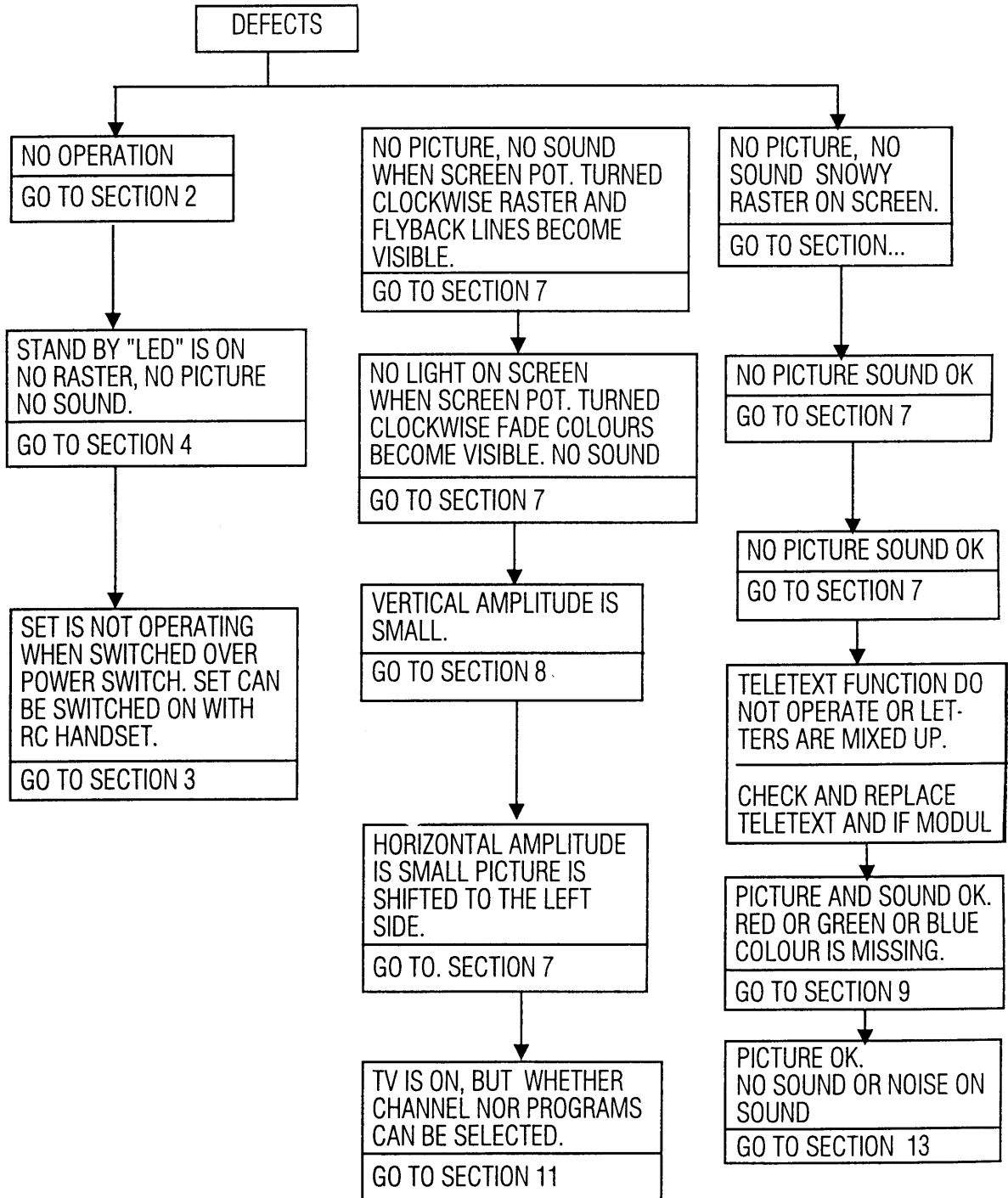


# ① TROUBLE SHOOTING

- 1 -TROUBLE SHOOTING GUIDE
- 2 -GENERAL POWER SUPPLY DEFECTS
- 3 -POWER I-POWER SUPPLY DEFECTS
- 4 -POWER II-POWER SUPPLY DEFECTS
- 5 -SWITCH MODE TRANSFORMER DEFECTS
- 6 -PROTECTION CIRCUIT DEFECTS
- 7 -DEFECTS RELATED TO DARK SCREEN
- 8 -DEFLECTION CIRCUIT DEFECTS
- 9 -TEA 2029 AND PERIPHERAL DEFECTS
- 10 -COLOUR DECODER DEFECTS
- 11 -CRT DRIVE BOARD AND IC501 DEFECTS
- 12 -MICROPROCESSOR DEFECTS
- 13 -SOUND CIRCUIT DEFECTS

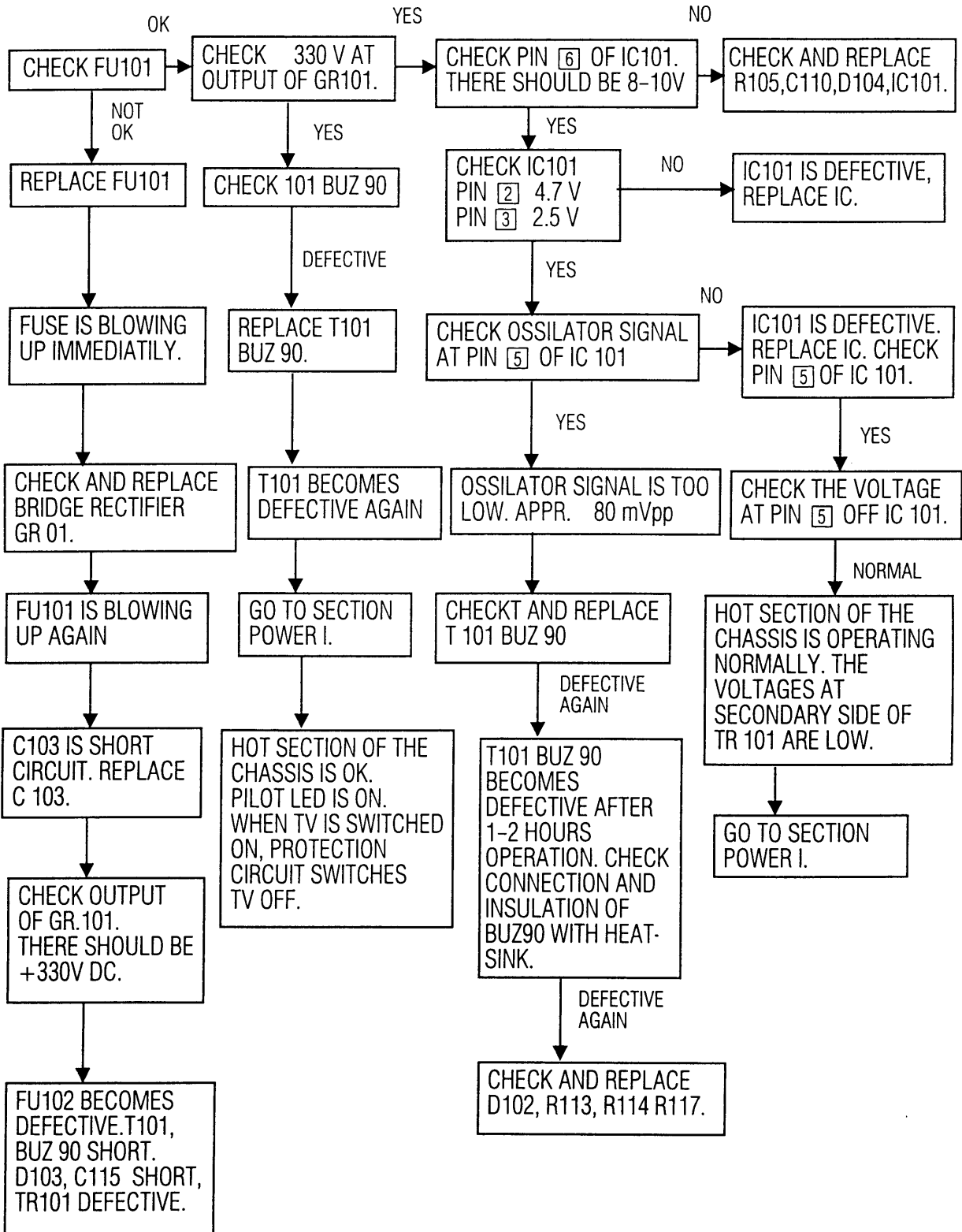


**NOTE:** ALL ANALOG CONTROL (LUMINANCE, CONTRAST, COLOUR, VOLUME), SHOULD BE AT MEDIUM LEVEL.

2

# NO OPERATION

STAND BY LED IS OFF



# POWER I DEFECTS

POWER LED IS OFF

IC1001 IS GOOD. T101 BUZ 90 WHEN REPLACED BECOMES DEFECTIVE AGAIN.

MEASURE THE VOLTAGE AT PIN [5] OF IC101. IF THESE VOLTAGE IS 5-6 Vpp., CHECK BASE OF T101 AND R817

CHECK AND REPLACE D103 C115, R115 WHICH ARE CONNECTED TO [5] PIN OF T101 BUZ 90.

NOT DEFECTIVE

AFTER REPLACEMENT IC101 BECOMES DEFECTIVE. CHECK AND REPLACE R108, C117, AND C111. NOTE: DISCHARGE C112 BEFORE PLACEMENT.

TV IS OPERATING. WHEN THE SUPPLY VOLTAGE EXCEEDS 200V AC, PICTURE IS DISTURBED. REPLACE C111, C112.

CHECK AND REPLACE D109, C121, C122, C804 IF DEFECTIVE

NORMAL

CHECK AND REPLACE TRANS. TR101, R110 R111.

TV IS NOT OPERATING AT VOLTAGES BELOW 220 V AC. CHECK AND REPLACE R111, R112, R110, C113, C114

SWITCH MODE POWER SUPPLY IS OPERATING. 125V (145V) DC AT THE OUTPUT OF TR101 NOT STABLE. CHECK AND REPLACE D101, R104, P101, D105, R109, R106.

NOT DEFECTIVE

TV IS NOT OPERATING, BUT THE PICTURE IS BENDED AT THE UPPER EDGE OF THE SCREEN.

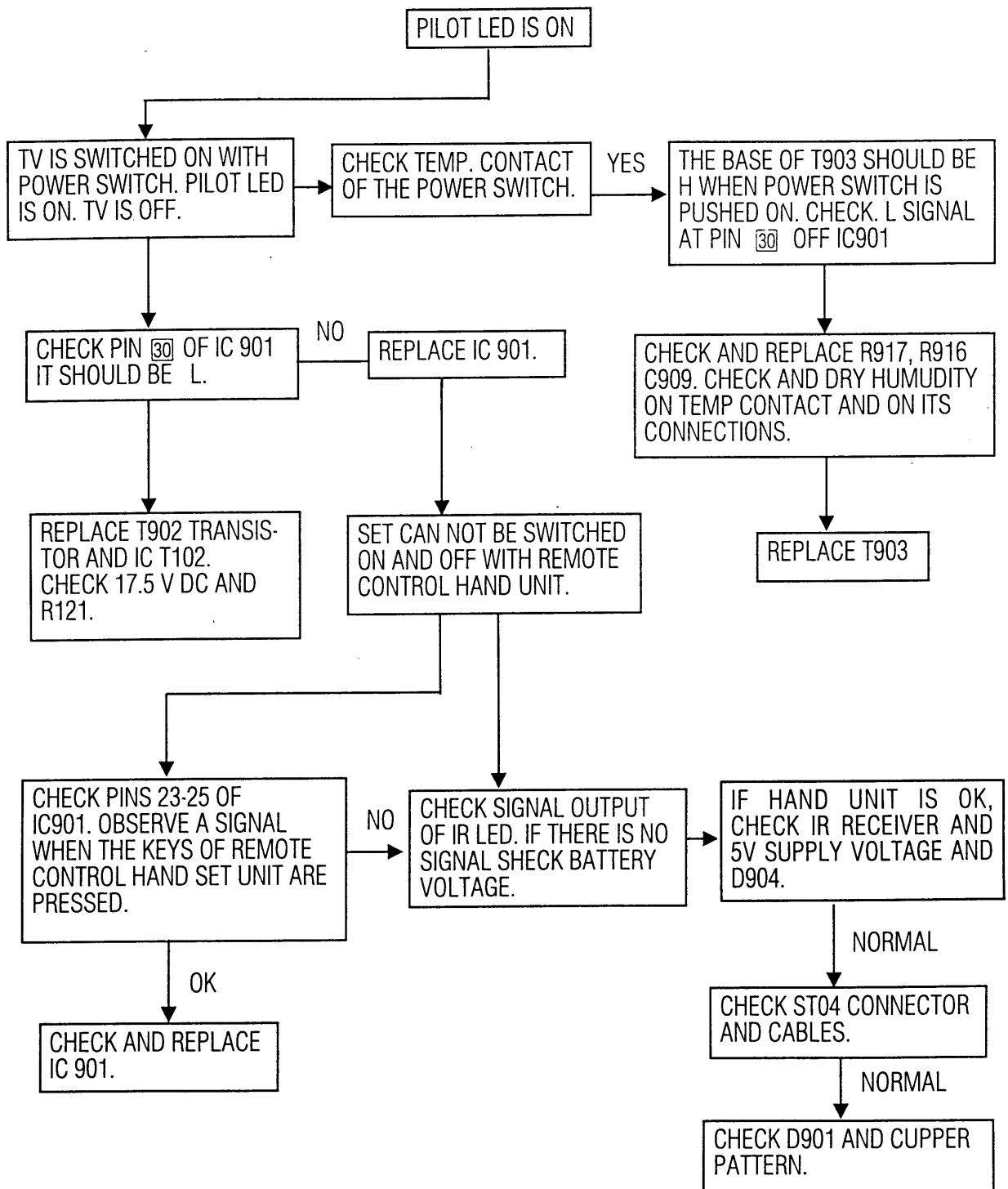
THE SET IS OPERATING FEW MINUTES AFTER SWITCHED ON AND THAN PROTECTION CIRCUIT SWITCHES OF THE SET.

DC SUPPLY VOLTAGES 125V (145V) 17.5V, 8.5V ARE LOW. CHECK D104, R106, IC101

REPLACE TR101 TRANSFORMER

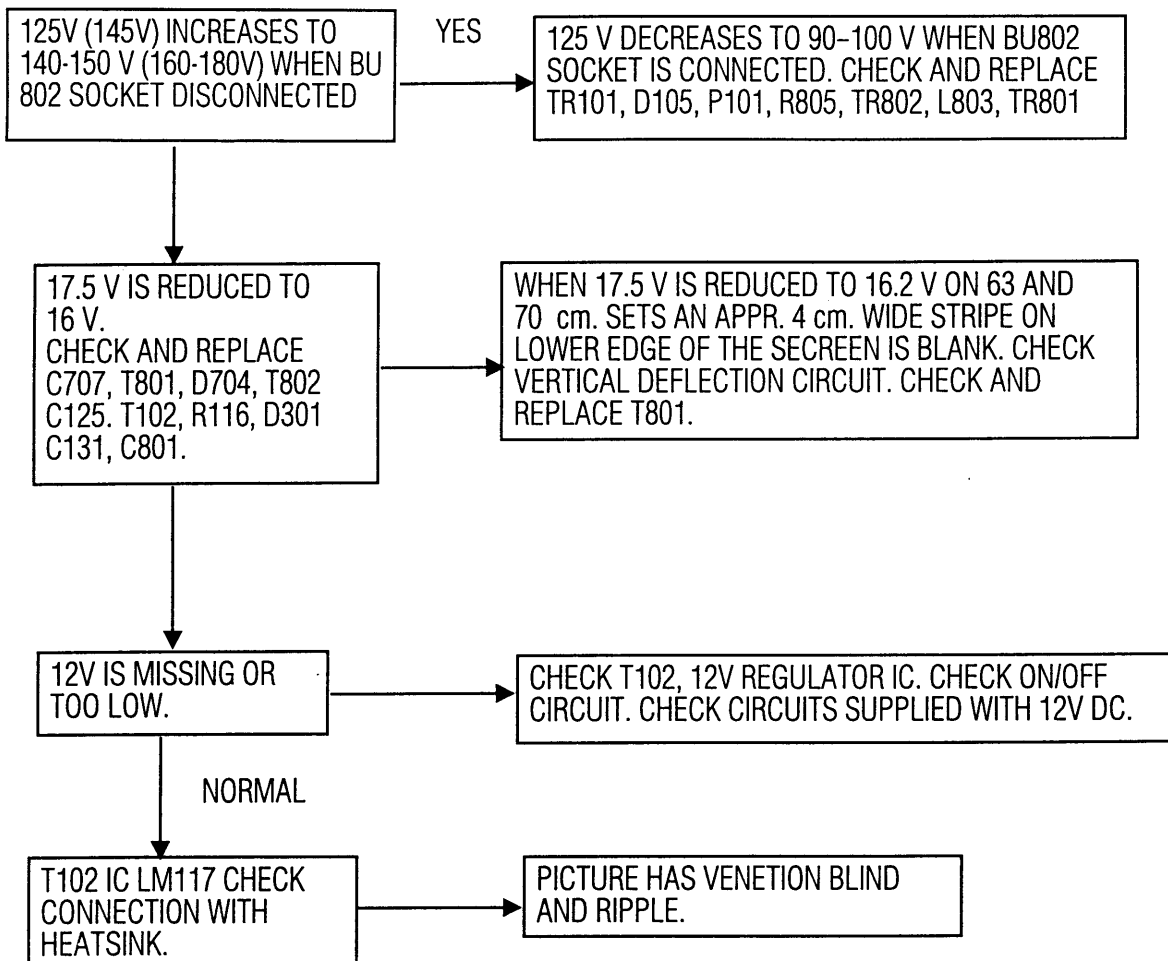
CHECK CRT EARTH WIRE AND ITS CONNECTION WITH THE CHASSIS.

## POWER II DEFECTS



5

## SWITCH MODE TRANSFORMER TR101 AND PERIPHERAL DEFECTS



6

## SET GOES TO STANDBY DURING OPERATION

12 V DC VOLTAGE  
IS MISSING

IF PIN 30 IC901 IS AT 4V. THIS IC HAS SWITCHED OFF THE SET. STATIC DISCHARGE CAN CAUSE PROTECTION CIRCUIT TO REACT. CHECK CRT DRIVE BOARD AND ITS EART CONNECTION.

CHECK EARTH PINS OF DST TRANSFORMER. RETOUCH-  
SOLDERS OF DST PINS OR REPLACE DST.

MUTING SIGNAL ON PIN 28 OF IC701 IS MISSING  
REPLACE IC 701.

12 V DC VOLTAGE  
IS NORMAL.

CHECK VOLTAGE AT PIN 28 OF IC701. DURING NORMAL OPERATION THIS VOLTAGE IS LESS THAN 0.7 V. DURING PROTECTION, THIS VOLTAGE IS HIGHER THAN 0.7 V. CHECK + 17.5 AND DRY SOLDER ON VERTICAL CIRCUIT.

125V (145V) AND 12V DC  
VOLTAGES ARE MISSING

HORIZONTAL OUTPUT STAGE INCLUDES A COMPONENT  
CAUSING OVER CURRENT CHECK AND REPLACE T802,  
TR802, C813, C810, D801.

CRT PRODUCES TOO  
MUCH STATIC ELEKTRIC  
CHARGE.

CHECK CRT EART WIRE, CRT-CHASSIS EART  
CONNECTION, CRT SOCKET-CHASSIS EART  
CONNECTION. WHEN OK REPLACE CRT.

SCREEN IS DARK. WHEN SCREEN POTENTIOMETER TURNED CLOCKWISE RASTER AND FLYBACK LINES APPEAR ON SCREEN.

CHECK SDA AND SCL SIGNALS AND 2-4 V DC AT PINS [31], [32] OF IC 901.

IF ONE OF SDA OR SCL IS MISSING.

IN MONO SETS SDA AND SCL SIGNAL LINES ARE SEPARATED FROM TELETEXT BOARD TUNER AND MEMORY IC. THIS WAY SHORT CIRCUIT OF THIS SIGNALS CAN BE LOCALIZED. IN STEREO SETS SDA AND SCL SIGNAL LINES ARE SEPARATED FROM STEREO BOARD OR IF BOARD. SHORT CIRCUIT CAN BE LOCALIZED, AND DEFECTIVE MODULE CAN BE REPLACED.

SDA-SCL SIGNALS ARE NORMAL, SCREEN IS DARK.

CHECK PIN VOLTAGES AND SURROUND COMPONENTS OF IC501. CHECK 5.3 V AT PIN [26]. PINS [19], [20] ARE FOR CONTRAST AND BRIGHTNESS. CHECK VOLTAGES AT THESE PINS VARIING BETWEEN 1-4.5 V. CHECK 12V DC AT PIN [6]. CHECK Y-LUMINANCE SIGNAL ON PIN [15]. IF ALL ITEMS ARE NORMAL, IC501 OR CRT DRIVE BOARD IS DEFECTIVE.

REPLACE CRT DRIVE BOARD. CHECK AND REPLACE D501, D503, C503. CHECK VOLTAGE AT PIN [9] OF IC501.

SCREEN IS DARK. RASTER IS AVAILABLE.

PUSH AV BUTTON ON REMOTE CONTROL HAND UNIT. CHECK SQUARE WAVE ON PIN [15] OF IC 501. IF OK, CHECK SQUARE WAVE AT PINS [1], [3], [5]. IF OK, CRT DRIVE BOARD IS DEFECTIVE. IF NOT, REPLACE IC501.