

Thomas A. Edison, Inc.

Model: R4

Chassis:

Year: Pre June 1933

Power:

Circuit:

IF:

Tubes:

Bands:

Resources

[Riders Volume 2 - EDISON 2-1](#)

[Riders Volume 3 - EDISON 3-1](#)

[Riders Volume 2 - EDISON 2-2](#)

[Riders Volume 1 - EDISON 1-6](#)

[Riders Volume 1 - EDISON 1-7](#)

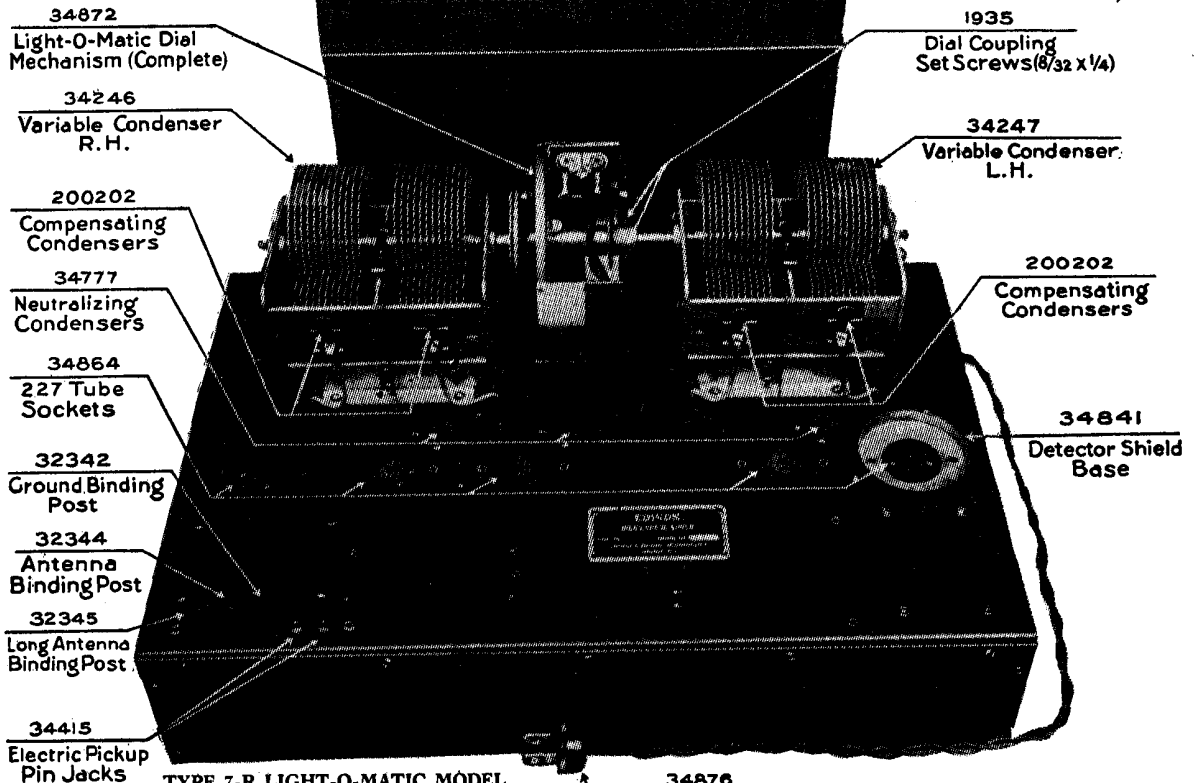
[Riders Volume 1 - EDISON 1-8](#)

[Riders Volume 1 - EDISON 1-9](#)

[Riders Volume 1 - EDISON 1-10](#)

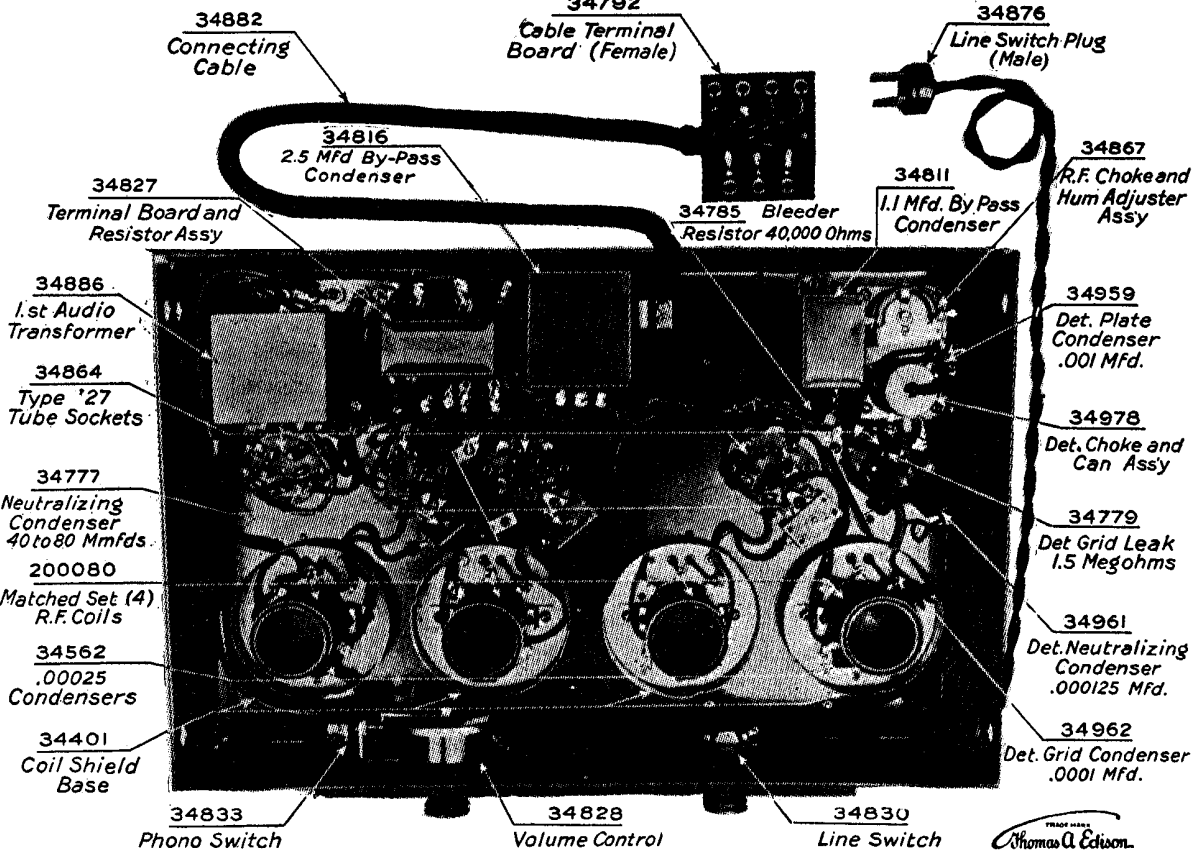
THOMAS A. EDISON, INC.

MODEL'S R4,R5,C4
Chassis Views



TYPE 7-R LIGHT-O-MATIC MODEL
60 CYCLE A.C. RECEIVER UNIT
(TOP VIEW)

TYPE 7-R LIGHT-O-MATIC MODEL
60 CYCLE A.C. RECEIVER UNIT
(BOTTOM VIEW)



34833
Phono Switch

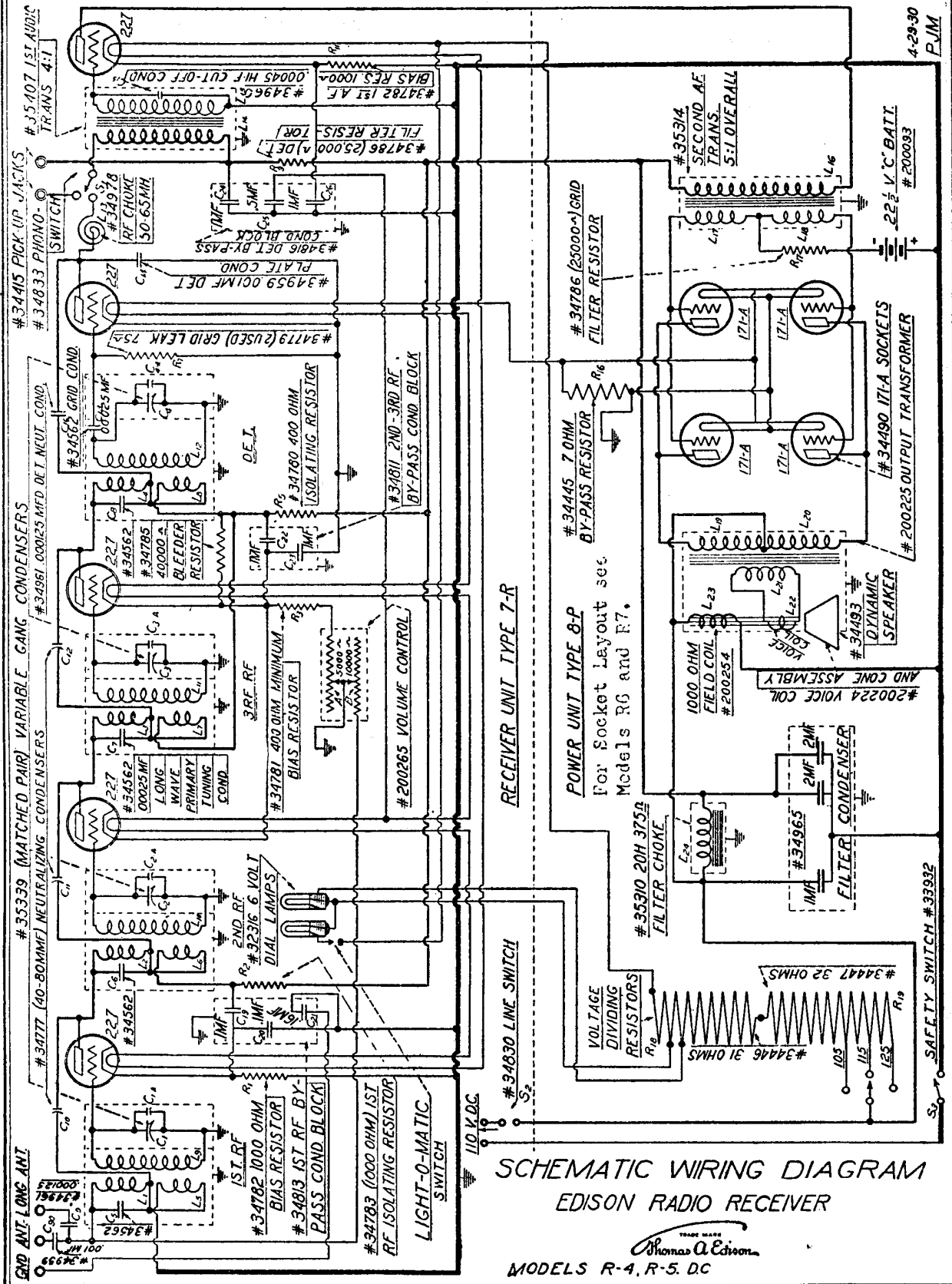
34828
Volume Control

34830
Line Switch



THOMAS A EDISON, INC.

MODELS R4, R5 DC Schematic



SCHMATIC WIRING DIAGRAM EDISON RADIO RECEIVER

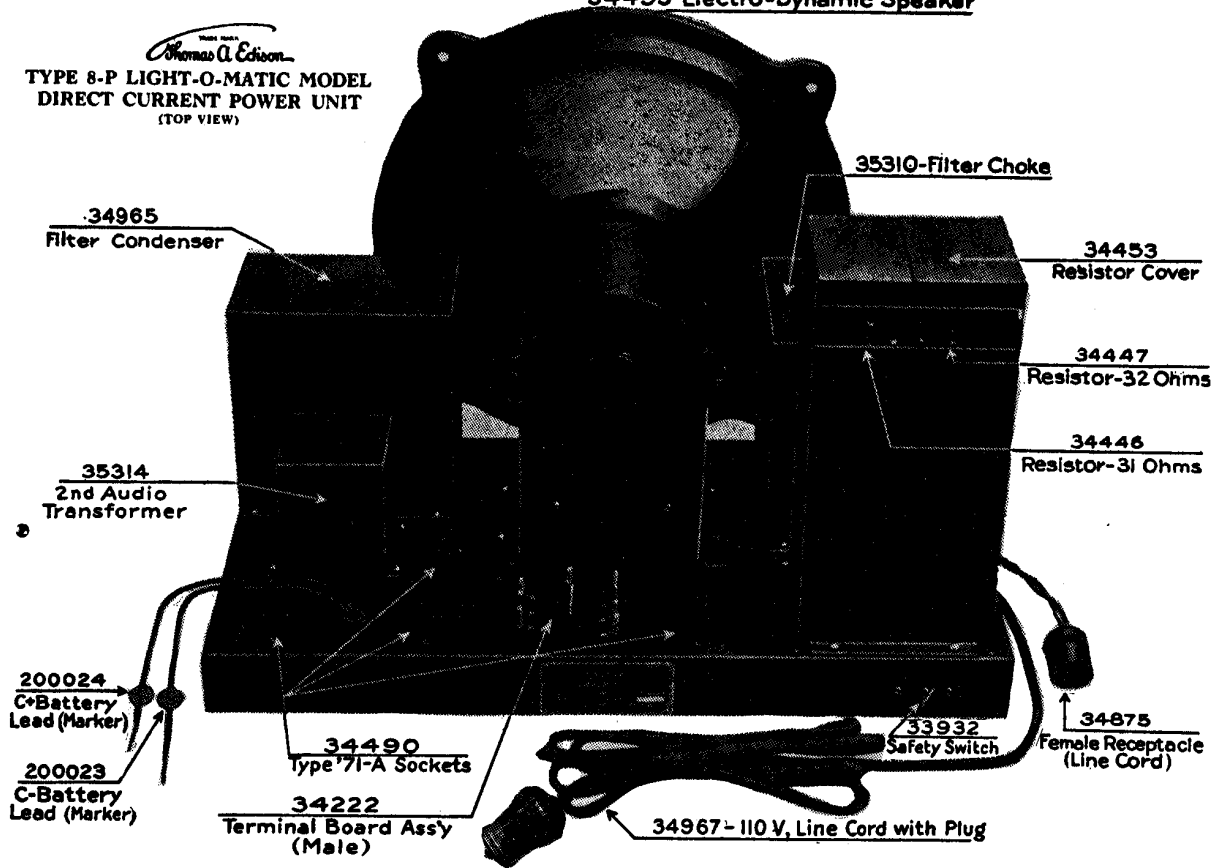
Thomas A Edison TRADE MARK MODELS R-4, R-5 DC

MODELS R4,R5,C4
Power Unit Chassis Views

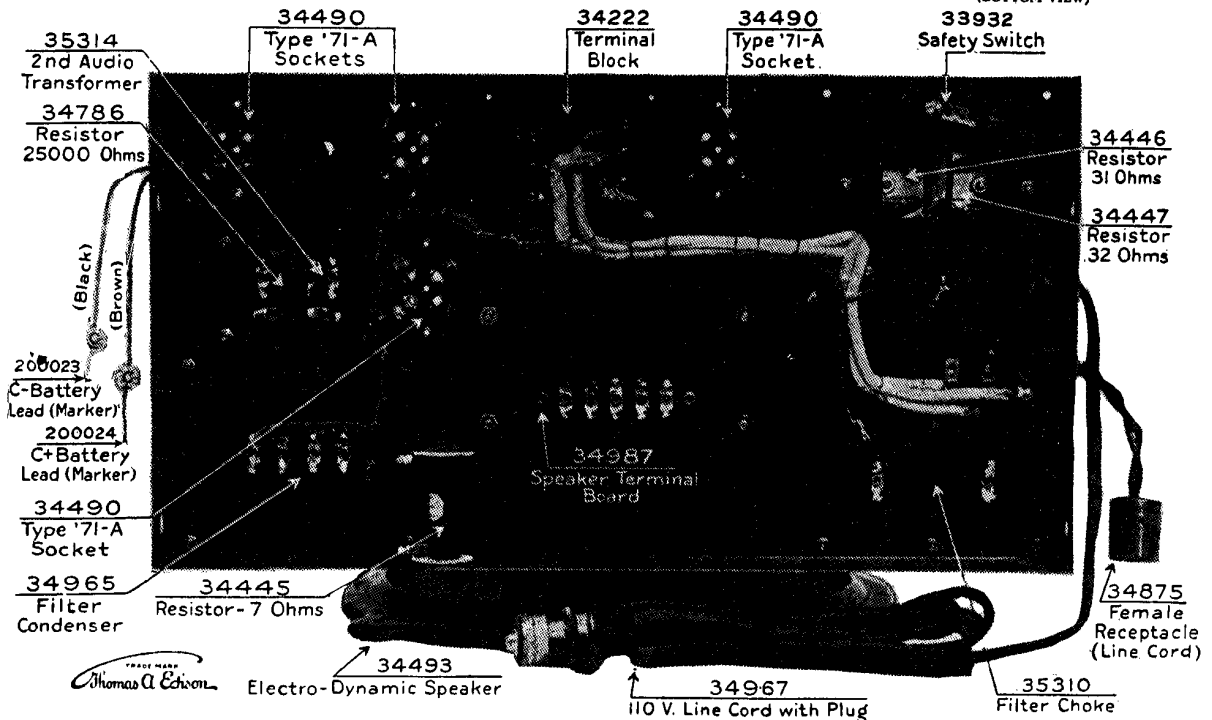
THOMAS A. EDISON, INC.

34493 Electro-Dynamic Speaker

TRADE MARK
Thomas A. Edison
TYPE 8-P LIGHT-O-MATIC MODEL
DIRECT CURRENT POWER UNIT
(TOP VIEW)

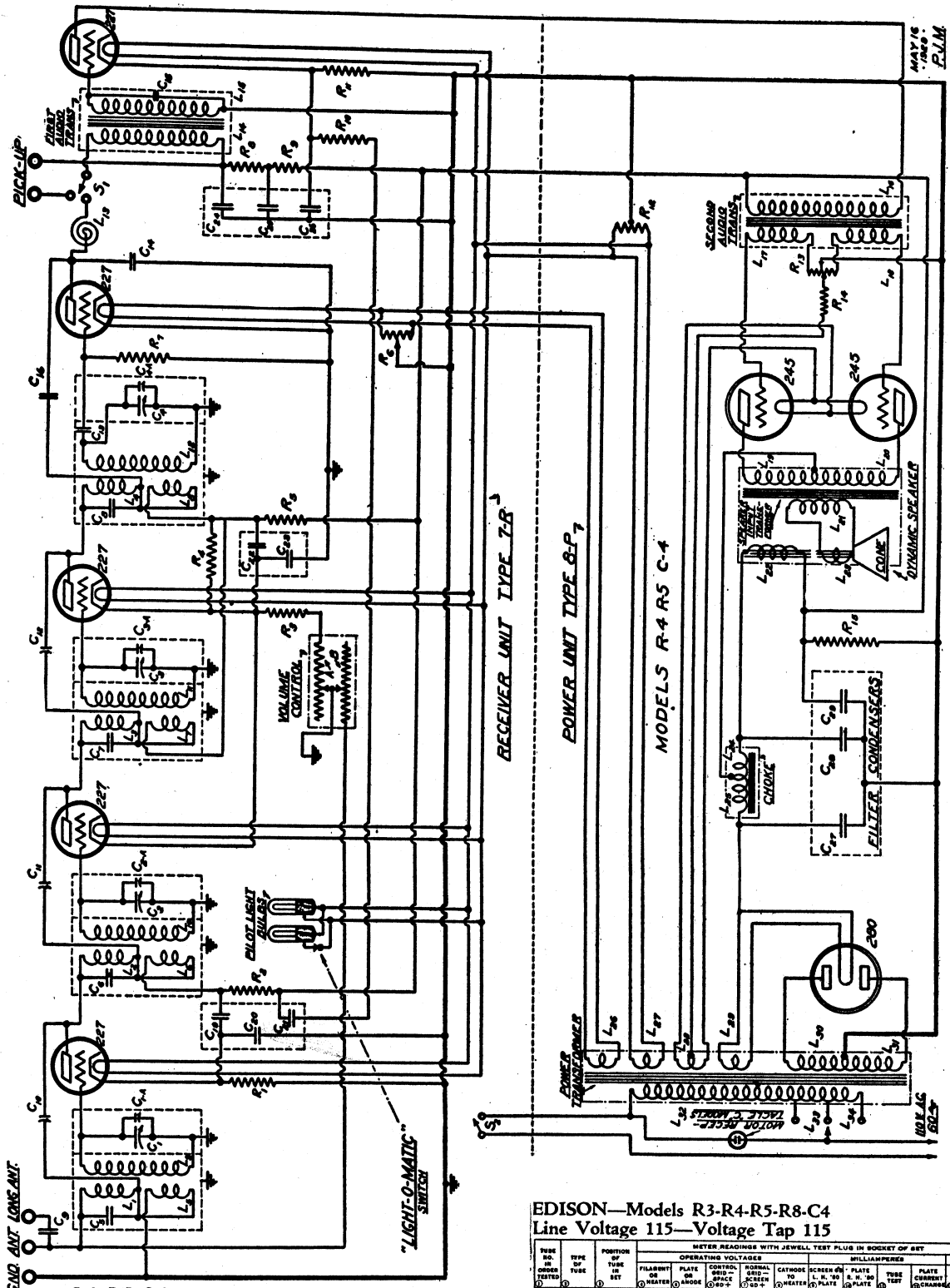


TYPE 8-P LIGHT-O-MATIC MODEL
DIRECT CURRENT POWER UNIT
(BOTTOM VIEW)



THOMAS A. EDISON, INC.

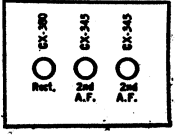
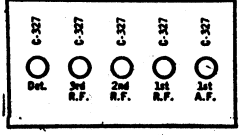
MODELS R4, R5, C4
Schematic



GND. AINT. LONG AINT.

R-4, R-5, C-4

(A.C.)



EDISON—Models R3-R4-R5-R8-C4
Line Voltage 115—Voltage Tap 115

TUBE NO. WHEN TESTED	TYPE OF TUBE	POSITION OF TUBE IN SET	METER READINGS WITH JEWELL TEST PLUG IN SOCKET OF SET								
			PLATE VOLTAGE	CONTROL GRID VOLTAGE	SCREEN GRID VOLTAGE	SPIDER SPACE GRID VOLTAGE	FOCAL POINT TO HEATER	OUTSIDE SCREEN TO PLATE	SCREEN & H. 50 TO PLATE	FUSE TEST	PLATE CURRENT (MILLIAMPERES)
1	227	1 R.F.	2.35	114	-	6	-	-	5.6	7.5	1.9
2	227	2 R.F.	2.35	114	-	6	-	-	5.6	9.5	5.9
3	227	3 R.F.	2.35	114	-	6	-	-	5.6	9.5	5.9
4	227	Det.	2.35	88	-	-	-	-	2.0	2.0	0
5	227	1 A.F.	2.35	110	-	6.5	-	-	5.7	6.0	1.3
6	245	FP-AF	2.4	250	-	46	-	-	27.5	28	4.5
7	245	FP-AF	2.4	250	-	46	-	-	27.5	28	4.5
8	280	Rect.	4.9	-	-	-	-	50.4	50.4	-	-

MODELS R4, R5, C4
Parts List

THOMAS A. EDISON, INC.

IDENTIFICATION OF PARTS (Continued)

NO.	NAME AND FUNCTION	ELECTRICAL VALUE
R-10	Hum balance resistor (1st a. f.)	6,000 ohm resistance, 1 watt.
R-11	Bias resistor, 1st a. f. stage.	2,000 ohm resistance, 1 watt.
R-12	R. f. and a. f. heater center tapped resistor.	20 ohm fixed center-tapped resistance.
R-13	Push-pull balancing resistor.	200 ohm center-tapped potentiometer.
R-14	Bias resistor, 2nd a. f. stage.	780 ohm, 5 watt resistance.
R-15	Power supply loss current resistor.	10,000 ohm, 5 watt resistance.
L-1	Long wave primary, 1st r. f. transformer.	Each a 500 microhenry coil.
L-2	Long wave primary, 2nd r. f. transformer.	
L-3	Long wave primary, 3rd r. f. transformer.	
L-4	Long wave primary, detector input transformer.	
L-5	Short wave primary, 1st r. f. transformer.	Each a 7 1/2 turn coil.
L-6	Short wave primary, 2nd r. f. transformer.	
L-7	Short wave primary, 3rd r. f. transformer.	
L-8	Short wave primary, detector input transformer.	
L-9	Secondary, 1st r. f. transformer.	Each a 245 microhenry coil, (measured in shield).
L-10	Secondary, 2nd r. f. transformer.	
L-11	Secondary, 3rd r. f. transformer.	
L-12	Secondary, detector input transformer.	
L-13	Detector plate r. f. choke.	50 to 65 millihenry choke.
L-14	Primary, 1st a. f. transformer.	4:1 ratio a. f. transformer.
L-15	Secondary, 1st a. f. transformer.	
L-16	Primary, 2nd a. f. transformer.	5:1 ratio a. f. transformer with separate secondary ratios connected in series by variable resistances R-13.
L-17	Secondary, 2nd a. f. transformer.	
L-18	Secondary, 2nd a. f. transformer.	Speaker input transformer, mounted in speaker frame, utilizing center tapped primary.
L-19	Half primary, speaker input transformer.	
L-20	Half primary, speaker input transformer.	4,500 ohm field coil.
L-21	Secondary, speaker input transformer.	
L-22	Field coil, dynamic speaker.	20 henry, 375 ohm choke.
L-23	Voice coil, dynamic speaker.	
L-24	Inside third of filter choke.	Detector heater secondary winding.
L-25	Outside two-thirds of filter choke.	
L-26	R. f. and a. f. heater secondary winding.	Rectifier fil. secondary winding.
L-27	R. f. and a. f. heater secondary winding.	
L-28	Rectifier fil. secondary winding.	Half high voltage secondary winding.
L-29	Rectifier fil. secondary winding.	
L-30	Half high voltage secondary winding.	Low line voltage primary winding.
L-31	Half high voltage secondary winding.	
L-32	Low line voltage primary winding.	Additional section of primary winding for medium voltage.
L-33	Low line voltage primary winding.	
L-34	Additional section of primary winding for high line voltage.	Radio-phonograph switch.
S-1	Radio-phonograph switch.	
S-2	Line switch.	Located in dial mechanism, operating Light-O-Matic pilot light.
	Light-O-Matic Switch.	
	Motor Receptacle (Brown).	This plug provides 110 volts A. C. for operation of phonograph motor in radio phonograph combination model.
	Volume Control	
		{ A—Wire wound, 5,000 ohms. B—Graphite, 10,000 ohms.

IDENTIFICATION OF PARTS

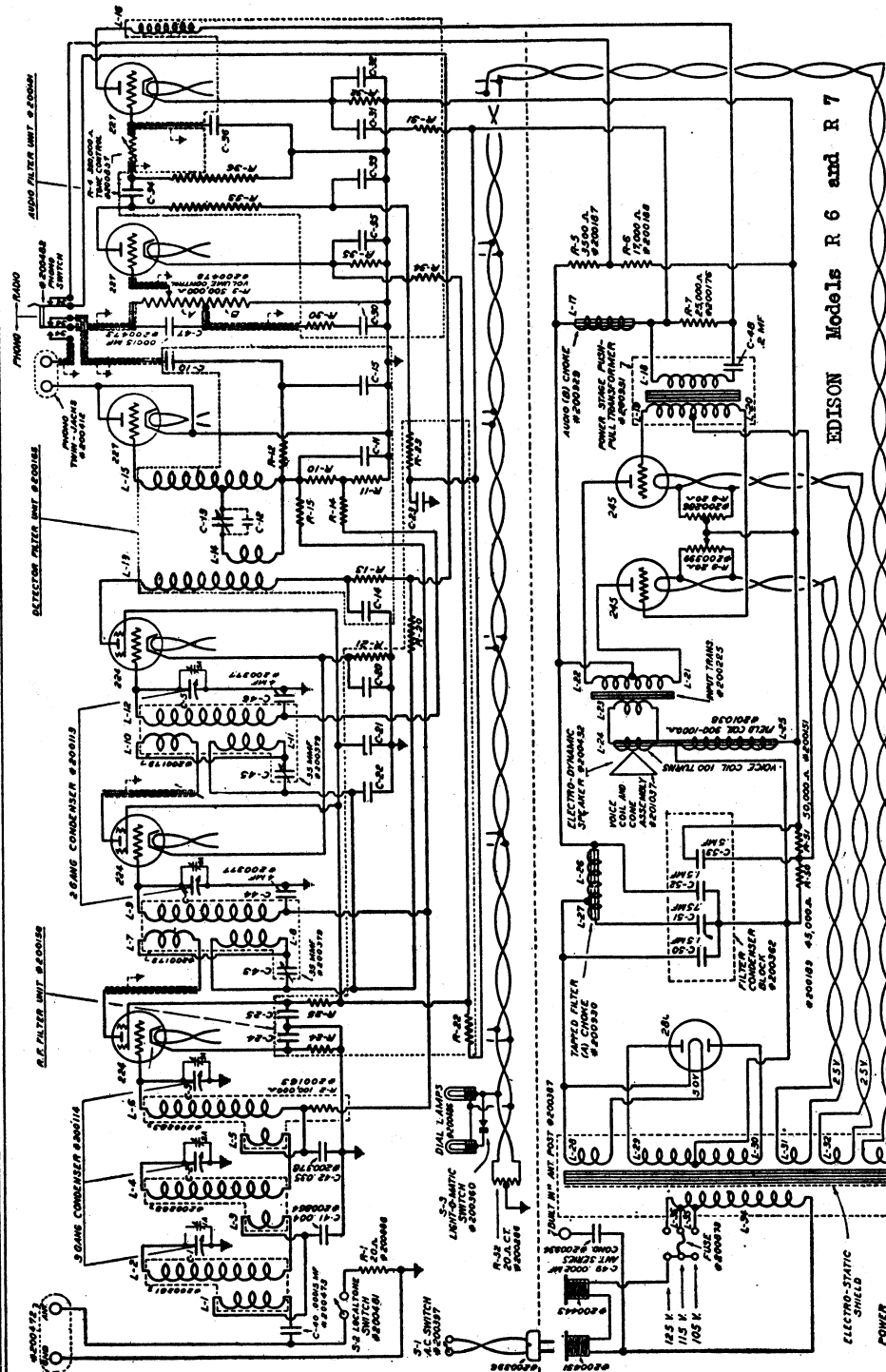
TO ACCOMPANY PLATE No. 1-A

"LIGHT-O-MATIC" MODELS R-4, R-5 and C-4

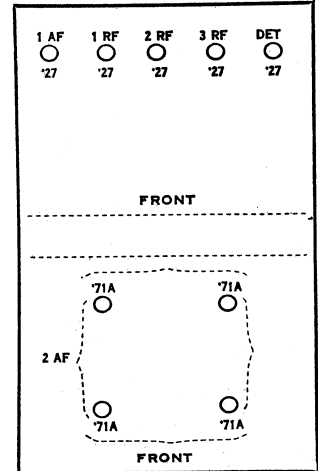
NO.	NAME AND FUNCTION	ELECTRICAL VALUE
C-1	Tuning condenser, 1st r. f. stage.	{ 2-gang variable condenser, maximum capacity. each section 355 mmfd.
C-2	Tuning condenser, 2nd r. f. stage.	
C-3	Tuning condenser, 3rd r. f. stage.	{ 2-gang variable condenser, maximum capacity. each section 355 mmfd.
C-4	Tuning condenser, detector stage.	
C-5	Each a fixed condenser tuning the long wave primary circuit of the associated transformer to approximately 450 Kilocycles.	Each a .00025 mfd. fixed moulded mica condenser.
C-6		
C-7		.000125 mfd. fixed moulded mica condenser.
C-8		
C-9	Long antenna series condenser.	Each an adjustable condenser, 40 to 80 mmfd.
C-10	Neutralizing condensers, 1st, 2nd and 3rd r. f. stages, respectively.	
C-11		.0001 mfd. fixed moulded mica condenser.
C-12		
C-13	Detector grid condenser.	.001 mfd. fixed moulded mica condenser.
C-14	Detector plate condenser.	
C-15	High frequency cut-off condenser.	.00045 mfd. fixed moulded mica condenser.
C-16	Detector Neutralizing Condenser	
C-19	Plate by-pass condenser, 1st r. f. stage.	.1 mfd. 300v. paper condenser.
C-20	Bias by-pass condenser, 1st r. f. stage.	
C-21	Hum balance condenser (1st a. f.)	.16 mfd. 300v. paper condenser. (C-19, 20 and 21 in same can.)
C-22	Plate by-pass condenser, 2nd and 3rd r. f.	
C-23	Bias by-pass condenser, 2nd and 3rd r. f.	.1 mfd. 300v. paper condenser. (C-22 and 23 in same can.)
C-24	A. f. by-pass condenser, detector plate.	
C-25	Filter condenser, detector plate supply	1. mfd. 150v. paper condenser.
C-26	Bias by-pass condenser, 1st a. f. stage.	
C-27	1st filter condenser.	2. mfd. 600v. paper condenser.
C-28	2nd filter condenser.	
C-29	3rd filter condenser.	1. mfd. 300v. paper condenser. (C-27, 28 and 29 in same can.)
C-1A	Tuning compensator, 1st r. f.	
C-2A	Tuning compensator, 2nd r. f.	Each an adjustable air and mica dielectric condenser mounted on side of variable condenser section which it shunts.
C-3A	Tuning compensator, 3rd r. f.	
C-4A	Tuning compensator, detector.	1,000 ohm resistance, 1 watt.
R-1	Bias resistor, 1st r. f. stage.	
R-2	Isolating resistor, 1st r. f.	1,000 ohm resistance, 1 watt.
R-3	Minimum bias resistor, 2nd and 3rd r. f.	400 ohm resistance, 1 watt.
R-4	Bleeder resistor.	40,000 ohm resistance, 1 watt.
R-5	Isolating resistor, 2nd and 3rd r. f.	400 ohm resistance, 1 watt.
R-6	Detector heater hum adjuster.	20 ohm potentiometer.
R-7	Detector grid leak.	1.5 megohm resistance, 1 watt.
R-8	2nd section detector filter resistor.	25,000 ohm resistance, 1 watt.
R-9	1st section detector filter resistor.	25,000 ohm resistance, 1 watt.

MODELS R6,R7
Schematic

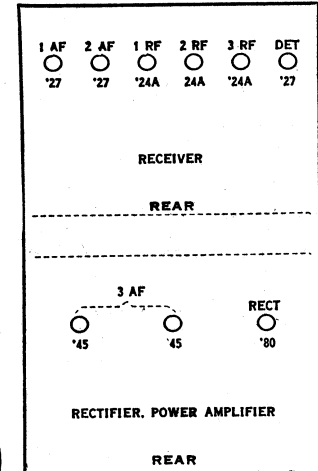
THOMAS A. EDISON, INC.



Models Edisons R4, R5 (DC)



Models Edisons R6, R7



EDISON—Models R6 and R7
Line Voltage 115—Voltage Tap 115
*Grid Vols 8-10 on Strong Signal
†Volume Control Minimum 2.5—Maximum .5

TYPE	PART NO.	OPERATING CHARACTERISTICS		TYPICAL CHARACTERISTICS		TYPICAL CHARACTERISTICS		TYPICAL CHARACTERISTICS	
		POWER	EFFICIENCY	LINE VOLTAGE	LINE CURRENT	LINE VOLTAGE	LINE CURRENT	LINE VOLTAGE	LINE CURRENT
1 AF	27	1.5	10	115	0.05	115	0.05	115	0.05
2 AF	27	1.5	10	115	0.05	115	0.05	115	0.05
1 RF	24A	1.5	10	115	0.05	115	0.05	115	0.05
2 RF	24A	1.5	10	115	0.05	115	0.05	115	0.05
3 RF	24A	1.5	10	115	0.05	115	0.05	115	0.05
DET	27	1.5	10	115	0.05	115	0.05	115	0.05
RECT	80	1.5	10	115	0.05	115	0.05	115	0.05