Alignment Instructions

R BIAS 159 G BIAS 136 B BIAS 127 R DRIVE 35 G DRIVE 31 B DRIVE 32 V. CENTER 10 V. SIZE 23 H. CENTER 28 VCO 07 VCO FIN 107 VCO-L 05 VCO-L FIN 113 AGC NO LED EAST 44 Pr 01	SVC v0	
	R BIAS G BIAS B BIAS R DRIVE G DRIVE B DRIVE V. CENTER V. SIZE H. CENTER VCO VCO FIN VCO-L VCO-L FIN AGC LED EAST Pr	159 136 127 35 31 32 10 23 28 07 107 05 113 NO 44 01

ENTER SERVICE MODE

1. Select the Pr 91.

2. Adjust " Sparpness " to 0.

3. Enter the service mode

using the follow keys. $R \rightarrow G \rightarrow MENU.$

1. AFT

- 1) Set a signal Generator with
 - RF FREQUENCY = 38.9MHz, 34.2MHz (L')
 - RF OUTPUT LEVEL = 80+/-5dBuV
 - System = PAL for 38.9MHz.
- SECAM-I for 43.2MHz. 2) Connect the Signal Generator RF Output
- (PAL 38.9MHz) to P101 (Tuner IF Output). There must be no signal input to the tuner.
- Locate the cusor to "VCO" in Service Mode Menu, then press the "Vol +" key and wait until the "Please wait" disappear on the TV screen.
- 4) Connect the Signal Generator RF Output (SECAM-L 34.2MHz) to P101 (Tuner IF Output).
- 5) Locate the cusor to "VCO-L" in Service Mode Menu, then press the "Vol +" key and wait until the "Please wait" disappear on the TV screen.

2. SCREEN

- 1) Receive the Retma pattern and heat run over 15minutes.
- Adjust the "R, G BIAS, R, G DRIVE" to 0, "B BIAS" to 127, "B DRIVE" to 32. Adjust the screen volume that the Retma pattern reachs the cut-off point.

3. WHITE BALANCE

- 1) Receive the Full white pattern and heat run over 15minutes.
- Adjust the picture control at the point "X" value of white balance instrument in 20cd/m
- 3) Enter the service mode.
- 4) Adjust "R BIAS, G BIAS" to x=288, y=301.
- 5) In order to exit the service mode power off the TV set and power on.
- Set the TV set to "Normal I" mode(20/21 inch) or set to "Normal II" mode(14 inch)
- 7) Enter the service mode.
- 8) Adjust "R DRIVE, G DRIVE" to x=288, y=301.
- 9) Repeat above process until the white balance value to x=288, y=301, X=20, x=288, y=301, X=200 (approximate) in 2) -8).

4. FOCUS

- 1) Apply a RETMA PATTERN signal.
- 2) Adjust the Focus Volume on FBT to obtain optimal resolution.

5. AGC

- 1) Set a pattern Generator with
 - RF LEVEL = 60dBuV
 - 100% FULL COLOR BAR
- 2) Connect the Pattern Genetator RF Output to tuner RF input.
- 3) Connect the probe of oscilloscope in AGC pin of tuner.
- 4) Adjust the AGC point to MAX 1V.
- (Simple Method)
 - 1) Receive the pattern.
 - 2) Locate the cusor in "AGC" and adjust using the "VOL +" or "VOL -" keys.
 - Adjust the point there is no noise in about 60dBuV and no beat in about 90dBuV.

6. GEOMETRY

6.1 VERTICAL CENTER

- 1) Set the TV to "NORMAL I" mode.
- 2) Enter the service mode.
- Locate the cusor at "V.CENTER" then press "VOL +" or "VOL -" keys to adjust the center line with the mechanical center marks of the CRT.

6.2 VERTICAL SIZE

- * The VERTICAL CENTER adjustment has to be done in advance.
 - 1) Receive the Retma pattern.
 - 2) Set the TV to "NORMAL I" mode.
 - 3) Enter the service mode.
 - 4) Locate the cursor at "V.SIZE" then press "VOL +" or "VOL -" keys to adjust the upper part of the picture.

6.3 HORIZONTAL CENTER

- 1) Apply a RETMA PATTERN signal.
- 2) Set the TV to "NORMAL I" mode.
- 3) Enter the service mode.
- 4) Locate the cursor at "H.CENTER" then press "VOL +" or "VOL -" keys to adjust the picture centering.

if EEPROM(I702) has been changed;

- Option data has to be change and
- all alignment function has to be readjusted
- * The initial state of adjustment are as follows;
- V-Center, V-Size, H-Center, R, G, B, AFT = Center (

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- AGC =
- * Service Remocon





