



Ver. v. Historie v/d Radio



TRADE NAME Excel Model T-211
 IMPORTER Excel Corp. of America, 9 Rockefeller Plaza, New York 20, N. Y.
 TYPE SET Battery Operated 4 Tube Portable AM Receiver
 POWER SUPPLY 1.5 Volts DC "A" Supply & 67.5 Volts DC "B" Supply
 RATING 120MA @ 1.5 Volts DC & 13.2 MA @ 67.5 Volts DC
 TUNING RANGE—BROADCAST 540KC—1600KC

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading.

Suggested alignment tools:

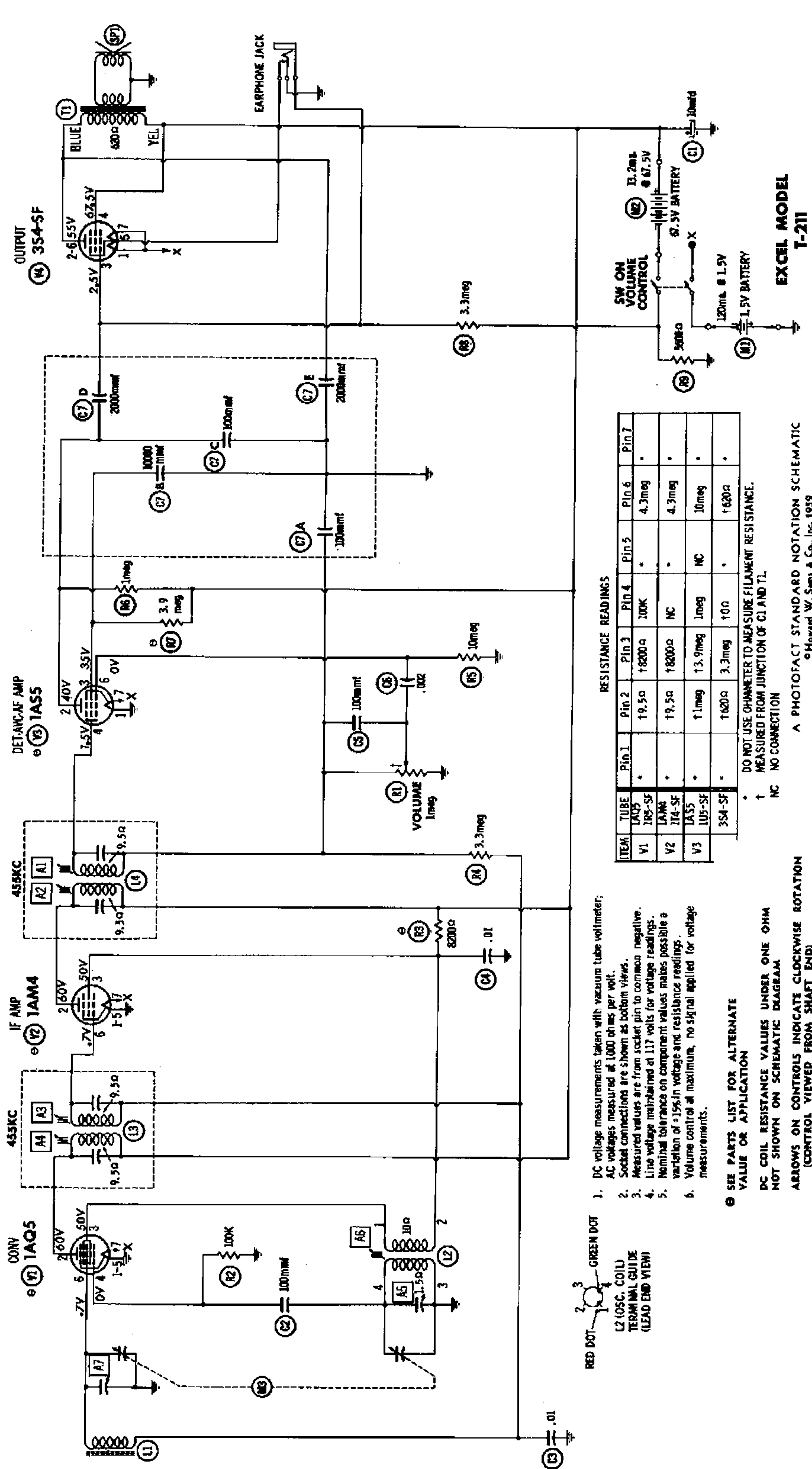
A1 thru A4.....	GENERAL CEMENT #8271, 8273, 8275, 8276, 8721, 8722, 9150, 9293, 5003 WALSCO #2518, 2519
A5 & A6.....	GENERAL CEMENT #5004, 5008, 5009 WALSCO #2520
A7.....	GENERAL CEMENT #8721, 8722 WALSCO #2519

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Loop	455KC (400v Mod)	Tuning gang fully open	Across voice coil	A1, A2, A3, A4	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
2.	"	1600KC	"	"	A5	"
3.	"	600KC	800KC	"	A6	"
4.	"	1400KC	1400KC	"	A7	"

HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

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RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V1	1A05	*	19.5Ω	18200Ω	200K	*	4.3meg	*
V2	1A1M4	*	19.5Ω	18200Ω	NC	*	4.3meg	*
V3	1A55	*	↑ 1meg	13.9meg	1meg	NC	10meg	*
	35A-SF	*	1620Ω	3.3meg	10Ω	*	1620Ω	*

* DO NOT USE OHMMETER TO MEASURE FILAMENT RESISTANCE.
 † MEASURED FROM JUNCTION OF C1 AND T1
 NC NO CONNECTION

1. DC voltage measurements taken with vacuum tube voltmeter;
2. AC voltages measured at 1000 ohms per volt.
3. Socket connections are shown as bottom views.
4. Measured values are from socket pin to common negative.
5. Line voltage maintained at 117 volts for voltage readings.
6. Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance readings.
7. Volume control at maximum, no signal applied for voltage measurements.

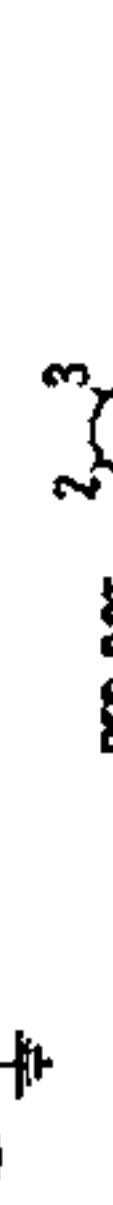
SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

EXCEL MODEL T-211

A PHOTOFACT STANDARD NOTATION SCHEMATIC
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PARTS LIST AND DESCRIPTIONS

TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE
V1 V2	Converter IF Amplifier	1AQ5/ 1R5-SF 1AM4/ 1T4-SF

ITEM No.	USE	TYPE
V3 V4	Det. -AVC-AF Amp. Output	1A85/ 1U5-SF 384-SF

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	EXCEL PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	10	80		SRE150V10	NLW10-100	TT150X8		TE-1407	

FIXED CAPACITORS

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

ITEM No.	RATING			REPLACEMENT DATA						NOTES
	CAP.	VOLT	TOL	EXCEL PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C2	100				SI 100	D6-101	L10T1	UC-591	5GA-T1	
C3	.01	200			P285N-01	DD-103	BYA1081	GEM-411	65P10852	
C4	.01	200			P288N-01	DD-103	BYA1081	GEM-411	65P10852	
C5	100				SI 100	D6-101	L10T1	UC-531	5GA-T1	
C6	.002	200			P285N-002	DD-103	BYB6D2	GEM-8222	65P20253	
C7A	100				BPD-0001	DD-101	EY0T1	B-310	5GA-T1	
B	10000				BPD-01	DD-103	BYA1081	B-110	5HK-S1	
C	100				BPD-0001	DD-101	L10T1	B-310	5GA-T1	
D	2000				BPD-002	DD-202	BYA10D2	B-220	5HK-D2	
E	2000				BPD-002	DD-202	BYA10D2	B-220	5HK-D2	

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES	
	RESISTANCE	WATTS	EXCEL PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.		MALLORY PART No.
R1	1meg	1/2						Volume & Switch

RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

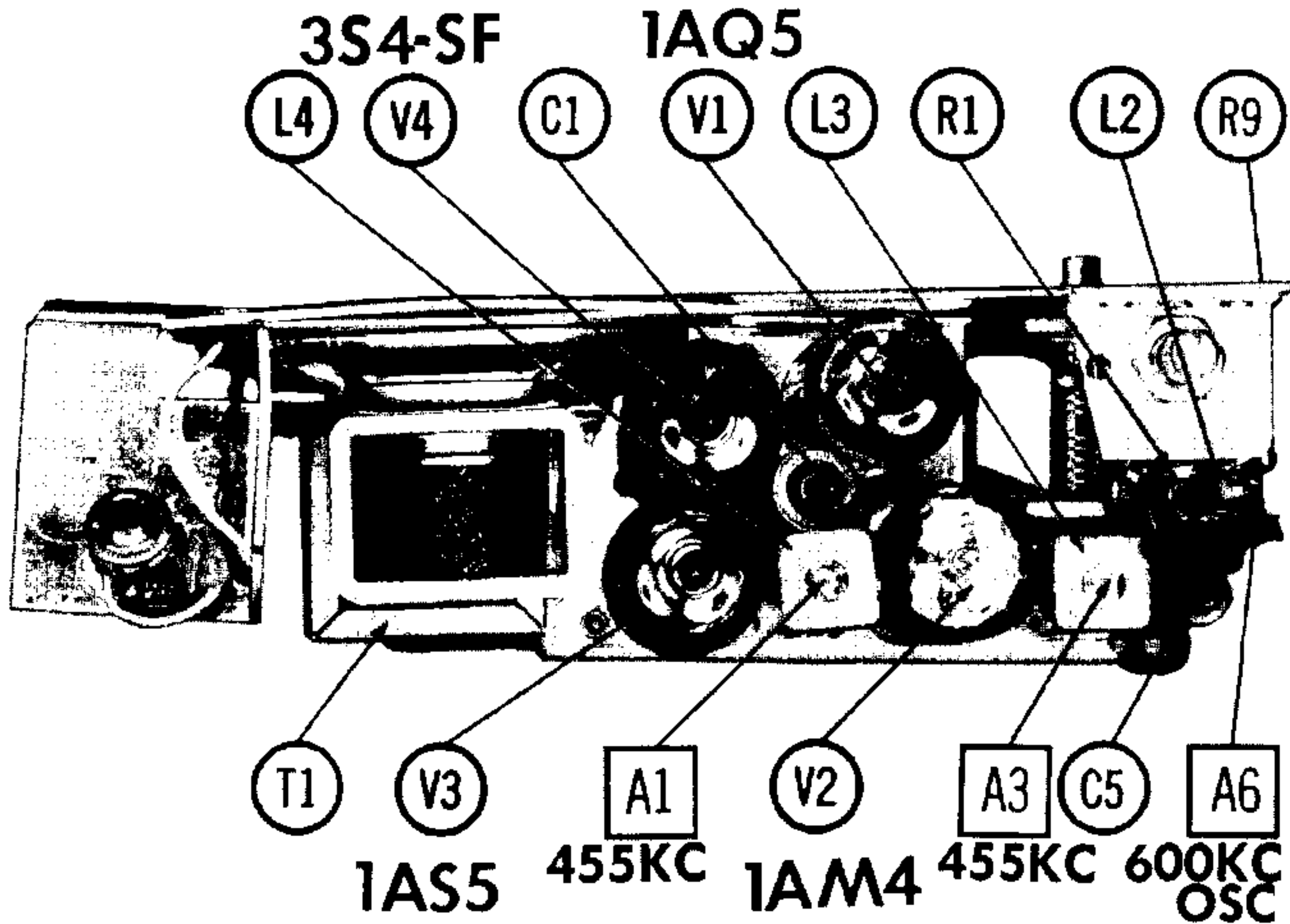
ITEM No.	RATING		EXCEL PART No.	NOTES
	OHMS	WATT		
R2	100K			Note 1
R3	8200Ω			
R4	3.3meg			
R5	10meg			

ITEM No.	RATING		EXCEL PART No.	NOTES
	OHMS	WATT		
R6	1meg			Note 2
R7	3.9meg			
R8	3.3meg			
R9	5800Ω			

Note 1. Some versions may use 10K in this application.

Note 2. Some versions may use 4.7meg in this application.

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA						NOTES
		EXCEL PART No.	Gramer PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Ram PART No.	
L1	Loopstick							
L2	Osc. Coil							
L3	Input IF							
L4	Output IF							

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA						NOTES	
			EXCEL PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.		Triad PART No.
	PRI.	SEC.								
T1	10K	13Ω								

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				EXCEL PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	2½"	PM	15Ω		25A07Z13	

BATTERIES

ITEM No.	VOLTAGE	EXCEL PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1.5V		2R		A100		M-13R		
M2	87.5V			UX45		416		M-217	

MISCELLANEOUS

ITEM No.	PART NAME	EXCEL PART No.	NOTES
M3	Tuning Cap.		2 Gang

CABINETS & CABINET PARTS

(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in Ten Colors 8524 (Stranded) Available in Ten Colors
Power Cord	Use BELDEN No. 1765-B (6 Ft. Length) 1725-K (7½ Ft. Length)

CHASSIS BOTTOM VIEW

