

General Information

Chassis: EC1-B-21
CRT: A51EBV12X09
Remote Control:
6450043277 (JXSB)
Main Power Button:
6102495355

Matrix

Item	See Model
Safety Notice	Sanyo 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:	1.5 watts
Picture Tube:	37cm diagonal, 90 degree (Visible Picture Diagonal)
	34 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.

Recommended Safety Parts

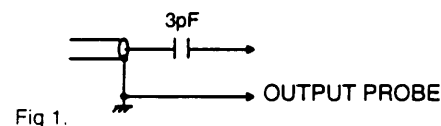
Item	Part No.	Description
C321, C331	4040082705	Ceramic 470P K 400V
	4040083108	Ceramic 470P M 400V
D315	4080078706	Photo Couple CNY75B
	4080077303	Photo Couple CNY75C
F301	4230222102	FUSE 250V 4A
K601	6100103986	CRT Socket
L901	6100304437	Degaussing Coil
	6102048537	Degaussing Coil
	6450025624	Degaussing Coil
	6450025631	Degaussing Coil
	6102316476	Degaussing Coil
Q901	4140054404	CRT A51EBV12X09
R331, R332	4020008305	Solid 5.6M KA 1/2W
SW301	6100113336	Push Switch
T301	6100333765	Power Trans
T311	6102210026	Converter Trans
T470	6102336078	FBT
W901	6450000669	Cord. Power

- 4: Connect digital voltmeter to the test point "TP-B".
- 5: By using VR351, adjust voltage to $130 \pm 0.5V$.

TU-AFT Adjustment

Note: Do not attempt this adjustment with weak signal.

- 1: Tune the receiver to the clearest station. (Modulation: 80%, Carrier: 39.5MHz).
- 2: Connect the output probe to the test point "Tuner-TR".
- 3: Connect the oscilloscope to the test point "TP-D".
- 4: By using L230, adjust DC voltage $4.0 \pm 0.2V$.



AGC Adjustment

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

- 1: Tune the receiver to the clearest station. Set brightness and contrast controls to maximum and colour control to minimum.
- 2: Set AGC VR (VR120) to mid-range.
- 3: Tune AGC control in the direction which causes snow noise to just appear, then in the opposite direction until the snow noise just disappears.

Grey Scale Adjustment

(Screen VR Adjustment)

- 1: Tune the receiver to the black and white pattern.
- 2: Set brightness and contrast control to normal.
- 3: Set SW220 to "SERVICE" position.
- 4: Set VR601 and VR611, VR640 to be the mechanical centre.
- 5: Turn VR602, VR612 and VR622 fully anti-clockwise.
- 6: Set screen VR for one colour to be just visible.

(Bias VR Adjustment)

- 4: By using VR602, 2 or VR622, adjust line

- until white.
- 5: Turn VR601 to end of counter-clockwise.
- 6: To make white by using VR640.
- 7: Set the screen VR for one colour to be just visible.
- 8: return VR601 to mechanical centre.
- 9: Set SW220 to the normal position.

High Voltage and Width Confirm

(High Voltage Confirm)

- 1: Tune the receiver to PAL circular pattern.
- 2: Set brightness and contrast controls to the normal.
- 3: Connect digital voltmeter to the test point (+) "TP-H", and (-) "TP-G" and the high voltage meter to the CRT anode.
- 4: Confirm high voltage to be 25.0 ± 1 kV at beam current 0.7 ± 0.05 , and less than 27.5 kV at 0 beam current.

(H-Width Confirm)

- 3: Cut JA1 in case of the sum of the width maker to be more than 5 (a + b).
- 4: Reconfirm the high voltage in case of cutting JA1.

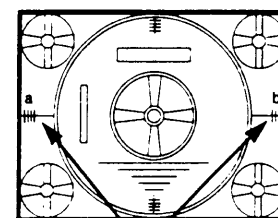


Fig 2. WIDTH MAKER

H-Centre Adjustment

- 1: Tune the receiver to the PAL circular pattern.
- 2: By using VR401 adjust H-centre to be $0 \pm 3mm$.

V-Centre and V-Size Adjustment

(V-Centre Adjustment)

- 1: Tune the receiver to PAL circular pattern.
- 2: Set brightness and contrast controls to normal.
- 3: By using SW401 adjust V-Centre to be $0 \pm 3mm$.

(V-Size Adjustment)

- 3: By using VR431 adjust the vertical width to be $C = D \div 4$ mm.

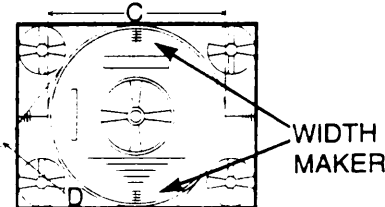


Fig 3.

Character Setting Adjustment

- 1: Tune the receiver to the Philips pattern.
- 2: Press the PRESET button on the TV.
- 3: By using VR701 adjust the position of "No" within "a". See Fig 4.

Focus Adjustment

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

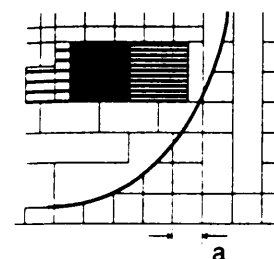


Fig 4.

Circuit Alignment

VIF Alignment

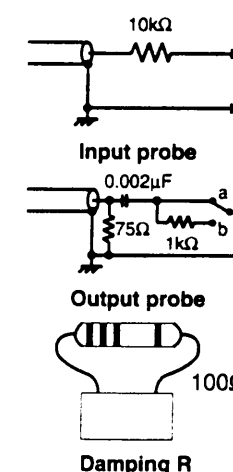


Fig 5.

Setting

DC 15V
 AGC Voltage
 Output Probe
 Input Probe
 tuning Voltage
 Band
 Damping R
 System SW
 Sweep ATT
 Adjustment

Detector Adjustment

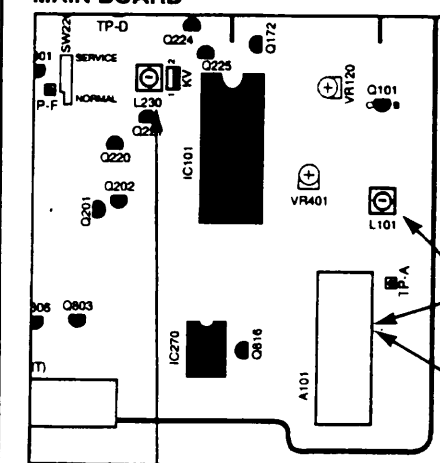
R352
 IC101-48p
 Tuner TR (side B)
 TP-F
 Tuner TU
 UB
 -
 25
 By using L230 adjust "P" to be maximum amplitude.

CH Trap Adjustment

R352
 IC101-48p
 Tuner TR (side B)
 TP-F
 Tuner TU
 UB
 KV-1 & KV-2
 I
 25
 By using Tuner converter coil and L101, make the marker positions to:
 P=48+/-10%
 C=49+/-10%

VIF Waveform

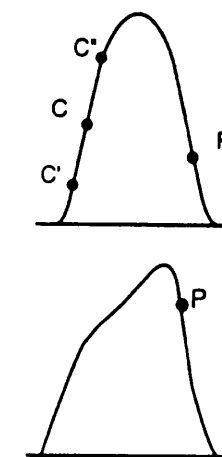
MAIN BOARD



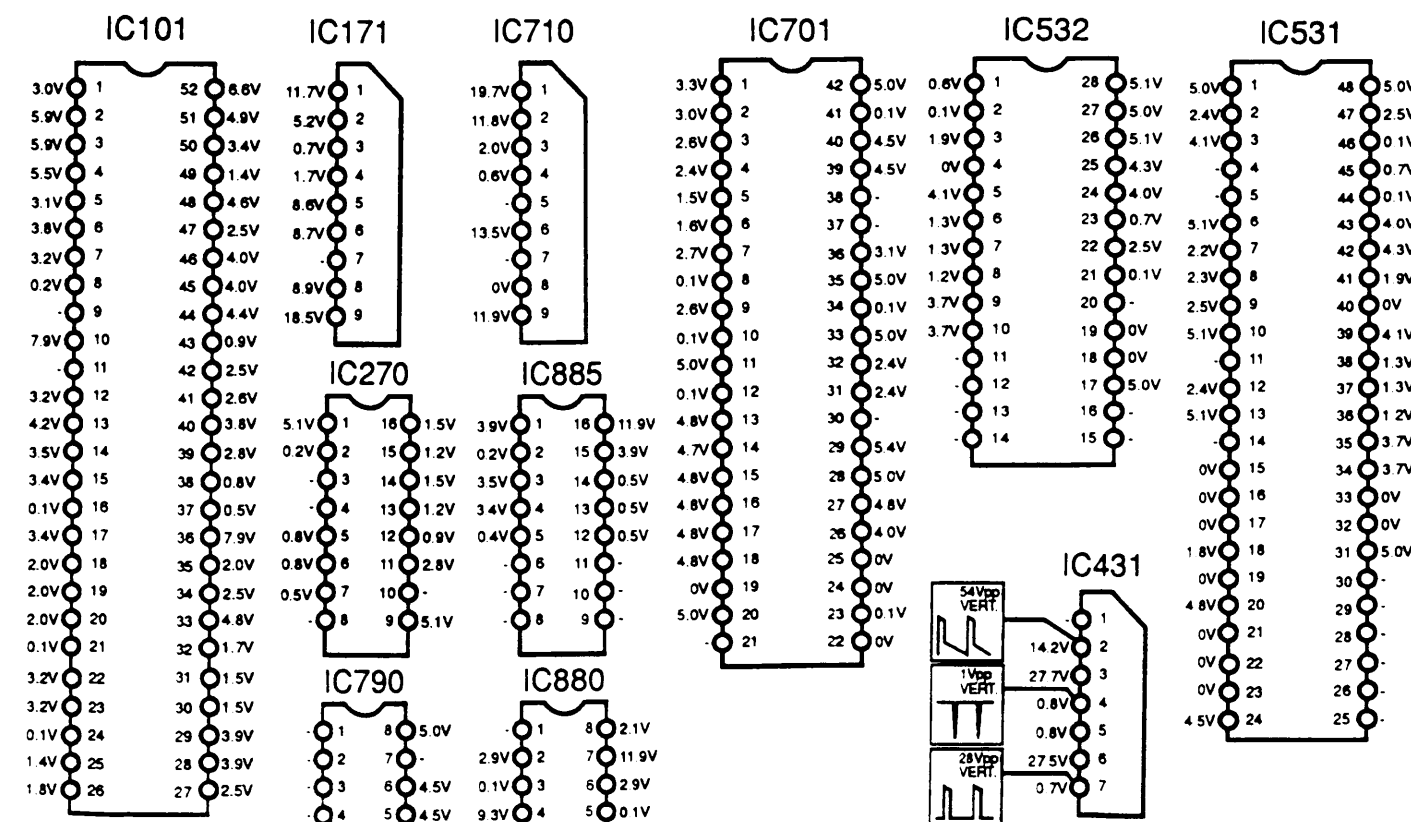
Detector adjustment

Overall waveform adjustment

Tuner converter coil & Tuner TR



IC Diagram



MAIN PCB ASSY E79C
UE2542K