

ALIGNMENT PROCEDURE

INSTRUMENTS REQUIRED

Signal Source

1. RF Signal Generator (RCA WR-50A or equivalent)
2. TV/FM Sweep Generator (RCA WR-69A or equivalent).
3. Crystal-Calibrated Marker Generator (RCA WR-99A or equivalent).

Output Indicators

4. Vacuum Tube Voltmeter (RCA "Voltohyst" or equivalent).
5. Oscilloscope (RCA WO-91A equivalent).

Tools

6. Hex Head Alignment tool.
7. Thin Fiber Shaft Screwdriver Alignment tool.

GENERAL ALIGNMENT CONDITIONS

1. Connect low side of signal source and output indicator to chassis ground unless otherwise specified. Ground connection should be kept close to high side connection.
2. Signal input should be kept as low as possible to avoid AVC action. (Set output indicator to highest sensitivity.)
3. Markers should be accurate (crystal controlled or checked against a crystal calibrator). The 10.7 mc marker used in each section of the FM alignment should be the same (generator dial should not be changed).
4. Marker insertion and amplitude should not distort the oscilloscope trace.
5. Set function switch to band being aligned.

ALIGNMENT PROCEDURE CRC 6530A CUSTOM SERIES "20" CHASSIS #1

AM ALIGNMENT

(1) Push in AM switch

Step	Connect High Side of Signal Generator To —	Set Sweep Generator TO —	Set Marker Generator TO —	Set Radio Dial TO —	Adjust for Maximum
#1	Pin #1 V-2 6BA6	Connect oscilloscope to junction R-11 and C-11			
#2		455 KC	455 KC (Radiated)	Quiet spot on dial	Peak T-4 top and bottom cores for symmetrical curve of maximum gain. See Fig #4
#3	Pin #7 V-4 (6BE6)				Peak T-3 top and bottom cores for curve of maximum gain. See Fig #4
#4	Radiate modulated signal to antenna		1620 KC	1620 KC	Adjust oscillator for maximum on scope
#5			1500 KC	1500 KC	Adjust antenna trimmer for maximum output on scope.
#6			600 KC	600 KC	Peak oscillator coil for maximum on scope.
#7	Repeat steps nos. #4, #5 and #6.				

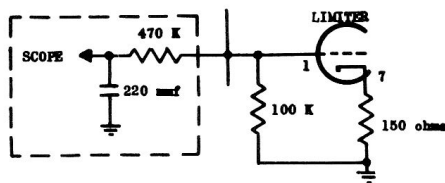


Figure 1

FM ALIGNMENT

(1) Push in FM selector switch

Step	Connect High Side of Signal Generator To —	Set Sweep Generator TO —	Set Marker Generator TO —	Set Radio Dial TO —	Adjust for Maximum
#1	Pin #1 V-2 6BA6	Connect Voltohyst to junction R-25 and R-26			
#2			10.7 MC	Quiet spot on dial	Peak T-2 bottom core for maximum output
#3		Relocate voltohyst to junction R-22 and R-23. Make sure meter is properly zeroed.			
#4			10.7 MC	Quiet spot on dial	Peak T-2 top for absolute zero on meter
#5		Connect oscilloscope to limiter grid through test jig. See Fig #1			
#6	Antenna Terminals	10.7 MC	10.7 MC (Radiated)	Quiet spot on dial	Peak T-1 top and bottom cores for maximum symmetrical curve with marker in center of curve. See Fig. #3
#7		Remove sweep from pin #1 V-2			
#8		89 MC	10.7 MC	89 MC	Peak top and bottom cores Tuner IF for curve of maximum gain. See Fig. #3 T-1 may require touch up.
#9		Disconnect sweep, marker and oscilloscope			
#10			106 MC	106 MC	Adjust oscillator and antenna trimmer for maximum output.
#11			89 MC	89 MC	Adjust oscillator and antenna coil for maximum output.
#12	Repeat steps nos. #10 and #11				

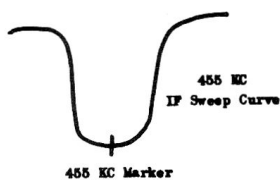


Figure 2—
(Chassis #3)

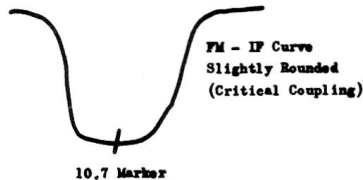


Figure 3—
(Chassis #1 to #5)

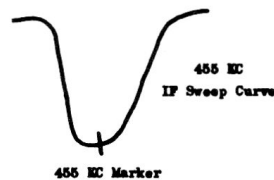


Figure 4—
(Chassis #1)

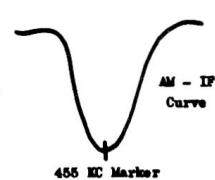


Figure 5—
(Chassis #4)

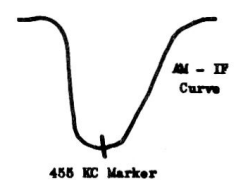


Figure 6—
(Chassis #2)

CRC 6530A CUSTOM SERIES "20" CHASSIS #1

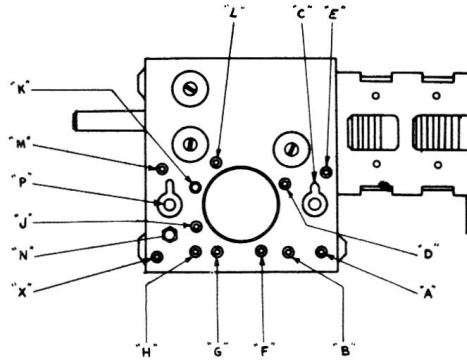


Figure 10—FM Tuner & Variable Capacitor for Chassis #1, #2.

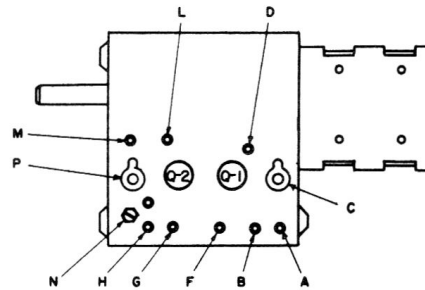


Figure 14—CRC6530A Chassis Layout #1

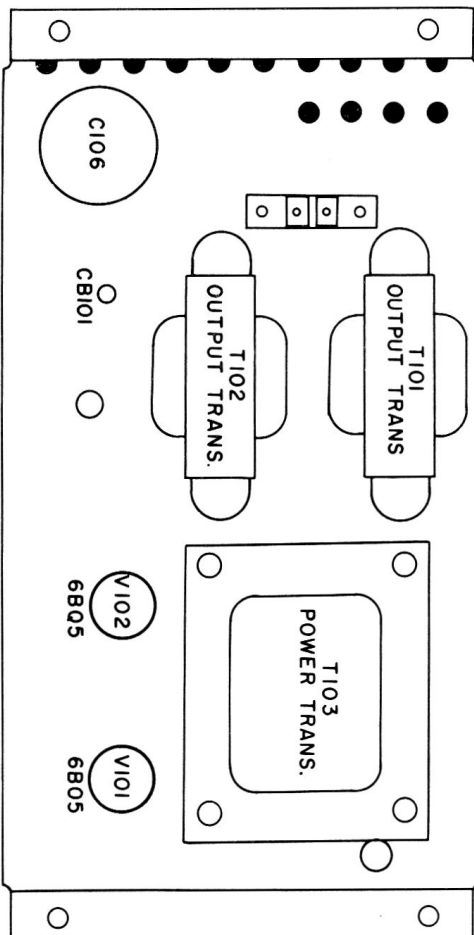
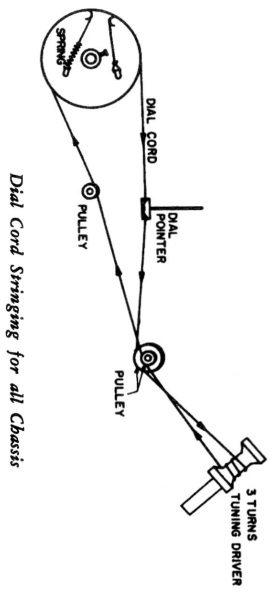
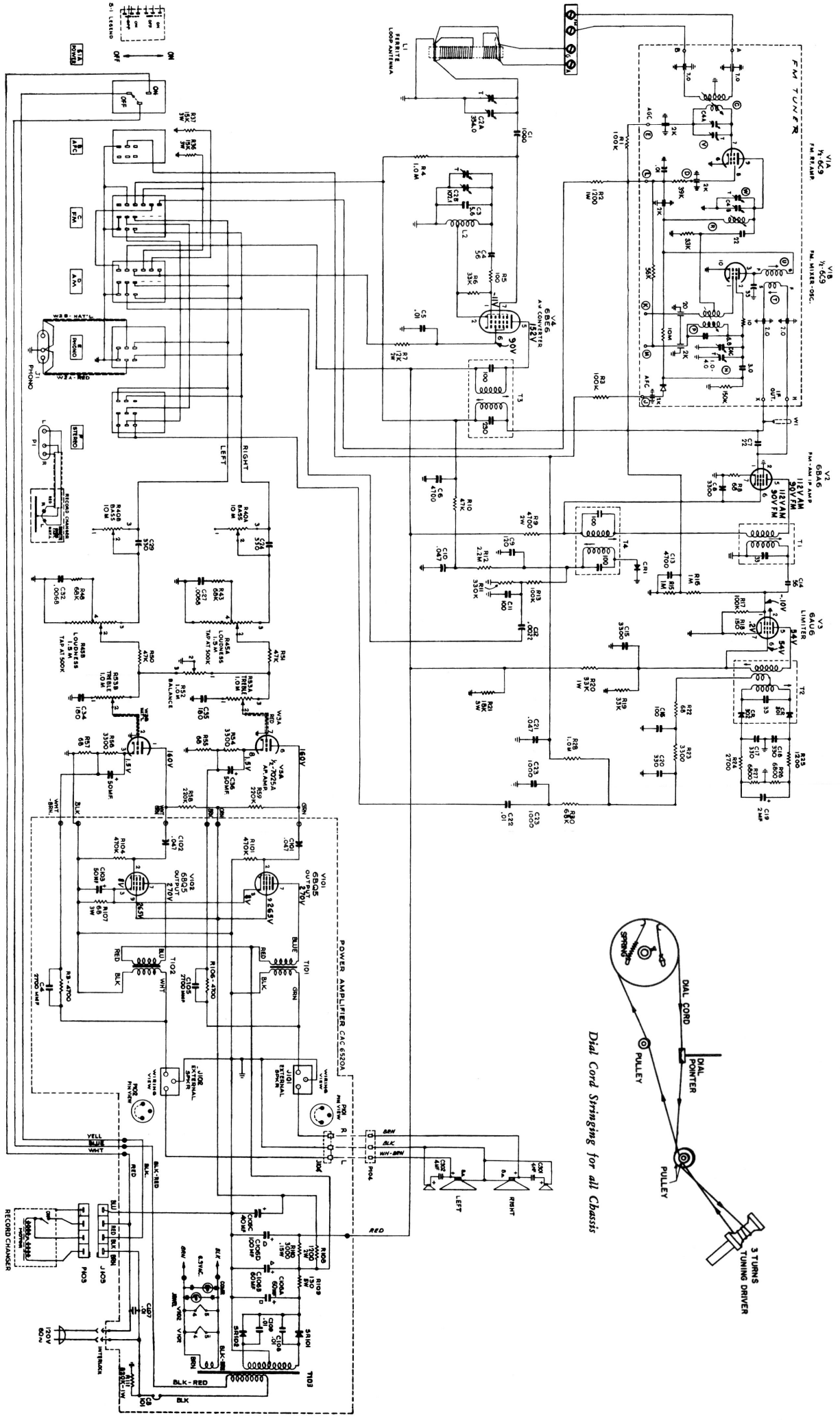


Figure 13—CAC6520A Power Amplifier for Chassis #1



Schematic Diagram Chassis #1

