IMPORTANT SAFETY NOTICE
THE COMPONENT IDENTIFIED BY SHADING ON THE INTERNATIONAL SYMBOLOGY ON THIS SCHEMATIC DIAGRAM CORRESPONDS TO SPECIAL FEATURS IMPORTANT FOR PROTECTION FROM ELECTRICAL, FIRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURERS SPECIFIED PARTS BE USED FOR THESE CRITICAL COMPONENTS.

NOTES:
1. ALL RESISTORS ARE 1/2 W, 1% VALUES IN OHMS, 1/8 W, 5% VALUES.
2. ALL CAPACITORS ARE SHOWN IN UF P-M-
3. COT UNIT OF INDUCTANCE IS M-

P/N 484 - 257A
HORIZONTAL TIMING

VIDEO

SYNC.

1.396mS

0.19mS

1.184mS

0.19mS

12.7mS

1.016mS

1.41mS

60Hz (16.69mS)

15.75KHz (63.5uS)

NOTES
1. SIGNAL INPUT LEVEL: 1Vp-p
2. TIME TOLERANCE: ±0.1%
3. THE MONITOR IS ADJUSTED ACCORDING TO THE ABOVE TIMINGS AND FREQUENCY.
A. NO CHARACTER

NO CHARACTER

TURN THE BRIGHTNESS CONTROL CLOCKWISE TO THE EXTREME

WHOLE SCREEN BRIGHT

YES

CHECK CRT CATHODE (KR.KG.KB) SIGNAL LEVEL (CRT PWB) NORMAL?

YES

CHECK PERIPHERAL CIRCUIT OF CRT

NO

NO RASTER

REFER TO NO RASTER

NO

CHECK CONNECTOR P55 2.3.5 SIGNAL NORMAL? (CRT PWB)

NO

ABOUT 45Vpp

YES

CHECK A10 POINT VOLTAGE 115V

NO

TROUBLE IN P707 or R363

NO

ABOUT 2.5Vpp

YES

CHECK A9 POINT VOLTAGE 12V

NO

TROUBLE IN P305

NO

TROUBLE IN VIDEO DRIVE CIRCUIT (Q301-Q324)

DISCONNECTED P304

YES

CHECK TP1.2.3 SIGNAL NORMAL? (MAIN PWB)

NO

ABOUT 2.5Vpp

YES

CHECK C332 + SIDE VOLTAGE (12V)

NO

TROUBLE IN VIDEO OUTPUT (Q501-Q506)

NO

TROUBLE IN R732 or D709
K. NO SOUND

NO SOUND

TURN THE VOLUME (R409)

CHECK SOUND IC ① PIN VOLTAGE 12V?

NO

TROUBLE IN R732 or D709 TROUBLE IN FBT

YES

TROUBLE IN POWER SUPPLY

CHECK SOUND IC ⑨ PIN VOLTAGE 14V?

NO

TROUBLE IN SIGNAL CABLE

YES

TROUBLE IN P404

CHECK SOUND IC ② PIN SIGNAL OK?

NO

TROUBLE IN P404

YES

CHECK P404 OK?

NO

TROUBLE IN IC401
B. NO POWER

NO POWER

CHECK P962 (115V)?

ABNORMAL

CHECK FUSE OK? (ACV)

NO

TROUBLE IN FUSE (3.15A)

YES

TROUBLE IN KBL06

CHECK BD 901 (DCV)?

NO

YES

CHECK IC950 ①, ③

NO

TROUBLE IN STR-41090 TRANS

YES

CHECK Q950 (KTC2120)
C. NO RASTER

START

NO RASTER

CRT HEATER RED-HOT?

YES

TUNE THE BRIGHTNESS CONTROL CLOCKWISE TO THE EXTREME

WHOLE SCREEN BRIGHT

NO

CHECK G2 VOLTAGE ABOUT 450V

NO

TROUBLE IN FBT

YES

CHECK A10 VOLTAGE 115V?

NO

TROUBLE IN A10 OR R363

YES

IF TURN THE SUB BRIGHTNESS CONTROL (742) CLOCKWISE SCREEN BRIGHT?

NO

NO HIGH VOLTAGE, TROUBLE IN FBT

YES

RASTER OK
E. NO HORIZONTAL SYNC.

1. NO HORIZONTAL SYNC.

2. CHECK INPUT SIGNAL LEVEL AND TIMING OF P301 (HOR. SYNC SIGNAL)

3. SIGNAL AND TIMING NORMAL ABOUT 3.5Vp-p

   YES

   ADJUST H.HOLD VR (R716) SYNC OK?

   YES

   ADJUST THE H.HOLD

   NO

   CHECK IC701 WAVE FORM NORMAL?

   YES

   CHECK IC701 WAVE FORM NORMAL?

   NO

   TROUBLE IN IC701

   NO

   TROUBLE IN SIGNAL CABLE or LOGIC SIDE

   YES

   TROUBLE R712, C742

   ABOUT 3.2Vp-p
F. NO VERTICAL SYNC.

NO VERTICAL SYNC.

CHECK INPUT SIGNAL LEVEL AND TIMING OF P301 (6)

SIGNAL AND TIMING NORMAL (ABOUT 3-5Vp-p)

NO → TROUBLE IN SIGNAL CABLE or LOGIC SIDE

YES → ADJUST V.HOLD VR

ADJUST V.HOLD VR (R603) SYNC OK?

YES → ADJUST V.HOLD VR

NO → CHECK IC701 (16, 17, 18) WAVE FORM NORMAL?

WF16-WF17 YES → TROUBLE IN IC701

WF12-WF15 NO → TROUBLE IN IC701

CHECK IC601 (2, 4) WAVE FORM NORMAL?

WF16-WF17 YES → TROUBLE IN IC701

WF12-WF15 NO → TROUBLE IN IC601
G. CONVERGENCE IS BAD

CONVERGENCE IS BAD

CONVERGENCE ON THE CENTER AREA IS BAD

CONVERGENCE ON THE FRING AREA IS BAD

YES → ADJUST STATIC CONVERGENCE

NO → ADJUST MENT PROCEDURE OF CONVERGENCE

YES → ADJUST DY LOCATION

H. FOCUSING PROBLEM

FOCUSING IS NOT POSSIBLE

CHECK FOCUS VR

YES → TROUBLE IN FOCUS CIRCUIT (F.B.T)

NO → ADJUST FOCUS VR

REPLACE CRT
I. VERTICAL PIN COMPENSATION (V.PCC) IS BIG

- VERTICAL PINCUSHION COMPENSATION (V-PCC) IS BIG → CHECK V-PCC VR (621)
  - NO → ADJUST V-PCC CONTROL
  - YES → TROUBLE IN V-PCC CIRCUIT (V.DEF CIRCUIT)

J. HORIZONTAL LINE

- HORIZONTAL LINE
  - CHECK VERT. OUT PUT IC601 ④ WAVE FORM OK?
    - NO → CHECK IC 701 POINT VOLTAGE 12V?
      - YES → TROUBLE IN IC701
      - NO → TROUBLE IN POWER SUPPLY
    - YES → CHECK VERT. OUTPUT IC601 ② WAVE FORM OK?
      - NO → CHECK VERT. OUT PUT IC601 ⑥ VOLTAGE 24V?
        - YES → TROUBLE IN IC601
        - NO → TROUBLE IN IC601
  - YES → CONFIRM DY OPEN