

## General Information

**Chassis: EB2-A**  
**CRT: A51JRU40X02 (MW)**  
**Remote Control:**  
**6450036873 (JXSA)**  
**Battery Lid: 6102500189**  
**Main Power Button:**  
**6102495355**

## Matrix

Item See Model  
 Safety Notices CB 1443

## Specifications

Give complete "Service Ref. No." for parts order or servicing, it is shown on the rating sheet on the cabinet back of the TV set.

Power Source: AC 220 - 240V 50 Hz  
 Television System: System 1  
 Colour System: PAL  
 Receiving Channel: UHF 21 - 69  
 Aerial Input Impedance: 75 ohm  
 AV Terminal 21 pin socket: CENELEC standard  
 Sound Output: 8.5 watts x 2  
 C21EF25N  
 Picture Tube: 55cm diagonal, 90 degree  
 (Visible picture diagonal) 51 cm  
 C25EG25N  
 Picture Tube: 63cm diagonal, 110 degree  
 (Visible picture diagonal) 59 cm

## Service Adjustments

### Service Control Adjustment

#### B1 Power Supply Adjustment

- 1: Set VR351 to be mechanical centre before pressing the main switch.

- 2: Tune the receiver to PAL circular pattern.
- 3: Set brightness and contrast controls to normal.
- 4: Connect digital voltmeter to R791 (VR351 side).
- 5: By using VR351, adjust voltage to  $130 \pm 0.5V$  (for 21").  
 By using VR351, adjust voltage to  $150 \pm 0.5V$  (for 25").

#### AFT Adjustment

- 1: Tune the receiver to the clearest station.
- 2: By using T121, adjust AFT to obtain best picture.

#### AGC Adjustment

**Note:** Do not attempt this adjustment with a weak signal.

- 1: Tune the receiver to the clearest station.
- 2: Set AGC VR (VR120) in direction which causes snow noise to appear, then in the opposite direction until snow noise just disappears.

#### Grey Scale Adjustment

##### (Screen VR Adjustment)

- 1: Tune the receiver to white pattern.
- 2: Set brightness control to display centre and contrast control to normal.
- 3: Set SW220 to "SERVICE" position.
- 4: Set VR602 and VR612 to be mechanical centre.
- 5: Turn VR601, VR611 and VR621 fully anti-clockwise.
- 6: Set screen VR for one colour to be just visible.

##### (Bias VR Adjustment)

- 7: By using VR601, VR611 or VR621, adjust line until white.

##### (Drive VR Adjustment)

- 9: By using VR602 and VR612, adjust white balance.

#### High Voltage and Width Adjustment

##### (High Voltage Adjustment)

- 1: Tune the receiver to PAL circular pattern.
- 2: Set brightness and contrast controls to maximum.
- 3: Connect digital voltmeter to both terminals of R232 (left side) (+), and a

- 4: high voltage meter to the CRT anode.  
 Confirm high voltage to be  $25.0 \pm 1kV$  at beam current 1.0, and less than 28.0 kV at 0 beam current (for 21").  
 Confirm high voltage to be  $26.0 \pm 1kV$  at beam current 1.1 and less than 29.0 kV at 0 beam current (for 25").

##### (H-Width Adjustment)

- 5: If H-width is too wide or narrow, connect or disconnect a lead wire J150 (for 21"). Adjust VR462 to obtain proper H-Width (for 25").

- 6: Reconfirm high voltage.

##### H-Centre Adjustment

- 1: Tune the receiver to the circular pattern.
- 2: Adjust H-centre by using VR401.

##### V-Centre Adjustment

- 1: Tune the receiver to circular pattern.
- 2: Adjust V-centre by using SW451.

##### V-Size Adjustment

- 1: Tune the receiver to the circular pattern.
- 2: Adjust V-size by using VR451.

##### Focus Adjustment

By using FOCUS VR, adjust focus control for good scanning lines.

## Circuit Alignment

#### VIF Alignment

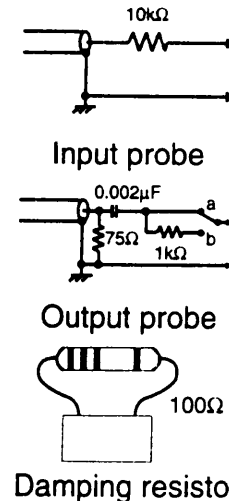


Fig 1.

Setting	Detector Adjustment	CH Trap Adjustment
DC 15V	IC351-1	IC351-1
AGC Voltage	IC101-48p	IC101-48p
Output Probe	Tuner TP (side B)	Tuner TP (side B)
Input Probe	Q124-E	124-E
Band	No	No
Damping R	No	KU1 & KU-2
System SW	I	I
Sweep ATT	25	25
Adjustment	By using T121 adjust "P" to be maximum amplitude	By using Tuner converter coil and T101, make the marker positions to: P=30+/-10% C=30+/-10%

#### VIF Waveform

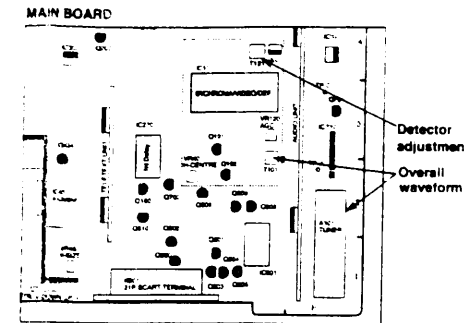
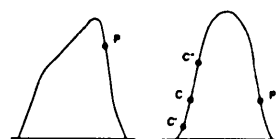


Fig 2.

#### SIF Alignment

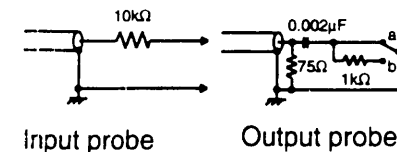


Fig 3.

Setting	Detector Adjustment	CH Trap Adjustment
DC 15V	IC901 -15pin	IC901-15pin
AGC Voltage	IC901-3pin	-
Output Probe	IC901-1pin (side B)	IC901-12pin (side B)
Input Probe	IC901-14pin	IC901-6pin (Condition)
Swsep ATT	10	
Marker		
Frequency	39.5 Mhz	Carrier freq.: 6.0mhz Modulation freq.: 1khz (sine w/f)

- Adjustment**
- 1: Adjust AGC voltage to be "A"=0.5Vp-p
  - 2: By using adjust "P" to be equal centre line

#### VIF Waveform

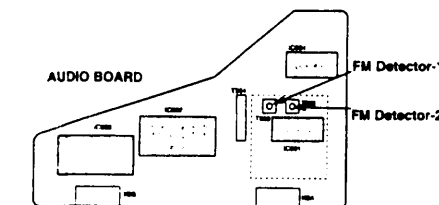
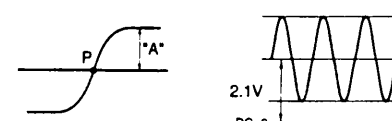


Fig 4.

## Memory IC Replacement (Important Notice)

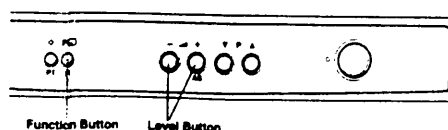


Fig 5.

When you replace a memory IC (IC790), it is necessary to initialise the IC as follows.

## Initialisation of Memory IC

- 1: When you press and hold the Function button on the TV set and then press the Recall button on the RC transmitter, the following picture will appear on the screen. (fig. 6)

ITEM -1 SET→ 0

Fig 6.

- 2: Confirm SET number of all items is "0" by pressing the Function button.
- 3: If it is not "0" change to "0" by the Level (+/-) button. (Changing the SET number, automatically memorised).
- 4: Press the Recall button to return to normal TV mode.

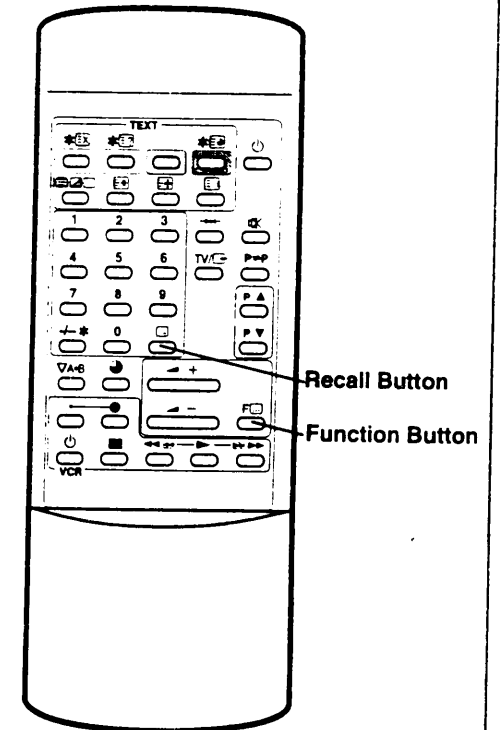
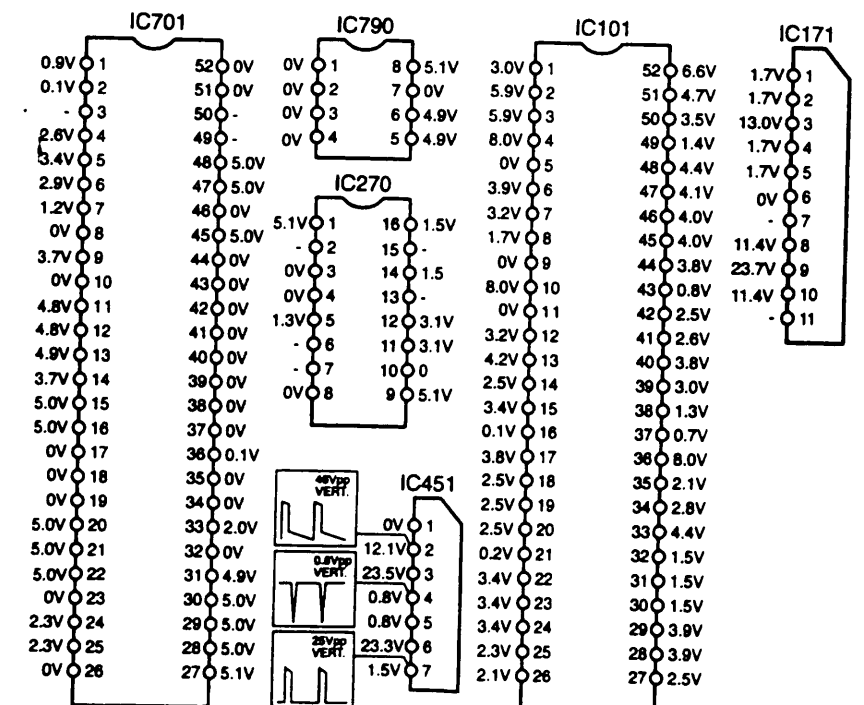
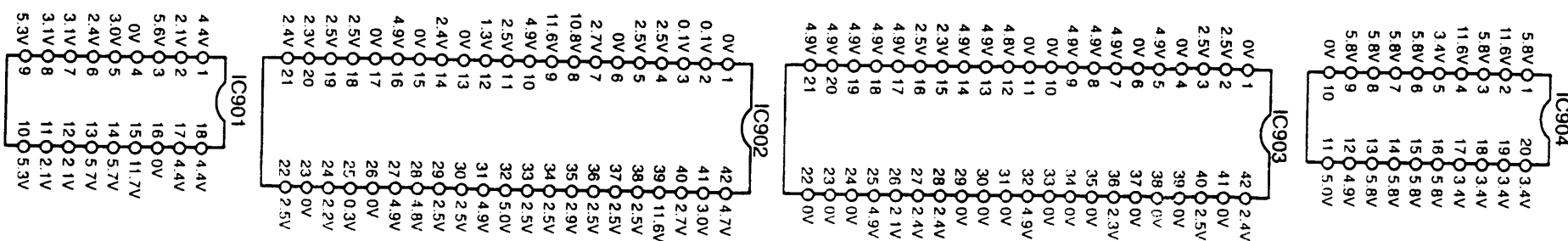
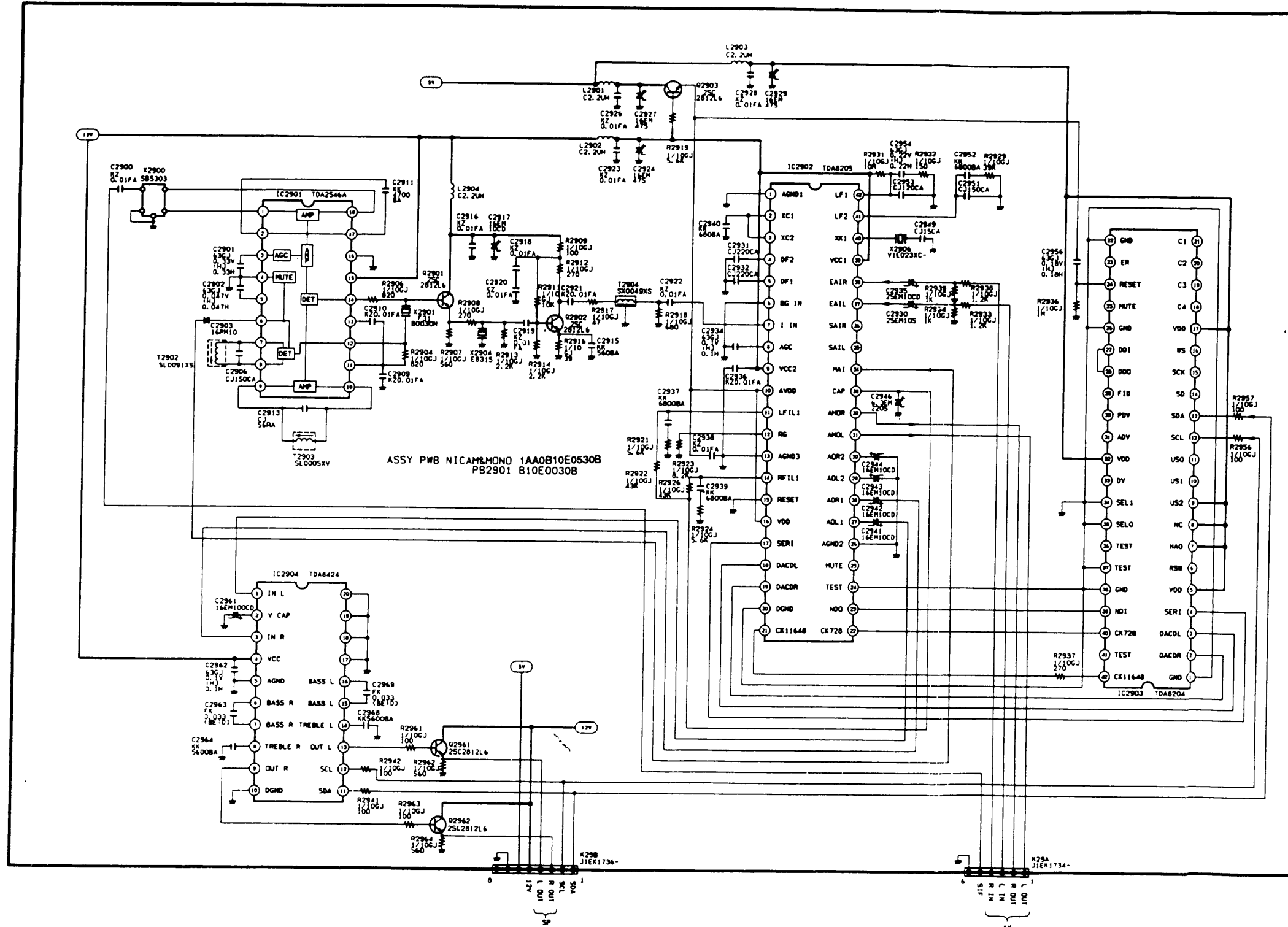


Fig 7.

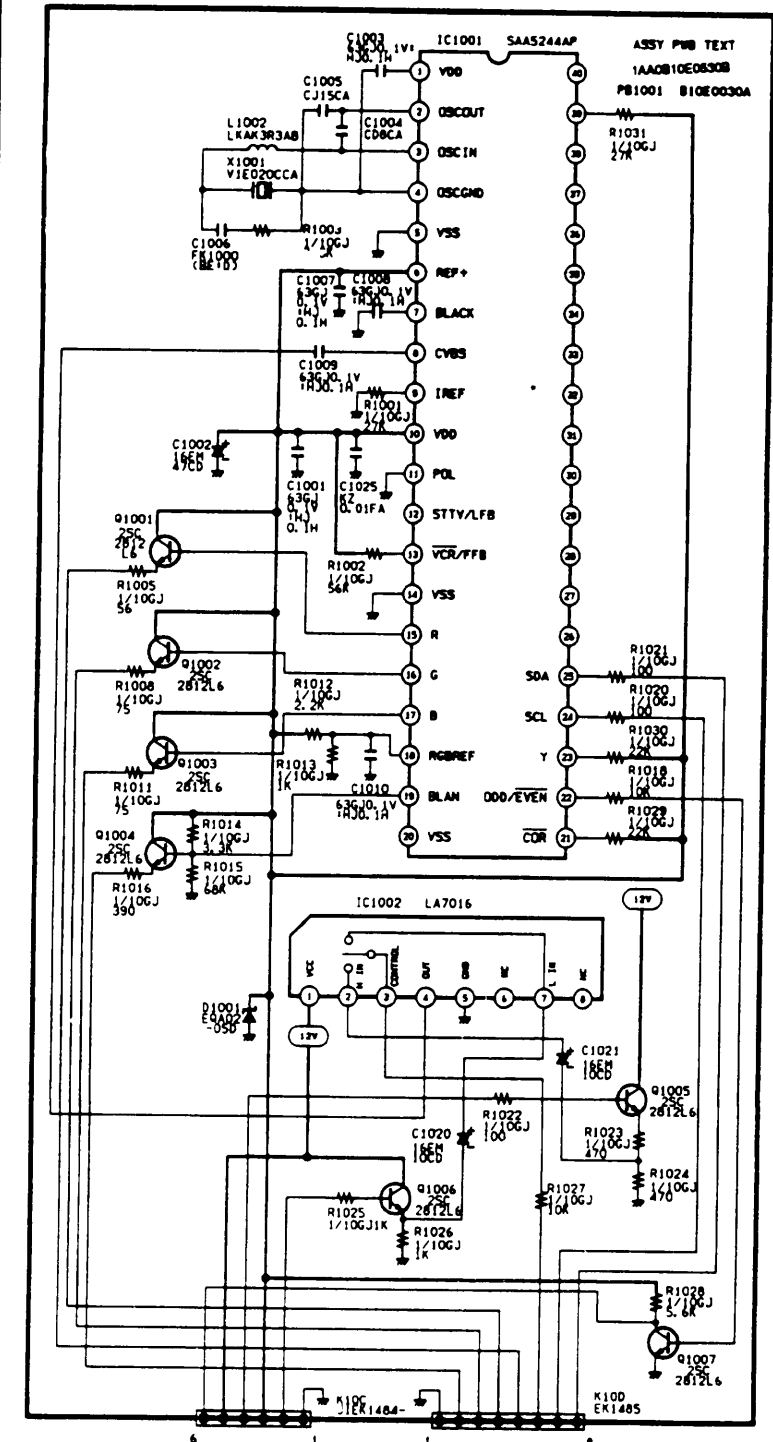
## IC - Main Diagram



## NICAM Diagram



### Text Diagram



Main Diagram

