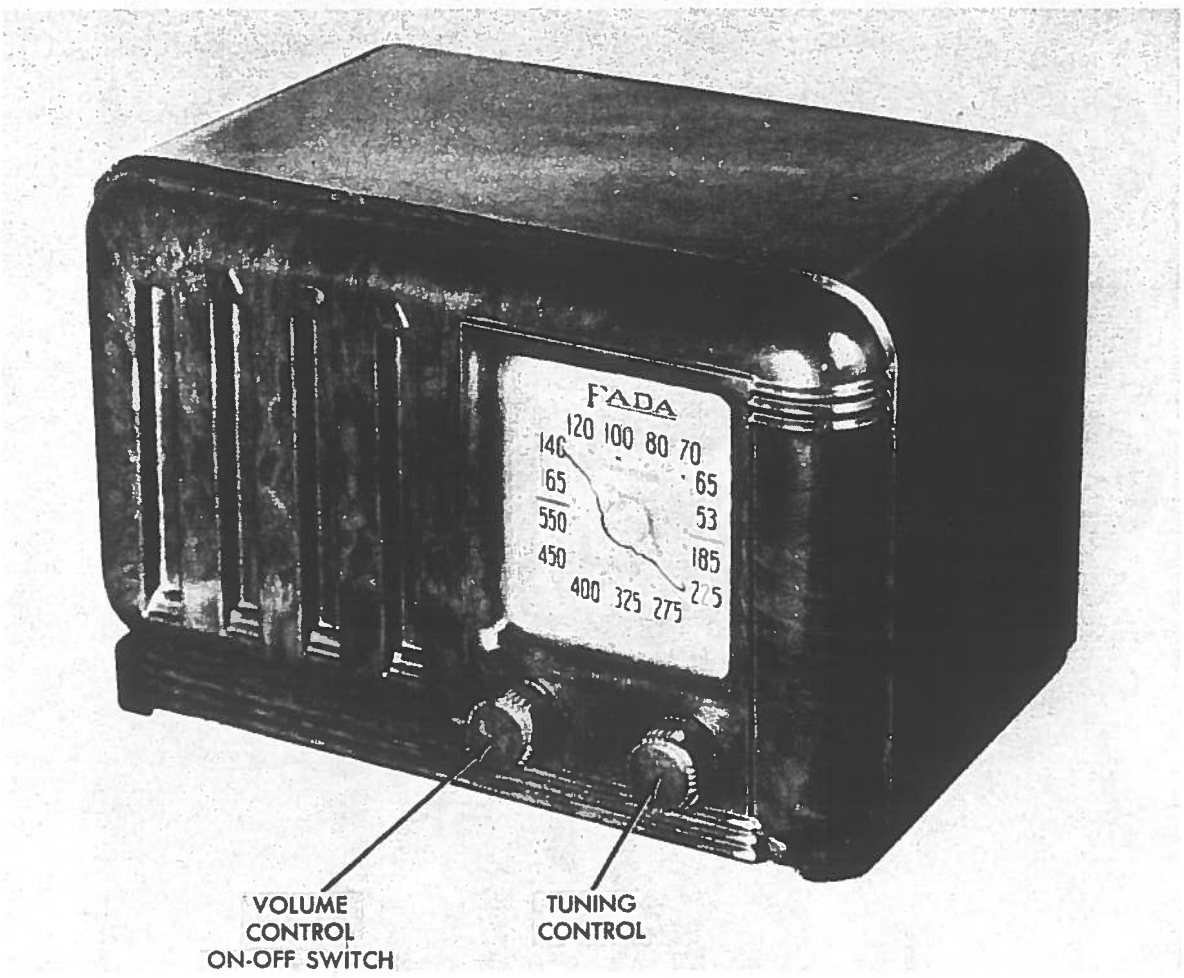


FADA MODEL 609W

TRADE NAME	Fada, Models 609, 610 Series
MANUFACTURER	Fada Radio & Electric Co. Inc. - 30-20 Thomson Ave. - Long Island City, New York
TYPE SET	AC - DC Superheterodyne - Self Contained Loop Antenna
TUBES (FIVE)	Types 12SA7GT/G Mixer, 12SK7GT/G IF Amp., 12SQ7GT/G Det.-AVC-AF, 50L6GT Power Output, 35Z5GT Rectifier
POWER SUPPLY	117 Volts AC-DC Rating .245 Amp., @ 117 Volts AC
TUNING RANGE--BROADCAST	528-1680 KC SHORT WAVE

ALIGNMENT INSTRUCTIONS

DUMMY ANTENNA *	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
.001	High side to signal grid of 12SA7. Low side to chassis	456KC	Quiet point at high end of dial	Across voice coil	A1, A2 A3	Adjust for maximum output. See Note A
	Loop	1680KC	Full C.C.W. (min. cap.)	"	A4	Adjust for maximum output. See Note B
	"	1400KC	Tune to signal	"	A5	Adjust for maximum output See Note B
	Note A - Use isolation transformer if available. If not, isolating capacitor must be connected between receiver chassis and signal generator ground lead. Note B - Connect signal generator to loop of few turns of wire and couple loosely to receiver loop by spacing.					

Volume control at maximum volume and output from signal generator as low as possible for all adjustments. Use insulated alignment screwdriver.

PARTS LIST AND DESCRIPTIONS

TUBES

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	INSTALLATION NOTES
		FADA PART No.	STANDARD REPLACEMENT		
1	Mixer	12SA7GT/G	12SA7GT/G	8AD	
2	IF Amp.	12SK7GT/G	12SK7GT/G	8N	
3	Det.-AVC-AF	12SQ7GT/G	12SQ7GT/G	8Q	
4	Power Output	50L6GT/G	50L6GT/G	7AC	
5	Rectifier	35Z5GT/G	35Z5GT/G	6AD	

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.	MALLORY PART No.	SOLAR PART No.	SPRAGUE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	
6(A)	40	150	22.1	FP357	DY-3X40-150	EL-340	AF844D	UP6CJ44	■ Filter
(B)	30	150							▲ "
(C)	20	150							- "
7	.05	400	12.12	TP426	S-4-05	TC-15	484-.05	DT4S5	Line Bypass
8	.03	400	12.9	TP424	S-6-03	TC-13	484-.03	DT4S3	50L6 Plate Bypass
9	.02	400	12.8	TP423	S-4-02	TC-12	484-.02	DT4S2	Audio Coupling
10	.005	600	12.4	TP408	S-6-005	TC-25	684-.005	DT6D5	" "
11	.05	200	12.11	TP426	S-4-05	TC-15	484-.05	DT4S5	12SK7 Cath. Bypass
12	.05	200	12.11	TP426	S-4-05	TC-15	484-.05	DT4S5	AVC Filter
13	250	500	17.8	MC240	MO.5-325	1FM-325	1468-.00025	5W5T25	12SQ7 Plate Bypass
14	100	500	17.5	MCB235	MOS.5-31	MS-31	1469-.0001	5R5T1	Osc. Grid Cond.

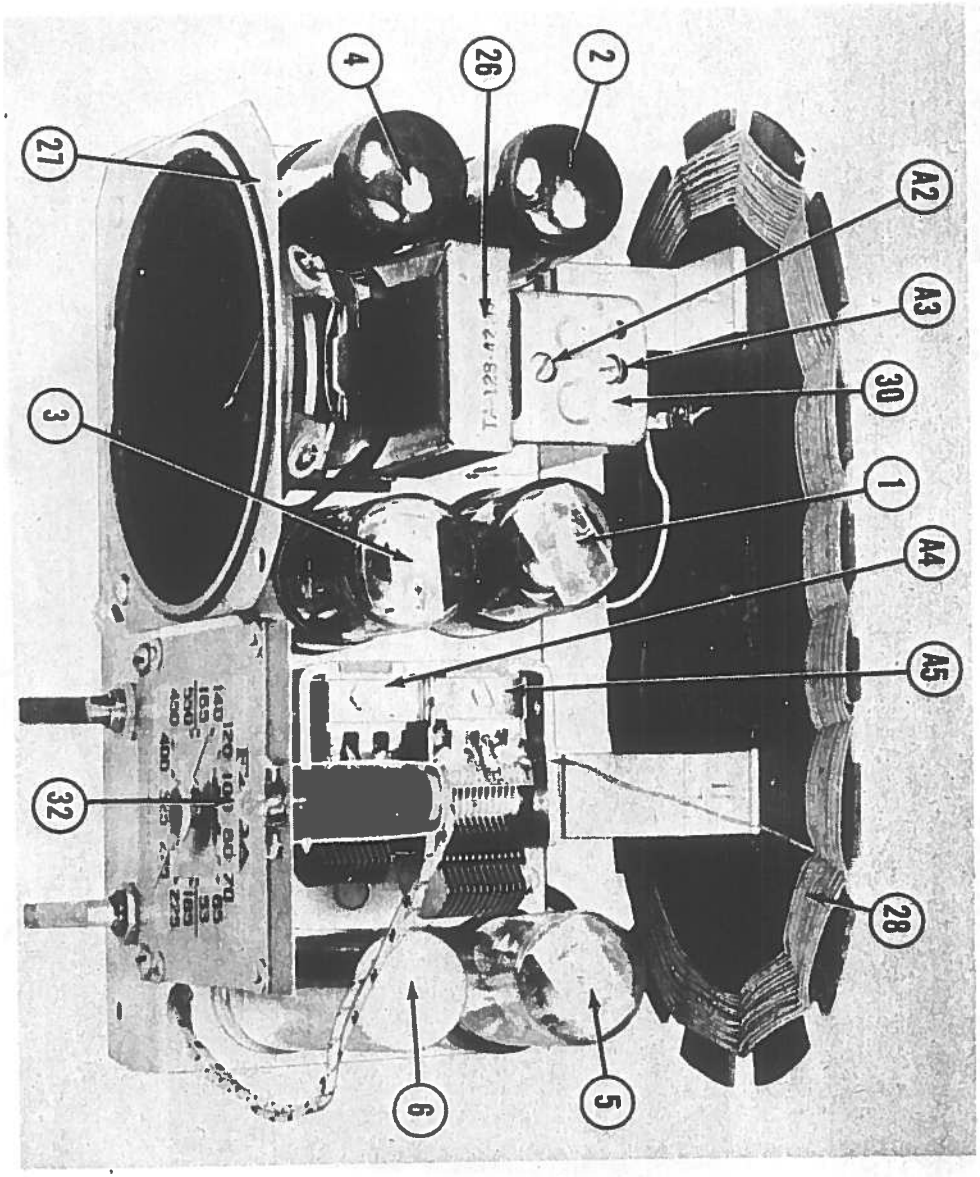
CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES
	RESISTANCE	WATTS	FADA PART No.	MALLORY PART No.	IRC PART No.	CLAROSTAT PART No.	
15(A)	500K	1	52.1	MR48	DS13-133	M-60-Z	Volume
(B)	Switch		Not Req.	M26	41	SW-A	Attach to 15A per instr.

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	FADA PART No.	IRC PART No.	
16	22KΩ	½	32.13	BTS-22K	Red-Red-Or. Osc. Grid
17	100Ω	½	32.2	BW-½-100	Br.-Blk.-Br. IF Cathode
18	1 Meg.Ω	¼	32.23	BTS-1 Meg.	Br.-Blk.-Grn. AVC Network
19	3.9 Meg.	½	32.26	BTS-3.9 Meg	Or.-Wh.-Grn. 1st AF Grid
20	220KΩ	½	32.18	BTS-220K	Red-Red-Yl. Plate load
21	470KΩ	¼	32.20	BTS-470K	Yl.-Vi.-Yl. Output Grid
22	130Ω	½	32.3	BW-½-130	Br.-Or.-Br. Output Cathode
23	200Ω	1	32.27	BW-1-200	Red-Blk.-Br. Filter
24	1200Ω	1	32.29	BW-1-1200	Br.-Red-Red Filter
25	30Ω	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.	THORDARSON PART No.	UTAH PART No.	
	PRI.	SEC.	PRI.	SEC.					
26	2370Ω	3.95Ω	162Ω	.71Ω	42.1	A3876#	T13842#	8775*	# Mounting Bracket must be fabricated. * Bend mounting tabs down and mount by original bracket.

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			INSTALLATION NOTES
			FADA PART No.	JENSEN PART No.	UTAH PART No.	
27	FIELD PM CONE DIA. 4"	VC IMP. 3.95Ω VC DIA. ½"	107.11 401M	ST-540	4PZ	Special cone adjustment feature. Replace with duplicate part.

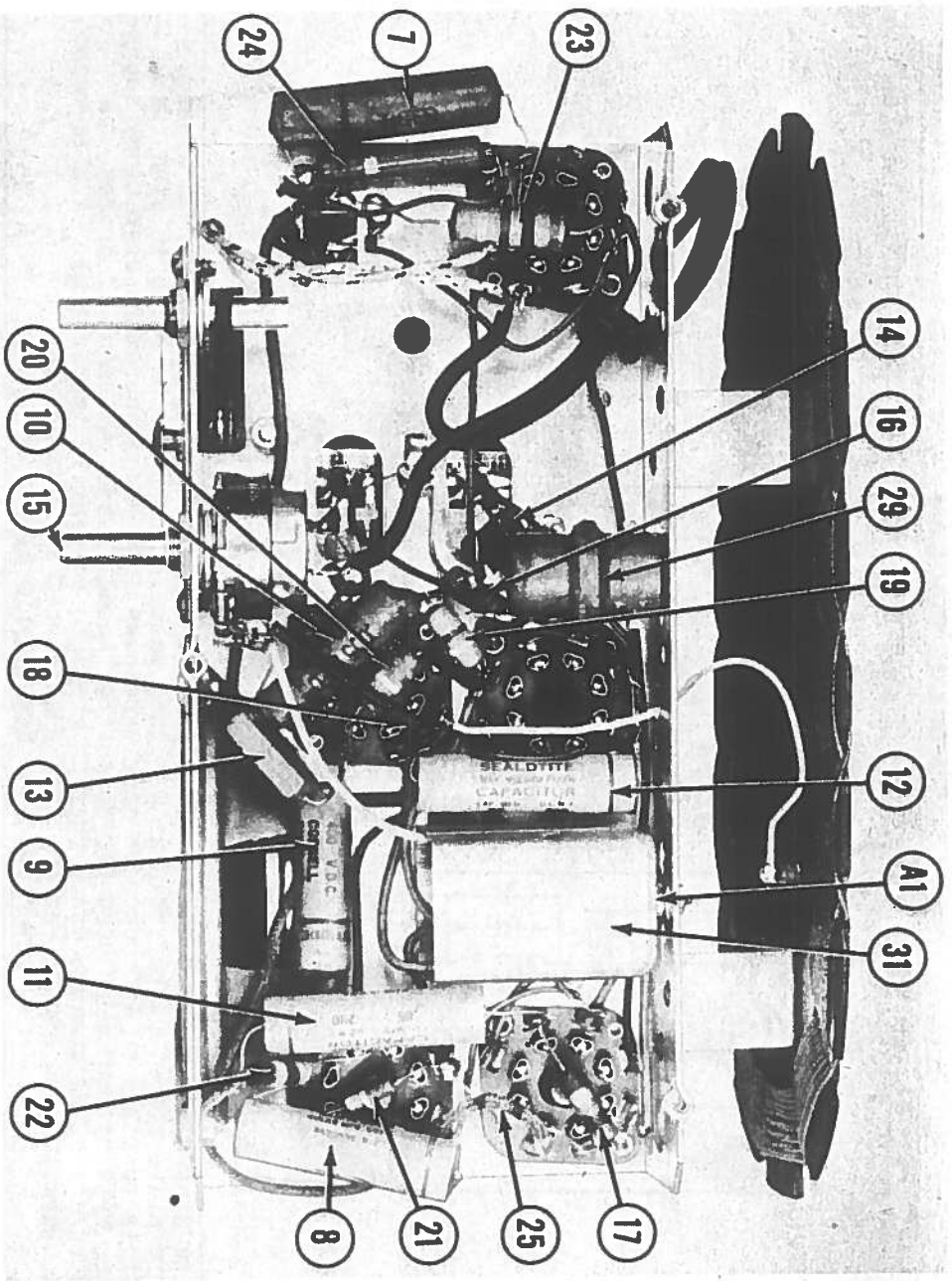
R F COILS

ITEM No.	USE	DC RES.		REPLACEMENT DATA		INSTALLATION NOTES
		PRI.	SEC.	FADA PART No.	MEISSNER PART No.	
28	Loop Ant.	1Ω		37.2		
29	Osc.	.5Ω	5Ω	37.1		
30	Input IF	20Ω	20Ω	37.3	16-6658	
31	Output IF	23Ω	23Ω	37.4		

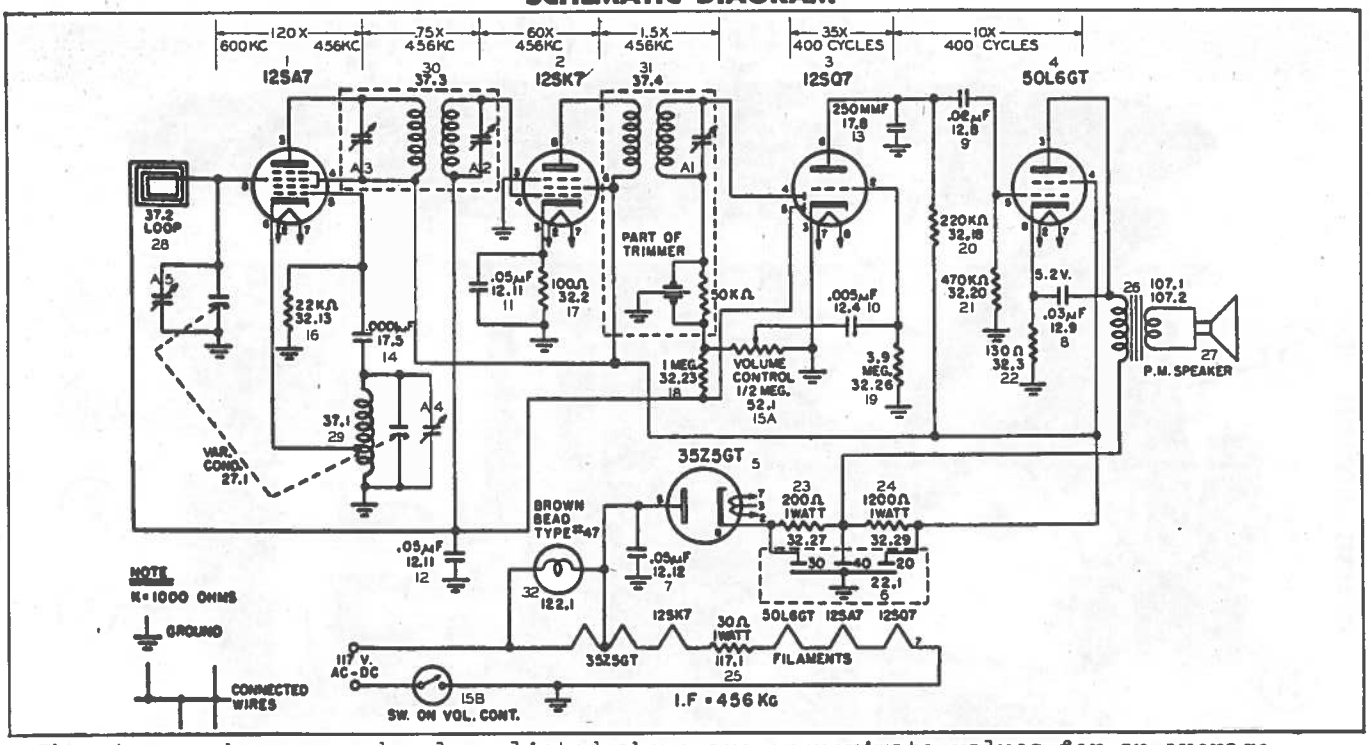
DIAL LIGHT

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		INSTALLATION NOTES
					FADA PART No.		
32	Brown	6-8	0.15	Brown	122-1		#47

CHASSIS—BOTTOM VIEW

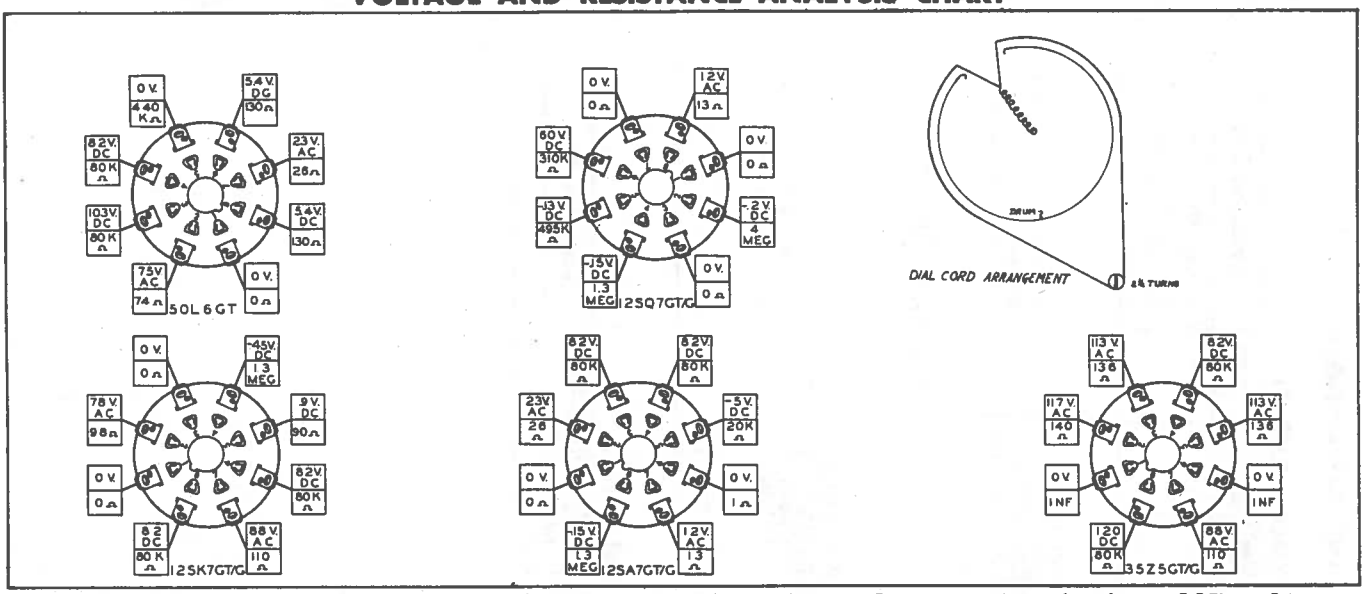


SCHEMATIC DIAGRAM



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 make possible a variation of ± 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