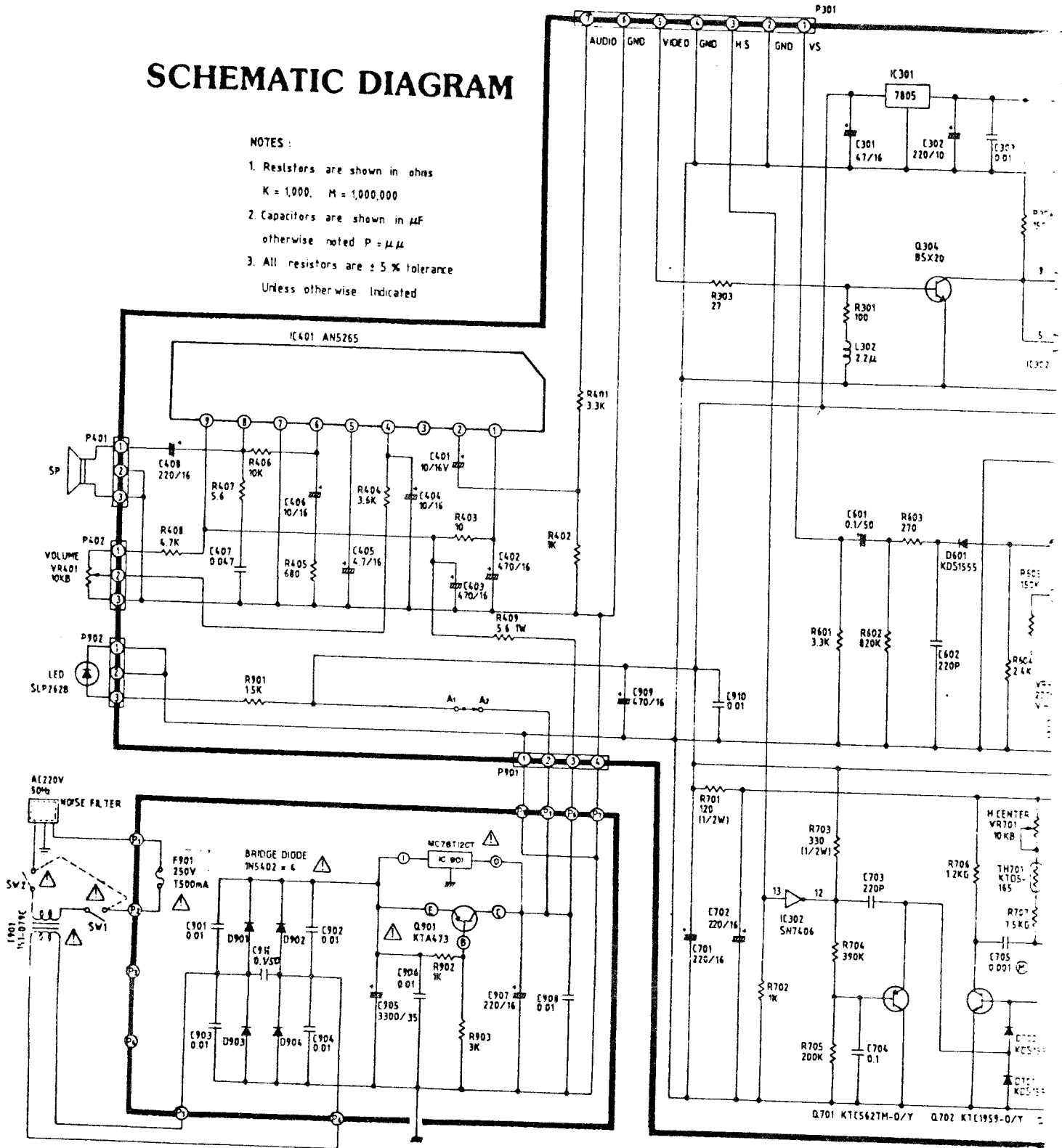


# SCHEMATIC DIAGRAM

**NOTES:**

1. Resistors are shown in ohms  
K = 1,000, M = 1,000,000
2. Capacitors are shown in  $\mu\text{F}$   
otherwise noted P =  $\mu\text{M}$
3. All resistors are  $\pm 5\%$  tolerance  
Unless otherwise indicated

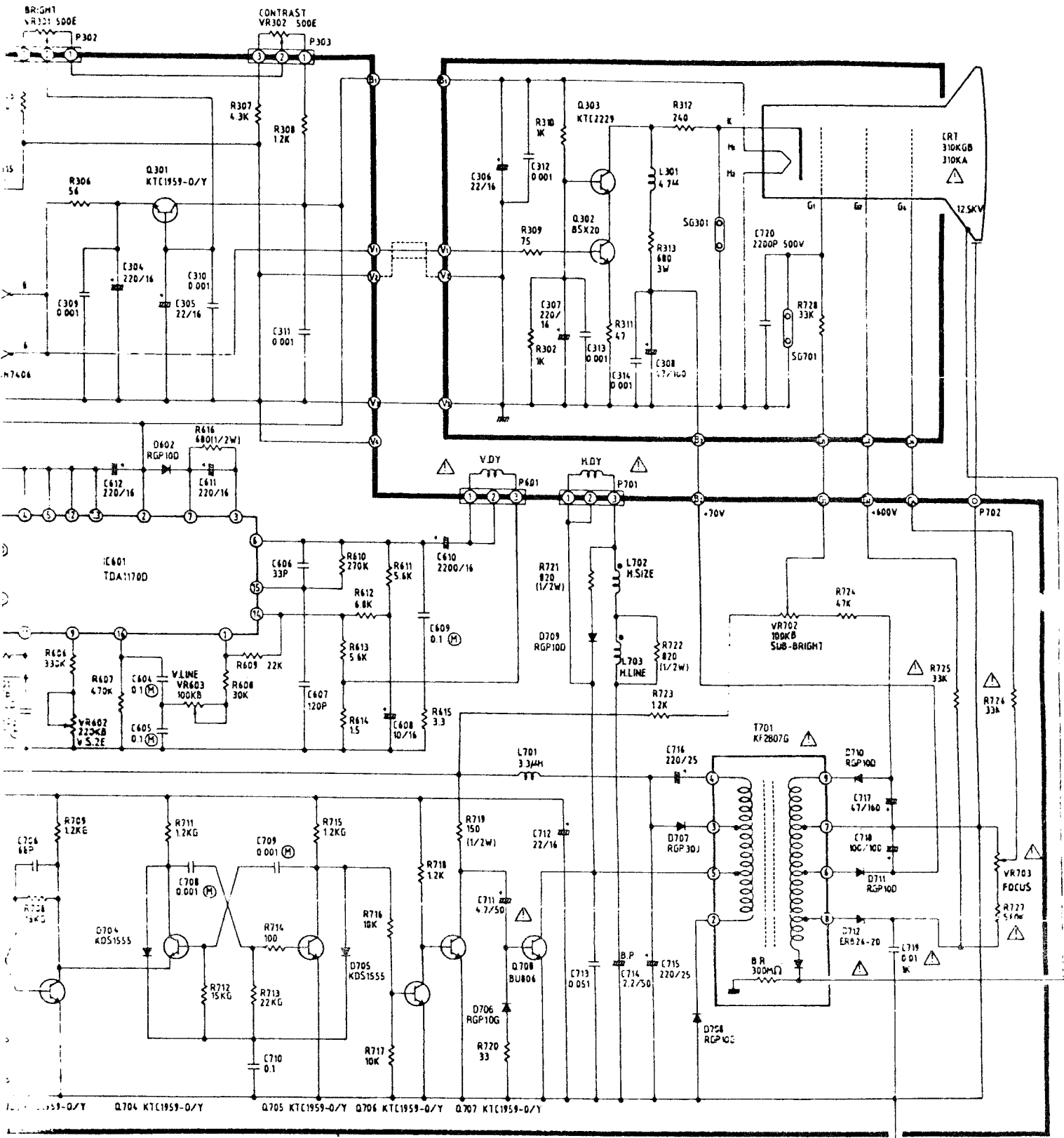


⚠ : REPLACE ALL COMPONENTS MARKED WITH SAFETY SYMBOL WITH IDENTICAL TYPE

**IMPORTANT SAFETY NOTICE**

THE SHADED AREA ON 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 SHADED AREAS OF THE SCHEMATIC.

SM124

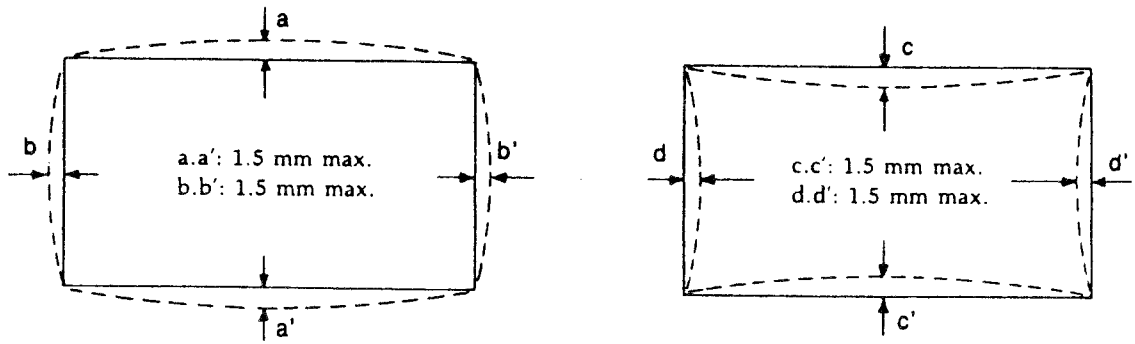


IMPORTANT AVIS SUR LA SÉCURITÉ

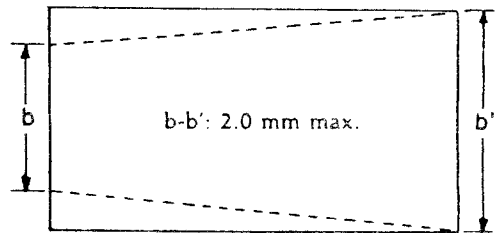
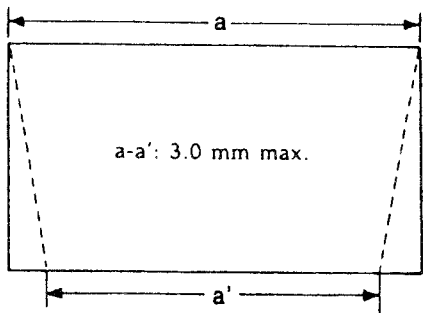
LA PARTIE OMBRÉE DE CE DIAGRAMME SCHEMATIQUE COMPREND D'IMPORTANTES CARACTÉRISTIQUES SPÉCIALES CONÇUES POUR PROTÉGER DES RAYONS X, ET DES DANGERS D'INCENDIE ET DE SECOURS ÉLECTRIQUES. EN CAS DE BESOIN, DES PIÈCES DE CETTE PARTIE OMBRÉE DOIVENT ÊTRE REMPLACÉES. N'UTILISEZ QUE DES PIÈCES SPÉCIFIÉES PAR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

P/N 484-476A

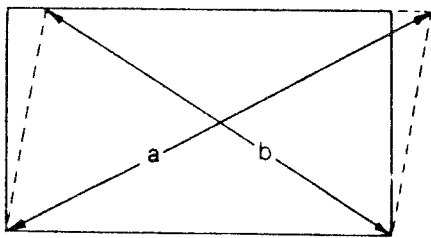
## PINCUSHION AND BARRELLING



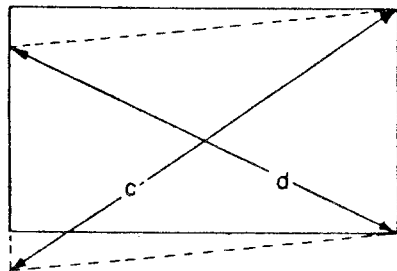
## TRAPEZOID



## PARALLELOGRAM

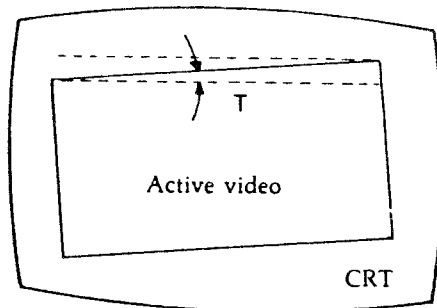


a-b: 2.0 mm max.



c-d: 2.0 mm max.

## YORK TILT



$T = 1^\circ \text{ max.}$

Fig. 2, Geometry Measurements

# SPECIFICATIONS

## 1. CATHODE RAY TUBE

Type: Non-glare DARK  
Size & Deflection angle: 12", 90°  
Neck diameter: 20 mm  
Phosphor: Paper White

## 2. INPUT

Input signal: TTL Signal

- Video : 1 Vp-p Positive
- Audio : 1 Vp-p
- Vertical Drive :  $5 \pm 1.5$  Vp-p Negative
- Horizontal Drive :  $5 \pm 1.5$  Vp-p Negative

Power Input : AC 220V 50Hz, 0.26A  
Input Connector : 13 Pin Din Connector

## 3. SCANNING

Horizontal frequency : 35.7 KHz  
Horizontal retrace time : 6.3  $\mu$ S  
Vertical frequency: 71.2 Hz  
Vertical retrace time : 420  $\mu$ S

## 4. VIDEO

- Display Area (HXV) : 210 mm  $\times$  130 mm
- Amplifier Type : Linear
- Frequency band width : 32 MHz
- Horizontal resolution : 1100 lines at center
- Display character : 80  $\times$  50 characters

## 5. GEOMETRIC DISTORTION: 2.5% max.

## 6. LINEARITY

- Horizontal : 10% max.
- Vertical : 10% max.

## 7. EXTERNAL CONTROLS: BRIGHTNESS, CONTRAST, ON/VOLUME

# ADJUSTMENT AND MAINTENANCE

## CIRCUIT PROTECTION

Circuit protection is provided by one Mini fuse, on the power pc board. A 0.5 Ampere fuse (F901) is wired into one side of the AC line and provides primary protection to the entire chassis.

## 1. CENTERING ADJUSTMENT

**CAUTION:** The following adjustment points are close to the high voltage yoke terminal. If the raster is not centered in the raster opening, it may be centered by removing the cabinet back and adjusting the centering tabs on the neck of the tube, located at the rear of the deflection yoke. Turn the whole device clockwise or counter-clockwise. To increase the amount of raster shift, move the two tabs which project from the device, farther apart. If the raster is tilted on an angle, it may be straightened by loosening the deflection yoke locking clamp and rotating the deflection yoke.

## 2. FOCUS

Adjust the focus control (VR703) for best overall focus of the test pattern (marked with the symbol "%"). Usually the center and corners of the screen do not focus at the same setting and a compromise must be made.

## 3. BRIGHTNESS

Adjust subbrightness control (VR301) for visual cut off of the raster when external brightness is turned to maximum.

## 4. VERTICAL SIZE AND LINEARITY ADJUSTMENT

The vertical size control (VR602) should be adjusted for the picture to fill the screen vertically, the linearity control (VR603) should be adjusted for best overall vertical linearity. Adjustment of either control will not affect the adjustment of the other.

## 5. HORIZONTAL SIZE AND LINEARITY ADJUSTMENT

The horizontal size control (L702) is located on the main PCB, it should be adjusted for the picture to fill the screen horizontally, the linearity control (L703) should be adjusted for the best overall horizontal linearity adjustment so neither control will affect the adjustment of the other.