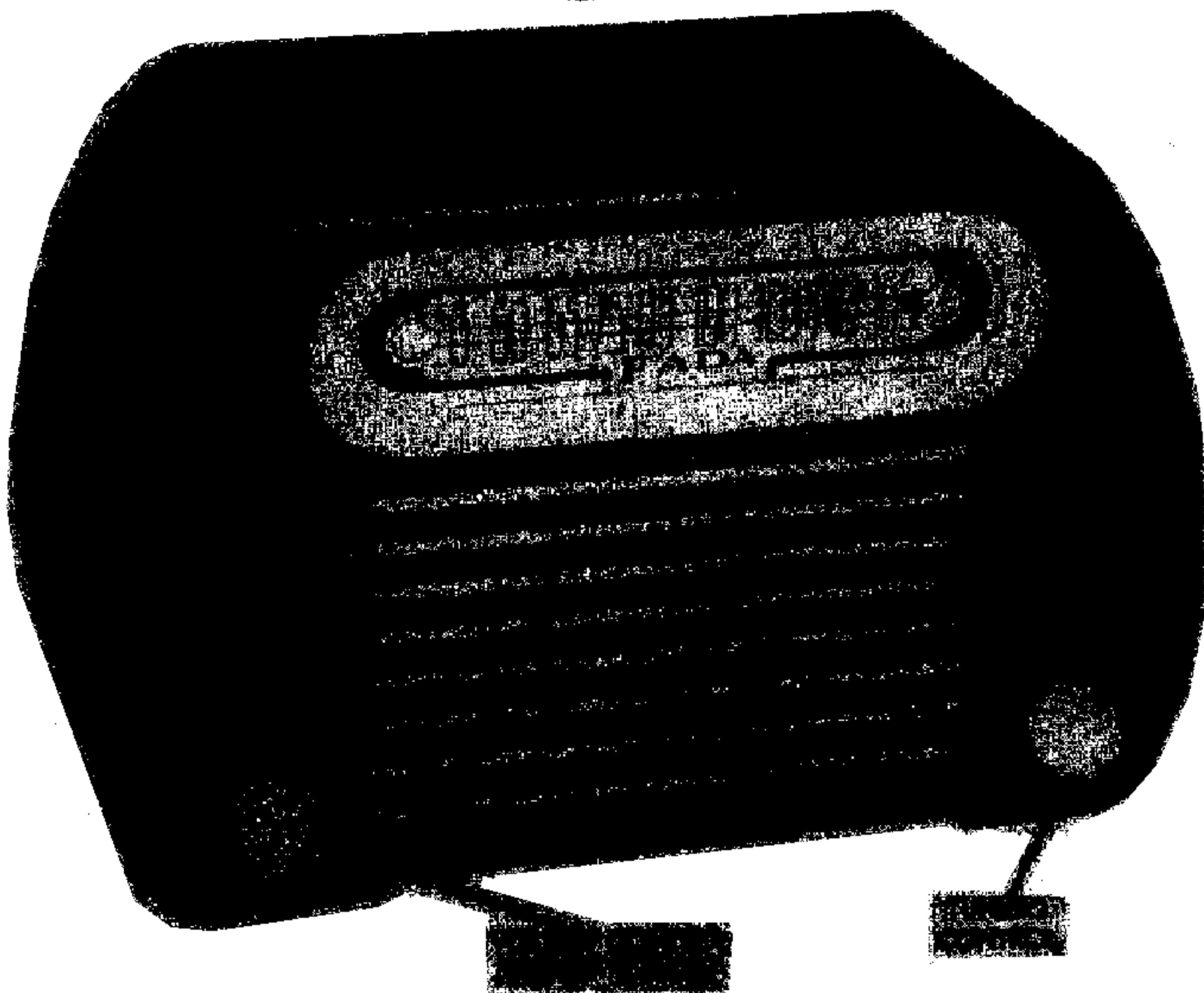
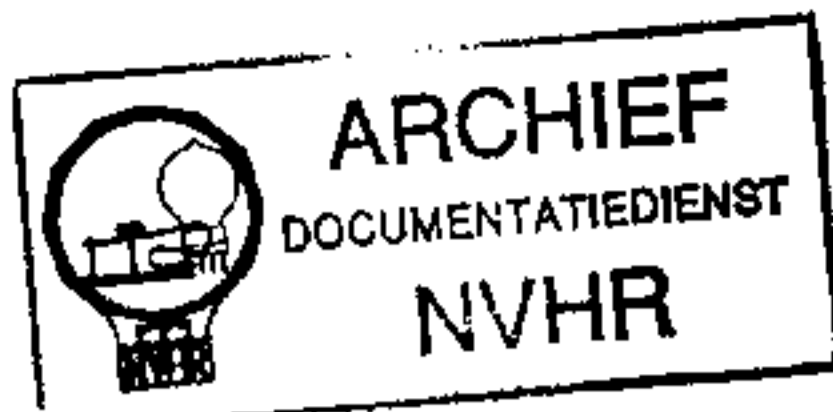


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TRADE MARK

Ned. Ver. v. Historie v/d Radio

FADA MODEL 652 SERIES



FADA MODEL 652

TRADE NAME Fada, Model 652 Series
 MANUFACTURER Fada Radio & Electric Company, Inc. 30-20 Thomson Avenue-Long Island City, New York
 TYPE SET AC - DC Superheterodyne - Self Contained Loop Antenna
 TUBES (SIX) Types 14A7/12B7 RF Amplifier, 14Q7 Mixer, 14A7/12B7 IF Amplifier, 14BG Det.-AVC-AF, 35A5 Power Output, 35Y4 Rectifier.

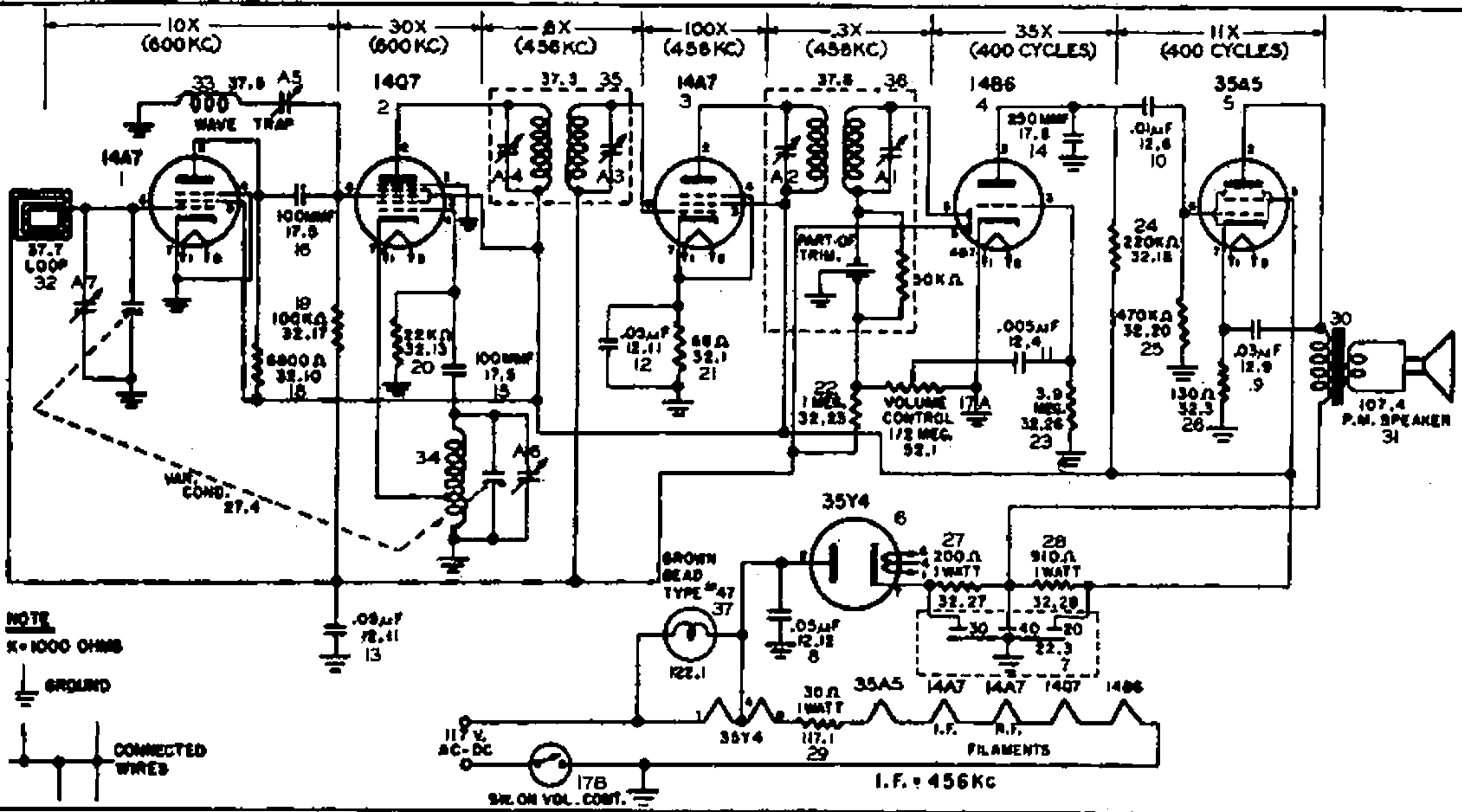
POWER SUPPLY 117 Volts AC-DC Rating .240 Amp. @ 117V. AC
 TUNING RANGE-BROADCAST 528-1680KC SHORT WAVE

ALIGNMENT INSTRUCTIONS

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
.001 MMFD.	High side to signal grid of 14Q7. Low side to chassis.	456KC	Quiet point at high end of band.	Across voice coil	A1, A2, A3, A4.	Adjust for maximum output. Use isolation transformer if available. If not, isolating capacitor must be connected between signal generator ground lead and receiver chassis.
.001 MMFD.	High side to signal grid of 14A7. Low side to chassis.	456KC	Max. Cap. (set to mark at extreme left)	"	A5	Adjust for minimum output.
	Loop	1400KC	1400KC mark	"	A6	Adjust for maximum output. Connect signal generator to loop of few turns of wire and couple loosely to receiver loop by spacing.
	"	"	"	"	A7	Adjust for maximum output.

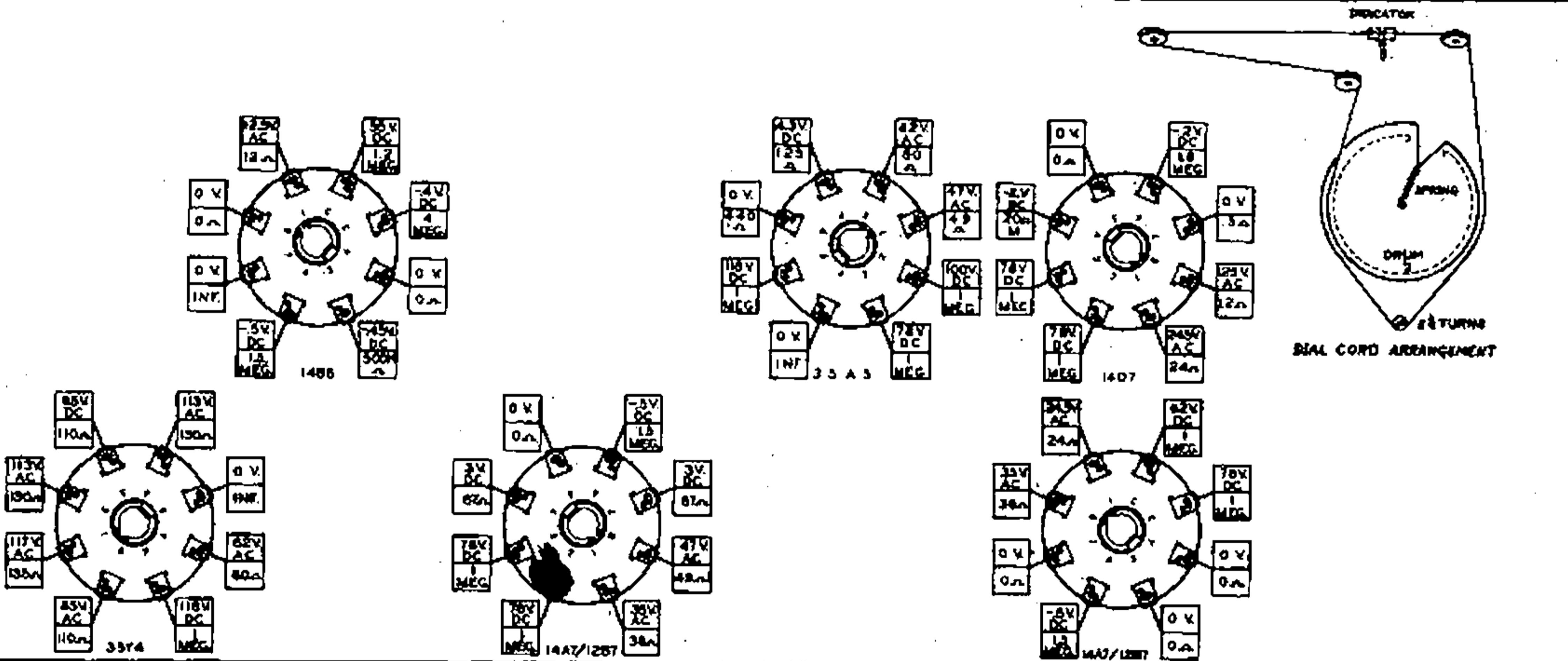
Dial pointer should be over mark on extreme left with rotor in full mesh. Volume control at maximum volume and output from signal generator as low as possible for all adjustments. Use insulated alignment screwdriver for adjusting.

SCHEMATIC DIAGRAM



The stage gain measured values listed above are approximate values for an average operative stage, rather than an absolute value. It should be borne in mind that it is possible to introduce so many variables into the measurement operation, such as, type of equipment used for measuring, handling and placement of probes, the accuracy of alignment, etc., that an absolute reading is impractical. AVC is made inoperative and 3-volt battery bias substituted for measurement.

VOLTAGE AND RESISTANCE ANALYSIS CHART



- 1 - DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1000 ohms per volt.
- 2 - Socket connections are shown as bottom views.
- 3 - Measured values are from socket pin to common negative.
- 4 - Line voltage maintained at 117 volts for voltage readings.
- 5 - Nominal tolerance on component values makes possible a variation of $\pm 10\%$ in voltage and resistance readings.
- 6 - Volume control at maximum, no signal applied for voltage measurements.

HOWARD W. SAMS & CO., INC.

2924 EAST WASHINGTON STREET - INDIANAPOLIS 6, INDIANA

"The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc. as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc. by the manufacturers of the particular type of replacement part listed."

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PARTS LIST AND DESCRIPTIONS

TUBES

ITEM No.	USE	REPLACEMENT DATA		EIA BASE TYPE	INSTALLATION NOTES
		FADA PART No.	STANDARD REPLACEMENT		
1	RF Amp.	14A7/12B7	14A7/12B7	8V	
2	Mixer	14Q7	14Q7	8AL	
3	IF Amp.	14A7/12B7	14A7/12B7	8V	
4	DET.-AVC-AF	14B6	14B6	8W	
5	Power Output	35A5	35A5	6AA	
6	Rectifier	35Y4	35Y4	5AL	

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING		REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES	
	CAP.	VOLT	FADA PART No.	MALBORY PART No.	SOLAR PART No.	SPRAGUE PART No.	AEROVOX PART No.		CORNELL-DUBILIER PART No.
7(A)	40	150	22.3	TN129	M-40-150	TA-430		E242215	Filter - Blue " - Red " - Yellow
(B)	30	150			M-2x20-150				
(C)	20	150			UT-201				
8	.05	400	12.12	TP426	S-4-05	TC-15	484-.05	DT485	Line Bypass
9	.03	400	12.9	TP424	S-6-03	TC-13	484-.03	DT483	35A5 Plate Bypass
10	.01	300	12.6	TP421	S-4-01	TC-11	484-.01	DT481	Audio Coupling
11	.005	600	12.4	TP408	S-6-005	TC-25	684-.005	DT6D5	"
12	.05	200	12.11	TP426	S-4-05	TC-15	484-.05	DT485	14A7 Cath. bypass
13	.05	200	12.11	TP428	S-4-05	TC-15	484-.05	DT485	AVC Filter
14	250	500	17.8	MC240	MO.5-325	1FM-325	1468-.00025	5W5T25	14B6 Plate Bypass
16	100	500	17.5	MC235	MO.5-31	1FM-31	1468-.0001	5W5T1	Osc. Grid Cond.
16	100	500	17.5	MC235	MO.5-31	1FM-31	1468-.0001	5W5T1	RF Coupling

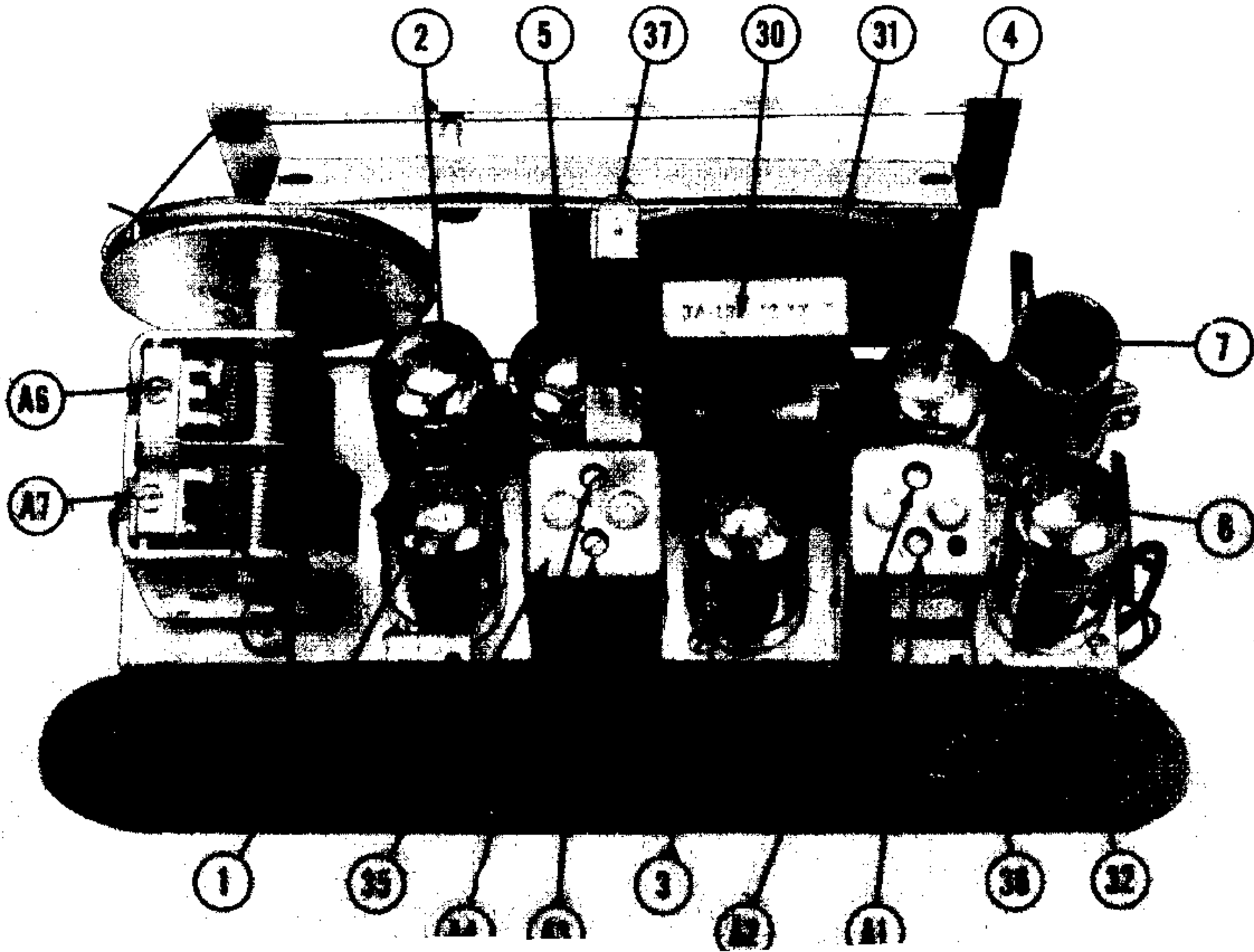
CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES
	RESISTANCE	WATTS	FADA PART No.	MALBORY PART No.	IRC PART No.	CLAROSTAT PART No.	
17(A)	500K Ω	1	52.3	MR48	DB13-133	M-60-2	Used in later production. Attach to 17A per instructions.
(B)	Shaft	1	Not Req.	Not Req.	A	Not Req.	
(C)	Switch		"	"	41	SW-A	
17(A)	500K Ω	1	52.1	MR48	DB13-133	M-60-2	Used in early production. Attach to 17A per instructions.
(B)	Shaft	1	Not Req.	Not Req.	"	Not Req.	
(C)	Switch		"	"	41	SW-A	

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	FADA PART No.	IRC PART No.	
18	6800 Ω	1/2	32.10	BTS-6800	Blue-Gray-Red RF Plate Load
19	100K Ω	1/2	32.17	BTS-100K	Br.-Blk.-Yl. Mixer
20	22K Ω	1/2	32.23	BTS-22K	Red-Red-Or. Osc. Grid
21	68 Ω	1/2	32.1	BW-1/68	Blue-Gray-Blk. IF Cathode
22	1 Meg.	1/2	32.32	BTS-1 Meg.	Br.-Blk.-Grn. AVC Network
23	3.9 Meg.	1/2	32.28	BTS-3.9 Meg.	Or.-Wh.-Grn. 1st AF Grid
24	220K Ω	1/2	32.18	BTS-220K	Red-Red-Yl. Plate Load
25	470K Ω	1/2	32.20	BTS-470K	Yl.-Vi.-Yl. Output Grid
26	130 Ω	1/2	32.3	BW-1/130	Br.-Or.-Br. Output Cathode
27	200 Ω	1	32.27	BW-1-200	Red-Blk.-Br. Filter
28	910 Ω	1	32.28	BW-1-910	Wh.-Br.-Br. Filter
29	30 Ω	1	117.1	BW-1-30	Or.-Blk.-Blk. Line Dropping

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS

TRANSFORMER (OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		FADA PART No.	STANCOR PART No.	THORDARN PART No.	UTAH PART No.	
	PRI.	SEC.	PRI.	SEC.					
30	2150 Ω	3.4 Ω	190 Ω	.69 Ω	42.1	A3878*	T-14882*	8775*	*Bend mounting tabs down and mount by original bracket. *Improvisation of new mounting bracket is necessary.

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			INSTALLATION NOTES
			FADA PART No.	JENSEN PART No.	UTAH PART No.	
31	FIELD	VC IMP.	107.4	BT-113*	4FY*	#Improvisation is necessary for mounting the escutcheon in the same position as originally.
	PM	3.4 Ω				
	CONE DIA.	VC DIA.	NOT REPLACEABLE-USE COMPLETE SPEAKER UNIT.			
	4"	2"				

R F COILS

ITEM No.	USE	DC RES.		REPLACEMENT DATA		INSTALLATION NOTES
		PRI.	SEC.	FADA PART No.	MEISSNER PART No.	
32	Loop Ant.	1 Ω		37.7		
33	Wave Trap	49 Ω		37.5		
34	Osc.	.5 Ω	5 Ω	37.6		
35	Input IF	20 Ω	20 Ω	37.3	16-8658	
36	Output IF	19 Ω	19 Ω	37.8		

DIAL LIGHT

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		INSTALLATION NOTES
					FADA PART No.		
37	Bayonet	6-8	.15	brown	122.1		Mazda 47

CHASSIS - BOTTOM VIEW

