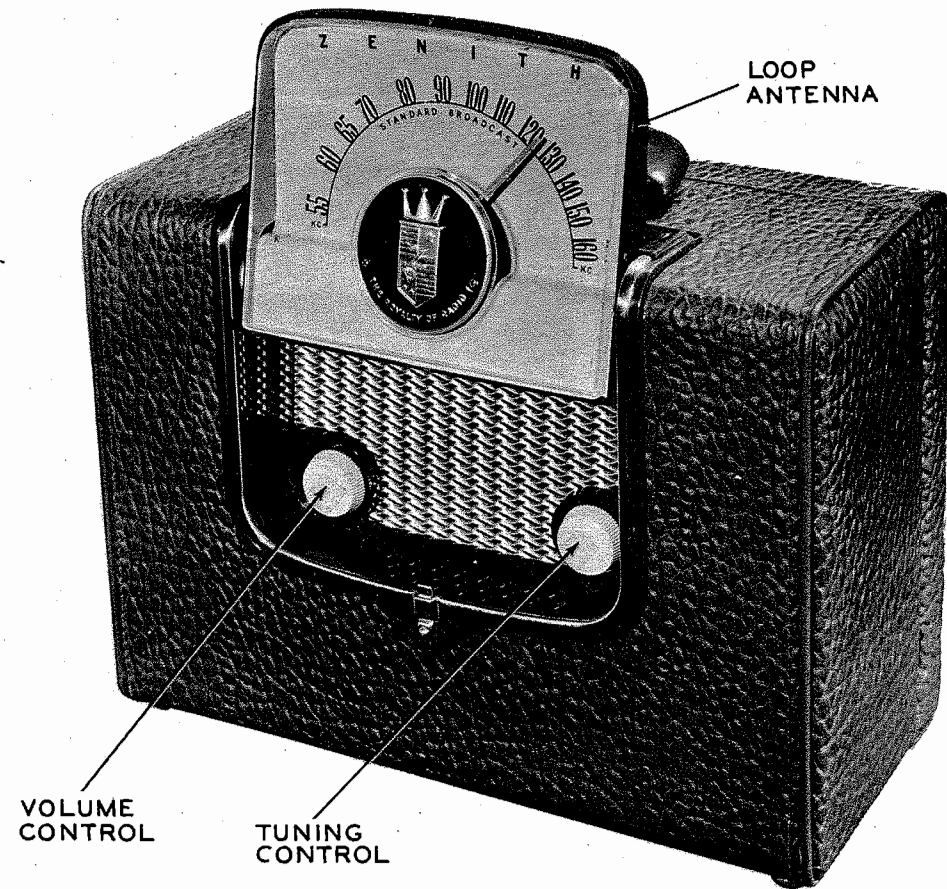




ZENITH
MODEL G503 (Ch. 5G41) (BATTERY-LINE OPERATED)

ZENITH
MODEL G503 (Ch. 5G41) (BATTERY-LINE OPERATED)

ZENITH MODEL G503						
TRADE NAME	Zenith, Model G503 (Ch. 5G41)					
MANUFACTURER	Zenith Radio Corp., 6001 Dickens Ave., Chicago 39, Illinois					
TYPE SET	Three Power Operated Portable Superheterodyne Receiver with Loop Antenna					
TUBES (FIVE)	Types 1U4 RF Amp., 1L6 Converter, 1U4 IF Amp., 1S5 DET-AVC-AF, 3V4 Power Output					
POWER SUPPLY	110-120 Volts AC-DC or 9 Volts "A" Supply and 90 Volts "B" Supply in Pack Form					
RATING	.13 Amp. at 117 Volts AC or 55MA at 9 Volts DC and 12MA at 90 Volts DC					
TUNING RANGE—BROADCAST	535-1620KC					
ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT						
To set pointer turn tuning cap fully closed and set pointer parallel with base of dial. Use isolation transformer if available. If not connect a .1MFD capacitor in series with low side of signal generator and B-. Loop should be maintained in same relative position to chassis as when receiver is in cabinet. Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
.1MFD	High side to pin 6 (Grid) of 1L6 (V2). Low side to B-.	455KC (400 v Mod.)	Tuning agang fully open	Across voice coil	A1, A2, A3, A4	Adjust for maximum output. If isolation transformer is not used, reduce dummy antenna to .001MFD to reduce hum modulation.
	Loop	1600KC	1600KC	"	A5	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
	Loop	1400KC	1400KC	"	A6, A7	"

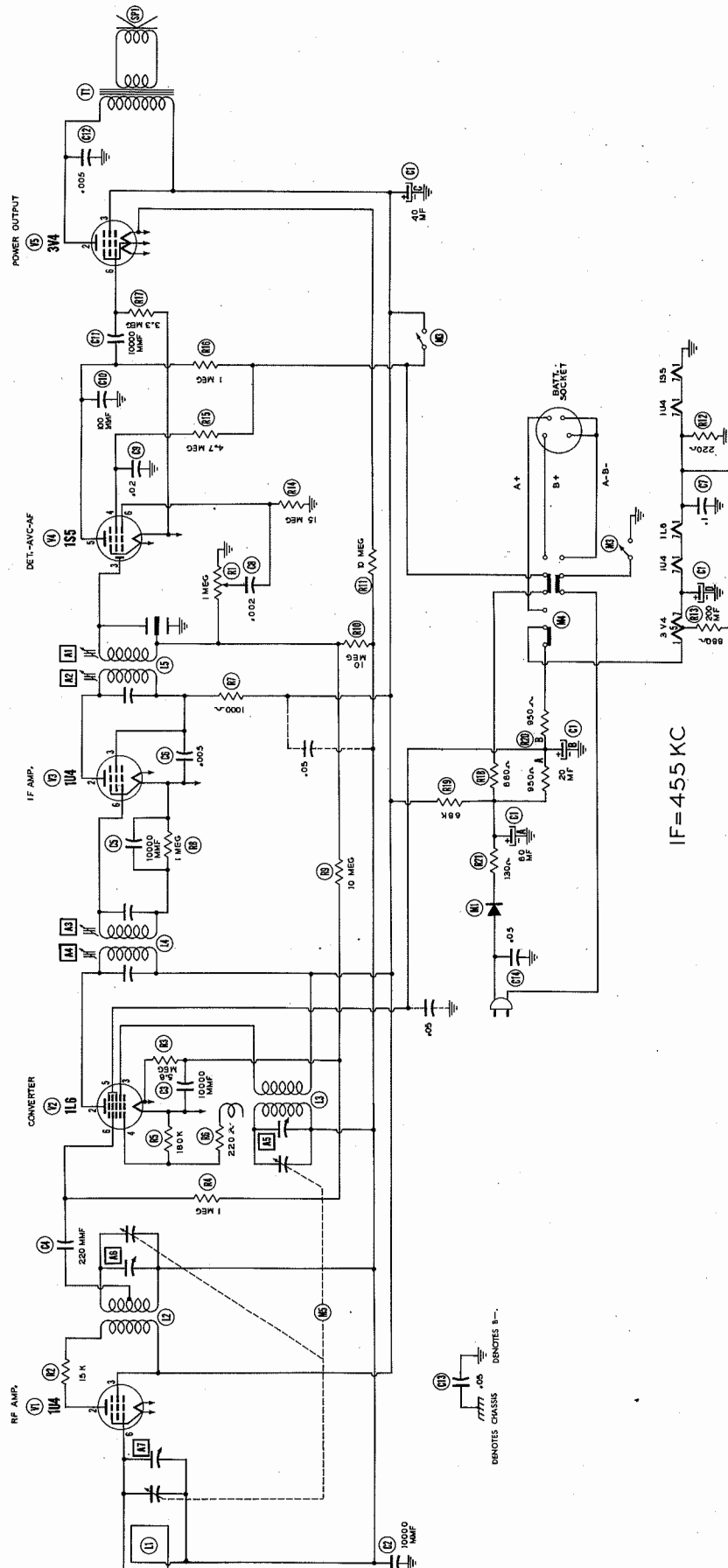
HOWARD W. SAMs & CO., INC. • Indianapolis Indiana

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DATE 7-50

SET 99

FOLDER 19



IF=455 KC

Pin	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V1	1U4	1	2	3	4	5	6	7
V2	1L6	1	2	3	4	5	6	7
V3	1U4	1	2	3	4	5	6	7
V4	1S5	1	2	3	4	5	6	7
V5	3V4	1	2	3	4	5	6	7

Pin	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V1	1U4	1	2	3	4	5	6	7
V2	1L6	1	2	3	4	5	6	7
V3	1U4	1	2	3	4	5	6	7
V4	1S5	1	2	3	4	5	6	7
V5	3V4	1	2	3	4	5	6	7

1 TAKEN WITH VACUUM TUBE VOLTMETER.

THE COOPERATION OF THE MANUFACTURER OF THIS RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

A PHOTOFACT STANDARD NOTATION SCHEMATIC
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PARTS LIST AND DESCRIPTIONS
TUBES (SYLVANIA or Equivalent)

ZENITH
MODEL G503

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	INSTALLATION NOTES
		ZENITH PART No.	STANDARD REPLACEMENT		
V1	RF Amp.	1U4	1U4	6AR	
V2	Converter	1L6	1L6	7CD	
V3	IF Amp.	1U4	1U4	6AR	
V4	DET. -AVC-AF	1S5	1S5	6AU	
V5	Power Output	3V4	3V4	6BX	

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	ZENITH PART No.	AEROVOX PART No.	CENTRALAB PART No.	ERIE PART No.	SPRAGUE PART No.	
C1A	60	150	22-1741	AF1284D40R			D5180	▲ Filter
B	20	150						▲ Filter
C	40	150						■ Filter
D	200	10						Filament Bypass
C2	10000		22-3	BPD-10	D6-103	811-01	36C1	AVC Filter
C3	10000		22-3	BPD-10	D6-103	811-01	36C1	AVC Filter
C4	220	500	22-182	1468-00025	D6-221	GP2K-220	1FM-325	RF Coupling
C5	10000		22-3	BPD-10	D6-103	811-01	36C1	IF Grid Filter
C6	.005	200	22-319	P688-005	D6-502	811-005	TM-25	IF Decoupling
C7	.1	200	22-827	P288-1			TM-1	Filament Bypass
C8	.002	600	22-492	P688-002	D6-202	GP2M-002	TM-22	Audio Coupling
C9	.02	200	22-1386	P488-02			TM-12	AF Amp. Screen Bypass
C10	100		22-1669	GP100M	D6-101	GP1K-100	1FM-31	AF Amp. Plate Bypass
C11	10000		22-3	BPD-10	D6-103	811-01	36C1	Audio Coupling
C12	.005	600	22-229	P688-005	D6-502	811-005	TM-25	Output Plate Bypass
C13	.05	200	22-829	P288-05			72P51	Line Isolation
C14	.05	400	22-1017	P488-05			TM-15	Line Filter

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES
	RESISTANCE	WATTS	ZENITH PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	
R1	1 Meg.	1/2	63-2013	Q13-173	15/16-63-Z	BSK-70	Volume control

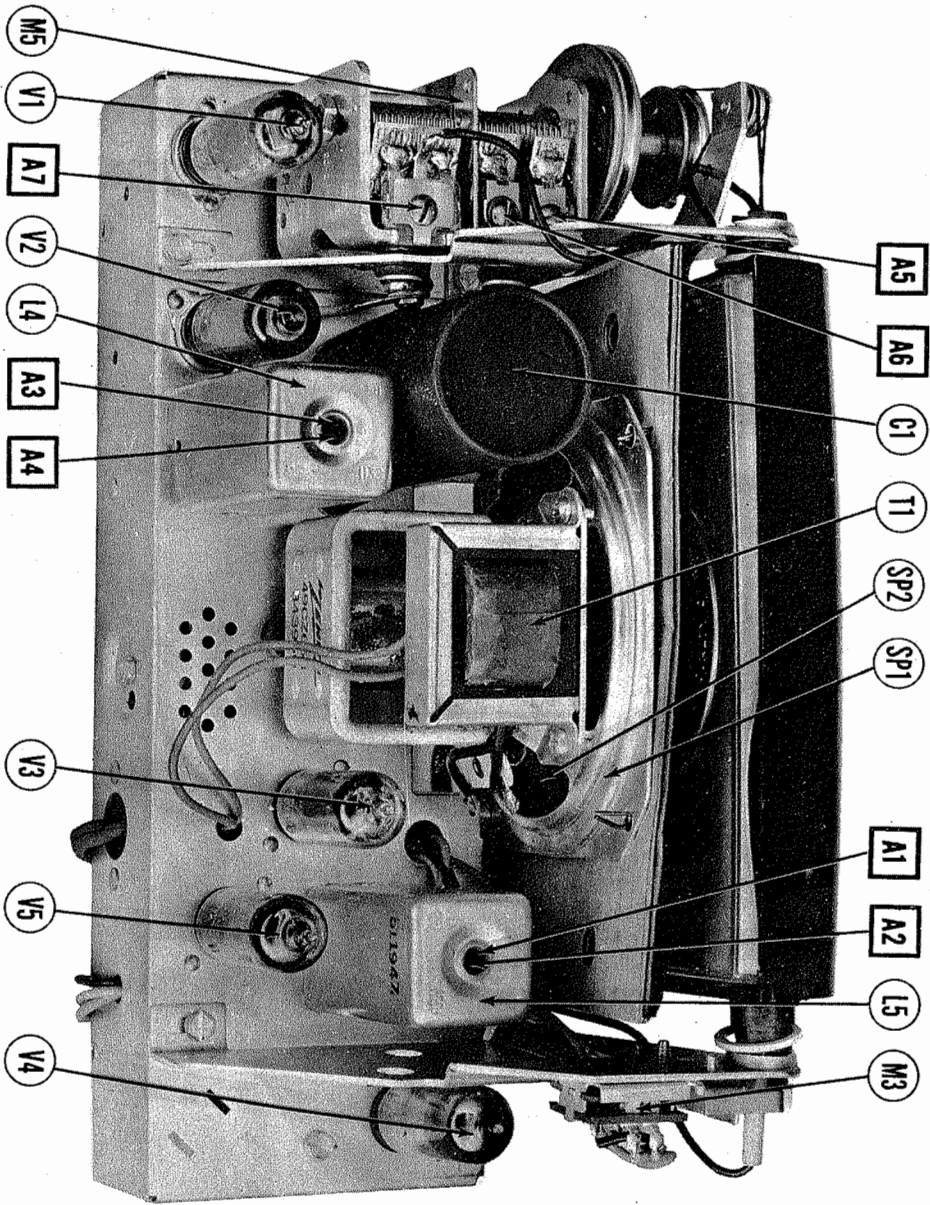
RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	ZENITH PART No.	IRC PART No.	
R2	15KΩ		63-1834	BTS-15K	RF Plate
R3	5.6 Meg.		63-1943	BTS-5.6 Meg.	AVC Network
R4	1 Meg.		63-1912	BTS-1 Meg.	Conv. Grid
R5	180KΩ		63-1880	BTS-180K	Osc. Grid
R6	220Ω		63-1757		Parasitic Supp.
R7	1000Ω		63-1786	BTS-1000	IF Decoupling
R8	1 Meg.		63-1912	BTS-1 Meg.	IF Grid
R9	10 Meg.		63-1954	BTS-10 Meg.	AVC Network
R10	10 Meg.		63-1954	BTS-10 Meg.	AVC Network
R11	10 Meg.		63-1954	BTS-10 Meg.	AVC Network
R12	220Ω		63-1757	BW-1/2-220	Filament String
R13	680Ω		63-1778	BTS-680	Filament String
R14	15 Meg.		63-1961	BTS-15 Meg.	AF Amp. Grid
R15	4.7 Meg.		63-1940	BTS-4.7 Meg.	AF Amp. Screen
R16	1 Meg.		63-1912	BTS-1 Meg.	AF Amp. Plate
R17	3.3 Meg.		63-1933	BTS-3.3 Meg.	Output Grid
R18	680Ω		63-1778	BTS-680	Filter
R19	68KΩ		63-1862	BTS-68K	Filter
R20A	950Ω	5			Filter-Wire Wound
B	950Ω	5			Filament Dropping-Wire Wound
R21	130Ω	5	63-2018		Surge Limiter-Wire Wound

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		ZENITH PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
	PRI.	SEC.	PRI.	SEC.					
T1	10.5KΩ	3.7Ω	730Ω	.7Ω	206-658	A-3879	A-2932	RO-16	

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS (Continued)
SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA		INSTALLATION NOTES
	FIELD	V. C. IMP.	ZENITH PART No.	JENSEN PART No.	
SP1	PM	3.7Ω	49-658	ST-113 *	4A07 *
SP2	CONE DIA.	V. C. DIA.	208-658	MOD. P4-X	
	4"	9/16"			

R F COILS

ITEM No.	USE	DC RES.		REPLACEMENT DATA	
		PRI.	SEC.	ZENITH PART No.	MEISSNER PART No.
L1	Loop Ant.	1.6Ω		S-15434	
L2	RF Coil	7.2Ω	6.2Ω	S-15811	
L3	Osc. Coil	3.2Ω	10Ω	S-15812	14-1074
L4	1st IF	20Ω	20Ω	95-1132	16-6678
L5	2nd IF	21Ω	21Ω	95-1133	

SELENIUM RECTIFIER

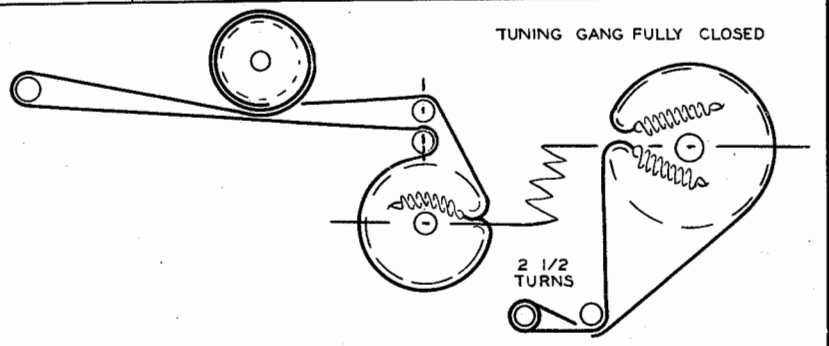
ITEM No.	RATING		REPLACEMENT DATA		NOTES
	CURRENT	ZENITH PART No.	SYLVANIA PART No.		
M1	.065A	212-10	NB-5		

BATTERIES

ITEM No.	VOLTAGE	ZENITH PART No.	REPLACEMENT DATA						INSTALLATION NOTES
			EVEREADY			BURGESS			
			"A"	"B"	"A-B"	"A"	"B"	"A-B"	
M2	9V "A" 90V "B"	Z909						F6A60P	

MISCELLANEOUS

ITEM No.	PART NAME	ZENITH PART No.	NOTES
M3	Switch	85-451	On-Off
M4	Switch	85-450	AC/DC-Battery
M5	3 Gang Var. Cap.	22-2070	(37-504MMF, 14-227MMF, 14-157MMF)
	Dial Glass	192-132	
	Dial Scale	26-420	
	Dial Pointer	59-225	
	Cabinet	14-1230	G503
	Cabinet	14-1231	G503Y



DIAL CORD DRIVE

CHASSIS—BOTTOM VIEW

