503 Cal Outline

1. Power Supplies

Supply	Tolerance	Ripple
- 100	Adjustable	25mv
+ 12.6	± 5%	25mv
+ 100	± 5%	25mv
+ 250	± 5%	25mv
-3000	± 5%	——

2. Adjust Calibrator (R880) for 500mv at front panel using Test Scope. Check 5mv output.

3. Align CRT and adjust Astigmatism.

4. Stability Adjustment.

Vert. Amp

5. Coarse DC Bal (R436)

→ GRID I - >1cm at 1mv

6. .2v Gain Adj. (R478) } Interaction

7. 1mv Gain Adj. (R460) }

8. Check all + input attenuators.

9. Check - input attenuators from .5 v/cm to 20 v/cm.

10. Check Var v/cm Pot.

11. Attenuator Compensation (47pf)

Sensitivity	+ Input	- Input
.2 v/cm	C416	C406
.5 v/cm	C415B, C415C	C405B, C405C
5 v/cm	C414B, C414C	C404B, C404C

Check other ranges from .2 v/cm to 20 v/cm both + and - .

Horiz. Amp. (Use sweep from test scope to Vert. Amp.)

12. Coarse DC Bal Adj. (R346)

→ GRID I >1cm at 1mv

13. .2 v/cm Gain Adj. (R378) } Interaction

14. 1 mv/cm Gain Adj. (R460) }

15. Check all + input attenuators.

16. Check - input attenuators from .5 v/cm to 20 v/cm.

17. Check Var v/cm pot.

#1	S/N 7240	MAR 11, 1972	~~FEET~~ - ~~CRT STRAP~~
#2	S/N 7210	FEB 28, 1972	~~FEET FEET~~ ~~CRT STRAP~~?
#3	S/N 7211	APR. 30, 1972	
#4	S/N 7213	MAR 2, 1972	~~FEET~~ ~~CRT STRAP~~
#5	S/N 7214	FEB 29, 1972	~~FEET~~ ~~CRT STRAP~~ - ~~GRM WASHERS~~
#6	S/N 7216	MAR 1, 1972	~~FEET~~
#7	S/N 7217	MAY 2, 1972	
#8	S/N 7218	MAR. 25, 1972	
#9	S/N 7219	MAR 5, 1972	~~FEET~~
#10	S/N 7221	MAR 11, 1972	~~FEET~~
#11	S/N 7222	MAR 22, 1972	~~FEET~~ ~~CRT STRAP~~ ~~END POST CAPS~~ ~~CRT WASHER~~, ~~SPRING, FASTENER~~
#12	S/N 7223	MAR 15, 1972	~~[illegible]~~ ~~[illegible]~~
#13	S/N 7224	MAR. 25, 1972	
#14	S/N 7227	MAR 7, 1972	~~FEET~~, ~~CRT STRAP~~, ~~END POST CAPS~~
#15	S/N 7228	MAR. 28, 1972	
#16	S/N 7198	MAR 23, 1972	
#17	S/N 7241	MAR 24, 1972	
#18	S/N 7242	MAR 5, 1972	~~FEET~~
#19	S/N 7246	MAR 8, 1972	~~FEET, CRT STRAP, END POST CAPS~~
#20	S/N 7250	MAR 9, 1972	~~FEET~~
#21	S/N 7259	MAR 16, 1972	~~FEET~~ - ~~CRT STRAP~~ ~~END POST CAPS~~

185A MANUAL S/N 10598

18. Attenuator Compensation (47pf)

Sensitivity	+ Input (right side is top)	- Input
.2 v/cm	C306	C316
.5 v/cm	C305B, C305C	C315B, C315C
5 v/cm	C304B, C304C	C314B, C314C

19. Phasing S/N 101 - 6997
Preset: Horizontal + Input DC; others to ground.
50 kH_z at .2 v/cm and adj. 191 for 6 cm.
Change 191 to 450 kH_z and adj. Horiz Defl. plate leads for 4.3 cm Horiz. Defl.
Change + Vert to DC and adj. 191 for 6 cm.
Adj. C419 for min. eye opening.

Change both v/cm to 1 mv.
Preset: Vert + Input DC; others to ground.
Adjust 191 for 6 cm vert signal 50kH_z.
Change 191 to 450 kH_z. Adj. C456 for 4.3cm.
Change + Horiz. to DC and adj. C356 for min eye opening. Check other ranges from 1 mv to .2 v/cm.
Interaction: Repeat Phasing Procedure until no further adjustments are necessary.

20. Adjust Sweep Cal (R322)
1 ms marks, 1 ms/cm, mag x 1

21. Adjust Sweep Length (R176)
10.5 cm.

22. Adjust Sweep/Mag Regis (R339)

23. Check Magnifier

24. Check Var Time/cm Control

25. Check Timing .1 ms/cm to 5 s/cm

26. Adjust 10 µs/cm (C160C)
Check 20, 50 µsec/cm

27. Adjust 1 us/cm (C160A)
Check 2, 5 µsec/cm

28 CHECK TRIG LEVEL

S/N 560 & up C356 & C456 added

S/N 6997 & Up C368 & C468 added

1. Adjust C419	Bandpass of 450kHz at plus Vert Input. Check minus Input (.2 v/cm)
2. Adjust Horiz. Deflection Plate Leads	Adjust for same Band Pass at plus Horiz Input as Vert (.2 v/cm)
3. Adjust C368 (minus Inputs, .2 v/cm)	Min. eye opening at 450kHz. 6cm signal.
4. Adjust C468 (plus Inputs, .2 v/cm)	Same as step #3.
5. Adjust C356 (plus Inputs, 1mv/cm)	Min. eye opening at 450kHz, 6cm signal.
6. Adjust C456 (minus Inputs, 1mv/cm)	Same as setp #5.

(steps 3-6 interact--repeat)