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Date: 10/29/97 1:57 PM
Subject: CRT(5083-6350)Rejuvenation

----- Message Contents -----

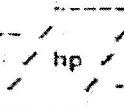
REJUVINATION PROCESS FOR CRT Part Number 5083-6350

1. Inspect for mechanical integrity (straight pins, socket not cracked or broken, no badly scratched glass etc.) clean Crt with glass cleaner. If instrument pattern is burnt into phosphor inverse video of the same pattern may be used at high intensity for approximately 2 minutes to correct this problem.
2. Make all base pin and post accelerator connections in accordance with the CRT Test Schematic Sheet # 2 of Drawing A-5083-6300-1. These connections are made to HP CRT Test Station console ET-5153-804.
3. Turn on Crt observing safety consideration for the voltages that are present. Check to be sure intensity control works, that there is no internal arcing, no purple glow internally and that the initial intensity (Luminance) as measured; screen illuminated with 100 line raster measuring 5 x 5 cm is at least 50 cd/m². Intensity initially lower than this won't usually yield an intensity that is usable after the rejuvenation process.
4. When all of the above conditions are met, turn off Post accelerator supply voltage, turn off Cathode supply voltage and adjust Heater supply voltage to 2.0 volts, turn intensity adjust down to a very minimal level; follow table below adjusting voltages at time intervals indicated.

Step	Time (minutes)	Heater (WGV)	Cathode (VK)	Post Accelerator (VPA)
1	5	2.0	0	0
2	2	2.6	0	0
3	2	3.8	0	0
4	2	6.0	0	0
5	2	7.3	0	0
6	2	9.5	0	0
7	90	7.3	2450	19,000
8	390	6.9	2450	19,000
9	295	6.5	2450	19,000
10	200	6.3	2450	19,000
11	270	6.0	2450	19,000

5. After following the 21 hour process above measure the luminance; if it has increased substantially it may be beneficial to repeat the above process. If there has been little or no increase in luminance, or in some cases a decrease, it is unlikely that repeating the above process will be of any value.

HEWLETT-PACKARD CO.

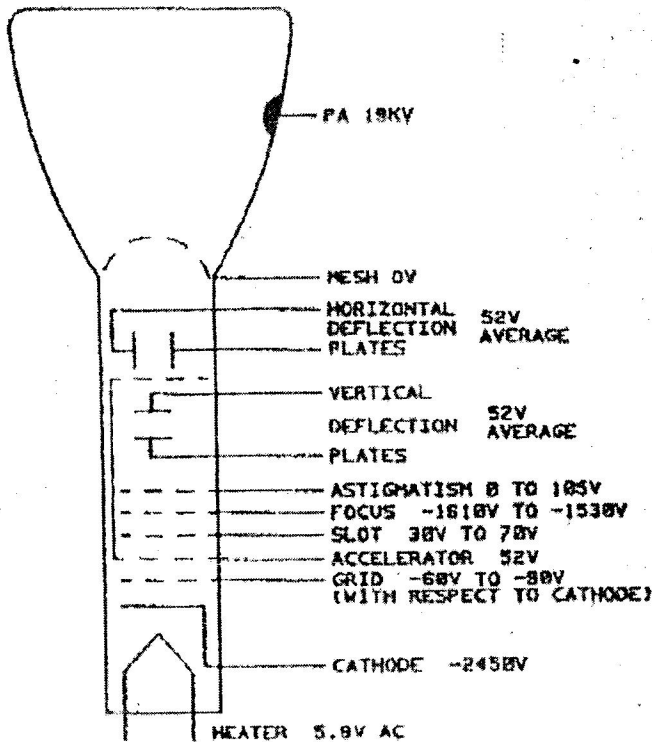


FILE A363001

CRT TEST SCHEMATIC

BASE PIN CONNECTIONS

- | | |
|---------------------------------|------------------------------------|
| PIN 1 HEATER | PIN 9 HORIZONTAL DEFLECTION PLATE |
| PIN 2 CATHODE | PIN 8 ACCELERATOR |
| PIN 3 GRID | PIN 10 VERTICAL DEFLECTION PLATE |
| PIN 4 FOCUS | PIN 11 HORIZONTAL DEFLECTION PLATE |
| PIN 5 MESH | PIN 12 ASTIGMATISM |
| PIN 6 SLOT LENS | PIN 13 N/C |
| PIN 7 VERTICAL DEFLECTION PLATE | PIN 14 HEATER |



SCHEMATIC USAGE
5083-6350

			IMDEL	1STK # D0C-A36001
			CRT TEST SPECIFICATION	
J 18-46804	IN.W.	104-26-89	BY JIM STRINDER	DATE APRIL 16, 1984
LTI P.C. #	APPR	DATE	APPD PETE WRIGHT	SHEET # 2 OF 62
REVISIONS		ISUPERSEDES		IDWG # A-5083-6300-1

TO: GLEN GIUSTI 43404

TEST SPECIFICATIONS FOR 5083-6350			REF. NO.	(cont.)	CHK.
SPECIAL COMMENTS: low voltage to w.g. heater. use adapter A-9				+ - 6.5 .16 div.	10
				+ - 7.5 .18 div.	10
CATHODE: ELCON MAXIMUM DRIVE ALLOWED: 45 volts PHOSPHOR TYPE: P-31 USE GRATICULE OVERLAY? yes GRATICULE SIZE: 12 div. vert, 17 div. horiz. DIVISION SIZE: 1CM			16.	AVERAGE HORIZONTAL DEFLECTION FACTOR: 5.88 to 8.24 volt/div.	100
			17.	HORIZONTAL DEFLECTION PLATE FADE: -trace length - 12 divisions -1pa center screen- 1ua -X1pa at extremes- 50%	100
OPERATING VOLTAGES					
WRITE GUN HEATER: 5.9 volts					
CURRENT:					
CATHODE: -2,450 volts			*18.	ELECTRICAL MEASUREMENT OF PATTERN DISTORTION	
ACCELERATOR: 52 volts			19.	SPOT CENTERING: max. distance from center .7V/.7H div.	100
VERTICAL PLATE AVERAGE: 52 volts			20.	CRT CUTOFF: -90 to -60 volts	100
HORIZONTAL PLATE AVERAGE: 52 volts			*21.	PATTERN GENERATOR CUTOFF	
MESH: 0 volts					
POST ACCELERATOR: +19,000 volts			22.	LIGHT OUTPUT: 7x7 div. 45 volts drive	100
FOCUS: -1,610 to -1,530 volts			23.	CATHODE CONDITION: one reage, no dip	100
ASTIGMATISM: 27 to 77 volts			24.	GAS CROSS: (no gas cross)	100
SLOT LENS: 30 to 70 volts			25.	MODULATION MEASUREMENTS: 140 CD/M2 at drive level of 45 volts or less	100
WRITE GUN GRID CUT-OFF: -90 to -60 volts			26.	FOCUS AND ASTIGMATISM ADJUSTMENT: (PRECISE) -1,610 to -1,530	
REF. NO.	A-5083-6300-1	% CHK	27.	LINE WIDTH MEASUREMENT: setup: 7:7 division raster 140 CD/M2 7 div. V/7 div. H	100
5.	ELEMENT LEAKAGE: maximum		28.	HORIZONTAL LINES: CENTER SCREEN 3.8 div.	100
	-WRITE GUN HEATER 15 ua	100	29.	WORST CASE 3.8 div. (within 12x17 div.)	100
	-POST ACCELERATOR 10 ua	100	30.	VERTICAL LINES: CENTER SCREEN 3.8 div.	100
	-WRITE GUN CATHODE 10 ua	100	31.	WORST CASE 3.8 div. (within 12x17 div.)	100
	-WRITE GUN GRID 5 ua	100	32.	MESH AND SCREEN EVALUATION	100
	-ACCELERATOR 15 ua	100	*33.	QUALITY AREAS	
	-FOCUS 10 ua	100	*34.	TEST CONDITIONS	
	-ASTIGMATISM 10 ua	100	35.	MESH AND SCREEN TEST SPEC.	100
	-SLOT LENS 10 ua	100	*36.	MESH SPOT REMOVAL	
	-MESH 50 ua	100	37.	HORIZONTAL DEFLECTION LINEARITY: -when requested- 3%	
	-VERT PLATE 50 ua	100	38.	VERTICAL DEFLECTION LINEARITY: -when requested- 3%	
	-HORIZ PLATE 50 ua	100	39.	HIGH VOLTAGE BREAKDOWN: (when requested) - cathode -2.695kv - p.a. +20.9kv - w.g. heater 6.5v A.C.	
6.	STRAY EMISSION: use hood, no stray emission - PA +20.9KV	100	*39.	LIGHT MEASURING INSTRUMENT: (information)	
7.	SLOT LENS ADJUSTMENT	100	40.	INFORMATION TO BE RECORDED ON TEST SCREEN INCLUDING COMPARATOR GUN TEST INFORMATION.	
*8.	FOCUS AND ASTIGMATISM (rough adjustment)		41.	FINAL TEST	100
*9.	X ALIGNMENT ADJUSTMENT	100	* DESIGNATES OPERATION TO BE DONE BUT NO SPECIFIED PARAMETER.		
10.	GUN TO GRATICULE ANGLE: vary of trace from graticule 1.0 div.	100	MODEL		
11.	HORIZONTAL TRACE PATTERN DISTORTION: distance from center div.		STK. NO.		
	0 .03 div.	10	REV. F 8-45682 CRT TEST SPECIFICATION		
	+ 1 .03 div.	10	BY NILES WALEN <i>NW</i> DATE AUGUST 02, 1983		
	+ 2 .05 div.	10	APPD. SHEET 1 OF 1		
	+ 3 .07 div.	10	SUPERSEDES DWG. NO. A-5083-6350-1		
	+ 4 .10 div.	10			
	+ 5 .12 div.	10			
	+ 6 .14 div.	100			
12.	AVERAGE VERTICAL DEFLECTION FACTOR: 8.33 to 11.67 volts/div.	100			
13.	SUPPRESSION CHECK	100			
14.	VERTICAL DEFLECTION PLATE FADE: -trace length- 17 divisions -1pa center screen- 1ua -X1pa at extremes- 50%	100			
15.	VERTICAL TRACE PATTERN DISTORTION: distance from center div.				
	0 .08 div.	100			
	+ 1.5 .09 div.	10			
	+ 2.5 .10 div.	10			
	+ 3.5 .11 div.	10			
	+ 4.5 .12 div.	10			
	+ 5.5 .14 div.	10			

