01154107	RD, 2.7K ohm 1/2W	R
R344	01154107	RD, 2.7K ohm 1/2W	R
R345	180-286M	RF, FUSING RES 47 ohm 1/8W	S
R346	01157065	RD, 47 ohm 1/8W	R
R347	01157067	RD, 56 ohm 1/8W	R
R348	01157153	RD, 220K ohm 1/8W	R
R349	01157081	RD, 220 ohm 1/8W	R
VR350	180-171B	VR, H1022A 4.7KB	S
R351	01157073	RD, 100 ohm 1/8W	R
VR352	180-098M	SEMIFIX, SR29R 330B	S
R353	01157097	RD, 1K ohm 1/8W	R
R354	01157121	RD, 10K ohm 1/8W	R
R355	01157067	RD, 56 ohm 1/8W	R
R356	01157080	RD, 200 ohm 1/8W	R
R357	01157087	RD, 390 ohm 1/8W	R
R358	01157073	RD, 100 ohm 1/8W	R
R359	01157073	RD, 100 ohm 1/8W	R
R361	01154107	RD, 2.7K ohm 1/2W	R

REF. NO.	PART NO.	DESCRIPTION	REMARK
R362	01154107	RD, 2.7K ohm 1/2W	R
R363	01154107	RD, 2.7K ohm 1/2W	R
R364	01154107	RD, 2.7K ohm 1/2W	R
R365	180-286M	RF, FUSING RES 47 ohm 1/8W	S
R366	01157065	RD, 47 ohm 1/8W	R
R367	01157067	RD, 56 ohm 1/8W	R
R368	01157153	RD, 220K ohm 1/8W	R
R369	01157081	RD, 220 ohm 1/8W	R
VR370	180-171B	VR, H1022A 4.7KB	S
R371	01157056	RD, 20 ohm 1/8W	R
R372	01157066	RD, 51 ohm 1/8W	R
R373	01157097	RD, 1K ohm 1/8W	R
R374	01157121	RD, 10K ohm 1/8W	R
R375	01157067	RD, 56 ohm 1/8W	R
R376	01157080	RD, 200 ohm 1/8W	R
R377	01157087	RD, 390 ohm 1/8W	R
R378	01157073	RD, 100 ohm 1/8W	R
R379	01157067	RD, 56 ohm 1/8W	R
R381	01154107	RD, 2.7K ohm 1/2W	R
R382	01154107	RD, 2.7K ohm 1/2W	R
R383	01154107	RD, 2.7K ohm 1/2W	R
R384	01154107	RD, 2.7K ohm 1/2W	R
R385	180-286M	RF, FUSING RES. 47 ohm 1/8W	S
R386	01157065	RD, 47 ohm 1/8W	R
R387	01157067	RD, 56 ohm 1/8W	R
R388	01157153	RD, 220K ohm 1/8W	R
R389	01157081	RD, 220 ohm 1/8W	R
VR390	180-171B	VR, H1022A 4.7KB	S
CAPACITOR			
C302	08200972	CK, 0.01uF/50V	R
C303	08200973	CK, 0.022uF/50V	R
C304	08200972	CK, 0.01uF/50V	R
C305	08300154	CC, 560pF/50V	R
C306	08300152	CC, 470pF/50V	R
C307	08300152	CC, 470pF/50V	R
C308	02211072	CK, 0.01uF/500V	S
C309	02213172	CK, 0.01uF/1000V	S
C310	08110507	CE, 1uF/50V	R
C311	08110319	CE, 100uF/16V	R
C312	08110317	CE, 47uF/16V	R
C313	08110507	CE, 1uF/50V	R
C314	08110317	CE, 47uF/16V	R

REF. NO.	PART NO.	DESCRIPTION	REMARK
C315	08110319	CE, 100uF/16V	R
C316	08110613	CE, 10uF/100V	R
C320	08110607	CE, 1uF/100V	R
C321	08110709	CE, 2.2uF/160V	R
C322	08110507	CE, 1uF/50V	R
C329	08110313	CE, 10uF/16V	R
C331	08110511	CE, 4.7uF/50V	R
C332	08200978	CK, 0.1uF/50V	R
C333	08300136	CC, 100pF/50V	R
C334	08300124	CC, 33pF/50V	R
C335	08110610	CE, 3.3uF/100V	R
C336	08200972	CK, 0.01uF/50V	R
C351	08110511	CE, 4.7uF/50V	R
C352	08200978	CK, 0.1uF/50V	R
C353	08300136	CC, 100pF/50V	R
C354	08300134	CC, 82pF/50V	R
C355	08110610	CE, 3.3uF/100V	R
C356	08200972	CK, 0.01uF/50V	R
C371	08110511	CE, 4.7uF/50V	R
C372	08200978	CK, 0.1uF/50V	R
C373	08300136	CC, 100pF/50V	R
C374	08300138	CC, 120pF/50V	R
C375	08110610	CE, 3.3uF/100V	R
C376	08200972	CK, 0.01uF/50V	R
COIL			
L301	125-022C	FERRITE CORE	S
L302	125-022C	FERRITE CORE	S
L332	04011037	PEAKING COIL, 6.8uH	R
L352	04011037	PEAKING COIL, 6.8uH	R
L372	04011037	PEAKING COIL, 6.8uH	R
TRANSISTOR			
Q301	06120240	TR, KTC1815-Y	R
Q302	06120218	TR, KTC2482	S
Q331	06150057	TR, MPS2369	S
Q332	06130124	TR, 2SC3467D/E	S
Q333	06130124	TR, 2SC3467D/E	S
Q334	06120343	TR, 2SA1370-D/E	S
Q351	06150057	TR, MPS2369	S
Q352	06130124	TR, 2SC3467D/E	S
Q353	06130124	TR, 2SC3467D/E	S
Q354	06120343	TR, 2SA1370-D/E	S
Q371	06150057	TR, MPS2369	S
Q372	06130124	TR, 2SC3467D/E	S
Q373	06130124	TR, 2SC3467D/E	S
Q374	06120343	TR, 2SA1370-D/E	S
DIODE			
D301	06200167	DIODE, 1S2471	S
D302	06220227	DIODE, ZENER 5.1BTA	S
D320	06200029	DIODE, 1N4005	S
D331	06200167	DIODE, 1S2471	R
D332	06200167	DIODE, 1S2471	R
D333	06200167	DIODE, 1S2471	R
D351	06200167	DIODE, 1S2471	R
D352	06200167	DIODE, 1S2471	R
D353	06200167	DIODE, 1S2471	R
D371	06200167	DIODE, 1S2471	R

REF. NO.	PART NO.	DESCRIPTION	REMARK
D372	06200167	DIODE, 1S2471	R
D373	06200167	DIODE, 1S2471	R
IC301	06300731	IC, LM1203	S
MISCELLANEOUS			
P301	366-039J	10 PIN	R
P302	366-043B	11 PIN	R
P303	366-921K	2 PIN	R
SG301	165-010A	SPARK GAP, DSP-301N	S
SG302	165-010A	SPARK GAP, DSP-301N	S
SG303	165-010A	SPARK GAP, DSP-301N	S
SG305	165-004A	SPARK GAP	S
RESISTORS			
R346	01157139	RD, 56K ohm 1/8W	R
R501	01154091	RD, 560 ohm 1/2W	R
R502	01157041	RD, 4.7 ohm 1/8W	R
R503	01157093	RD, 680 ohm 1/8W	R
R504	01157067	RD, 56 ohm 1/8W	R
R505	01157115	RD, 5.6K ohm 1/8W	R
R506	01157097	RD, 1K ohm 1/8W	R
R508	01157097	RD, 1K ohm 1/8W	R
R510	01157097	RD, 1K ohm 1/8W	R
R511	01157097	RD, 1K ohm 1/8W	R
R512	01157091	RD, 560 ohm 1/8W	R
R601	01157145	RD, 100K ohm 1/8W	R
R602	01157148	RD, 130K ohm 1/8W	R
R603	01157145	RD, 100K ohm 1/8W	R
R604	01157153	RD, 220K ohm 1/8W	R
R605	01157130	RD, 24K ohm 1/8W	R
R606	01157135	RD, 39K ohm 1/8W	R
R607	01157065	RD, 47 ohm 1/8W	R
R608	01157097	RD, 1K ohm 1/8W	R
R609	01157148	RD, 130K ohm 1/8W	R
R612	01157127	RD, 18K ohm 1/8W	R
R613	01157119	RD, 8.2K ohm 1/8W	R
R617	01157123	RD, 12K ohm 1/8W	R
R618	01154036	RD, 3 ohm 1/2W	R
R619	01154036	RD, 3 ohm 1/2W	R
R620	01157107	RD, 2.7K ohm 1/8W	R
R621	01157041	RD, 4.7 ohm 1/8W	R
R623	01154081	RD, 220 ohm 1/2W	R
R624	01154035	RD, 2.7 ohm 1/2W	R
R625	01157057	RD, 22 ohm 1/8W	R
R626	01157110	RD, 3.6K ohm 1/8W	R
R627	01157107	RD, 2.7K ohm 1/8W	R
R630	01157097	RD, 1K ohm 1/8W	R
R631	01157091	RD, 560 ohm 1/8W	R
R632	01157103	RD, 1.8K ohm 1/8W	R
R633	01154079	RD, 180 ohm 1/2W	R
R634	01157112	RD, 4.3K ohm 1/8W	R
R637	01157115	RD, 5.6K ohm 1/8W	R
R638	01157145	RD, 100K ohm 1/8W	R
R639	01157145	RD, 100K ohm 1/8W	R
R640	01157145	RD, 100K ohm 1/8W	R
R641	01157123	RD, 12K ohm 1/8W	R
R642	01157125	RD, 15K ohm 1/8W	R
R643	01157153	RD, 220K ohm 1/8W	R
R644	01157137	RD, 47K ohm 1/8W	R

REF. NO.	PART NO.	DESCRIPTION	REMARK
R645	01157145	RD, 100K ohm 1/8W	R
R663	01157139	RD, 56K ohm 1/8W	R
R701	01157097	RD, 1K ohm 1/8W	R
R702	01157123	RD, 12K ohm 1/8W	R
R703	01157129	RD, 22K ohm 1/8W	R
R704	01157111	RD, 3.9K ohm 1/8W	R
R706	01157113	RD, 4.7K ohm 1/8W	R
R707	01157131	RD, 27K ohm 1/8W	R
R708	01157119	RD, 8.2K ohm 1/8W	R
R709	01157133	RD, 33K ohm 1/8W	R
R710	01157097	RD, 1K ohm 1/8W	R
R711	01157123	RD, 12K ohm 1/8W	R
R712	01157144	RD, 91K ohm 1/8W	R
R713	01157154	RD, 240K ohm 1/8W	R
R714	01157119	RD, 8.2K ohm 1/8W	R
R715	01157129	RD, 22K ohm 1/8W	R
R716	01157125	RD, 15K ohm 1/8W	R
R717	01160110	RD, 3.6K ohm 1/8W	R
R718	01157125	RD, 15K ohm 1/8W	R
R719	01157125	RD, 15K ohm 1/8W	R
R721	01160123	RD, 12K ohm 1/8W	R
R722	01160097	RD, 1K ohm 1/8W	R
R723	01157049	RD, 10 ohm 1/8W	R
R724	01154055	RD, 18 ohm 1/2W	R
R725	01154055	RD, 18 ohm 1/2W	R
R726	01154055	RD, 18 ohm 1/2W	R
R727	01154055	RD, 18 ohm 1/2W	R
R728	01157100	RD, 1.3K ohm 1/8W	R
R729	01157055	RD, 18 ohm 1/8W	R
R731	01154097	RD, 1K ohm 1/2W	R
R736	01157155	RD, 270K ohm 1/8W	R
R737	01157109	RD, 3.3K ohm 1/8W	R
R738	01157113	RD, 4.7K ohm 1/8W	R
R739	01157113	RD, 4.7K ohm 1/8W	R
R740	01157163	RD, 560K ohm 1/8W	R
R741	01157121	RD, 10K ohm 1/8W	R
R742	01157161	RD, 470K ohm 1/8W	R
R743	01157059	RD, 27 ohm 1/8W	R
R745	01157025	RD, 1 ohm 1/8W	R
R748	01157097	RD, 1K ohm 1/8W	R
R749	01154025	RD, 1 ohm 1/2W	R
R750	01154025	RD, 1 ohm 1/2W	R
R755	180-304Q	METAL, OXIDE 150 ohm 3W	R
R756	180-304Q	METAL, OXIDE 150 ohm 3W	R
R757	01157077	RD, 150 ohm 1/8W	R
R758	01157077	RD, 150 ohm 1/8W	R
R759	01516017	RN, 0.47 ohm 1/2W	R
R761	01157161	RD, 470K ohm 1/8W	R
R790	01157049	RD, 10 ohm 1/8W	R
R901	01154155	RD, 270K ohm 1/2W	R
R902	180-104B	RWR, STD 7W 2.2 ohm	S
R903	180-304V	METAL, OXIDE 48K ohm 5W	S
R904	01154156	RD, 300K ohm 1/2W	R
R905	01154053	RD, 15 ohm 1/2W	R
R906	01154049	RD, 10 ohm 1/2W	R
R907	01157049	RD, 10 ohm 1/8W	R
△ R908	01154053	RD, 15 ohm 1/2W	R
R909	01154049	RD, 10 ohm 1/8W	R
R910	01157061	RD, 33 ohm 1/8W	R
△ R911	01516021	RN, 0.68 ohm 1/2W	R

REF. NO.	PART NO.	DESCRIPTION	REMARK
R912	01516021	RN, 0.68 ohm 1/2W	R
R915	180-1407	FUSING RES, 0.47 ohm 1/2W	R
R916	180-1407	FUSING RES, 0.47 ohm 1/2W	R
CAPACITOR			
C501	08200768	CK, 0.0047uF/50V	R
C502	08110319	CE, 100uF/16V	R
C503	08700327	CQ, 0.0047uF/100V	R
C504	08110501	CE, 0.1uF/50V	R
C505	08110319	CE, 100uF/16V	R
C506	08200972	CK, 0.01uF/50V	R
C507	08110507	CE, 1uF/50V	R
C602	08110321	CE, 220uF/16V	R
C603	08110507	CE, 1uF/50V	R
C604	181-032J	TANTAL, 1/25V	R
C605	08200972	CK, 0.01uF/50V	R
C607	08110509	CE, 2.2uF/50V	R
C608	08300124	CC, 33pF/50V	R
C609	08110519	CE, 100uF/50V	R
C610	08300124	CC, 33pF/50V	R
C611	02140521	CE, 220uF/50V	R
C612	08110519	CE, 100uF/50V	R
C613	08110519	CE, 100uF/50V	R
C614	08110511	CE, 4.7uF/50V	R
C616	08110507	CE, 1uF/50V	R
C617	08700337	CQ, 0.1uF/100V	R
C618	02140427	CE, 2200uF/25V	R
C619	08110315	CE, 22uF/16V	R
C620	08110313	CE, 10uF/16V	R
C621	08110313	CE, 10uF/16V	R
C623	08110613	CE, 10uF/100V	R
C624	08110972	CK, 0.01uF/50V	R
C625	08700329	CQ, 6800pF/100V	R
C626	08110607	CE, 1uF/100V	R
C660	08110519	CE, 100uF/50V	R
C701	08300136	CC, 100pF/50V	R
C702	08700323	CQ, 0.0022uF/100V	R
C703	08201046	CK, 270pF/500V	R
C705	08700325	CQ, 0.0033uF/100V	R
C706	08110507	CE, 1uF/50V	R
C707	08700331	CQ, 0.01uF/100V	R
C708	08110507	CE, 1uF/50V	R
C709	08752425	CQ, 3300pF/100V	S
C711	08220972	CK, 0.01uF/50V	R
C712	08110321	CE, 220uF/16V	R
C713	08110511	CE, 4.7uF/50V	R
C714	08220972	CK, 0.01uF/50V	R
C715	08700337	CQ, 0.1uF/100V	R
C716	08700331	CQ, 0.01uF/100V	R
C717	08110511	CE, 4.7uF/50V	R
C718	08110319	CE, 100uF/16V	R
C719	08201060	CK, 1000pF/500V	R
C720	08700327	CQ, 0.0047uF/100V	R
C722	181-060G	PP(400WV), 183KF	S
C723	181-353P	BUP, 0.0051uF/1600V	S
C724	181-143Y	PP, 0.68uF/250V	S
C725	08110319	CE, 100uF/16V	R
C728	181-102C	CE, HR 47uF/160V	S
C730	08110610	CE, 3.3uF/100V	R

REF. NO.	PART NO.	DESCRIPTION	REMARK
C731	08110507	CE, 1uF/50V	R
C734	08110507	CE, 1uF/50V	R
C735	08201054	CK, 560pF/500V	R
C740	08110519	CE, 100uF/50V	R
C742	08110709	CE, 2.2uF/160V	R
△ C902	181-278A	X-PP, 0.1uF/125V	S
△ C903	181-124E	CE, 470uF/200WV	R
C904	181-060E	PP, 0.047uF/400V	R
C905	08110613	CE, 10uF/100V	R
C906	08700335	CQ, 0.047uF/100V	R
C911	181-048J	DE, 7100F/222M	R
C912	181-048J	DE, 7100F/222M	R
C913	181-093C	DE, 7100F/472M	S
C914	08201046	CK, 270pF/500V	R
C915	02140719	CE, 100uF/160V	R
C917	08201046	CK, 270pF/500V	R
C918	02140619	CE, 100uF/100V	R
C919	08201046	CK, 270pF/500V	R
C920	02140521	CE, 220uF/50V	R
C921	08201046	CK, 270pF/500V	R
C922	02140323	CE, 470uF/16V	R
C923	02140323	CE, 470uF/16V	R
C935	02140617	CE, 47uF/100V	R
COIL			
L601	150-518D	CHOKE COIL, 140uH	S
L702	150-468F	H-LINEARITY COIL	S
L703	150-235K	CHOKE COIL, 3.5mH	S
L901	150-354A	LINE FILTER, 2x6 mH	S
L902	150-509A	LINE FILTER, 2x1.8mm	S
L903	150-235C	CHOKE, 100uH/1A	S
L904	150-235C	CHOKE, 100uH/1A	S
L905	150-235C	CHOKE, 100uH/1A	S
IC			
IC501	06300624	IC, GD74LS86	S
IC601	06300799	IC, LA7837 SANYO	S
IC602	06300565	IC, GL358	S
IC701	06300776	IC, 1151(G3S)	S
	06300256	IC, LA7851	S
△ IC901	06300512	IC, STR58041	S
TRANSISTOR			
Q501	06120253	TR, KTA 1015-Y(TA)	R
Q601	06120240	TR, KTC1815-Y	R
Q602	06120240	TR, KTC1815-Y	R
Q603	06120253	TR, KTA1015-Y	R
Q606	06179461	TR, KTC1959-Y	R
Q607	06100095	TR, KTA562TM-Y	R
Q608	06120240	TR, KTC1815-Y	R
△ Q609	06120345	TR, KSB610-0 DARLINGTON	S
Q701	06170006	TR, KTC200-Y	R
△ Q702	06160040	TR, BU508DFI	S
Q704	06120240	TR, KTC1815-Y	R
Q706	06179461	TR, KTC1959-Y	S
Q707	06100095	TR, KTA562M	S
△ Q901	06120175	TR, KTC2120-Y	R
DIODE			
D501	06220227	DIODE, ZENER 5.1BTA	S

REF. NO.	PART NO.	DESCRIPTION	REMARK
D502	06200485	DIODE, GREEN KLG113L	R
D602	06220069	DIODE, 1N4002TA	R
D603	06200167	DIODE, 1S2471	R
D701	06220235	DIODE, ZENER 11BL	R
D703	06200167	DIODE, 1S2471	R
D704	06200481	DIODE, 1N4936(FAGOR)	S
D705	06200167	DIODE, 1S2471	R
△ D709	06200370	DIODE, RU4DS	S
△ D710	06200375	DIODE, RG4A	S
D711	06200167	DIODE, 1S2471	R
D713	06200480	DIODE, 1N4935/RGP10D	S
D714	06200167	DIODE, 1S2471	S
D715	06200027	DIODE, 1N4003	S
D722	06220071	DIODE, 1N4004TA	S
D901	06200222	DIODE, RB156(BRIDGE)	S
D903	06200480	DIODE, 1N4935(FAGOR)	S
D904	06200480	DIODE, 1N4935(FAGOR)	S
D905	06200480	DIODE, 1N4935(FAGOR)	S
△ D906	06200481	DIODE, 1N4936(FAGOR)	S
D907	06200389	DIODE, RU2AM(SANKEN)	S
D908	06200481	DIODE, 1N4936(FAGOR)	S
D909	06200480	DIODE, 1N4935(FAGOR)	S
D910	06200480	DIODE, 1N4935(FAGOR)	S
MISCELLANEOUS			
P703	366-921G	PIN WAFER, IL-G8(2.5S)	S
P704	366-139A	PIN FALT, WAFER 6P	S
P901	381-117A	AC SOCKET	S
	381-122A	AC SOCKET	S
	381-190A	AC SOCEKT	S
△ P902	366-059A	PIN, MOLEX 5096-02C	S
△ P904	366-043B	PIN, PLUG(2P)	S
F901	131-036D	FUSE, 125V 2.5A	S
TP1	384-044B	LUG SPLICE	S
TP2	384-044B	LUG SPLICE	S
VR601	180-375K	VR, H1021A 10KB	S
VR602	180-680C	VR, K121KOG(V) CLIC 1KB	S
VR603	180-375C	VR, H1021A 470B	S
VR605	180-192N	EVN-D2A, 10KB	S
VR607	180-680F	VR, K121KO(V) 10KB	S
VR608	180-680F	VR, K121KOG(V) CLIC 10KB	S
VR702	180-680D	VR, K121KO(V) 1KB	S
VR703	180-192J	EVN-D2A, 2KB	S
VR706	180-192L	EVN-D2A, 5KB	S
VR707	180-192W	EVN-D2A, 200KB	S
VR708	180-192N	EVN-D2A, 10KB	S
VR709	180-186A	VR, K121LO 10KB	S
VR710	180-186E	VR, K121LO (LIC 250KE)	S
T701	151-269E	HORIZONTAL, DRIVE TRANS	S
△ T702	154-166B	FLY BACK TRANS, CA-9	S
T702	154-195A	FLY BACK TRANS	S
	154-197A	FLY BACK TRANS	S
△ T901	151-132A	SMPS TRANSFORMER	S
	151-132B	SMPS TRANSFORMER	S
T902	151-135A	PULSE TRANSFORMER	S
	151-135C	PULSE TRANSFORMER	S
P301	387-609A	SIGNAL CABLE BLACK (H-SUNG) 4FT	S
△ TH901	163-016A	THERMISTOR, PTH451C 6BG08N	S

REF. NO.	PART NO.	DESCRIPTION	REMARK
△ S901	387-573R	CONNECTOR, 8P	S
	387-573Q	CONNECTOR, 11P	S
	140-075G	POWER SWITCH, SDL-1P	S
	387-219M	CONNECTOR, SWITCH	S
	150-425H	DEGAUSSING, COIL	S
	170-612A	CPT, EARTH	S
	174-120P	POWER CORD	S
	112-M03B	CDT M34KDD10XX02N6LE	S
	2055-10072A	CDT, M34KDP20XX02	S
	309-372A	CHASSIS ASSY, TOTAL (CV430 120V)	S
	407-669H	PLATE ASSY, HEAT SINK 58041	S
	407-F54A	PLATE ASSY, HEAT SINK LA7837	S
	387-019F	CONNECTOR ASSY, AC INPUT SOCKET	S
	110-D24A	PCB, MAIN VGA	S
	111-D25A	PCB, VIDEO VGA	S
	110-J41C	PCB ASSY, CONTROL VGA	S
	111-D26A	PCB CONTROL VGA	S
	387-611C	POWER SWITCH ASSY	S
VR620	180-191U	EVN-D8A, 100KB	S
VR621	180-191W	EVN-D8A, 200KB	S
	340-294A	CHASSIS ASSY, TOTAL (CV432, 120V)	S
	309-372E	CHASSIS ASSY, TOTAL (CV430, 220V)	S

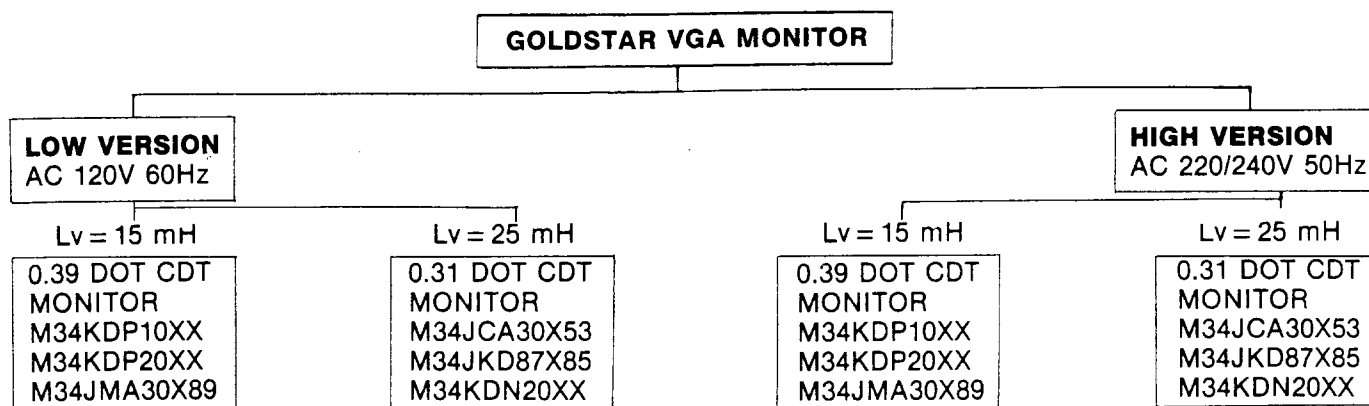
NOTE: 0.31 CDT(Lv = 25mH) ADDED PARTS

REF.NO	PART NO.	DESCRIPTION	REMARK
D602			CANCEL
C609			CANCEL
	110-N41A	BLANKING PCB ASSY	S
P801	366-921D	5 PIN	S
Q801	06100147	KTA965	S
Q802	06120194	KTC2285-Y	S
D801	06200344	ZENER, DZ33B	S
D802	06220069	1N4002	R
D803	06220069	1N4002	R
R801	01157049	RD, 10 ohm 1/2W	R
R802	01157091	RD, 560 ohm 1/8W	R
R803	01157129	RD, 22K ohm 1/8W	R
R804	01157104	RD, 2K ohm 1/8W	R
R805	01157121	RD, 10K ohm 1/8W	R
	111-E92A	PCB	S
R806	01154057	RD, 22 ohm 1/2W	R
	387-571D	CONNECTOR ASSY	S
	112-079A	CDT, M34JCA30X53	S
	309-372D	CHASSIS ASSY, TOTAL (CV430, 120V)	S
	309-372F	CHASSIS ASSY, TOTAL (CV430, 220V)	S
	340-294E	CHASSIS ASSY, TOTAL (CV432, 220V)	S

PRODUCT SAFETY NOTE:

Components marked (△) have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this service manual. Don't degrade the safety of the receiver through improper servicing.

CLASSIFICATION OF VGA MONITOR



COMPARISION OF PARTS LIST

If you try to repair your monitor, look on the ID label of the minitor, you must insert the correct part in accordance with LOW VERSION or HIGH VERSION MONITOR, 0.39 DOT CDT or 0.31 DOT CDT MONITOR. The replacement parts list are as follows;

MAIN BOARD

1. POWER PARTS

REF. NO.	PART NO.	LOW VERSION (120V)	PART NO.	HIGH VERSION (220V)
		DESCRIPTIONS		DESCRIPTIONS
F901	131-036D	FUSE, 125V 2.5A	131-036E	FUSE, 250V 2A
TH901	163-016A	PTH451CD613G	06200270	PTH451C40BG
D906	06200481	1N4936	06200270	RGP 10M
T901	151-132A	SMPS TRANS	151-132C	SMPS TRANS
	151-132B	SMPS TRANS	151-132D	SMPS TRANS
T902	151-135A	PULS TRANS	151-135B	PULS TRANS
	151-135C	PULS TRANS	151-135D	PULS TRANS
R901	01154155	RD, 270K ohm 1/2W	01154156	RD, 300K ohm 1/2W
R902	180-104B	RWR, STD 2.2 ohm 7W	180-104E	RWR, STD 3.3 ohm 7W
R903	180-304V	RS, 48K ohm 5W	180-304C	RS, 68K ohm 5W
R904	01157049	RD, 10 ohm 1/4W	01154077	RD, 150 ohm 1/2W
R907	01157049	RD, 10 ohm 1/4W	01154077	RD, 150 ohm 1/2W
R909	01157049	RD, 10 ohm 1/4W	01154077	RD, 150 ohm 1/2W
R911	01516021	RN, 0.68 ohm 1/2W	01516025	RN, 1 ohm 1/2W
R912	01516221	RN, 0.68 ohm 1/2W	01516025	RN, 1 ohm 1/2W
R913	-	-	01154156	RD, 300K ohm 1/2W
R914	-	-	01154156	RD, 300K ohm 1/2W
C901	-	-	181-278C	X-PP, 0.23uF/250V
C902	181-278A	X-PP, 0.11uF/250V	181-192C	X-PP, 0.33uF/250V
C905	08110613	CE, 10uF/100V	021405616	CE, 33uF/100V
C906	08700335	CQ, 92 47000pF/100V	08700334	CQ, 92 3300pF/100V
C907	-	-	08201060	CK, 0.001uF/50V
L901	150-354A	COIL, LINE FILTER	150-494E	COIL, LINE FILTER
	150-425H	DEGAUSSING, COIL	150-425K	DEGAUSSING, COIL
	387-019F	AC SOCKET, ASSY	387-019N	AC SOCKET, ASSY
S901	140-075G	POWER SWITCH	140-261C	POWER SWITCH

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LOW VERSION 0.31 DOT CDT, HIGH VERSION 0.39 DOT CDT and HIGH VERSION 0.31 DOT CDT MONITOR are same as low VERSION 0.39 DOT CDT MONITOR on schematic diagram.