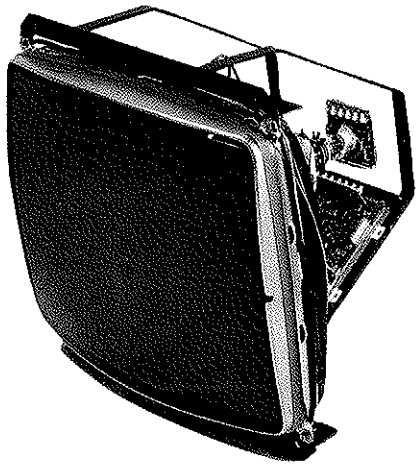
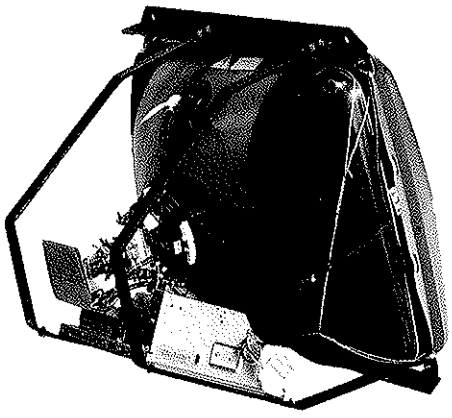
COLOR DISPLAY MONITOR

INSTRUCTION MANUAL





KORTEK®

● SAFETY PRECAUTIONS

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this monitor.

The followings are the necessary precautions to be observed before servicing.

1) An isolation transformer must be used between the AC supply and the AC plug of the monitor before servicing or testing is performed since the chassis and the heat sink are directly connected to one side of the AC line which involves a shock hazard.
   Before servicing is performed, read all the precautions labelled on the CRT and chassis.

2) Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube.
   The picture tube is highly evacuated and if broken glass fragments are violently expelled, use shatterproof goggles and keep picture tube away from the bare body while handling.

3) Potentials as high as 25Kvolts are present when this receiver is operating. Operation of the receiver outside the cabinet or with the back cover removed involves a shock hazard from the receiver.
   a) Servicing should not be anyone who is not thoroughly familiar with the precautions necessary when working on high-voltage equipment.
   b) Always discharge the picture tube anode to keep off the shock hazard before removing the anode cap.
   c) Perfectly discharge the high potential of the picture tube before handling. The picture tube is highly evacuated and if broken glass fragments are violently expelled, use shatterproof goggles and keep picture tube away from the bare body while handling.

4) Wind the lead wires around terminals before soldering when replacing parts or circuit boards.

5) When replacing a high wattage resistor (oxide metal film resistor) in circuit board, keep the resistor 10mm always from circuit board.

6) Keep wires away from high voltage or high temperature components.

● X-RAY RADIATION PRECAUTIONS

1) Excessive high voltage can produce potentially hazardous X-RAY RADIATION.
   To avoid such hazards, the high voltage must not be above the specified limit.
   The nominal value of the high voltage of this receiver is 25Kv at zero beam current (minimum brightness) under a 120VAC power source.
   The high voltage must not, under any circumstances, exceed 30Kv. Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure on page P (11) of this manual. It is recommended the reading of the high voltage be recorded as a part of the service record.
   It is important to use an accurate and reliable high voltage meter.

2) The only source of X-RAY RADIATION in this receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.

● PERFORMANCE AND OPERATING DATA

Apply a suitable power source to the monitor through an isolation transformer.
Set Up Controls
All controls are preset at the factory, but may be adjusted to suit program material.
-Supply
Voltage 1 105VAC ~ 135VAC (Main Voltage)
Frequency 50Hz ~ 60Hz
(Apply supply voltage through an isolation transformer with 1 Amp. minimum capability)

Specifications are subject change in order to assure you the latest in display technology ···

● COLOR SPECIFICATIONS

1) CRT
   a) Zenith
   b) From 9″ to 25″ diagonal measure
   c) P22 phosphor
   d) Polished faceplate standard : variety of optional faceplates and transmittances available.
   e) Stripe trio spacings (standard) : 0.62mm(9″), 0.66mm(13″), 0.82mm(19″), 0.82mm(25″)
   f) Optional finer pitches available.

2) INPUT SIGNALS
   a) Video : RGB analog, 1v to 5v peak−to−peak (adjustable with contrast control), 4.7k ohm input impedance, 40 usec to 50 usec active video.
   b) Optional inputs available
      −Negative video
      −RGB analog 0~0.75v, 75 ohm input impedance
      −Composite video (NTSC)
      −Both composite video and RGB analog : Both signal sources can be connected to the monitor at the same time. Monitor display can be switched from one to the other, at anytime at pixel or vertical frame rate.
   c) Sync : TTL positive or negative going, separate or composite. Input impedance : 20K ohms for positive going sync; 12K ohms for negative going sync.

3) HORIZONTAL SCAN
   a) Width : Adjustable with just one coil to accommodate active video from 40 usec to 50 usec.
   b) Frequency : 15.1kHz to 16.8kHz standard;higher scan frequencies available.
   c) Linearity : ± 5%

4) PICTURE SIZE REGULATION
   a) 2%

5) VERTICAL SCAN
   a) Frequency : 47 Hz to 63 Hz
   b) Linearity : ± 5%

6) GEOMETRIC DISTORTION
   a) ± 2% (max)

7) VIDEO CHARACTERISTICS
   a) Bandwidth (-3 db) 12 MHz typical
   b) Rise Time : Less than 50 nanoseconds
   c) Overshoot (max) : 5%

8) MECHANICAL
   a) From 9″ to 19″ monitor is available in universal mount brackets. The monitor can be mounted in the user's cabinet horizontally or vertically.
   b) The monitor is available as a kit−without a frame : Also available in chassis from−adaptable to individual customer requirements.
   c) Contact your sales representative for details.

9) USER ADJUSTABLE CONTROLS AND ADJUSTMENTS
   a) Brightness, Contrast Horizontal Hold, Horizontal Size, Horizontal Raster Position, Horizontal Video Position, Vertical Hold, Vertical Size, Vertical Raster Position, Focus. Custom Control Location available.

10) POWER INPUT
   a) 120 VAC +10%~−10%, 50~60Hz, 85W (max).
      Isolation transformer required ; furnished with monitor as an option.

11) ENVIRONMENTAL CONDITIONS
   a) Operating temperature 0° to 55℃. Complies with U.L., C.S.A., and D.H.H.S. radiation performance standard (composite video).

12) RESOLUTIONS
   a) Standard CRT
      − 9″ 280 Pixels×240 Lines
      −13″ 400 Pixels×240 Lines
      −19″ 400 Pixels×240 Lines
      −25″ 560 Pixels×240 Lines

● SERVICE INSTRUCTIONS

All monitors are equipped with automatic degaussing coils which demagnetize the picture tube every time the monitor is turned on after being off for a minimum of 5 minutes.
Should any part of the chassis become magnetized it will be necessary to degauss the affected area with a manual degaussing coil. Move the coil slowly around the CRT face area and all surrounding metal parts. Then slowly withdraw for a distance of 6 feet before turning off.

● CIRCUIT ADJUSTMENT

1) Contrast Control (Adjust CONTRAST)
   Adjust the control for the desired picture intensity
2) Horizontal Oscillator Adjustment (Adjust H HOLD)
   If there is an indication of unstable horizontal synchronization, adjust the Horizontal Hold Control (H-HOLD) to produce a stable picture.
3) Width Adjustment (Adjust L 2)
   If the picture of the screen is not adequately wide, adjust L 401 to the width as required.
4) Horizontal Raster Position Adjustment (H-position)
   If the picture is off center horizontally, some compensation can be made by adjusting H-position as required.
5) Vertical Oscillator Adjustment (Adjust V-HOLD)
   If the picture moves up or down on the screen, adjust the Vertical Hold Control (V-HOLD) until there is a single picture on the screen.
6) Vertical Height Adjustment (Adjust V SIZE)
   Adjust Height Control (V SIZE)to change the height of the picture or pattern.
7) Vertical Raster Position Adjustment (V-position)
   If the picture or pattern is off center vertically, some compensation can be made by adjustment (V-position) as required.
8) White Balance Adjustment (Adjust RV 301. RV 302. RV 303. RV 304. RV 305.RV 306)
9) Focus Adjustment (Adjust Focus VR)
   Adjust focus control VR on focus pack for well defined scanning lines in the central area of the screen.
10) Brightness Adjustment (Adjust BRIGHT)
    Adjustment of (BRIGHT) may be necessary to obtain the proper black level. Do not use the screen contro to set the black level.
11) Screen Adjustment (Adust Screen VR on Focus Pack)
    This control has been set at the factory and should not need further attention. If however it is necessary when the game is applied, adjust Screen VR on Focus Pack.

● CONVERGENCE MAGNET ASSEMBLY POSITIONING

Convergence magnet assembly and rubber wedges need mechanical positioning following the figure 3.

● COLOR PURITY ADJUSTMENT

NOTE : Before attempting any purity adjustments, the monitor should be operated for at least fifteen minutes.

1) Demagnetize the picture tube and cabinet using a degaussing coil.
2) Turn the BRIGHTNESS control to maximum.
3) Turn the CONTRAST control to maximum.
4) Adjust RED and BLUE CUT controls (RV 301, RV 305) (RV 302, RV 306) to provide only a green raster. The adjustment of the GREEN CUT control (RV 303, RV 304) is necessary.
5) Loosen the clamp screw holding the yoke, and slide the yoke backward to provide vertical green belt (zone) in the picture screen.

6) Remove the Rubber Wedges.

7) Rotate and spread the tabs of the purity magnet (See figure 4) around the neck of the picture tube until the green belt is in the center of the screen. At the same time, center the raster vertically.

8) Move the yoke slowly forward until a uniform green screen is obtained. Tighten the clamp screw of the yoke temporarily.

9) Check the purity of the RED and BLUE raster by adjusting the CUT controls.

10) Proceed with convergence adjustment.

● CONVERGENCE ADJUSTMENT

NOTE : Before attempting any convergence adjustments, the monitor should be operated for at least fifteen minutes.

1) CENTER CONVERGENCE ADJUSTMENT

a) Receive crosshatch pattern with a R.G.B. signal generator.

b) Adjust the BRIGHTNESS. Contrast control for well defined pattern.

c) Adjust two tabs of the 4−Pole magnets to change the angle between them (See figure 4) and superimpose RED and BLUE vertical lines in the center area of the picture screen.(See figure 5).

d) Turn both tabs at the same time keeping the constant angle to superimpose RED and BLUE horizontal lines at the center of the screen. (See figure 5)

e) Adjust two tabs of 6−Pole magnets to superimpose RED and BLUE line with GREEN one. Adjusting the angle affects the vertical lines and rotating dot magnets affects the horizontal lines.

f) Repeat adjustments 3), 4), 5) keeping in mind RED, GREEN and BLUE movement, because 4−Pole magnets and 6−Pole magnets interact and make dot movement complex.

2) CIRCUMFERENCE CONVERGENCE ADJUSTMENT

NOTE : This adjustment requires Rubber Wedge Kit

a) Loosen the clamping screw of deflection yoke to allow the yoke to tilt.

b) Place a wedge as shown in figure 3 temporarily. (Do not remove cover paper on adhesive part of the wedge.)

c) Tilt front of the deflection yoke up or down to obtain better convergence in circumference. (See firgure 5) Push the mounted wedge into the space between picture tube and the yoke to hold to yoke temporarily.

d) Place other wedge into bottom space and remove the cover paper to stick.

e) Tilt front of the yoke right or left to obtain better convergence in circumference. (See figure 5).

f) Hold the yoke position and put another wedge in either upper space. Remove cover paper and stick the wedge on picture tube to hold the yoke.

g) Detach the temporarily mounted wedge and put it in another upper space. Stick it on picture tube to fix the yoke.

h) After placing three wedges, recheck overall convergence.
Tighten the screw firmly to hold the yoke tightly in place.

i) Stick 3 adhesive tapes on wedges as showen in figure 3.

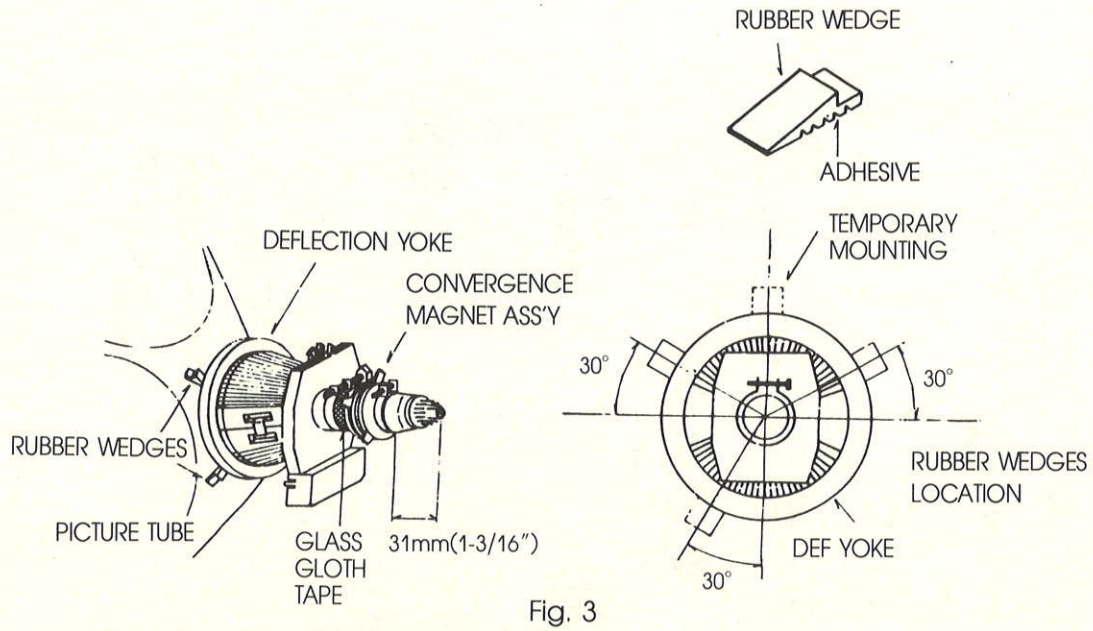


Fig. 3

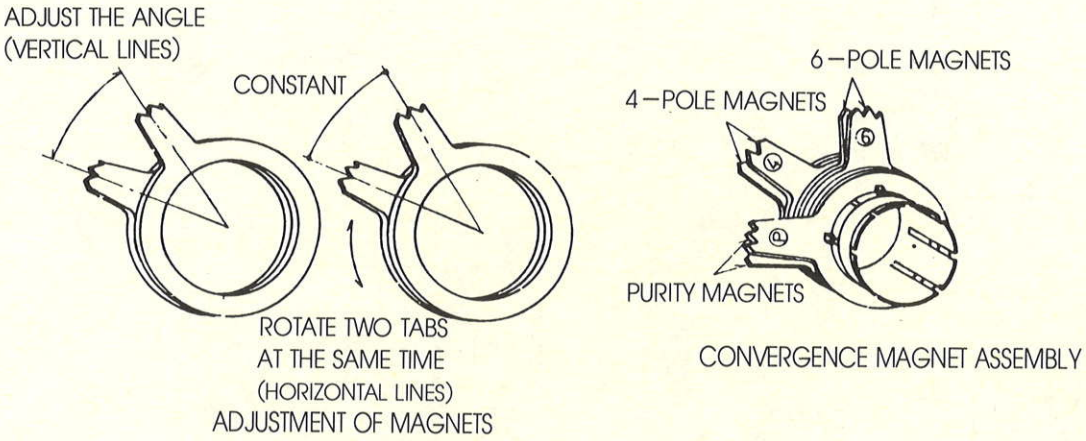


Fig.4

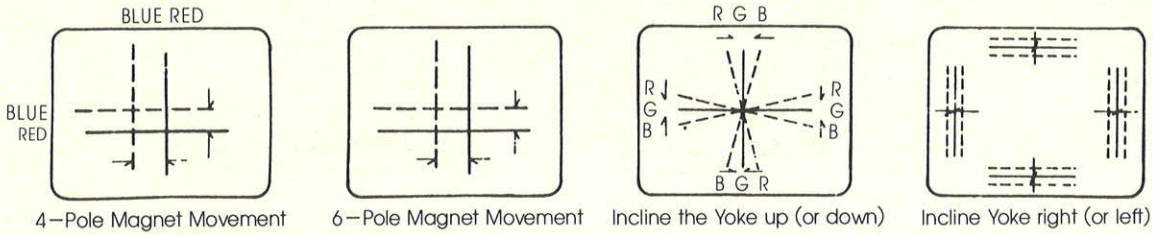
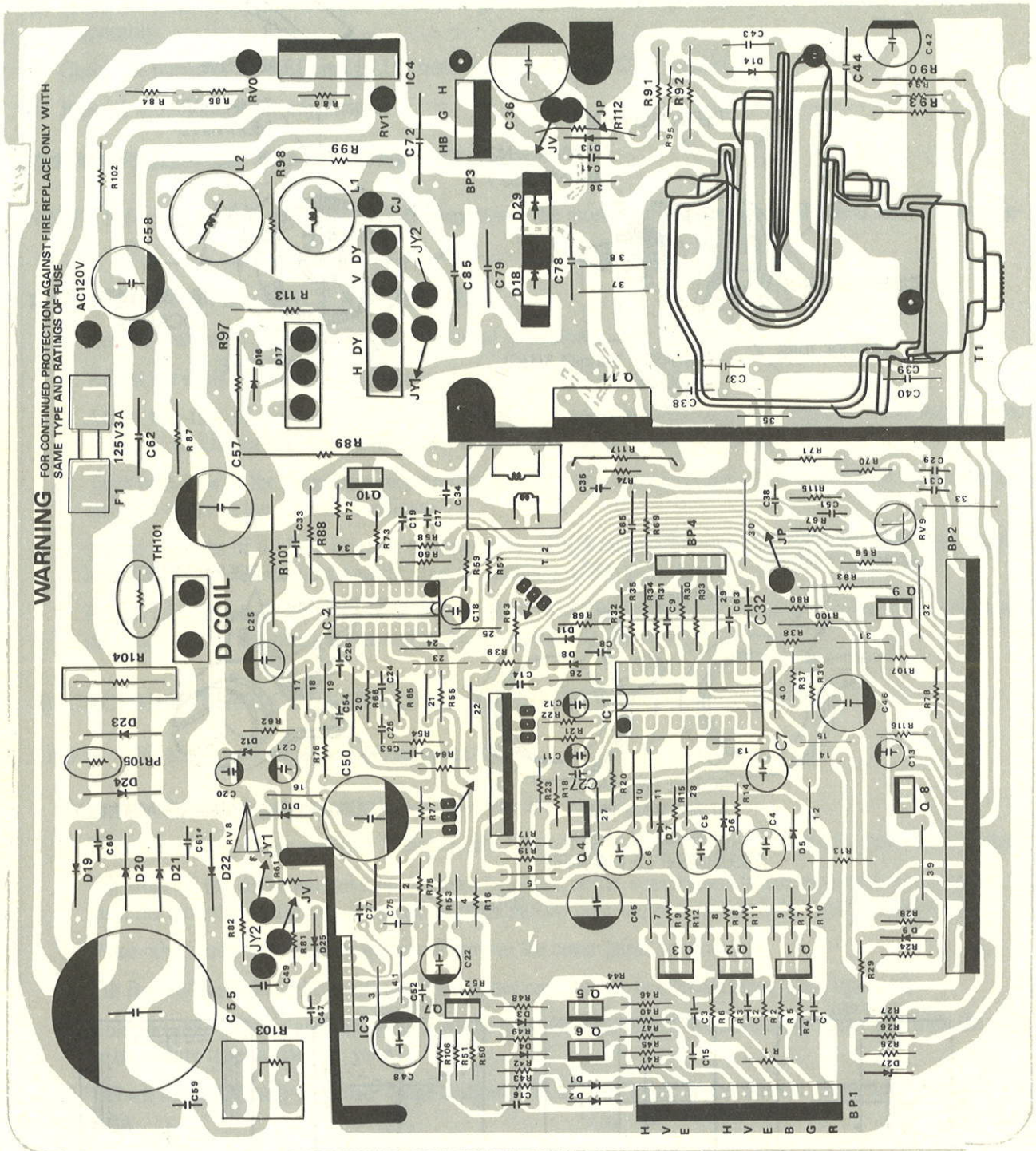
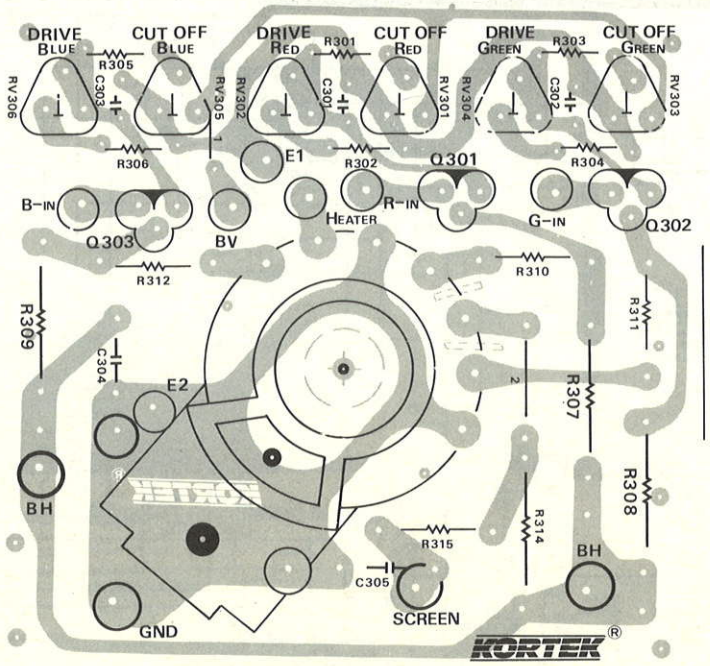


Fig.5 Dot Movement Pattern

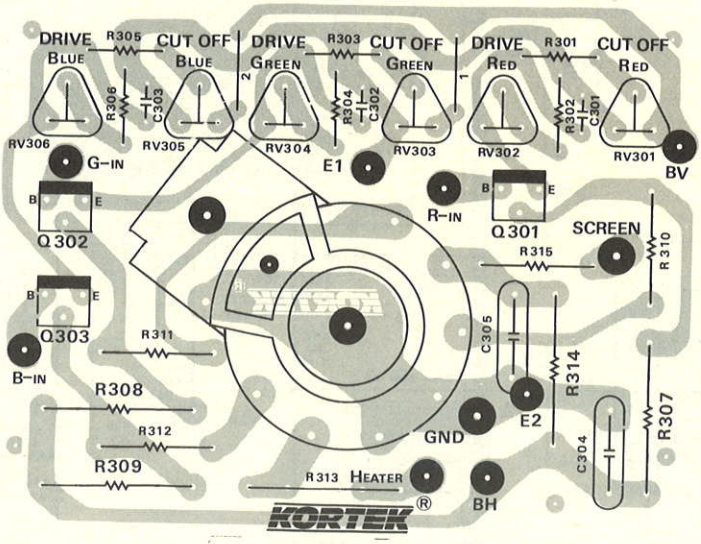
P.C. BOARD LAYOUT

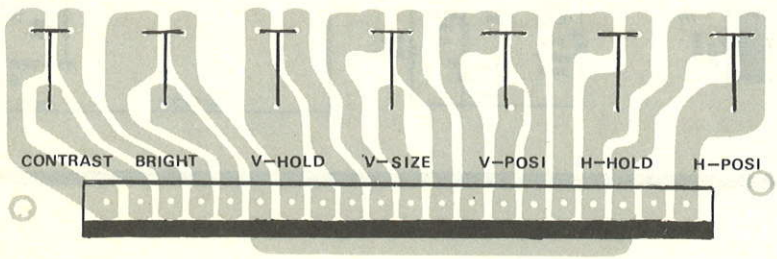


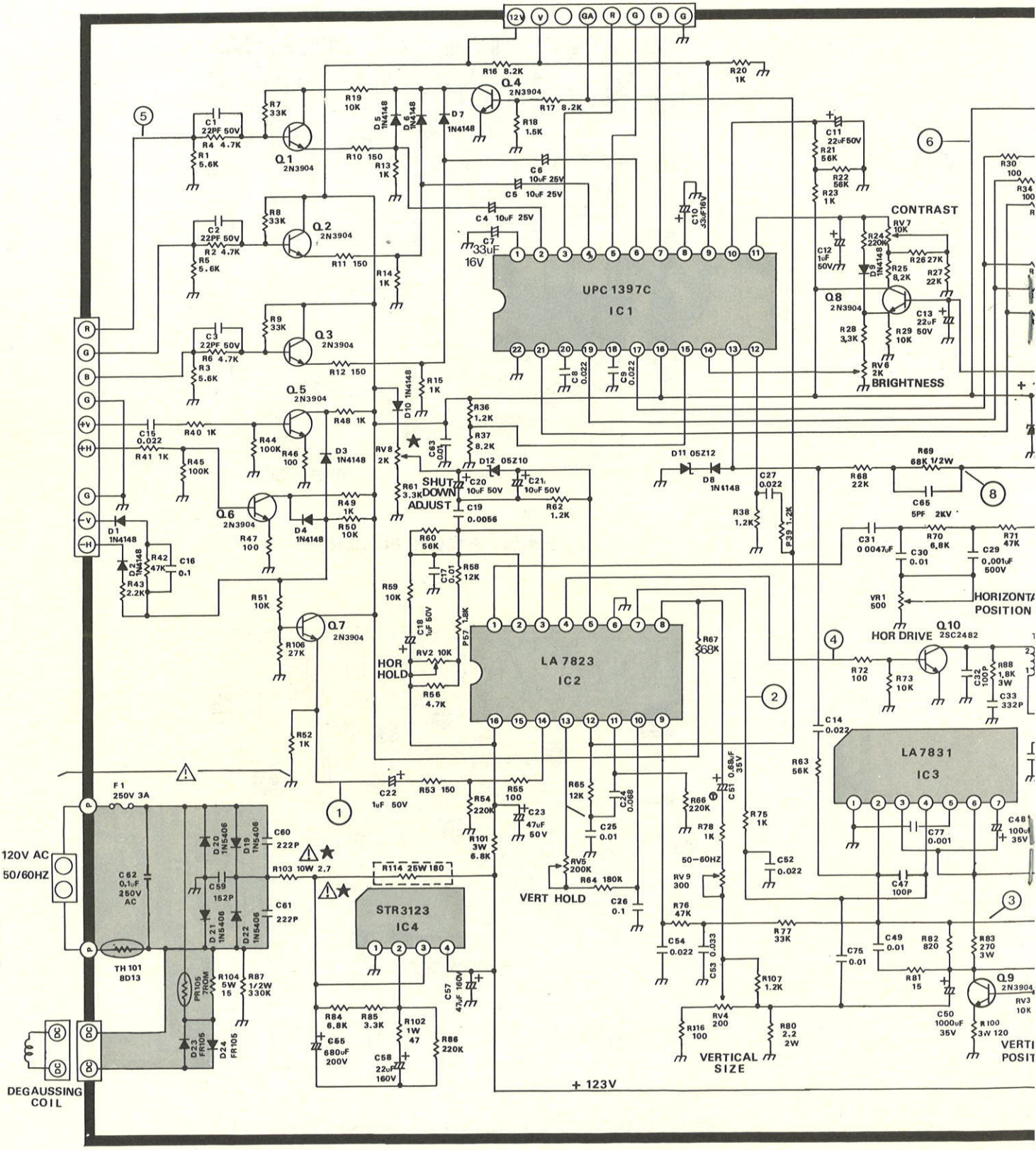
29 ϕ NECK BOARD

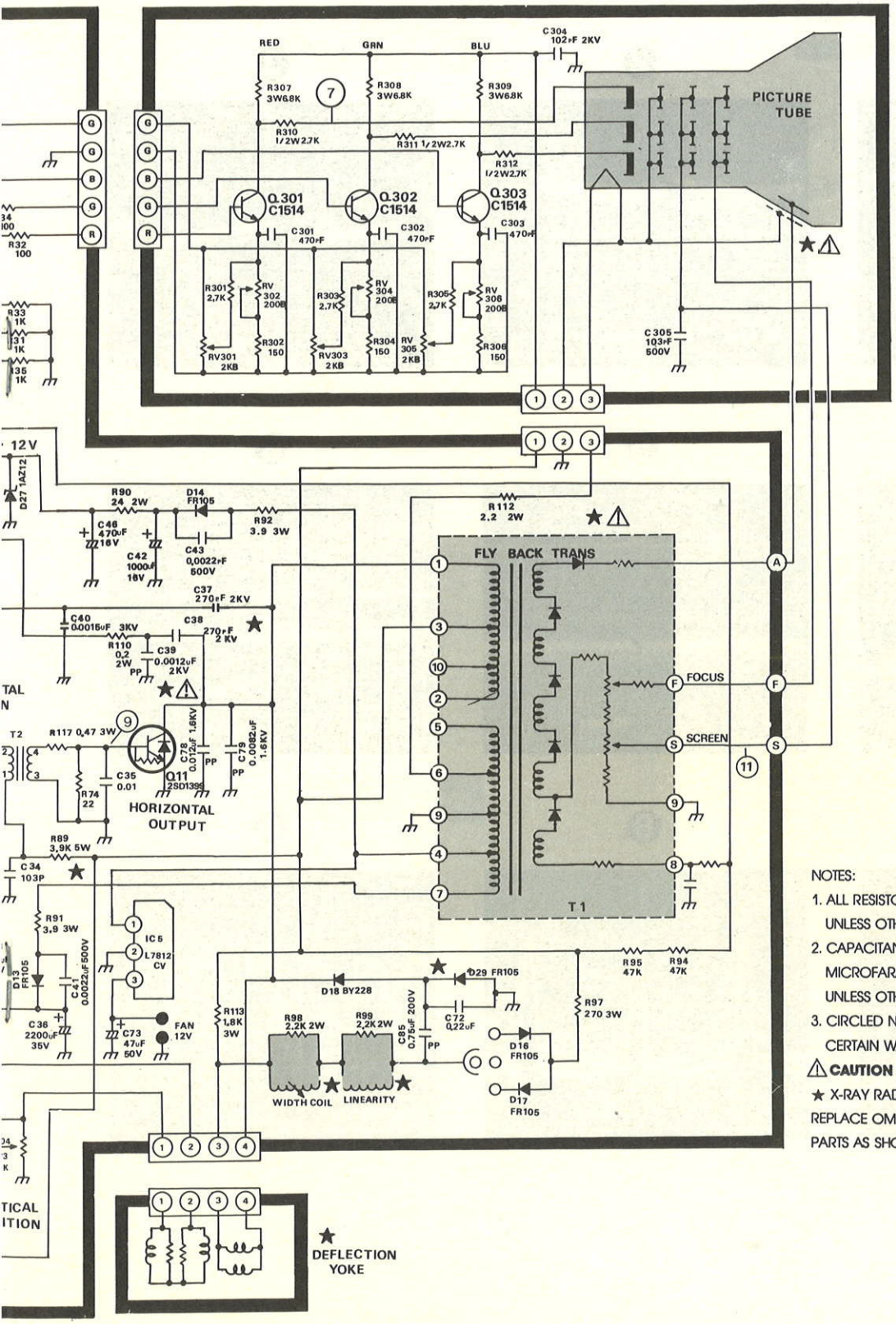


22.5 ϕ NECK BOARD






UPC 1397C
IC1
LA 7823
IC2
LA 7831
IC3
STR3123
IC4
Q1 2N3904
Q2 2N3904
Q3 2N3904
Q4 2N3904
Q5 2N3904
Q6 2N3904
Q7 2N3904
Q8 2N3904
Q9 2N3904
Q10 2SC2482
CONTRAST
BRIGHTNESS
SHUT DOWN ADJUST
HOR HOLD
HOR DRIVE
HORIZONTA POSITION
VERT HOLD
VERTICAL SIZE
VERTI POSIT
120V AC 50/60HZ
DEGAUSSING COIL
+ 123V



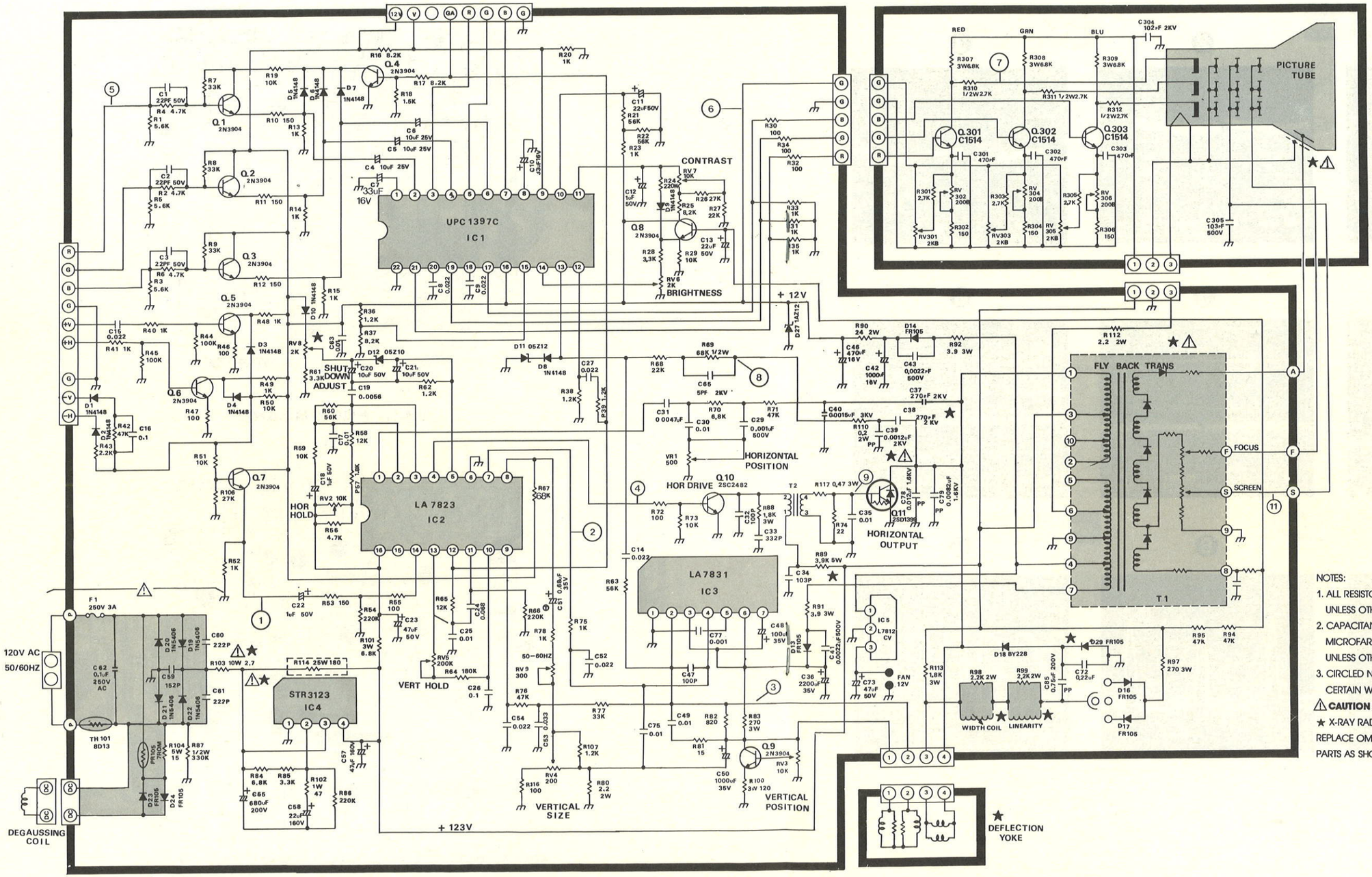
NOTES:

1. ALL RESISTORS ARE IN OHMS, 1/4W, 5% UNLESS OTHERWISE INDICATED.
2. CAPACITANCE VALUES LESS THAN I ARE IN MICROFARADS. ABOVE I IN PICOFARADS UNLESS OTHERWISE INDICATED.
3. CIRCLED NUMBERS INDICATE LOCATIONS CERTAIN WAVEFORM READINNGS.

⚠ **CAUTION** SAFETY CRITICAL COMPCNENT

★ X-RAY RADIATION RELATED COMPONENT. REPLACE OMLY WITH SAME TYPE PARTS AS SHOWN IN PARTS LIST.

SCHEMATIC DIAGRAM



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CONTROL TEST POINTS AND WAVE FORMS

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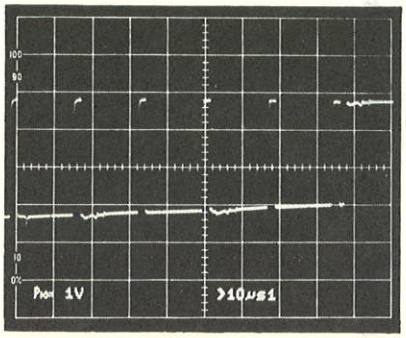

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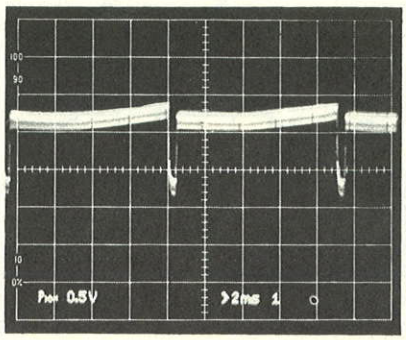

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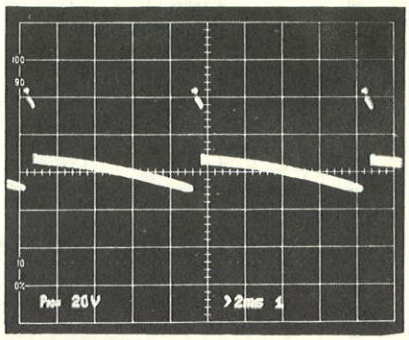

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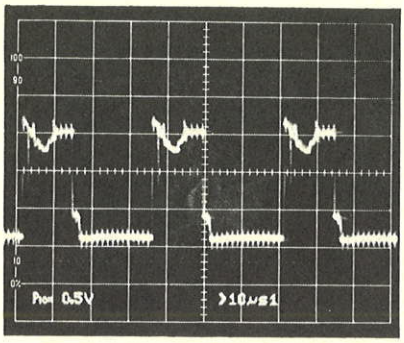

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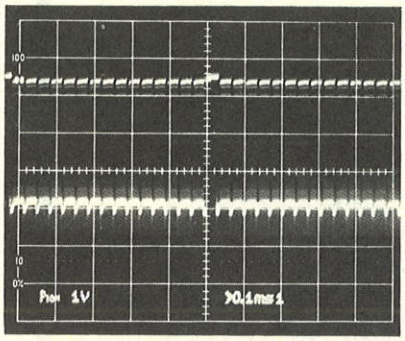

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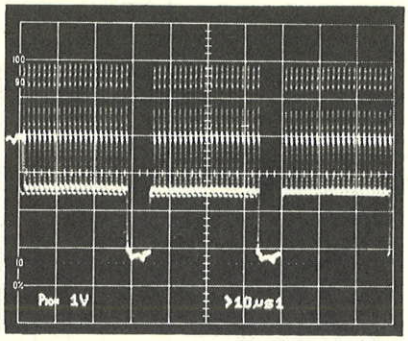

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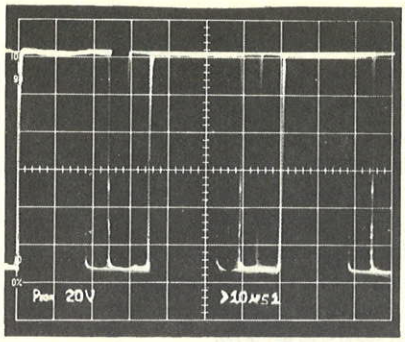

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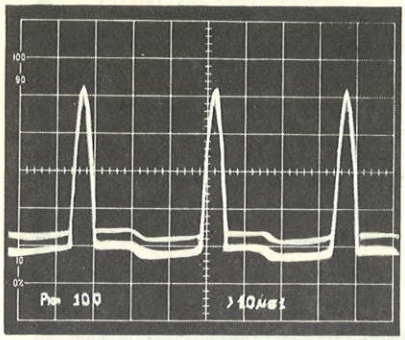

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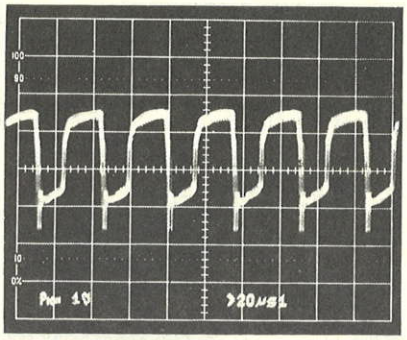
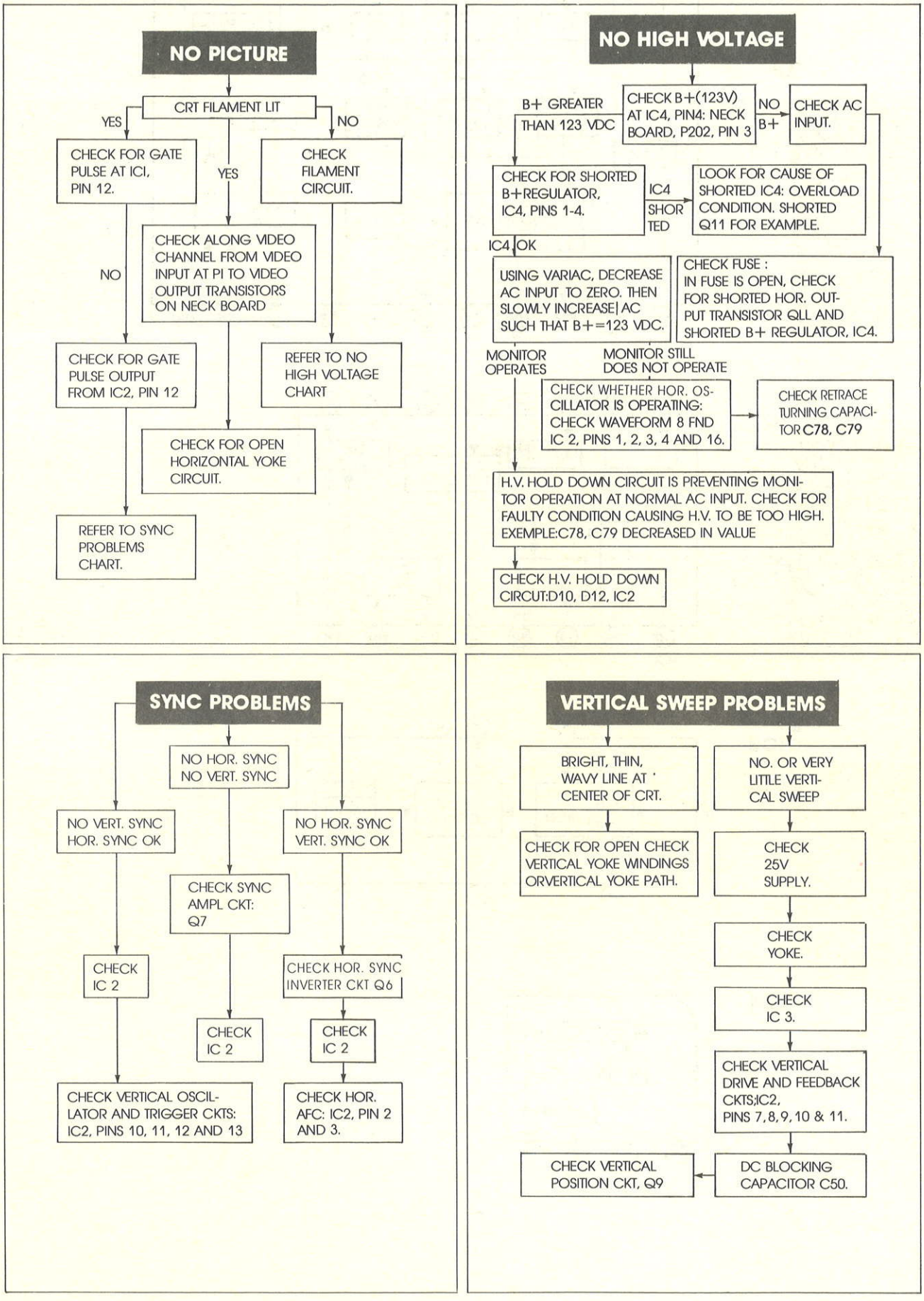
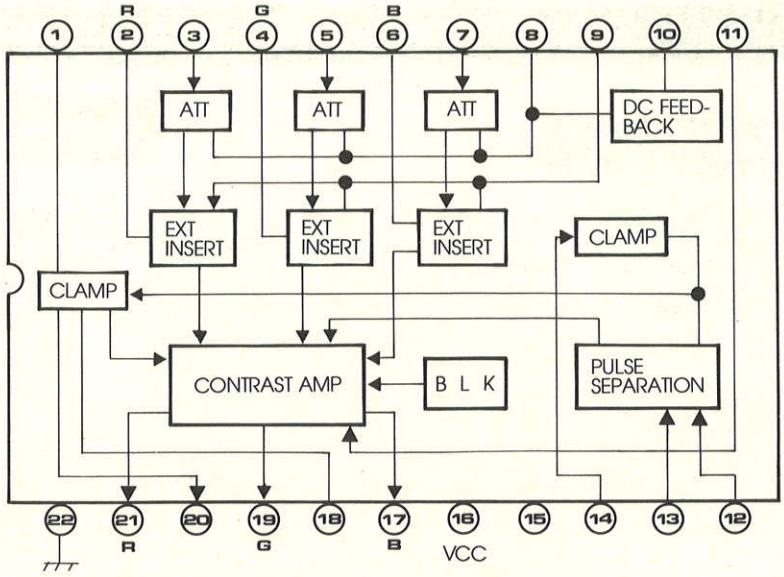


TROUBLESHOOTING CHART



IC 1



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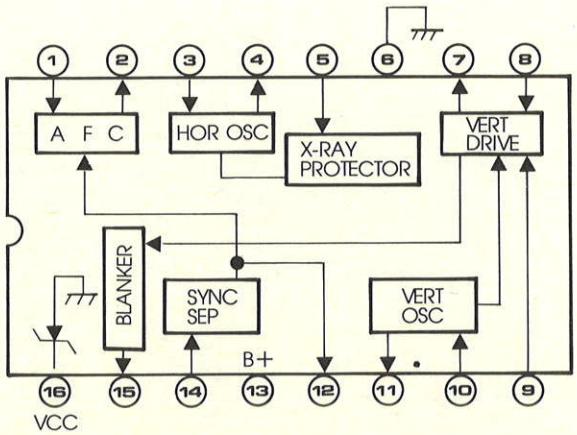

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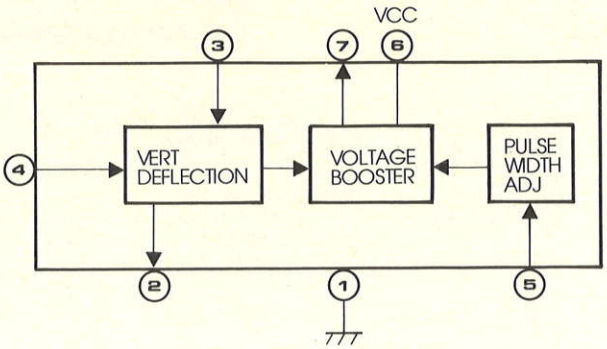

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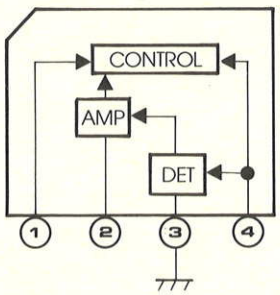

● KTW-N 26" PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
	RESISTORS	
R106	R004-273	27 Kohm 1/4W Carbon
R107	R004-122	1.2 Kohm 1/4W Carbon
R112	0020-022	2.2 ohm 2W Metal Oxide
R113	0030-182	1.8 Kohm 3W Metal Oxide
⚠★ R114	N250-181	180 ohm 25W Cement
R116	R004-101	100 ohm 1/4W Carbon
R117	0030-N47	0.47 ohm 3W Metal Oxide
	SEMI-FIXID RESTORS	
RV1	F92E-501	500 ohm B
RV2	F92E-103	10 Kohm B
RV3	F92E-103	10 Kohm B
RV4	F92E-201	200 ohm B
RV5	F92E-204	200Kohm B
RV6	F92E-202	2 Kohm B
RV7	F92E-103	10 Kohm B
★ RV8	F92E-202	2 Kohm B
RV9	F92E-301	300 ohm B
	CAPACITORS	
C1	C050-220	22 pF 50V Ceramic
C2	C050-220	22 pF 50V Ceramic
C3	C050-220	22 pF 50V Ceramic
C4	E025-106	10 uF 25V Electrolytic
C5	E025-106	10 uF 25V Electrolytic
C6	E025-106	10 uF 25V Electrolytic
C7	E016-336	33 uF 16V Electrolytic
C8	M100-223	0.022 uF 100V Mylar
C9	M100-223	0.022 uF 100V Mylar
C11	E050-226	22 uF 50V Electrolytic
C12	E050-105	1 uF 50V Electrolytic
C13	E050-226	22 uF 50V Electrolytic
C14	M100-223	0.022 uF 100V Mylar
C15	M100-223	0.022 uF 100V Mylar
C16	M100-104	0.1 uF 100V Mylar
C17	M100-103	0.01 uF 100V Mylar
C18	E050-105	1 uF 50V Electrolytic
C19	M100-562	0.0056 uF 100V Mylar (TIN)
C20	E050-106	10 uF 50V Electrolytic
C21	E050-106	10 uF 50V Electrolytic
C22	E050-105	1 uF 50V Electrolytic
C23	E050-476	47 uF 50V Electrolytic
C24	M100-683	0.068 uF 100V Mylar
C25	M100-103	0.01 uF 100V Mylar
C26	M100-104	0.1 uF 100V Mylar
C27	M100-223	0.022 uF 100V Mylar
C29	C500-102	0.001 uF 500V Ceramic
C30	M100-103	0.01 uF 100V Mylar

REF. NO.	PART NO.	DESCRIPTION
	CAPACITORS	
C31	M100-472	0.0047 uF 100V Mylar
C32	C500-101	100 pF 500V Ceramic
C33	C500-332	0.0033 uF 500V Ceramic
C34	C500-103	0.01 uF 500V Ceramic
C35	M100-103	0.01 uF 100V Mylar
C36	E035-228	2200 uF 35V Electrolytic
★ C37	C202-271	270 pF 2KV Ceramic
C38	C202-271	270 pF 2KV Ceramic
C39	C202-122	0.0012 uF 2KV Ceramic
C40	C202-152	0.0015 uF 2KV Ceramic
C41	C500-222	0.0022 uF 500V Ceramic
C42	E016-108	1000 uF 16V Electrolytic
C43	C500-222	0.0022 uF 500V Ceramic
C44	X200-104	0.1 uF 200V P-P
C45	E016-477	470 uF 16V Electrolytic
C46	E016-477	470 uF 16V Electrolytic
C47	C500-101	100 pF 500V Ceramic
C48	E035-107	100 uF 35V Electrolytic
C49	M100-103	0.01 uF 100V Mylar
C50	E035-108	1000 uF 35V Electrolytic
C51	T035-684	0.68 uF 35V Tantal
C52	M100-223	0.022 uF 100V Mylar
C53	M100-333	0.033 uF 100V Mylar
C54	M100-223	0.022 uF 100V Mylar
C55	E200-687	680 uF 200V Electrolytic
C57	E160-476	47 uF 160V Electrolytic
C58	E160-226	22 uF 160V Electrolytic
⚠ C59	C500-152	0.0015 uF 500V Ceramic
⚠ C60	C500-222	0.0022 uF 500V Ceramic
⚠ C61	C500-222	0.0022 uF 500V Ceramic
⚠ C62	B250-104	0.1 uF AC 250V Box
C63	M100-103	0.01 uF 100V Mylar
C65	C202-005	5 pF 2KV Ceramic
C72	X250-224	0.22 uF 250V P-P
C75	M100-103	0.01 uF 100V Mylar
C77	M100-102	0.001 uF 100V Mylar
C78	X162-123	0.012 uF 1600V P-P
C79	X162-822	0.0082 uF 1600V P-P
C85	X200-754	0.75 uF 200V P-P
	SEMICONDUCTOR	
D1	DIR-148	1N4148 Diode
D2	DIR-148	1N4148 Diode
D3	DIR-148	1N4148 Diode
D4	DIR-148	1N4148 Diode
D5	DIR-148	1N4148 Diode
D6	DIR-148	1N4148 Diode
D7	DIR-148	1N4148 Diode
D8	DIR-148	1N4148 Diode

● KTW-N 26" CRT PCB PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
	RESISTORS	
R301	R004-272	2.7 Kohm 1/4W Carbon
R302	R004-151	150 ohm 1/4W Carbon
R303	R004-272	2.7 Kohm 1/4W Carbon
R304	R004-151	150 ohm 1/4W Carbon
R305	R004-272	2.7 Kohm 1/4W Carbon
R306	R004-151	150 ohm 1/4W Carbon
R307	0030-682	6.8 Kohm 3W Metal Oxide
R308	0030-682	6.8 Kohm 3W Metal Oxide
R309	0030-682	6.8 Kohm 3W Metal Oxide
R310	R002-272	2.7 Kohm 1/2W Carbon
R311	R002-272	2.7 Kohm 1/2W Carbon
R312	R002-272	2.7 Kohm 1/2W Carbon
	SEMI-FIXED RESISTORS	
RV301	F17E-202	2 Kohm B
RV302	F17E-201	200 ohm B
RV303	F17E-202	2 Kohm B
RV304	F17E-201	200 ohm B
RV305	F17E-202	2 Kohm B
RV306	F17E-201	200 ohm B
	CAPACITORS	
C301	C500-471	470pF 500V Ceramic
C302	C500-471	470pF 500V Ceramic
C303	C500-471	470pF 500V Ceramic
C304	C202-102	0.001uF 2KV Ceramic
C305	C500-103	0.01uF 500V Ceramic
	SEMICONDUCTORS	
Q301	S2N-514	2SC1514 Transistor
Q302	S2N-514	2SC1514 Transistor
Q303	S2N-514	2SC1514 Transistor

● KTW-N 26″ PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
	RESISTORS	
R1	R004-562	5.6 Kohm 1/4W Carbon
R2	R004-472	4.7 Kohm 1/4W Carbon
R3	R004-562	5.6 Kohm 1/4W Carbon
R4	R004-472	4.7 Kohm 1/4W Carbon
R5	R004-562	5.6 Kohm 1/4W Carbon
R6	R004-472	4.7 Kohm 1/4W Carbon
R7	R004-333	33 Kohm 1/4W Carbon
R8	R004-333	33 Kohm 1/4W Carbon
R9	R004-333	33 Kohm 1/4W Carbon
R10	R004-151	150 ohm 1/4W Carbon
R11	R004-151	150 ohm 1/4W Carbon
R12	R004-151	150 ohm 1/4W Carbon
R13	R004-102	1 Kohm 1/4W Carbon
R14	R004-102	1 Kohm 1/4W Carbon
R15	R004-102	1 Kohm 1/4W Carbon
R16	R004-822	8.2 Kohm 1/4W Carbon
R17	R004-822	8.2 Kohm 1/4W Carbon
R18	R004-152	1.5 Kohm 1/4W Carbon
R19	R004-103	10 Kohm 1/4W Carbon
R20	R004-102	1 Kohm 1/4W Carbon
R21	R004-563	56 Kohm 1/4W Carbon
R22	R004-562	5.6 Kohm 1/4W Carbon
R23	R004-102	1 Kohm 1/4W Carbon
R24	R004-224	220 Kohm 1/4W Carbon
R25	R004-822	8.2 Kohm 1/4W Carbon
R26	R004-273	27 Kohm 1/4W Carbon
R27	R004-223	22 Kohm 1/4W Carbon
R28	R004-332	3.3 Kohm 1/4W Carbon
R29	R004-103	10 Kohm 1/4W Carbon
R30	R004-101	100 ohm 1/4W Carbon
R31	R004-102	1 Kohm 1/4W Carbon
R32	R004-101	100 ohm 1/4W Carbon
R33	R004-101	1 Kohm 1/4W Carbon
R34	R004-101	100 ohm 1/4W Carbon
R35	R004-102	1 Kohm 1/4W Carbon
R36	R004-122	1.2 Kohm 1/4W Carbon
R37	R004-822	8.2 Kohm 1/4W Carbon
R38	R004-122	1.2 Kohm 1/4W Carbon
R39	R004-122	1.2 Kohm 1/4W Carbon
R40	R004-102	1 Kohm 1/4W Carbon
R41	R004-102	1 Kohm 1/4W Carbon
R42	R004-473	47 Kohm 1/4W Carbon
R43	R004-222	2.2 Kohm 1/4W Carbon
R44	R004-104	100 Kohm 1/4W Carbon
R45	R004-104	100 Kohm 1/4W Carbon
R46	R004-101	100 ohm 1/4W Carbon
R47	R004-101	100 ohm 1/4W Carbon
R48	R004-102	1 Kohm 1/4W Carbon
R49	R004-102	1 Kohm 1/4W Carbon
R50	R004-103	10 Kohm 1/4W Carbon
R51	R004-103	10 Kohm 1/4W Carbon

REF. NO.	PART NO.	DESCRIPTION
	RESISTORS	
R52	R004-102	1 Kohm 1/4W Carbon
R53	R004-151	150 ohm 1/4W Carbon
R54	R004-224	220 Kohm 1/4W Carbon
R55	R004-101	100 ohm 1/4W Carbon
R56	R004-472	4.7 Kohm 1/4W Carbon
R57	R004-182	1.8 Kohm 1/4W Carbon
R58	R004-123	12 Kohm 1/4W Carbon
R59	R004-103	10 Kohm 1/4W Carbon
R60	R004-563	56 Kohm 1/4W Carbon
R61	R004-332	3.3 Kohm 1/4W Carbon
R62	R004-122	1.2 Kohm 1/4W Carbon
R63	R004-563	56 Kohm 1/4W Carbon
R64	R004-184	180 Kohm 1/4W Carbon
R65	R004-123	12 Kohm 1/4W Carbon
R66	R004-224	220 Kohm 1/4W Carbon
R67	R004-683	68 Kohm 1/4W Carbon
R68	R004-223	22 Kohm 1/4W Carbon
R69	R004-683	68 Kohm 1/2W Carbon
R70	R004-682	6.8 Kohm 1/4W Carbon
R71	R004-473	47 Kohm 1/4W Carbon
R72	R004-102	10 Kohm 1/4W Carbon
R73	R004-101	100 ohm 1/4W Carbon
R74	R004-220	22 ohm 1/4W Carbon
R75	R004-102	1 Kohm 1/4W Carbon
R76	R004-473	47 Kohm 1/4W Carbon
R77	R004-333	33 Kohm 1/4W Carbon
R78	R004-102	1 Kohm 1/4W Carbon
R80	0020-022	2.2 ohm 1W Metal Oxide
R81	R004-150	150 ohm 1/4W Carbon
R82	R004-821	820 ohm 1/4W Carbon
R83	0030-271	270 ohm 3W Metal Oxide
R84	R004-682	6.8 Kohm 1/4W Carbon
R85	R004-332	3.3 Kohm 1/4W Carbon
R86	R004-224	220 Kohm 1/4W Carbon
△ R87	R004-334	330 Kohm 1/2W Carbon
R88	0030-182	1.8 Kohm 3W Metal Oxide
★ R89	0050-392	3.9 Kohm 5W Metal Oxide
R90	0020-240	24 ohm 2W Metal Oxide
R91	R004-039	3.9 ohm 3W Metal Oxide
R92	R004-039	3.9 ohm 3W Metal Oxide
R93	R004-102	1 Kohm 1W Metal Oxide
R94	R004-473	47 Kohm 1/4W Carbon
R95	R004-473	47 Kohm 1/4W Carbon
R97	R004-271	270 ohm 3W Metal Oxide
R98	R004-222	2.2 Kohm 2W Metal Oxide
R99	R004-222	2.2 Kohm 2W Metal Oxide
R100	R004-121	120 ohm 3W Metal Oxide
R101	R004-682	6.8 Kohm 3W Metal Oxide
R102	R004-470	47 ohm 1W Metal Oxide
△★ R103	R004-027	2.7 ohm 10W Cement
△R104	R004-150	15 ohm 5W Cement

● KTW-N 26″ PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
	SEMICONDUCTORS	
D9	D1R-148	1N4148 Diode
D10	D1R-148	1N4148 Diode
D11	D1Z-051	05Z5.1 Zener Diode
D12	D1Z-010	05Z10 Zener Diode
D13	D1F-F05	FR105 Diode
D14	D1F-F05	FR105 Diode
D16	D1F-F05	FR105 Diode
D17	D1F-F05	FR105 Diode
D18	D1R-228	BY228 Diode
⚠ D19	D1R-406	1N5406 Diode
⚠ D20	D1R-406	1N5406 Diode
⚠ D21	D1R-406	1N5406 Diode
⚠ D22	D1R-406	1N5406 Diode
⚠ D23	D1F-F05	FR105 Diode
⚠ D24	D1F-F05	FR105 Diode
D25	D1R-002	1N4002 Diode
D27	D1Z-012	1AZ12 Zener Diode
★ D29	D1F-F05	FR105 Diode
IC1	IHP-97C	uPC1397C IC
IC2	IHL-823	LA7823 IC
IC3	IHL-831	LA7831 IC
IC4	IHS-123	STR3123 IC
IC5	IHM-812	MC7812 IC
	SEMICONDUCTORS	
Q1	S2N-904	2N3904 Transistor
Q2	S2N-904	2N3904 Transistor
Q3	S2N-904	2N3904 Transistor
Q4	S2N-904	2N3904 Transistor
Q5	S2N-904	2N3904 Transistor
Q6	S2N-904	2N3904 Transistor
Q7	S2N-904	2N3904 Transistor
Q8	S2N-904	2N3904 Transistor
Q9	S2N-904	2N3904 Transistor
Q10	S2N-482	2SC2482 Transistor
⚠ ★ Q11	S2N-399	2SD1399 Transistor
	TRANSFORMERS & COILS	
★ T1	T610-110	Fly Back Transformer
T2	T610-002	Transformer Horiz. Drive
★ L1	L610-003	Horiz-Linearity Coil
★ L2	L610-020	Horiz-Width Coil
	MISCELLANEOUS	
⚠ F1	U250-003	Fuse 3Amp 250V
⚠ FR105	PR07-207	7Rom Posistor
⚠ TH101	TH8D-013	8D-13 Thermistor
	CONNECTORS	
BP1	HANLIM Wafer	LWP-1143-09
	HANLIM Housing	CHP-1143-09
BP2	HANLIM Wafer	FW-1143-20
	HANLIM Housing	CH-1143-20
	HANLIM Terminal	CT-1140-20
BP5	HANLIM Wafer	LW-1145-03
	HANLIM Housing	CH-1145-03
	HANLIM Terminal	CT-1140-03
BP6	HANLIM Wafer	LW-0640-05
	HANLIM Housing	CHW-0640-05
	HANLIM Terminal	CT-0640-05
	COLOR PICTURE TUBE	
★★ p101	PT01-201	CRT & DY