

Cathode-Ray Oscillograph

Type TMV-122-C

25-60 CYCLE

The following sheets contain revised servicing information for the Cathode Ray Oscillograph, Type TMV-122-C. These sheets are to be used with Instruction Book IB-23339, replacing part of the servicing information included in that book.

The theory of operation, installation and operation are thoroughly covered in the instruction book. However, due to a slight circuit change, the operation of the "Range" switch is better described as follows (page 15):

- "Range" switch, S4, selects one of eight timing capacitor values. It thus changes the timing axis oscillator frequency in steps giving 8 ranges approximately as follows:

No. 1, 10-35; No. 2, 20-65; No. 3, 55-180; No. 4, 130-450; No. 5, 300-1050; No. 6, 900-3500; No. 7, 2000-7500, and No. 8, 5500-18,000 cycles.

Also under "6. Ampl. 'B' Gain Control (horizontal)" note the following:

Due to the capacity load on this input potentiometer, when operating on "Timing" at the higher audio frequencies, linear sweep will not be obtained at all settings of this control. For best results, the control should be set for maximum linearity, which will occur at about 2/3 full screen deflection.

Under "Replacement Parts," note the addition or changes in the items shown on page 5.

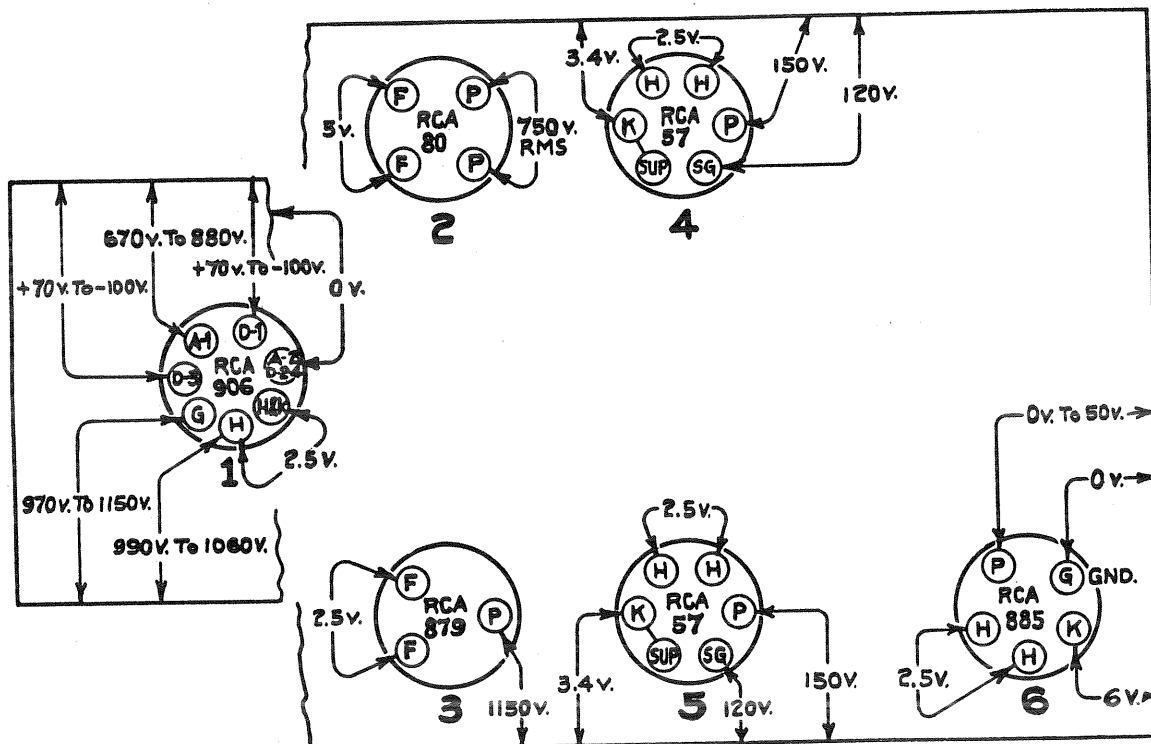


Figure 1—Radiotron Socket Voltages (Bottom View)

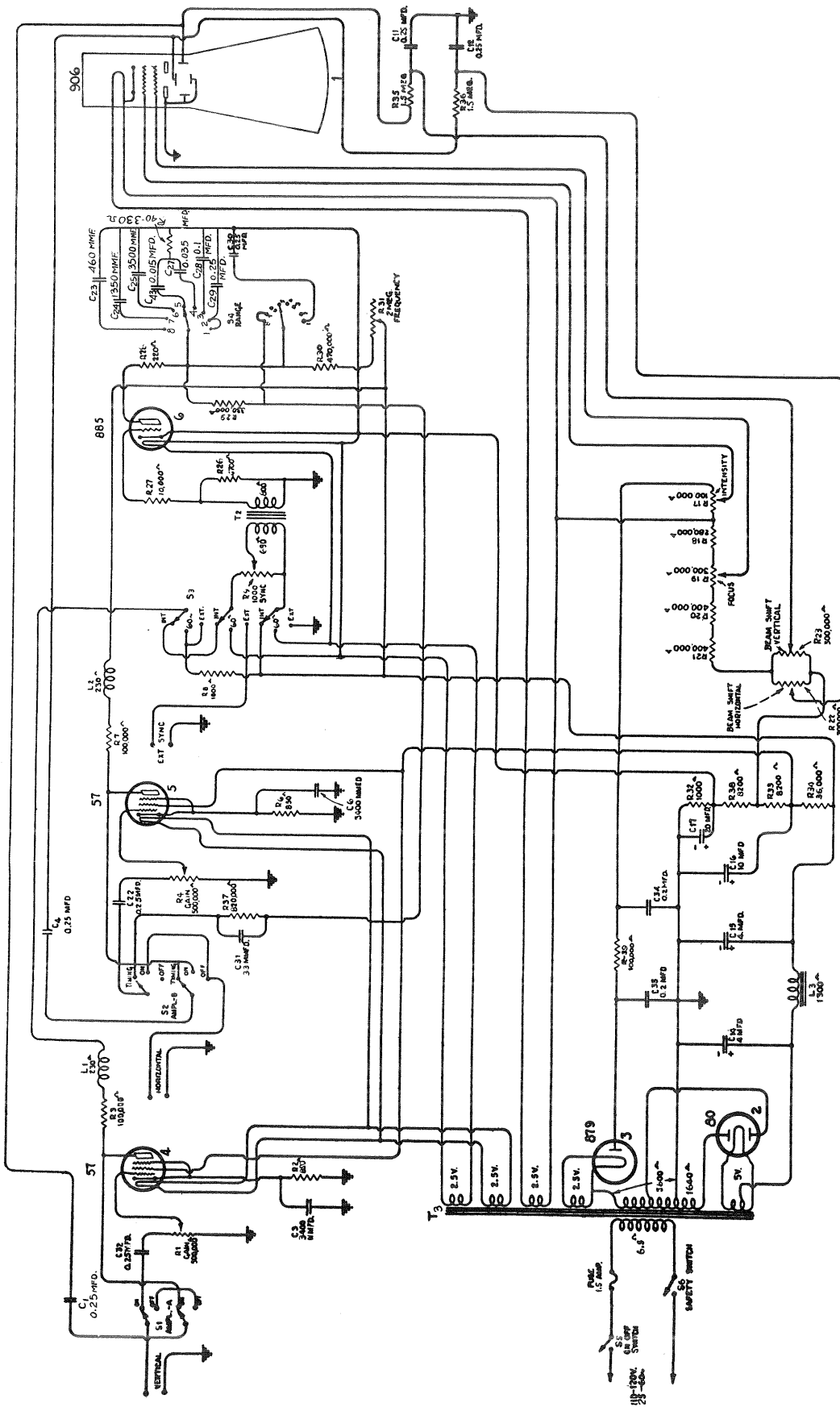
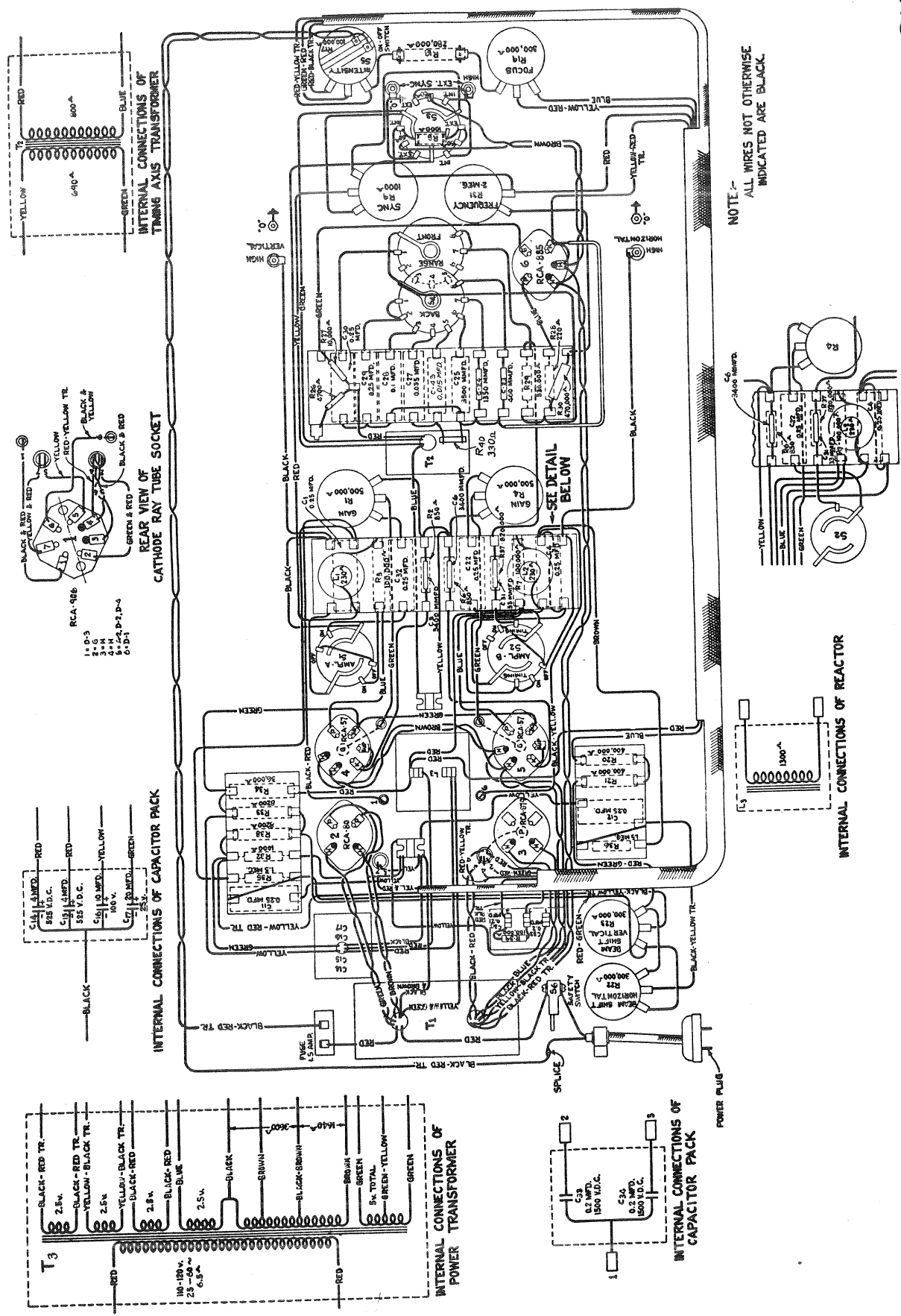


Figure 2—Schematic Diagram

SN-566



NOTE - ALL WIRES NOT OTHERWISE INDICATED ARE BLACK.

Figure 3—Wiring Diagram

RADIOTRON SOCKET VOLTAGE TABLE

120-Volt, 60-Cycle Supply Line

Socket Number	RADIOTRON		Cathode Volts to Ground DC.	Screen Grid Volts To Ground DC.	Plate Volts to Ground DC.	Cathode Current MA-DC.	Anode Volts to Ground DC.		Deflecting Plates to Ground DC.		Filament or Heater Volts AC.
	Type	Function					No. 1	No. 2	D ₁	D ₂	
1	RCA-906	Cathode Ray	-990 to -1060*	—	—	—	-670 to -880*	0	+70 to -100*	+70 to -100*	2.5
2	RCA-80	Low Voltage Rectifier	—	—	375 (RMS)	24	—	—	—	—	5.0
3	RCA-379	High Voltage Rectifier	—	—	+1150*	—	—	—	—	—	2.5
4	RCA-57	20-90,000 Cycle Amp.	+3.4	+120	+150	2.5	—	—	—	—	2.5
5	RCA-57	20-90,000 Cycle Amp.	+3.4	+120	+150	2.5	—	—	—	—	2.5
6	RCA-885	20-15,000 Cycle Osc.	+6.0	—	0 to +50*	180 to 900 Micro-Amps	—	—	—	—	2.5

* Cannot be correctly measured with ordinary voltmeter.

Stock No.	DESCRIPTION	List Price	Stock No.	DESCRIPTION	List Price
4244	Cap—Contact cap—Package of 5....	\$0.20	4687	Resistor—1000 ohms—Carbon type— 1/2 watt (R8, R32)—Package of 10.	2.00
5198	Capacitor—33 mmfd. (C31).....	.16	5199	Resistor—4700 ohms—Carbon type— 1/4 watt (R26)—Package of 5.....	1.00
5197	Capacitor—460 mmfd. (C23).....	.18	5205	Resistor—8200 ohms—Carbon type— 1 watt (R33, R38).....	.22
5115	Capacitor—1350 mmfd. (C24).....	.25	3381	Resistor—10,000 ohms—Carbon type 1/4 watt (R27)—Package of 5.....	1.00
4439	Capacitor—3400 mmfd. (C3, C6)....	.35	5206	Resistor—36,000 ohms—wire wound (R34) .....	.35
5005	Capacitor—3500 mmfd. (C25).....	.16	3252	Resistor—100,000 ohms—Carbon type —1/2 watt (R39)—Package of 5....	1.00
11315	Capacitor—.015 mfd. (C43).....	.20	12529	Resistor—270,000 ohms—Carbon type —1 watt (R18)—Package of 5.....	1.10
5196	Capacitor—0.035 mfd. (C27).....	.18	5200	Resistor—330,000 ohms—Carbon type —1/2 watt (R29)—Package of 5....	1.00
4841	Capacitor—0.1 mfd. (C28).....	.22	12530	Resistor—390,000 ohms—Carbon type —1 watt (R20, R21)—Package of 5.	1.10
4840	Capacitor—0.25 mfd. (C11, C12, C29, C30) .....	.30	5202	Resistor—470,000 ohms—Carbon type —1/2 watt (R30)—Package of 5....	1.00
5170	Capacitor—0.25 mfd. (C1, C4, C22, C32) .....	.25	5203	Resistor—820,000 ohms—Carbon type —1/2 watt (R37)—Package of 5....	1.00
4844	Capacitor Pack—Two sections of 0.2 mfd. each (C33, C34).....	7.25	5204	Resistor—1.5 megohm—Carbon type —1/2 watt (R35, R36)—Package of 5	1.00
7960	Knob—Range or Ext. Sync. switch knob .....	.20	11896	Transformer—Power transformer— 105-125 volts—25-60 cycles.....	12.55
5207	Potentiometer—Frequency control potentiometer (R31).....	1.35			
5201	Resistor—220 ohms—Carbon type— 1/2 watt (R28)—Package of 5.....	1.00			
11932	Resistor—330 ohms—Carbon type— 1/10 watt (R40)—Package of 5....	.75			
12531	Resistor—910 ohms—Carbon type— 1/2 watt (R2, R6)—Package of 5...	1.00			

STOCK No. 9640

IB-23339-3

RCA PARTS



DIVISION

RCA MANUFACTURING CO., INC.

CAMDEN, NEW JERSEY, U. S. A.