

Most - Often - Needed

1940

RADIO
DIAGRAMS
and Servicing Information

Compiled by

M. N. BEITMAN



SUPREME PUBLICATIONS
CHICAGO

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

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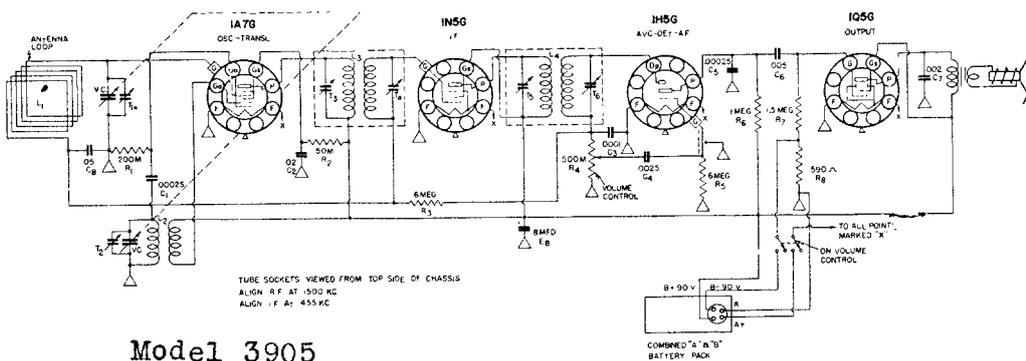
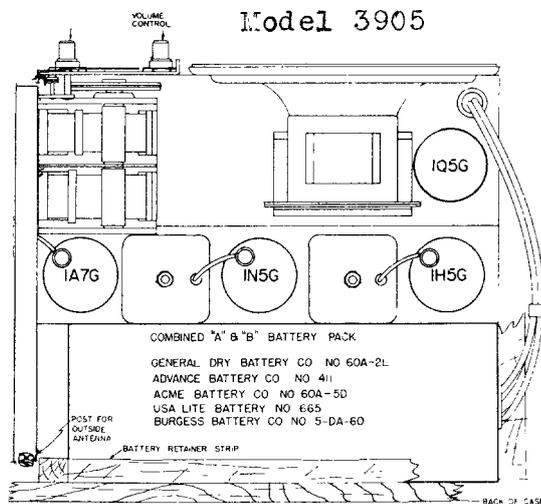
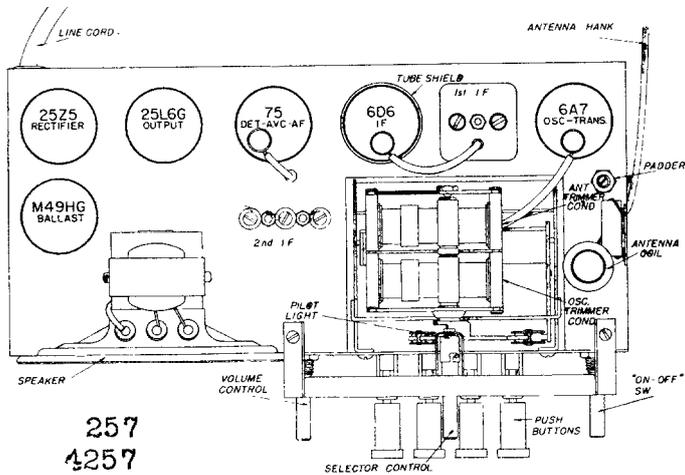
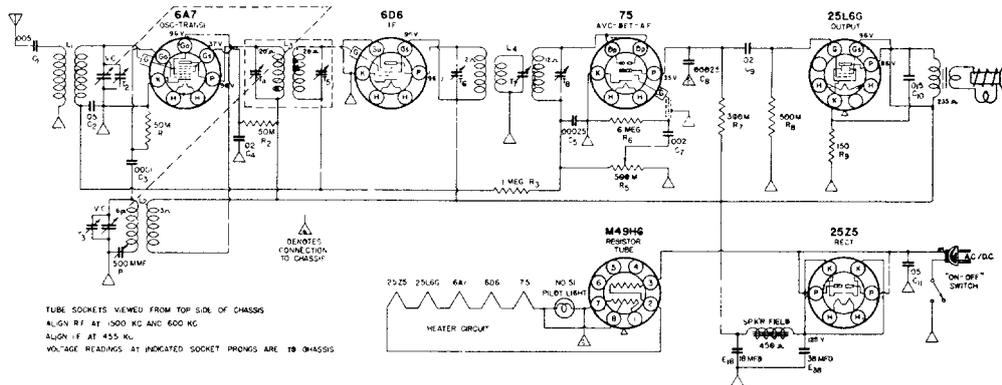
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Air-King Products Co.

Models 257, 4257

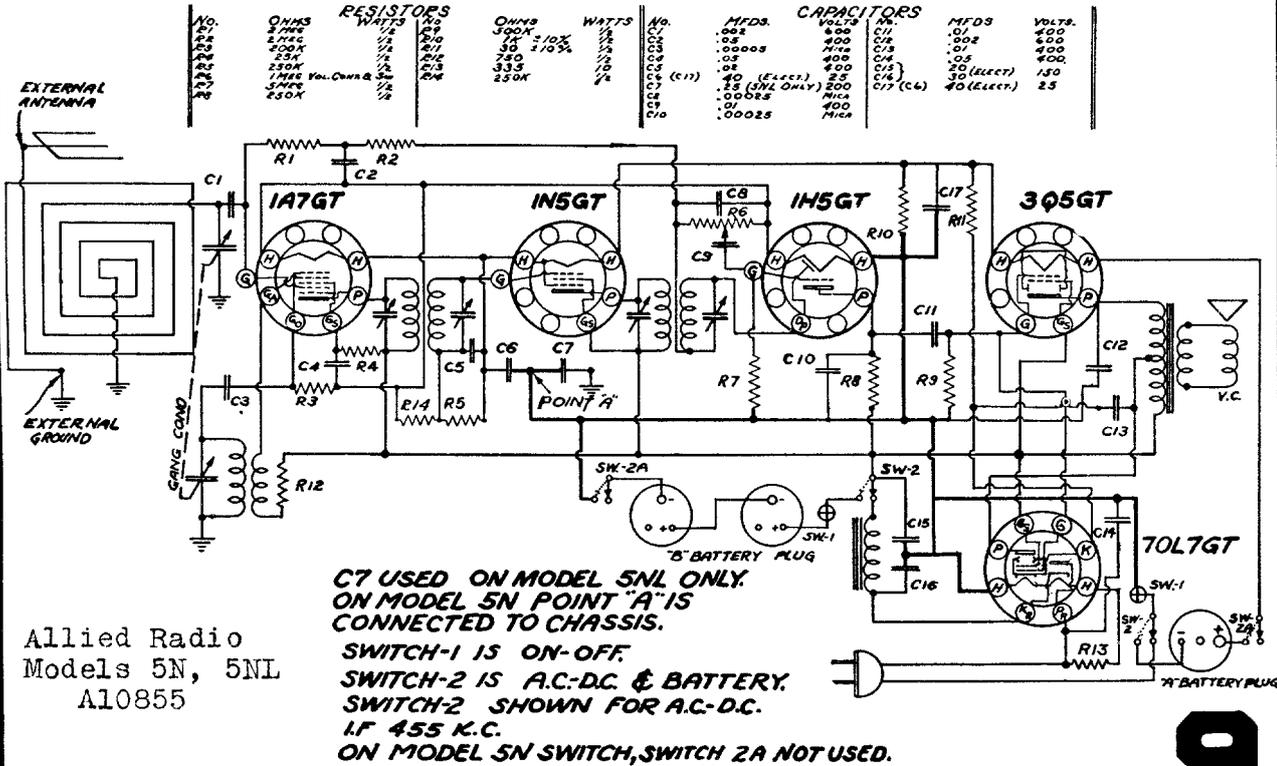
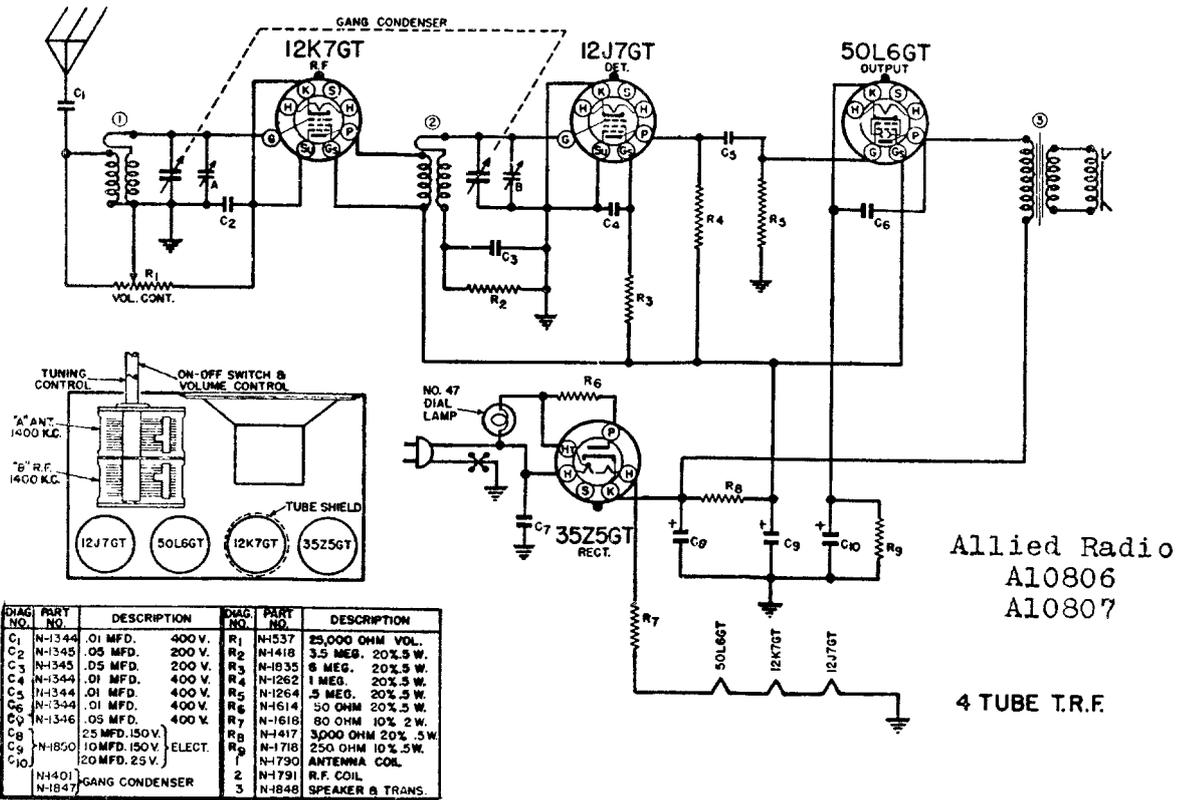


Model 3905

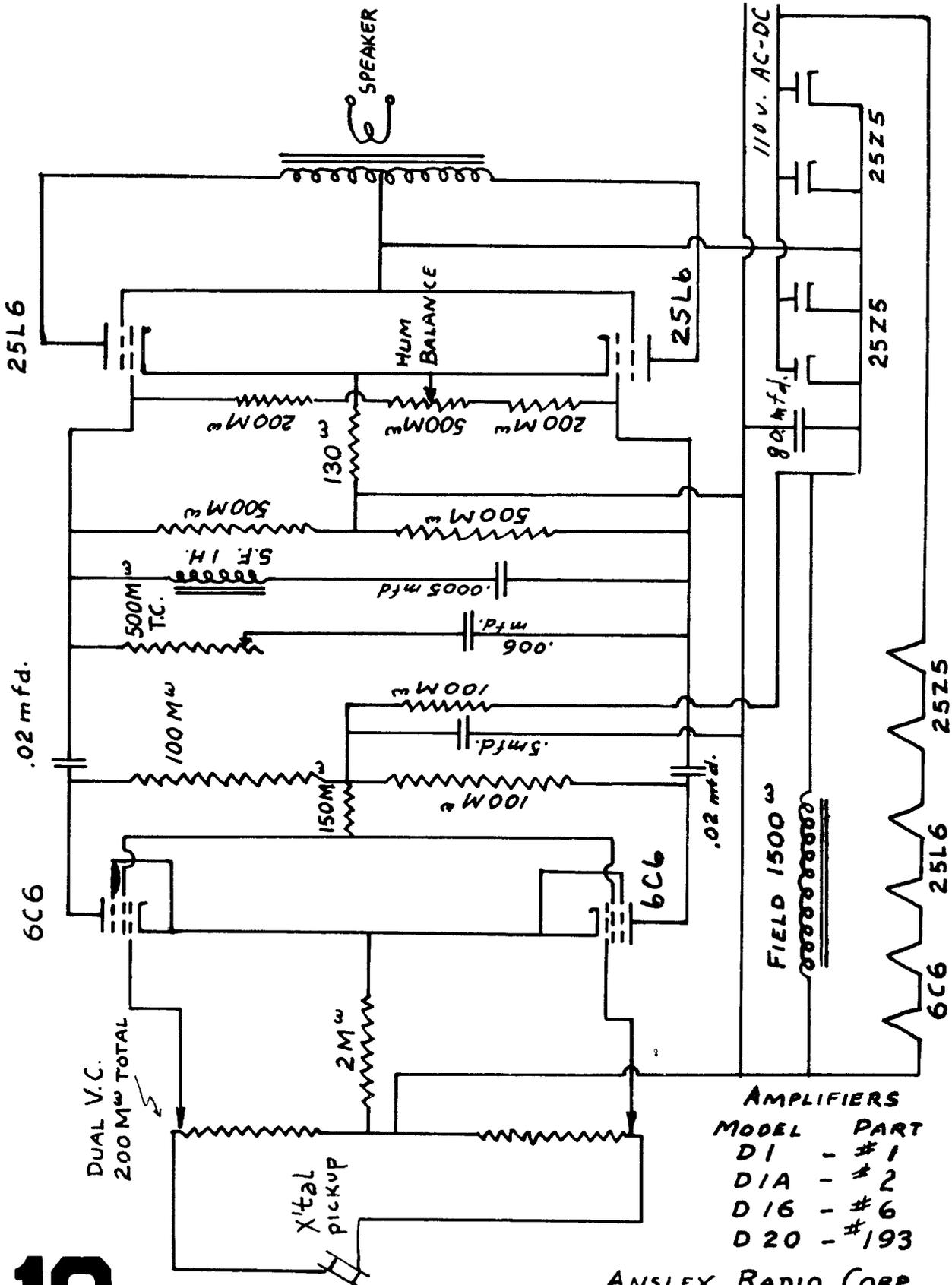
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AMPLIFIERS

MODEL	PART
D1	- #1
D1A	- #2
D16	- #6
D20	- #193

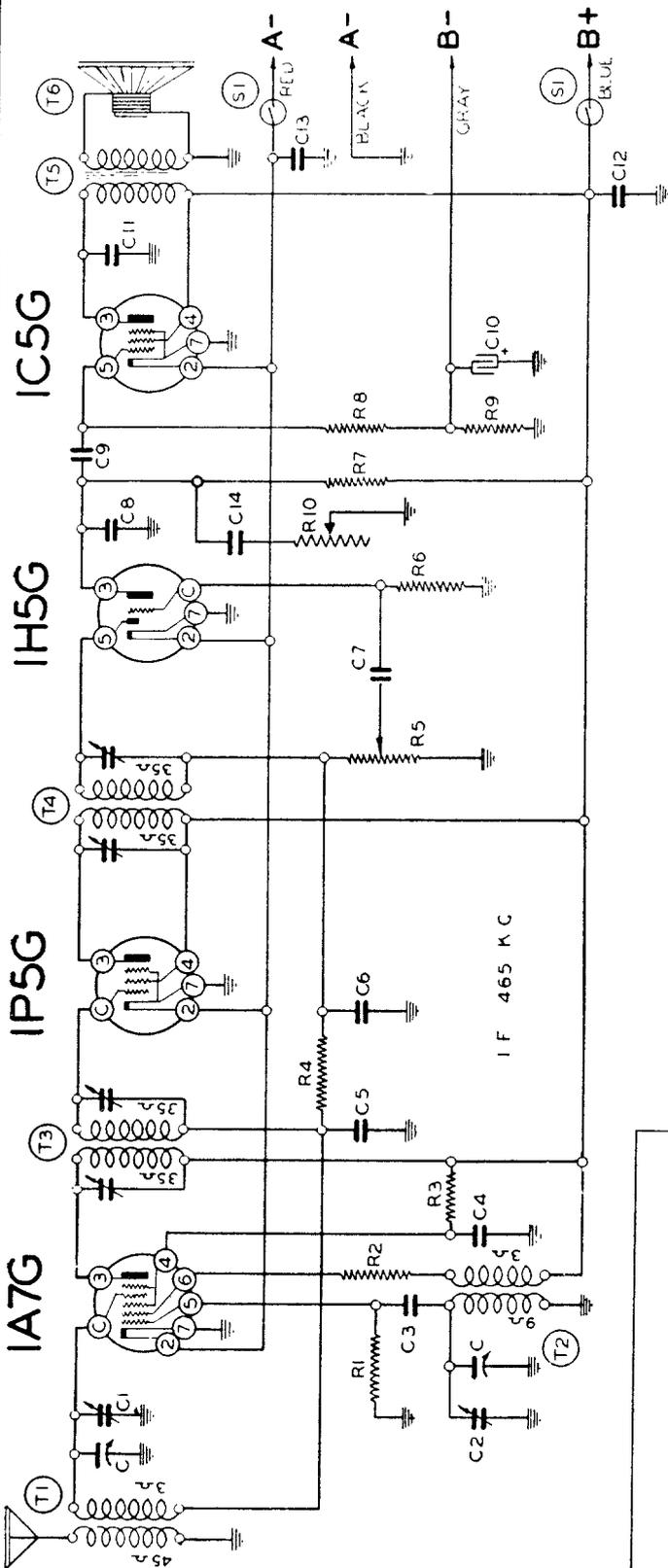
ANSLEY RADIO CORP.

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Belmont Radio

Model 460

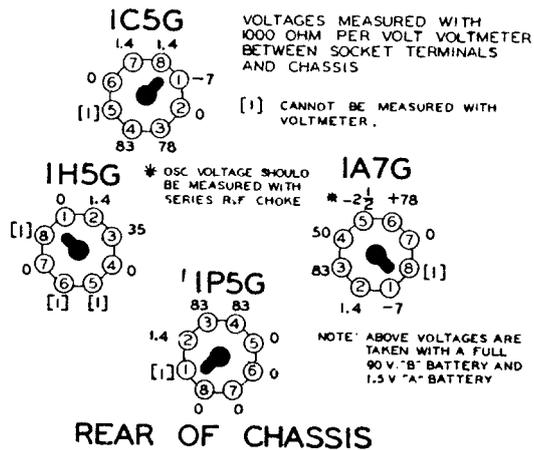


Circuit Ref. No.	Part No.	Description
RESISTORS		
R1	130266	200M ohm— $\frac{1}{2}$ w.
R2	13018	4M ohm— $\frac{1}{2}$ w.
R3	1307	40M ohm— $\frac{1}{2}$ w.
R4	1304	3 megohm— $\frac{1}{2}$ w.
R5	101175	1 megohm volume control
R6	130257	5 megohm— $\frac{1}{2}$ w.
R7	1303	500M ohm— $\frac{1}{2}$ w.
R8	13019	1 megohm— $\frac{1}{2}$ w.
R9	130200	700 ohm— $\frac{1}{2}$ w.
R10	101119	Tone Control (1 Megohm)

CONDENSERS		
C	102110	2 gang variable condenser
C1		Antenna Trimmer on gang
C2		Oscillator trimmer on gang
C3	12912	.00025 mica
C4	1009	.05 x 200 v.
C5	1009	.05 x 200 v.
C6	1295	.0001 mica
C7	10012	.003 x 600 v.
C8	1295	.0001 mica
C9	10011	.01 x 400 v.
C10	11975	10 mfd. x 25 w. v.
C11	10012	.003 x 600 v.
C12	10064	.25 x 200 v.
C13	10020	.1 x 200 v.
C14	10025	.002 x 600 v.

PARTS		
T1	111132	Antenna Coil
T2	110122	Oscillator Coil
T3	108151B	Input I. F. - 465 kc.
T4	108153	Output I. F. - 465 kc.
T5	10591	Output Transformer
T6	114166	5 in. P. M. Speaker
S1		Off-on switch on Volume control

BOTTOM VIEW OF CHASSIS



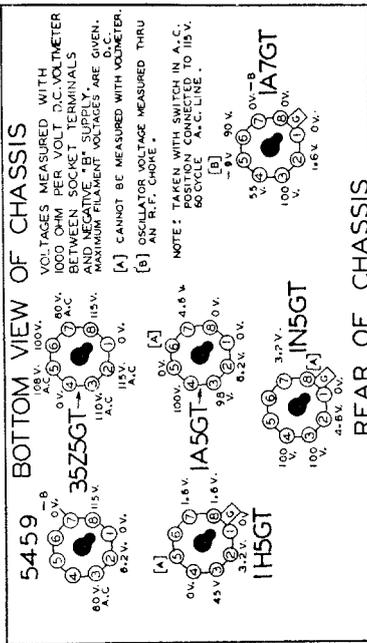
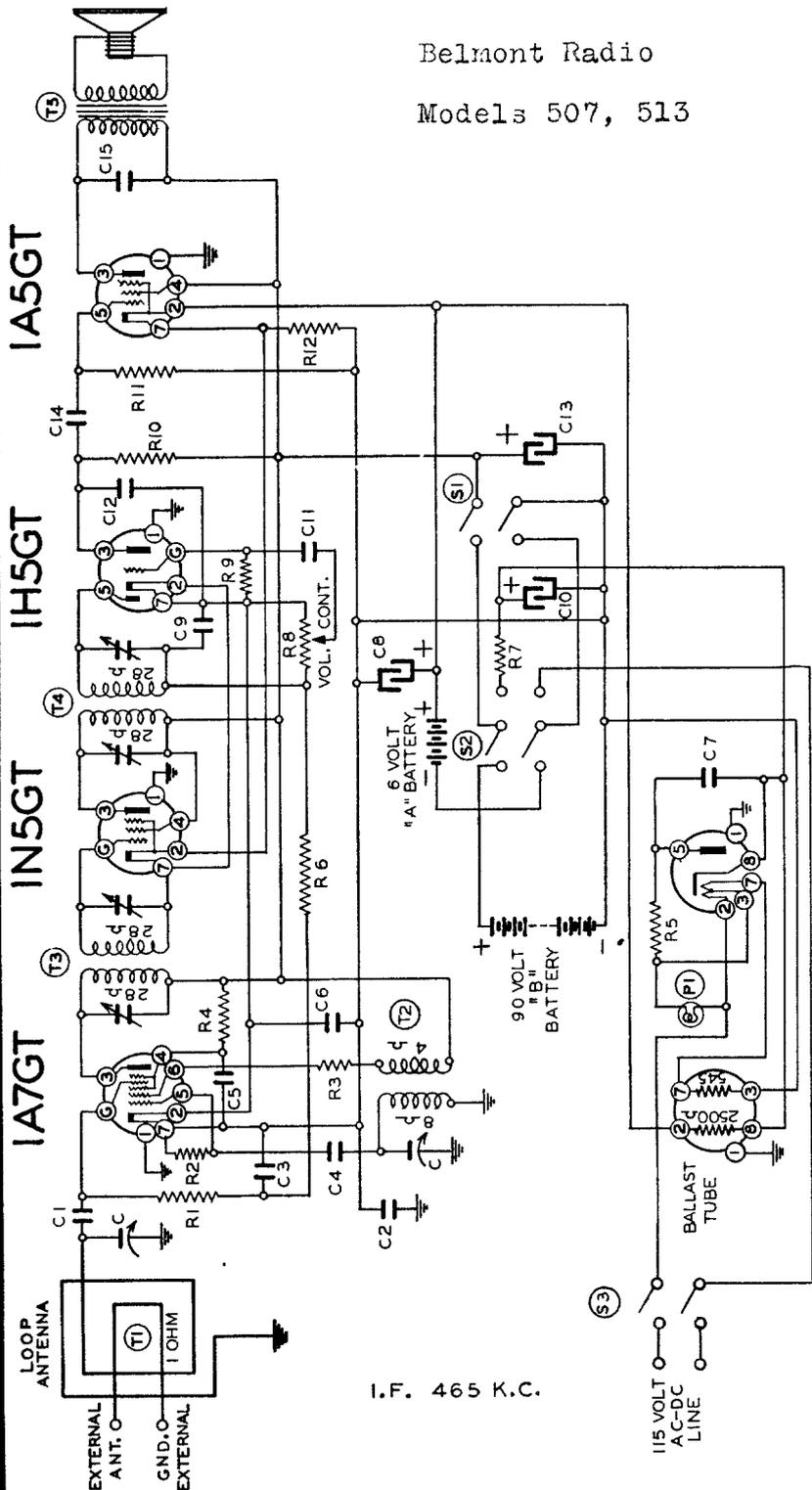
REAR OF CHASSIS

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Belmont Radio
Models 507, 513



Circuit Diagram Ref. Part No. No.

5459 35Z5GT

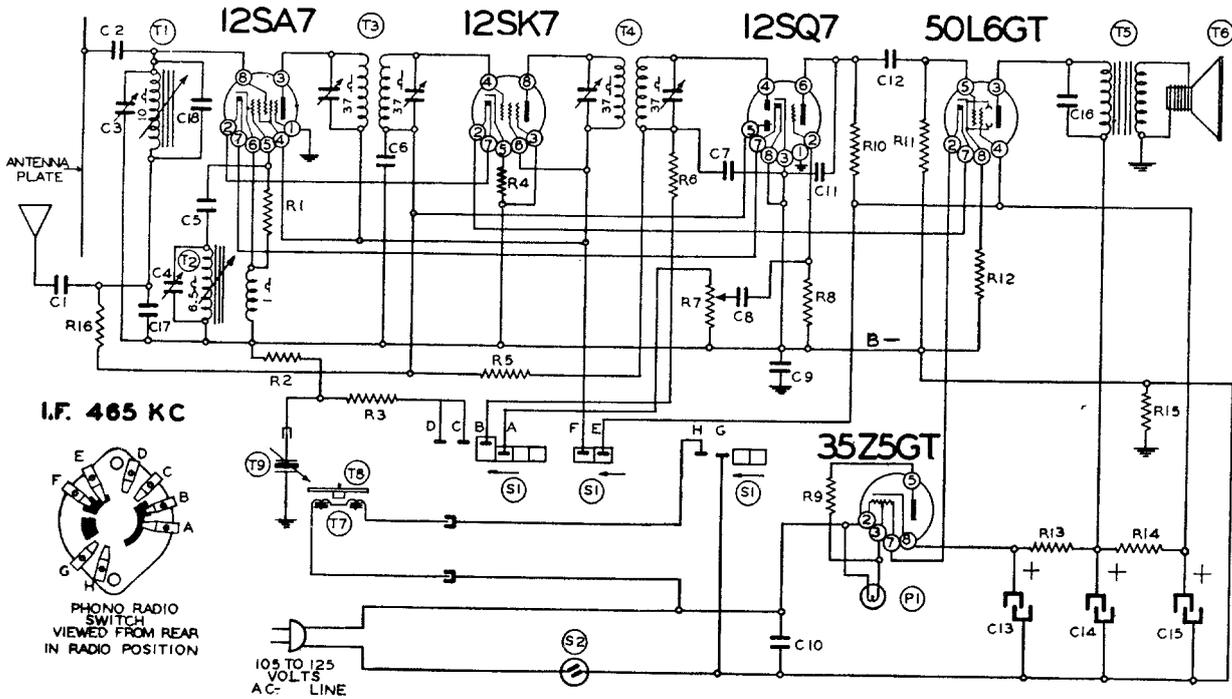
RESISTORS	
R1	13038 2 megohm— $\frac{1}{4}$ w.
R2	130266 200M ohm— $\frac{1}{4}$ w.
R3	13018 4M ohm— $\frac{1}{4}$ w.
R4	130208 40M ohm— $\frac{1}{4}$ w.
R5	130215 25 ohm— $\frac{1}{4}$ w.
R6	130170 3 megohm— $\frac{1}{4}$ w.
R7	130129 2500 ohm— $\frac{1}{4}$ w.
R8	101210 1 megohm volume control
R9	130257 5 megohm— $\frac{1}{4}$ w.
R10	1303 500M ohm— $\frac{1}{4}$ w.
R11	13038 2 megohm— $\frac{1}{4}$ w.
R12	13092 1M ohm— $\frac{1}{4}$ w.

CONDENSERS	
C1	102125 2 gang variable condenser
C2	12912 .00025
C3	100110 .2 mfd. x 400 v.
C4	1009 .05 x 200 v.
C5	12912 .00025
C6	1009 .05 x 200 v.
C7	10020 .1 x 200 v.
C8	10011 .01 x 400 v.
C9	119104 Lytic 200 mid. x 6 w. v.
C10	1295 .0001 mfd.
C11	119104 Lytic 40 mfd. x 150 w. v.
C12	10025 .002 x 600 v.
C13	1292 .0005 mfd.
C14	119104 Lytic 20 mfd. x 150 w. v.
C15	10011 .01 x 400 v.
C15	10025 .002 x 600 v.

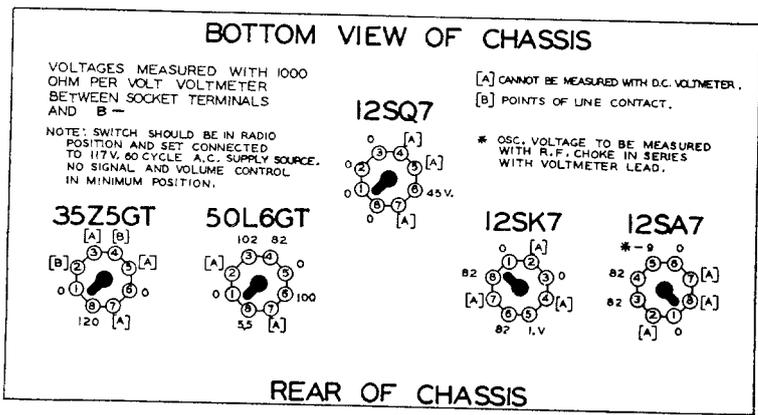
C8, C10 and C13 in same unit

PARTS	
T1	111171 Loop Antenna
T2	110144 Oscillator Coil
T3	108171 Input I.F. Coil—465 kc.
T4	108172 Output I.F. Coil—465 kc.
T5	114189 Speaker with output transf.
S1	101210 Switch on volume control
S2	125106 Power Switch
S3	125107 Cut-off switch in line cord
P1	107249 Pilot light T47

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



Belmont Radio Model 533



Circuit Diagram Ref. No.	Part No.	Description
RESISTORS		
R1	130176	20M ohm— $\frac{1}{2}$ w.
R2	130118	600M ohm— $\frac{1}{2}$ w.
R3	130118	600M ohm— $\frac{1}{2}$ w.
R4	13056	100 ohm— $\frac{1}{2}$ w.
R5	130170	3 megohm— $\frac{1}{2}$ w.
R6	13012	50M ohm— $\frac{1}{2}$ w.
R7	10217	$\frac{1}{2}$ megohm—volume control
R8	130257	5 megohm— $\frac{1}{2}$ w.
R9	130215	25 ohm— $\frac{1}{2}$ w.
R10	1309	200M ohm— $\frac{1}{2}$ w.
R11	13037	750M ohm— $\frac{1}{2}$ w.
R12	130166	150 ohm— $\frac{1}{2}$ w.
R13	13097	200 ohm— $\frac{1}{2}$ w.
R14	130287	1200 ohm—1 watt
R15	1309	200M ohm— $\frac{1}{2}$ w.
R16	1309	200M— $\frac{1}{2}$ w.
CONDENSERS		
C1	1295	.0001 Mica Condenser
C2	129114	.0003 mfd. mica
C3	124136	Antenna Trimmer
C4	124136	Oscillator Trimmer
C5	1295	.0001 mica
C6	1009	.05 x 200 v
C7	1295	.0001 mica
C8	10025	.002 x 600 v.
C9	100119	.1 x 400 v.
C10	1001	.1 x 400 v.
C11	12912	.00025 mica
C12	10019	.006 x 600 v.
C13	11994	40 mfd. lytic—150 w. v.
C14	11994	20 mfd. lytic—150 w. v.
C15	11994	20 mfd. lytic—150 w. v.
C16	10011	.01 x 400 v.
C17	129162	.0008 Mica Condenser
C18	129163	.000025 Ceramic Condenser
C3 and C4 are same unit		
C13, C14 and C15 are in same unit		
PARTS		
T1	112767	Antenna Coil—Permeability assembly complete
T2	112767	Oscillator Coil
T3	108140F	Input I. F. Coil—465 kc.
T4	108145D	Output I. F. Coil—465 kc.
T5	105108	Output Transformer
T6	114193	5" P.M. Speaker
T7	104206	Phono Motor
T8	12228	Turntable
T9	114194	Phono pick up arm
S1	125113	Phono Switch
S2		Switch on volume control
P1	107249	Pilot light T47
T1 and T2 in same unit		

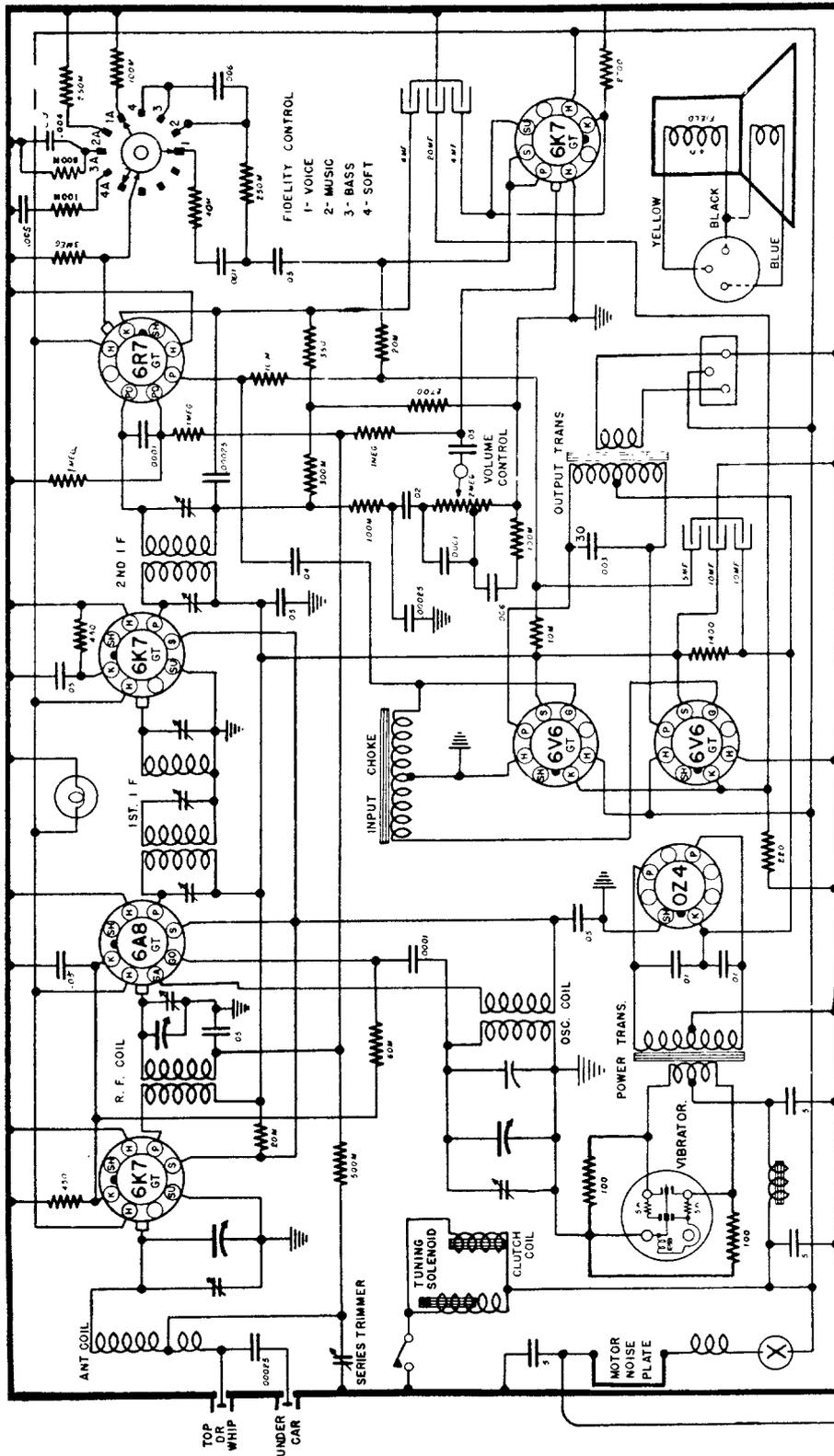
SERVICE NOTES:

Voltages taken from different points of circuit to chassis are measured with volume control at minimum, all tubes in their sockets and speaker connected, with a volt meter having a resistance of 1000 ohms per volt.

All voltages as indicated on the voltage chart are measured with 117 volt 60 cycle A.C. line.

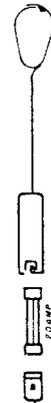
CAUTION:—No aligning adjustments should be attempted without first thoroughly checking over all other possible causes of trouble, such as poor installations, open or grounded antenna systems, low line voltage, defective tubes, condensers and resistors. In order to properly align this radio, the chassis should be removed from the cabinet.

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



985536 CIRCUIT DIAGRAM

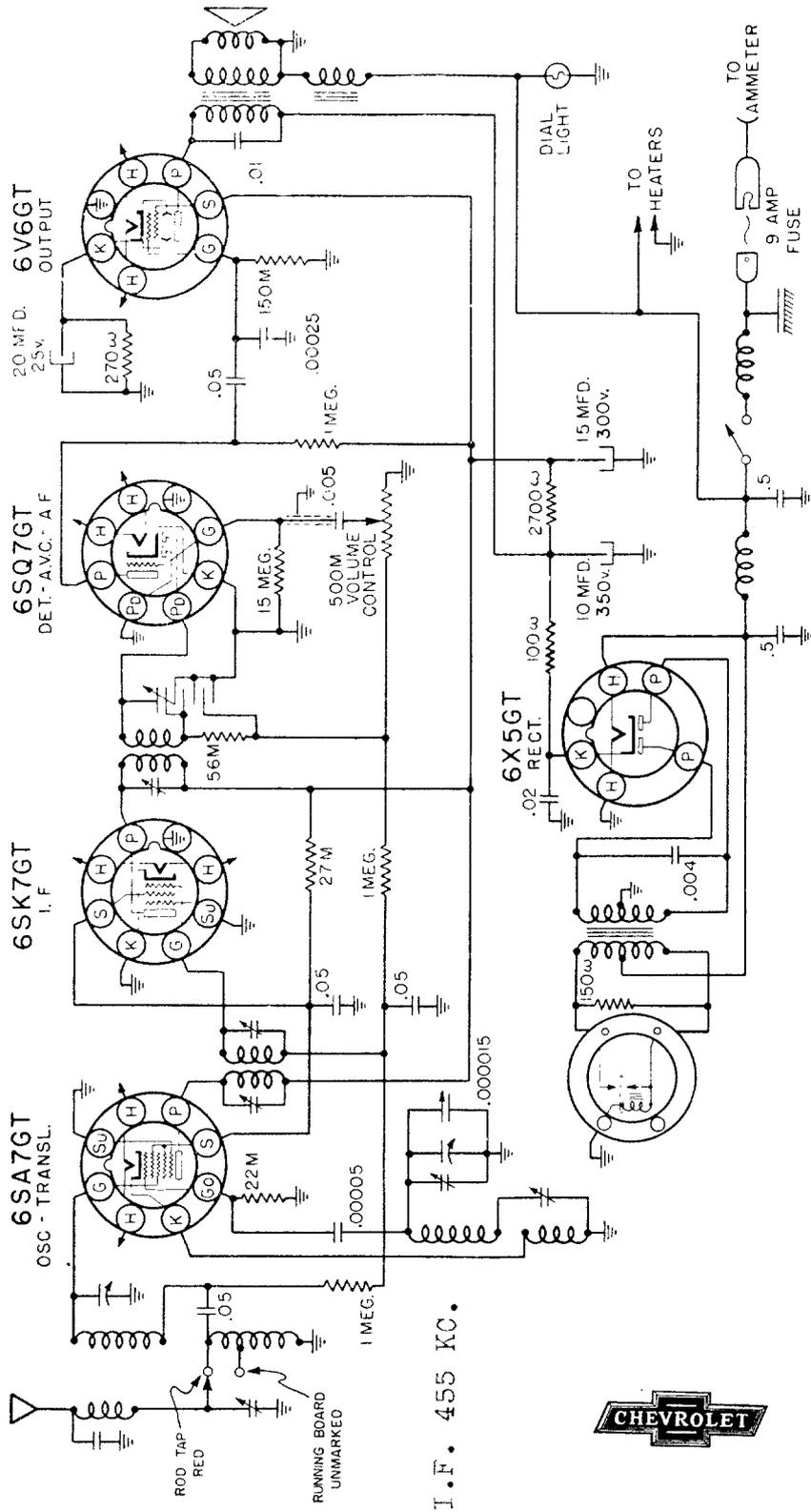
I.F. 262.5 KC.



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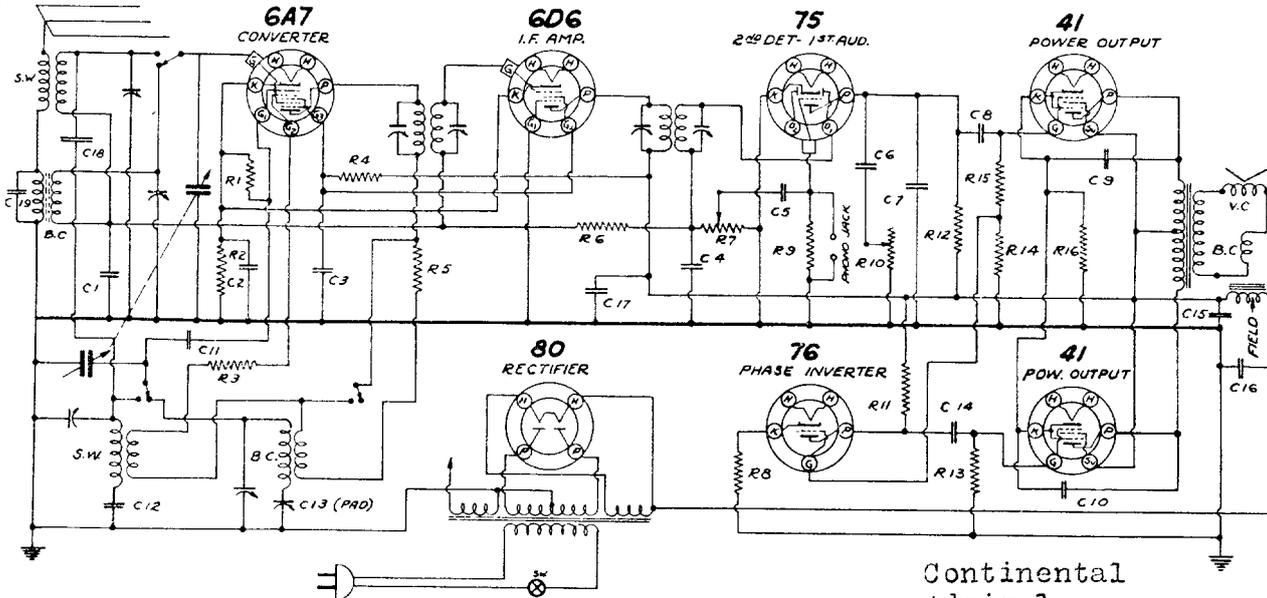
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985538 CIRCUIT DIAGRAM

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Continental
Admiral

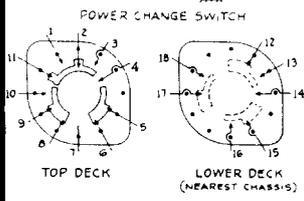
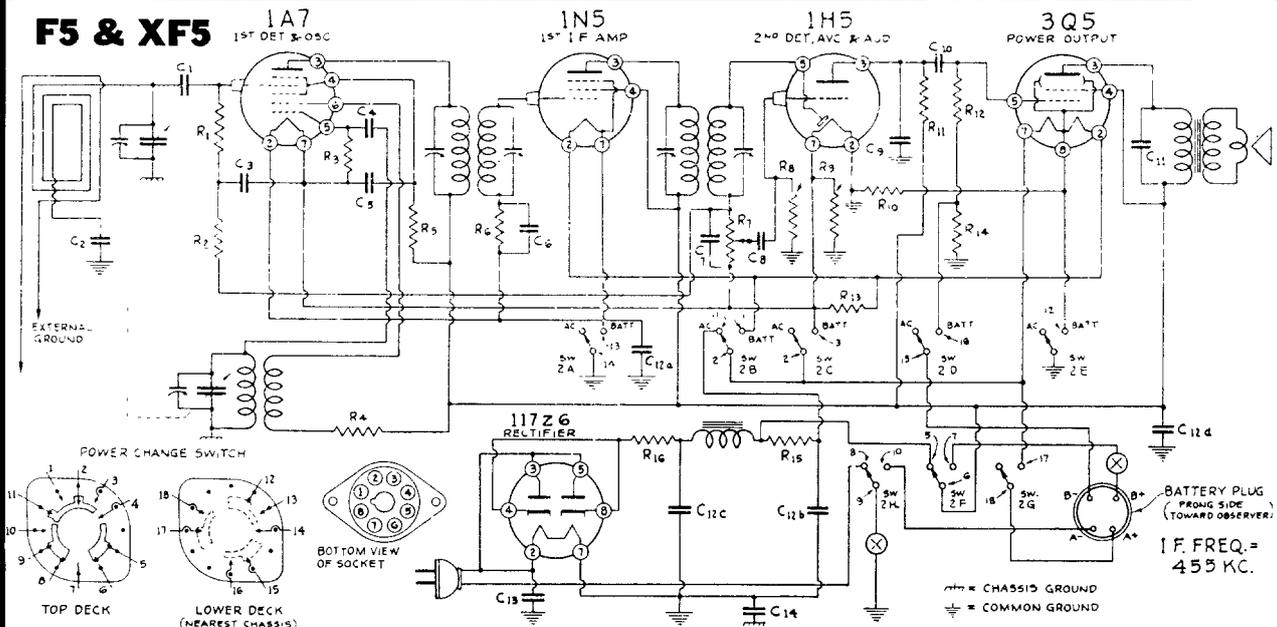
I.F. 455 K.C.

BAND SWITCHES SHOWN IN BROADCAST
POSITION.
BOTTOM VIEW OF TUBE SOCKETS SHOWN.
GANG CONDENSER CAPACITY 443MMFD.

SCHEMATIC DIAGRAM MODEL 7C

CAPACITORS				RESISTORS							
No.	MFG'S	VOLTS	NO.	MFG'S	VOLTS	No.	OHMS	WATTS	No.	OHMS	WATTS
C1	.05	200	C11	.0001	MICA	R1	50,000	1/2	R11	50,000	1/2
C2	.25	200	C12	.004-5%	MICA	R2	200	1/2	R12	250,000	1/2
C3	.05	400	C13	300-600MMFD	PADDER	R3	250	1/2	R13	500,000	1/2
C4	.00025	MICA	C14	.01	400	R4	20,000	1/2	R14	100,000	1/2
C5	.01	300	C15	10.0	350	R5	1,000	1/2	R15	400,000	1/2
C6	.005	600	C16	10.0	350	R6	2MEG	1/2	R16	300	1/2
C7	.00025	MICA	C17	.05	400	R7	800,000	VOL. CON.			
C8	.01	400	C18	.05	GUMMICK	R8	3,000	1/2			
C9	.005	600	C19	.0001	MICA	R9	5MEG	1/2			
C10	.005	600				R10	500,000	1/2			

F5 & XF5



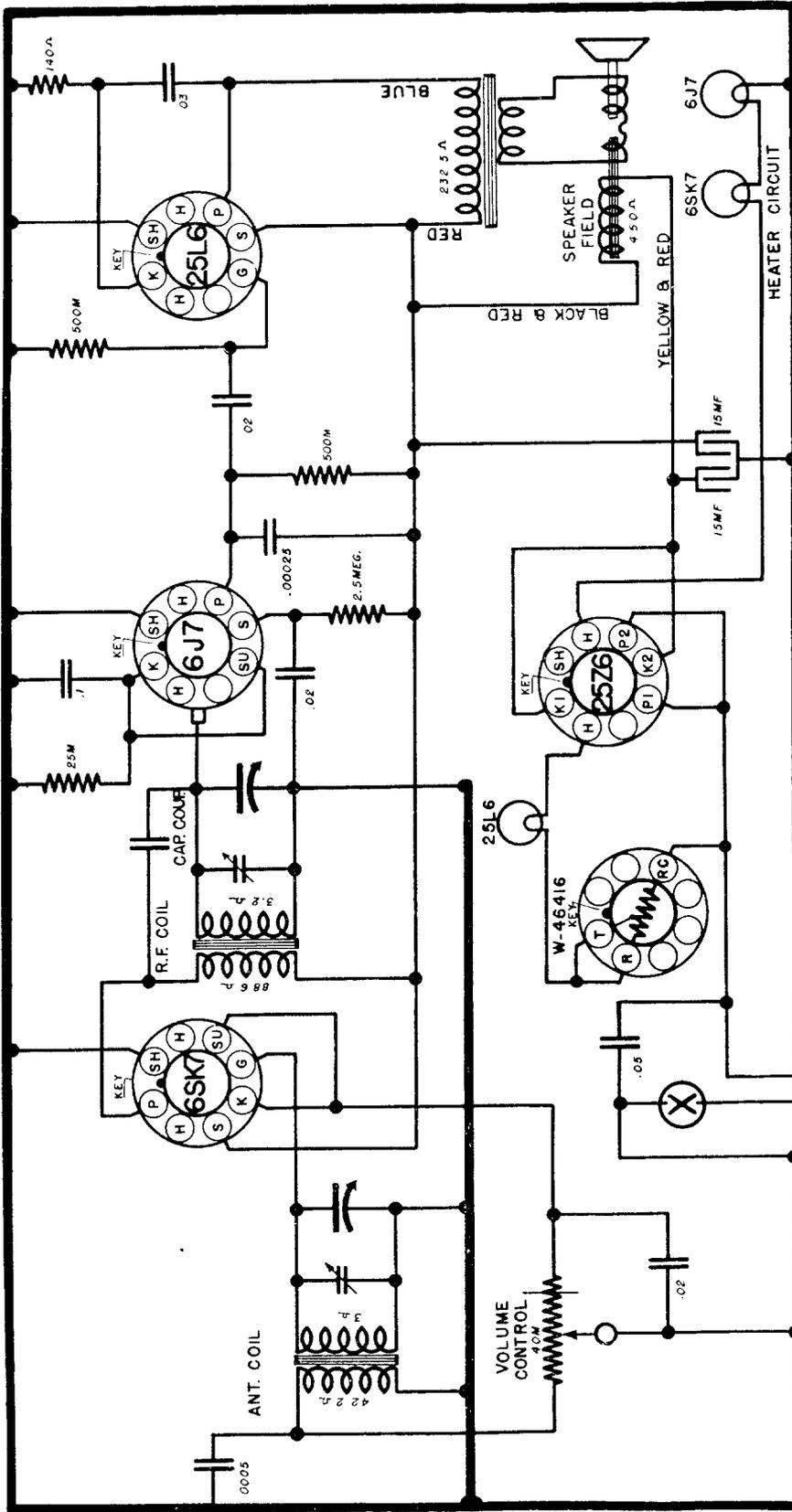
No.	Ohms	Watts	No.	Ohms	Watts	No.	Capacity (Mfd.)	Volts	No.	Capacity (Mfd.)	Volts
R1	1,000,000	1/2	R9	110	1/2	C1	.00025	Mica	C10	.01	400
R2	1,000,000	1/2	R10	750-10%	1/2	C2	.1	200	C11	.002	400
R3	200,000	1/2	R11	250,000	1/2	C3	.01	200	C12a	40.	25
R4	500	1/2	R12	1,000,000	1/2	C4	.0065	Mica	C12b	40.	25
R5	30,000	1/2	R13	400	1/2	C5	.05	200	C12c	30.	150
R6	5,000,000	1/2	R14	450-10%	1/2	C6	.01	200	C12d	30.	150
R7	1,000,000	V.C.	R15	2,100	5	C7	.00025	Mica	C13	.05	400
R8	5,000,000	1/2	F16	30	1/2	C8	.01	400	C14	.25	200

In Model F5 switch points 4, 15, 16, 17 and 18 are not used. Switch point 4 is also not used on Model XF5. Power change switch 2A thru 2H and the pictorial view shown in the "AC-DC" position.

In late models C2 is not used.

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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



Power Consumption @ 117.5 Volts Line—Approximately 43 Watts.
 D. C. Drop Across Speaker Field—29 Volts.
 Maximum Power Output Approximately 2.0 Watts.

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MODEL --- # 10

TUBES MAY BE METAL OR GT TYPE

CROSLEY

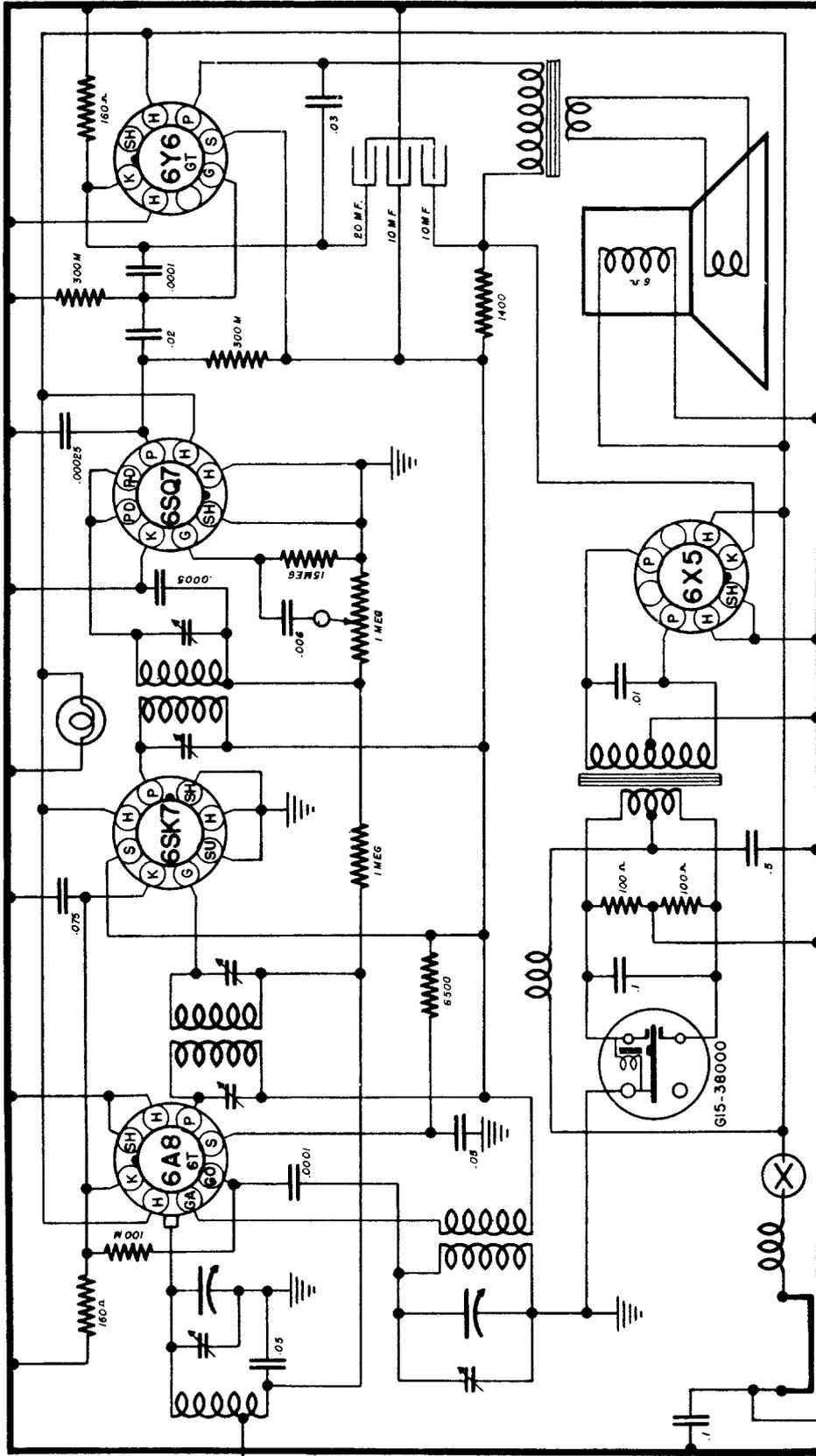
SOCKET VOLTAGES TAKEN @ 117.5 VOLT LINE (A. C.)

Tube	Function	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
6SK7	R. F. Amplifier	GND.	H	3.0	GRID	3.0	92	H	91
6J7	Detector	GND.	H	20	8	2.0	—	H	2.0
25L6	Output	GND.	H	82	91	GRID	N.C.	H	5.8
25Z6	Rectifier	GND.	H	A.C.	120	A.C.	—	H	120
W-46416	Ballast Resistor — 165 Ohms (Cold)	Between No. 3 and No. 7 Pins with No. 8 Pins Tied Together.							

ANTENNA ROLL

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455 KC. I.F.

WIRING DIAGRAM—MODEL A-559

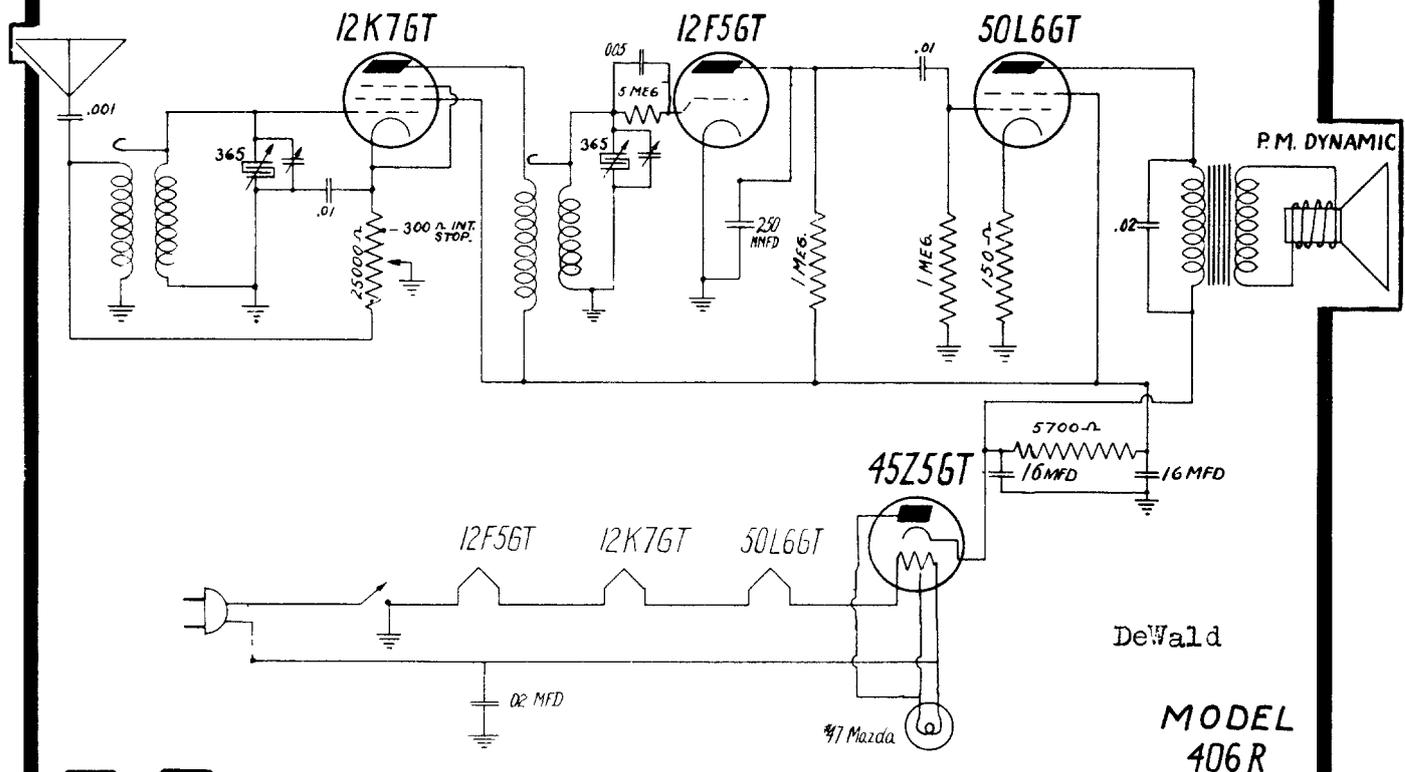
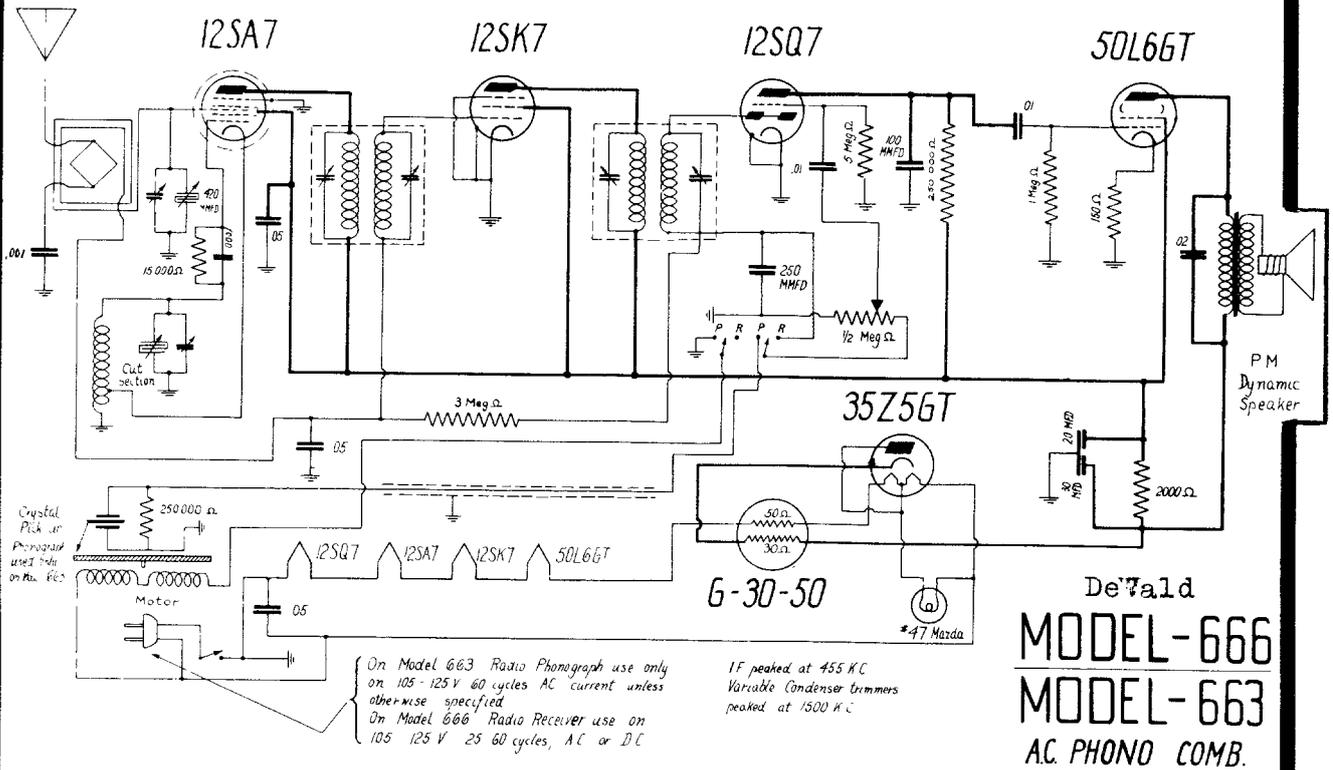
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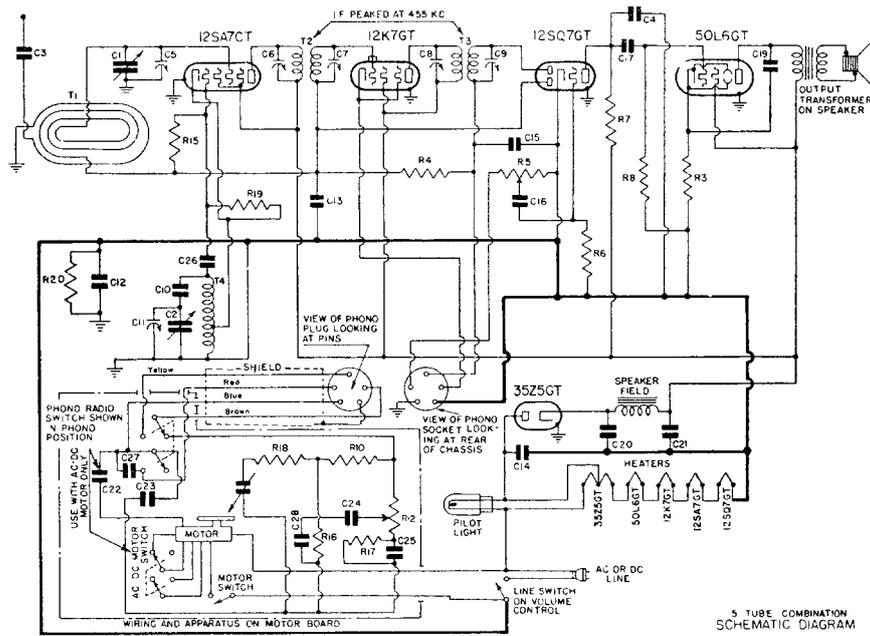
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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

Emerson Radio



CV-289, 290 AND CV1-290 WITH 12SA7GT

ITEM	PART NO.	DESCRIPTION
T1	6MW-171B	Loop antenna assembly (for CV-289, CV-291 and CV1-291) (see prod. ch. No. 4)
T1	6VW-188A	Loop antenna assembly (for CV-290 and CV1-290) (see production change No. 4)
T4	7BT-486A	Oscillator coil (see production change No. 2)
T2	7BT-488C	Double-tuned 455 kc first i-f transformer
T3	7BT-489A	Double-tuned 455 kc second i-f transformer
	or	
	7FT-513D	Double-tuned 455 kc second i-f transformer
R1	2CR-193	30,000 ohm 1/2 watt carbon resistor
R2	KR-53	50,000 ohm 1/4 watt carbon resistor
R3	3FR-293	140 ohm 1/2 watt wire-wound resistor
R4	NNR-220	3 megohm 1/4 watt carbon resistor
R5	6VR-364	Volume control .5 megohm with line switch
R6, R15	4XR-327	15 megohm 1/4 watt carbon resistor
R7, R8, R11, R18	KR-56	500,000 ohm 1/4 watt carbon resistor
R9, R10	KR-57	1 megohm 1/4 watt carbon resistor
R12	6VR-366	Tone control, 75,000 ohm, with motor line switch
R13	6RR-375	170 ohm 1 watt wire-wound resistor
R14	4XR-334	2,500 ohm 1 watt carbon resistor
R19	LR-60	20,000 ohm 1/4 watt carbon resistor
R16, R20	LR-61	200,000 ohm 1/4 watt carbon resistor
R17	KR-54	100,000 ohm 1/4 watt carbon resistor
C1, C2	6RC-436	Two-gang variable condenser
C3, C16	3HC-274	0.002 mf, 600 volt tubular condenser
C4, C15, C26	4XC-394A	0.00022 mf mica condenser
†C5, C11		Trimmers, part of variable condenser.
†C6, C7, C8, C9		Trimmers, part of i-f transformers.
C10, C13, C23	BC-12	0.05 mf, 200 volt tubular condenser
C12	3CC-302	0.15 mf, 200 volt tubular condenser
C14	LC-64	0.05 mf, 400 volt tubular condenser
C17	6JC-425	0.024 mf, 400 volt tubular condenser
C18	4XC-404	20 mf, 150 volt dry electrolytic condenser
C19	LC-65	0.02 mf, 400 volt tubular condenser
C20, C21	6JC-426B	Dual 20 mf, 150 volt dry electrolytic condenser
C22	3LC-297A	0.01 mf, 400 volt tubular condenser (used only with a.c.-d.c. motors)
C24	IC-47A	0.0005 mf mica condenser
C25	KC-59	0.006 mf, 400 volt tubular condenser (see production change No. 6)
C27	CCC-127	0.01 mf, 200 volt tubular condenser
C28	NC-70A	0.0002 mf mica condenser
	6JS-368U	4" dynamic speaker (not used on CV-291 or CV1-191)
	6JS-386	6 1/2" permanent magnet dynamic speaker

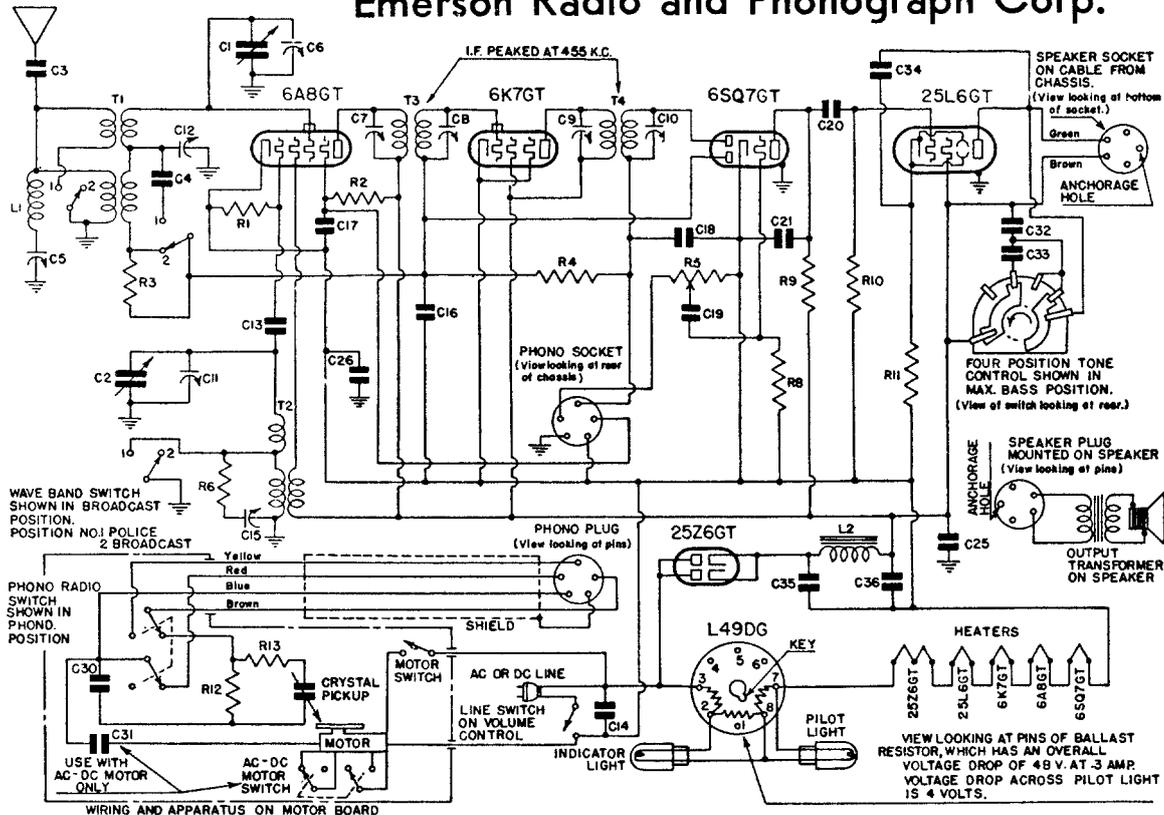
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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

MODEL CG-293 (For A.C. Operation Only) MODEL CG1-293 (For A.C. or D.C. Operation) MODEL CG-294 (A.C. Automatic Record Changer) MODEL CG1-294 (A.C.-D.C. Automatic Record Changer)

Emerson Radio and Phonograph Corp.



T1, L1	6GT-468	Two-band antenna coil with 455 kc wave-trap.....
T2	6GT-469	Two-band oscillator coil.....
T3	4XT-434CU	455 kc first i-f transformer.....
T4	4XT-435H	455 kc second i-f transformer.....
R1, R2	KR-53	50,000 ohm 1/4 watt carbon resistor.....
R3, R6	PR-79	1,000 ohm 1/4 watt carbon resistor.....
R4	NNR-220	3 megohm 1/4 watt carbon resistor (see production change no. 2).....
R5	6SR-362	Volume control—250,000 ohms with line switch (see production change no. 2).....
R8	4XR-327	15 megohm 1/4 watt carbon resistor.....
R9, R10	KR-56	500,000 ohm 1/4 watt carbon resistor (see production change no. 1).....
R11	3FR-293	140 ohm 1/2 watt wire-wound resistor.....
R12	KR-55	250,000 ohm 1/4 watt carbon resistor.....
R13	KR-57	1 megohm 1/4 watt carbon resistor.....
C1, C2	L-49DG	Plug-in type ballast resistor. Interchangeable with L49D.....
C3	6GC-428	Two-gang variable condenser.....
C4	NNC-199	0.001 mf, 600 volt tubular condenser.....
C12, C15	6GC-429	0.00064 mf mica condenser.....
C13	6GC-430	Dual trimmer assembly.....
C14	IIC-133A	0.000025 mf mica condenser.....
C16, C17	LC-64	0.05 mf, 400 volt tubular condenser.....
C25, C30	BC-12	0.05 mf, 200 volt tubular condenser.....
C18, C21	5AC-384	0.0002 mf, 600 volt tubular or mica condenser.....
C19	3HC-274	0.002 mf, 600 volt tubular condenser.....
C20	LC-65	0.02 mf, 400 volt tubular condenser.....
C26	3CC-302	0.15 mf, 200 volt tubular condenser.....
C31	3LC-297A	0.01 mf, 400 volt molded condenser (for a.c.-d.c. motors only).....
C32, C33	ZXC-211	0.03 mf, 200 volt tubular condenser.....
C34	XXC-207	0.005 mf, 400 volt tubular condenser.....
C35, C36	6QC-437	Multiple 20 and 40 mf, 150 volt dry electrolytic condenser.....
		C35—20 mf C36—40 mf

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Emerson Radio

MODELS: DQ-333 and DQ-334 | MODELS: DQ1-333 and DQ1-334

- L1 Loop antenna
- T4 Oscillator coil
- T2 T3 I.F. transformers
- R1 20,000 ohm $\frac{1}{4}$ w.
- R3 140 ohm $\frac{1}{2}$ watt
- R4 3 megohm $\frac{1}{4}$ watt
- R5 .5 megohm V.C.
- R2 R6 15 megohm $\frac{1}{4}$ w.
- R7 R8 .5 megohm $\frac{1}{4}$ w.
- R9 200,000 ohm $\frac{1}{4}$ w.
- C10 0.1 mfd. 200 v.
- C14 0.05 mfd. 400 v.
- C4 C15 0.0002 mfd. mica
- C3 C16 0.002 mfd. 600 v.
- C20-21 Dual 20 mfd. 150
- C22 0.2 mfd. 200 v.
- C24 0.02 mfd. 400 v.
- C25 0.01 mfd. 400 v.

Location of Coils and Trimmer Adjustments

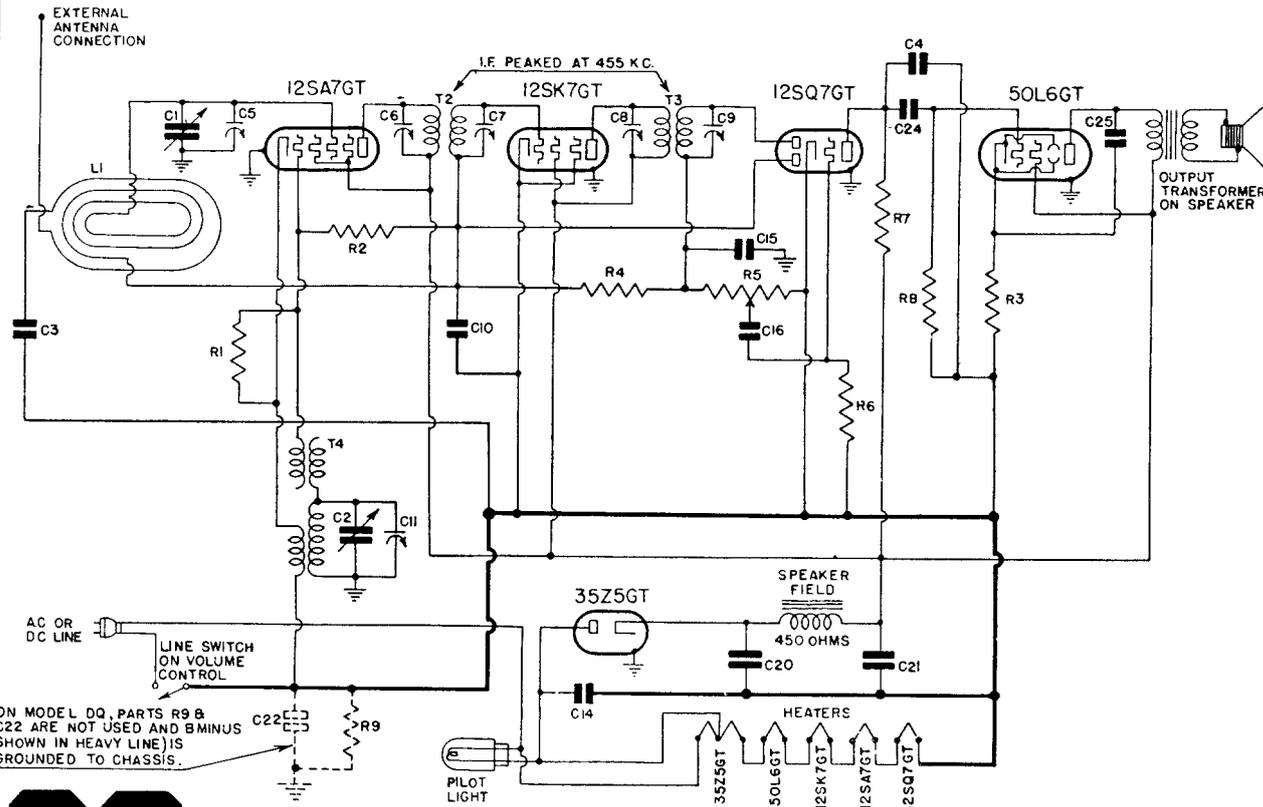
The first i-f transformer is mounted on top of the chassis deck to the right of the variable condenser. The trimmers are accessible through holes in the top of the can.

The second i-f transformer is mounted on top of the chassis between the variable condenser and the speaker. The trimmers are accessible through holes in the top of the can.

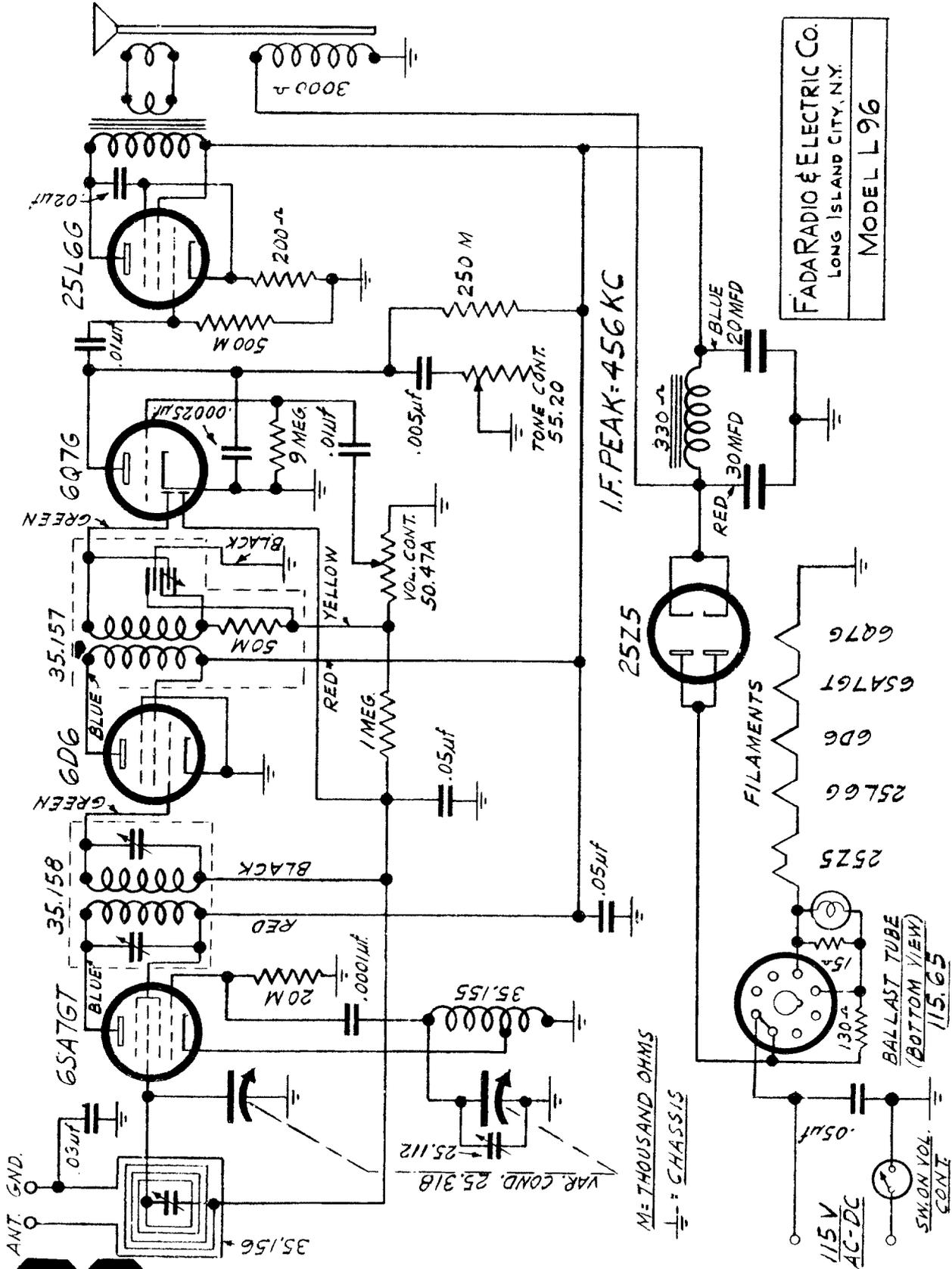
The trimmers for the antenna and oscillator coils are located on the variable condenser. The trimmer on the front section is for the oscillator coil.

The oscillator coil is located underneath the chassis. The loop antenna acts as the antenna coil.

An oscillator with frequencies of 455 and 1400 kc is required.



MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

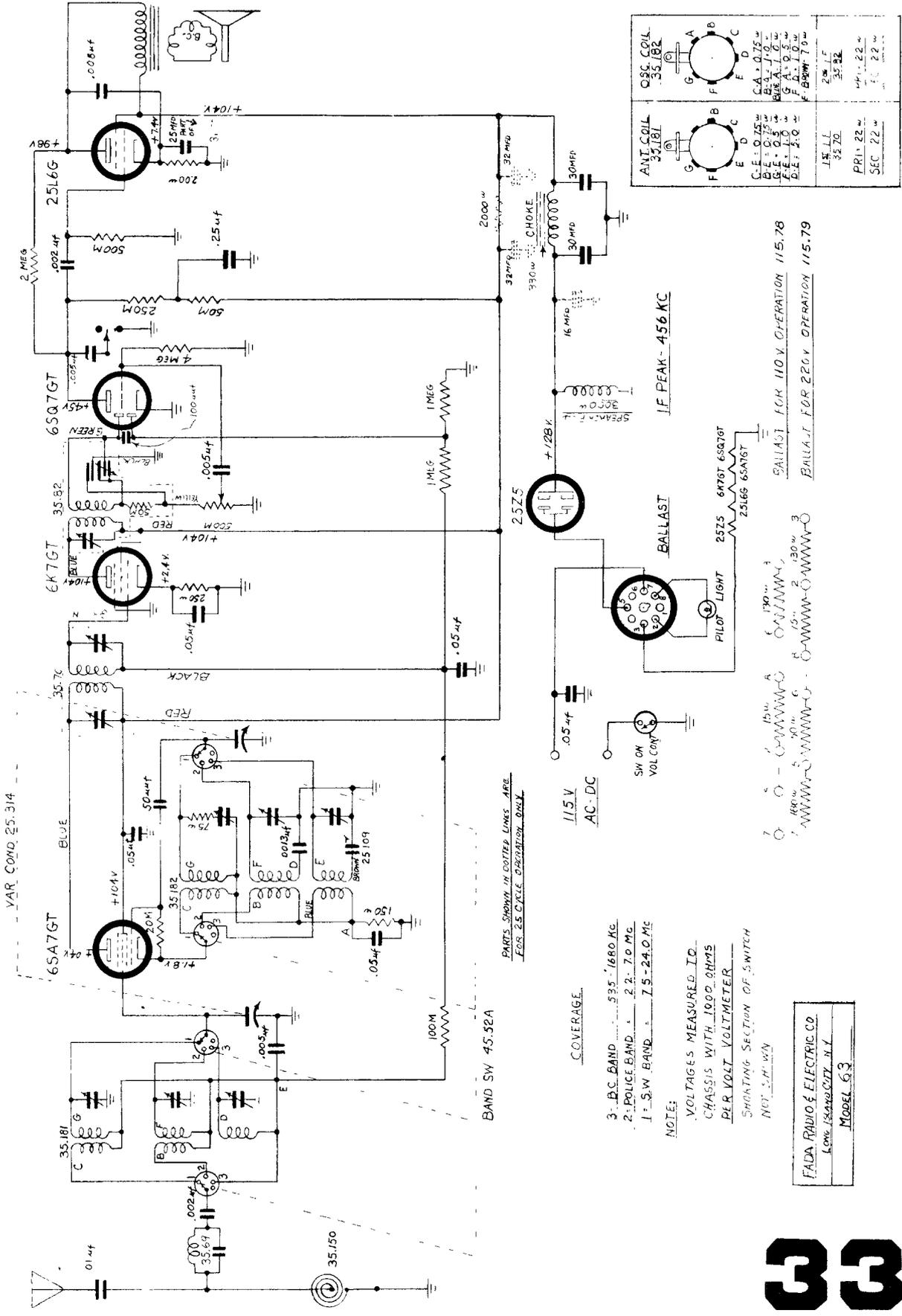


FADA RADIO & ELECTRIC CO.
LONG ISLAND CITY, N.Y.
MODEL L96

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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



ANT. COIL	OSC. COIL
35.181	35.182
C.E. - 0.15 D.E. - 0.15 F.E. - 1.0 G.E. - 1.0 D.E. - 2.0	G.A. - 0.75 H.A. - 0.75 I.A. - 1.0 J.A. - 1.0 F. - 2.0
1X 11L 2X 22 PRI. 22 SEC. 22	2X 1F 3X 32 4X 22 5X 22

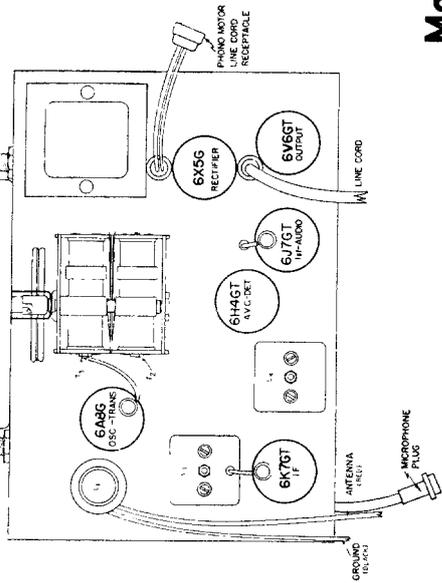
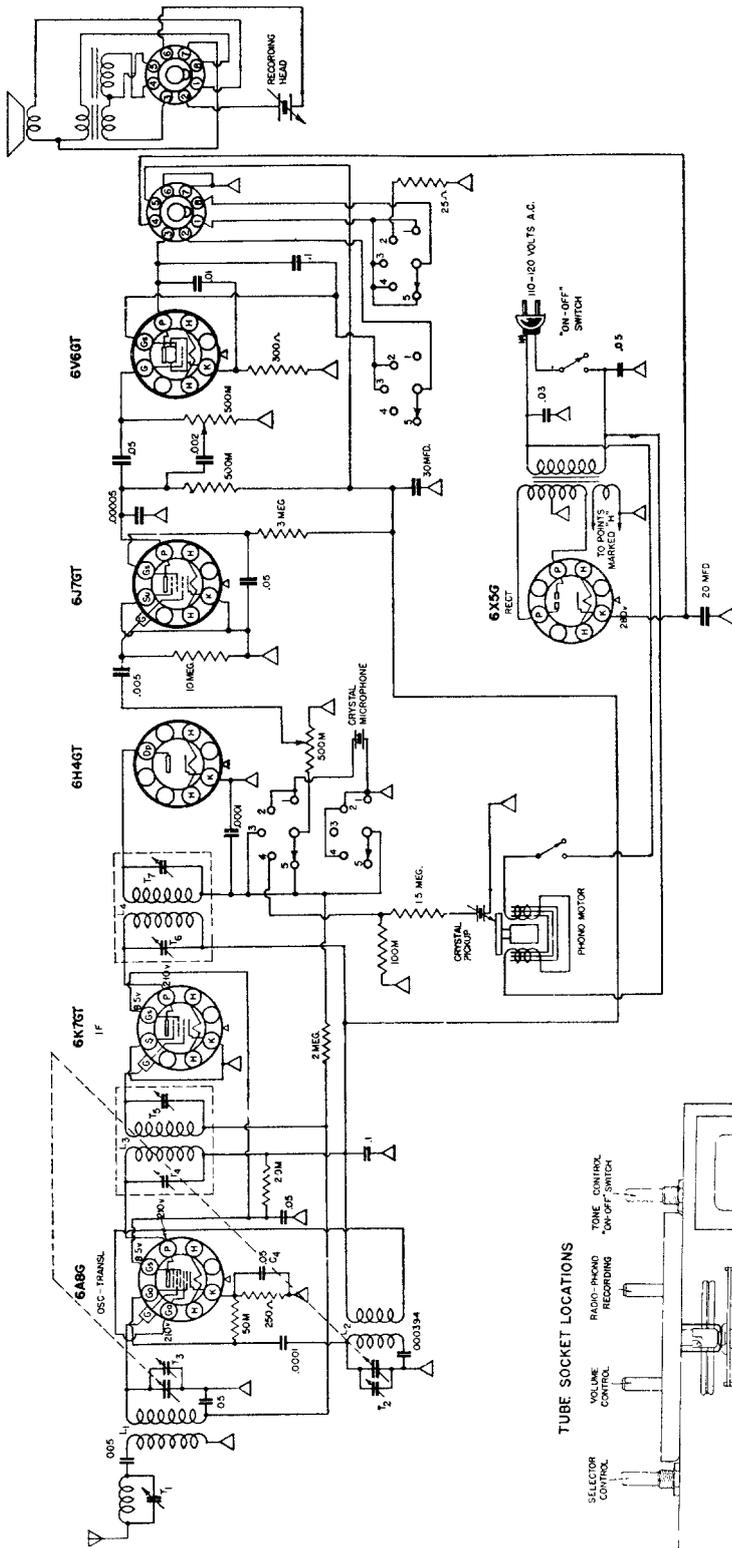
COVERAGES

3. BC. BAND 535 - 1680 KC.
 2. POLICE BAND 2.2 - 7.0 MC.
 1. I-S-W. BAND 7.5 - 24.0 MC.

NOTE:
 VOLTAGES MEASURED I.D.
 CHASSIS WITH 1000 OHMS
 PER VOLT VOLTMETER

**SHORTING SECTION OF SWITCH
 NOT SHOWN**

FADA RADIO & ELECTRIC CO.
 Long Beach, CALIF., U.S.A.
 Model 63



FEDERAL RECORDER CO., Inc.

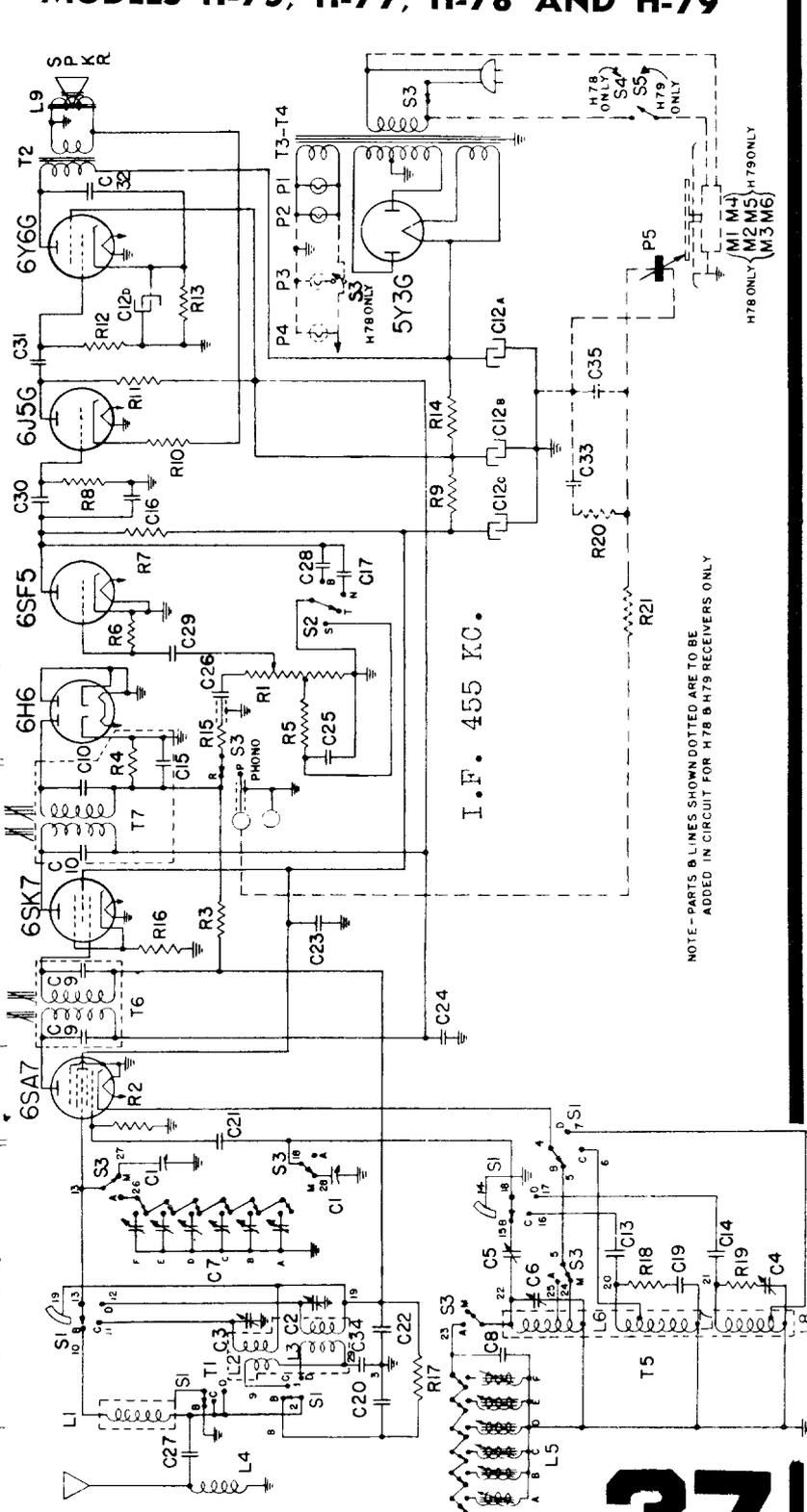
Model 101 — Radio, Phonograph and Recorder Combination

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

GENERAL ELECTRIC

MODELS H-73, H-77, H-78 AND H-79

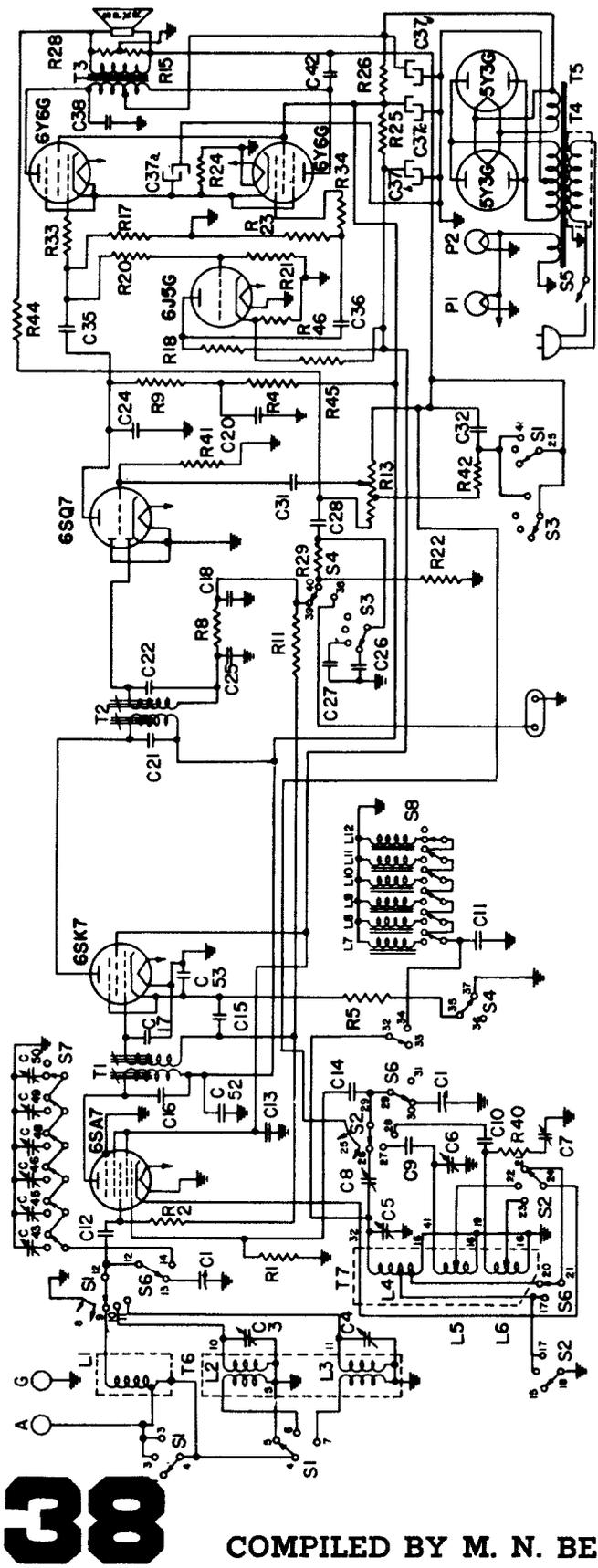
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
C-1	Tuning condenser	L-5E	50 mmf. mica capacitor	L-1	Beam-a-Scope	6SA7	6SA7
C-2	band antenna trimmer	L-5F	.05 mfd. paper capacitor	L-2	Antenna choke	6SK7	6SK7
C-3	"C" band oscillator trimmer	M-1	.05 mfd. paper capacitor	L-3	Touch Tuning trimmer (Code-Blue)	6H6	6H6
C-4	"D" band oscillator trimmer	M-2	.0072 mfd. paper capacitor	L-4	Touch Tuning trimmer (Code-Blue)	6J5G	6J5G
C-5	"B" band oscillator trimmer	M-3	.005 mfd. paper capacitor	L-5A	Touch Tuning trimmer (Code-Blue)	6Y6G	6Y6G
C-6	"E" band oscillator trimmer	M-4	.01 mfd. paper capacitor	L-5B	Touch Tuning trimmer (Code-Red)	5Y3G	5Y3G
C-7A	100-490 mmf. trimmer	M-5	.002 mfd. paper capacitor	L-5C	Touch Tuning trimmer (Code-Blue)	573G	573G
C-7B	100-490 mmf. trimmer	P-1	.01 mfd. paper capacitor	L-5D	Touch Tuning trimmer (Code-Red)	583G	583G
C-7C	100-490 mmf. trimmer	P-2	.01 mfd. paper capacitor				
C-7D	20-180 mmf. trimmer	P-3	.01 mfd. paper capacitor				
C-7E	20-180 mmf. trimmer	P-4	.05 mfd. paper capacitor				
C-7F	7-65 mmf. trimmer	P-5	.001 mfd. paper capacitor				
C-8	750 mmf. silvered mica capacitor	R-1	Antenna scope				
C-9	Adjusted silvered mica capacitors	R-2	Touch Tuning trimmer				
C-10	40 mfd. dry electrolytic	R-3	Touch Tuning trimmer				
C-11	20 mfd. dry electrolytic	R-4	Touch Tuning trimmer				
C-12a	20 mfd. dry electrolytic	R-5	Touch Tuning trimmer				
C-12b	20 mfd. dry electrolytic	R-6	Touch Tuning trimmer				
C-12c	20 mfd. dry electrolytic	R-7	Touch Tuning trimmer				
C-13	5600 mmf. mica capacitor	R-8	Touch Tuning trimmer				
C-14	100 mmf. mica capacitor	R-9	Touch Tuning trimmer				
C-15	100 mmf. mica capacitor	R-10	Touch Tuning trimmer				
C-16	680 mmf. mica capacitor	R-11	Touch Tuning trimmer				
C-17	920 mmf. mica capacitor						
C-18	920 mmf. mica capacitor						
C-19	920 mmf. mica capacitor						
C-20	4700 mmf. mica capacitor						



NOTE - PARTS IN BOLD LINES SHOWN DOTTED ARE TO BE ADDED IN CIRCUIT FOR H78 & H79 RECEIVERS ONLY

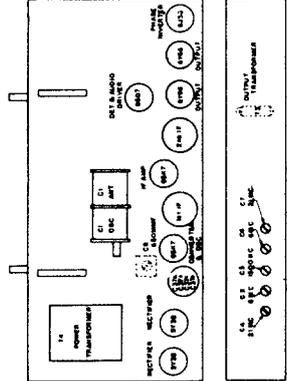
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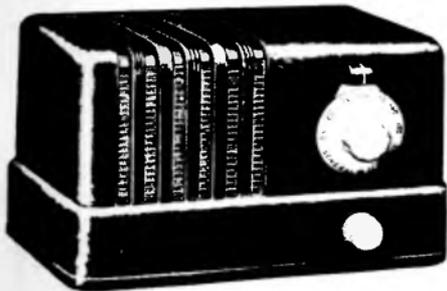
Trimmer Location

General Electric
I.F. 455 KC.
MODEL H-87

Symbol	Description	Symbol	Description	Symbol	Description
C-1	Tuning Capacitor	C-42	.01 mfd., Paper Capacitor	R-20	3.3 megohms, Carbon Resistor
C-3	"C" Band Antenna Trimmer	C-43	7-65 mfd., Antenna Trimmer	R-21	270,000 ohms, Carbon Resistor
C-4	"D" Band Antenna Trimmer	C-44	20-180 mfd., Antenna Trimmer	R-22	220,000 ohms, Carbon Resistor
C-5	"B" Band Oscillator Trimmer	C-45	100-180 mfd., Antenna Trimmer	R-23	150,000 ohms, Carbon Resistor
C-6	"C" Band Oscillator Trimmer	C-46	100-490 mfd., Antenna Trimmer	R-24	100,000 ohms, Carbon Resistor
C-7	"D" Band Oscillator Trimmer	C-47	100-490 mfd., Antenna Trimmer	R-25	2400 ohms, 3-4-W. Wire Wound
C-8	"B" Band Padder	C-48	100-490 mfd., Antenna Trimmer	R-26	2200 ohms, 2.6-W. Wire Wound
C-9	1600 mfd., Mica Capacitor #5%	C-49	.25 mfd., Paper Capacitor	R-28	68 ohms, Carbon Resistor
C-10	4300 mfd., Mica Capacitor #5%	C-50	.08 mfd., Paper Capacitor	R-29	47,000 ohms, Carbon Resistor
C-11	750 mfd., Silvered Mica Capacitor #5%	C-51	Beam-a-Scope	R-33	1000 ohms, Carbon Resistor
C-12	150 mfd., Mica Capacitor	C-52	"C" Band Antenna Coil	R-34	1000 ohms, Carbon Resistor
C-13	0.1 mfd., Paper Capacitor	C-53	"D" Band Antenna Coil	R-40	33 ohms, Carbon Resistor
C-14	47 mfd., Mica Capacitor	L-1	"B" Band Oscillator Coil	R-41	4.7 megohms, Carbon Resistor
C-15	47 mfd., Paper Capacitor	L-2	"D" Band Oscillator Coil	R-42	100,000 ohms, Carbon Resistor
C-16	47 mfd., Mica Capacitor	L-3	"C" Band Oscillator Coil	R-43	4.7 megohms, Carbon Resistor
C-17	47 mfd., Paper Capacitor	L-4	"D" Band Oscillator Coil	R-44	15,000 ohms, 1-W. Carbon Resistor
C-18	47 mfd., Mica Capacitor	L-5	Tuning Coil (Code—None)	R-45	270 ohms, Carbon Resistor
C-19	100 mfd., Paper Capacitor	L-6	Tuning Coil (Code—Red)	R-46	270 ohms, Carbon Resistor
C-20	100 mfd., Paper Capacitor	L-7	Tuning Coil (Code—Blue)	P-1	Pilot Light, Mazda No. 44
C-21	47 mfd., Mica Capacitor	L-8, 9	Tuning Coil (Code—None)	P-2	Antenna Band Switch
C-22	100 mfd., Paper Capacitor	L-10, 11, 12	Tuning Coil (Code—Blue)	S-1	Oscillator Band Switch
C-23	470 mfd., Paper Capacitor	R-1	22,000 ohms, Carbon Resistor	S-2	Tone Switch
C-24	0.1 mfd., Paper Capacitor	R-2	1.0 megohm, Carbon Resistor	S-3	Power Switch
C-25	0.1 mfd., Paper Capacitor	R-3	47,000 ohms, Carbon Resistor	S-4	Volume Switch
C-26	0.008 mfd., Paper Capacitor	R-4	330 ohms, Carbon Resistor	S-5	Manual Switch
C-27	0.05 mfd., Paper Capacitor	R-5	47,000 ohms, Carbon Resistor	S-6	Antenna Section, Touch Tuning
C-28	0.05 mfd., Paper Capacitor	R-6	220,000 ohms, Carbon Resistor	S-7	Switch Section, Touch Tuning
C-29	20 mfd., 250 V. Dry Electrolytic	R-7	2.2 megohms, Volume Control	S-8	Oscillator Section, Touch Tuning
C-30	20 mfd., 250 V. Dry Electrolytic	R-8	15 ohms, Carbon Resistor		
C-31	20 mfd., 250 V. Dry Electrolytic	R-9	330,000 ohms, Carbon Resistor		
C-32	40 mfd., 250 V. Dry Electrolytic	R-10	68,000 ohms, Carbon Resistor		
C-33	40 mfd., 250 V. Dry Electrolytic	R-11			
C-34	40 mfd., 250 V. Dry Electrolytic	R-12			
C-35	40 mfd., 250 V. Dry Electrolytic	R-13			
C-36	40 mfd., 250 V. Dry Electrolytic	R-14			
C-37a	40 mfd., 250 V. Dry Electrolytic	R-15			
C-37b	40 mfd., 250 V. Dry Electrolytic	R-16			
C-37c	40 mfd., 250 V. Dry Electrolytic	R-17			
C-37d	40 mfd., 250 V. Dry Electrolytic	R-18			
C-38	.02 mfd., Paper Capacitor				

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

General Electric **MODEL H-400**



GENERAL INFORMATION

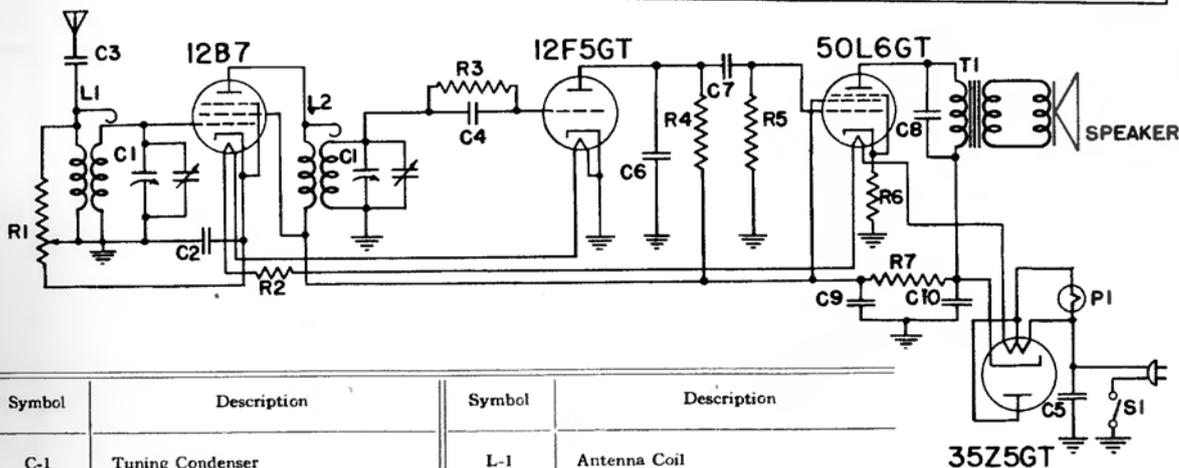
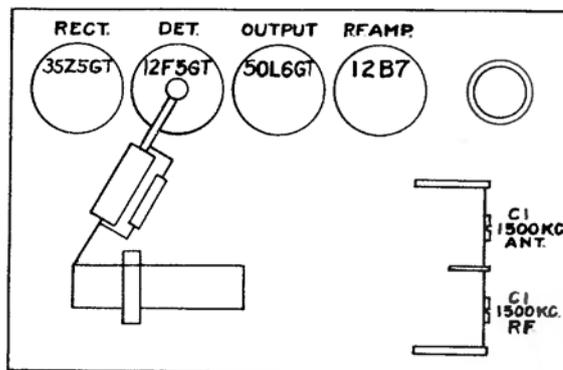
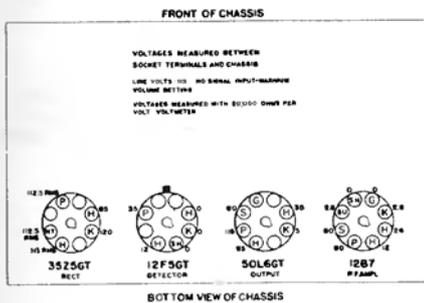
Model H-400 is a compact four-tube AC-DC tuned radio-frequency receiver that tunes the standard broadcast band of frequencies and one police band. One side of the power line is connected directly to the chassis ground; therefore, caution should be exercised in servicing.

When operating from a DC source of power it is necessary to insert the power plug with the proper polarity. If the receiver fails to function with the power plug inserted one way, reverse the plug. If any hum is noticed when the receiver is used on A-C, reverse the power plug as above.

ALIGNMENT

Connect the high side of the signal generator through a 100-mmf condenser to the terminal to which the antenna hank is soldered. The low side of the signal generator output should be connected to the receiver chassis through a .05 mfd. condenser. Connect a suitable output meter across the voice coil leads; then proceed as follows:

1. With gang condenser plates completely closed, the tuning index should be over the last calibration mark on the dial.
2. Set volume control to about $\frac{3}{4}$ of maximum.
3. Rotate gang to minimum capacity and tune trimmers on the gang condenser to 1750 KC signal. Re-tune gang to 1500 KC signal and peak trimmers by alternate adjustment.



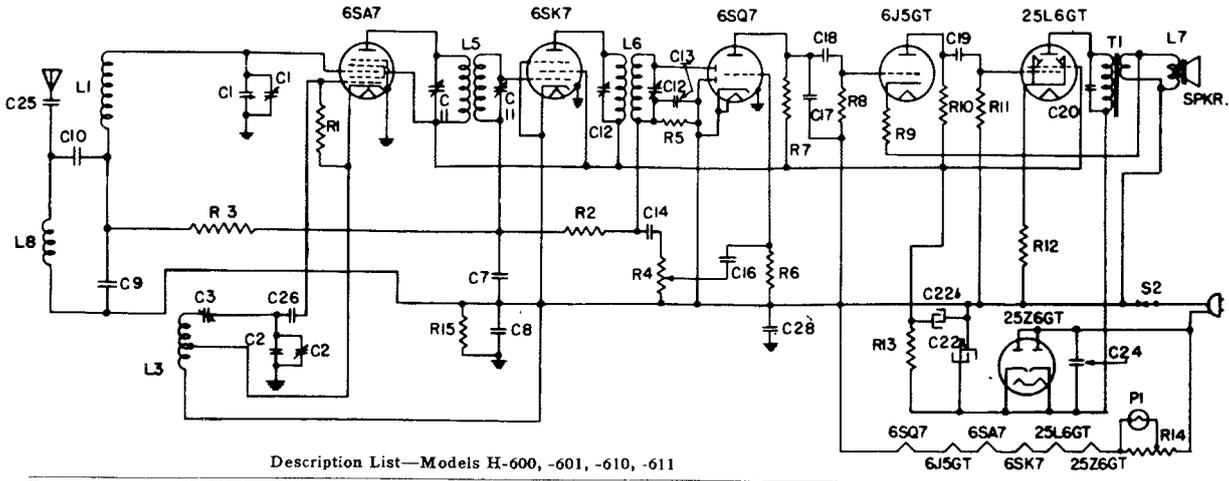
Symbol	Description	Symbol	Description
C-1	Tuning Condenser	L-1	Antenna Coil
C-2	.01 mfd., 600 V. Paper	L-2	R.F. Coil
C-3	.001 mfd., 600 V. Paper	P-1	Pilot Lamp, MAZDA No. 47
C-4	.005 mfd., 600 V. Paper	R-1	30,000 ohm, Volume Control (300 ohm step)
C-5	.01 mfd., 600 V. Paper	R-2	75 ohm, 2-W. Carbon
C-6	330 mmf., Mica	R-3	4.7 megohm, $\frac{1}{2}$ -W. Carbon
C-7	.01 mfd., 600 V. Paper	R-4	1.0 megohm, $\frac{1}{2}$ -W. Carbon
C-8	.02 mfd., 600 V. Paper	R-5	1.0 megohm, $\frac{1}{2}$ -W. Carbon
C-9	20 mfd., 150 V. Dry Electrolytic	R-6	150 ohm, $\frac{1}{2}$ -W. Carbon $\pm 5\%$
C-10	40 mfd., 150 V. Dry Electrolytic	R-7	4700 ohm, $\frac{1}{2}$ -W. Carbon

35Z5GT

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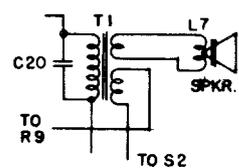
39

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



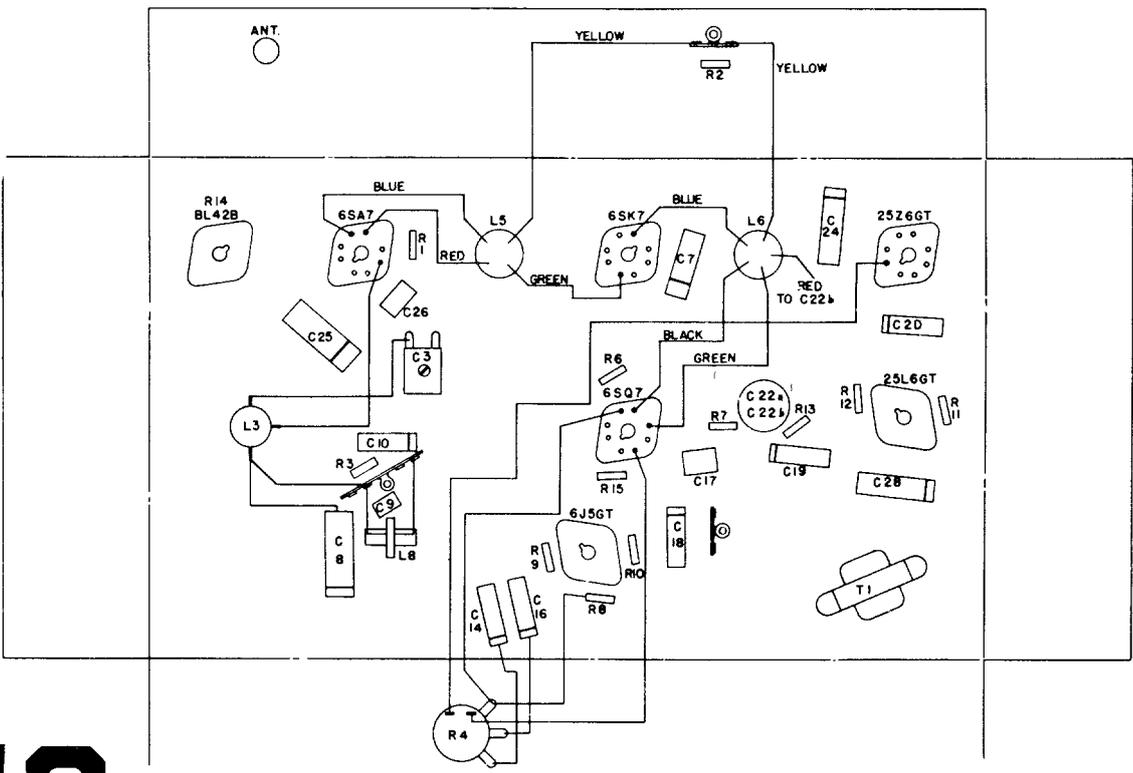
Description List—Models H-600, -601, -610, -611

Symbol	Description	Symbol	Description
C1	Antenna section of tuning condenser	R3	470,000 ohms carbon resistor
C2	Oscillator section of tuning condenser	R4	2 megohms volume control
C3	"B" band paddler	R5	470,000 ohms carbon resistor
C7	.05 mfd. paper capacitor	R6	15 megohms carbon resistor
C8	0.1 mfd. paper capacitor	R7	470,000 ohms carbon resistor
C9	3900 mmf. $\pm 5\%$ mica capacitor	R8	1.0 megohm carbon resistor
C10	.01 mfd. paper capacitor	R9	3300 ohms carbon resistor
C13	470 mmf. mica capacitor	R10	39,000 ohms carbon resistor
C14	.002 mfd. paper capacitor	R11	470,000 ohms carbon resistor
C16	.02 mfd. paper capacitor	R12	150 ohms carbon resistor
C17	470 mmf. mica capacitor	R13	1000 ohms carbon resistor
C18	.005 mfd. paper capacitor	R14	BL42B ballast resistor
C19	.005 mfd. paper capacitor	R15	470,000 ohms carbon resistor
C20	.01 mfd. paper capacitor	L1	Beam-a-Scope
C22a	50 mfd. 150 V dry electrolytic	L3	Oscillator coil
C22b	30 mfd. 150 V dry electrolytic	L5	1st I.F. transformer
C24	.05 mfd. paper capacitor	L6	2nd I.F. transformer
C25	.01 mfd. paper capacitor	L7	Speaker voice coil
C26	47 mmf. mica capacitor	L8	Antenna choke, 1 1/2 MH
C28	0.1 mfd. paper capacitor	P1	Pilot lamp, MAZDA No. 44
R1	33,000 ohms carbon resistor	T1	Output transformer
R2	2.2 megohms carbon resistor		



ON H-601 & H-611 RECEIVERS
SUBSTITUTE THIS TRANS-
FORMER (T-1) FOR ONE SHOWN
ABOVE.

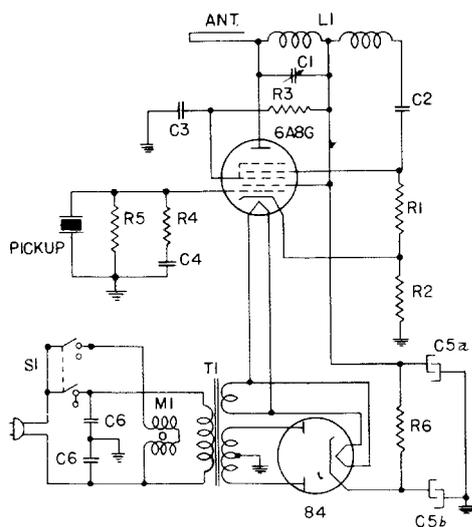
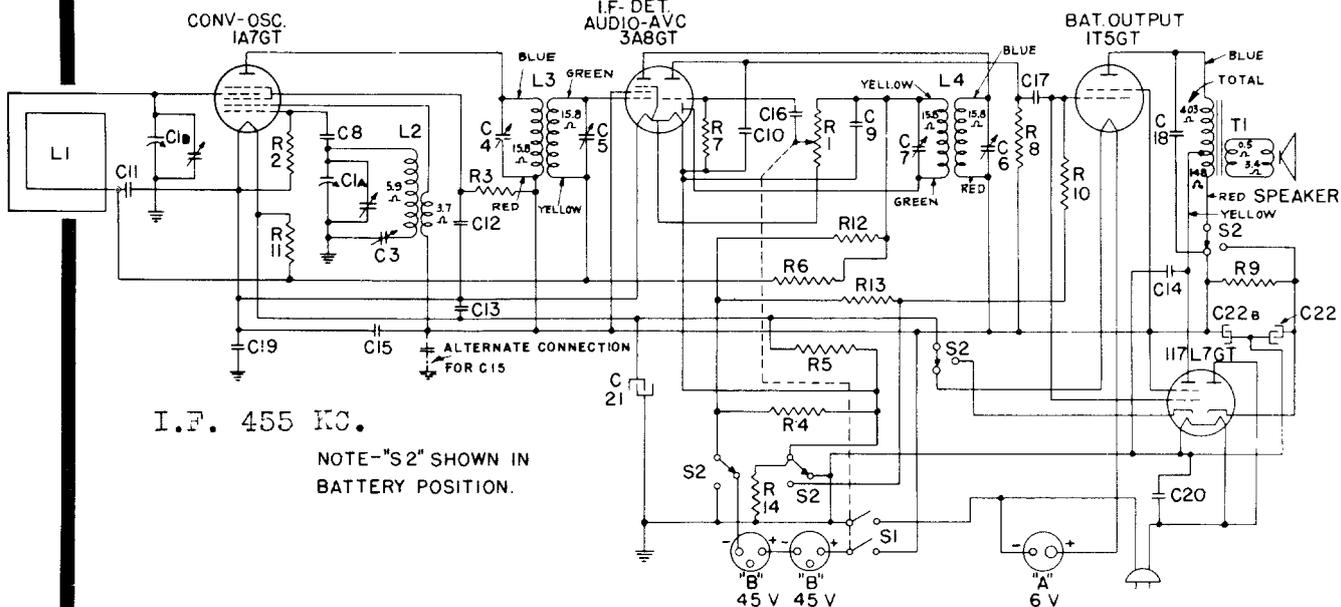
General Electric Models H-600, -601, -610, -611



MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

General Electric Model HB-412

Symbol	Description	Symbol	Description	Symbol	Description
C-1A	Oscillator section tuning condenser	C-19	0.2 mfd. paper capacitor	R-6	2.2 megohms carbon resistor
C-1B	Antenna section tuning condenser	C-20	.01 mfd. line capacitor	R-7	15 megohms carbon resistor
C-3	Oscillator padding capacitor	C-21	100 mfd. 5 V. dry electrolytic	R-8	1.0 megohm carbon resistor
C-8	47 mmf. mica capacitor	C-22A	40 mfd. 150 V. dry electrolytic	R-9	1800 ohms carbon resistor
C-9	220 mmf. mica capacitor	C-22B	20 mfd. 150 V. dry electrolytic	R-10	470,000 ohms carbon resistor
C-10	220 mmf. mica capacitor	L-1	Beam-a-Scope	R-11	3.9 megohms carbon resistor
C-11	.05 mfd. paper capacitor	L-2	Oscillator coil	R-12	680,000 ohms carbon resistor
C-12	0.1 mfd. paper capacitor	L-3	1st I.F. transformer	R-13	1.5 megohms carbon resistor
C-13	0.1 mfd. paper capacitor	L-4	2nd I.F. transformer	R-14	27 ohms carbon resistor
C-14	220 mmf. mica capacitor	R-1	1.0 megohm volume control	S-1	Power switch (on volume control)
C-15	0.1 mfd. paper capacitor	R-2	220,000 ohms carbon resistor	S-2	AC-DC or Battery switch
C-16	.002 mfd. paper capacitor	R-3	47,000 ohms carbon resistor	T-1	Output transformer
C-17	.01 mfd. paper capacitor	R-4	150 ohms carbon resistor		
C-18	.004 mfd. paper capacitor	R-5	560 ohms carbon resistor		



General Electric Model HM-21

Symbol	Description
C-1	300-850 mmf. tuning trimmer
C-2	100 mmf. mica capacitor
C-3	0.1 mfd. paper capacitor
C-4	.005 mfd. paper capacitor
C-5a	10 mfd. dry electrolytic
C-5b	10 mfd. dry electrolytic
C-6	.01-.01 mfd. line capacitor
L-1	Oscillator coil
M-1	Motor
R-1	120,000 ohms carbon resistor
R-2	1,200 ohms carbon resistor
R-3	47,000 ohms carbon resistor
R-4	47,000 ohms carbon resistor
R-5	1.0 megohms carbon resistor
R-6	6,800 ohms carbon resistor
S-1	Power switch
T-1	Power transformer

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General Electric

Models H-634, H-638, and H-640

Tuning Frequency Range

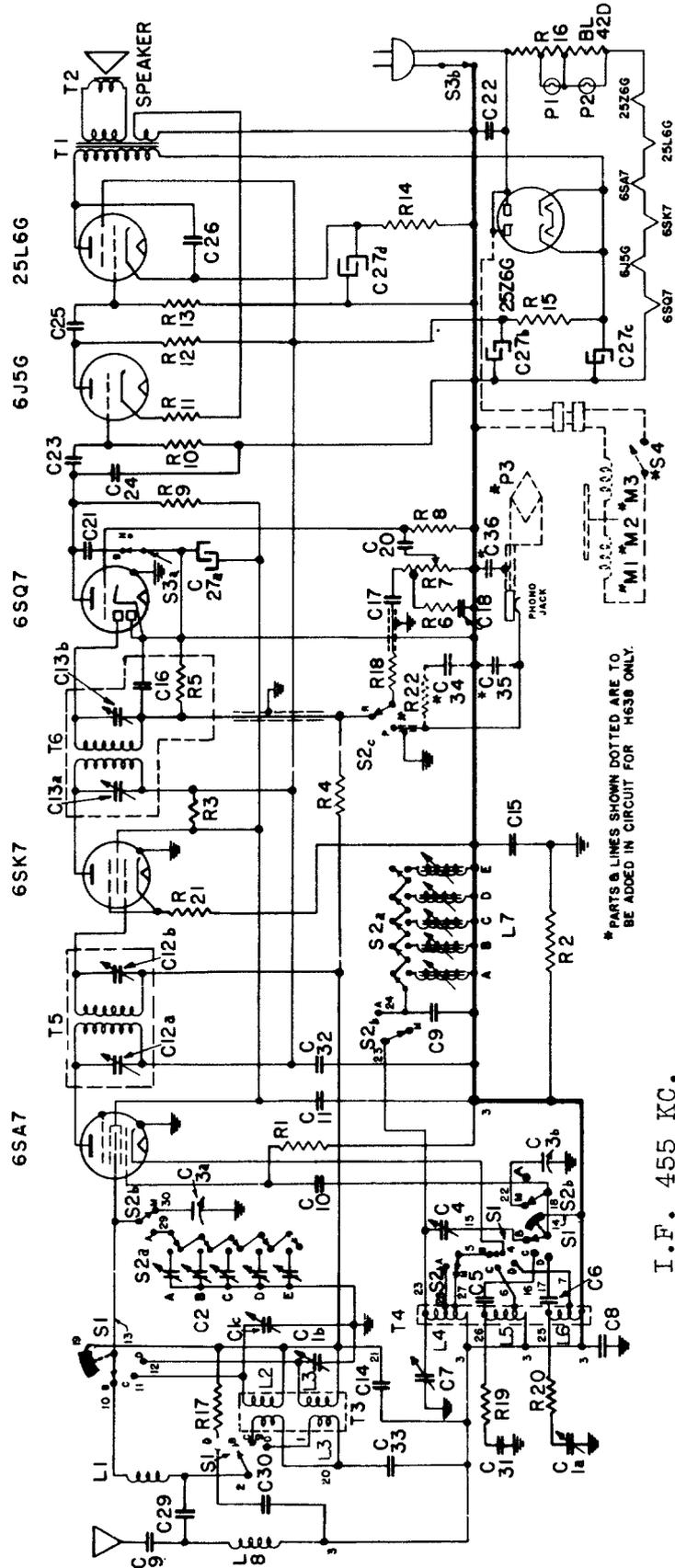
Band "B" 550-1600 K.C.
 Band "C" 2200-6500 K.C.
 Band "D" 6500-22000 K.C.

Intermediate Frequency 455 K.C.

SYMBOL	DESCRIPTION
M-1	60 cycle phono motor
M-2	50 cycle phono motor
M-3	25 cycle phono motor
R-1	27,000 ohms, carbon resistor
R-2	470,000 ohms, carbon resistor
R-3	2,200 ohms, carbon resistor
R-4	2.2 megohms, carbon resistor
R-5	470,000 ohms, carbon resistor
R-6	56,000 ohms, carbon resistor
R-7	2 megohm volume control
R-8	.5 megohms, carbon resistor
R-9	220,000 ohms, carbon resistor
R-10	300 megohm, carbon resistor
R-11	300 ohms, carbon resistor
R-12	290,000 ohms, carbon resistor
R-13	470,000 ohms, carbon resistor
R-14	150 ohms, carbon resistor
R-15	560 ohms, carbon resistor
R-16	Ballast tube BL42D
R-17	47,000 ohms, carbon resistor
R-18	47,000 ohms, carbon resistor
R-19	150 ohms, carbon resistor
R-20	68 ohms, carbon resistor
R-21	390 ohms, carbon resistor
R-22	100,000 ohms, carbon resistor
P-1, 2	Dial lamp, Mazda No. 44.

SYMBOL	DESCRIPTION
C-22	.05 mfd. 250 V. A. C. moulded capacitor
C-23	.005 mfd. paper capacitor
C-24	100 mmf. mica capacitor
C-25	.02 mfd. paper capacitor
C-26	.01 mfd. paper capacitor
C-27a	50 mfd. 150 V. dry electrolytic
C-27b	50 mfd. 150 V. dry electrolytic
C-27c	20 mfd. 25 V. dry electrolytic
C-29	0.1 mfd. paper capacitor
C-30	4700 mmf. mica capacitor ± 5%
C-31	22 mmf. mica capacitor
C-32	.05 mfd. paper capacitor
C-33	.05 mfd. paper capacitor
C-34	.01 mfd. paper capacitor
C-35	.002 mfd. paper capacitor
C-36	.01 mfd. paper capacitor
L-1	Loop antenna
L-2	"C" band antenna coil
L-3	"B" band antenna coil
L-4	"B" band oscillator coil
L-5	"C" band oscillator coil
L-6	"D" band oscillator coil
L-7	Station coil trimmers
L-8	Antenna choke

SYMBOL	DESCRIPTION
C-1a	"D" band oscillator trimmer
C-1b	"D" band antenna trimmer
C-1c	"C" band antenna trimmer
C-2a	7-65 mmf. station trimmer
C-2b	20-180 mmf. station trimmer
C-2c	100-490 mmf. station trimmer
C-2d	100-490 mmf. station trimmer
C-3	Tuning condenser
C-4	"B" band oscillator padder
C-5	2000 mmf. mica capacitor ± 5%
C-6	5600 mmf. mica capacitor ± 5%
C-7	.01 mfd. paper capacitor
C-8	"B" band oscillator trimmer
C-9	750 mmf. silvered mica capacitor ± 5%
C-10	47 mmf. mica capacitor
C-11	.05 mfd. paper capacitor
C-12	.05 mfd. paper capacitor
C-13	.01 mfd. paper capacitor
C-14	100 mmf. mica capacitor
C-15	.005 mfd. mica capacitor
C-16	.005 mfd. paper capacitor
C-17	.0072 mfd. paper capacitor
C-18	.005 mfd. paper capacitor
C-19	.01 mfd. paper capacitor
C-20	.01 mfd. paper capacitor
C-21	.0015 mfd. paper capacitor



* PARTS & LINES SHOWN DOTTED ARE TO BE ADDED IN CIRCUIT FOR H-638 ONLY.

I.F. 455 KC.

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General Electric Model HJ-612

I.F. Alignment

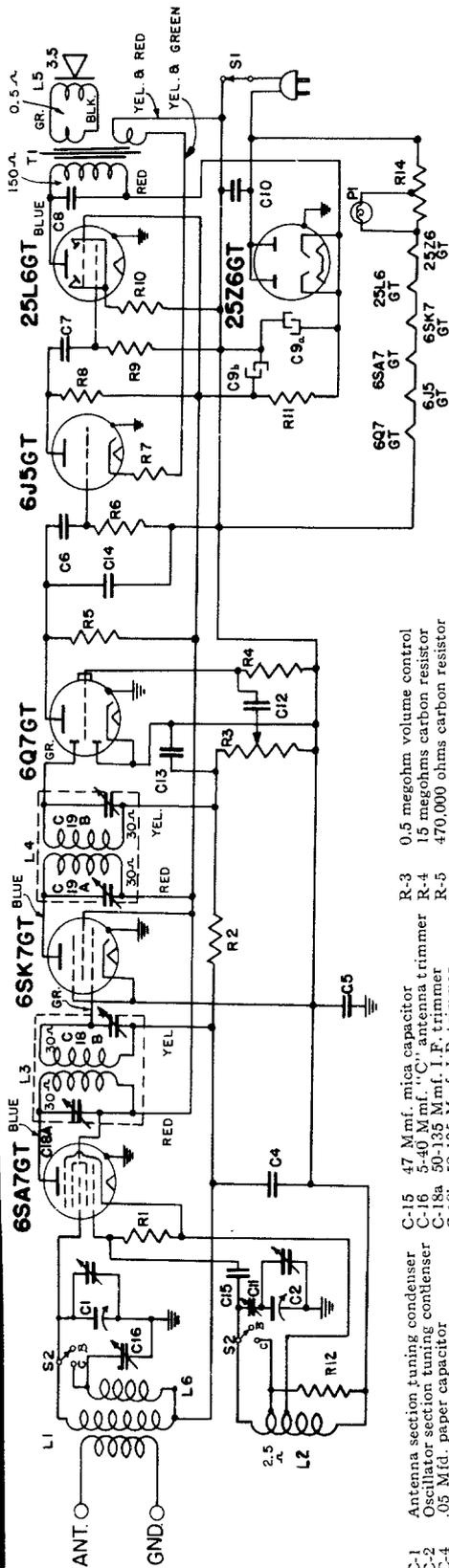
Connect an output meter across the voice coil. Rotate the volume control to maximum. Completely close the gang condenser plates and set the dial pointer to the first dial mark at the low end of the scale. Throw the band switch to "BC" (up).

Set test oscillator to 455 KC and apply signal to the control grid of the 6SA7 tube through a .05 mfd. capacitor. Do not remove the 6SA7 grid lead. Keep the test oscillator output as low as a readable meter reading will permit. Adjust all I.F. trimmers for maximum meter reading.

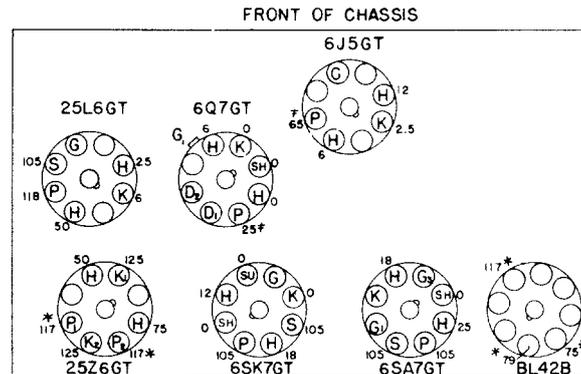
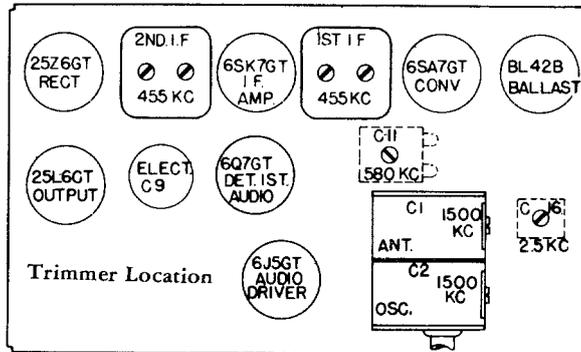
R.F. Alignment

Apply a 1500 KC signal either through a standard I.R.E. dummy to the antenna terminal or through an additional loop connected to the signal generator output which can be magnetically coupled to the receiver Beam-a-Scope. When using an I.R.E. dummy antenna for R.F. alignment do not connect a ground lead between the signal generator and the receiver. Align (C-2) at 1500 KC and peak (C-1) for maximum output. Change signal to 580 KC and tune receiver to signal. Peak (C-11) on the 580 KC signal by rocking the gang condenser. Retrim at 1500 KC.

Throw the band switch to "SW" band. Peak (C-16) on 2500 KC.



- C-1 Antenna section tuning condenser
- C-2 Oscillator section tuning condenser
- C-3 .05 Mfd. paper capacitor
- C-4 .2 Mfd. paper capacitor
- C-5 .005 Mfd. paper capacitor
- C-6 .005 Mfd. paper capacitor
- C-7 .01 Mfd. paper capacitor
- C-8 .05 Mfd. 150 V. dry electrolytic
- C-9 300-675 Mmf. paddler
- C-10 .05 Mfd. paper capacitor
- C-11 70 Mmf. mica capacitor
- C-12 220 Mmf. mica capacitor
- C-13
- C-14
- C-15 47 Mmf. mica capacitor
- C-16 5-40 Mmf. "C" antenna trimmer
- C-18a 50-135 Mmf. I.F. trimmer
- C-18b 50-135 Mmf. I.F. trimmer
- C-19a 50-135 Mmf. I.F. trimmer
- C-19b 50-135 Mmf. I.F. trimmer
- L-1 Beam-a-Scope
- L-2 Oscillator coil
- L-3 1st I.F. transformer
- L-4 2nd I.F. transformer
- L-5 "C" band antenna coil
- L-6 Dial lamp, MAZDA No. 44
- R-1 33,000 ohms carbon resistor
- R-2 2.2 megohms carbon resistor
- R-3 0.5 megohm volume control
- R-4 15 megohms carbon resistor
- R-5 470,000 ohms carbon resistor
- R-6 1.0 megohms carbon resistor
- R-7 3300 ohms carbon resistor
- R-8 39,000 ohms carbon resistor
- R-9 470,000 ohms carbon resistor
- R-10 1000 ohms, 1 W. carbon resistor
- R-11 4700 ohms carbon resistor
- R-12 4700 ohms carbon resistor
- R-14 Ballast resistor BL-42-B
- T-1 Output transformer



VOLTAGES MEASURED BETWEEN SOCKET TERMINALS AND MINUS B
 * MEASURED ON 250 VOLT SCALE OF 1000 OHMS PER VOLT METER
 * VOLTS AC.
 LINE VOLTS - 117 AC GANG CLOSED MAX VOLUME

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SUPER DEFIANT MODEL SX25

RESISTORS

NO.	OHMS	WATTAGE	NO.	OHMS	WATTAGE
R1	100,000	1/3	23	3,000	1/3
2	400	"	24	50,000	"
3	100,000	"	25	250,000	"
4	10,000	R. F. Gain	26	100,000	"
5	500	S Meter	27	250,000	"
6	100	1/3	28	2,000,000	"
7	3,000	"	29	1,000,000	"
8	100,000	"	30	500,000	A.F. Gain
9	400	"	31	250,000	1/3
10	500	"	32	250,000	"
11	3,000	"	33	250,000	"
12	100,000	"	34	250,000	"
13	400	"	35	200,000	"
14	50,000	"	36	250	1
15	30,000	1	37	20,000	1
16	15,000	1	38	15,000	1
17	4,000	1	39	15,000	1
18	100,000	1/3	40	150	1/3
19	500,000	"	41	50,000	"
20	800	"	42	20,000	1
21	3,000	"	43	8	1/3
22	1,000	"			

CONDENSERS

NO.	CAPACITY	VOLTAGE	TYPE	NO.	CAPACITY	VOLTAGE	TYPE
C1	Main Tuning Gang			29	100 mmfd		Mica
2	2 PL. Bd. Spr. Sec.			30	3 mmfd		Twisted Pair
3	5 " " " "			31	.02 mfd	400	Paper
4	.01 mfd	200	Paper	32	.02 mfd	400	Paper
5	.05 mfd	200		33	.05 mfd	200	Paper
6	.05 mfd	200	Paper	34	.002 mfd	1,600	Tubular Oil
7	.02 mfd	400	Paper	35	250 mfd		Mica
8	.05 mfd	200	Paper	36	.05 mfd	400	Paper
9	35 mmfd		Ceramicon	37	10 mfd	25	Electrolytic
10	.05 mfd	200	Paper	38	.05 mfd	400	Paper
11	.02 mfd	400	Paper	39	10 mfd	25	Electrolytic
12	.05 mfd	200	Paper	40	.002 mfd	1,600	Tubular Oil
13	5 mmfd		Ceramicon	41	.1 mfd	400	Paper
14	35 mmfd		Ceramicon	42	10 mfd	350	Electrolytic
15	.05 mfd	200		43	30 mfd	350	Electrolytic
16	.05 mfd	400	Paper	44	.01 mfd	600	Paper
17	.02 mfd	400	Paper	45	100 mmfd		Mica
18	4.5 mmfd		Compensating	46	500 mmfd		Mica
19	10 mfd	350	Electrolytic	47	.02 mfd	400	Paper
20	.05 mfd	200	Paper	48	105 mmfd		Ceramicon
21	25 mmfd		Phasing	49	.002 mfd.		Mica
22	1.5 to 18 mmfd "TXS"		Trimmer	50	105 mmfd		Ceramicon
23	1.5 to 18 mmfd		Trimmer	51	2300 mmfd		Dual Pad
24	.05 mfd	200	Paper	52	1400 mmfd		Single Pad
25	.02 mfd	400	Paper	53	450 mmfd		Dual Pad
26	.05 mfd	200	Paper	54	.1 mfd	200	Paper
27	.02 mfd	400	Paper	55	700 mmfd		Mica
28	50 mmfd		Mica				

SWITCHES

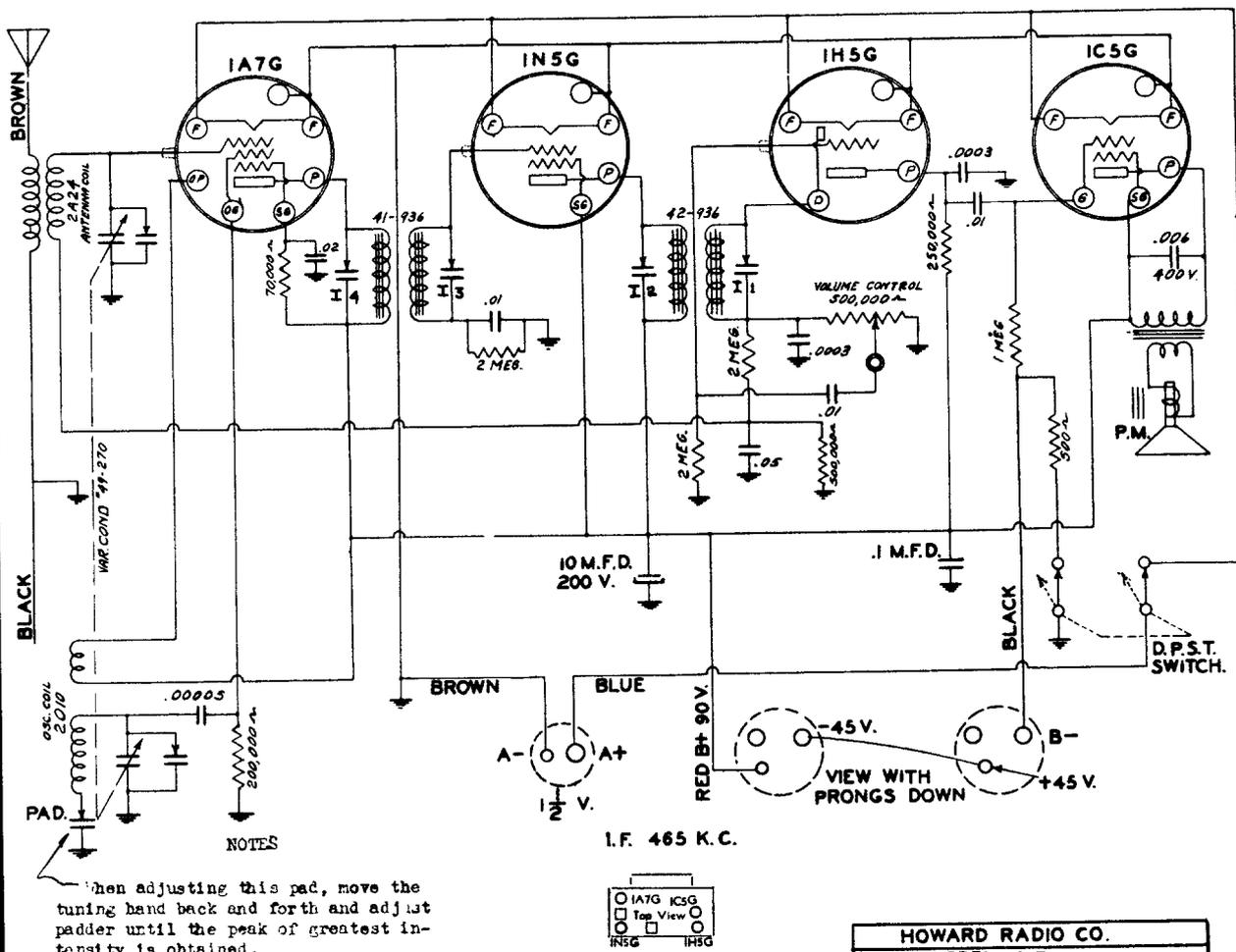
SW1 - AC ON-OFF on A.F. Gain Control
 SW2 - Stand-by SPST
 SW3 - B.F.G. ON-OFF SPST

SW4 - A.N.L. ON-OFF SPST
 SW5 - High-Low Tone SPST
 SW6 - "S" Meter on R.F. Gain Control.

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SERVICE NOTES

It is necessary that the 1N5G tube be shielded. See that the shield is firmly in place around the bottom portion of the tube.

The intermediate frequency of this receiver is 465 KC.

The trimmers and padding condenser adjustments are accessible through bottom of cabinet.

Color code of battery leads:- Red B+90; Black B-; Brown A-; Blue A + 1/2 V.

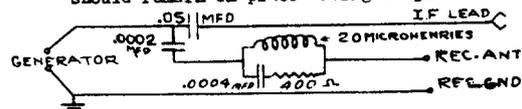
RECOMMEND BATTERY KITS

	EVEREADY	BURGESS	
1 1/2 V. "A" 1 Required	740	20-F	For greater economy use two "A" cells in PARALLEL. Connect plus to plus and minus to minus.
45 V. "B" 2 Required	749	D60	
Combination "A" and "B" Single Unit.	746	17GD60	Use Adapter

Each step of the alignment should be repeated in the original order for greater accuracy. Keep output from Signal Generator low. The I.F. trimmers are reached through the two holes on the top of each I.F. can.

See that the tuning hand is set exactly on the last line above 540 when the condenser is at maximum capacity.

The following dummy antenna circuit is recommended, since it is adaptable for any frequency range. The grid cap should remain in place during alignment.



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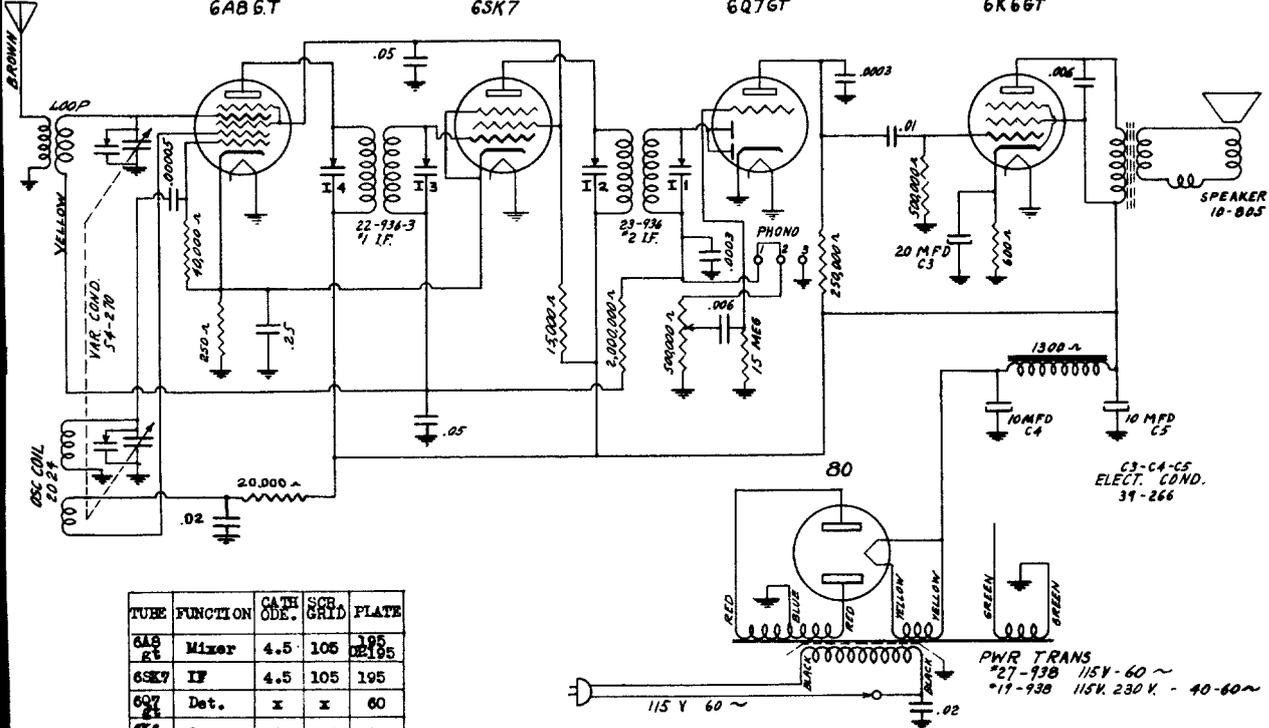
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6AB6T

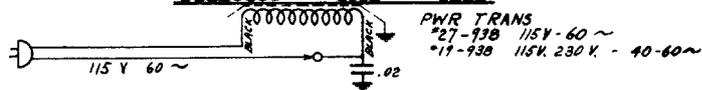
6SK7

6Q7GT

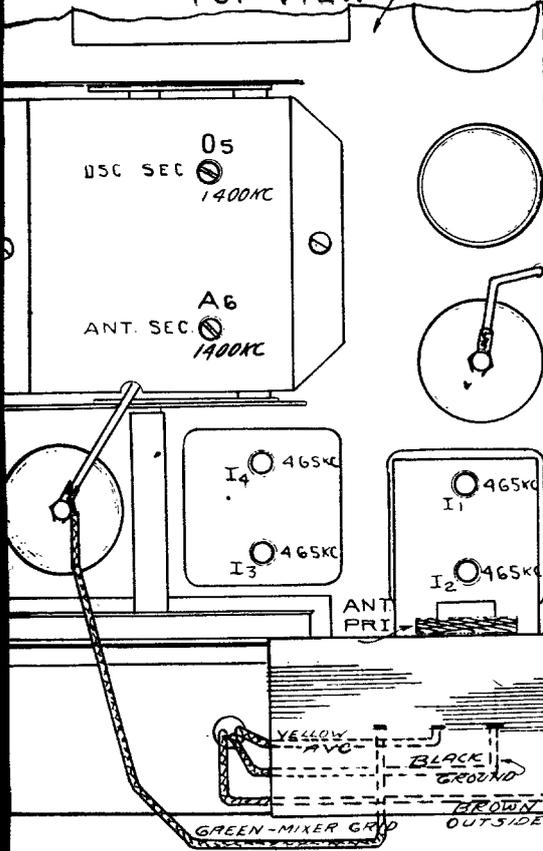
6K6GT



TUBE	FUNCTION	CATH. ODE.	SCR. GRID	PLATE
6AB6T	Mixer	4.5	105	195 DE 195
6SK7	IF	4.5	105	195
6Q7GT	Det.	x	x	60
6K6GT	Output	16	195	185



TOP VIEW

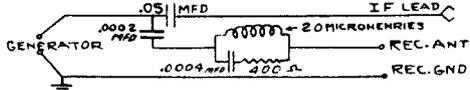


Howard Radio Model 300

ALIGNMENT PROCEDURE

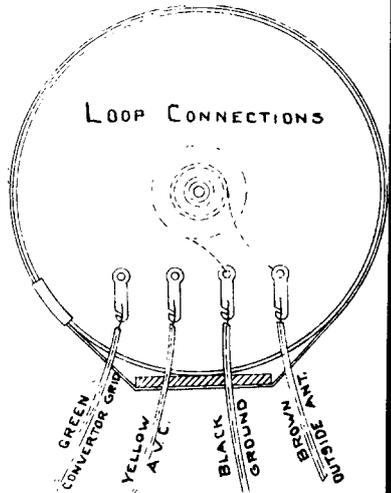
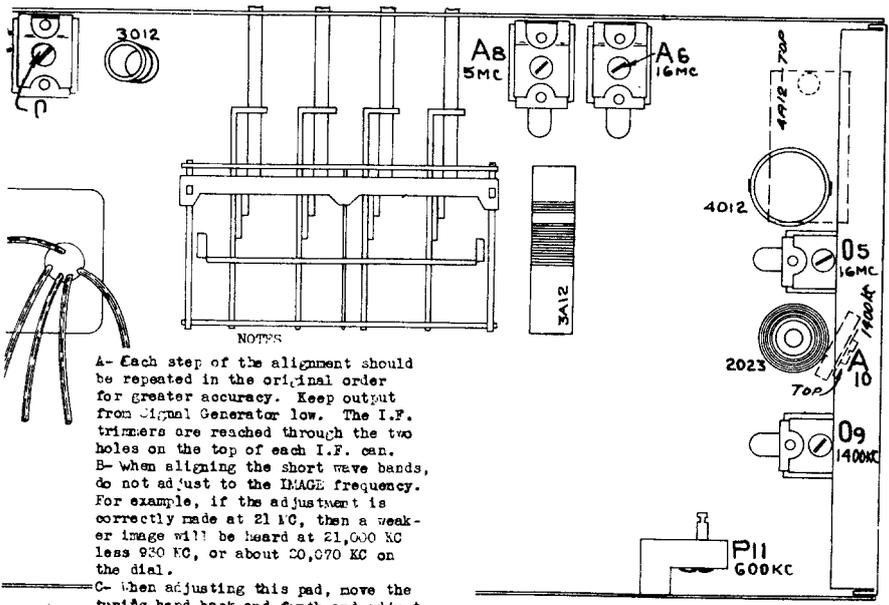
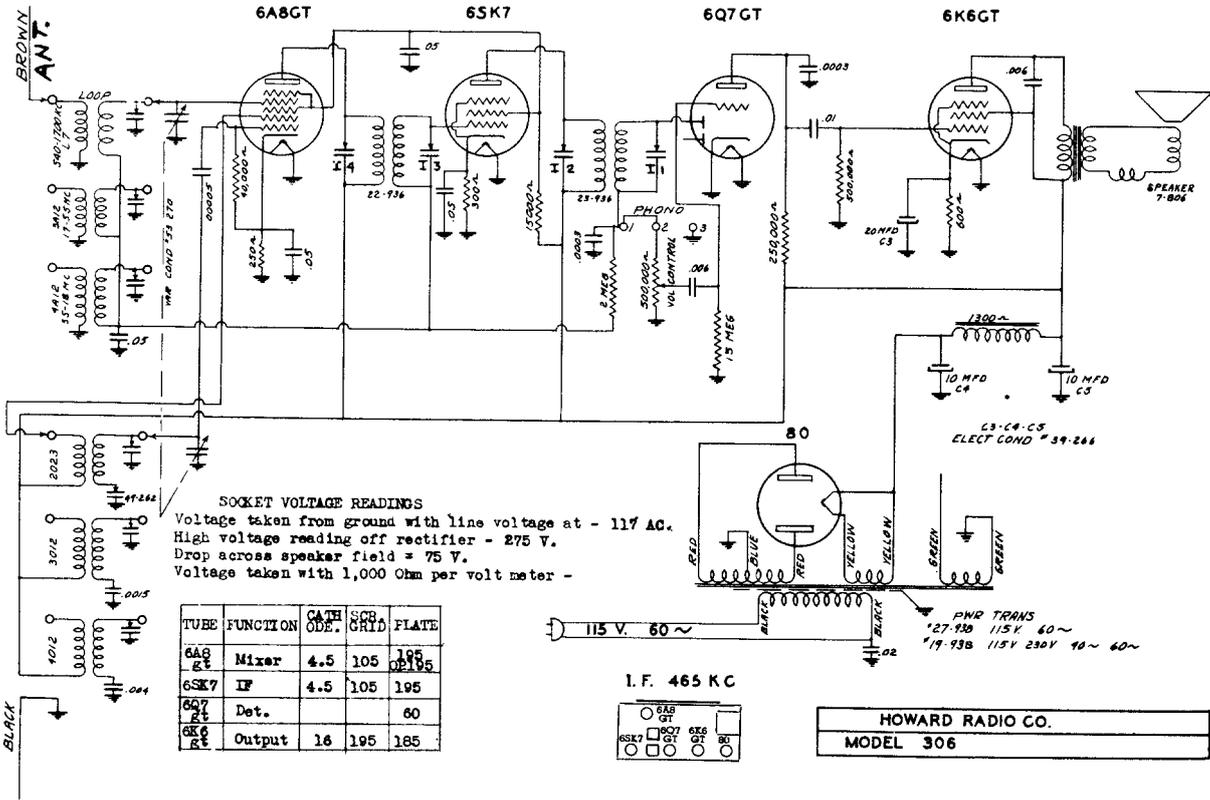
Wave-Band Switch Position	Position of Dial Pointer	Generator Frequency	Generator Connection	See Note	Trimmers Adjusted (In order shown)	Trimmer Function
x	Min. Cap.	465 KC	6AB Grid	A, E	I ₁ I ₂ I ₃ I ₄	IF
x	1400 KC	1400 KC	Brown lead	D	C ₅ C ₆	Osc. & Ant.
x	600 KC	600 KC	Brown lead		OUT PLATE	OSC. SECTION

- A- Each step of the alignment should be repeated in the original order for greater accuracy. Keep output from signal generator low. The I.F. trimmers are reached through the two holes on the top of each I.F. can.
- B- When aligning the short wave bands, do not adjust to the IMAGE frequency. For example, if the adjustment is correctly made at 21 MC, then a weaker image will be heard at 21,000 KC less 930 KC, or about 20,070 KC on the dial.
- C- When adjusting this pad, move the tuning hand back and forth and adjust pad until the peak of greatest intensity is obtained.
- D- See that the tuning hand is set exactly on the last line above 540 when the condenser is at maximum capacity.
- E- The following dummy antenna circuit is recommended, since it is adaptable for any frequency range. The grid cap should remain in place during alignment.



SOCKET VOLTAGE READINGS
 Voltage taken from ground with line voltage at - 117 AC.
 High voltage reading off rectifier = 275 V.
 Drop across speaker field = 75 V.
 Voltage taken with 1,000 Ohm per volt meter -

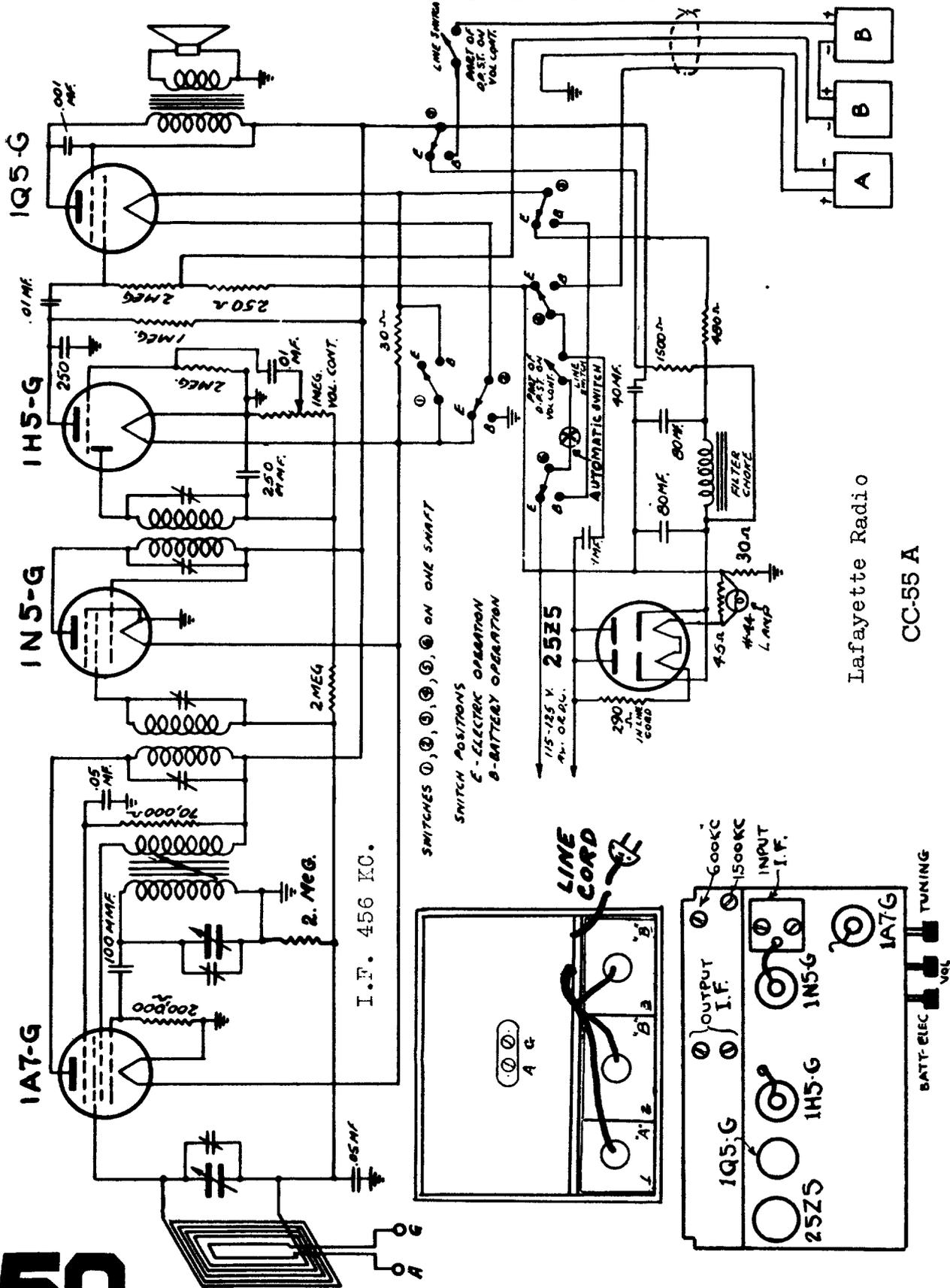
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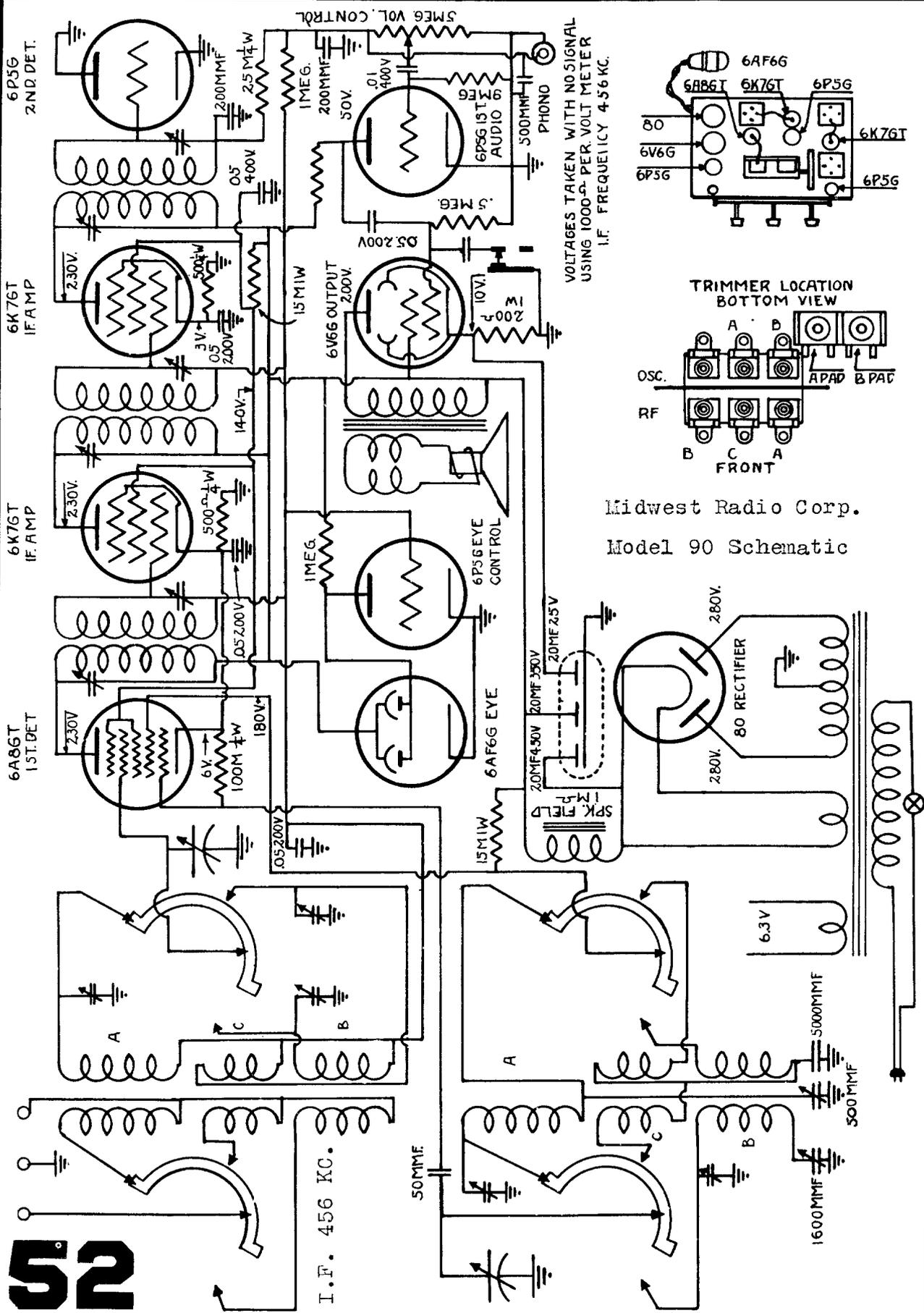
ALIGNMENT PROCEDURE

Wave-Band Switch Position	Position of Dial Pointer	Generator Frequency	Generator Connection	See Note	Trimmers Adjusted (In order shown)	Trimmer Function
BC	Min. Cap.	465 KC	6A8 Grid	A,E	I ₁ I ₂ I ₃ I ₄	IF
SW	16 MC	16 MC	Brown lead	B,D	O ₅ A ₆	Osc. Ant.
PB	5 MC	5 MC	Brown lead		O ₇ A ₈	Osc. Ant.
BC	1400 KC	1400 KC	Brown lead		O ₉ A ₁₀	Osc. Ant.
BC	600 KC	600 KC	Brown lead	C	P ₁₁	Osc. Pad.

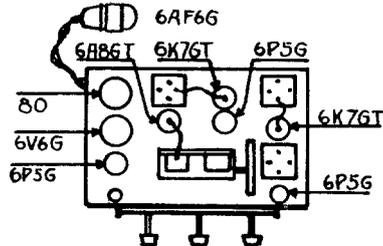
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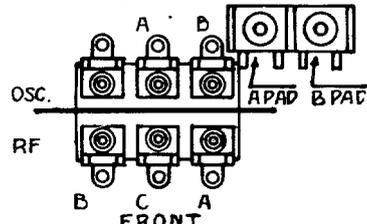
Lafayette Radio
CC-55 A



VOLTAGES TAKEN WITH NO SIGNAL
USING 1000-Ω PER. VOLT METER
I.F. FREQUENCY 456 KC.

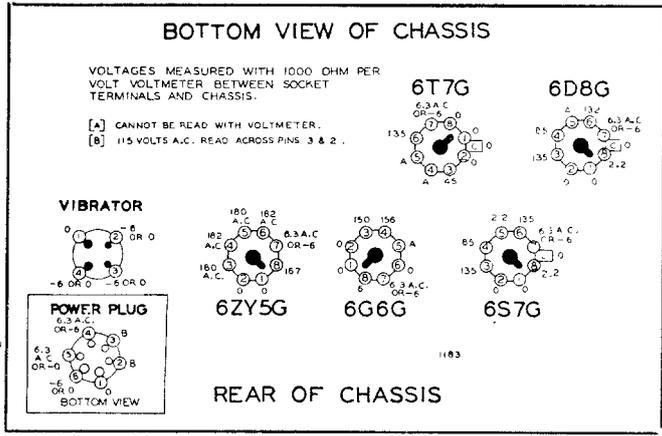
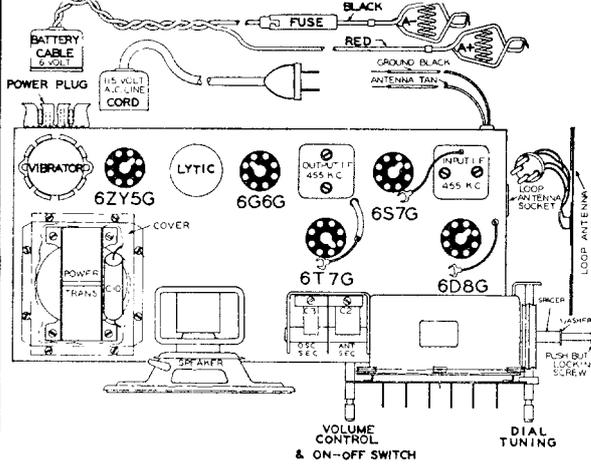
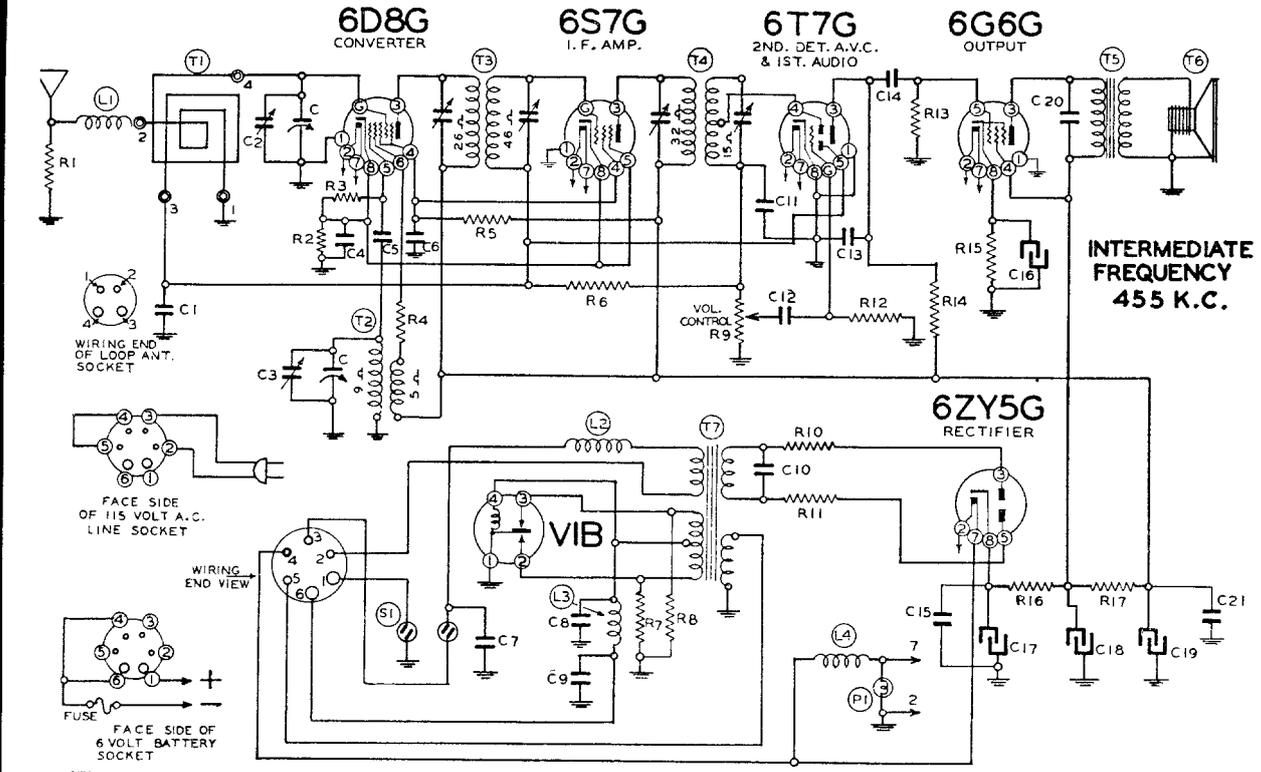


TRIMMER LOCATION
BOTTOM VIEW



Midwest Radio Corp.
Model 90 Schematic

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



MONTGOMERY WARD

RESISTORS

R1	BE13022	5M ohm—1/2 watt
R2	BE130166	150 ohm—1/2 watt
R3	BE13012	50M ohm—1/2 watt
R4	BE13026	1000 ohm—1/2 watt
R5	BE130157	12M ohm—1/2 watt
R6	BE13194	3 megohm—1/2 watt
R7	BE130168	100 ohm—1/2 watt
R8	BE130168	100 ohm—1/2 watt
R9	BE101225	1 megohm volume control
R10	BE130333	60 ohm—1/2 watt
R11	BE130233	60 ohm—1/2 watt
R12	BE130223	10 megohm—1/2 watt
R13	BE13037	750M ohm—1/2 watt
R14	BE13011	250M ohm—1/2 watt
R15	BE13079	400 ohm—1/2 watt
R16	BE130222	350 ohm—1/2 watt
R17	BE130235	1500 ohm—1/2 watt

MODEL 04BR-570A

PARTS

T1	BE111187	Loop Antenna Assembly
T2	BE110155	Oscillator Coil
T3	BE108129C	Input I.F. Coil—455 kc.
T4	BE108130D	Output I.F. Coil—455 kc.
T5	BE105113	Output Transformer
T6	BE114205	5" P.M. Speaker
T7	BE104216	Power Transformer
L1	BE12312	R.F. Choke
L2	BE10566	R.F. "A" Choke
L3	BE10568	R.F. Choke
L4	BE10566	R.F. "A" Choke
P1	BE12626	On-Off Switch on Volume Control Plug-in Vibrator Unit

CONDENSERS

C	BE102134	2 gang variable condenser
C1	BE1009	.05 x 200 volts
C2		Antenna trimmer on gang
C3		Oscillator trimmer on gang
C4	BE10020	.1 x 200 v.
C5	BE1295	.0001 mica
C6	BE10020	.1 x 200 v.
C7	BE10013	.05 x 400 v.
C8	BE10031	.5 x 120 v.
C9	BE10031	.5 x 120 v.
C10	BE10073	.008 x 1200 v.
C11	BE12951	.000125 mica
C12	BE10012	.03 x 600 v.
C13	BE12960	.00015 mica
C14	BE10011	.01 x 400 v.
C15	BE10020	.1 x 200 v.
C16	BE119111	20 mid. lytic—25 w. v.
C17	BE119111	40 mid. lytic—200 w. v.
C18	BE119111	20 mid. lytic—200 w. v.
C19	BE119111	20 mid. lytic—200 w. v.
C20	BE10019	.006 x 600 v.
C21	BE10020	.1 x 200 v.

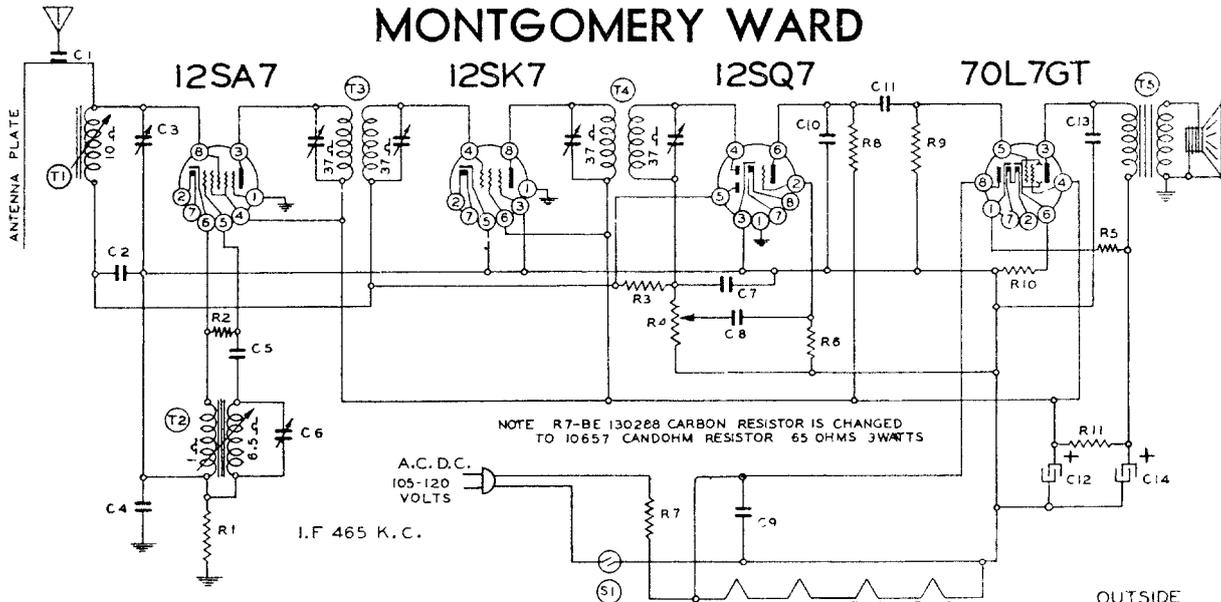
C16, C17, C18, C19 are in same unit

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MONTGOMERY WARD

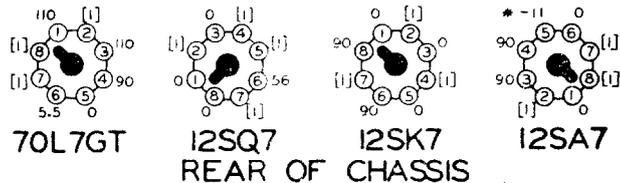


BOTTOM VIEW OF CHASSIS

VOLTAGES MEASURED WITH 1000 OHM PER VOLT VOLT METER BETWEEN SOCKET TERMINALS AND NEGATIVE "B" SUPPLY.

[1] CANNOT BE MEASURED WITH VOLT METER.

* OSCILLATOR VOLTAGE MEASURED WITH R.F. CHOKE IN SERIES WITH LEAD.



BOTTOM VIEW

RESISTORS

R1	BE130100	150M ohm— $\frac{1}{2}$ w.
R2	BE130176	20M ohm— $\frac{1}{2}$ w.
R3	BE1304	3 megohm— $\frac{1}{2}$ w.
R4	BE101188	Volume control (500M ohm)
R5	BE130293	30 ohm—1 watt
R6	BE130257	5 megohm— $\frac{1}{2}$ w.
R7	BE10657	65 ohm—3 watt
R8	BE13011	250M ohm— $\frac{1}{2}$ w.
R9	BE13011	250M ohm— $\frac{1}{2}$ w.
R10	BE130166	150 ohm— $\frac{1}{2}$ w.
R11	BE130279	1M ohm—1 watt

CONDENSERS

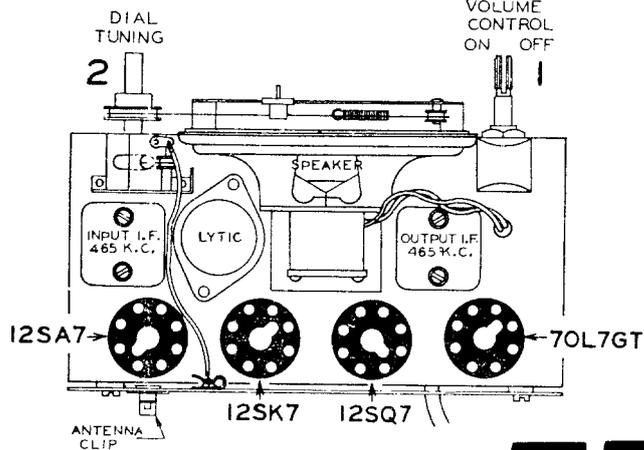
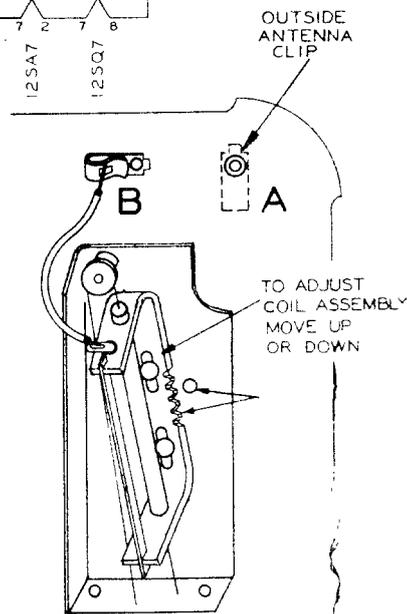
C1	BE131262	.00001 washer condenser (Ant. Clip on Back Plate)
C2	BE1009	.05 x 200 v.
C3	BE124100	Antenna Trimmer
C4	BE10091	.15 x 400 v.
C5	BE12939	.00005 mica
C6	BE124100	Osc. Trimmer
C7	BE12912	.00025 mica
C8	BE10025	.002 x 600 v.
C9	BE10013	.05 x 400 v.
C10	BE1292	.0005 mica
C11	BE10011	.01 x 400 v.
C12	BE11992	20 ufd. x 150 w. v. lytic
C13	BE10011	.01 x 400 v.
C14	BE11992	40 ufd. x 150 w. v. lytic C3 and C6 in one unit C12 and C14 in one unit

PARTS

T1	BE111136	Antenna Coil Complete
T2	BE110126	Oscillator Coil
T3	BE108157	Input I. F. Coil—465 kc.
T4	BE108157B	Output I. F. Coil—465 kc.
T5	BE114170	4 in. P. M. Speaker and Output transformer
S1		Off-on switch on volume control

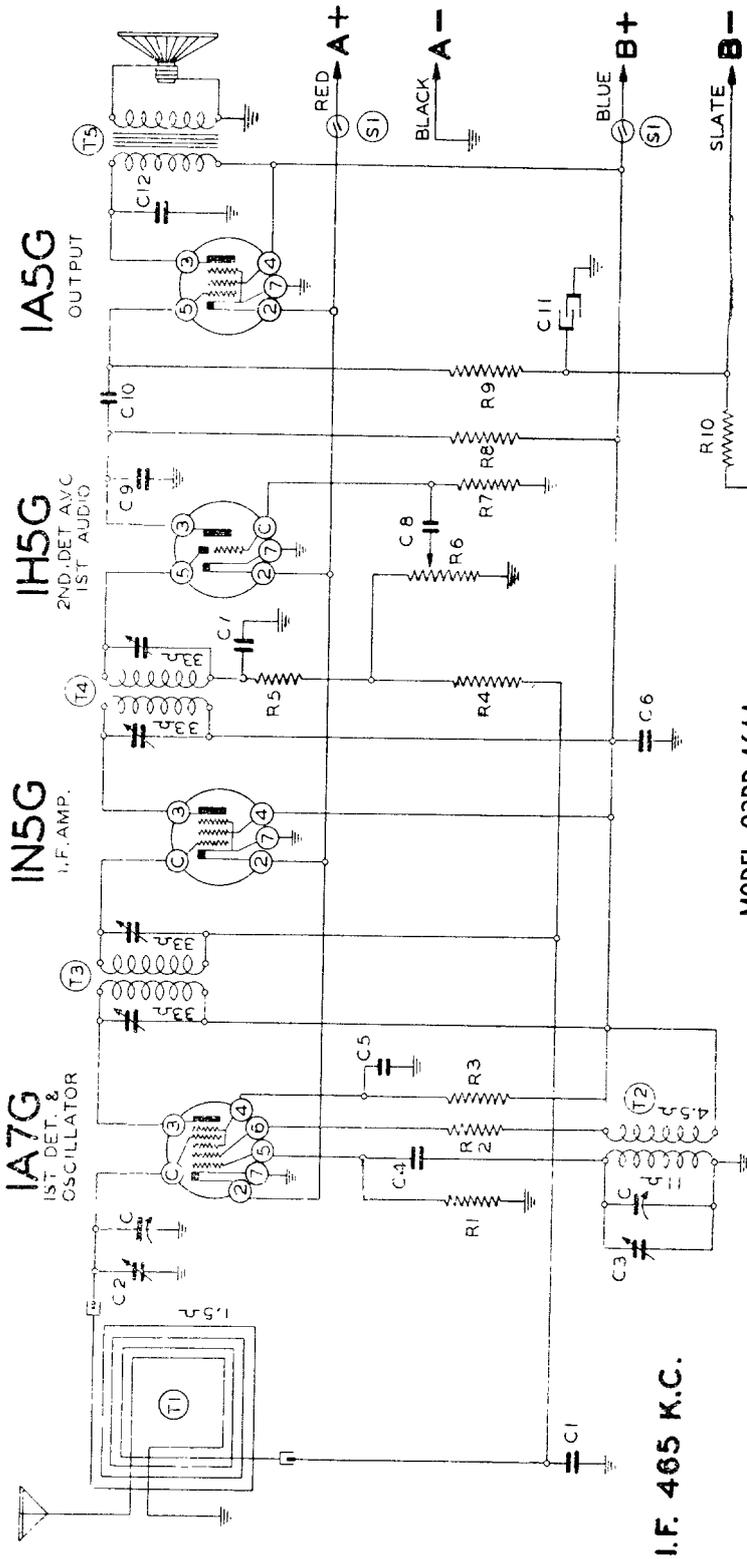
MODEL 93BR-420B

- " 93BR-421B
- " 93BR-423B
- " 93BR-424B
- " 93BR-431B



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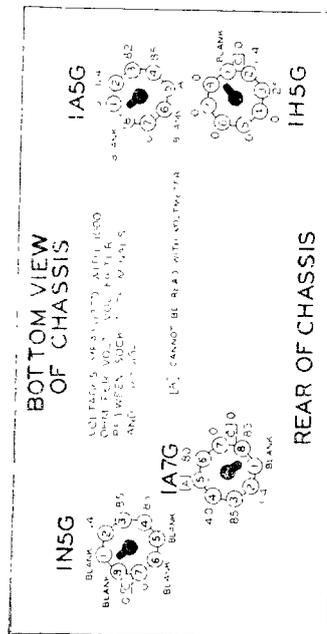
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MONTGOMERY WARD

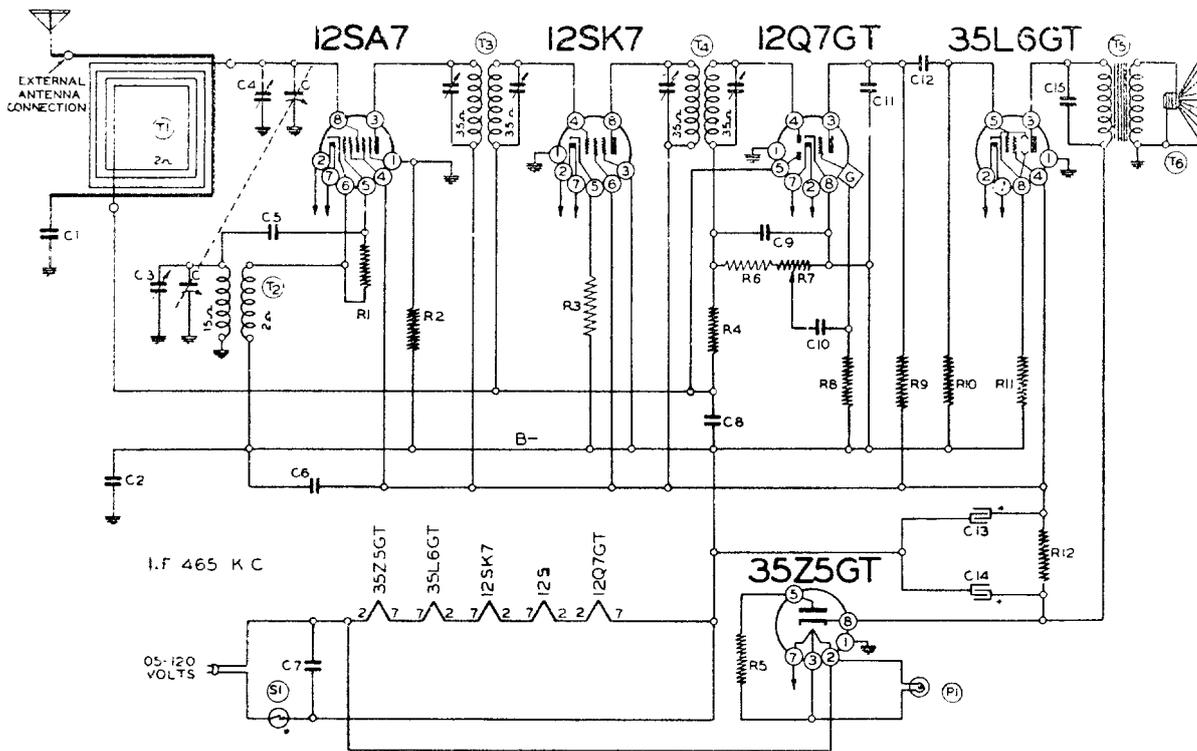
Schematic Ref. No.	Part No.	Description
R1	BE11309	200M ohm - 1/2 w. 20%
R2	BE13018	4M ohm - 1/2 w. 20%
R3	BE13038	40M ohm - 1/2 w. 20%
R4	BE13038	2 megohm - 1/2 w. 20%
R5	BE13021	100M ohm - 1/2 w. 20%
R6	BE10173	1 megohm volume control
R7	BE13027	5 megohm - 1/2 w. 25%
R8	BE13037	750M ohm - 1/2 w. 20%
R9	BE13038	2 megohm - 1/2 w. 20%
R10	BE13070	500 ohm - 1/2 w. 10%
C1	BE102105	? gang, variable condenser
C2	BE10022	.05 x 200 v. 25%
C3		
C4		
C5		
C6		
C7		
C8		
C9		
C10		
C11		
C12		
T1	BE11131	Loop Antenna Complete
T2	BE11021	B. C. Oscillator Coil
T3	BE108151	Input I. F. Coil
T4	BE108152	Output I. F. Coil
T5	BE114165	5" Speaker with output transformer
SI		D.P.S.T. On-off switch on volume control

Schematic Ref. No.	Part No.	Description
R1	BE11309	200M ohm - 1/2 w. 20%
R2	BE13018	4M ohm - 1/2 w. 20%
R3	BE13038	40M ohm - 1/2 w. 20%
R4	BE13038	2 megohm - 1/2 w. 20%
R5	BE13021	100M ohm - 1/2 w. 20%
R6	BE10173	1 megohm volume control
R7	BE13027	5 megohm - 1/2 w. 25%
R8	BE13037	750M ohm - 1/2 w. 20%
R9	BE13038	2 megohm - 1/2 w. 20%
R10	BE13070	500 ohm - 1/2 w. 10%
C1	BE102105	? gang, variable condenser
C2	BE10022	.05 x 200 v. 25%



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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



Schematic Part Ref. No. No.

Description

RESISTORS

R1	BE130176	20M ohm— $\frac{1}{4}$ w.—10%
R2	BE1309	200M ohm— $\frac{1}{2}$ w.
R3	BE130203	40 ohm— $\frac{1}{4}$ w.—10%
R4	BE1304	3 megohm— $\frac{1}{4}$ w.
R5	BE130215	25 ohm— $\frac{1}{2}$ w.
R6	BE1301	25M ohm— $\frac{1}{4}$ w.
R7	BE101170	1 megohm—volume control
R8	BE130257	5 megohm— $\frac{1}{2}$ w.
R9	BE1303	500M ohm— $\frac{1}{2}$ w.
R10	BE1303	500M ohm— $\frac{1}{2}$ w.
R11	BE130166	150 ohm— $\frac{1}{2}$ w.
R12	BE130199	1500 ohm—1 watt

CONDENSERS

C	BE102107	2 gang variable condenser
C1	BE10011	.01 x 400 v.
C2	BE10091	.15 x 400 v.
C3		Osc. Trimmer on Gang
C4		Antenna Trimmer on Gang
C5	BE12921	.0002 mica

Schematic Part Ref. No. No.

Description

C6	BE1009	.05 x 200 v.
C7	BE1001	.1 x 400 v.
C8	BE1009	.05 x 200 v.
C9	BE1295	.0001 mica
C10	BE10025	.002 x 600 v.
C11	BE12912	.00025 mica
C12	BE100106	.004 x 600 v.
C13	BE11987	30 mfd. lytic
C14	BE11987	30 mfd. lytic
C15	BE10026	.02 x 400 v.

C13 and C14 in same unit

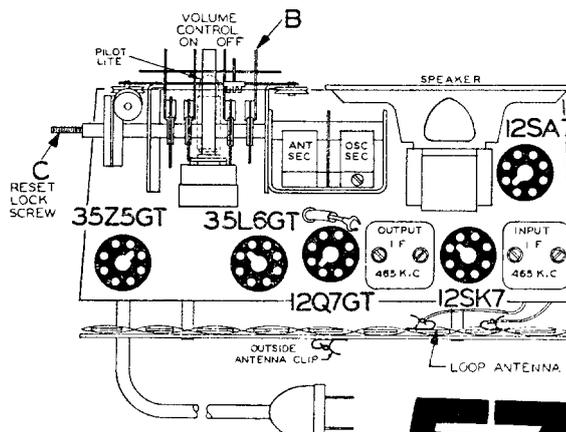
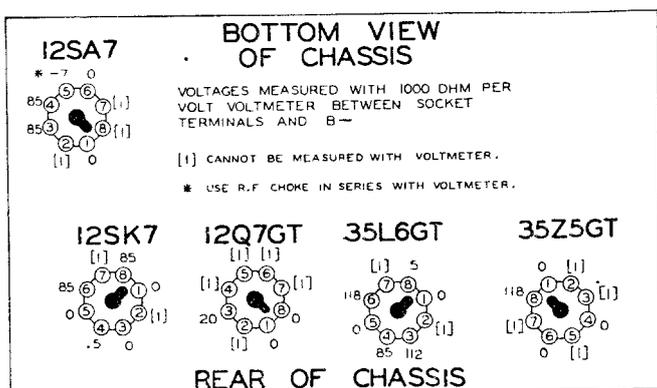
PARTS

T1	BE111128	Loop Antenna
T2	BE110116	Oscillator Coil
T3	BE108140E	Input I. F.
T4	BE108141B	Output I. F.
T5	BE10589	Output Transformer
T6	BE114160	5" P. M. Speaker
S1		Off-on switch on vol. control
P1	BE107249	6-8 v. pilot light T-47

Wards

MODEL 93BR508A

" 93BR509A



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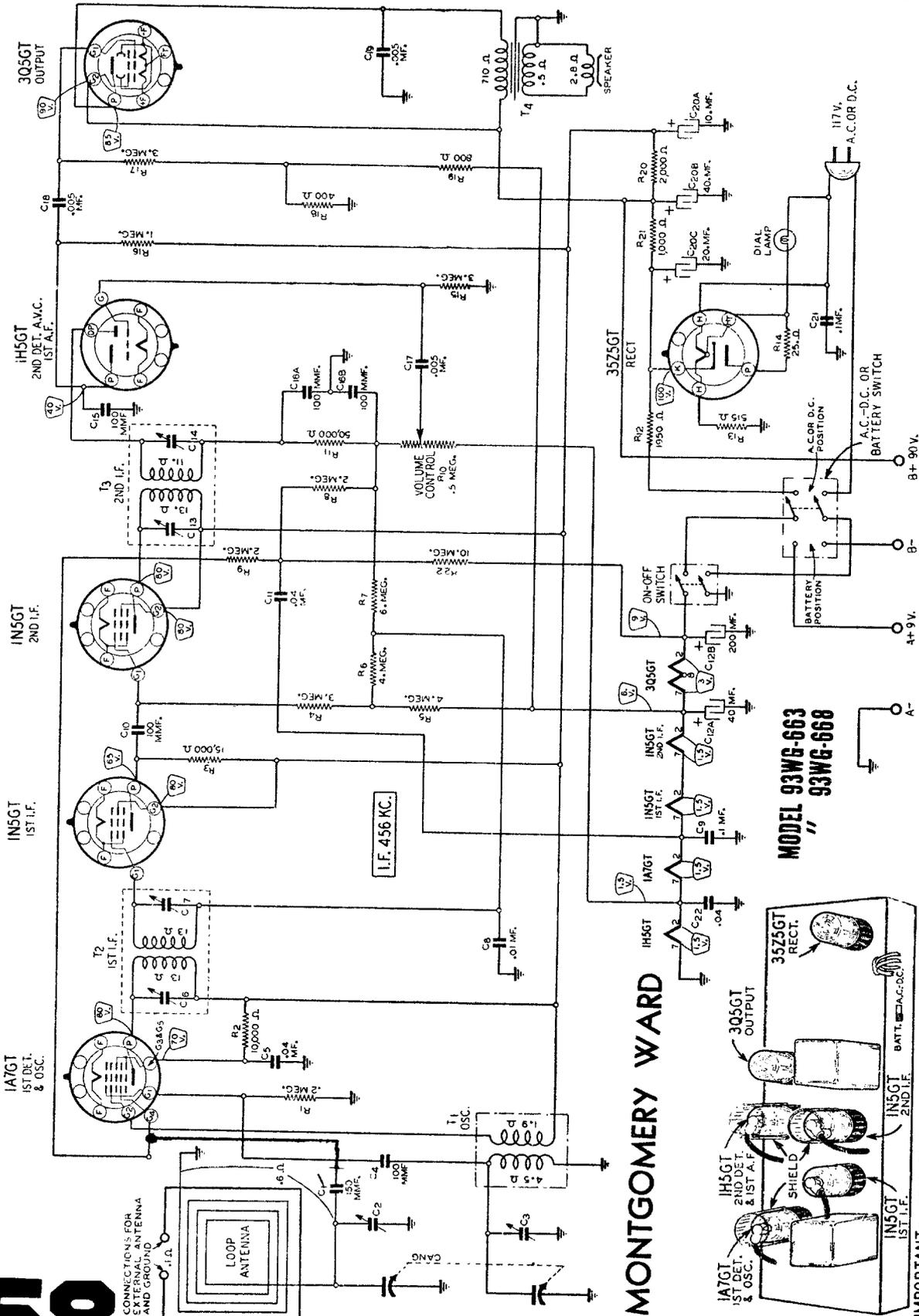
57

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CONNECTIONS FOR EXTERNAL ANTENNA AND GROUND

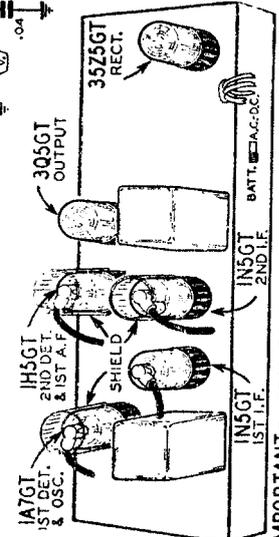
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I.F. 456 KC.

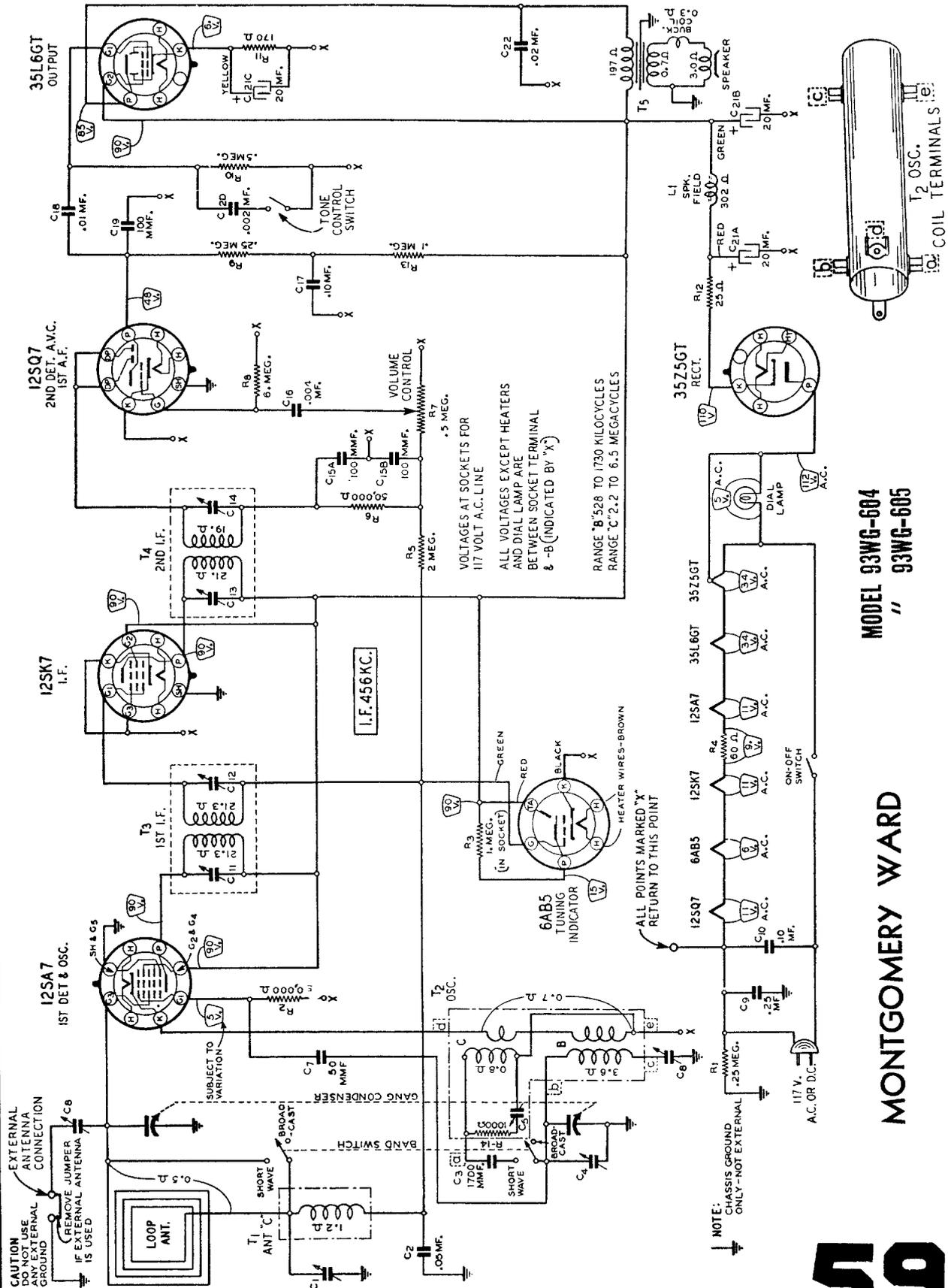
MODEL 93WG-663
" 93WG-668

MONTGOMERY WARD



IMPORTANT - METAL BASE TUBES MUST BE USED IN THOSE SOCKETS AT WHICH SHIELDS ARE SHOWN.

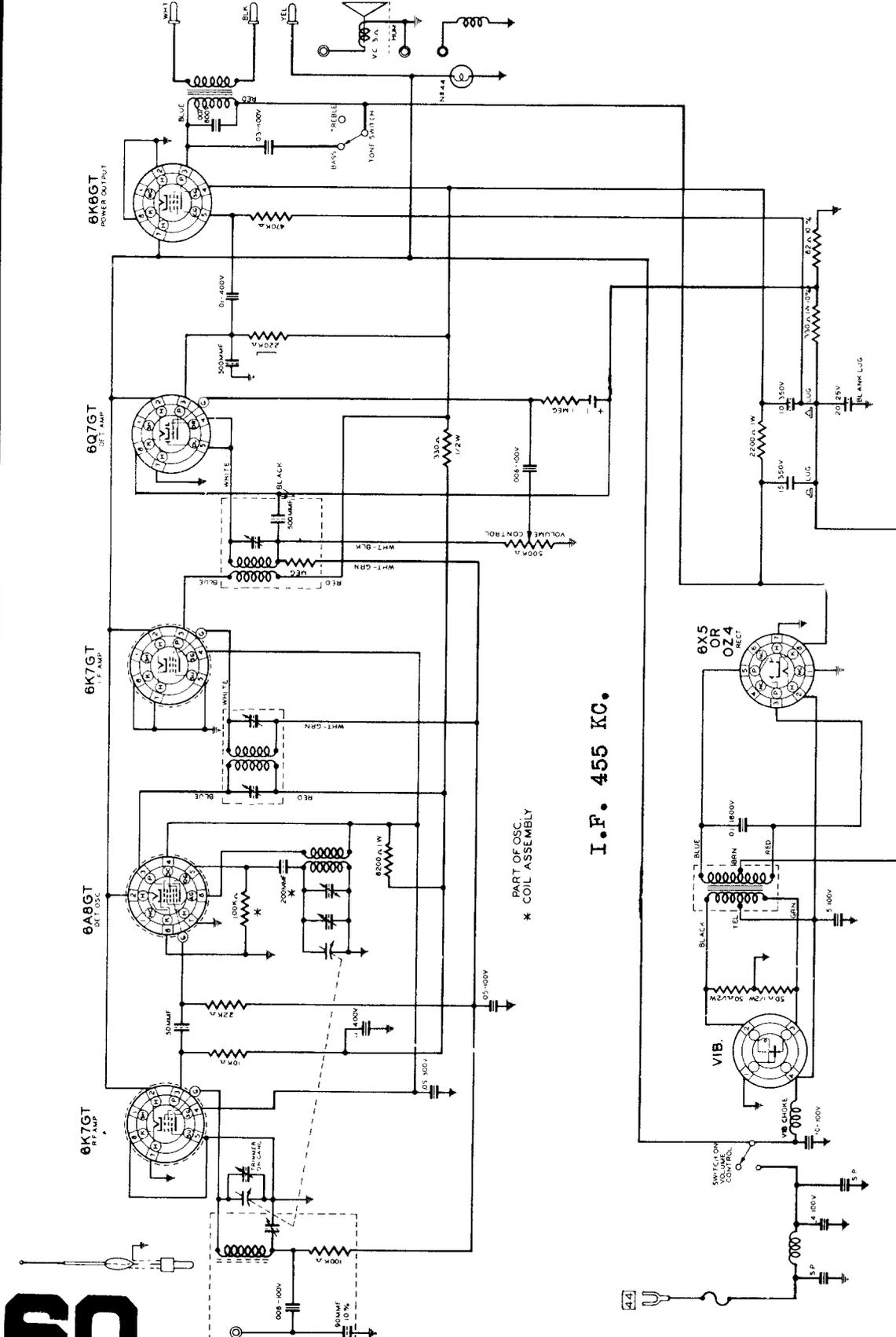
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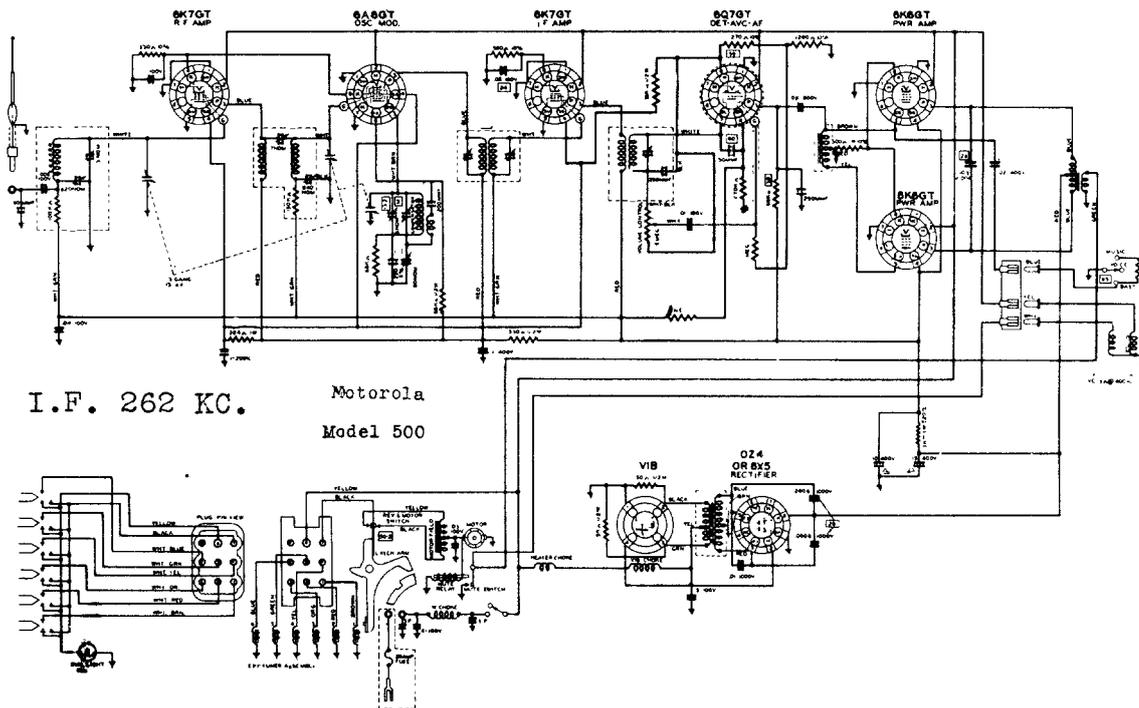
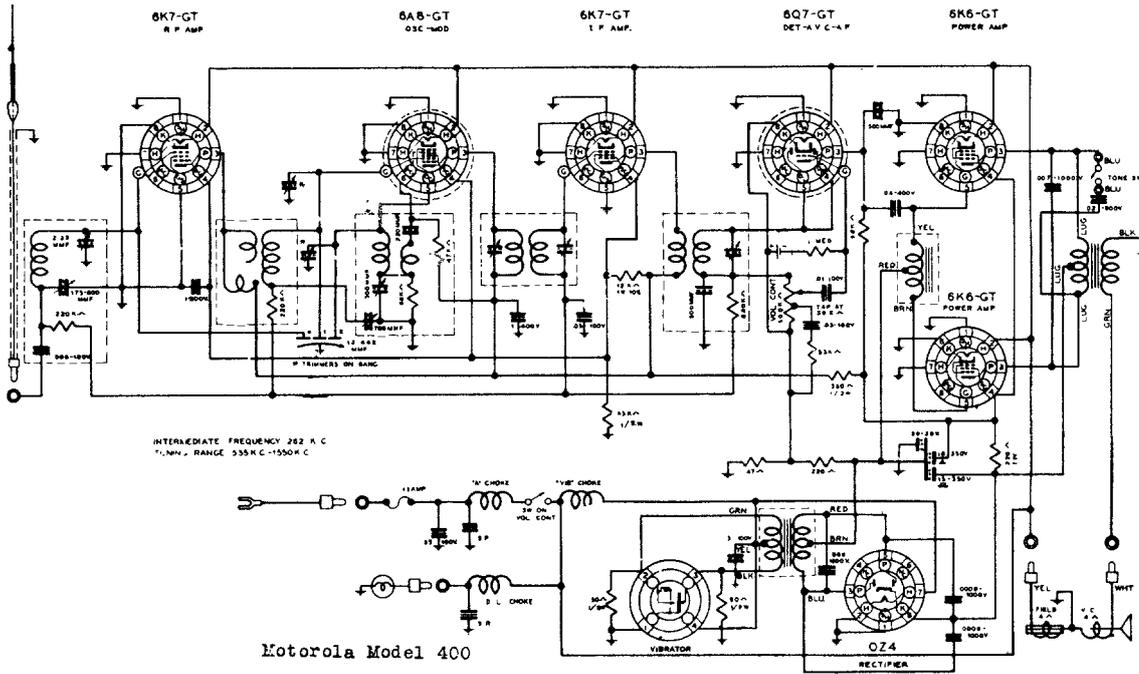


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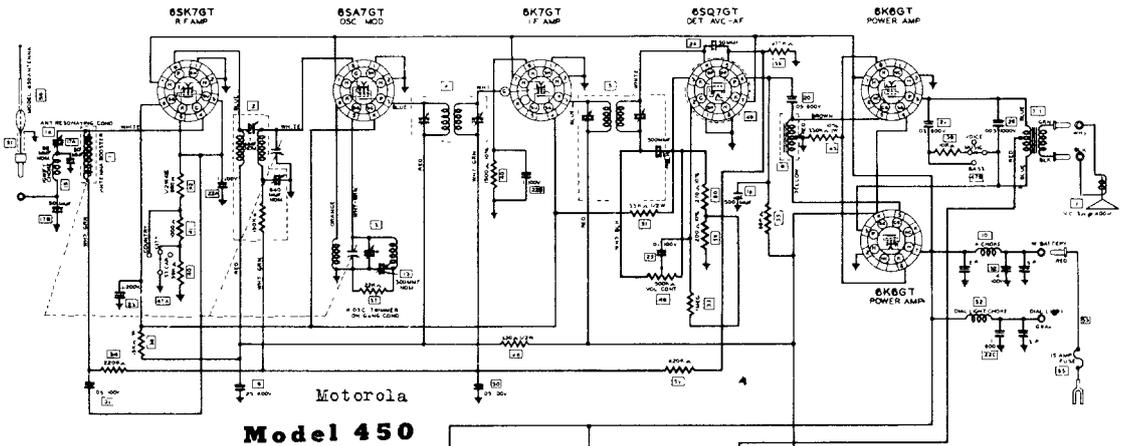
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Motorola Model No. 27-D-6

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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

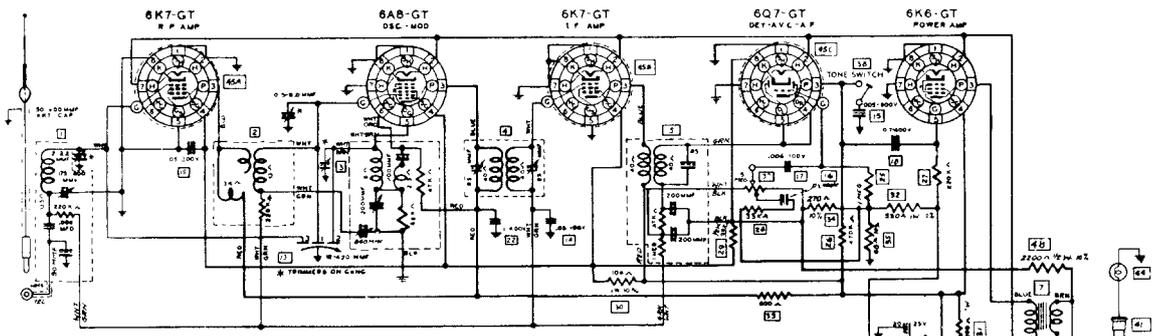
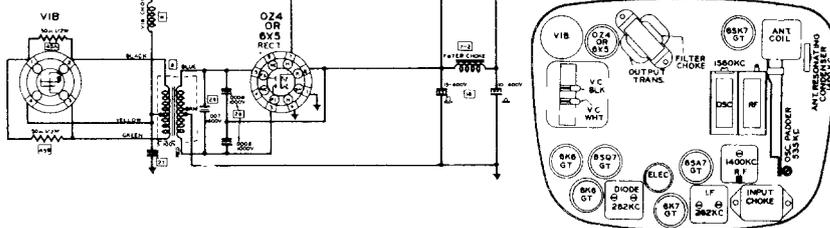


Motorola
Model 450

PIESER GROUP

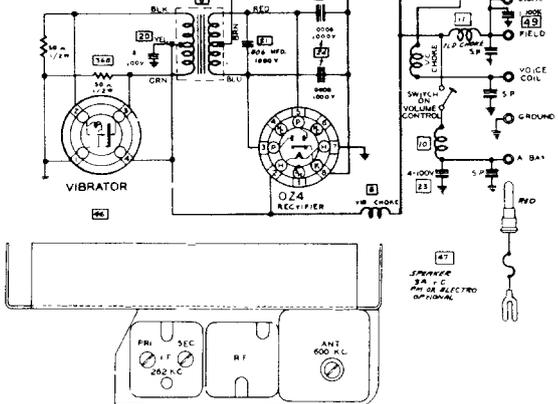
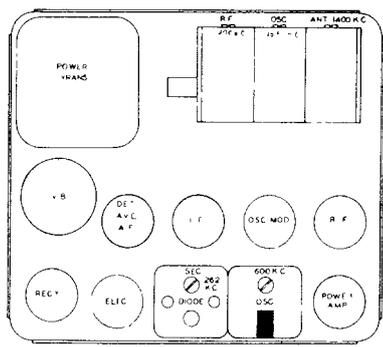
PIESER TYPE	PLATE	SCREEN	CATHODE
R.F.	65	75	1.5
OSC. MOD.	65	75	1.5
I.F.	65	75	1.5
DET. AVC. A.F.	65	75	1.5
POWER	65	75	1.5
6K6	65	75	1.5

ALL PIESERS DERIVED FROM ABOVE TYPES, TO BE USED AS SHOWN UNLESS OTHERWISE SPECIFIED.
 CAPACITORS IN MICRO-FARADS UNLESS OTHERWISE SPECIFIED.
 RESISTORS IN OHMS UNLESS OTHERWISE SPECIFIED.



I.F. 262 K.C.
TUNING RANGE 1560K C-535K C

Model 350



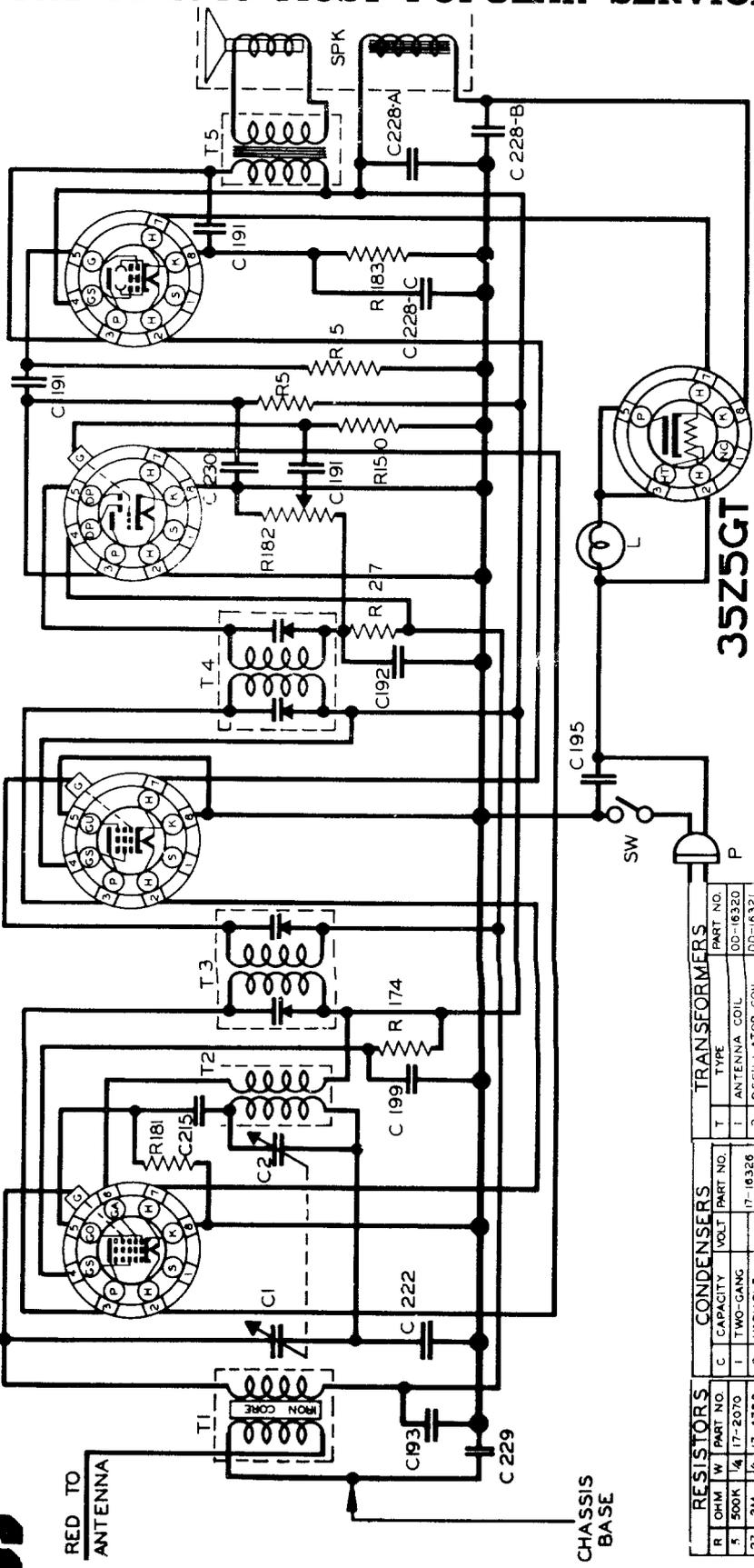
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Motorola

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ARVIN HOME RADIO CHASSIS RE 48
12A8GT 12K7GT 12Q7GT 50L6GT



MISCELLANEOUS UNITS

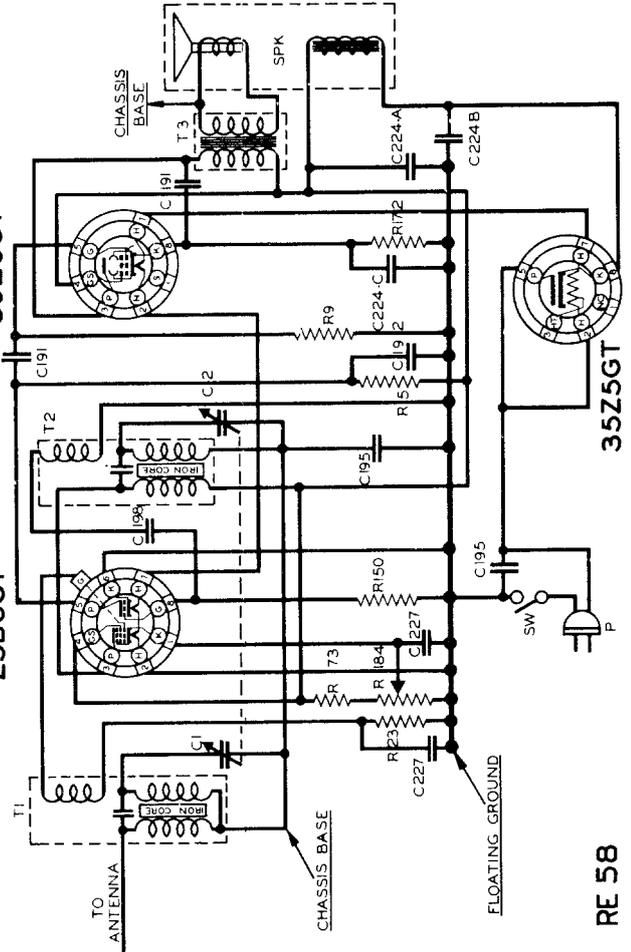
SYMBOL	DESCRIPTION	PART NO
L	DIAL LIGHT BULB - MAZDA NO 51	17-13904
P	LINE CORD & PLUG ASSEMBLY	17-16371
SPK	SPEAKER ASSEMBLY	17-16314A
SW	LINE SWITCH	17-14315

I.F. PEAK 455 K.C.
 BALANCE 1400 K.C. - CHECK AT 600 K.C.
 NOBLITT-SPARKS INDUSTRIES, INC.,

RESISTORS			CONDENSERS			TRANSFORMERS		
R	OHMS	W	C	CAPACITY	VOLT	T	TYPE	PART NO.
5	500K	1/4	1	TWO-GANG		1	ANTENNA COIL	DD-16320
27	2M	1/4	2	VARIABLE	17-16326	2	OSCILLATOR COIL	DD-16321
150	5M	1/4	191	.01	400	3	FIRST I.F. COIL	DD-16322
174	20K	1/4	192	.00025	600	4	SECOND I.F. COIL	DD-16323
181	100K	1/4	193	.05	200	5	OUTPUT TRANS.	DD-16324
182	1M	V.C.	193	.05	400			
183	150	1/4	199	.02	200			
			215	.0001	600			
			222	.2	400			
			228A	10 MFD.	150			
			228B	20 MFD.	150			
			229C	20 MFD.	2.5			
			229	.02	400			
			230	.0005	400			

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HOME RADIO CHASSIS RE-55
25B8GT 50L6GT



RESISTORS			CONDENSERS			MISCELLANEOUS UNITS			
Q	OHM	W	PART NO	C	CAPACITY	VOLT	PART NO	SYMBOL	DESCRIPTION
5	500K	1/4	17-207D	1	170-DGANG		7-1634	P	LINE CORE & PLUG ASSEMBLY
9	1M	1/4	17-208D	2	VARIABLE		17-1634	SPK	SPEAKER ASSEMBLY
23	250K	1/4	17-301L	19	.01	400	17-4272	SW	LINE SWITCH
73	30K	1/4	17-427B	192	00025	300	17-4273	T1	ANTENNA COIL
102	100	1/4	17-427C	193	.05	300	17-4274	T2	R.F. COIL
102	100	1/4	17-427D	194	.05	300	17-4275	T3	OUTPUT TRANSFORMER
104	10K	1/4	17-432D	2844	0. MFD.	150	7-1439		
				2845	20. MFD.	2.5			
				2262	20. MFD.	2.5			
				2271	.05	200	17-1323		

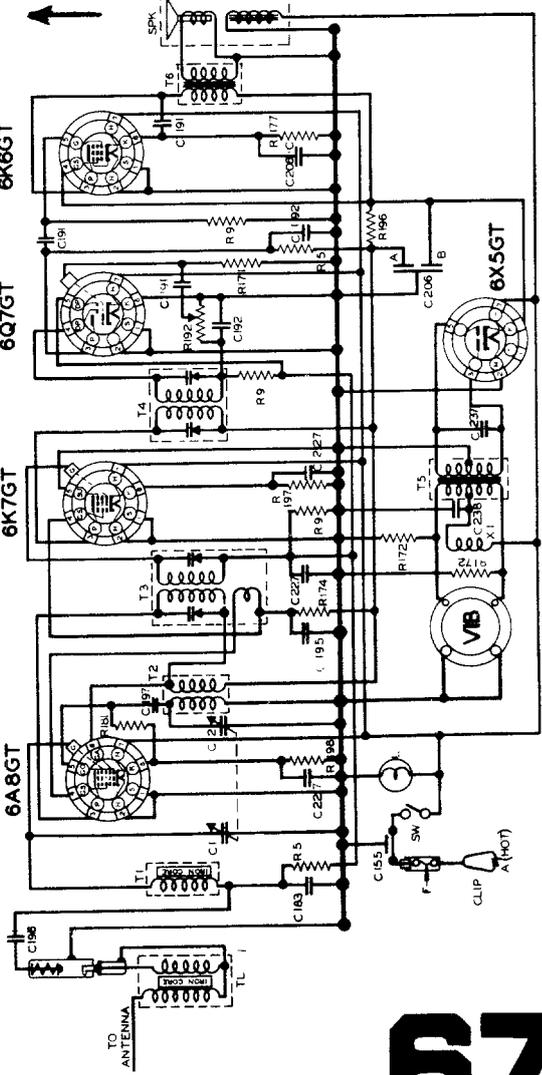
FREQUENCY RANGE
1700 K.C. TO 540 K.C.

CONDENSERS			CHOKES & TRANSFORMERS						
Q	OHM	W	PART NO	C	CAPACITY	VOLT	PART NO	SYMBOL	DESCRIPTION
1	500K	1/4	17-207D	1	170-DGANG		7-1444		
2	1M	1/4	17-208D	2	VARIABLE		7-27		
3	250K	1/4	17-301L	19	.01	400	17-4272		
4	30K	1/4	17-427B	192	00025	300	17-4273		
5	100	1/4	17-427C	193	.05	300	17-4274		
6	100	1/4	17-427D	194	.05	300	17-4275		
7	500	1/4	17-432D	2844	0. MFD.	150	7-1439		
8	500	1/4	17-432E	2845	20. MFD.	2.5			
9	1M	1/4	17-208D	2262	20. MFD.	2.5			
10	250K	1/4	17-301L	2271	.05	200	17-1323		

MISCELLANEOUS UNITS					
Q	OHM	W	PART NO	SYMBOL	DESCRIPTION
1	500K	1/4	17-207D	P	LINE CORE & PLUG ASSEMBLY
2	1M	1/4	17-208D	SPK	SPEAKER ASSEMBLY
3	250K	1/4	17-301L	SW	LINE SWITCH
4	30K	1/4	17-427B	T1	ANTENNA COIL
5	100	1/4	17-427C	T2	R.F. COIL
6	100	1/4	17-427D	T3	OUTPUT TRANSFORMER

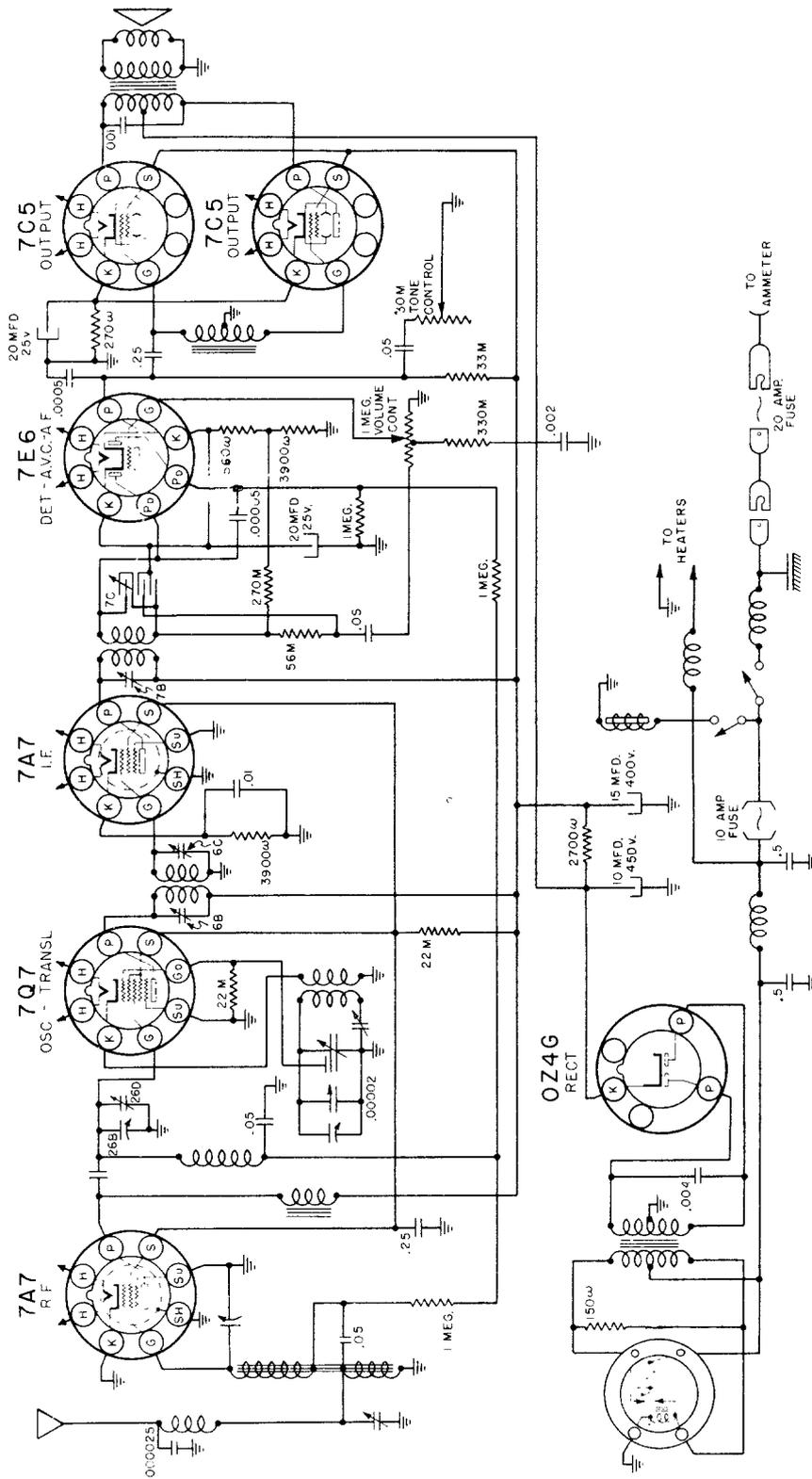
IF PEAK 455 K.C.
FREQUENCY RANGE 1575 TO 540 K.C.
NOBLITT-SPARKS INDUSTRIES, INC.

ARVIN CAR RADIO CHASSIS RE 58
6A8GT 6K7GT 6Q7GT 6K8GT 6X5GT



NOBLITT-SPARKS INDUSTRIES, INC.

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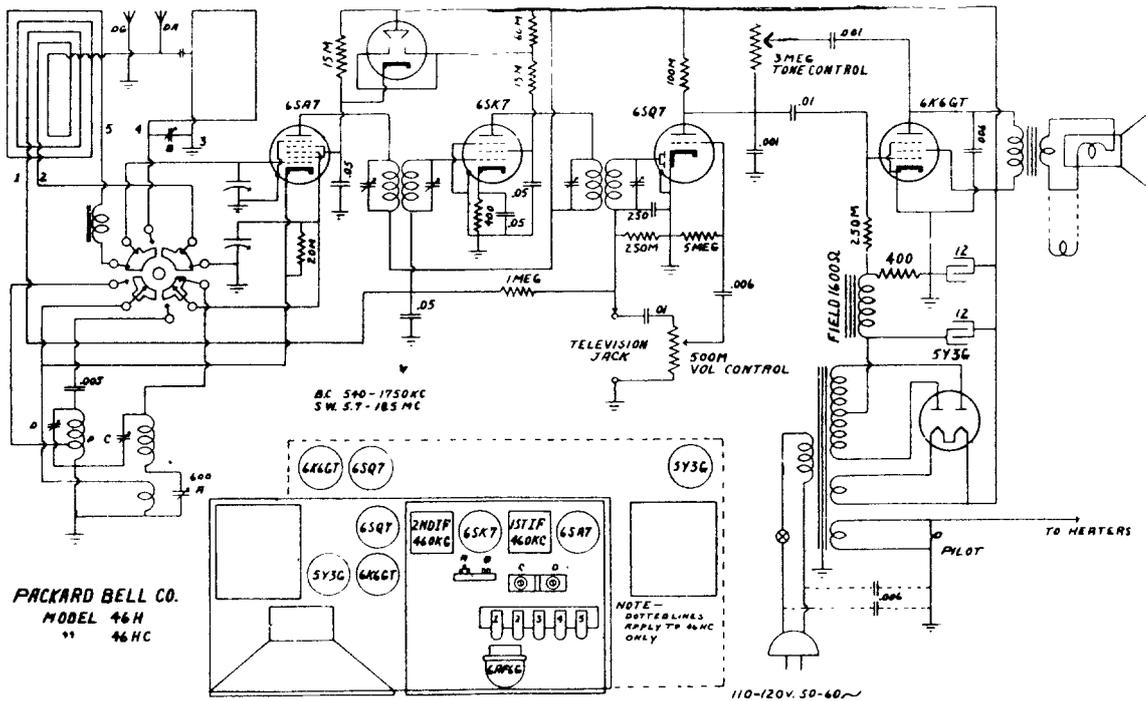
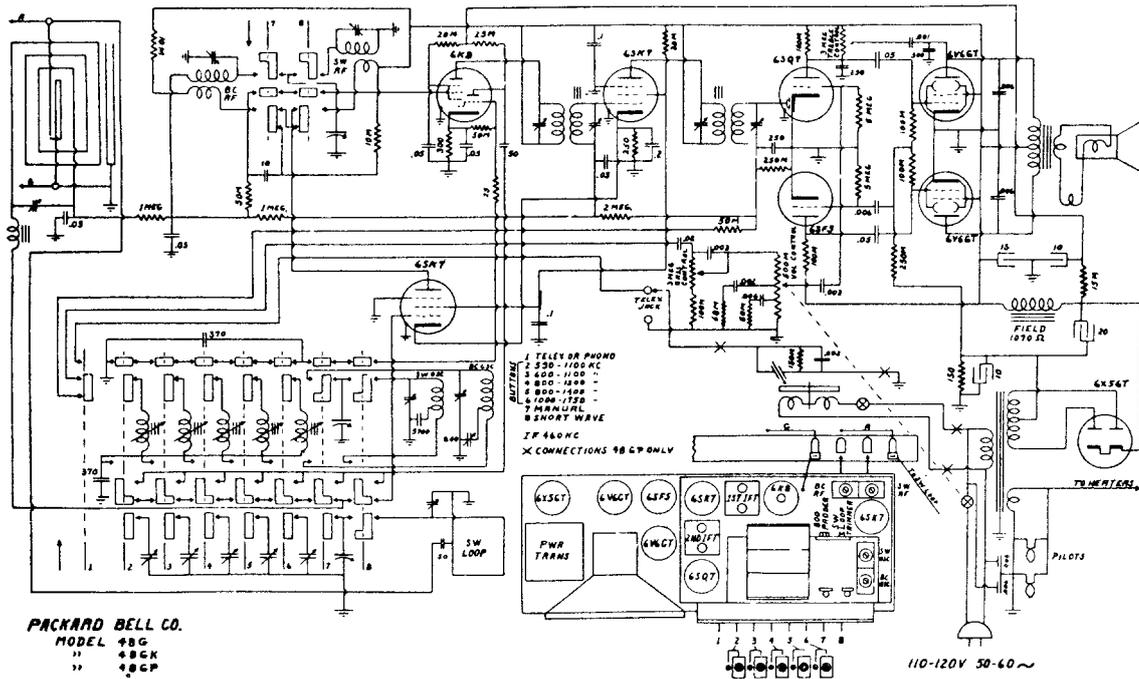
I. F. 260 KC.

OLDS MODEL 982160 - CIRCUIT DIAGRAM

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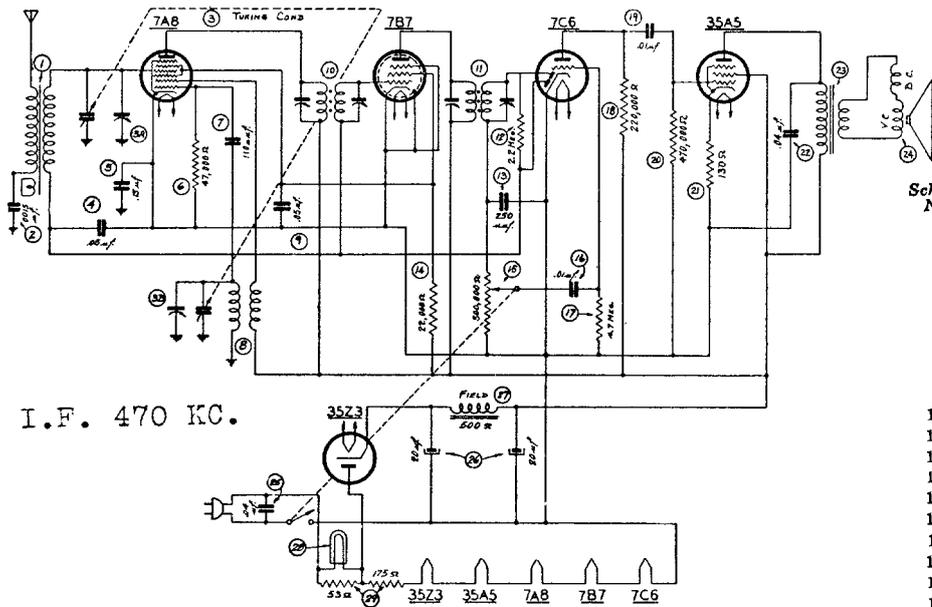
MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

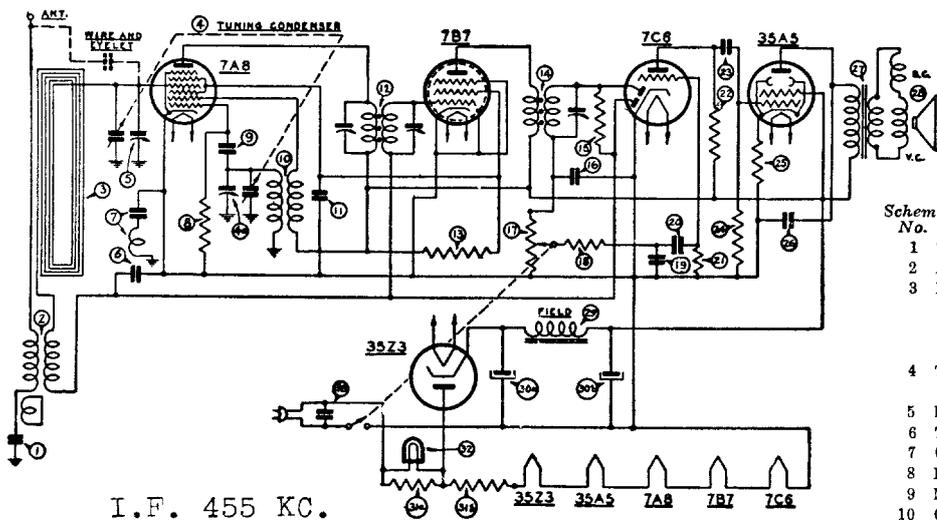


I.F. 470 KC.

PHILCO TRANSITONE HOME RADIO MODELS PT-25, PT-27 AND PT-39

Schem. No.	Description
1	Antenna Transformer
2	Tubular Condenser (.0015 mf., 200 V.)
3	Tuning Condenser
4	Tubular Condenser (.05 mf., 200 V.)
5	Tubular Condenser (.15 mf., 400 V.)
6	Resistor (47,000 ohms, 1/4 watt)
7	Mica Condenser (110 mmf.)
8	Oscillator Transformer
9	Tubular Condenser (.05 mf., 200 V.)
10	1st I. F. Transformer
11	2nd I. F. Transformer
12	Resistor 2.2 meg., 1/4 watt)
13	Mica Condenser (250 mmf.)
14	Resistor (22,000 ohms, 1/2 watt)
15	Volume Control (500,000 ohms)
16	Tubular Condenser (.01 mf., 200 V.)
17	Resistor (4.7 meg., 1/4 watt)
18	Resistor (220,000 ohms, 1/4 watt)
19	Tubular Condenser (.01 mf., 400 V.)
20	Resistor (470,000 ohms, 1/4 watt)
21	Resistor (130 ohms, 1/2 watt)
22	Tubular Condenser (.04 mf., 400 V.)
23	Output Transformer ..Part of Speaker
24	Speaker
25	Tubular Condenser (.04 mf., 400 V.)
26	Electrolytic Capacitor (20-20 mf., 150 V.)
27	Field Coil
28	Pilot Lamp
29	Line Resistor

PHILCO TRANSITONE HOME RADIOS — MODELS PT-26, PT-28 AND PT-36



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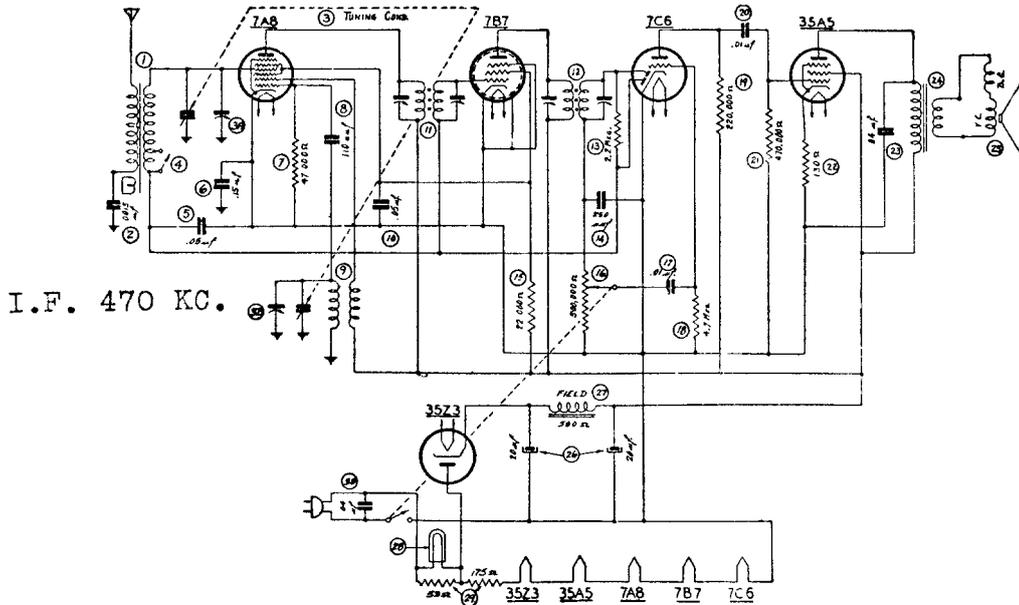
24	Resistor (470,000 ohms, 1/4 watt)
25	Resistor (130 ohms, 1/2 watt)
26	Tubular Condenser (.04 mf., 400V)
27	Output Transformer—Part of Speaker
28	Speaker
29	Field Coil—Part of Speaker No.
30	Electrolytic Capacitor (20-20 mf., 150V)
31	Line Resistor
32	Pilot Lamp
33	Tubular Condenser (.04 mf., 400V)

Schem. No.	Description
1	Tubular Condenser (.0015 mf., 200V)
2	Antenna Transformer
3	Loop Antenna — Part of cabinet and loop PT-26
4	Tuning Condenser — PT-26 & PT-28 PT-36
5	Padding Condenser
6	Tubular Condenser (.1 mf., 200V)
7	Condenser & Choke Assy.
8	Resistor (22,000 ohms, 1/4 watt)
9	Mica Condenser (110 mmf.)
10	Oscillator Transformer
11	Tubular Condenser (.05 mf., 200V)
12	1st I. F. Transformer
13	Resistor (22,000 ohms, 1/2 watt)
14	2nd I. F. Transformer
15	Resistor (2.2 meg., 1/4 watt)
16	Mica Condenser (250 mmf.)
17	Volume Control (500,000 ohms)
18	Resistor (47,000 ohms, 1/4 watt)
19	Mica Condenser (250 mmf.)
20	Tubular Condenser (.01 mf., 200V)
21	Resistor (4.7 meg., 1/4 watt)
22	Resistor (220,000 ohms, 1/4 watt)
23	Tubular Condenser (.01 mf., 400V)

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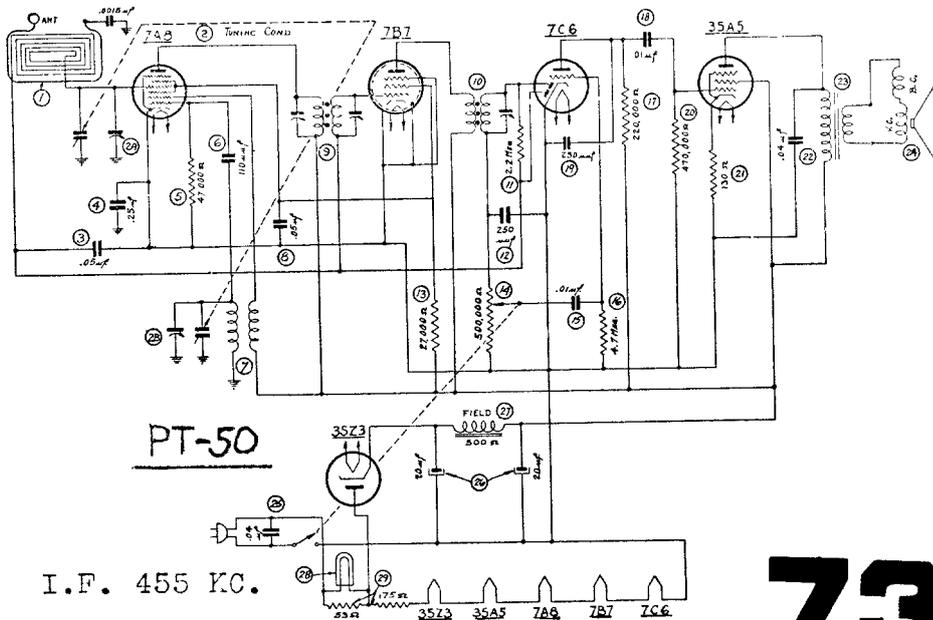


PHILCO TRANSITONE HOME RADIO MODELS PT-29 AND PT-31

Schem. No.	Description	Philco Part No.	Schem. No.	Description	Philco Part No.
1	Antenna Transformer	32-3164	18	Resistor (4.7 meg., 1/4 watt)	33-547154
2	Tubular Condenser (.0015 mf., 200 v.)	30-45558	19	Resistor (220,000 ohms, 1/4 watt)	33-422154
3	Tuning Condenser	31-2427	20	Tubular Condenser (.01 mf., 400 v.)	30-45728
4	Switch	42-1406	21	Resistor (47,000 ohms, 1/4 watt)	33-447154
5	Tubular Condenser (.05 mf., 200 v.)	30-45198	22	Resistor (130 ohms, 1/2 watt)	33-113338
6	Tubular Condenser (.15 mf., 400 v.)	30-45058	23	Tubular Condenser (.04 mf., 400 v.)	30-41198
7	Resistor (47,000 ohms, 1/4 watt)	33-347154	24	Output Transformer	
8	Mica Condenser (110 mmf.)	30-1130		Part of Speaker No.	36-1469
9	Oscillator Transformer	32-3152	25	Speaker	36-1469
10	Tubular Condenser (.05 mf., 200 v.)	30-45198	26	Electrolytic Condenser	36-1469
11	1st I. F. Transformer	32-3149		(20-20 mf., 150 v.)	30-2382
12	2nd I. F. Transformer	32-3150	27	Field Coil	Part of Speaker,
13	Resistor (2.2 meg., 1/4 watt)	33-522154		Part Number	36-1469
14	Mica Condenser (250 mmf.)	61-0033	28	Pilot Lamp	34-2068
15	Resistor (22,000 ohms, 1/2 watt)	33-322334	29	Line Resistor	33-3367
16	Volume Control (500,000 ohms)	33-5306	30	Tubular Condenser (.04 mf., 400 v.)	30-41198
17	Tubular Condenser (.01 mf., 200 v.)	30-44798			

PHILCO TRANSITONE HOME RADIOS — MODELS PT-33, PT-41 AND PT-61

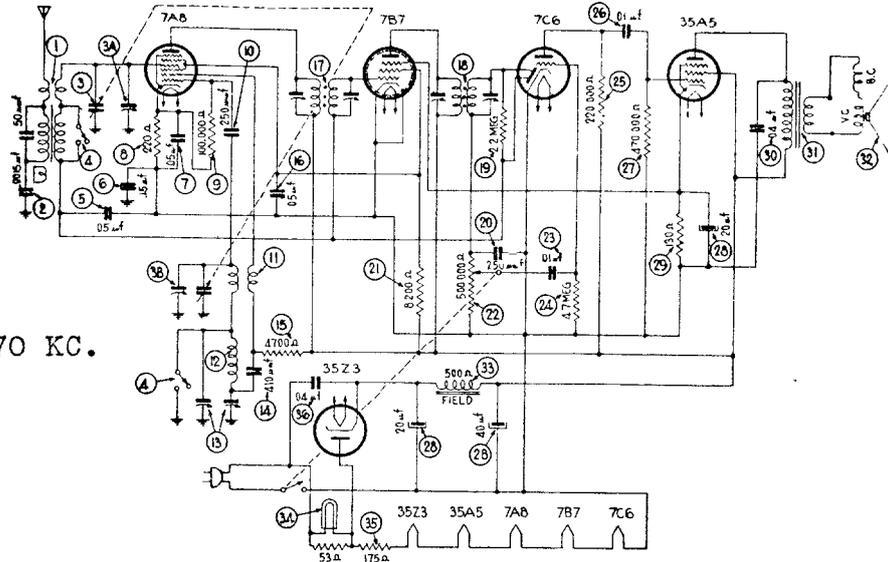
- 1 Loop Antenna Assembly
- 2 Tuning Condenser
- 3 Tubular Condenser (.05 mf., 200 V.)
- 4 Tubular Condenser (.25 mf., 400 V.)
- 5 Resistor (47,000 ohms, 1/4 watt)
- 6 Mica Condenser (110 mmf.)
- 7 Oscillator Transformer
- 8 Tubular Condenser (.05 mf., 200 V.)
- 9 1st I. F. Transformer
- 10 2nd I. F. Transformer
- 11 Resistor (2.2 megs., 1/4 watt)
- 12 Mica Condenser (250 mmf.)
- 13 Resistor (27,000 ohms, 1/2 watt)
- 14 Volume Control (500,000 ohms)
- 15 Tubular Condenser (.01 mf., 200 V.)
- 16 Resistor (4.7 megs., 1/4 watt)
- 17 Resistor (220,000 ohms, 1/4 watt)
- 18 Tubular Condenser (.01 mf., 400 V.)
- 19 Mica Condenser (250 mmf.)
- 20 Resistor (470,000 ohms, 1/4 watt)
- 21 Resistor (130 ohms, 1/2 watt)
- 22 Tubular Condenser (.04 mf., 400 V.)
- 23 Output Transformer . . Part of Speaker
- 24 Speaker
- 25 Tubular Condenser (.04 mf., 400 V.)
- 26 Electrolytic Condenser (20-20 mf., 150 V.)
- 27 Field Coil Part of Speaker
- 28 Pilot Lamp
- 29 Line Resistor



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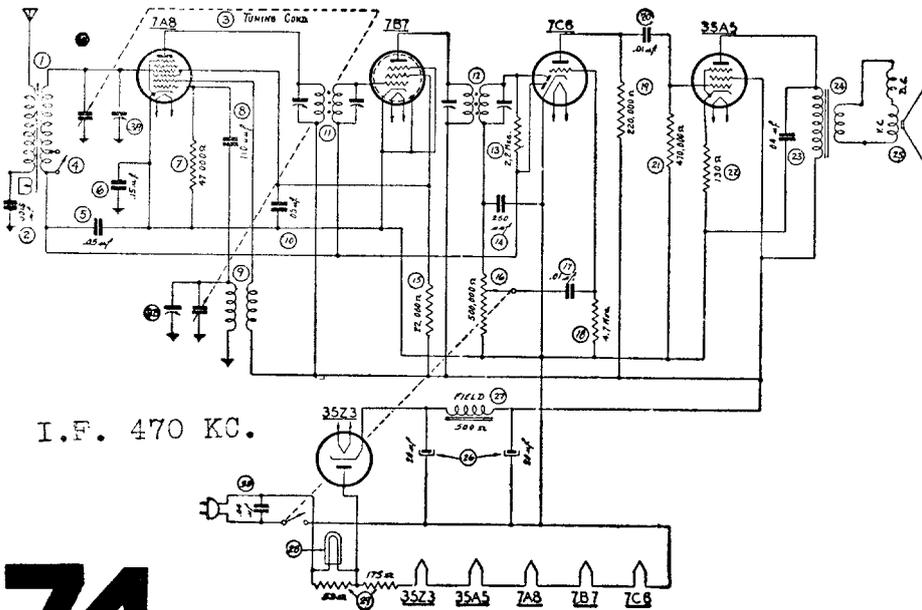


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PHILCO TRANSITONE MODELS PT-37 AND PT-53

Schem. No.	Description	Philco Part No.	Schem. No.	Description	Philco Part No.
1	Antenna Transformer	32-3233	19	Resistor (2.2 megohms, ¼ watt)	33-522154
2	Tubular Condenser (.0015 mf., 200 v.)	30-4555S	20	Mica Condenser (250 mmf.)	61-0083
3	Tuning Condenser	31-2431	21	Resistor (8,200 ohms, ¼ watt)	33-282334
4	Wave Switch	42-1497	22	Volume Control	33-5306
5	Tubular Condenser (.05 mf., 200 v.)	30-4519S	23	Tubular Condenser (.01 mf., 400 v.)	30-4572S
6	Tubular Condenser (.15 mf., 400 v.)	30-4600S	24	Resistor (4.7 megohm, ¼ watt)	33-547154
7	Tubular Condenser (.05 mf., 200 v.)	30-4519S	25	Resistor (220,000 ohms, ¼ watt)	33-522154
8	Resistor (220 ohms, ½ watt)	33-122336	26	Tubular Condenser (.01 mf., 200 v.)	30-4581S
9	Resistor (100,000 ohms, ¼ watt)	33-410154	27	Resistor (470,000 ohms, ¼ watt)	33-447154
10	Mica Condenser (250 mmf.)	61-0083	28	Electrolytic Condenser	30-2402
11	Short Wave Oscillator Trans.	32-3234	29	Resistor (130 ohms, ½ watt)	33-113336
12	BC Oscillator Transformer	32-3217	30	Tubular Condenser (.04 mf., 400 v.)	30-4119S
13	Dual Padding Condenser	31-6331	31	Output Trans.—Part of Speaker No.	36-1469
14	Mica Condenser (410 mmf.)	30-1089	32	Speaker	36-1469
15	Resistor (4700 ohms, ¼ watt)	33-247134	33	Field Coil—Part of Speaker No.	36-1469
16	Tubular Condenser (.05 mf., 200 v.)	30-4519S	34	Pilot Lamp	34-2068
17	1st I. F. Transformer	32-3327	35	Line Resistor	33-3367
18	2nd I. F. Transformer	32-3150	36	Tubular Condenser (.04 mf., 400 v.)	30-4119S

PHILCO TRANSITONE HOME RADIO MODEL PT-35



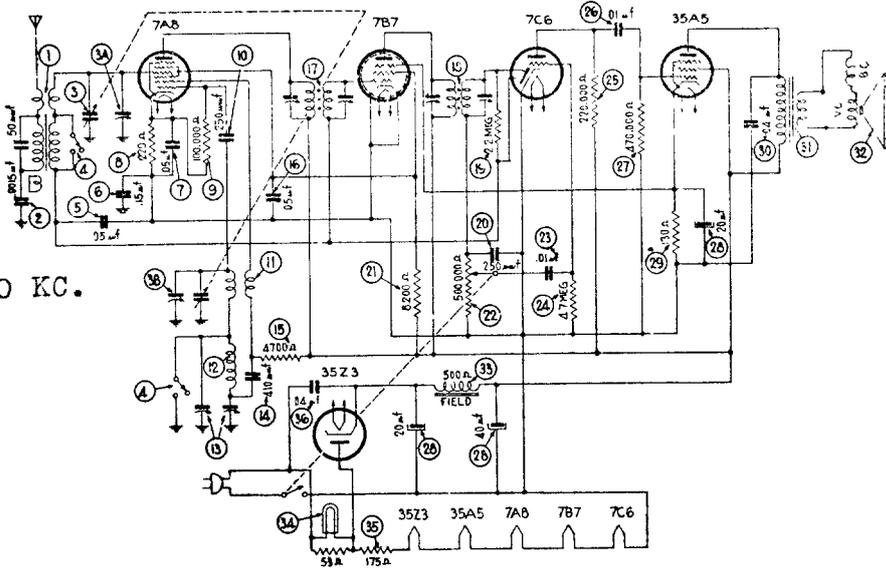
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Schem. No.	Description
1	Antenna Transformer
2	Tubular Condenser (.0015 mf., 200 v.)
3	Tuning Condenser
4	Switch
5	Tubular Condenser (.05 mf., 200 v.)
6	Tubular Condenser (.15 mf., 400 v.)
7	Resistor (47,000 ohms, ¼ watt)
8	Mica Condenser (110 mmf.)
9	Oscillator Transformer
10	Tubular Condenser (.05 mf., 200 v.)
11	1st I. F. Transformer
12	2nd I. F. Transformer
13	Resistor (2.2 meg., ¼ watt)
14	Mica Condenser (250 mmf.)
15	Resistor (22,000 ohms, ½ watt)
16	Volume Control (500,000 ohms)
17	Tubular Condenser (.01 mf., 200 v.)
18	Resistor (4.7 meg., ¼ watt)
19	Resistor (220,000 ohms, ¼ watt)
20	Tubular Condenser (.01 mf., 400 v.)
21	Resistor (470,000 ohms, ¼ watt)
22	Resistor (130 ohms, ½ watt)
23	Tubular Condenser (.04 mf., 400 v.)
24	Output Transformer Part of Speaker No.
25	Speaker
26	Electrolytic Condenser (20-20 mf., 150 v.)
27	Field Coil—Part of Speaker No.
28	Pilot Lamp
29	Line Resistor
30	Tubular Condenser (.04 mf., 400 v.)

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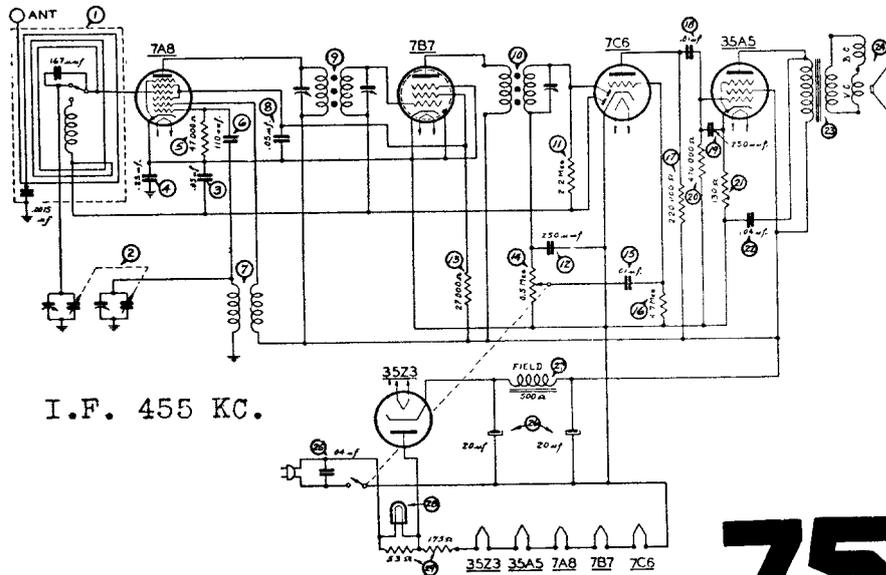
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PHILCO TRANSITONE MODEL PT-38

Schem. No.	Description	Philco Part No.	Schem. No.	Description	Philco Part No.
1	Antenna Transformer	32-3233	19	Resistor (2.2 megohms, 1/4 watt)	33-522154
2	Tubular Condenser (.0015 mf., 200 v.)	30-4555	20	Mica Condenser (250 mmf.)	61-0033
3	Tuning Condenser	31-2431	21	Resistor (8,200 ohms, 1/4 watt)	33-282334
4	Wave Switch	42-1497	22	Volume Control	33-5306
5	Tubular Condenser (.04 mf., 200 v.)	30-4519	23	Tubular Condenser (.01 mf., 400 v.)	30-4572
6	Tubular Condenser (.15 mf., 400 v.)	30-4600	24	Resistor (4.7 megohms, 1/4 watt)	33-547154
7	Tubular Condenser (.05 mf., 200 v.)	30-4519	25	Resistor (220,000 ohms, 1/4 watt)	33-522154
8	Resistor (220 ohms, 1/2 watt)	33-122336	26	Tubular Condenser (.01 mf., 400 v.)	30-4572
9	Resistor (100,000 ohms, 1/4 watt)	33-410154	27	Resistor (470,000 ohms, 1/4 watt)	33-447154
10	Mica Condenser (250 mmf.)	61-0033	28	Electrolytic Condenser	30-2402
11	Short Wave Oscillator Trans.	32-3234	29	Resistor (130 ohms, 1/2 watt)	33-113536
12	BC Oscillator Transformer	32-3217	30	Tubular Condenser (.04 mf., 400 v.)	30-4119
13	Dual Padding Condenser	31-6331	31	Output Trans.—Part of Speaker No.	36-1469
14	Mica Condenser (410 mmf.)	30-1089	32	Speaker	36-1469
15	Resistor (4700 ohms, 1/4 watt)	33-247134	33	Field Coil—Part of Speaker No.	36-1469
16	Tubular Condenser (.05 mf., 200 v.)	30-4519	34	Pilot Lamp	34-2068
17	1st I. F. Transformer	32-3327	35	Line Resistor	33-3367
18	2nd I. F. Transformer	32-3150	36	Tubular Condenser (.04 mf., 400 v.)	30-4119

PHILCO TRANSITONE HOME RADIO MODELS PT-43 AND PT-55

Schem. No.	Description
1	Loop Antenna Assembly
2	Tuning Condenser
3	Tubular Condenser (.05 mf., 200 v.)
4	Tubular Condenser (.25 mf., 400 v.)
5	Resistor (47,000 ohms, 1/4 watt)
6	Mica Condenser (110 mmf.)
7	Oscillator Transformer
8	Tubular Condenser (.05 mf., 200 v.)
9	1st I. F. Transformer
10	2nd I. F. Transformer
11	Resistor (2.2 megs., 1/4 watt)
13	Resistor (27,000 ohms, 1/4 watt)
14	Volume Control (500,000 ohms)
15	Tubular Condenser (.01 mf., 200 v.)
16	Resistor (4.7 megs., 1/4 watt)
17	Resistor (220,000 ohms, 1/4 watt)
18	Tubular Condenser (.01 mf., 400 v.)
19	Mica Condenser (250 mmf.)
20	Resistor (470,000 ohms, 1/4 watt)
21	Resistor (130 ohms, 1/2 watt)
22	Tubular Condenser (.04 mf., 400 v.)
23	Output Transformer
24	Speaker
25	Tubular Condenser (.04 mf., 400 v.)
26	Electrolytic Condenser (20-20 mf., 150 v.)
27	Field Coil, Part of Speaker
28	Pilot Lamp
29	Line Resistor

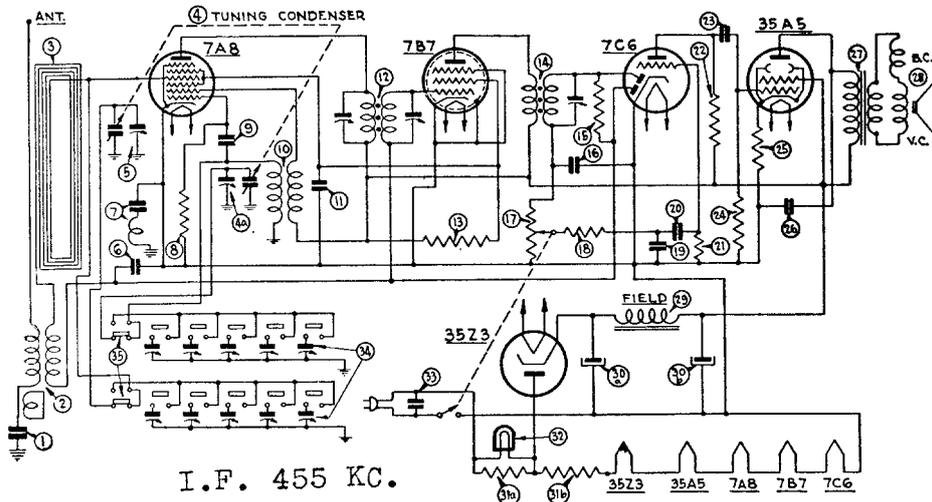


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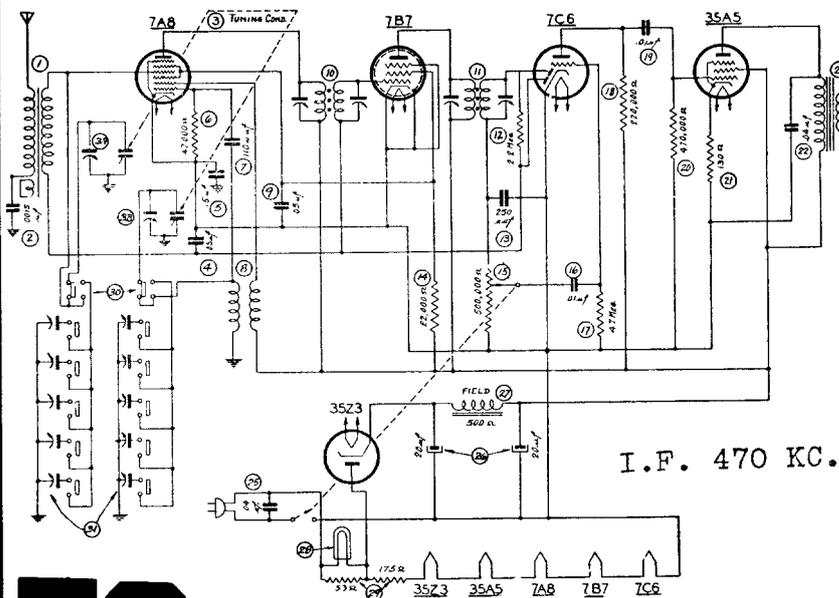
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PHILCO TRANSITONE HOME RADIOS — MODELS PT-46 AND PT-48

Schem. No.	Description	Philco Part No.	Schem. No.	Description	Philco Part No.
1	Tubular Condenser (.0015 mf., 200 v.)	30-4555	18	Resistor (47,000 ohms, 1/4 watt)	33-347154
2	Antenna Transformer	32-3394	19	Mica Condenser (250 mmf.)	61-0033
3	Loop Antenna — Part of Cabinet and Loop Assy. PT-46	76-1015	20	Tubular Condenser (.01 mf., 200 v.)	30-4479
	PT-48	76-1016	21	Resistor (4.7 meg., 1/4 watt)	33-547154
4	Tuning Condenser (PT-46 and PT-48)	31-2445	22	Resistor (220,000 ohms, 1/4 watt)	33-422154
5	Padding Condenser	31-6344	23	Tubular Condenser (.01 mf., 400 v.)	30-447154
6	Tubular Condenser (.1 mf., 200 v.)	30-4499	24	Resistor (470,000 ohms, 1/4 watt)	33-447154
7	Condenser & Choke Assy.	76-1019	25	Resistor (130 ohms, 1/2 watt)	33-113336
8	Resistor (22,000 ohms, 1/4 watt)	33-322154	26	Tubular Condenser (.04 mf., 400 v.)	30-4119
9	Mica Condenser (110 mmf.)	30-1130	27	Output Transformer Part of Speaker No.	36-1469
10	Oscillator Transformer	32-3152	28	Speaker	36-1469
11	Tubular Condenser (.05 mf., 200 v.)	30-4519	29	Field Coil	Part of Speaker No. 36-1469
12	1st I. F. Transformer	32-3390	30	Electrolytic Condenser (20-20 mf., 150 v.)	30-2382
13	Resistor (22,000 ohms, 1/2 watt)	33-322334	31	Line Resistor	33-3367
14	2nd I. F. Transformer	32-3301	32	Pilot Lamp	34-2068
15	Resistor (2.2 meg., 1/4 watt)	33-522154	33	Tubular Condenser (.04 mf., 400 v.)	30-4119
16	Mica Condenser (250 mmf.)	61-0033	34	Padding Condenser Strip	31-6324
17	Volume Control (500,000 ohms)	33-5306	35	Push Button Switch	42-1485

PHILCO TRANSITONE HOME RADIO MODELS PT-45 AND PT-47

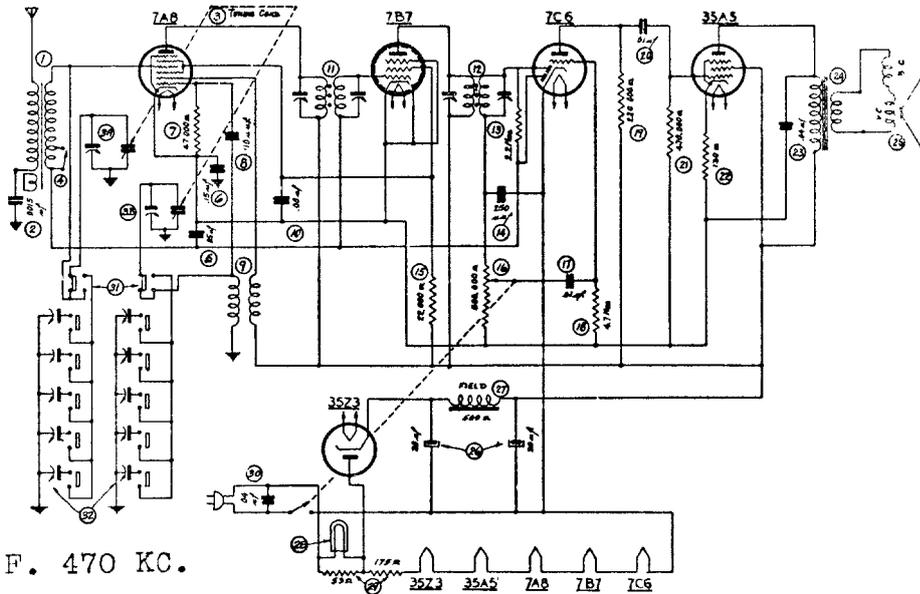


Schem. No.	Description
1	Antenna Transformer
2	Tubular Condenser (.0015 mf., 200 v.)
3	Tuning Condenser
4	Tubular Condenser (.05 mf., 200 v.)
5	Tubular Condenser (.15 mf., 400 v.)
6	Resistor (47,000 ohms, 1/4 watt)
7	Mica Condenser (110 mf.)
8	Oscillator Transformer
9	Tubular Condenser (.05 mf., 200 v.)
10	1st I. F. Transformer
11	2nd I. F. Transformer
12	Resistor (2.2 meg., 1/4 watt)
13	Mica Condenser (250 mmf.)
14	Resistor (22,000 ohms, 1/2 watt)
15	Volume Control (500,000 ohms)
16	Tubular Condenser (.01 mf., 200 v.)
17	Resistor (4.7 meg., 1/4 watt)
18	Resistor (220,000 ohms, 1/4 watt)
19	Tubular Condenser (.01 mf., 400 v.)
20	Resistor (470,000 ohms, 1/4 watt)
21	Resistor (130 ohms, 1/2 watt)
22	Tubular Condenser (.04 mf., 400 v.)
23	Output Transformer
24	Part of Speaker No.
25	Speaker
26	Tubular Condenser (.04 mf., 400 v.)
27	Electrolytic Condenser (20-20 mf., 150 v.)
28	Field Coil Part of Speaker No.
29	Pilot Lamp
30	Line Resistor
31	Push Button Switch
32	Padding Condenser Strip

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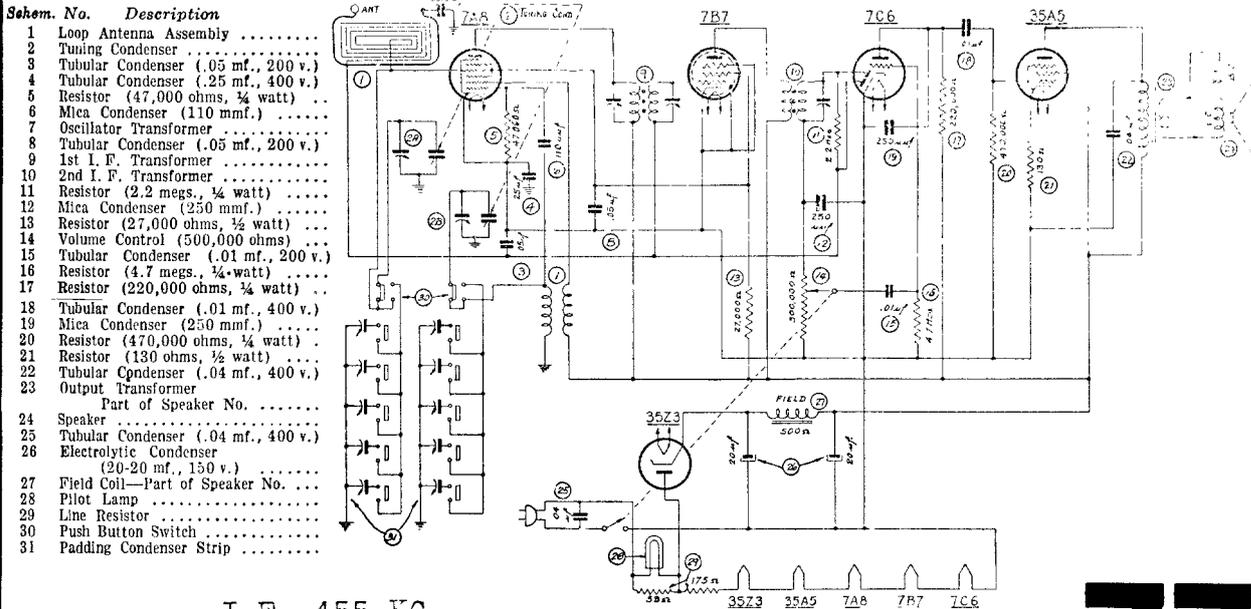


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TRANSITONE HOME RADIO MODELS PT-49 AND PT-51

Schem. No.	Description	Philco Part No.	Schem. No.	Description	Philco Part No.
1	Antenna Transformer	32-3168	18	Resistor (4.7 meg., ¼ watt)	33-347154
2	Tubular Condenser (.0015 mf., 200 v.)	30-45558	19	Resistor (220,000 ohms, ¼ watt)	33-422154
3	Tuning Condenser	31-2428	20	Tubular Condenser (.01 mf., 400 v.)	30-45728
4	Switch	42-1406	21	Resistor (470,000 ohms, ¼ watt)	33-447154
5	Tubular Condenser (.05 mf., 200 v.)	30-45198	22	Resistor (130 ohms, ½ watt)	33-113336
6	Tubular Condenser (.15 mf., 400 v.)	30-45058	23	Tubular Condenser (.04 mf., 400 v.)	30-41198
7	Resistor (47,000 ohms, ¼ watt)	33-347154	24	Output Transformer	
8	Mica Condenser (110 mmf.)	30-1130		Part of Speaker No.	36-1469
9	Oscillator Transformer	32-3167	25	Speaker	36-1469
10	Tubular Condenser (.05 mf., 200 v.)	30-45198	26	Electrolytic Condenser (20-20 mf., 150 v.)	30-2382
11	1st I. F. Transformer	32-3149	27	Field Coil Part of Speaker No.	36-1469
12	2nd I. F. Transformer	32-3150	28	Pilot Lamp	34-2068
13	Resistor (2.2 meg., ¼ watt)	33-522154	29	Line Resistor	33-3367
14	Mica Condenser (250 mmf.)	61-0033	30	Tubular Condenser (.04 mf., 400 v.)	30-41198
15	Resistor (22,000 ohms, ½ watt)	33-322334	31	Push Button Switch	42-1485
16	Volume Control (500,000 ohms)	33-5306	32	Padding Condenser Strip	31-6293
17	Tubular Condenser (.01 mf., 200 v.)	30-44798			

PHILCO TRANSITONE HOME RADIOS — MODELS PT-57 AND PT-65

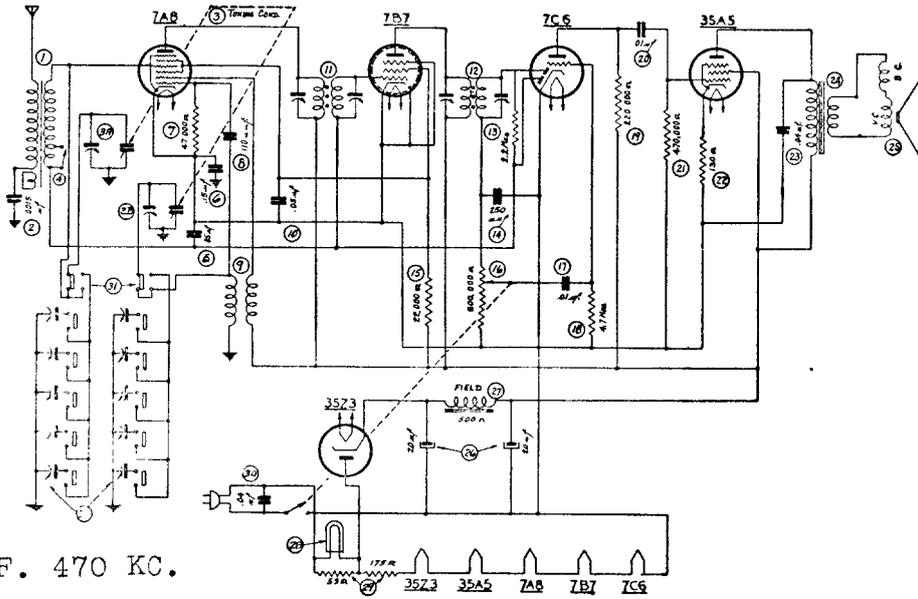


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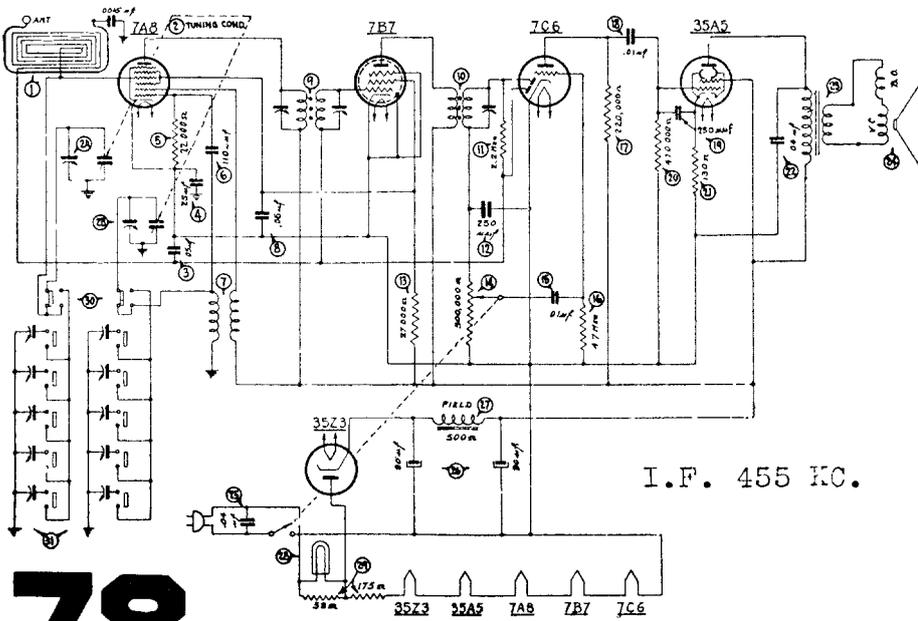


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PHILCO TRANSITONE HOME RADIO MODEL PT-59

Schem. No.	Description	Philco Part No.	Schem. No.	Description	Philco Part No.
1	Antenna Transformer	32-3164	18	Resistor (4.7 meg., 1/4 watt)	33-547154
2	Tubular Condenser (.0015 mf., 200 v.)	30-45538	19	Resistor (220,000 ohms, 1/4 watt)	33-422154
3	Tuning Condenser	31-2135	20	Tubular Condenser (.01 mf., 400 v.)	30-45728
4	Switch	42-1406	21	Resistor (470,000 ohms, 1/4 watt)	33-447154
5	Tubular Condenser (.05 mf., 200 v.)	30-45198	22	Resistor (130 ohms, 1/2 watt)	33-113336
6	Tubular Condenser (.15 mf., 400 v.)	30-45058	23	Tubular Condenser (.4 mf., 400 v.)	30-41198
7	Resistor (47,000 ohms, 1/4 watt)	33-347154	24	Output Transformer	
8	Mica Condenser (110 mmf.)	30-1130		Part of Speaker No.	36-1469
9	Oscillator Transformer	32-3152	25	Speaker	36-1469
10	Tubular Condenser (.05 mf., 200 v.)	30-45198	26	Electrolytic Condenser (20-20 mf., 150 v.)	30-2382
11	1st I. F. Transformer	32-3149	27	Field Coil	
12	2nd I. F. Transformer	32-3150		Part of Speaker, Part No.	36-1469
13	Resistor (2.2 meg., 1/4 watt)	33-522154	28	Pilot Lamp	34-2068
14	Mica Condenser (250 mmf.)	61-0033	29	Line Resistor	33-3367
15	Resistor (22,000 ohms, 1/2 watt)	33-322334	30	Tubular Condenser (.04 mf., 400 v.)	30-41198
16	Volume Control (500,000 ohms)	33-5306			
17	Tubular Condenser (.01 mf., 200 v.)	30-44798			

PHILCO TRANSITONE HOME RADIOS — MODEL PT-66



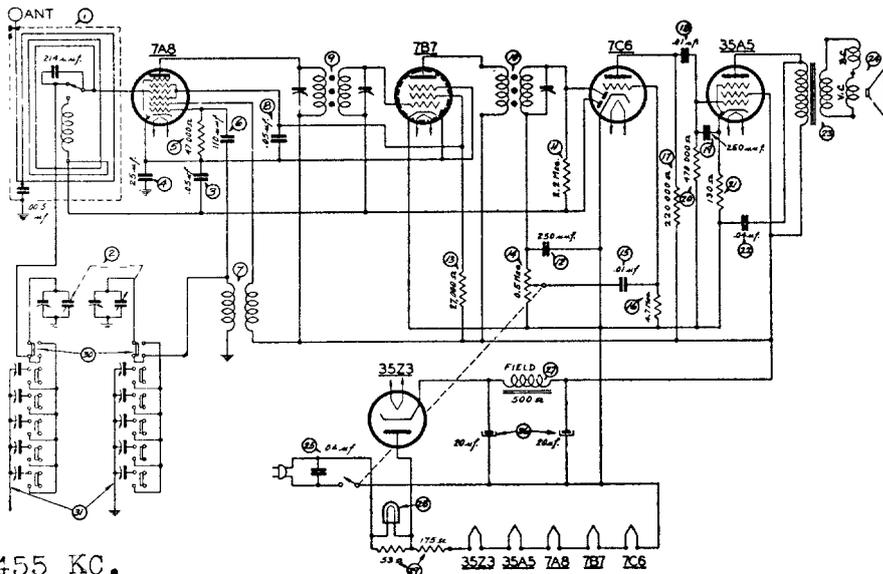
I.F. 455 KC.

Schem. No.	Description
1	Loop Antenna Assembly
2	Tuning Condenser
3	Tubular Condenser (.05 mf., 200 v.)
4	Tubular Condenser (.25 mf., 400 v.)
5	Resistor (22,000 ohms, 1/4 watt)
6	Mica Condenser (110 mmf.)
7	Oscillator Transformer
8	Tubular Condenser (.05 mf., 200 v.)
9	1st I. F. Transformer
10	2nd I. F. Transformer
11	Resistor (2.2 megs., 1/4 watt)
12	Mica Condenser (250 mmf.)
13	Resistor (27,000 ohms, 1/2 watt)
14	Volume Control (500,000 ohms)
15	Tubular Condenser (.01 mf., 200 v.)
16	Resistor (4.7 megs., 1/4 watt)
17	Resistor (220,000 ohms, 1/4 watt)
18	Tubular Condenser (.01 mf., 400 v.)
19	Mica Condenser (250 mmf.)
20	Resistor (470,000 ohms, 1/4 watt)
21	Resistor (130 ohms, 1/2 watt)
22	Tubular Condenser (.04 mf., 400 v.)
23	Output Transformer
	Part of Speaker No.
24	Speaker
25	Tubular Condenser (.04 mf., 400 v.)
26	Electrolytic Condenser (20-20 mf., 150 v.)
27	Field Coil—Part of Speaker No.
28	Pilot Lamp
29	Line Resistor
30	Push Button Switch
31	Padding Condenser Strip

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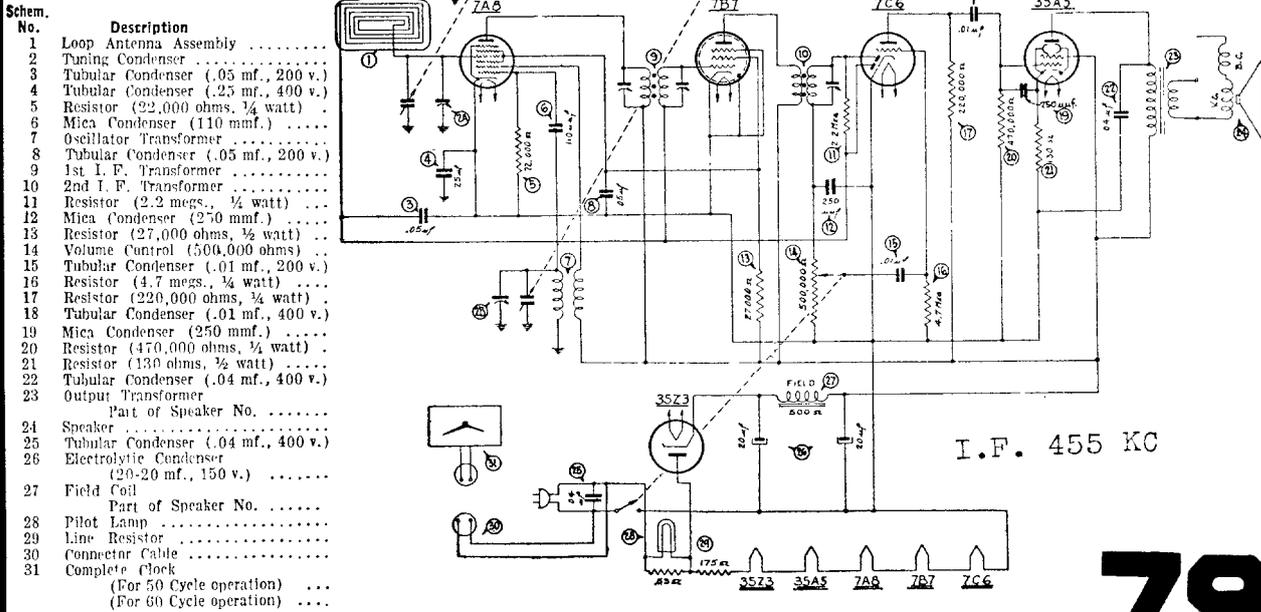


I.F. 455 KC.

PHILCO TRANSITONE HOME RADIO MODEL PT-67

Schem. No.	Description	Philco Part No.	Schem. No.	Description	Philco Part No.
1	Loop Antenna Assembly	38-9937	18	Tubular Condenser (.01 mf., 400 v.)	30-4572S
2	Tuning Condenser	31-2437	19	Mica Condenser (250 mmf.)	61-0033
3	Tubular Condenser (.05 mf., 200 v.)	30-4519S	20	Resistor (470,000 ohms, 1/4 watt)	33-447154
4	Tubular Condenser (.25 mf., 400 v.)	30-4604S	21	Resistor (130 ohms, 1/2 watt)	33-113336
5	Resistor (47,000 ohms, 1/4 watt)	33-347154	22	Tubular Condenser (.04 mf., 400 v.)	30-4119S
6	Mica Condenser (110 mmf.)	30-1130	23	Output Transformer	
7	Oscillator Transformer	32-3152		Part of Speaker No. 36-1469	
8	Tubular Condenser (.05 mf., 200 v.)	30-4519S	24	Speaker	36-1469
9	1st I. F. Transformer	32-3177	25	Tubular Condenser (.04 mf., 400 v.)	30-4119S
10	2nd I. F. Transformer	32-3178	26	Electrolytic Condenser (20-20 mf., 150 v.)	30-2382
11	Resistor (2.2 megs., 1/4 watt)	33-322154	27	Field Coil	Part of Speaker No. 36-1469
12	Mica Condenser (250 mmf.)	61-0033	28	Pilot Lamp	34-2068
13	Resistor (27,000 ohms, 1/2 watt)	33-327334	29	Line Resistor	33-3367
14	Volume Control (500,000 ohms)	30-4479S	30	Push Button Switch	42-1485
15	Tubular Condenser (.01 mf., 200 v.)	30-447154	31	Padding Condenser Strip	31-6324
16	Resistor (4.7 megs., 1/4 watt)	33-547154			
17	Resistor (220,000 ohms, 1/4 watt)	33-422154			

PHILCO TRANSITONE HOME RADIO — MODEL PT-69

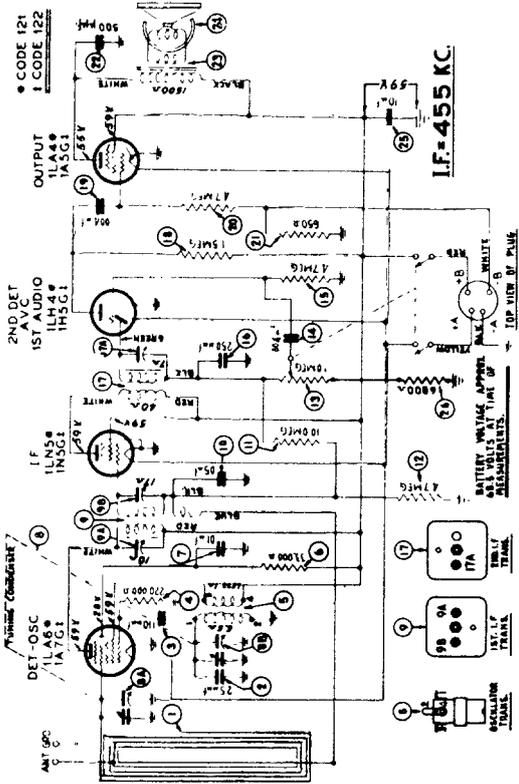


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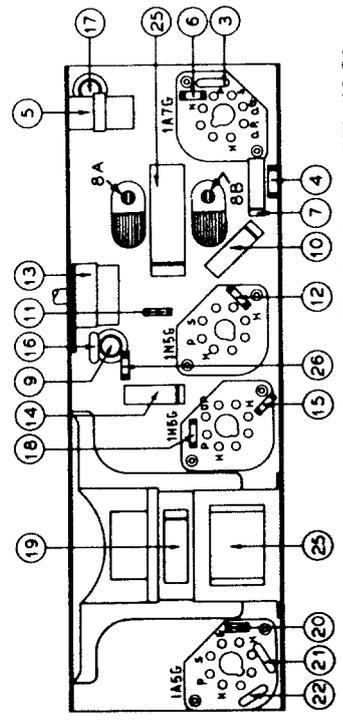


SCHMATIC DIAGRAM MODEL 40-81 CODES 121 & 122

PHILCO

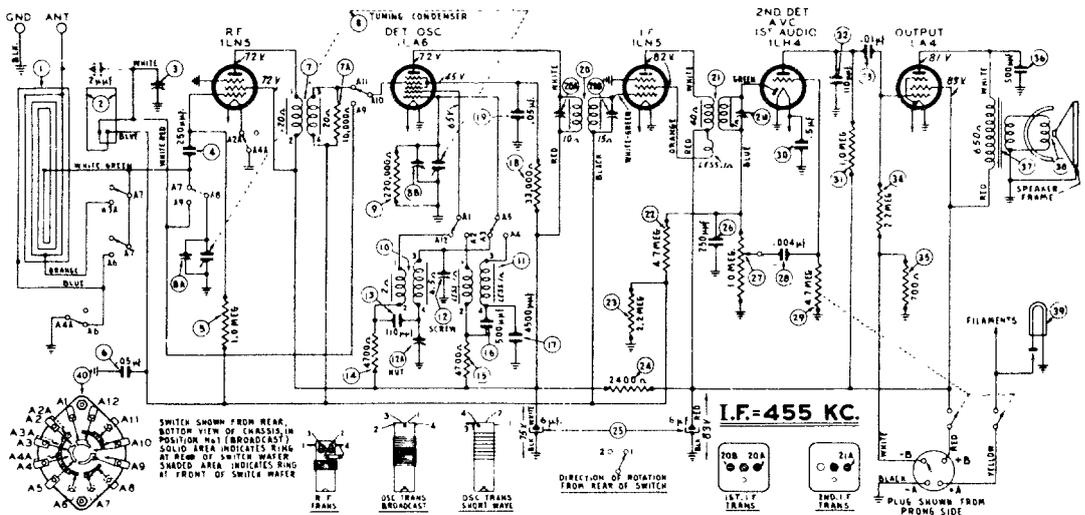
Models 40-81, Codes 121, 122

SCHE. No.	DESCRIPTION	PART No.
1	Loop Assembly (Part of Cabinet)	10413A
2	Mica Condenser (.15 mmfd.)	61-0036
3	Mica Condenser (.110 mmfd.)	30-11031
4	Resistor (220,000 ohms, 1/2 watt)	33-422339
5	Oscillator Transformer (Broadcast)	32-32249
6	Resistor (33,000 ohms, 1/2 watt)	33-333339
7	Tubular Condenser (.01 mfd.)	30-4372
8	Tuning Condenser Assembly	31-2432
9	1st I. F. Transformer Assembly	32-3285
10	Tubular Condenser (.05 mfd.)	30-4519
11	Resistor (10.0 meg., 1/2 watt)	33-810339
12	Resistor (4.7 meg., 1/2 watt)	33-547339
13	Volume Control and On-Off Switch	33-5331
14	Tubular Condenser (.004 mfd.)	30-4578
15	Resistor (4.7 meg., 1/2 watt)	33-547339
16	Mica Condenser (250 mmfd.)	61-0033
17	2nd I. F. Transformer Assembly	32-3286
18	Resistor (1.5 meg., 1/2 watt)	33-318339
19	Tubular Condenser (.004 mfd.)	30-4578
20	Resistor (4.7 meg., 1/2 watt)	33-547339
21	Resistor (650 ohms, 1/2 watt)	33-165328
22	Mica Condenser (500 mmfd.)	30-1114
23	Output Transformer	32-8092
24	Cone and Voice Coil Assembly (Speaker Part No. 30-1482-3)	30-4121
25	Electrolytic Condenser (10 mfd., 150 V.)	30-2386
26	Resistor (6600 ohms, 1/2 watt)	33-266339



PART LOCATIONS, UNDERSIDE OF CHASSIS, MODEL 40-81

Model 40-88, Code 121



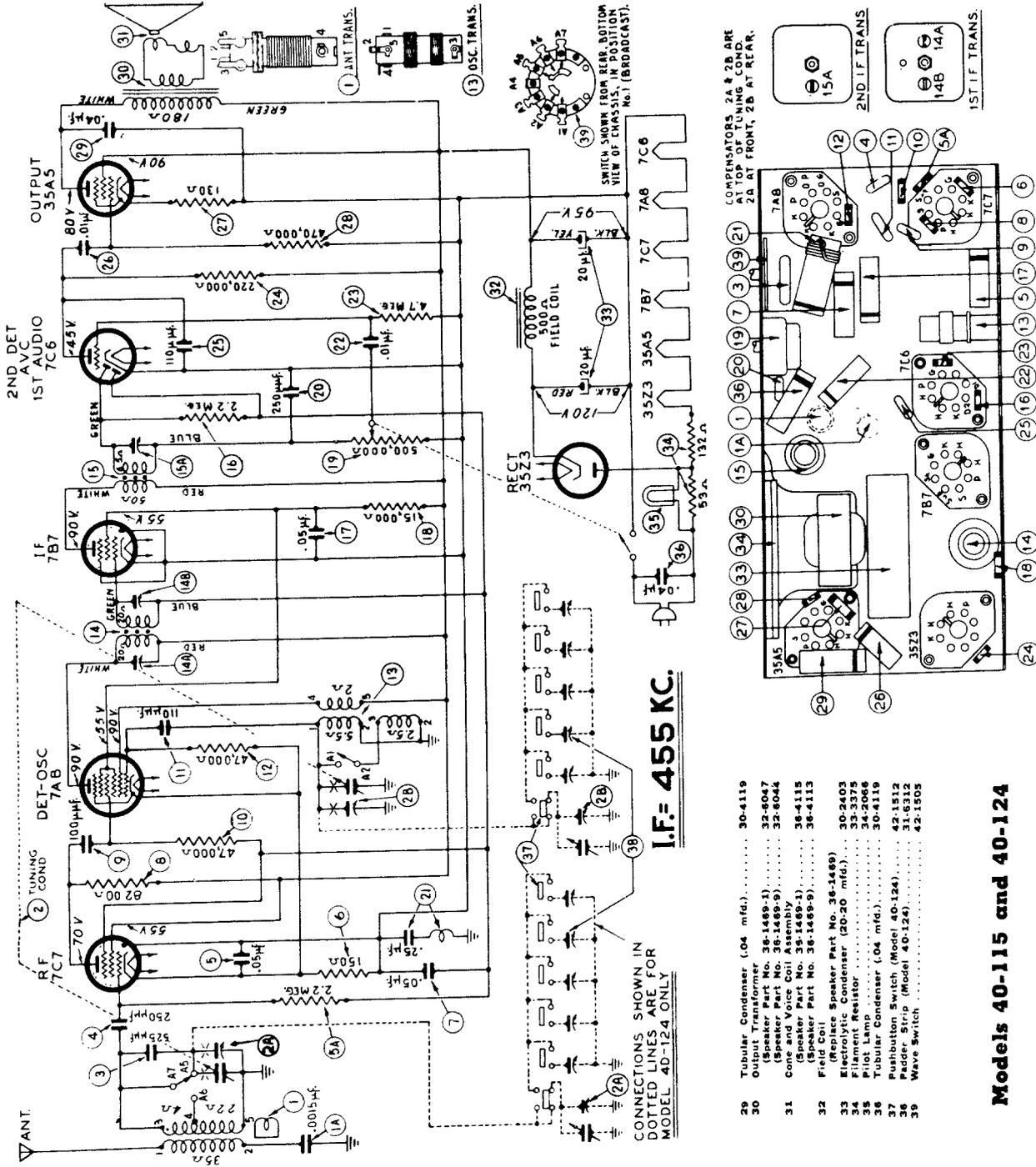
SCHE. No.	DESCRIPTION	PART No.
1	Loop Assembly (Broadcast)	38-9917
2	Loop Assembly (Short Wave)	38-9865
3	Compensator	31-6288
4	Mica Condenser (250 mmfd.)	61-0033
5	Resistor (1.0 meg., 1/2 watt)	33-510339
6	Tubular Condenser (.05 mfd.)	30-4819
7	R. F. Transformer Assembly	32-3218
7A	Resistor (10,000 ohms, 1/2 watt)	33-310339
8	Tuning Condenser Assembly	31-2378
9	Resistor (220,000 ohms, 1/2 watt)	33-422339
10	Oscillator Transformer (Broadcast)	32-3249
11	Oscillator Transformer (Short Wave)	32-3220
12	Compensator	31-6100
13	Mica Condenser (110 mmfd.)	30-1130
14	Resistor (4700 ohms, 1/2 watt)	33-247339
15	Resistor (4700 ohms, 1/2 watt)	33-247339
16	Mica Condenser (500 mmfd.)	30-1114
17	Mica Condenser (4500 mmfd.)	30-1109
18	Resistor (33,000 ohms, 1/2 watt)	33-333339

19	Tubular Condenser (.05 mfd.)	30-4519
20	1st I. F. Transformer Assembly	32-3222
21	2nd I. F. Transformer Assembly	32-3223
22	Resistor (4.7 meg., 1/2 watt)	33-547339
23	Resistor (2.2 meg., 1/2 watt)	33-522339
24	Resistor (2400 ohms, 1/2 watt)	33-224339
25	Electrolytic Condenser (6.6 mf., 150 V.)	30-2386
26	Mica Condenser (250 mmfd.)	61-0033
27	Tubular Condenser (.004 mfd.)	33-8310
28	Volume Control and On-Off Switch	30-4578
29	Resistor (4.7 meg., 1/2 watt)	33-547339
30	Tubular Condenser (.5 mfd.)	30-4551
31	Resistor (1.0 meg., 1/2 watt)	33-510339
32	Mica Condenser (110 mmfd.)	30-1130
33	Tubular Condenser (.01 mfd.)	30-4872
34	Resistor (2.2 meg., 1/2 watt)	33-522339
35	Resistor (700 ohms, 1/2 watt)	33-170339
36	Mica Condenser (500 mmfd.)	30-1114
37	Output Transformer	32-8096
38	Cone and Voice Coil Assembly	32-8096
39	Wave Lamp	30-2240
40	Wave Switch	32-1499

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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



I.F. = 455 KC.

CONNECTIONS SHOWN IN DOTTED LINES ARE FOR MODEL 40-124 ONLY

- 29 Tubular Condenser (.04 mfd.) 30-4119
- 30 Speaker Part No. 36-1469-1) 32-6047
- 31 Cone and Voice Coil Assembly (Speaker Part No. 36-1469-1) 36-4115
- 32 Filament Resistor (20-20 mfd.) 30-2403
- 33 Electrolytic Condenser (20-20 mfd.) 34-2066
- 34 Filament Resistor 30-4119
- 35 Pilot Lamp 42-1512
- 36 Pushbutton Switch (Model 40-124) 31-6312
- 37 Padder Strip (Model 40-124) 42-1505
- 38 Wave Switch 42-1505

SCHE. No.	DESCRIPTION	PART No.
1	Antenna Transformer (Model 40-115)	32-3303
	Antenna Transformer (Model 40-124)	32-3321
1A	Tubular Condenser (.0015 mfd.)	30-4555
2	Tuning Condenser (Model 40-115)	31-2425
	Tuning Condenser (Model 40-124)	31-2426
3	Mica Condenser (.525 mmfd.)	31-0033
4	Mica Condenser (.250 mmfd.)	30-4519
5	Tubular Condenser (.05 mfd.)	33-522339
5A	Resistor (2.2 meg., 1/2 watt)	33-115336
6	Resistor (150 ohms, 1/2 watt)	30-4519
7	Tubular Condenser (.05 mfd.)	33-262339
8	Resistor (8200 ohms, 1/2 watt)	30-1128
9	Mica Condenser (100 mmfd.)	33-347339
10	Resistor (47,000 ohms, 1/2 watt)	30-1130
11	Mica Condenser (110 mmfd.)	33-347339
12	Resistor (47,000 ohms, 1/2 watt)	32-3255
13	Oscillator Trans. (Model 40-115)	

SCHE. No.	DESCRIPTION	PART No.
14	1st I. F. Transformer Assembly	32-3237
15	2nd I. F. Transformer Assembly	32-3238
16	Resistor (2.2 meg., 1/2 watt)	33-522339
17	Tubular Condenser (.05 mfd.)	30-4519
18	Resistor (15,000 ohms, 1/2 watt)	33-315339
19	Volume Control and On-Off Switch	33-5306
20	Mica Condenser (.250 mmfd.)	30-1074
21	Choke and Condenser Assembly (.25 mfd.)	38-9958
22	Tubular Condenser (.01 mfd.)	30-4479
23	Resistor (4.7 meg., 1/2 watt)	33-547339
24	Resistor (220,000 ohms, 1/2 watt)	33-422339
25	Mica Condenser (110 mmfd.)	30-1130
28	Tubular Condenser (.01 mfd.)	30-4572
27	Resistor (130 ohms, 1/2 watt)	33-113336
28	Resistor (470,000 ohms, 1/2 watt)	33-447339

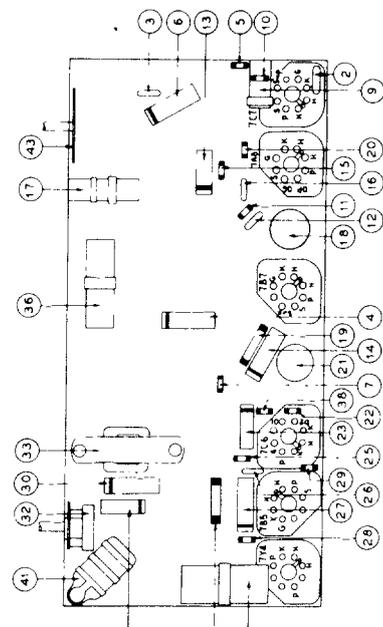
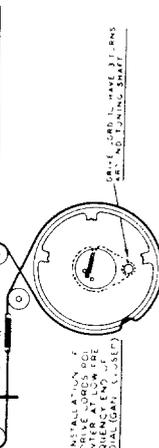
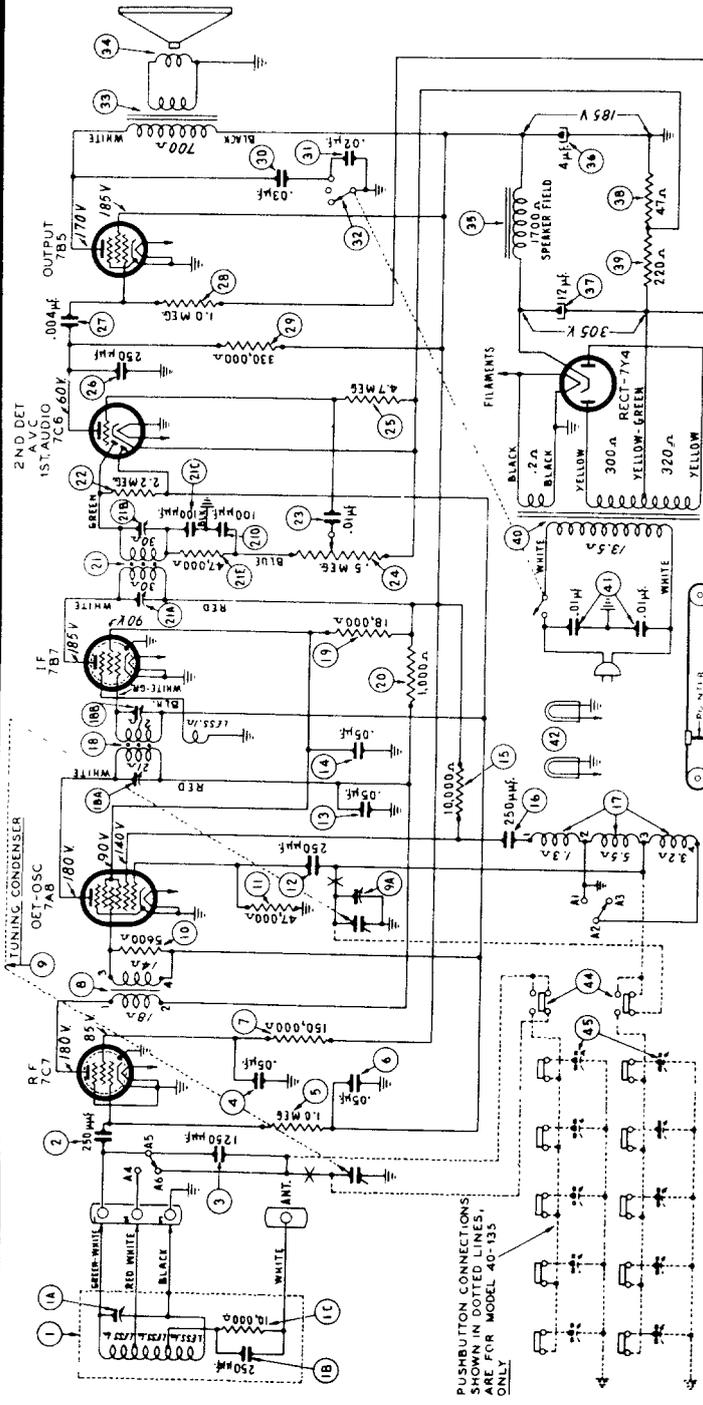
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Models 40-130 and 40-135



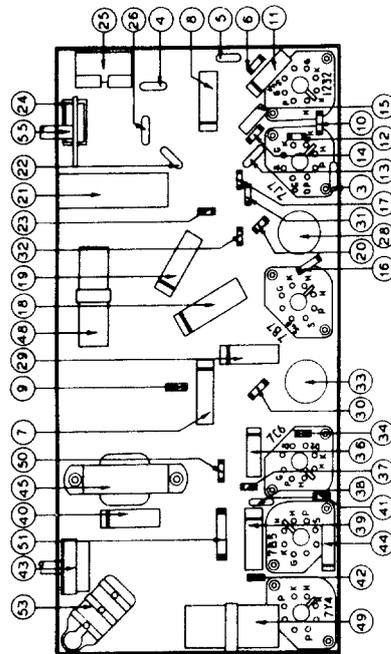
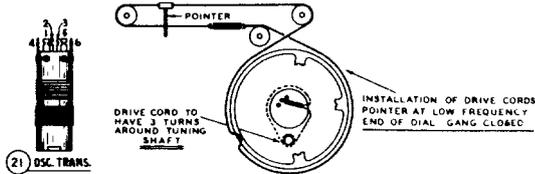
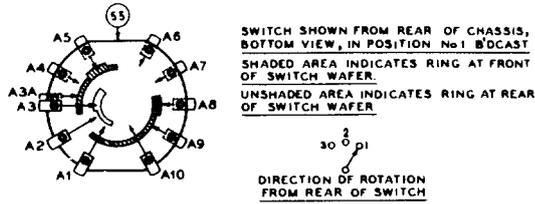
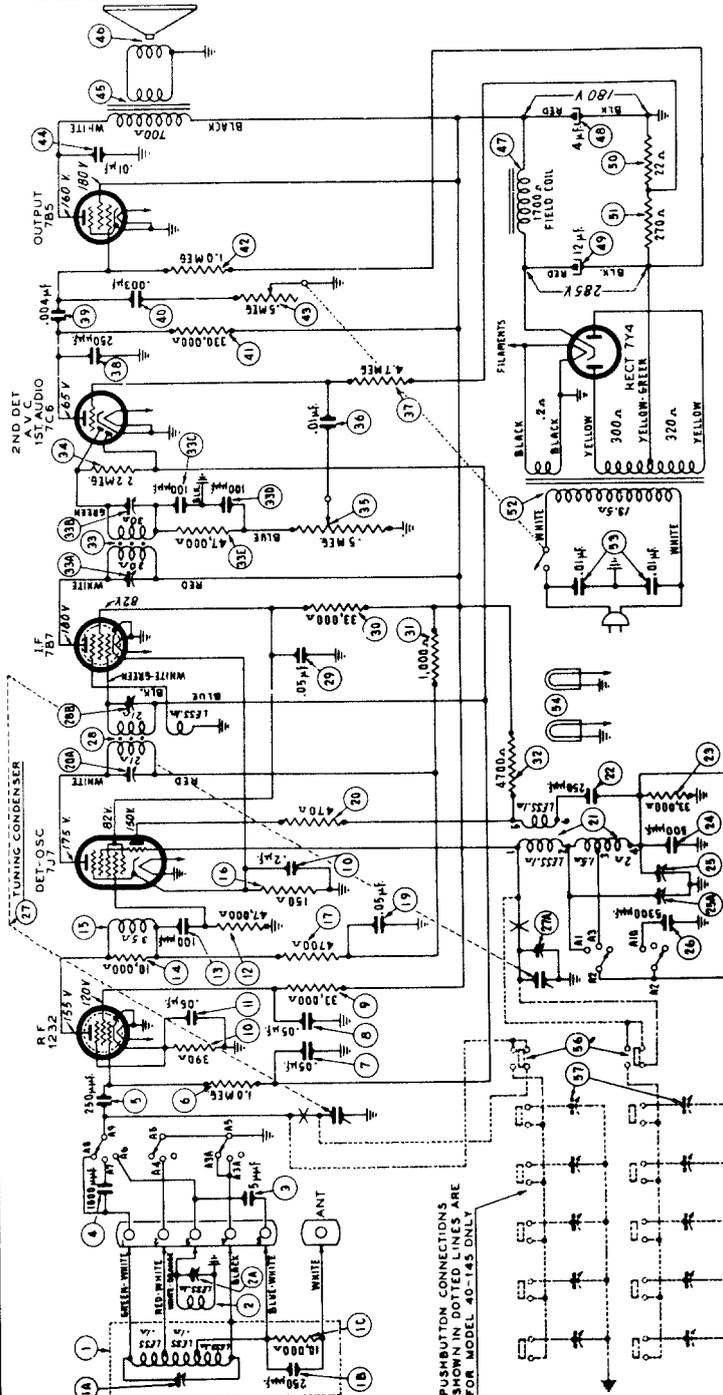
SCHE No.	DESCRIPTION	PART No.
1	Loop Assembly	38-9891
1A	Compensator	31-6318
1B	Mica Cond. (250 mmfd.)	61-0033
1C	Resistor (250 ohms, 1/2 watt)	33-310339
2	Resistor (10,000 ohms, 1/2 watt)	61-0033
3	Mica Cond. (250 mmfd.)	61-0033
4	Tubular Cond. (.05 mfd.)	30-4518
5	Resistor (2.0 meg., 1/2 watt)	33-510339
6	Tubular Cond. (.05 mfd.)	30-4518
7	Resistor (150,000 ohms, 1/2 watt)	33-415339
8	R. F. Transformer	32-3281
9	Tuning Condenser	31-2374
10	Resistor (5600 ohms, 1/2 watt)	33-256339
11	Resistor (47,000 ohms, 1/2 watt)	33-347339
12	Mica Cond. (250 mmfd.)	61-0033
13	Tubular Cond. (.05 mfd.)	30-4518
14	Tubular Cond. (.05 mfd.)	30-4518
15	Resistor (10,000 ohms, 1/2 watt)	33-310339
16	Mica Cond. (250 mmfd.)	61-0033
17	Oscillator Transformer	32-3212
18	1st I. F. Trans. Assy.	32-3210
19	Resistor (18,000 ohms, 1 watt)	33-318439
20	Resistor (1,000 ohms, 1/2 watt)	33-210339
21	2nd I. F. Trans. Assy.	32-3281

22	Resistor (2.2 meg., 1/2 watt)	33-522339
23	Tubular Cond. (.01 mfd.)	30-4572
24	Volume Control (.5 meg.)	33-5332
25	Resistor (4.7 meg., 1/2 watt)	33-547339
26	Mica Cond. (250 mmfd.)	61-0033
27	Tubular Cond. (.004 mfd.)	30-4578
28	Resistor (2.0 meg., 1/2 watt)	33-510339
29	Resistor (330,000 ohms, 1/2 watt)	33-435339
30	Tubular Cond. (.03 mfd.)	30-4449
31	Tubular Cond. (.02 mfd.)	30-4481
32	Tone Control and On-Off Switch	32-8064
33	Output Transformer	32-8083
34	Cone and Voice Coil Assy. (Spkr. Part No. 36-1478-3)	36-4085
35	Field Co. (Replace Spkr. Part No. 36-1478)	30-2401
36	Electrolytic Cond. (4 mfd., 400 V.)	30-2401
37	Electrolytic Cond. (12 mfd., 400 V.)	30-2409
38	Resistor (47 ohms, 1/2 watt)	33-047331
39	Resistor (220 ohms, 1 watt)	33-122431
40	Power Trans. (115 V., 50-60 cycles)	32-8064
41	Bakelite Cond. (.01-.01 mfd.)	39-03-00
42	Pilot Lamp	34-2064
43	Wave Switch	42-1484
44	Pushbutton Switch (Model 40-135 only)	42-1528
45	Padder Strip (Model 40-135 only)	31-6315

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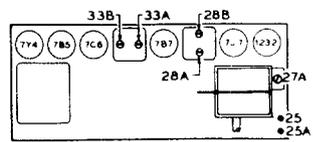
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Models 40-140 and 40-145



1	Loop Assembly (Broadcast)	36-9892	28	1st I. F. Trans. Assy.	32-3210
1A	Compensator	31-6318	29	Tubular Cond. (.05 mfd.)	30-4518
1B	Mica Cond. (250 mmfd.)	61-0033	30	Resistor (33,000 ohms, 1/2 watt)	33-33339
1C	Resistor (10,000 ohms, 1/2 watt)	33-310339	31	Resistor (1,000 ohms, 1/2 watt)	33-210339
2	Loop Assembly (Short Wave)	38-9893	32	Resistor (4700 ohms, 1/2 watt)	33-247339
2A	Compensator	31-6320	33	2nd I. F. Trans. Assy.	32-3281
3	Mica Cond. (5 mmfd.)	30-1097	34	Resistor (2.2 meg., 1/2 watt)	33-522339
4	Mica Cond. (1000 mmfd.)	30-1063	35	Volume Control (.01 mfd.)	33-5319
5	Mica Cond. (250 mmfd.)	61-0033	36	Tubular Cond. (.01 mfd.)	30-4572
6	Resistor (1.0 meg., 1/2 watt)	33-510339	37	Resistor (4.7 meg., 1/2 watt)	33-547339
7	Tubular Cond. (.05 mfd.)	30-4518	38	Mica Cond. (.004 mfd.)	61-0033
8	Tubular Cond. (.05 mfd.)	30-4518	39	Tubular Cond. (250 mmfd.)	30-4578
9	Resistor (33,000 ohms, 1/2 watt)	33-333339	40	Tubular Cond. (.003 mfd.)	30-4580
10	Resistor (390 ohms, 1/2 watt)	33-139331	41	Resistor (330,000 ohms, 1/2 watt)	33-43339
11	Tubular Cond. (.05 mfd.)	30-4518	42	Resistor (1.0 meg., 1/2 watt)	33-510339
12	Resistor (47,000 ohms, 1/2 watt)	33-347339	43	Tone Control (.5 meg., 1/2 watt)	33-5333
13	Mica Cond. (100 mmfd.)	30-1128	44	Tubular Cond. (.01 mfd.)	30-4572
14	Resistor (10,000 ohms, 1/2 watt)	33-310339	47	Field Coil (Replace Spkr. Part No. 36-1478)	30-2401
15	R. F. Transformer	32-3194	48	Electrolytic Cond. (4 mfd., 400 V.)	30-2409
16	Resistor (150 ohms, 1/2 watt)	33-115331	49	Electrolytic Cond. (12 mfd., 400 V.)	33-022331
17	Resistor (4700 ohms, 1/2 watt)	33-247339	50	Resistor (22 ohms, 1/2 watt)	33-127431
18	Tubular Cond. (.2 mfd.)	30-4536	51	Resistor (270 ohms, 1 watt)	32-8064
19	Tubular Cond. (.05 mfd.)	30-4518	52	Power Trans. (115 V., 50-60 cycles)	3903-000
20	Resistor (470 ohms, 1/2 watt)	33-147339	53	Line Condenser (.01-.01 mfd.)	34-2064
21	Oscillator Transformer	32-3195	54	Pilot Lamps	42-1495
22	Mica Cond. (250 mmfd.)	61-0033	55	Wave Switch	42-1528
23	Resistor (33,000 ohms, 1/2 watt)	33-33339	56	Push Button Switch (Model 40-145 only)	31-6316
24	Silver Mica Cond. (800 mmfd.)	30-1138	57	Padder Strip (Model 40-145 only)	
25	Compensator (2 section)	31-6317			
26	Mica Cond. (5300 mmfd.)	30-1134			

I.F.=455 KC.



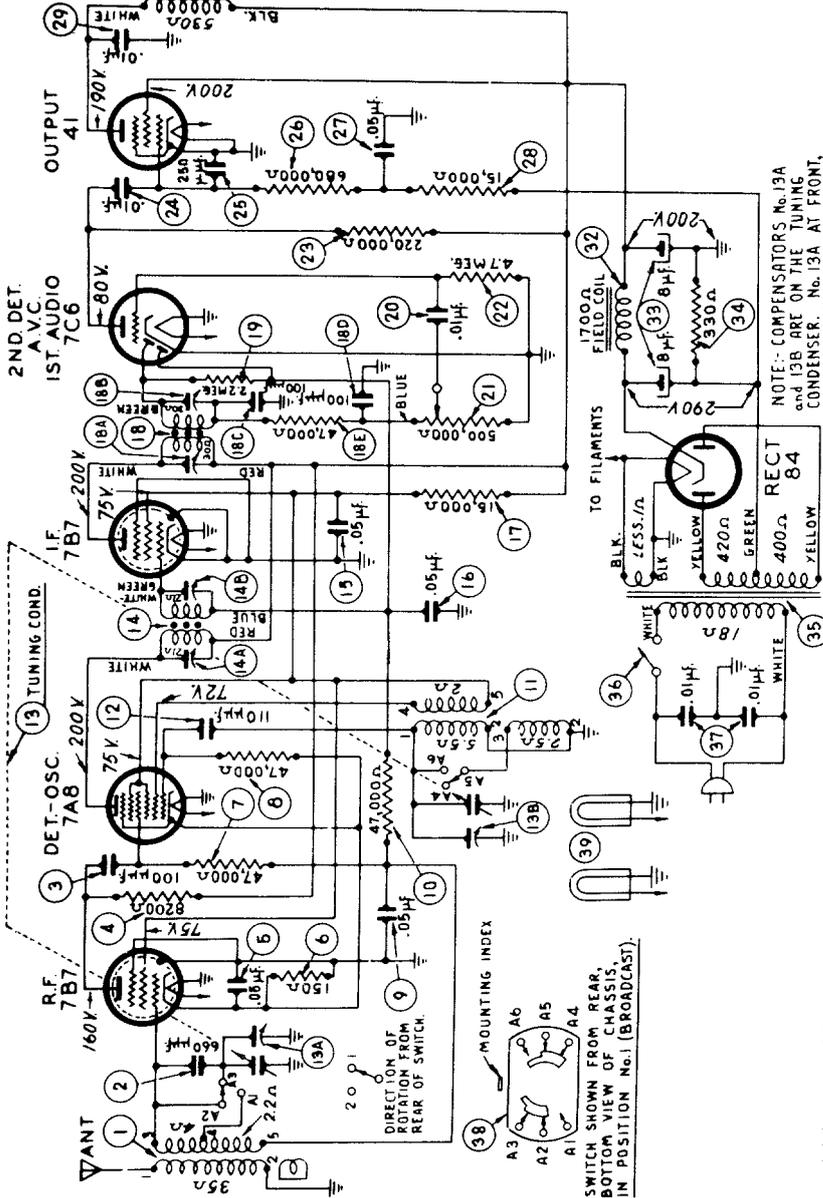
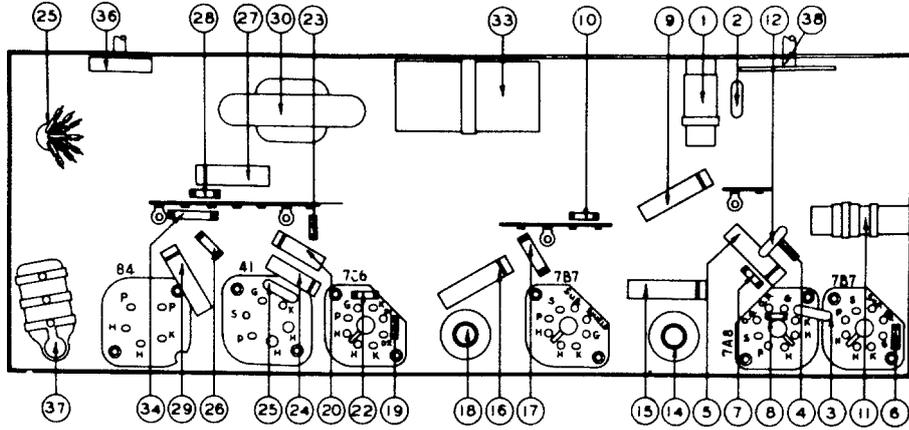
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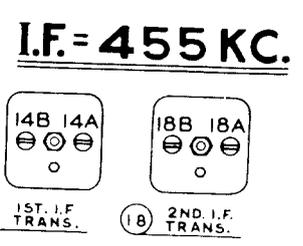
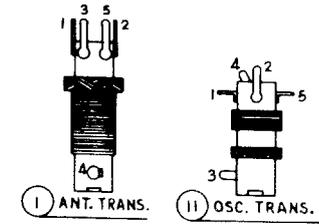
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PHILCO

Model 40-158



NOTE: COMPENSATORS No. 13A and 13B ARE ON THE TUNING CONDENSER. No. 13A AT FRONT, No. 13B AT REAR.



I.F. = 455 KC.

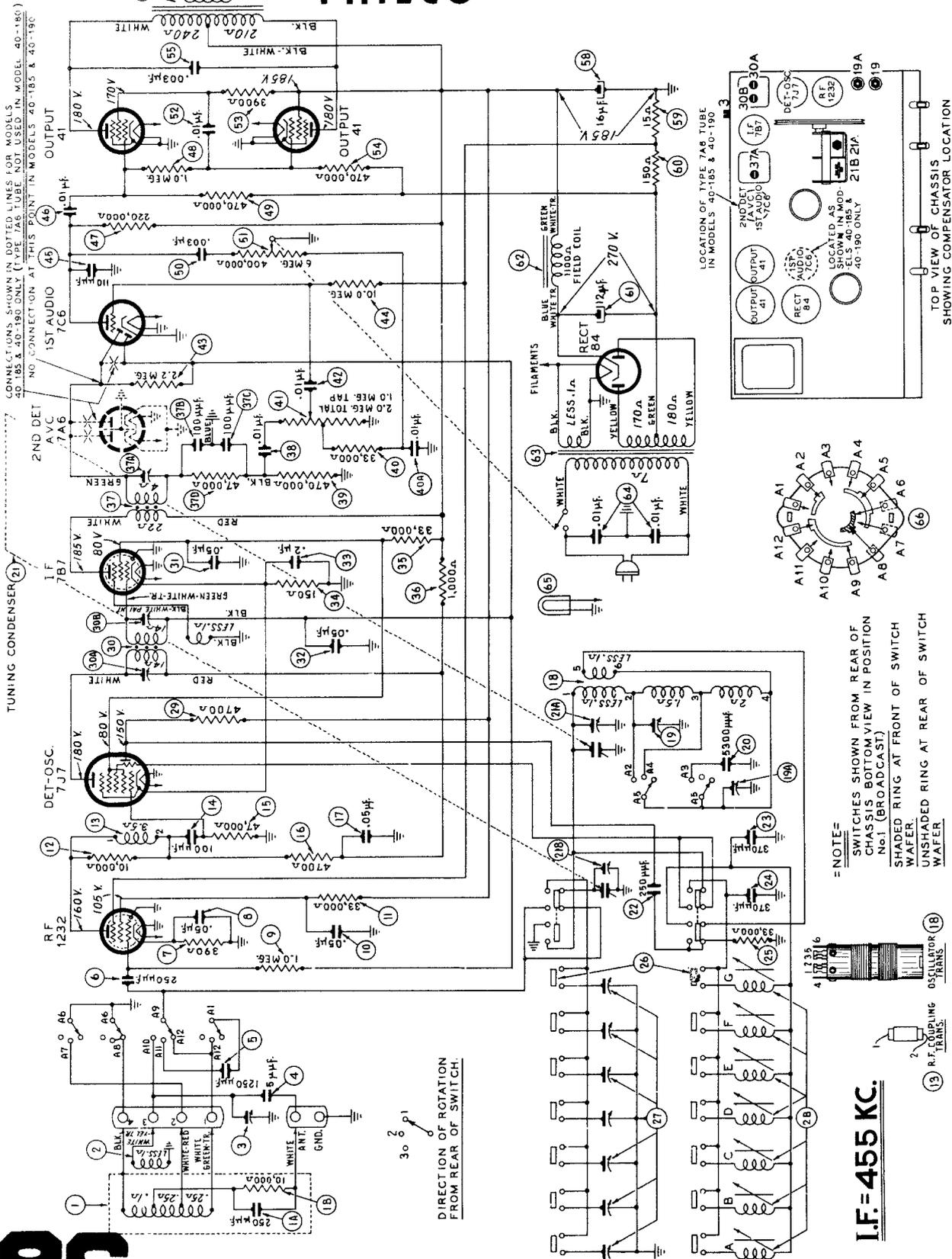
SCHE. No.	DESCRIPTION	PART No.
1	Antenna Transformer	32-3303
2	Mica Condenser (660 mmfd.)	30-1136
3	Mica Condenser (100 mmfd.)	30-1128
4	Resistor (8200 ohms, 1/2 watt)	33-282339
5	Tubular Condenser (.05 mfd.)	30-4519
6	Resistor (150 ohms, 1/2 watt)	33-115339
7	Resistor (47,000 ohms, 1/2 watt)	33-347339
8	Resistor (47,000 ohms, 1/2 watt)	33-347339
9	Tubular Condenser (.05 mfd.)	30-4519
10	Resistor (47,000 ohms, 1/2 watt)	33-347339
11	Oscillator Transformer	32-3255
12	Mica Condenser (110 mmfd.)	30-1130
13	Tuning Condenser Assembly	31-2418
14	1st I. F. Transformer Assy.	32-3361
15	Tubular Condenser (.05 mfd.)	30-4519
16	Tubular Condenser (.05 mfd.)	30-4519
17	Resistor (15,000 ohms, 1 watt)	33-315439
18	2nd I. F. Transformer Assembly	32-3211
19	Resistor (2.2 meg., 1/2 watt)	33-522339
20	Tubular Condenser (.01 mfd.)	30-4572
21	Volume Control (500,000 ohms)	33-5319
22	Resistor (4.7 meg., 1/2 watt)	33-547339
23	Resist. (220,000 ohms, 1/2 watt)	33-422339
24	Tubular Condenser (.01 mfd.)	30-4572
25	Mica Condenser (250 mmfd.)	61-0033
26	Resist. (680,000 ohms, 1/2 watt)	33-468339
27	Tubular Condenser (.05 mfd.)	30-4519
28	Resist. (15,000 ohms, 1/2 watt)	33-315339
29	Tubular Condenser (.01 mfd.)	30-4501
30	Output Transformer	32-8056
31	Cone and Voice Coil Assembly (Speaker Part No. 36-1480-3)	36-4086
32	Field Coil (Replace Speaker Part No. 36-1480)	36-4086
33	Elec. Cond. (8-8 mfd., 450 V.)	30-2447
34	Resistor (330 ohms, 1 watt)	33-133439
35	Power Transformer (115-130 V., 50-60 cycles)	32-8055
	(115-130 V., 25 cycle)	32-8076
36	A. C. Switch	42-1545
37	Bakelite Cond. (.01-.01 mfd.)	3903-DG
38	Wave Switch	42-1494
39	Pilot Lamps	34-2064

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MOST POPULAR SERVICE DIAGRAMS

PHILCO Models 40-180, 40-185, 40-190

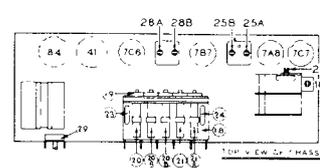
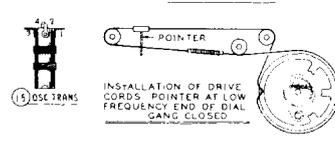
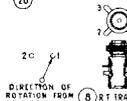
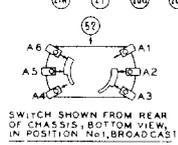
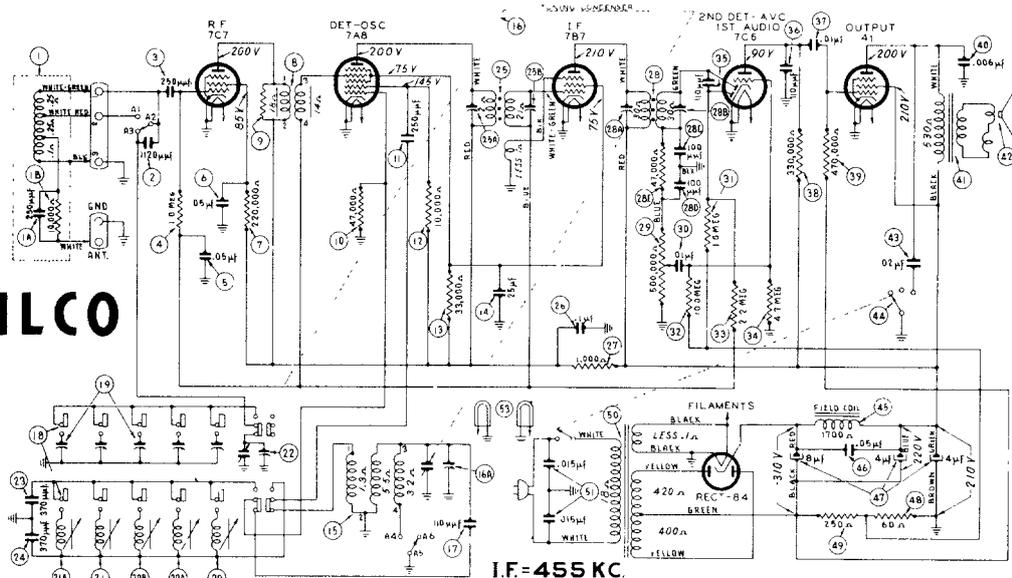


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Model 40-160

PHILCO



SCH. DIAGRAM MODEL 40-160

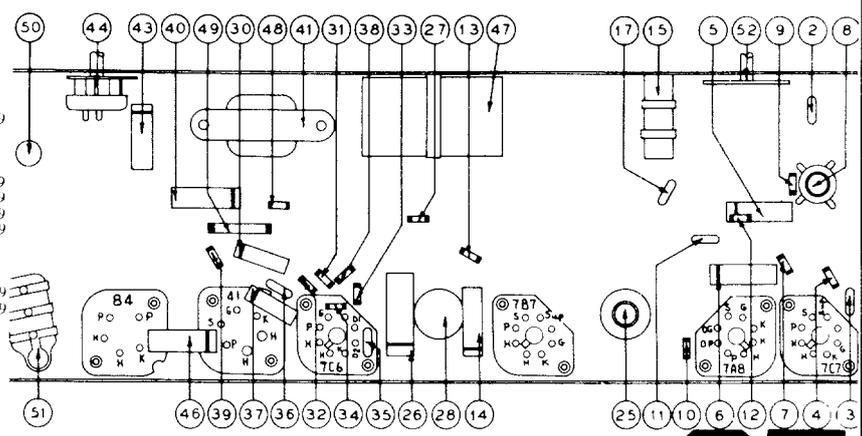
Sch. No.	Description	Part No.
1	Loop Assy.	38-9897
1A	Mica Cond. (.250 mfd.)	61-0033
2	Resistor (10,000 ohms, 1/2 watt)	33-410339
3	Mica Cond. (.250 mfd.)	61-0033
4	Resistor (1.0 meg., 1/2 watt)	33-510339
5	Tubular Cond. (.05 mfd.)	30-4519
6	Tubular Cond. (.05 mfd.)	30-4123
7	Resistor (220,000 ohms, 1/2 watt)	33-422339
8	R. F. Trans.	32-3283
9	Resistor (6800 ohms, 1/2 watt)	33-268339
10	Resistor (470,000 ohms, 1/2 watt)	33-447339
11	Mica Cond. (.250 mfd.)	61-0033
12	Resistor (10,000 ohms, 1/2 watt)	33-310339
13	Resistor (33,000 ohms, 1/2 watt)	33-333339
14	Tubular Cond. (.25 mfd.)	30-4448
15	Oscillator Trans.	32-3212
16	Tuning Cond.	31-2374
17	Mica Cond. (.10 mfd.)	30-1130
18	Push Button Switch	42-1493
19	Padder Strip and Bracket Assy.	31-6325
20	Cod. No. 1 540-1000 K.C.	32-3042
20A	Cod. No. 2 650-1100 K.C.	
20B	Cod. No. 3 740-1300 K.C.	
21	Cod. No. 4 900-1500 K.C.	
21A	Cod. No. 5 1100-1600 K.C.	
22	Compensator	31-6308
23	Silver Mica Cond. (.370 mfd.)	30-1110
24	Silver Mica Cond. (.370 mfd.)	30-1110
25	1st I.F. Trans.	32-3210
26	Tubular Cond. (.1 mfd.)	30-4455
27	Resistor (1000 ohms, 1/2 watt)	33-210339
28	2nd I.F. Trans. Assy.	32-3211
29	Volume Control	33-5319
30	Tubular Cond. (.01 mfd.)	30-4572
31	Resistor (1.0 meg., 1/2 watt)	33-510339
32	Resistor (10.0 meg., 1/2 watt)	33-610339
33	Resistor (2.2 meg., 1/2 watt)	33-522339
34	Resistor (4.7 meg., 1/2 watt)	33-547339
35	Mica Cond. (.110 mfd.)	30-1130
36	Mica Cond. (.110 mfd.)	30-1130
37	Tubular Cond. (.01 mfd.)	30-4572
38	Resistor (330,000 ohms, 1/2 watt)	33-433339
39	Resistor (470,000 ohms, 1/2 watt)	33-447339
40	Tubular Cond. (.006 mfd.)	30-4504
41	Output Trans.	32-8056
42	Cone and Voice Coil Assy. (Spkr. Part No. 36-1480-31)	36-4086
43	Tubular Cond. (.02 mfd.)	30-4599
44	Tone Control and On-Off Switch	42-1520
45	Field Coil (Replace Spkr. Part No. 36-1480)	36-1480
46	Tubular Cond. (.05 mfd.)	30-4123

Sch. No.	Description	Part No.
47	Electrolytic Cond. (18-4 mfd.)	30-2400
48	Resistor (60 ohms, 1/2 watt)	33-060339
49	Resistor (250 ohms, 1/2 watt)	33-125339
50	Power Trans.	32-8055
51	Line Cond. (.015-.015 mfd.)	3903 DG
52	Wave Switch	42-1494
53	Pilot Lamps	34-2064

MISCELLANEOUS PARTS

Description	Part No.
Bezel	27-4842
Cabinet	10398A
Cable and Plug (Power Supply)	L-3199
Chp (Coil Mtg.)	28-5002
Dial	27-5506
Drive Cord Assy. (Pointer)	31-2382
Drive Cord Assy. (Tuning Cond.)	31-2400
Escutcheon (Push Button)	27-4843
Insulating Bushing (Insulate Drive Shaft)	27-9437
Knobs (Tuning, Tone, Volume, Wave Switch)	27-4332

Description	Part No.
Knobs (Push Buttons)	27-4824
Pilot Lamp Socket Assy.	38-9908
Pointer	50-1479
Reflector (Pilot Lamp)	27-9455
Rubber Hose (Tuning Cond Drive)	27-9432
Spring (Tuning, Drive Cond)	28-8751
Spring (Pointer, Drive Cond)	28-8953
Spring (Drive Shaft, Grounding)	28-8955
Screw (Bezel Mtg.)	W-1834
Speaker	36-1480
Socket (Type 84 Tube)	27-6035
Socket (Type 41 Tube)	27-6036
Socket (Loktal, Type 7A8 Tube)	27-6129
Socket (Loktal, Type 7C7, 7B7, 7C6 Tubes)	27-6131
Tab (Dial)	27-5528
Tab (Television)	27-9451
Tab Kit	40-6474
Tuning Shaft	56-6952
Tuning Drive Drum Assy.	38-9883
Washer ("C" Type, Tuning Shaft)	28-2043



Part Locations, Underside of Chassis

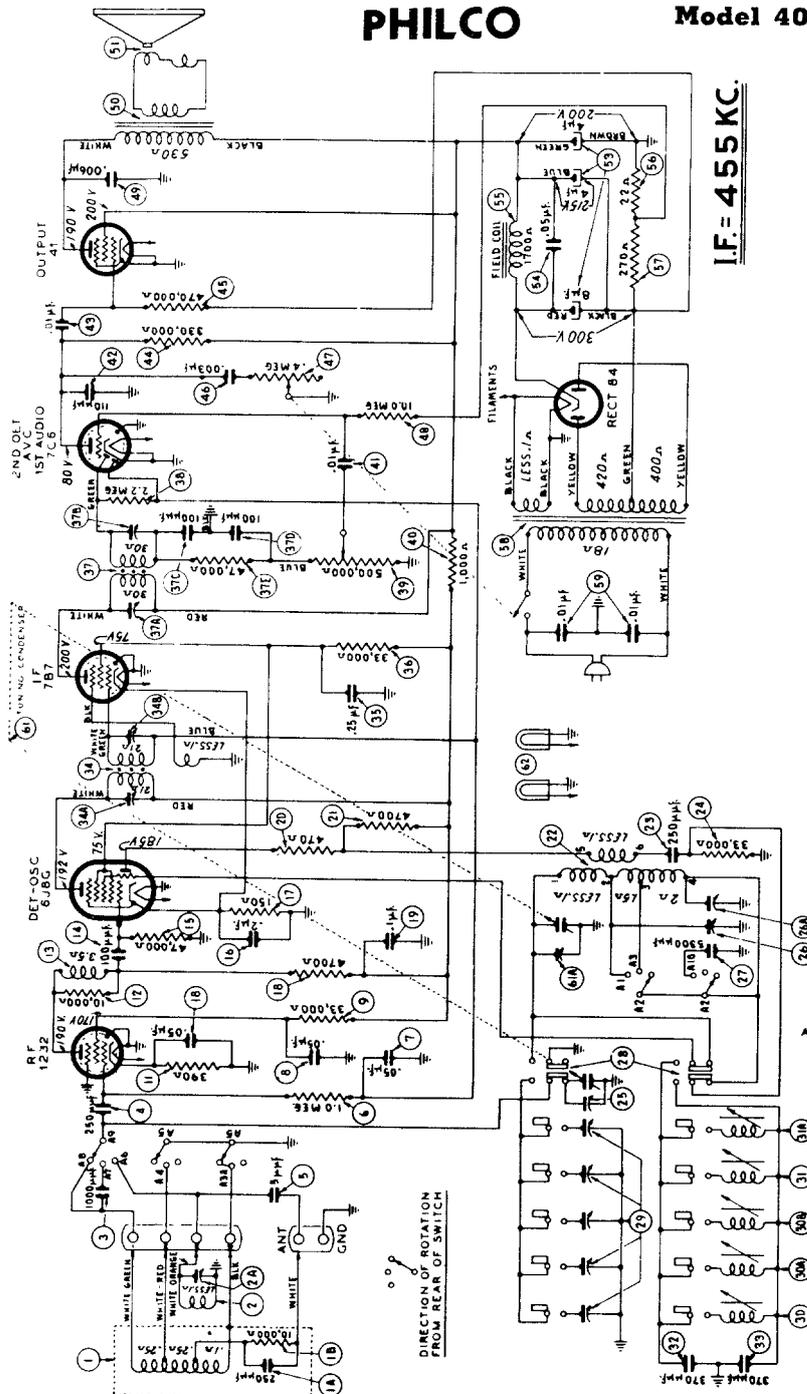
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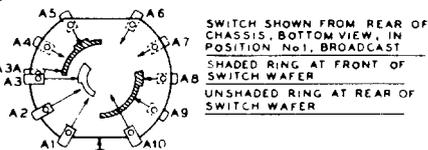
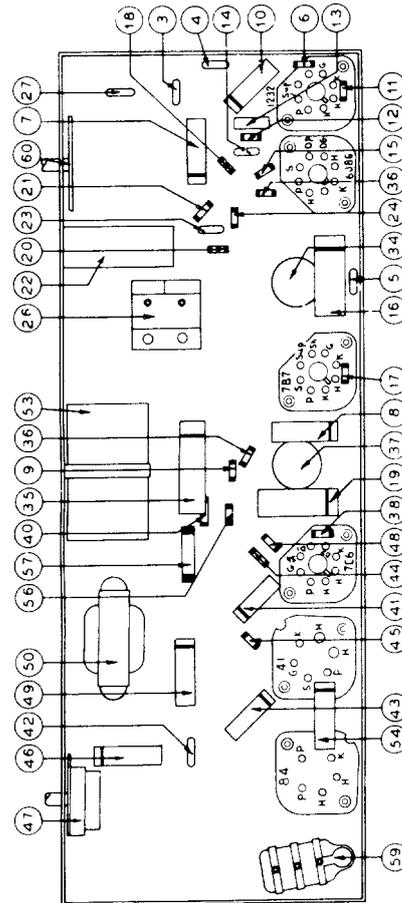
MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

PHILCO

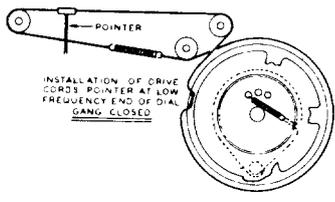
Model 40-165



IF = 455 KC.



SWITCH SHOWN FROM REAR OF CHASSIS, BOTTOM VIEW, IN POSITION No. 1, BROADCAST
SHADED RING AT FRONT OF SWITCH WAFER
UNSHADED RING AT REAR OF SWITCH WAFER



INSTALLATION OF DRIVE SCREW: POINTER AT LOW FREQUENCY END OF DIAL GANG CLOSED

SCHE. No.	DESCRIPTION	Value
1	Loop Assy. (Broadcast)	
1A	Mica Cond. (250 mmfd.)	
1B	Resistor (10,000 ohms, 1/2 watt)	
2	Loop Assy. (Short Wave)	
2A	Compensator (Part of S. W. Loop)	
3	Mica Cond. (1000 mmfd.)	
4	Mica Cond. (250 mmfd.)	
5	Mica Cond. (5 mmfd.)	
6	Resistor (1.0 meg., 1/2 watt)	
7	Tubular Cond. (.05 mfd.)	
8	Tubular Cond. (.05 mfd.)	
9	Resistor (33,000 ohms, 1/2 watt)	
10	Tubular Cond. (.05 mfd.)	
11	Resistor (300 ohms, 1/2 watt)	
12	Resistor (10,000 ohms, 1/2 watt)	
13	R. F. Coupling Trans.	
14	Mica Cond. (100 mmfd.)	
15	Resistor (47,000 ohms, 1/2 watt)	
16	Tubular Cond. (.2 mfd.)	
17	Resistor (150 ohms, 1/2 watt)	
18	Resistor (4700 ohms, 1/2 watt)	
19	Tubular Cond. (.4 mfd.)	
20	Resistor (470 ohms, 1/2 watt)	
21	Resistor (4700 ohms, 1/2 watt)	
22	Osc. Trans.	
23	Mica Cond. (250 mmfd.)	
24	Resistor (33,000 ohms, 1/2 watt)	
25	Compensator (Single)	
26	Compensator (2 section)	
27	Mica Cond. (3300 mmfd.)	
28	Push Button Switch	
29	Padder Strip and Bracket Assy.	
30	Coil No. 1 (540-1000 K.C.)	
30A	Coil No. 2 (650-1300 K.C.)	
30B	Coil No. 3 (740-1300 K.C.)	
31	Coil No. 4 (.900-1500 K.C.)	
31A	Coil No. 5 (1100-1800 K.C.)	
32	Silver Mica Cond. (370 mmfd.)	
33	Silver Mica Cond. (370 mmfd.)	
34	1st I. F. Trans.	
35	Tubular Cond. (.25 mfd.)	
36	Resistor (33,000 ohms, 1/2 watt)	
37	Resistor (1000 ohms, 1/2 watt)	
38	Resistor (2.2 meg., 1/2 watt)	
39	Volume Control (500,000 ohms)	
40	Resistor (1000 ohms, 1/2 watt)	
41	Resistor (470 ohms, 1/2 watt)	
42	Tubular Cond. (.01 mfd.)	
43	Mica Cond. (110 mmfd.)	
44	Resistor (330,000 ohms, 1/2 watt)	
45	Resistor (470,000 ohms, 1/2 watt)	
46	Tubular Cond. (.003 mfd.)	
47	Tone Control and On-Off Switch (.4 meg.)	
48	Resistor (10.0 meg., 1/2 watt)	
49	Tubular Cond. (.006 mfd.)	
50	Output Trans.	
51	Cone and Voice Coil Assy. (Spkr. Part No. 26-1480-3)	
53	Electrolytic Cond. (4-4-8 mfd.)	
54	Tubular Cond. (.05 mfd.)	
55	Field Coil (Replace Spkr. Part No. 26-1480-3)	
56	Resistor (22 ohms, 1/2 watt)	
57	Resistor (270 ohms, 1 watt)	
58	Power Trans. (110 volt, 60 Hz)	
59	Line Cond. (.01-.01 mfd.)	

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RECEIVER CIRCUIT ADJUSTMENTS — Models 40-215, 40-217

Operation	SIGNAL GENERATOR		RECEIVER		SPECIAL INSTRUCTIONS	
	Output Connections to Receiver	Dial Setting	Dial Setting	Control Setting		Adjust Compensators
1	78 I. F. Grid	470 K. C.	580 K. C.	Vol. Max. Range Switch "Brdest"	41A, 41B	Turn Out 38B Full
2	6J8G Det. Osc. Grid	470 K. C.	580 K. C.	Vol. Max. Range Switch "Brdest"	38A, 38C, 38B	Note A
3	Use Loop on Generator	18.0 M. C.	18.0 M. C.	Vol. Max. Range Switch "Short Wave"	29B, 2A	Note C, Note D 2A on SW Loop
4	Use Loop on Generator	1500 K. C.	1500 K. C.	Vol. Max. Range Switch "Brdest"	29, 8A	Note A
5	Use Loop on Generator	580 K. C.	580 K. C.	Vol. Max. Range Switch "Brdest"	30	Rollgang
6	Use Loop on Generator	1500 K. C.	1500 K. C.	Vol. Max. Range Switch "Brdest"	29	
7	Use Loop on Generator	3.5 M. C.	3.5 M. C.	Vol. Max. Range Switch "Police"	29A, 8	Note B

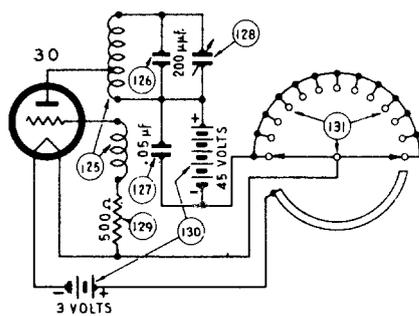


FIG. 3. SCHEMATIC DIAGRAM, WIRELESS REMOTE CONTROL.

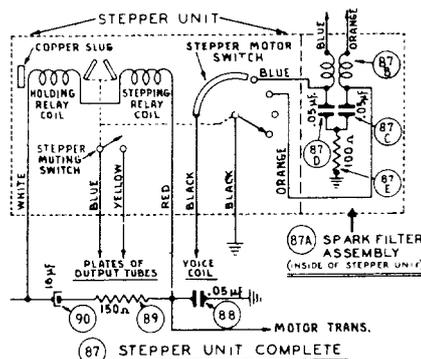
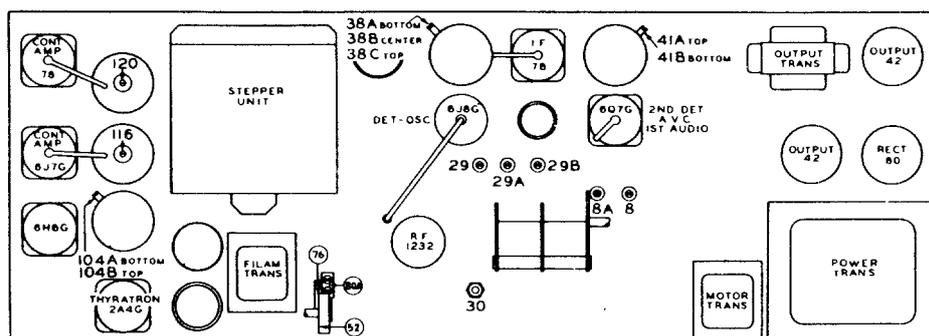


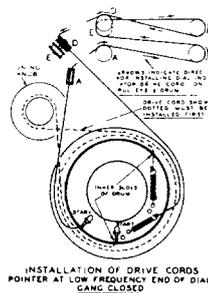
FIG. 4. WIRING OF STEPPER UNIT, WIRELESS REMOTE CONTROL.



NOTE A — DIAL CALIBRATION: In order to adjust the receiver correctly the dial must be aligned to track properly with the tuning condenser. To adjust the dial, proceed as follows: With the tuning condenser closed (maximum capacity), set the dial pointer on the extreme left index line at the low frequency end of the broadcast scale. The arrangement of the drive cable and dial pointer is shown.

NOTE C — If two peaks (signals) are observed on the aligning meter when adjusting the oscillator padder No. 29B, tune the padder to the second peak from the maximum capacity position (screw all the way in).

NOTE D — If two peaks (signals) are observed on the aligning meter when adjusting the loop padder 2A, tune the padder to the first peak signal from the maximum capacity position (screw all the way in). When adjusting the padders to this first peak roll the tuning condenser (rock) slightly back and forth to obtain the maximum readings on the aligning meter.



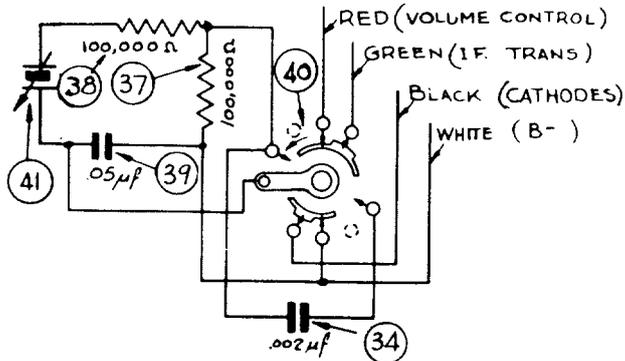
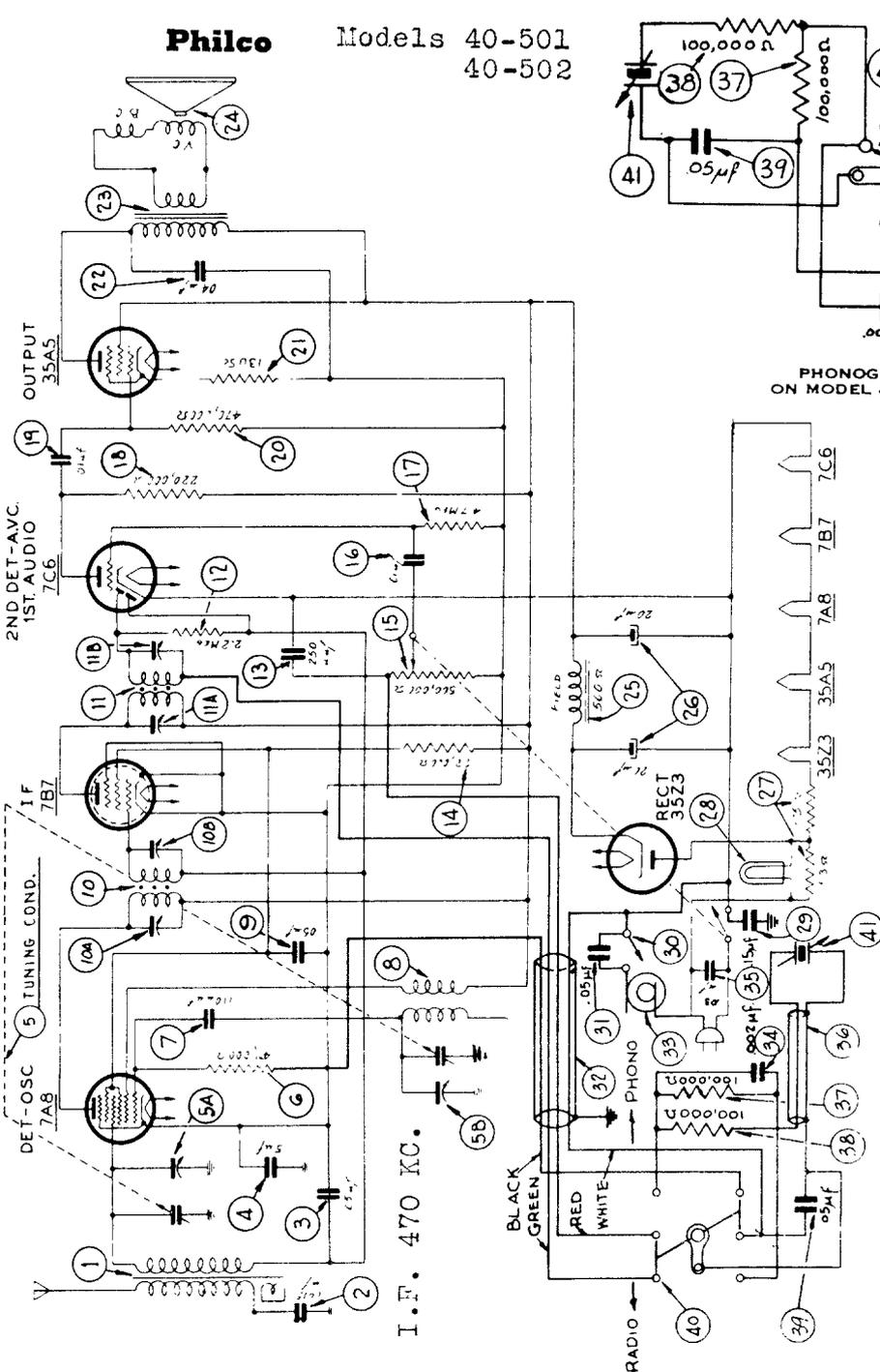
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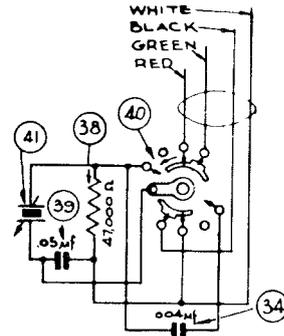
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Philco

Models 40-501
40-502



PHONOGRAPH WIRING AS USED ON MODEL 40-502, CODE 121



PHONOGRAPH WIRING AS USED ON MODEL 40-502, CODE 122

SCHE. No.	DESCRIPTION
31	Condenser, Tubular (.05 mfd.)
32	Radio-Phono Cable, Model 40-501
33	Motor (115 volts, 60 cycle) 40-501, Code 121, 40-502, Code 121, 40-502, Code 122
34	Condenser (.002 mfd., 40-501, 40-502, Code 121)
35	Condenser (.004 mfd., 40-502, Code 122)
36	Condenser (.03 mfd., 400 volts)
37	Pickup Cable

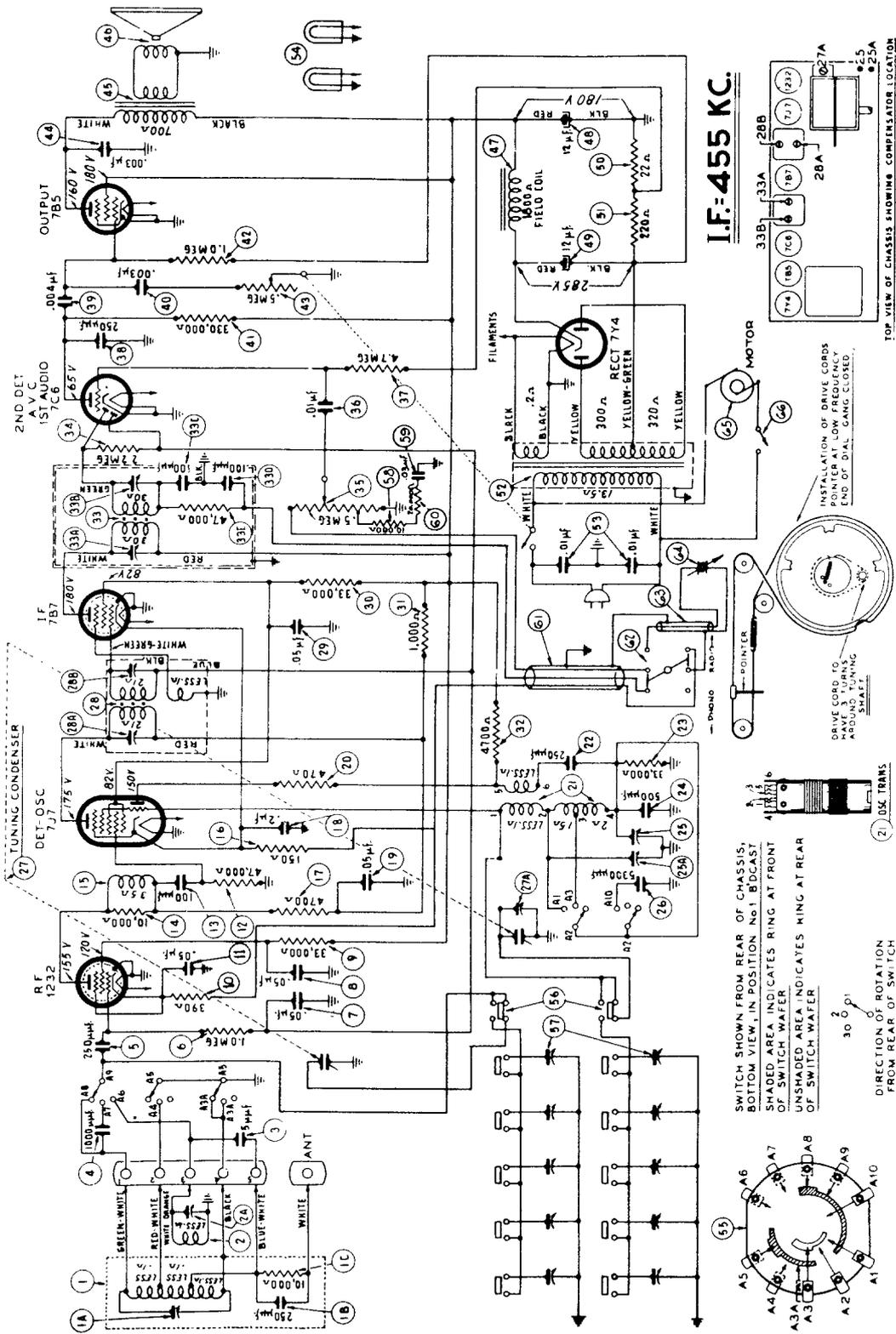
SCHE. No.	DESCRIPTION
37	Resistor (100,000 ohms, 40-501, Code 121, 40-502, Code 121)
38	Resistor (100,000 ohms, 40-501, 40-502, Code 121)
39	Resistor (47,000 ohms, 40-502, Code 122)
40	Condenser, Tubular (.05 mfd., 400 volts)
41	Radio-Phono Switch (Model 40-501) (Model 40-502, Code 121-122)
41	Pickup Crystal Cartridge 40-501, 40-502, Code 121, 40-502, Code 122

SCHE. No.	DESCRIPTION
1	Antenna Transformer
2	Condenser (.0015 mfd., 200 volts)
3	Condenser (.05 mfd., 400 volts)
4	Condenser (.15 mfd., 400 volts)
5	Tuning Condenser
5A	Antenna Compensator, Part of 5
6	Resistor (47,000 ohms, Model 40-502)
7	Condenser (.110 mfd.)
8	Oscillator Transformer
9	Condenser (.05 mfd., 200 volts)
10	1st I. F. Transformer
11	2nd I. F. Transformer
12	Resistor (2.2 megohms)
13	Condenser, Mica (.250 mfd.)
14	Resistor (22,000 ohms, Model 40-502, Code 122)
15	Volume Control
16	Condenser (.01 mfd., 200 volts)
17	Resistor (4.7 megohms, Model 40-502, Code 122)
18	Resistor (220,000 ohms, Model 40-502, Code 122)
19	Condenser, Tubular (.01 mfd., 400 volts)
20	Resistor (470,000 ohms, Model 40-502, Code 122)
21	Resistor (130 ohms)
22	Condenser (.02 mfd., 400 volts)
23	Output Transformer
24	Conc. Assembly for Speaker 36-1469-1, For use with Speaker 36-1469-9
25	Conc. Assembly for Speaker 36-1469-1, For use with Speaker 36-1469-9
26	Field Coil-Replace Speaker 36-1469-9
27	Electrolytic Condenser (20-20 mfd.)
28	Resistor
28	Pilot Lamp
29	Condenser (.15 mfd.)
30	Motor Switch (40-501, 121, 40-502, 121-122)

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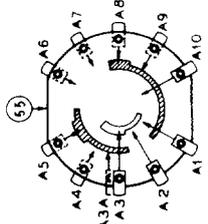
SCHEMATIC DIAGRAM MODEL 40-507

SWITCH SHOWN FROM REAR OF CHASSIS, BOTTOM VIEW, IN POSITION No. 1 BROADCAST. SHADED AREA INDICATES RING AT FRONT OF SWITCH WATER. UNSHADED AREA INDICATES RING AT REAR OF SWITCH WATER.

DRIVE CORD TO POINTERS AND CLOSURE END OF DIAL GANG CLOSED AROUND TUNING SWITCH.

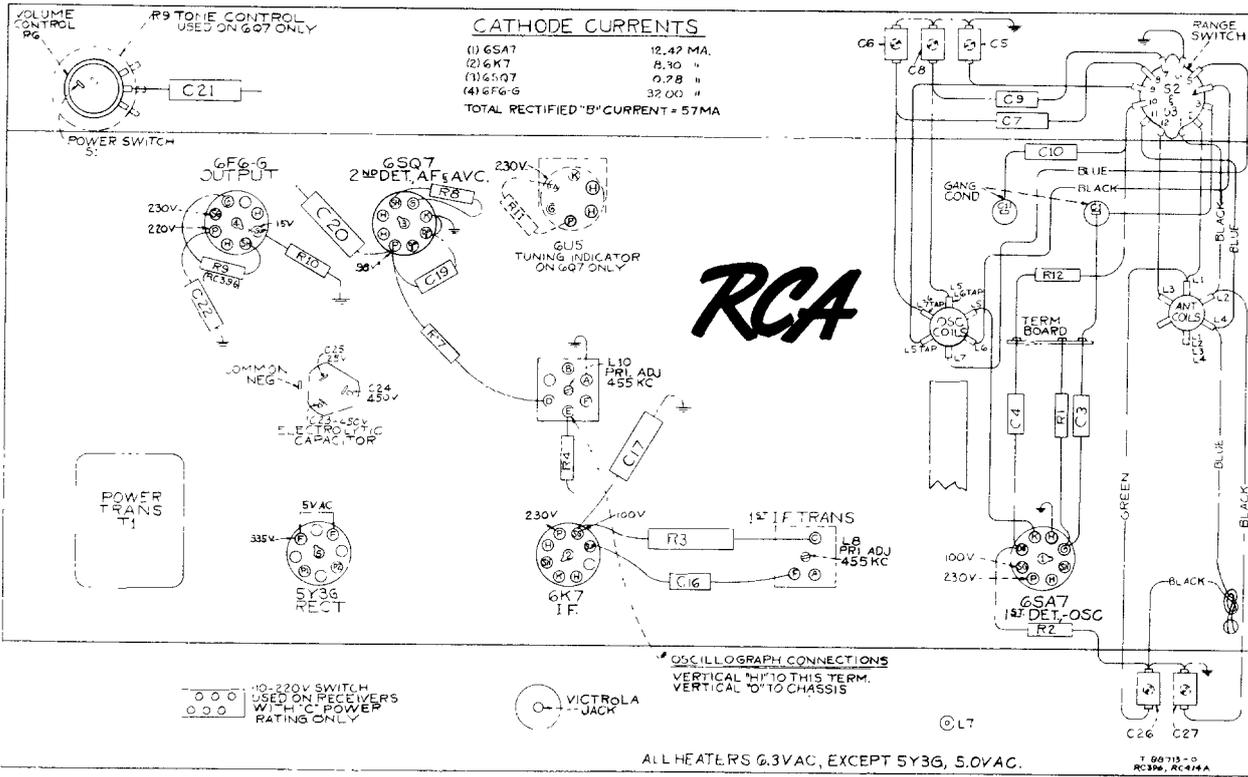
INSTRUCTION OF DRIVE CORDS POINTERS AND CLOSURE END OF DIAL GANG CLOSED AROUND TUNING SWITCH.

TOP VIEW OF CHASSIS SHOWING COMPENSATOR LOCATION.



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MODELS 5Q5, 5Q55, 5Q56 and 6Q7

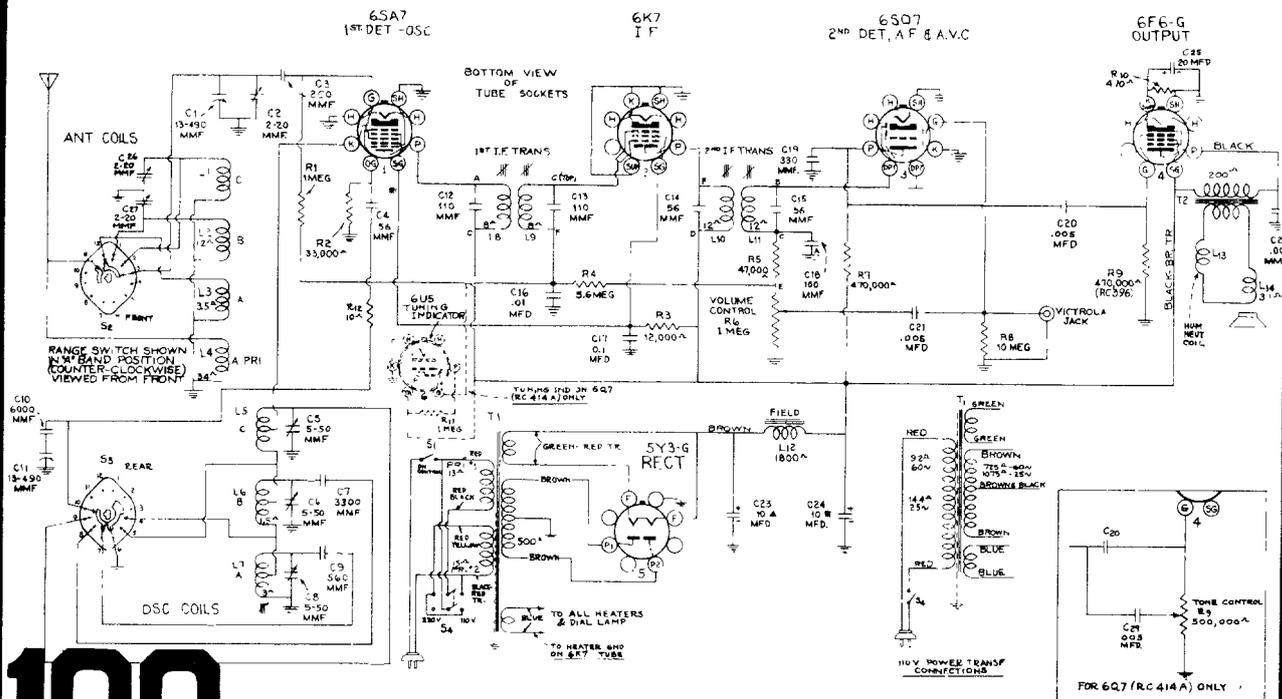


BOTTOM VIEW - REAR OF CHASSIS

R-F Wiring Diagram and Socket Voltages

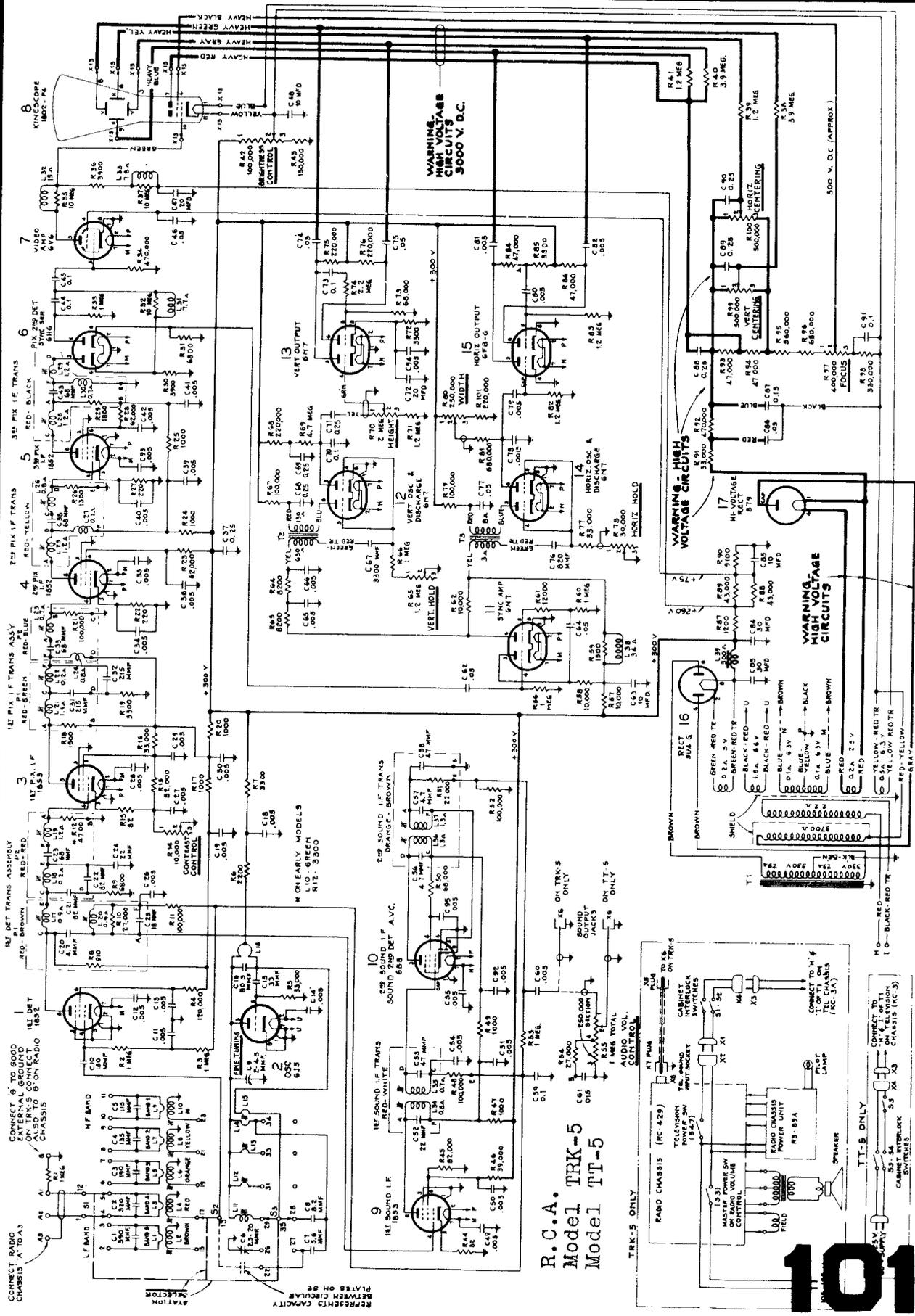
Measurements made to chassis unless otherwise indicated, with set tuned to quiet point and volume control at minimum. Values should hold within $\pm 20\%$ with 117-volt a.c. supply.

NOTE: Values with star () are operating voltages in circuits with high series resistance. The actual measured voltages will be lower, depending on the voltmeter loading.



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R.C.A. TRK-5
Model TT-5

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RCA MODEL TRK-5 and MODEL TT-5

Antenna Installation:

In most cases, the antenna should not be installed permanently on the apartment or residence roof until the quality of the picture reception has been observed on a Television Receiver. A temporary transmission line can be run between receiver and the antenna allowing sufficient slack to permit moving the antenna. Then, with a telephone system connecting an observer at the receiver and an assistant on the roof to find an antenna location, the antenna can be positioned to give the most satisfactory results on the received signal. A shift of only a few feet in antenna position or direction may effect a tremendous difference in picture reception. Whenever possible, the antenna location should be chosen or erected so the antenna is not only broadside to the transmitter but removed as far as possible from highways, hospitals and doctors' offices, and similar sources of interference. Auto ignition and diathermy apparatus may cause noise interference which spoils the picture.

In mounting any antenna, care must be taken to keep the antenna rods or pickup wires proper at least 1/4 wave length (at least 6 feet) away from other antennas, metal roofs and gutters or metal objects.

Under certain extremely unusual conditions, it may be possible to rotate or position the antenna so it receives the cleanest picture over a reflected path. If such is the case, the antenna should be so positioned. However, such a position may give variable results as the nature of reflecting surfaces may vary with weather conditions, as a wet surface has been known to have different reflecting characteristics than a dry surface.

In short, a television receiving antenna and its installation must conform to much higher standards than an antenna for reception of International Short Wave and Standard Broadcast signals because:

- (1) Intervening obstacles have a pronounced shielding effect on the ultra-high frequency waves producing low intensity signals. Severe trouble with multi-path transmissions may be experienced, especially in congested city areas.
- (2) The picture signal is comprised of a very wide band or range of frequencies, all of which must be received with good efficiency.
- (3) It must be continually remembered that the discernment of the eye is much more critical than that of the ear.



No attempt should ever be made to measure the high (2,000 volts) voltage, because of the dangers and difficulties involved. If at any time it becomes necessary to service the high voltage circuit, the suspected parts should be replaced by parts known to be in good operating condition.

Always replace the red can over the 879 high voltage rectifier.

The most dangerous portion of the receiver is the plate (top cap) lead for the 879 high voltage rectifier. Always be very careful when working near or with this lead.

When working on the high voltage supply portion of this chassis, the following precautions should be observed:

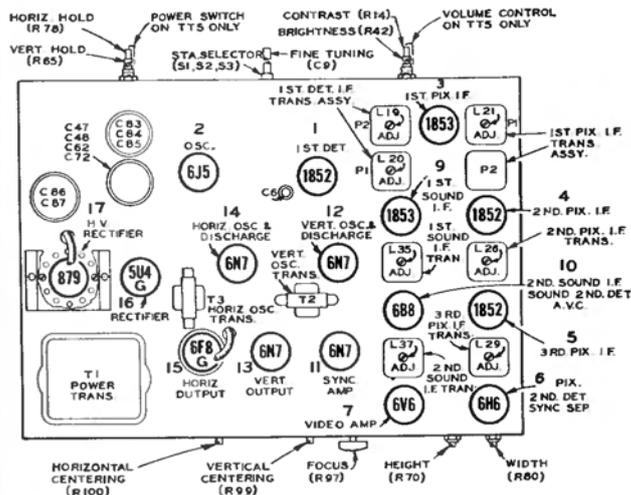
1. Remove power supply cord from the power supply socket.
2. Use only one hand at a time.
3. Connect a shorting lead between ground (firstly) and to the high voltage side.
4. Whenever working with the oil-filled high voltage filter capacitors, keep a constant short across the capacitor, as these capacitors do not completely lose their charge after being discharged a single or several subsequent times.
5. Only one person at a time should work on the unit to prevent any misunderstanding which may result in an accident.

When it is desired to measure any voltages on the Video portion of the chassis, the primary leads of the high voltage transformer should be disconnected and taped together.

When any changes are made on the Video portion of the chassis, the locations of leads and parts should be returned as closely as possible to their original positions.

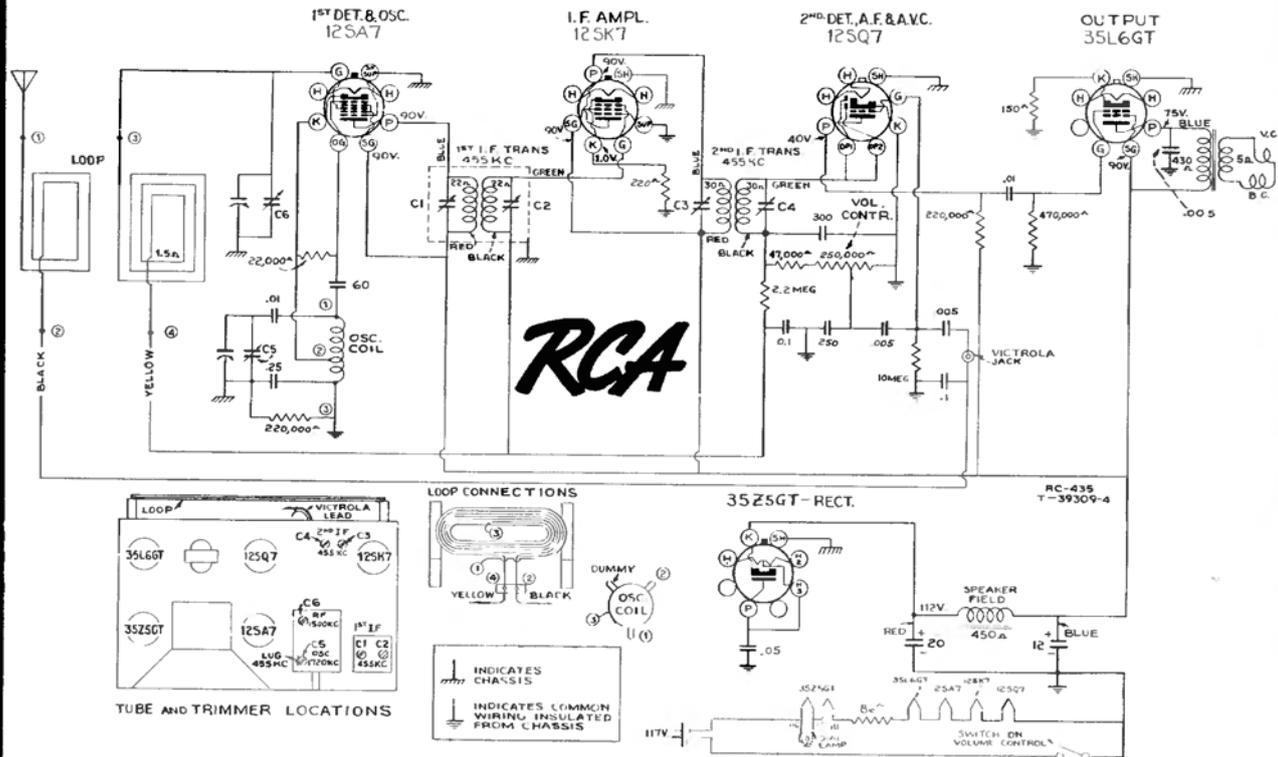
Service Hints:

1. In some cases the horizontal sweep oscillator circuit will radiate energy to nearby broadcast receiving antennas and lead-ins, causing interference with standard broadcast receivers.
2. If the picture "tears out" when the receiver is jarred it may be due to microphonic 1852, 1853, or 6J5 tubes.
3. The 6J5 oscillator tube should be removed without rocking it in its socket to loosen it, as the motion may cause the 80.5 mmf capacitor C16 to break off.
4. The coils or straps in the h.f. oscillator circuits should not be touched or moved or the alignment of the receiver will be disturbed.
5. The insulator on the high voltage filter capacitors may become dirty and break down to short out the high voltage.
6. The two Video coupling capacitors C44, 45, should be kept clear of chassis.
7. In some cases the metal Kinescope mounting shield may become magnetized by the earth's or some nearby magnetic field, and thus distort the picture on the screen towards the magnetized portion of the shield. The shield can be demagnetized by passing it slowly through a solenoid which is energized by an a-c current.



MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

Model 9TX-50 Series (Chassis No. RC-435)



Alignment Procedure

Output Meter Alignment.—Connect the meter across the voice coil, and turn the receiver volume control to maximum.

Test-Oscillator.—Connect the low side of the test-oscillator to the receiver chassis, through a .01 mfd. capacitor, and keep the output as low as possible.

Pre-Setting Dial.—With gang condenser in full mesh, the pointer should be adjusted so that top edge of pointer just touches rivet in dial plate.

Antenna.—The set is equipped with a built-in loop antenna. If an outdoor antenna is used, it may be connected to the "ANT" terminal on rear of cabinet. It should not be longer than 100 feet, including lead-in. If it is longer, connect a 100 to 200 mmf. capacitor in series with the lead-in.

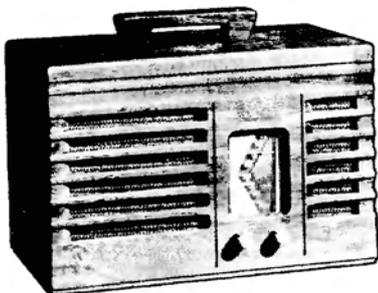
Power-Supply Polarity.—For operation on d-c, the power plug must be inserted in the outlet for correct polarity. If the set does not function, reverse the plug. On a-c, reversal of the plug may reduce hum.

Victrola Attachment.—A jack is provided on the rear of cabinet for connecting a Victrola Attachment into the audio-amplifying circuit. The cable from the Victrola Attachment should be terminated in a Stock No. 31048 plug to fit the jack.

Steps	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. peak output—
1	Tuning condenser stator (osc.) in series with .01 mfd.	455 kc	Quiet point at 1,600 kc end of dial	C1, C2, C3, C4 (1st and 2nd I-F transformers)
2	Antenna term. of ant. loop in series with 100 mmfd.	1,720 kc	Full clockwise (out of mesh)	C5 (oscillator)
3		1,500 kc	Resonance on 1,500 kc signal	C6 (antenna)

Precautionary Lead Dress

1. Dress 2nd I-F green lead close to chassis and under other parts.
2. Dress lead from gang condenser to grid of 12SA7 close to chassis and away from 12SQ7 socket.
3. Dress blue 1st I-F lead under volume control close to chassis.
4. Dress blue 2nd I-F lead close to chassis and behind 12SK7 socket.



POWER SUPPLY RATINGS

A-C Rating 105-125 volts, 50-60 cycles, 30 watts
 D-C Rating 105-125 volts, direct current, 30 watts

POWER OUTPUT (125 volt, 60 cycle supply)

Undistorted 1.5 watts
 Maximum 2.0 watts

LOUDSPEAKER

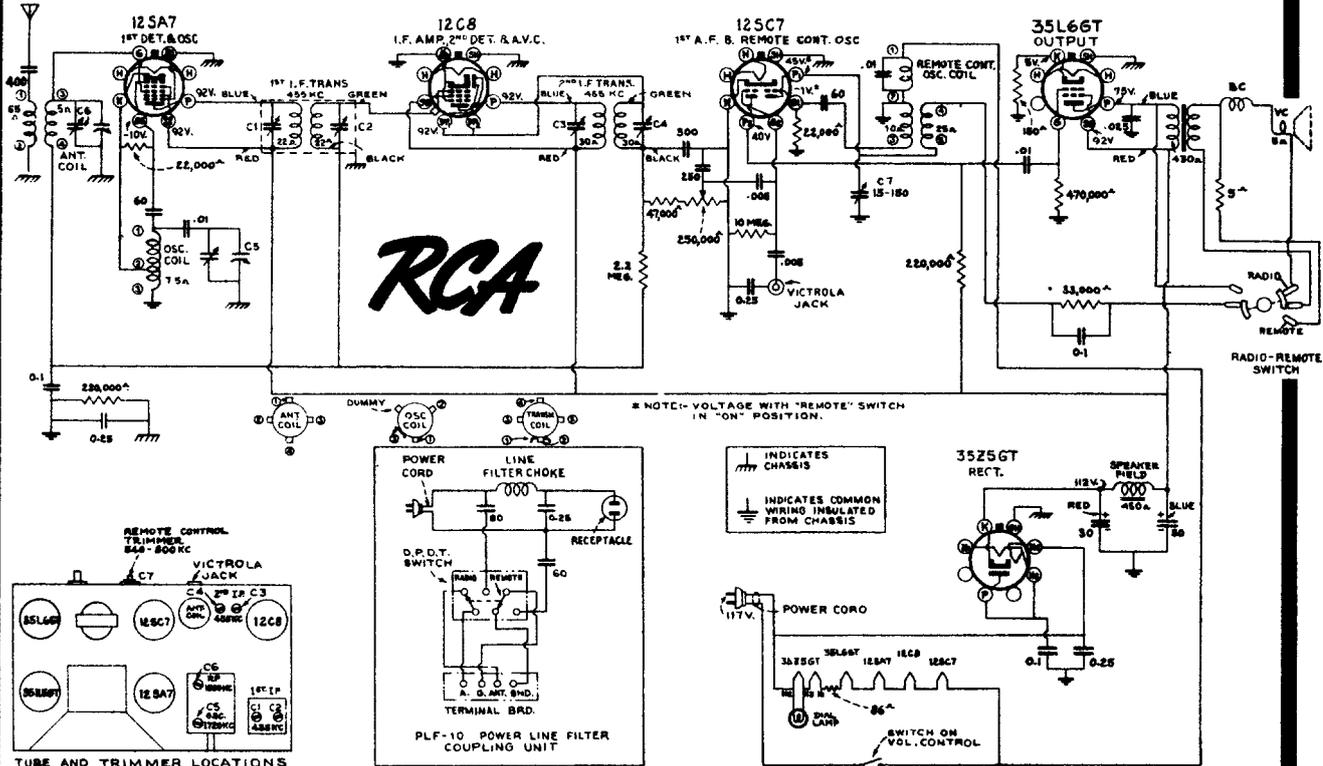
Type 4-inch Electrodynamic

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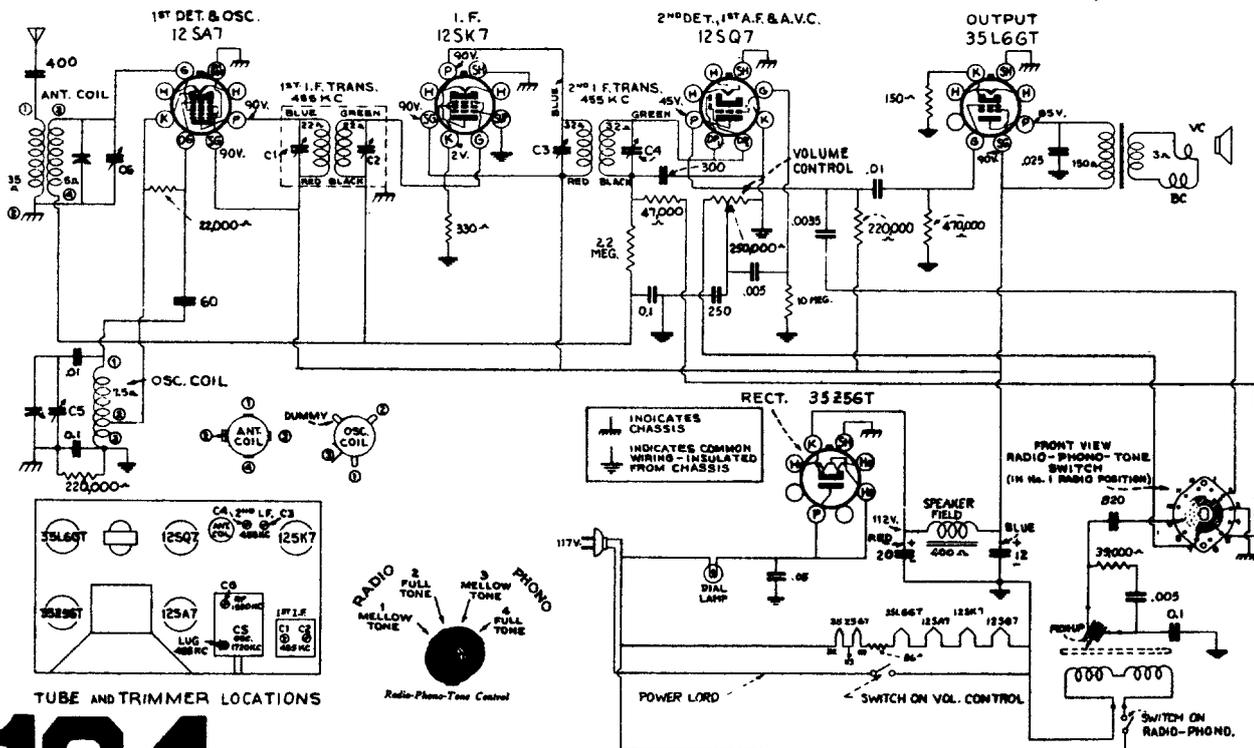
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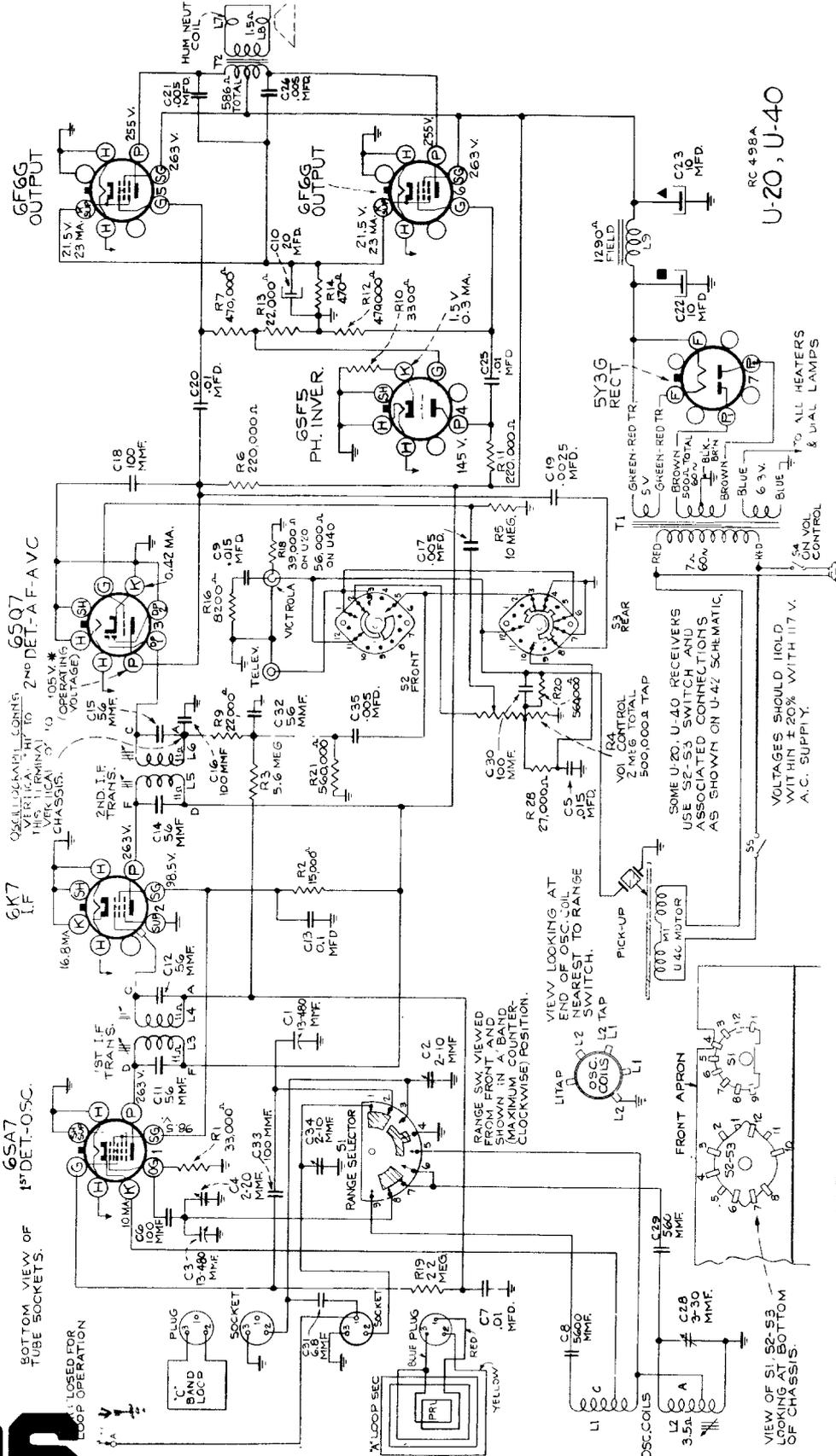
MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

Model 5X5 Series (Chassis No. RC-406)



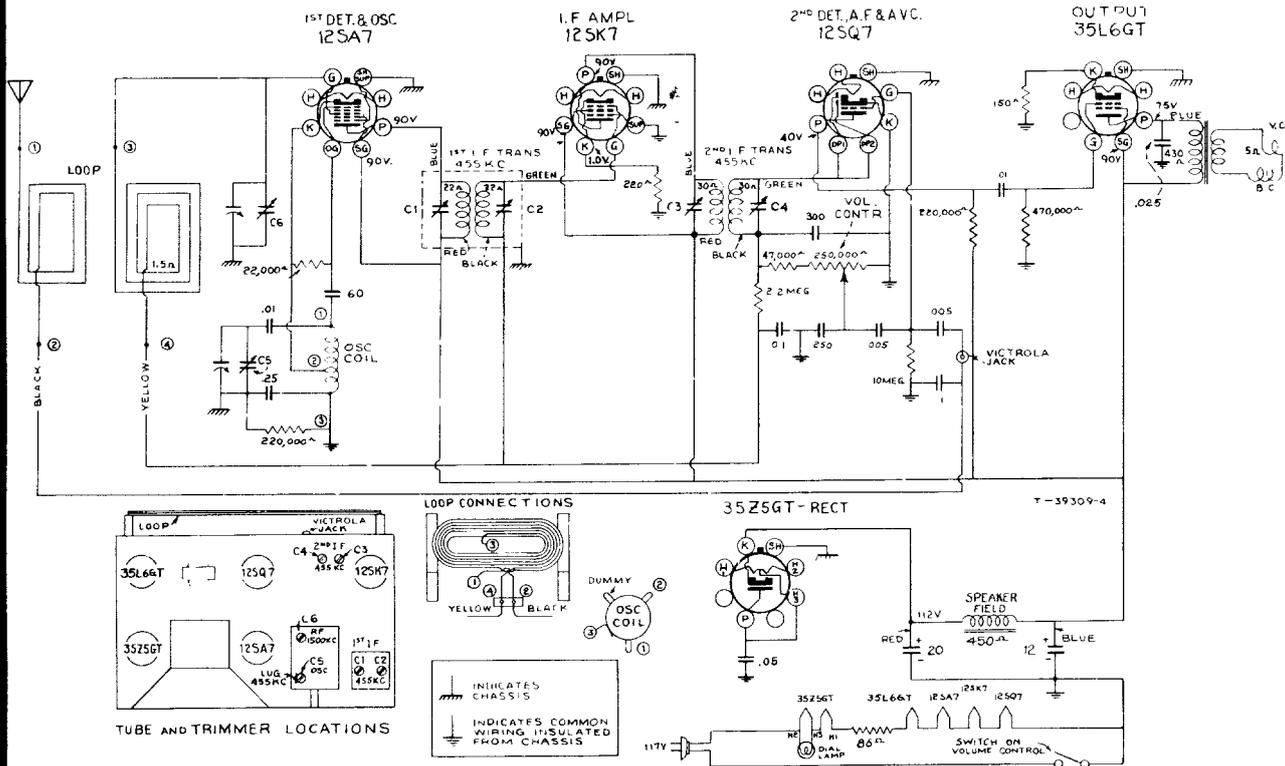
RCA Victor MODEL U-8 (Chassis No. RC-404A)





MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

Models 40X-30 and 40X-31 (Chassis No. RC405C & D)



Output Meter Alignment.—Connect the meter across the voice coil, and turn the receiver volume control to maximum.

Test-Oscillator.—Connect the low side of the test-oscillator to the receiver chassis, through a .01 mfd. capacitor, and keep the output as low as possible.

Pre-setting Dial.—With gang condenser in full mesh, the pointer should be horizontal.

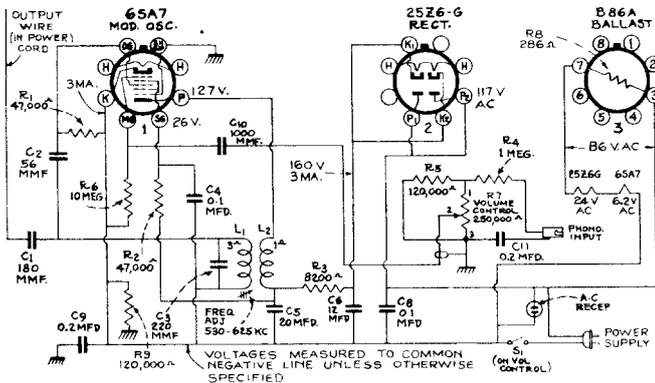
Antenna.—The set is equipped with a built-in loop antenna. If an outdoor antenna is used, it may be connected to the "ANT." terminal on rear of cabinet. It should not be longer than 100 feet, including lead-in. If it is longer, connect a 100 to 200 mmf. capacitor in series with the lead-in.

Power-Supply Polarity.—For operation on d-c, the power plug must be inserted in the outlet for correct polarity. If the set does not function, reverse the plug. On a-c, reversal of the plug may reduce hum.

Steps	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. peak output—
1	Tuning condenser stator (osc.) in series with .01 mfd.	455 kc	Quiet point at 1,600 kc end of dial	C1, C2, C3, C4 (1st and 2nd I-F transformers)
2	Antenna term. of ant. loop in series with 100 mmfd.	1,680 kc	Full clockwise (out of mesh)	C5 (oscillator)
3		1,500 kc	Resonance on 1,500 kc signal	C6 (antenna)

Precautionary Lead Dress

1. Dress 2nd I-F green lead close to chassis and under other parts.
2. Dress lead from gang condenser to grid of 12SA7 close to chassis and away from 12SQ7 socket.
3. Dress blue 1st I-F lead under volume control close to chassis.



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RCA

OSC-22

Wireless Oscillator

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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

RCA Victor MODELS BK-41 and BT-41

Cathode-ray Alignment is the preferable method. Connections for the oscillograph are as follows: Vertical "Hi" to E on the 2nd I-F transformer. Vertical "O" to chassis.

Output Meter Alignment.—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

Test-Oscillator.—For all alignment operations, connect the low side of the test-oscillator to the receiver chassis, and keep the output as low as possible to avoid a-v-c action.

For additional details, refer to booklet "RCA Victor Receiver Alignment."

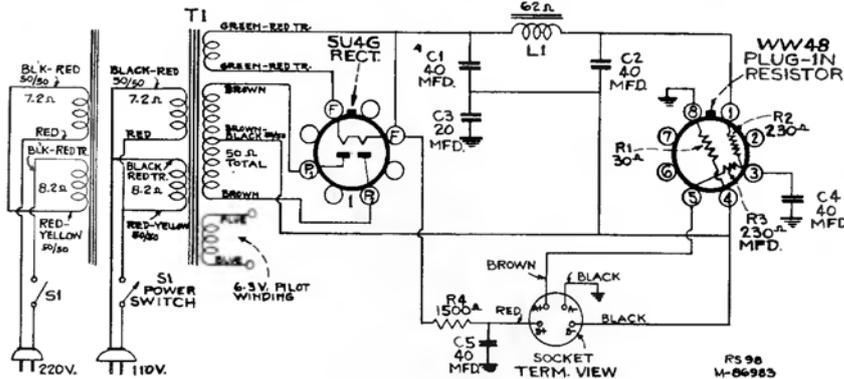
Pre-setting Dial.—With gang condenser in full mesh, the pointer should be horizontal.

Steps	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. peak output
No. 1	1N5-G I-F grid cap, in series with 0.01 mfd.	455 kc	Quiet point between 550-750 kc	L7 and L8 (2nd I-F transformer)
No. 2	1A7-G 1st-det. grid cap in series with 0.01 mfd.	455 kc		L5 and L8 (1st I-F transformer)
No. 3	Antenna lead, in series with 200 mmfd.	600 kc	600 kc	L4 (oscillator) L2 (antenna)
No. 4	Antenna lead, in series with 200 mmfd.	1,500 kc	1,500 kc	C15† (oscillator) C3 (antenna)

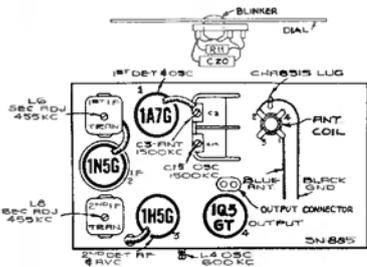
† Trimmer C16 on gang condenser should be unscrewed one complete turn from tight, before adjusting C15.



Model BK-41



Schematic Diagram—Model CV-40



Precautionary Lead Dress

1. Red lead from second i-f transformer to screen terminal of 1N5-G must be dressed close to and along edge of chassis.
2. Twisted green wire from antenna coil to gang must be 9 turns and kept clear of rotor.
3. Blue and green leads to volume control must be dressed close to chassis and between gang and front apron.
4. The opening in the shield of the 1N5-G should be turned away from the chassis and the i-f transformers.
5. Antenna and ground wires should be twisted together.

1A7-G
1ST DET. E. OSC. 1

1N5-G
I. F. 2

1H5-G
2ND DET. A. F. E. A. V. C. 3

1Q5-GT
OUTPUT 4

BOTTOM VIEW OF TUBE SOCKETS

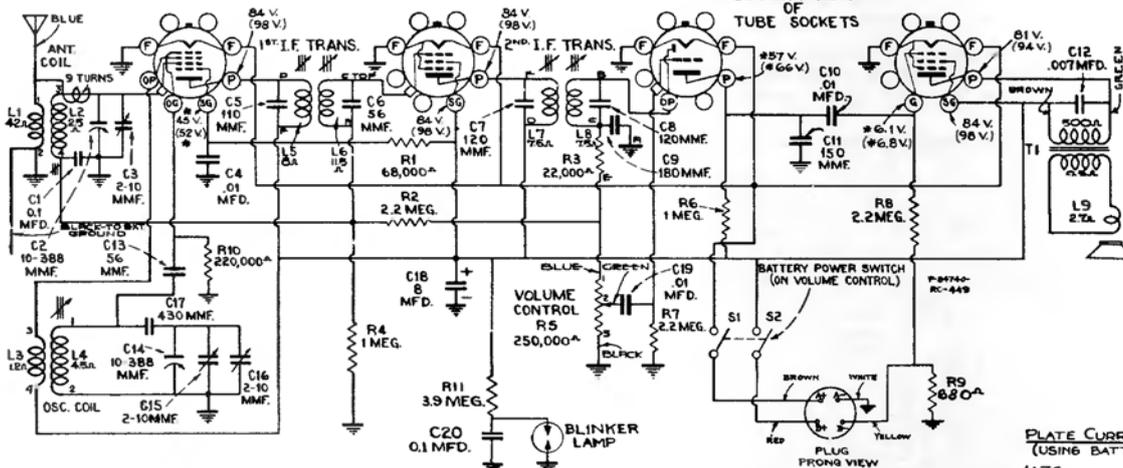


PLATE CURRENTS (USING BATTERIES)

1A7G	OSC. --- 0.65 MA.
OSC.	DET. --- 0.49 MA.
DET.	1N5G --- 1.2 MA.
1N5G	1H5G --- 0.026 MA.
1H5G	1Q5GT --- 6.0 MA.
1Q5GT	

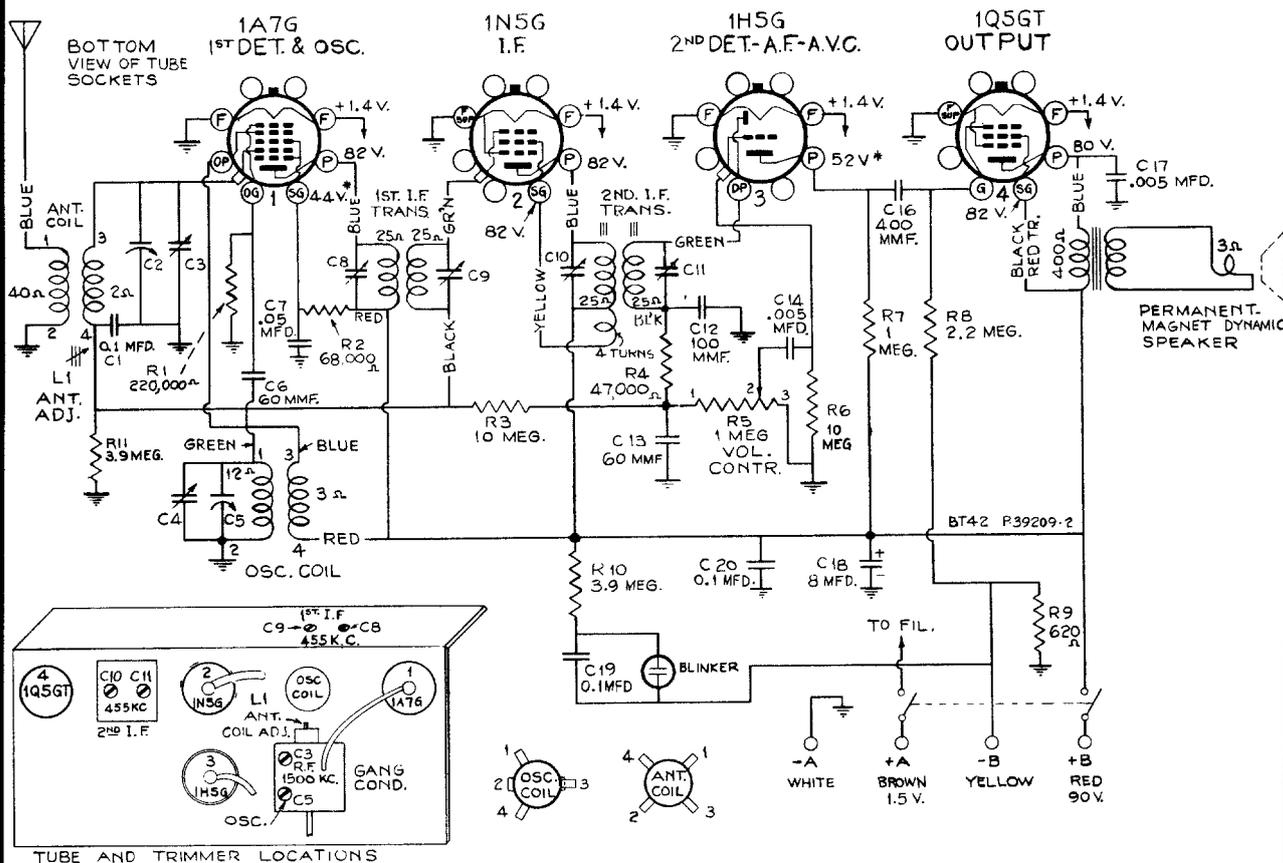
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STARRED (*) VOLTAGES ARE OPERATING VOLTAGES IN CIRCUITS WITH HIGH SERIES RESISTANCE; THE ACTUAL MEASURED VOLTAGES WILL BE LOWER, DEPENDING ON THE VOLTMETER LOADING.

VOLTAGES IN PARENTHESES ARE THOSE OBTAINED BY USING POWER SUPPLY CV-40. WHEN BATTERIES ARE USED VOLTAGES NOT IN PARENTHESES APPLY.

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MODEL BT-42



Alignment Procedure

Output Meter Alignment.—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

Test-oscillator.—For all alignment operations, keep the output as low as possible to avoid a-v-c action.

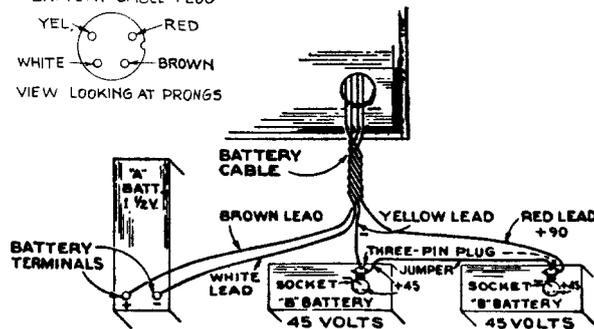
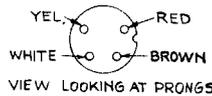
Pre-setting Dial.—With the gang condenser fully out of mesh, the indicator should point to the extreme right (high frequency) mark on the dial scale.

CAUTION.—When ready to install or replace batteries or tubes or to make any repairs or changes, be sure to turn off power switch.

Precautionary Lead Dress.—

1. All filament (brown) and B+ (red) leads must be dressed away from unshielded I.F. coil.
2. Green grid lead of 1A7G tube to be twisted around antenna (blue) lead for capacity coupling.
3. Red and brown battery cable leads to be dressed and held against front apron with tape.

BATTERY CABLE PLUG

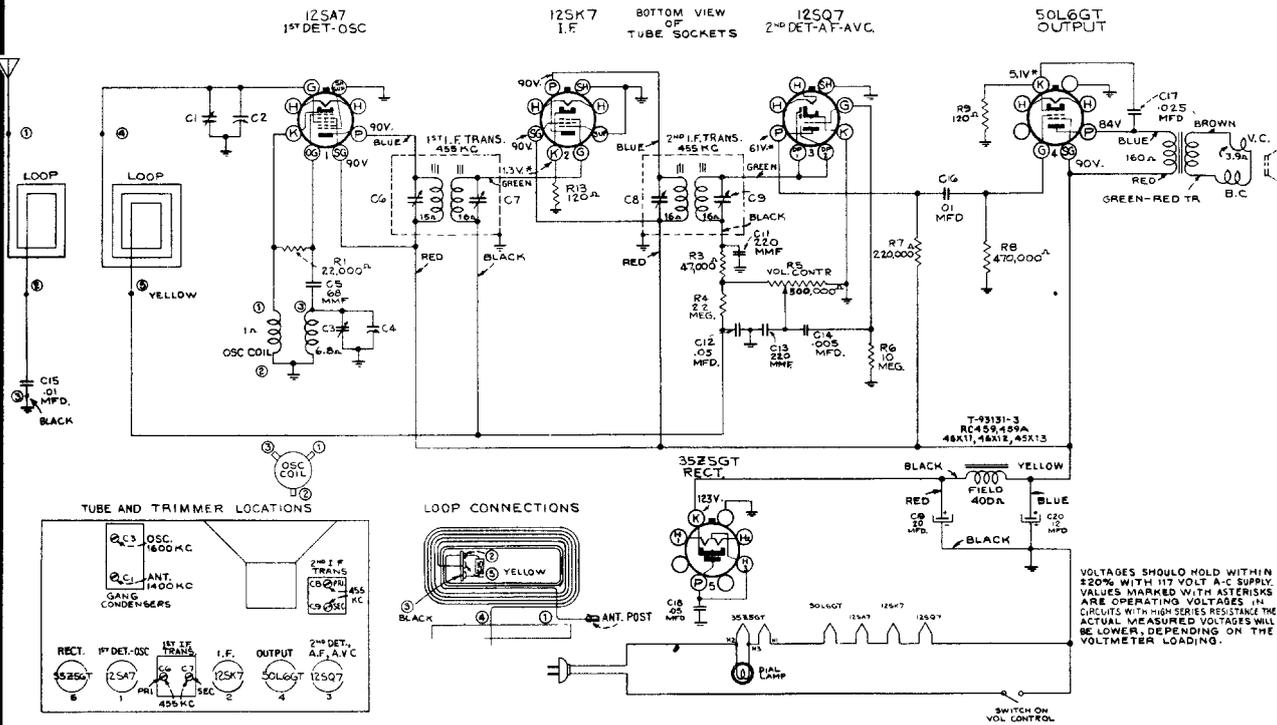


Steps	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn Radio Dial to—	Adjust the following for max. peak output—
1	1A7G 1st-Det. grid cap, in series with .01 mfd.	455 kc	Quiet point at 550 kc End of Dial	C8, C9, C10, C11 (1st and 2nd I-F transformers)
2	Antenna lead (blue) in series with 100 mmfd.	1,500 kc	1,500 kc	C5 (oscillator)
3		800 kc	800 kc	L1 (antenna)*
4		1,500 kc	1,500 kc	C3 (antenna)

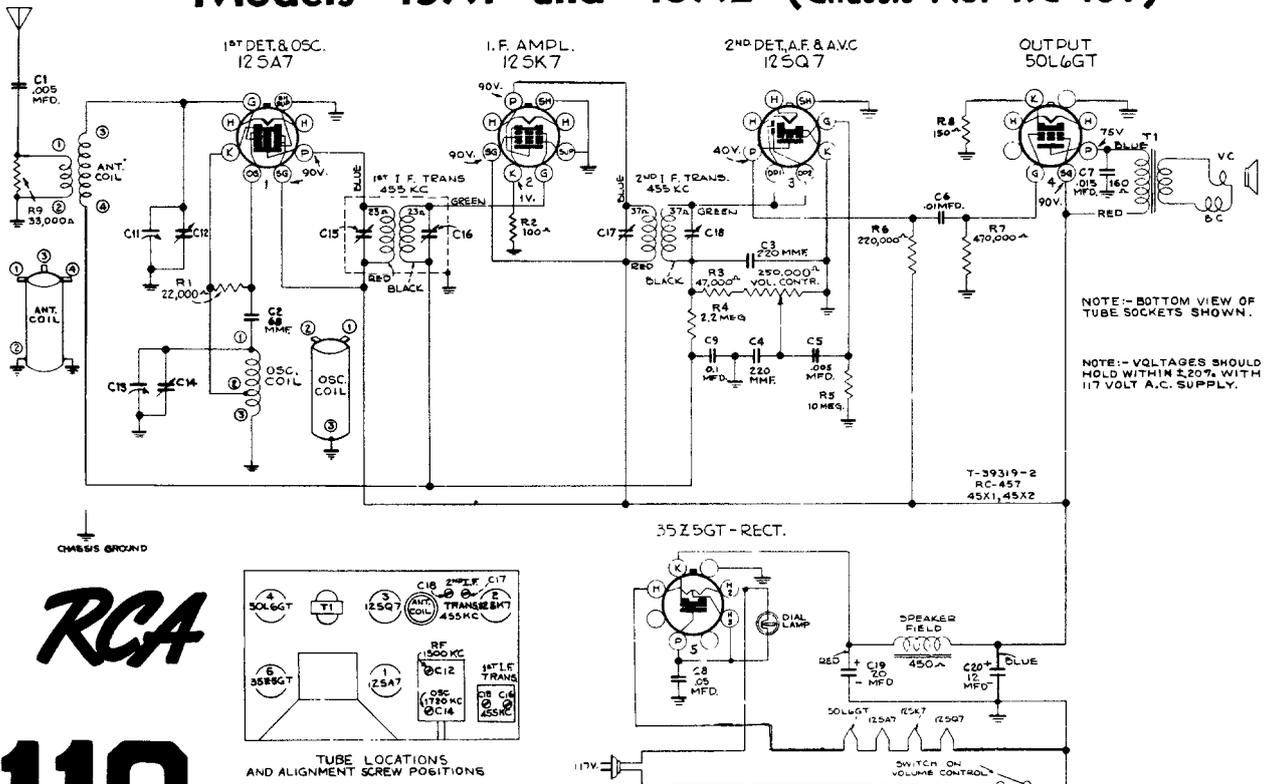
*When adjusting L1 (antenna), trimmer C3 should be in a minimum capacity position (unscrewed).

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

Models 45X11, 45X12 Model 45X13



Models 45X1 and 45X2 (Chassis No. RC-457)



RCA

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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

MODEL O-50 PORTABLE VICTROLA

(phonograph only)

The Model O-50 Portable Electric Victrola consists of a crystal pickup, a two-stage audio amplifier, and eight-inch electrodynamic speaker, and a motor turntable mechanism with automatic mercury switch for starting and stopping—all housed in a portable carrying case of modern design and appearance.

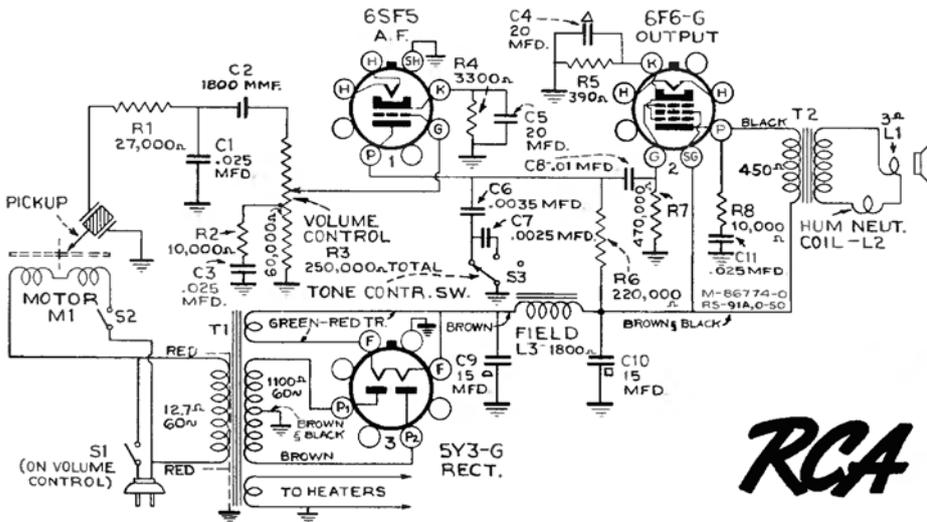
The phonograph motor is a self-starting, constant-speed induction type. It should be lubricated every six months by applying a few drops of light machine oil to the spindle bearing and oil hole.

The motor spindle is tapered, and a conical rubber piece fits snugly on the spindle. The hole in the turntable bushing

is tapered to fit the rubber. This provides an excellent self-centering floating mounting.

A metal washer is placed on the spindle under the rubber piece. The washer has ears on the under side which fit over a pin that projects through the spindle.

The motor switch is automatic for both starting and stopping, and when properly adjusted, will turn the motor on as the pickup is moved from the pickup rest toward the turntable. The switch should be adjusted so that it will snap into the "off" position when the pickup needle is $1\frac{3}{4}$ inches from the center line of the spindle. The motor may be shut off at any time by placing the pickup on the pickup rest.

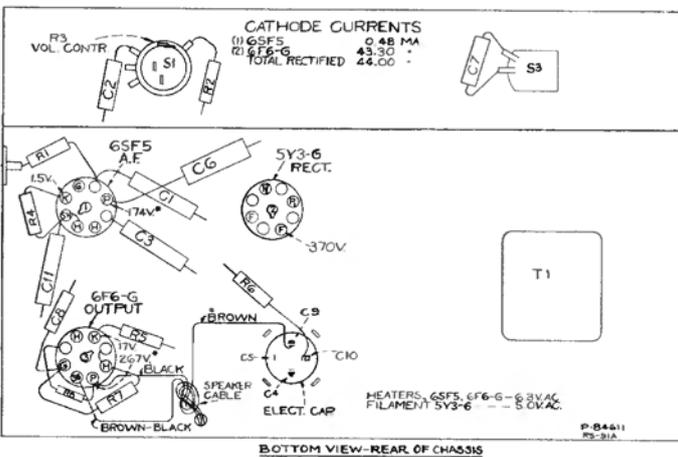


Schematic Circuit Diagram



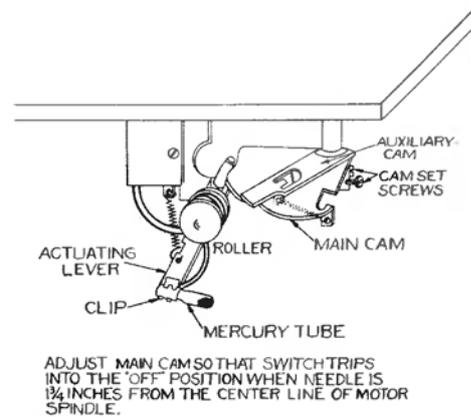
Model O-50

RCA



Parts Layout and Socket Voltages

Measurements made to chassis unless otherwise indicated, with set tuned to quiet point, volume control at minimum. Values should hold within approximately $\pm 20\%$ with 117-volt a-c supply.



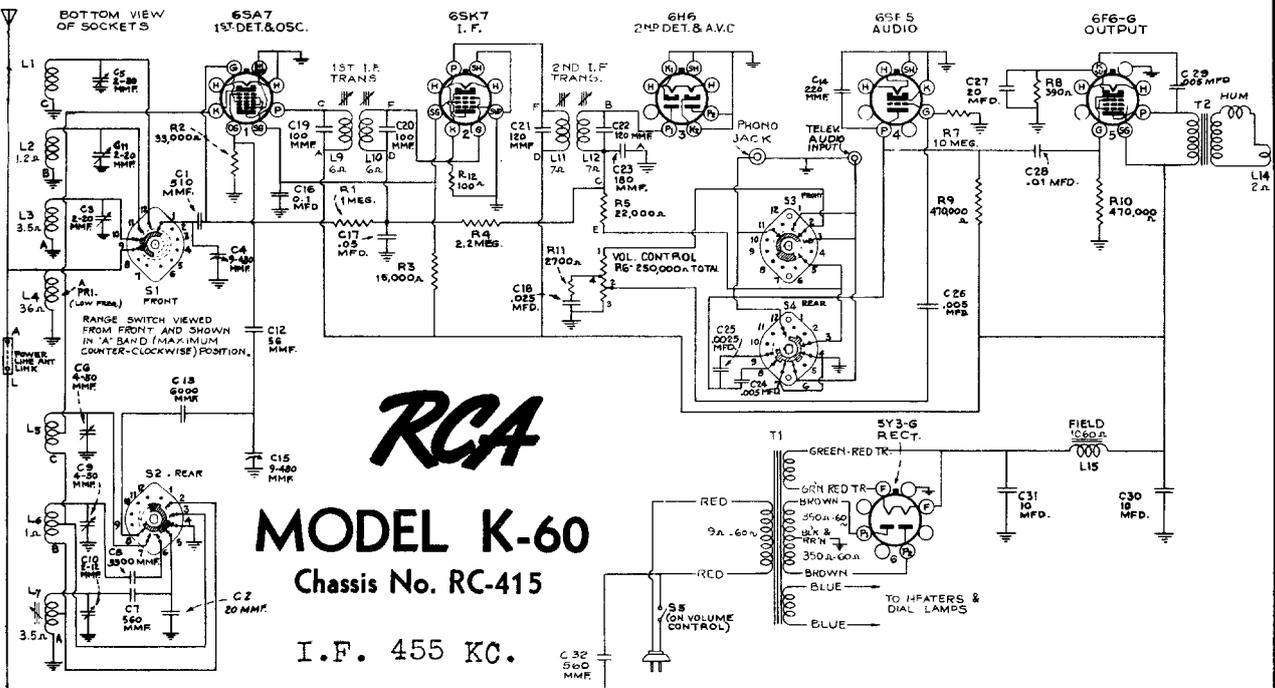
Switch Mechanism
(Shown with pickup in rest position)

NOTE: Values with star () are operating voltages in circuits with high series-resistance, and when measured will read lower depending on the voltmeter loading.

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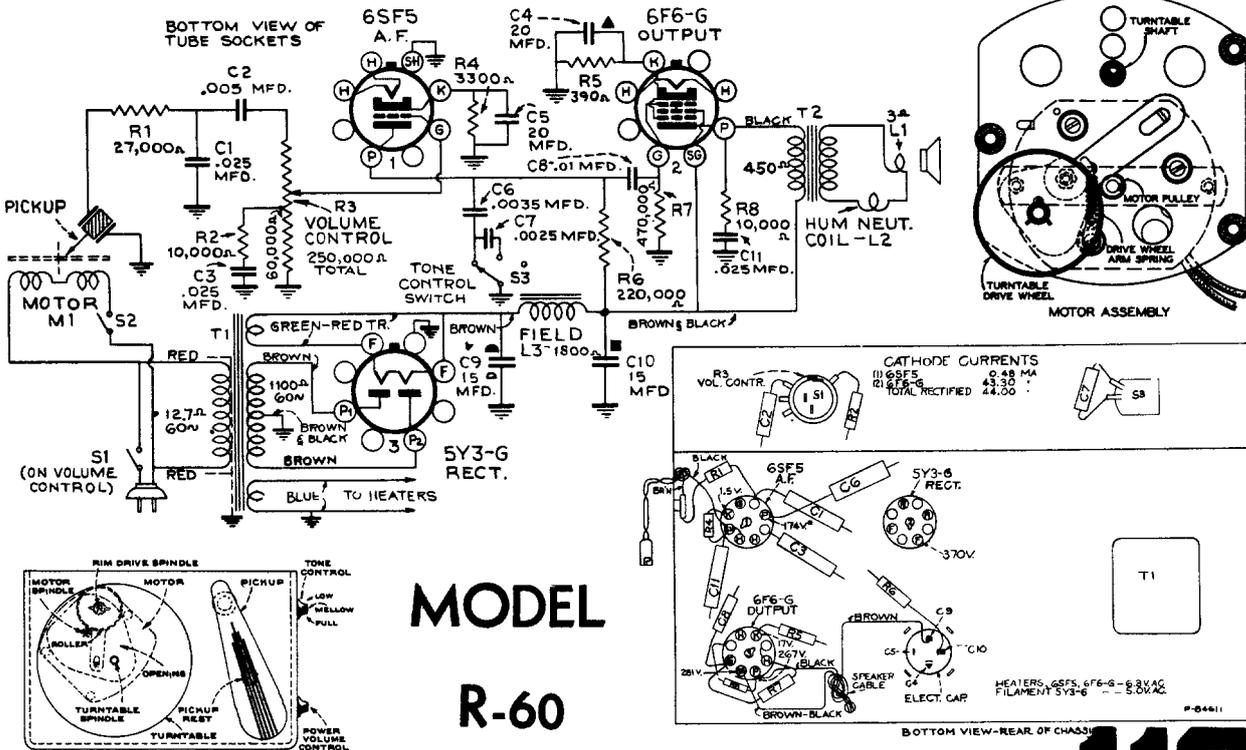
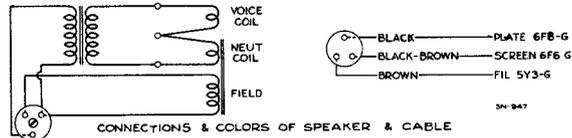
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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



Note: On some receivers the following circuit modifications are in effect:

1. R11 is 4,700 ohms, and C18 is .05 mfd.
2. C1 is 470 mmfd.
3. There are three types of 2nd I-F transformers in use.
 - a. The first type (Stock No. 14308) has C23 and R5 mounted inside the case, and is connected exactly as shown above.
 - b. In the second type R5 is omitted and the lead from S4 connects to C instead of E. E is not used.
 - c. In the third type R5 is omitted and C23 is connected externally from C to ground. E is not used. The lead from the diode plate connects to A instead of B.



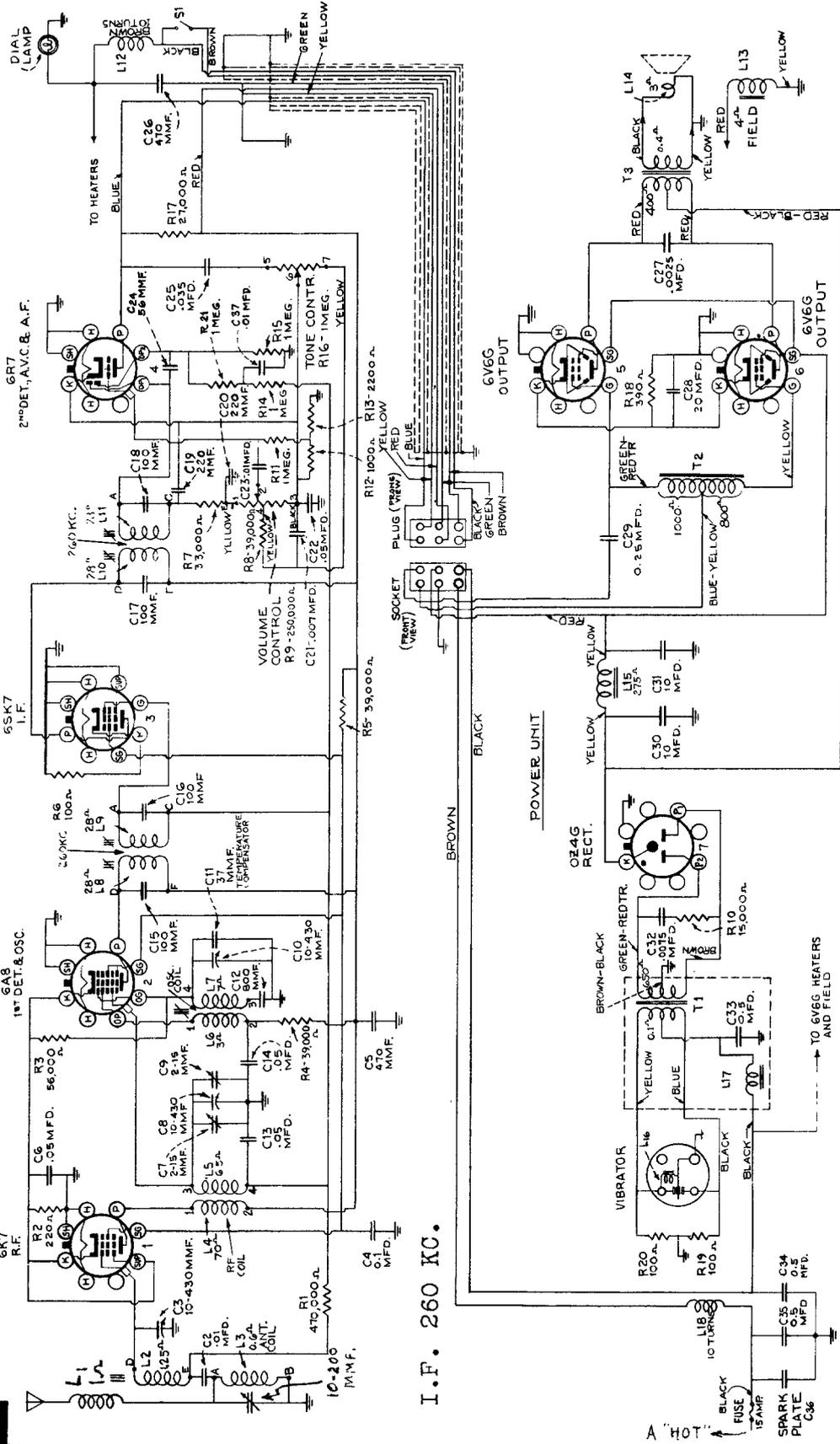
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MODEL M-70

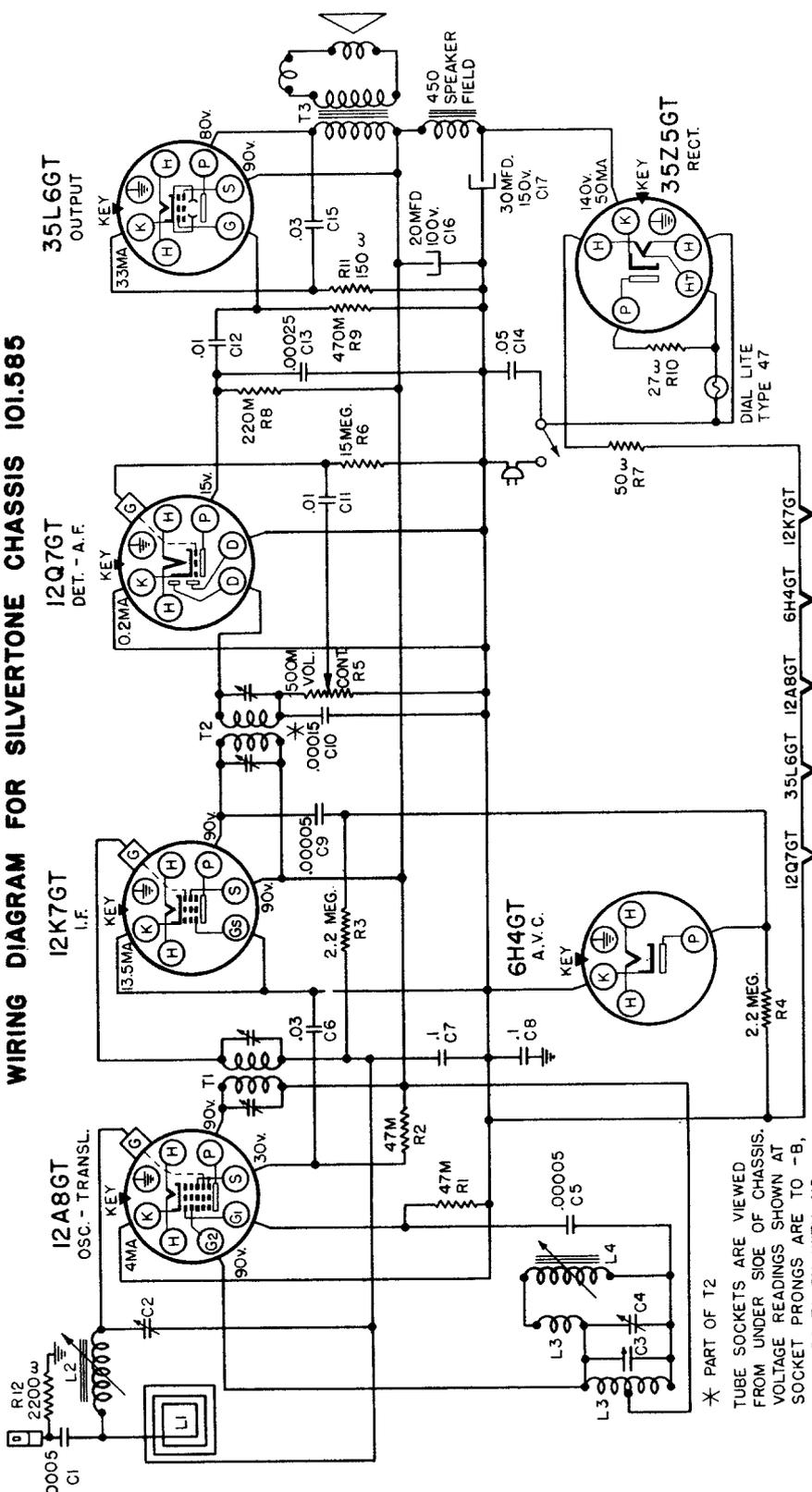
RCA

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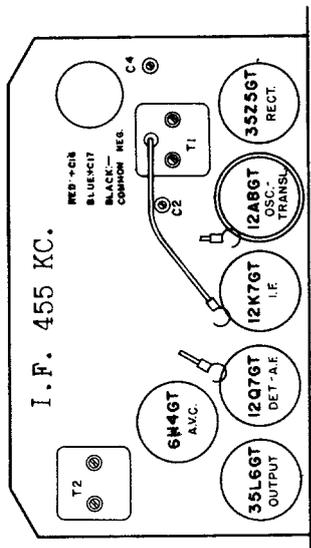


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WIRING DIAGRAM FOR SILVERTONE CHASSIS IOI.585



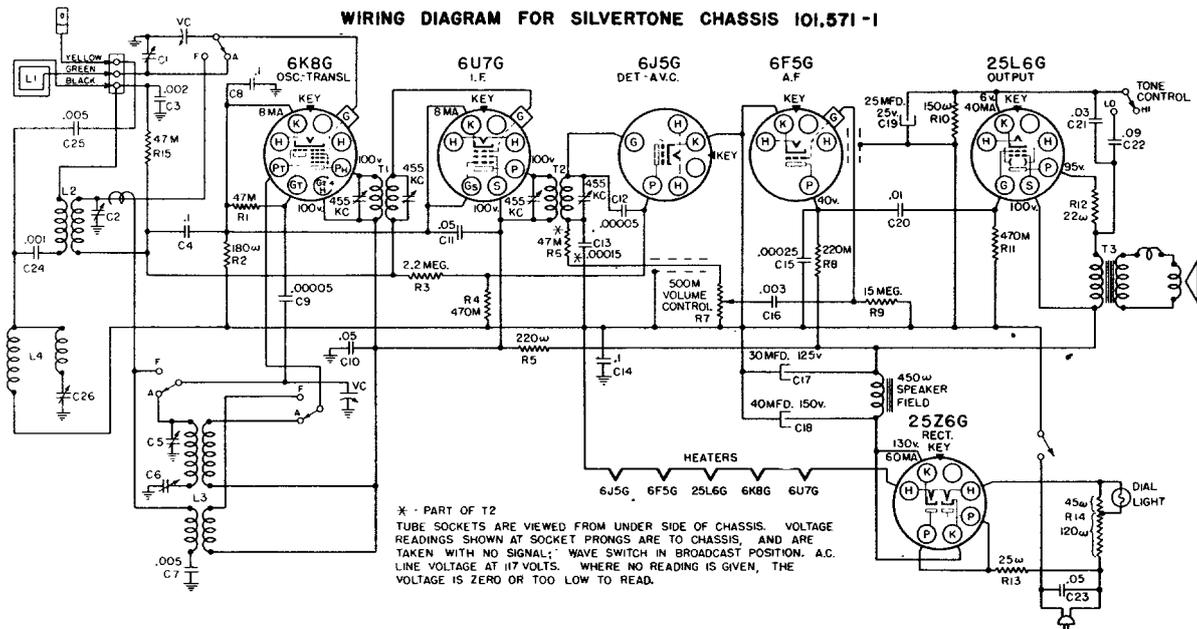
* PART OF T2
 TUBE SOCKETS ARE VIEWED FROM UNDER SIDE OF CHASSIS. VOLTAGE READINGS SHOWN AT SOCKET PRONGS ARE TO -B, AND ARE TAKEN WITH NO SIGNAL. LINE VOLTAGE AT 117 VOLTS. WHERE NO READING IS GIVEN, THE VOLTAGE IS ZERO OR TOO LOW TO READ.



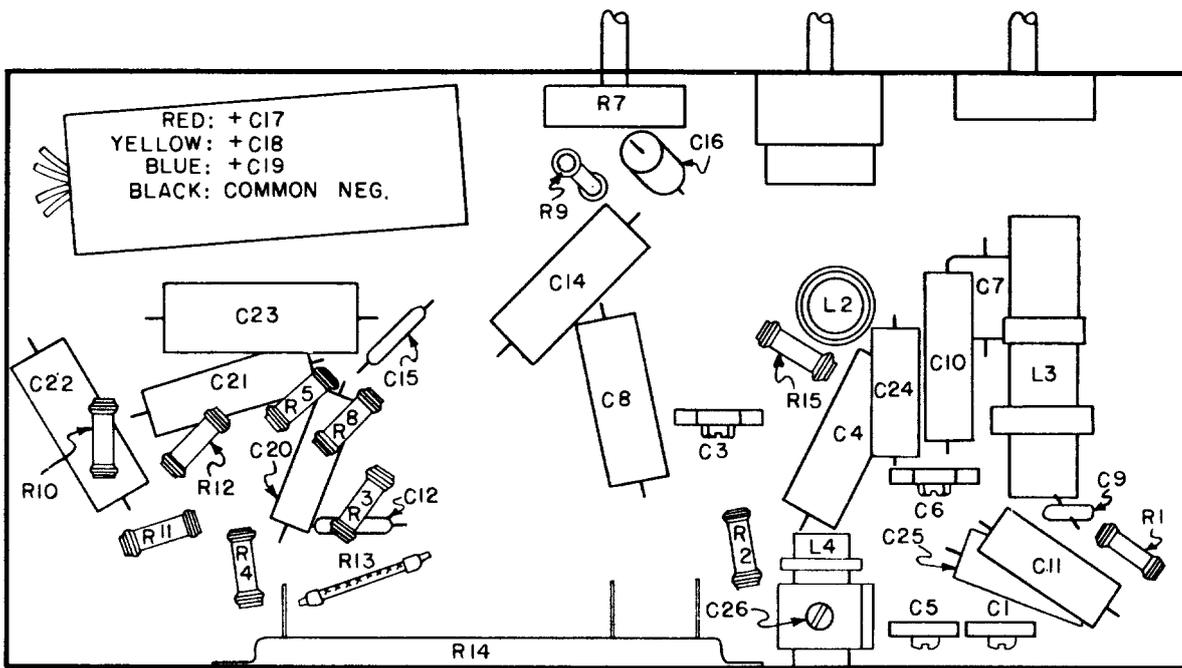
Sears Model 6320

LOCATIONS OF PARTS UNDER CHASSIS

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

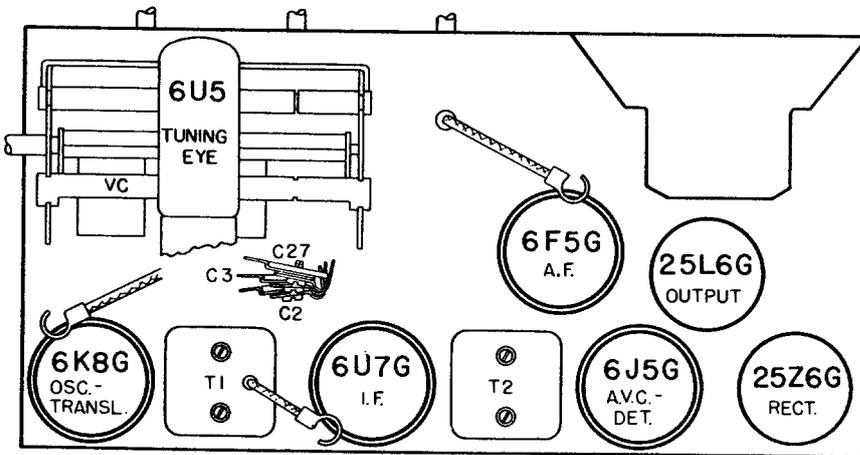
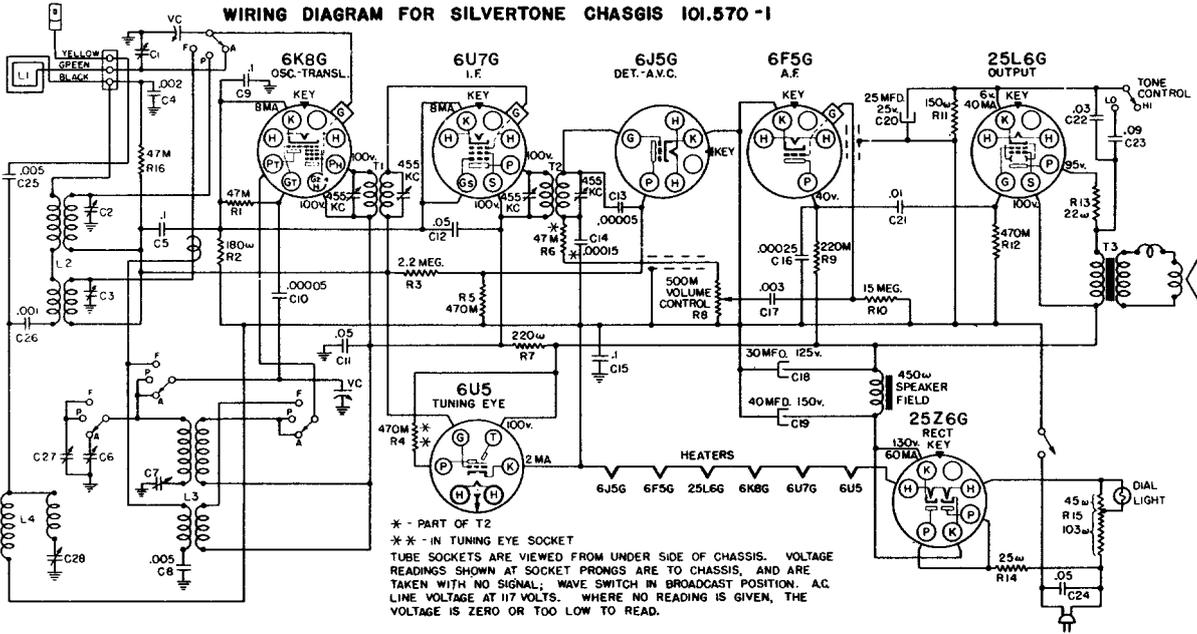


Sears Models 6321, 6322
6321, 6421

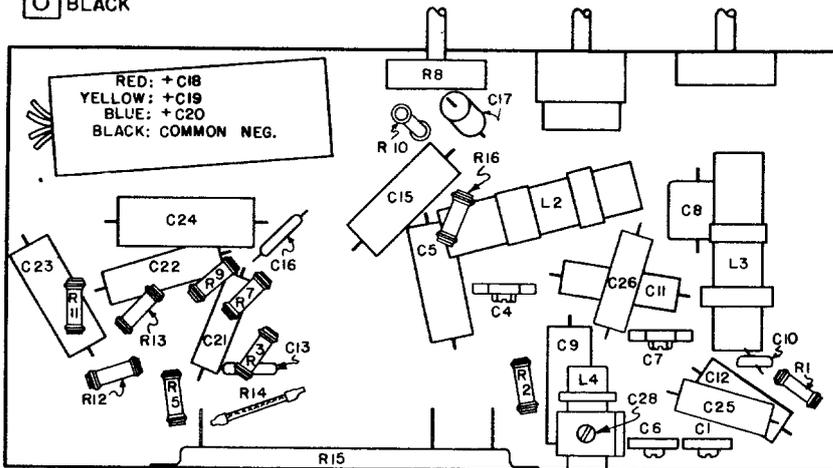


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WIRING DIAGRAM FOR SILVERTONE CHASGIS 101.570 -1



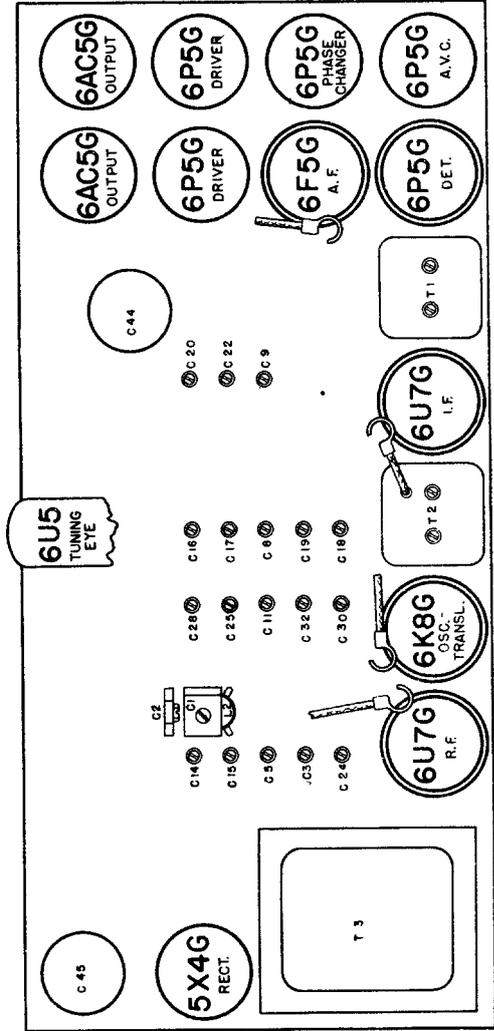
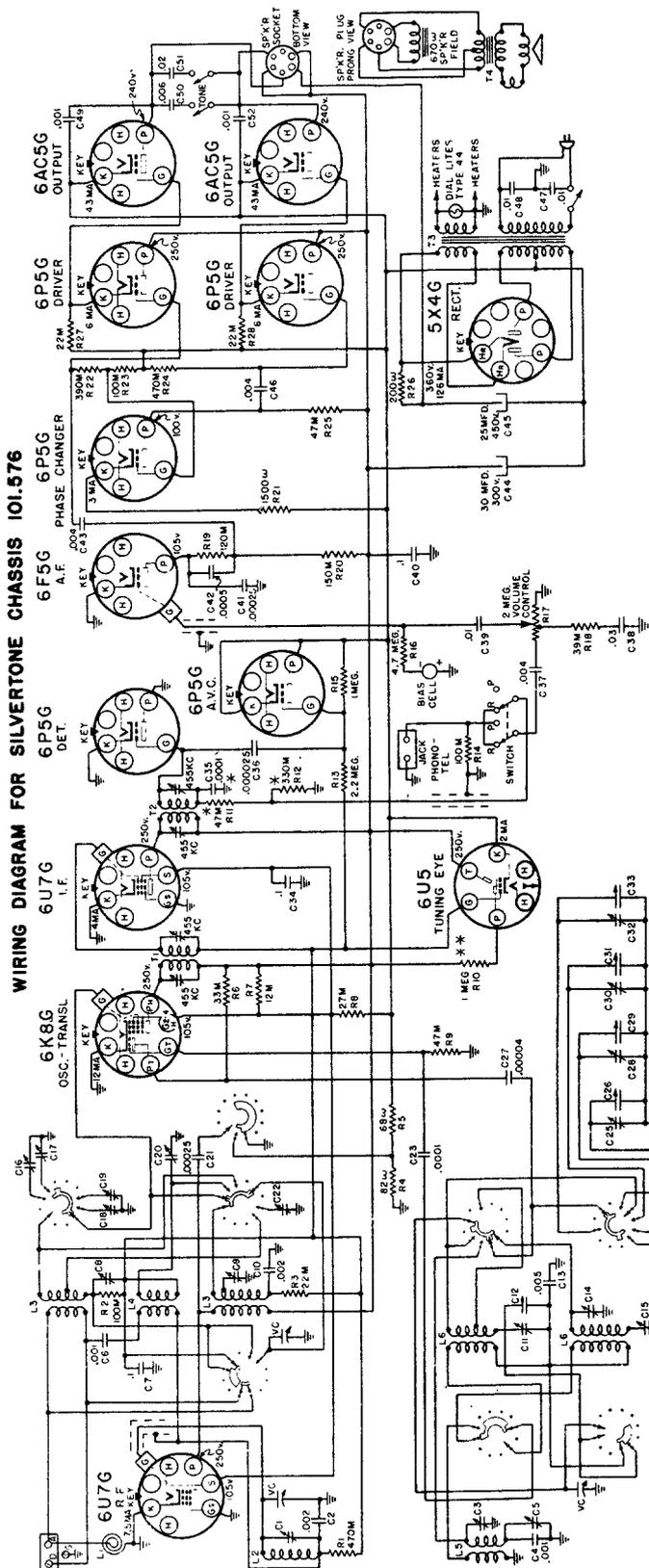
Sears Models 6324, 6424
6493



LOCATIONS OF PARTS UNDER CHASSIS.

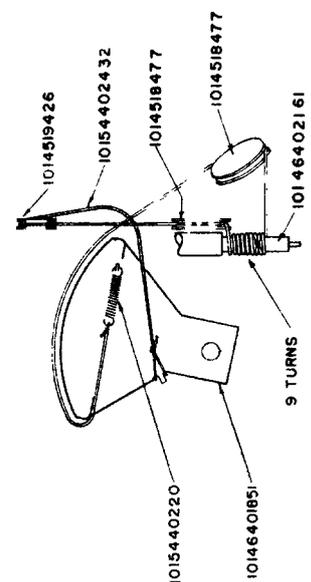
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WIRING DIAGRAM FOR SILVERTONE CHASSIS 101.576



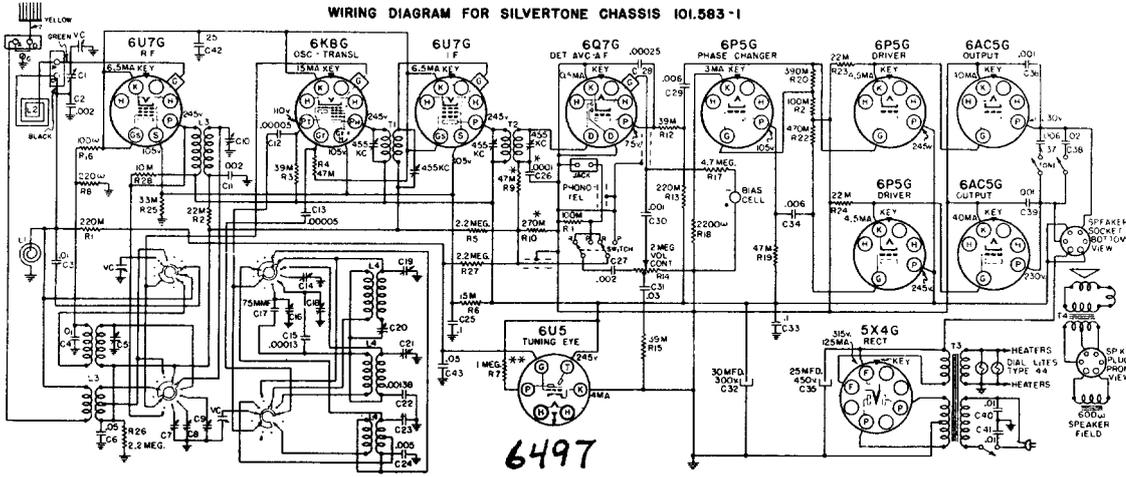
* - PART OF T2
 ** - IN TUNING EYE SOCKET
 TUBE SOCKETS ARE VIEWED FROM UNDER SIDE OF CHASSIS. VOLTAGE READINGS SHOWN AT SOCKET PRONGS ARE TO CHASSIS, AND ARE TAKEN WITH NO SIGNAL. WAVE SWITCH IN BROADCAST POSITION. LINE VOLTAGE AT 117 VOLTS. WHERE NO READING IS GIVEN, THE VOLTAGE IS ZERO OR TOO LOW TO READ.

Sears Models 6337, 6437



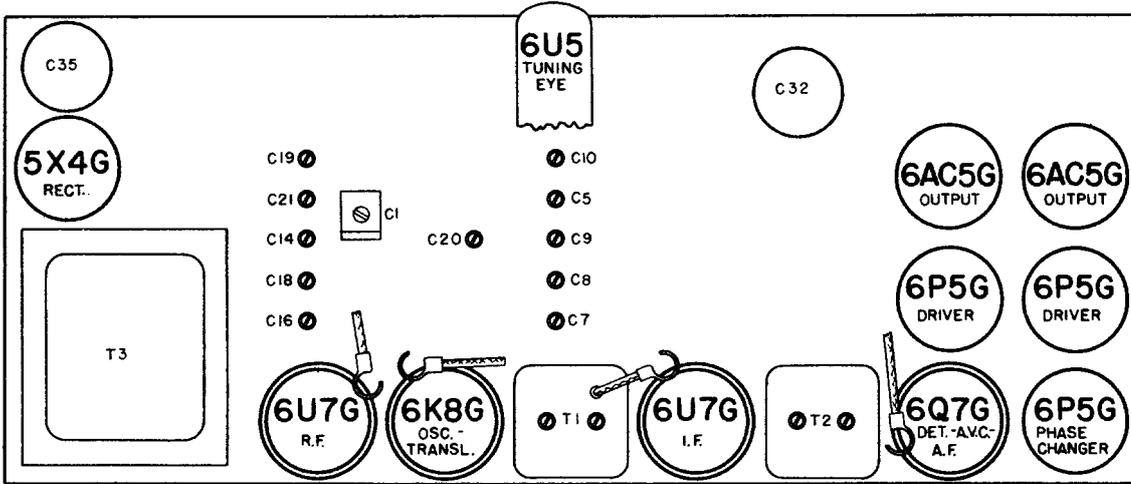
MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

WIRING DIAGRAM FOR SILVERTONE CHASSIS 101.583-1



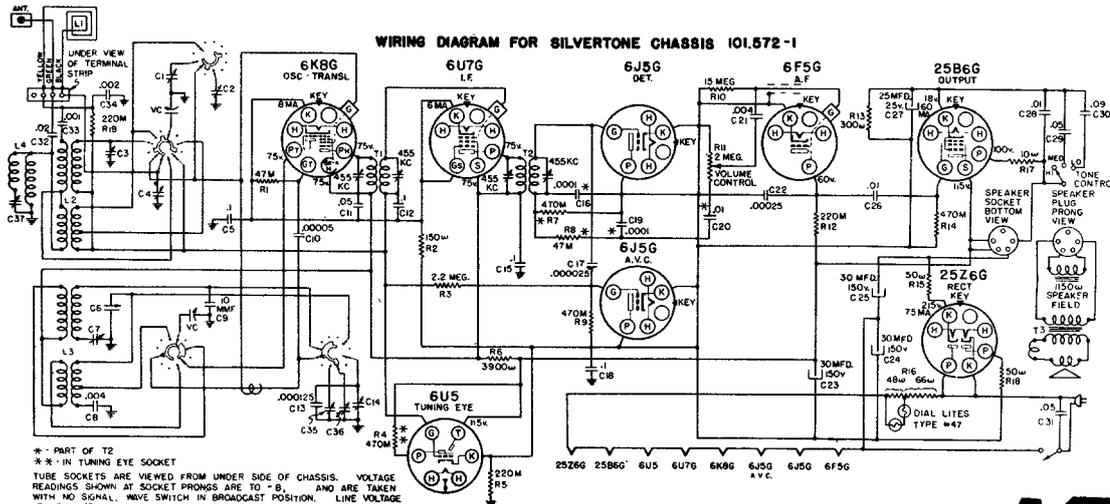
Sears Models 6438B, 6439A, 6440

* - PART OF T2
 ** - IN TUNING EYE SOCKET
 TUBE SOCKETS ARE VIEWED FROM UNDER SIDE OF CHASSIS. VOLTAGE READINGS SHOWN AT SOCKET PRONGS ARE TO CHASSIS, AND ARE TAKEN WITH NO SIGNAL; WAVE SWITCH IN BROADCAST POSITION. LINE VOLTAGE AT 117 VOLTS. WHERE NO READING IS GIVEN, THE VOLTAGE IS ZERO OR TOO LOW TO READ.



LOCATIONS OF PARTS ON TOP OF CHASSIS - 101.583-1

WIRING DIAGRAM FOR SILVERTONE CHASSIS 101.572-1



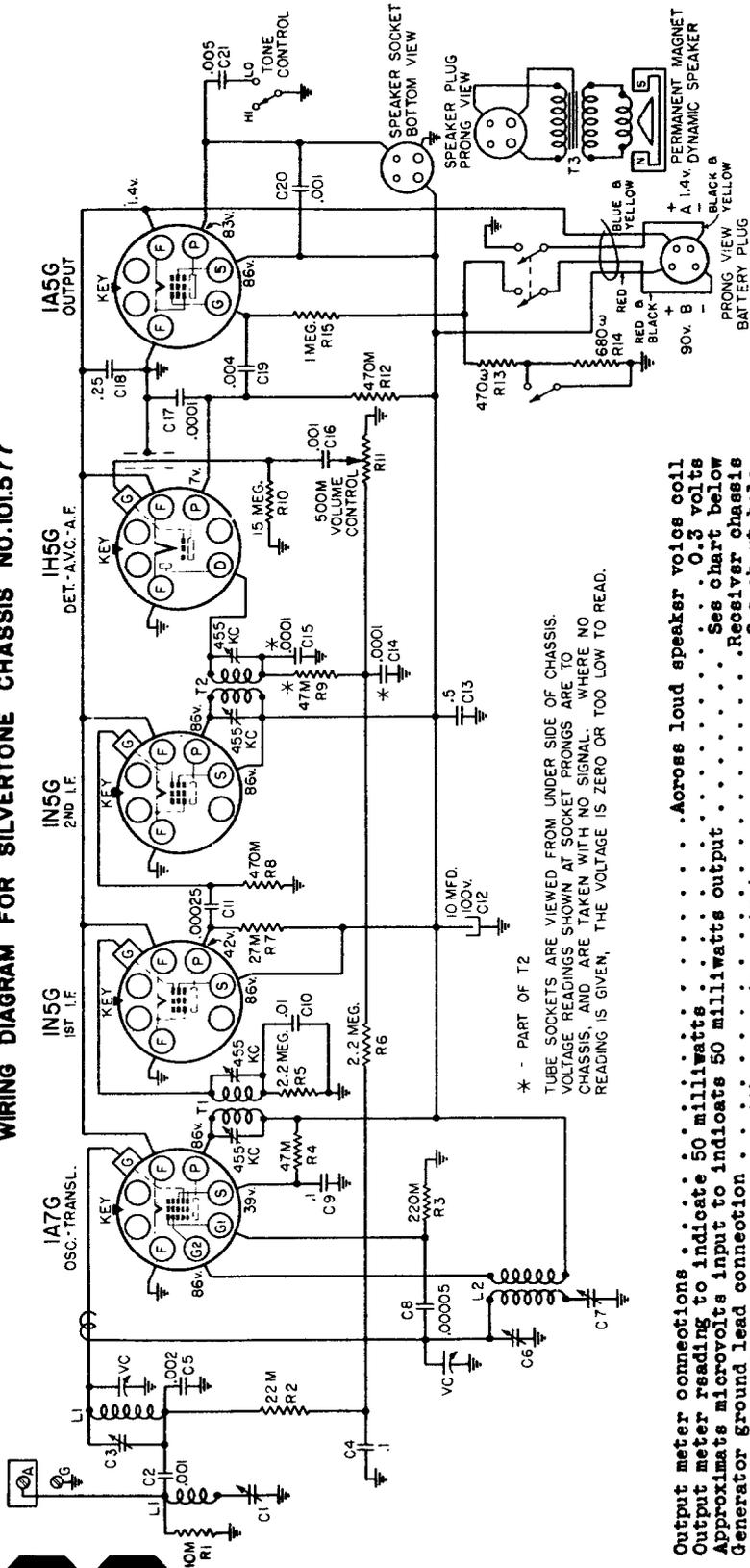
* - PART OF T2
 ** - IN TUNING EYE SOCKET
 TUBE SOCKETS ARE VIEWED FROM UNDER SIDE OF CHASSIS. VOLTAGE READINGS SHOWN AT SOCKET PRONGS ARE TO -B-, AND ARE TAKEN WITH NO SIGNAL; WAVE SWITCH IN BROADCAST POSITION. LINE VOLTAGE AT 117 VOLTS. WHERE NO READING IS GIVEN, THE VOLTAGE IS ZERO OR TOO LOW TO READ.

Sears Models 6325, 6425

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WIRING DIAGRAM FOR SILVERTONE CHASSIS NO. 101.577



* - PART OF T2
 TUBE SOCKETS ARE VIEWED FROM UNDER SIDE OF CHASSIS. VOLTAGE READINGS SHOWN AT SOCKET PRONGS ARE TO CHASSIS, AND ARE TAKEN WITH NO SIGNAL. WHERE NO READING IS GIVEN, THE VOLTAGE IS ZERO OR TOO LOW TO READ.

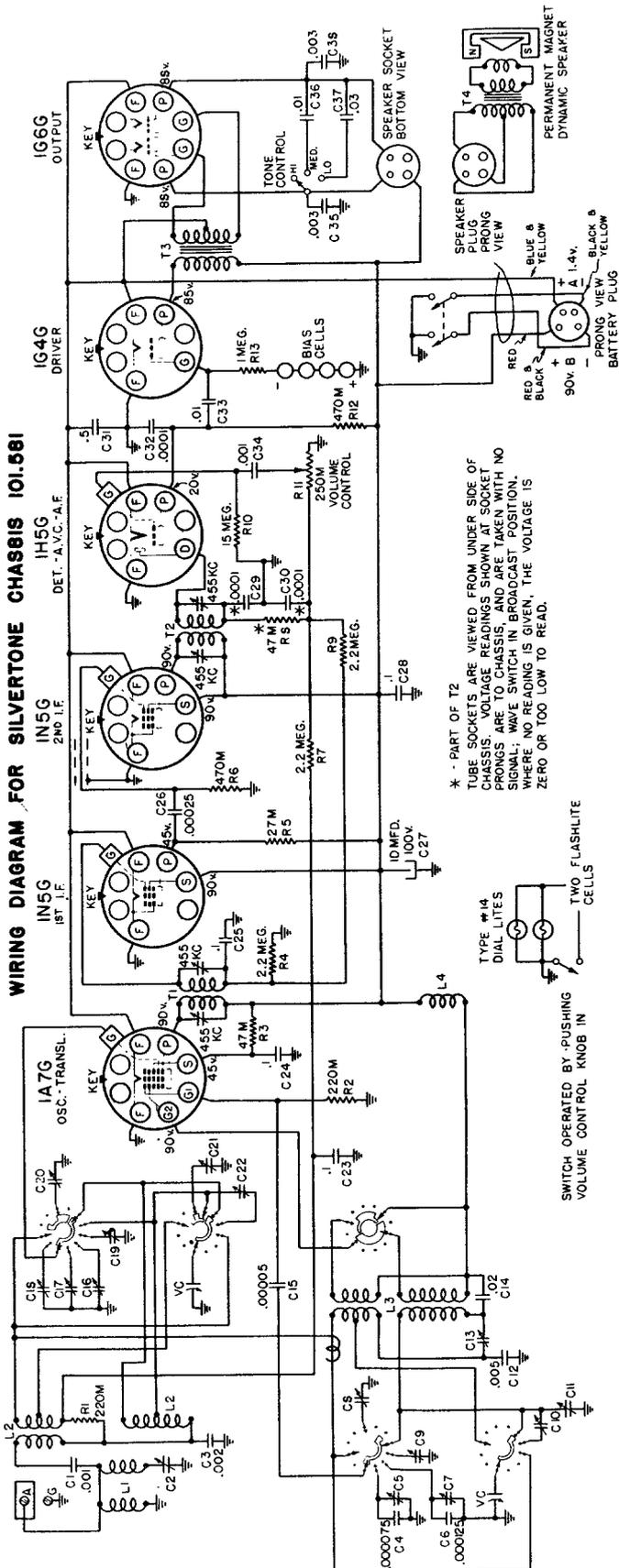
Output meter connections Across loud speaker voice coil
 Output meter reading to indicate 50 milliwatts 0.3 volts
 Approximate microvolts input to indicate 50 milliwatts output See chart below
 Generator ground lead connection Receiver chassis
 Dummy antenna lead to be in series with generator output See chart below
 Connection of generator output lead 30%, 400 cycles
 Generator modulation Fully on
 Position of Volume Control HI
 Position of Tone Control Horizontal (To fall on block
 Position of pointer with variable fully closed below 550 kc calibration mark)

POSITION OF VARIABLE	GENERATOR FREQUENCY	DUMMY ANTENNA	GENERATOR CONNECTION	TRIMMER ADJUSTMENTS (IN ORDER SHOWN)	TRIMMER FUNCTION	APPROXIMATE MICROVOLTS
Closed	455 kc	.1 mfd.	1A7G Trans-lator Grid Ant. Term.	T2, T1	IF	65
600 kc	455 kc	.0002 mfd.	Ant. Term.	C1*	IF Wave Trap	--
Fully open	1750 kc	.0002 mfd.	Ant. Term.	C6	Oscillator	45
1400 kc	1400 kc	.0002 mfd.	Ant. Term.	C3	Translator	30
600 kc (rock)	600 kc	.0002 mfd.	Ant. Term.	C7	Padder	35

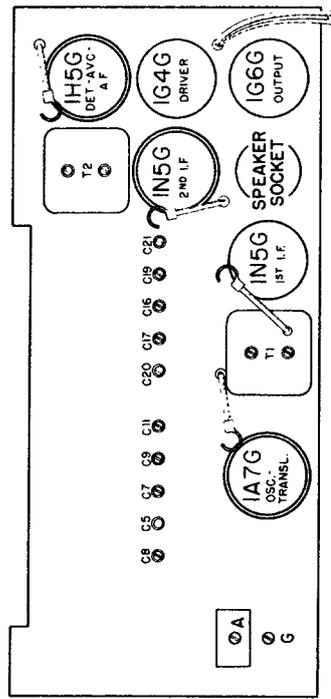
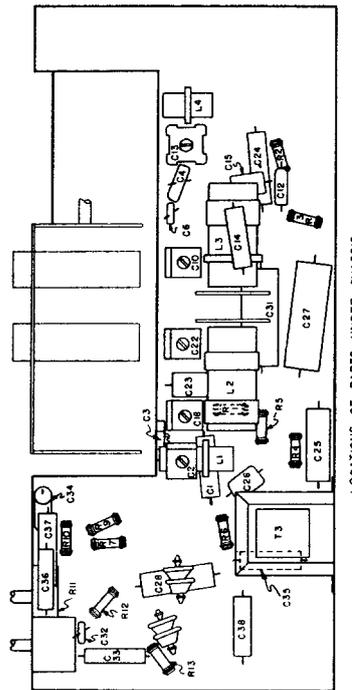
Sears Models 6353
 6354
 6355

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

WIRING DIAGRAM FOR SILVERTONE CHASSIS 101.561



Sears, Model 6362, 6363, 6364



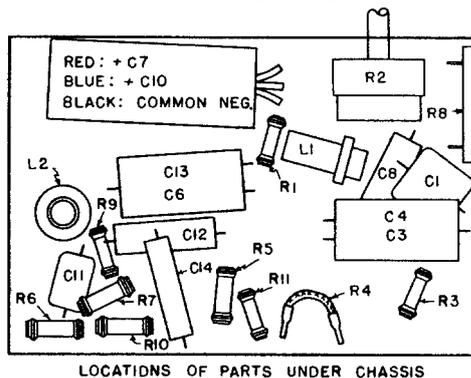
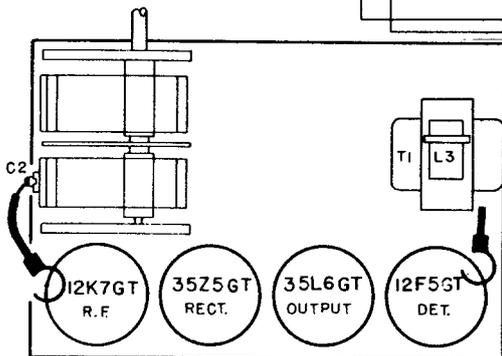
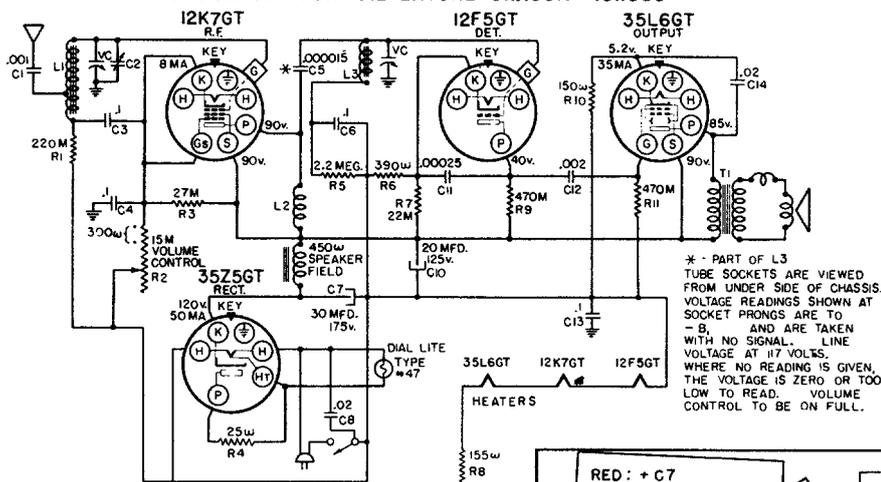
COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

123

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

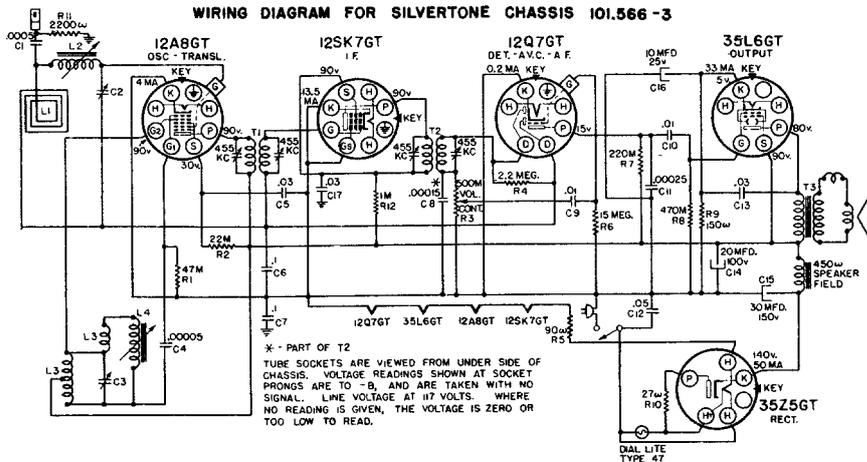
WIRING DIAGRAM FOR SILVERTONE CHASSIS 101.565

Sears,
Models
6400
6401
6402

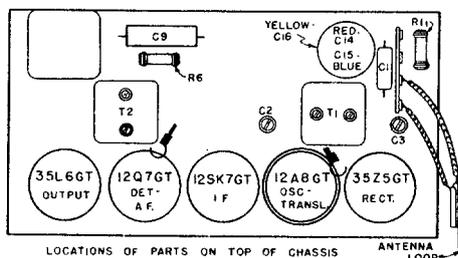


LOCATIONS OF PARTS UNDER CHASSIS

WIRING DIAGRAM FOR SILVERTONE CHASSIS 101.566 -3



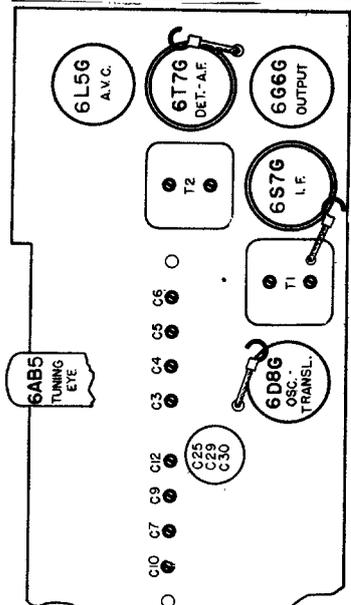
Sears Models 6403A, 6404A,
6405A, 6496A.



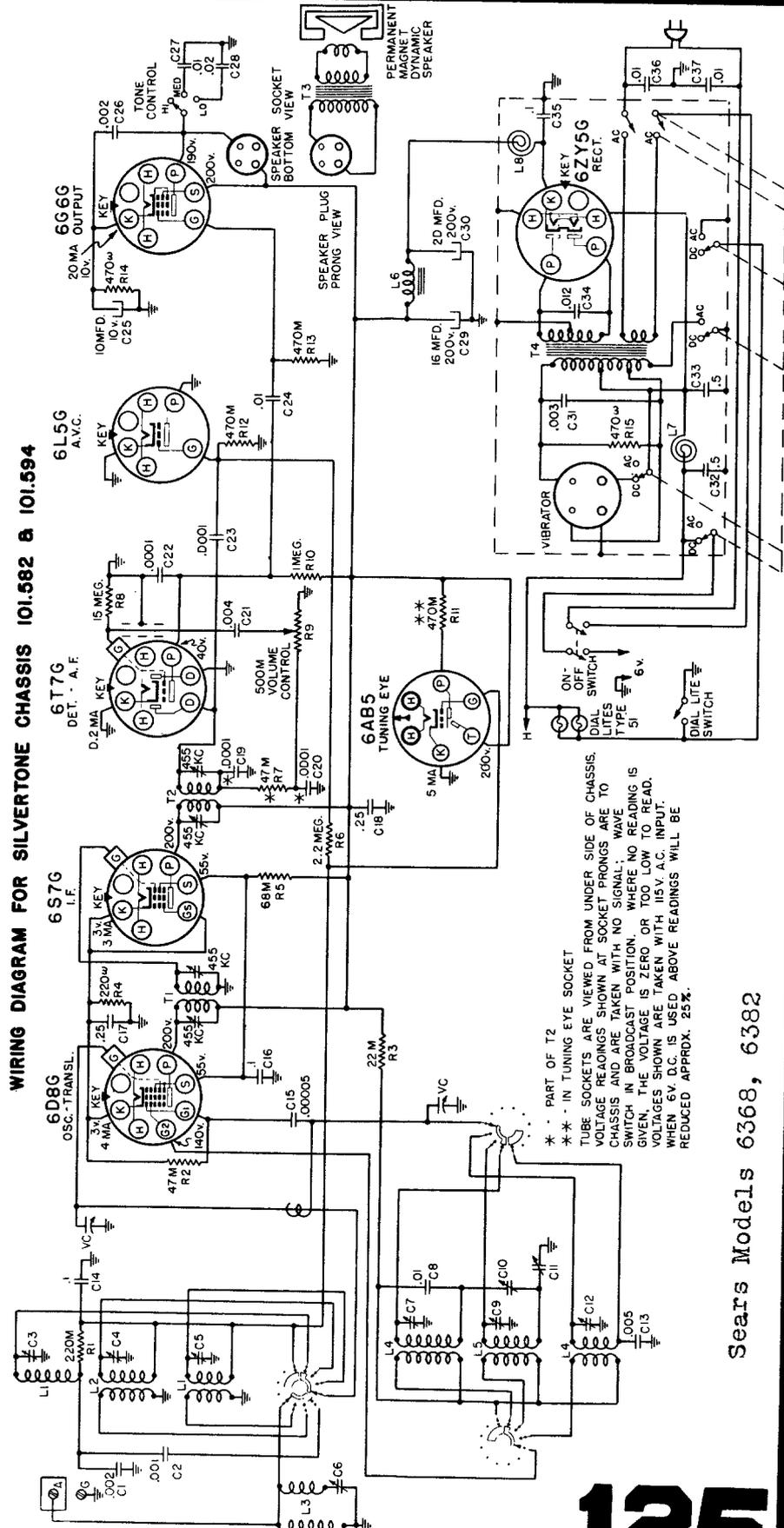
LOCATIONS OF PARTS ON TOP OF CHASSIS

124

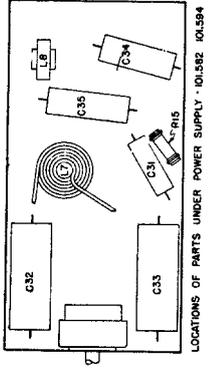
COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS



WIRING DIAGRAM FOR SILVERTONE CHASSIS 101.582 & 101.594



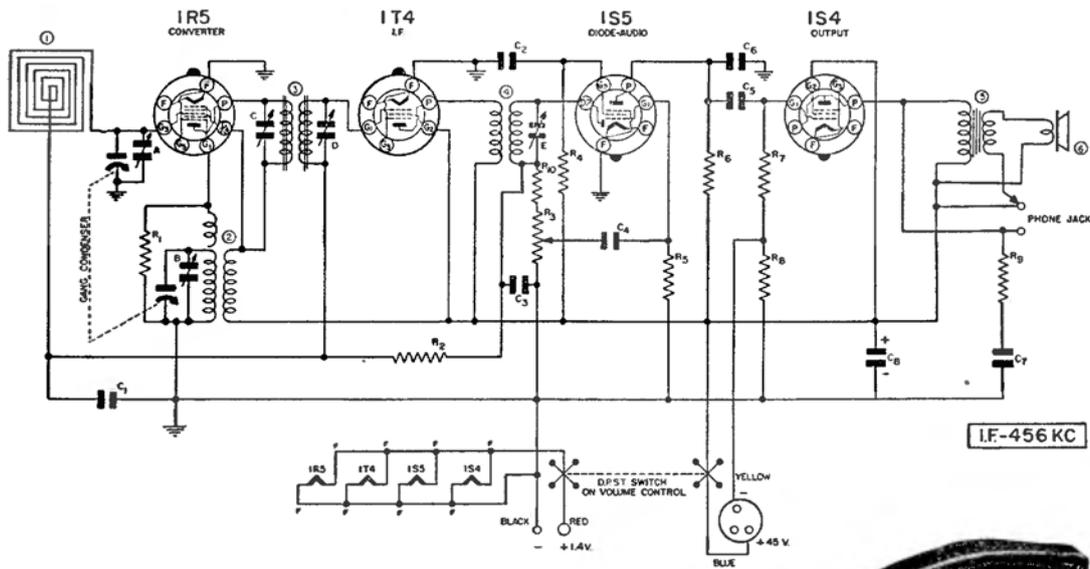
* * * IN TUNING EYE SOCKET
 TUBE SOCKETS ARE VIEWED FROM UNDER SIDE OF CHASSIS.
 VOLTAGE READINGS SHOWN AT SOCKET PRONGS ARE TO
 CHASSIS AND ARE TAKEN WITH NO SIGNAL; WAVE
 SWITCH IN BROADCAST POSITION. WHERE NO READING IS
 GIVEN, THE VOLTAGE IS ZERO OR TOO LOW TO READ.
 VOLTAGES SHOWN ARE TAKEN WITH 115V. A.C. INPUT.
 WHEN 6V. D.C. IS USED ABOVE READINGS WILL BE
 REDUCED APPROX. 25%.



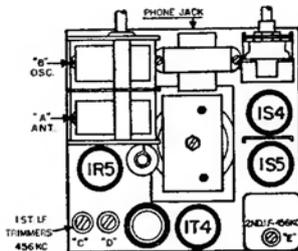
LOCATIONS OF PARTS UNDER POWER SUPPLY - 101.582 101.594

Sears Models 6368, 6382

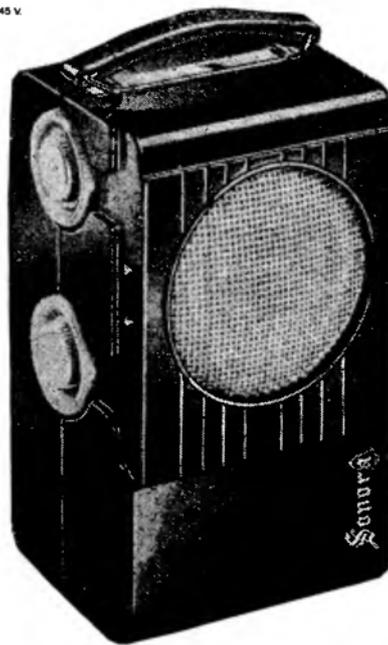
MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



DIAG. NO.	PART NO.	DESCRIPTION	DIAG. NO.	PART NO.	DESCRIPTION
R1	N-3172	100,000 OHM .5W. 20%	C5	N-3094	.01 MFD. 400 V.
R2	N-3173	2 MEGOHM 5W. 20%	C6	N-074	.0001 MFD. MICA
R3	N-3092	1 MEGOHM VOLUME CONTROL	C7	N-3094	.01 MFD. 400 V.
R4	N-3174	3 MEGOHM 5W. 20%	C8	N-361	6 MFD. 50V ELECTROLYTIC
R5	N-3093	6 MEGOHM 5W. 20%	1	N-3096	ANTENNA LOOP COIL
R6	N-3175	1 MEGOHM 5W. 20%	2	N-3097	OSCILLATOR COIL
R7	N-3173	2 MEGOHM 5W. 20%	3	N-3098	1ST. I.F. TRANSFORMER
R8	N-3178	500 OHM 5W. 5%	4	N-3099	2ND. I.F. TRANSFORMER
R9	N-3177	15,000 OHM 5W. 20%	5	N-3100	OUTPUT TRANSFORMER
R10	N-3184	50,000 OHM 5W. 20%	6	N-3101	4" P.M. SPEAKER
C1	N-1345	.05 MFD. 200 V.		N-3102	2 GANG CONDENSER
C2	N-3094	.01 MFD. 400 V.			
C3		.0001 MFD. (IN SHIELD)			
C4	N-3094	.01 MFD. 400 V.			



TUBE AND TRIMMER LOCATIONS



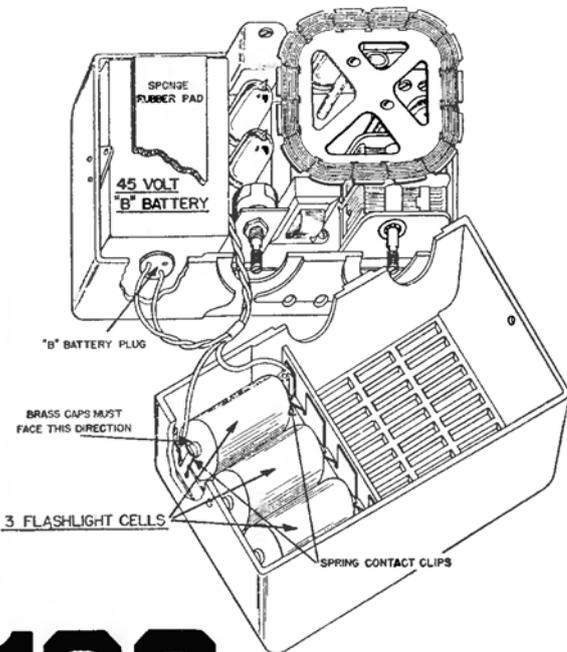
4 TUBE PORTABLE SUPERHETERODYNE SINGLE BAND

DRAWN G.S.C. APPROVED J.P. EDW. J.

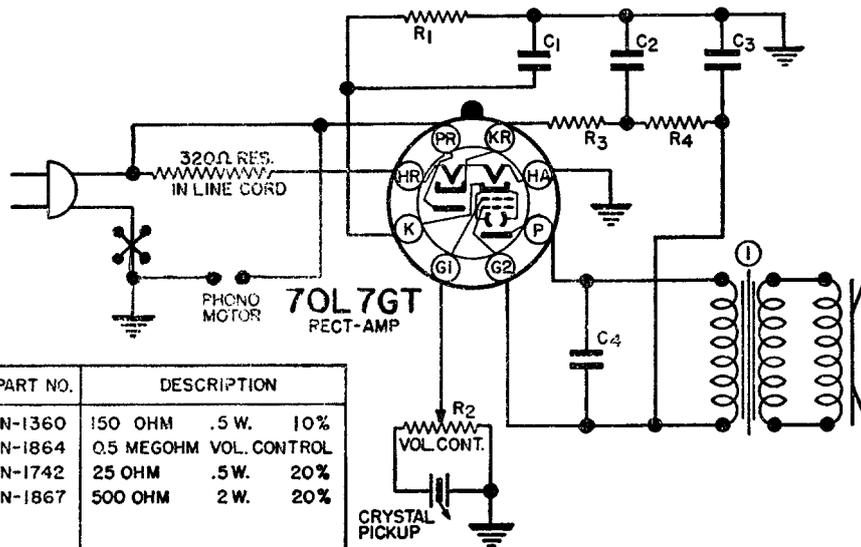
INSTALLATION OF NEW BATTERIES. To install new batteries remove the two large screws located on the ends of the case by inserting a small coin in the slot of the screws and turning. Open the case as shown in the accompanying illustration. The batteries can be readily removed and new ones used to replace them. The "A" cells must be inserted with the ends having the brass caps pointing in the direction shown in the diagram. Be sure the contact springs are clean before installing new "A" cells. If the contacts are dirty or corroded, scrape them off with a knife before installing new cells.

CAUTION. Never leave dead batteries in the receiver or store the receiver with the batteries in it for long periods as the batteries are apt to swell and damage the radio.

To insure maximum battery life from your receiver do not allow the batteries to become heated or damp and use the batteries while they are new. Batteries deteriorate with heat, moisture and age.



MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

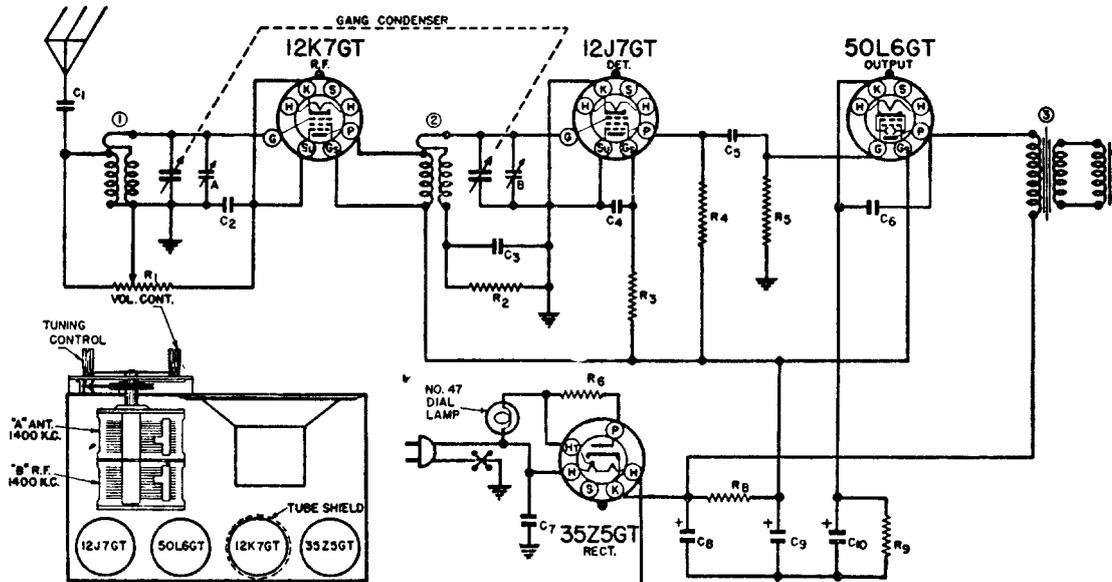


DIAG. NO.	PART NO.	DESCRIPTION
R1	N-1360	150 OHM .5 W. 10%
R2	N-1864	0.5 MEGOHM VOL. CONTROL
R3	N-1742	25 OHM .5 W. 20%
R4	N-1867	500 OHM 2 W. 20%
C1	N-1866	20 MFD. 25V.
C2		30 MFD. 150V.
C3		30 MFD. 150V.
C4	N-1344	.01 MFD. 400V.
I	N-1863	5 1/2" P.M. SPEAKER (TE-38)
	N-1865	LINE RES. CORD
	N-1910	5 1/2" P.M. SPKR. (TE-40 & 41)

Sonora

ELECTRIC PHONOGRAPH

DRN. J.B. APPR. 5-9-39



DIAG. NO.	PART NO.	DESCRIPTION	DIAG. NO.	PART NO.	DESCRIPTION
C1	N-1344	.01 MFD. 400 V.	R1	N-203	25,000 OHM VOL.
C2	N-1345	.05 MFD. 200 V.	R2	N-1418	3.5 MEG. 20%.5 W.
C3	N-1345	.05 MFD. 200 V.	R3	N-1835	6 MEG. 20%.5 W.
C4	N-1344	.01 MFD. 400 V.	R4	N-1262	1 MEG. 20%.5 W.
C5	N-1344	.01 MFD. 400 V.	R5	N-1264	.5 MEG. 20%.5 W.
C6	N-1344	.01 MFD. 400 V.	R6	N-4614	50 OHM 20%.5 W.
C7	N-1346	.05 MFD. 400 V.	R7	N-1618	80 OHM 10%.2 W.
C8	N-1850	25 MFD. 150V.	R8	N-1417	3000 OHM 20%.5 W.
C9		10 MFD. 150V. ELECT.	R9	N-1767	250 OHM 10%.3 W.
C10	N-1855	20 MFD. 25 V.	I	N-1790	ANTENNA COIL
		GANG CONDENSER	2	N-1791	R.F. COIL
			3	N-2047	SPEAKER & TRANS.

Sonora

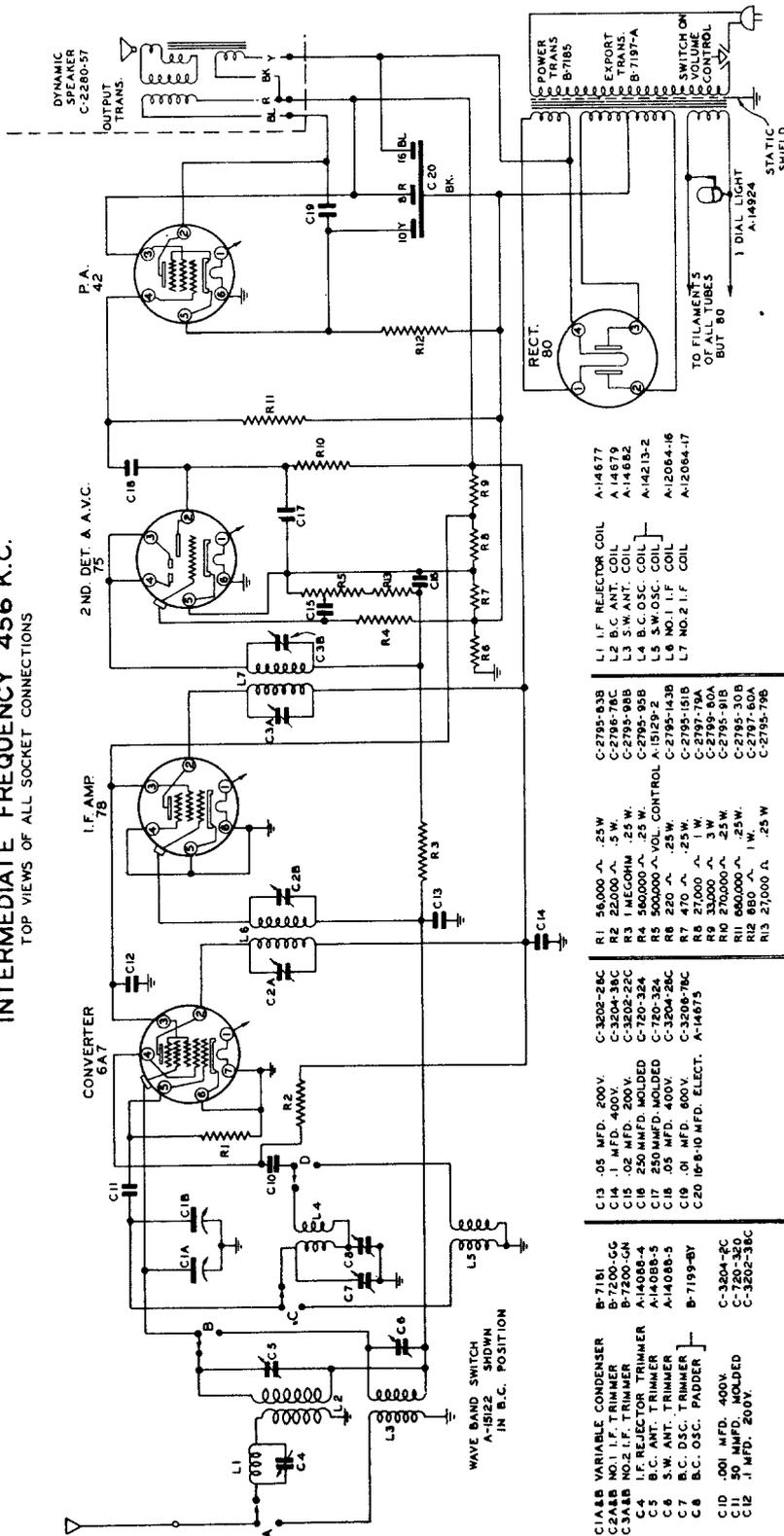
4 TUBE T.R.F.

CHKD. W.F. APPR. 5-9-39

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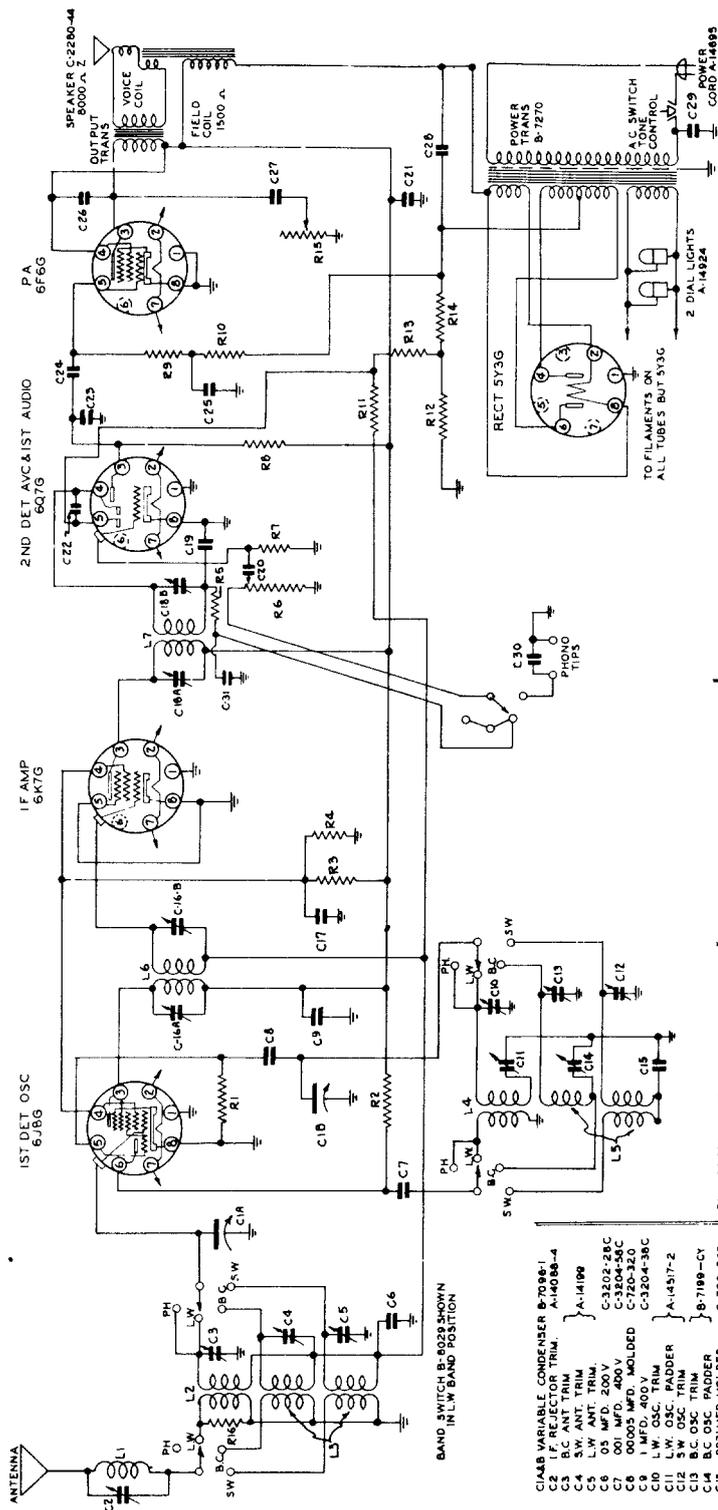
127

SCHEMATIC DIAGRAM
SPARTON SUPERHETERODYNE MODEL 530-X
INTERMEDIATE FREQUENCY 456 K.C.
 TOP VIEWS OF ALL SOCKET CONNECTIONS



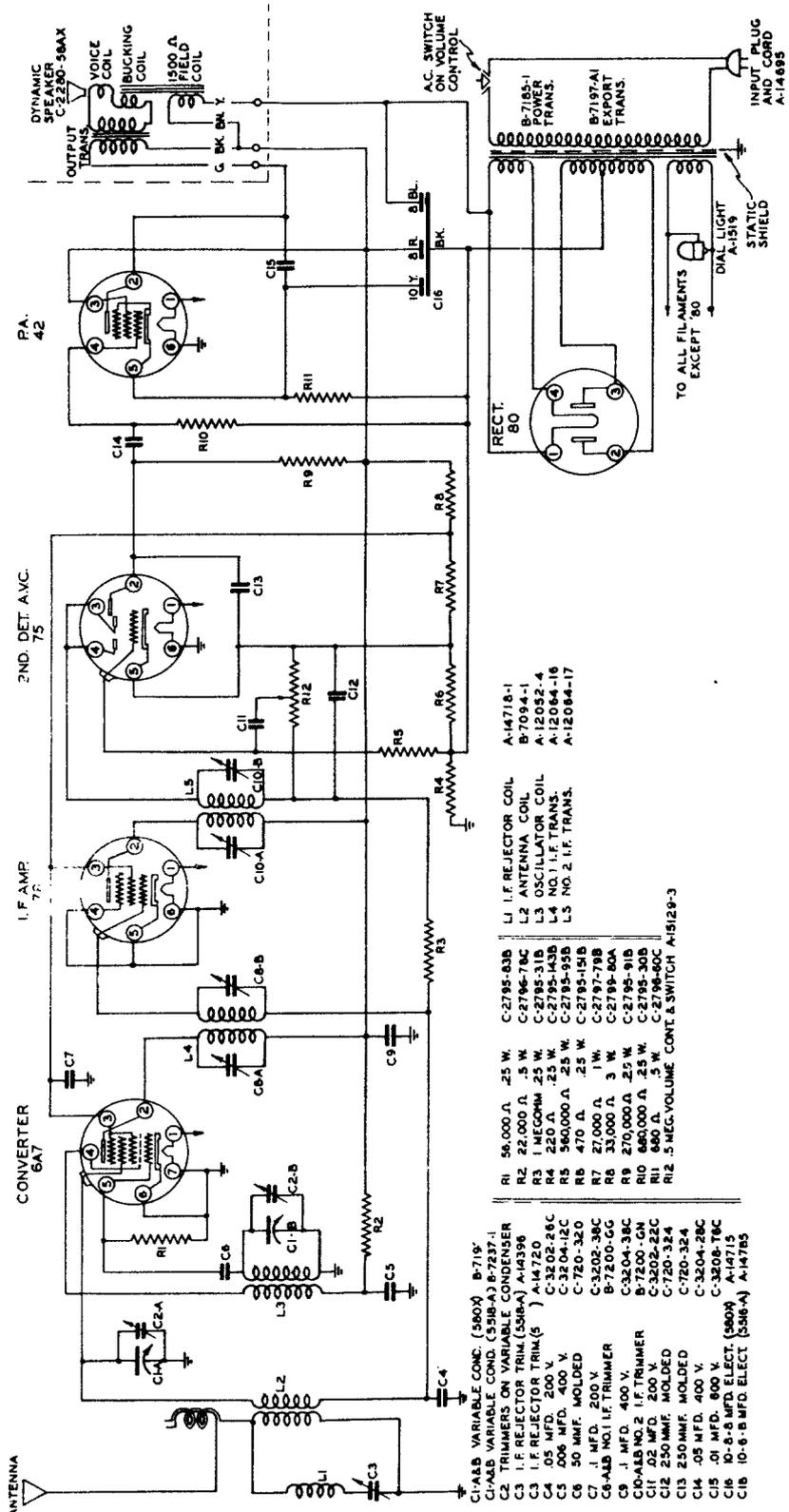
- | | | |
|---------|------------------------|-------------|
| C1A & B | VARIABLE CONDENSER | B-7181 |
| C2A & B | NO. 1 I.F. TRIMMER | B-7200-GG |
| C3A & B | NO. 2 I.F. TRIMMER | B-7200-GN |
| C4 | I.F. REJECTOR TRIMMER | A-14086-4 |
| C5 | B.C. ANT. TRIMMER | A-14088-5 |
| C6 | S.W. ANT. TRIMMER | A-14088-5 |
| C7 | B.C. OSC. TRIMMER | B-7199-BY |
| C8 | B.C. OSC. PADDER | C-3204-2C |
| C10 | .001 MFD. 400V. | C-720-320 |
| C11 | .50 MMFD. MOLDED | C-3202-38C |
| C12 | .1 MFD. 200V. | |
| C13 | .05 MFD. 200V. | C-3202-28C |
| C14 | .1 MFD. 400V. | C-3204-38C |
| C15 | .02 MFD. 200V. | C-3202-22C |
| C16 | 250 MMFD. MOLDED | C-720-324 |
| C17 | 250 MMFD. MOLDED | C-720-324 |
| C18 | .05 MFD. 400V. | C-3204-28C |
| C19 | .01 MFD. 600V. | C-3209-78C |
| C20 | 16-8-10 MFD. ELECT. | A-14675 |
| L1 | NO. 1 I.F. COIL | C-2795-83B |
| L2 | B.C. ANT. COIL | C-2795-76C |
| L3 | S.W. ANT. COIL | C-2795-98B |
| L4 | B.C. OSC. COIL | C-2795-98B |
| L5 | S.W. OSC. COIL | C-2795-98B |
| L6 | NO. 2 I.F. COIL | A-15129-2 |
| L7 | NO. 2 I.F. COIL | C-2795-143B |
| R1 | 50,000 Ω .25 W. | C-2795-151B |
| R2 | 22,000 Ω .25 W. | C-2795-78A |
| R3 | 1 MEG OHM .25 W. | C-2795-78A |
| R4 | 560,000 Ω .25 W. | C-2795-91B |
| R5 | 500,000 Ω VOL. CONTROL | C-2795-91B |
| R6 | 220 Ω .25 W. | C-2795-30B |
| R7 | 470 Ω .25 W. | C-2795-30B |
| R8 | 27,000 Ω .25 W. | C-2795-91B |
| R9 | 27,000 Ω .25 W. | C-2795-91B |
| R10 | 600,000 Ω .25 W. | C-2795-30B |
| R11 | 850 Ω 1 W. | C-2795-60A |
| R13 | 27,000 Ω .25 W. | C-2795-79B |
| A1 | 4577 | A-14577 |
| A2 | 14579 | A-14579 |
| A3 | 14582 | A-14582 |
| A4 | 14213-2 | A-14213-2 |
| A5 | 2064-16 | A-2064-16 |
| A6 | 2064-17 | A-2064-17 |

**SCHEMATIC DIAGRAM
SPARTON SUPERHETERODYNE MODEL 540LX
INTERMEDIATE FREQUENCY 456 K.C.
TOP VIEWS OF ALL SOCKET CONNECTIONS**



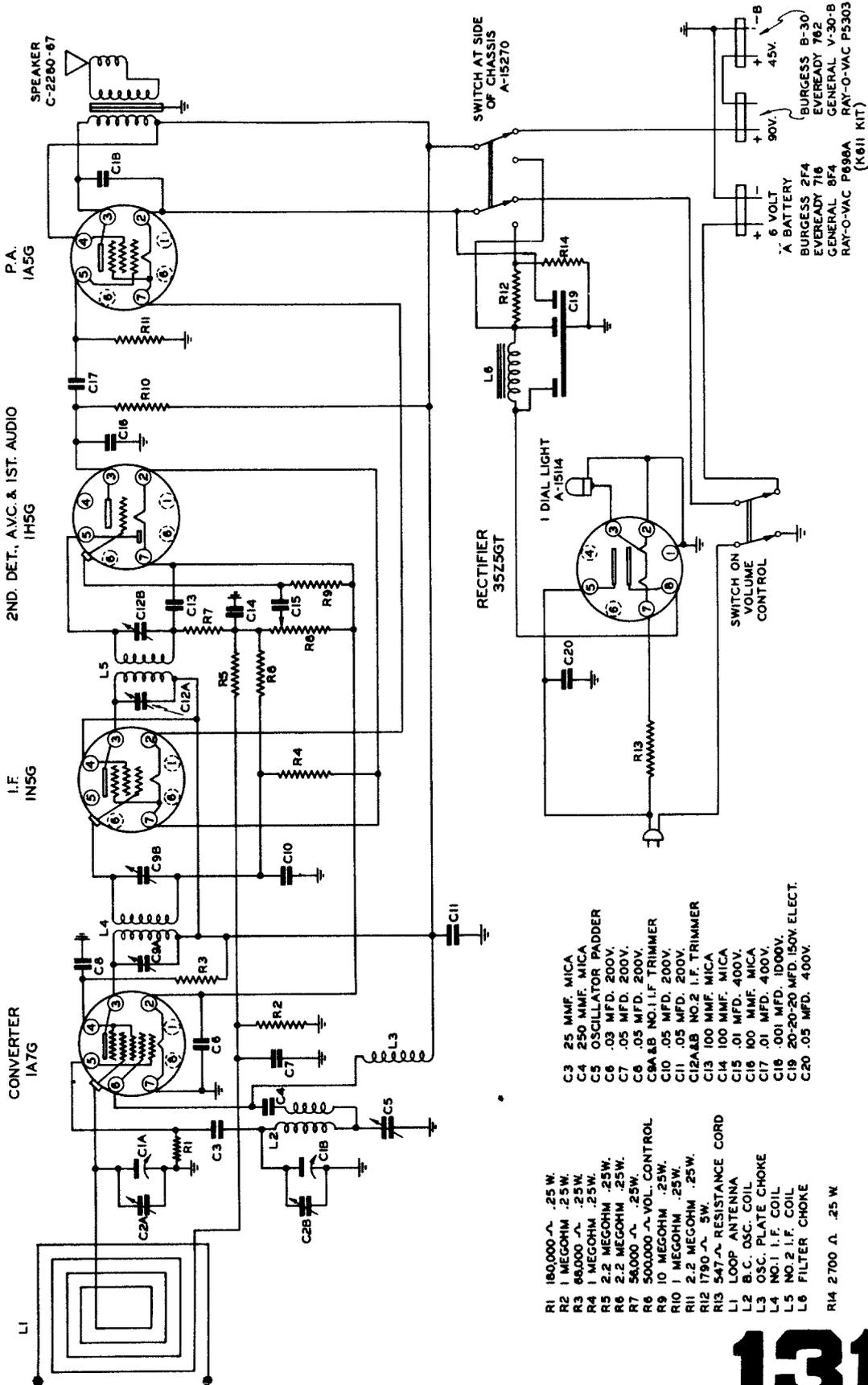
- | | | |
|---|--|---|
| C1A8 VARIABLE CONDENSER B-7098-1
C2 I.F. REJECTOR TRIM. A-14088-4
C3 B.C. ANT. TRIM.
C4 ANT. TRIM. A-14106
C5 L.W. ANT. TRIM.
C6 .05 MFD. 200 V. C-3202-28C
C7 .001 MFD. 400 V. C-3204-56C
C8 .00005 MFD. MOLDED C-720-320
C9 .05 MFD. 300 V. ELECT. C-3204-38C
C10 .05 MFD. 300 V. ELECT. C-3204-38C
C11 L.W. OSC. PADDER A-14317-2
C12 5 W. OSC. TRIM. B-7189-CY
C13 B.C. OSC. TRIM. B-720-382
C14 .001 MFD. 400 V. C-3204-56C
C15 .001 MFD. 400 V. C-3204-56C
C16 .001 MFD. 400 V. C-3204-56C
C17 1 MFD. 400 V. C-3204-56C
C18 .001 MFD. 400 V. C-3204-56C
C19 .001 MFD. 400 V. C-3204-56C
C20 .001 MFD. 400 V. C-3204-56C
C21 .001 MFD. 400 V. C-3204-56C
C22 .001 MFD. 400 V. C-3204-56C
C23 .001 MFD. 400 V. C-3204-56C
C24 .001 MFD. 400 V. C-3204-56C
C25 .001 MFD. 400 V. C-3204-56C
C26 .001 MFD. 400 V. C-3204-56C
C27 .03 MFD. 600 V. C-3208-80C
C28 .03 MFD. 600 V. C-3208-80C
C29 .003 MFD. 200 V. C-3208-80C
C30 .003 MFD. 200 V. C-3208-80C
C31 .0001 MFD. MICA C-720-325 | R1 58,000 Ω. 25 W.
R2 22,000 Ω. 5 W.
R3 24,000 Ω. 2 W.
R4 27,000 Ω. 1 W.
R5 27,000 Ω. 25 W.
R6 270,000 Ω. 25 W.
R7 58 MEG. 25 W.
R8 270,000 Ω. 25 W.
R9 270,000 Ω. 25 W.
R10 270,000 Ω. 25 W.
R11 270,000 Ω. 25 W.
R12 270,000 Ω. 25 W.
R13 270,000 Ω. 25 W.
R14 270,000 Ω. 25 W.
R15 15,000 Ω. 25 W.
R16 15,000 Ω. 25 W. | C-2795-83B I.F. REJECTOR COIL
C-2795-79C L.W. ANT. COIL
C-2795-182A L3 B.C. 1.5 W. ANT. COIL
C-2797-79B L4 L.W. OSC. COIL
C-2795-79B L5 B.C. 1.5 W. OSC. COIL
C-1500-1078 L6 NO. 1 I.F. COIL
C-2795-91B L7 NO. 2 I.F. COIL
A-14877-1
A-14209-5
A-14888-1
A-14213-5
A-12084-29
A-14924 |
|---|--|---|

SCHEMATIC DIAGRAM
SPARTON SUPERHETERODYNE MODEL 580-X
INTERMEDIATE FREQUENCY 456 K.C.
TOP VIEW OF ALL SOCKET CONNECTIONS



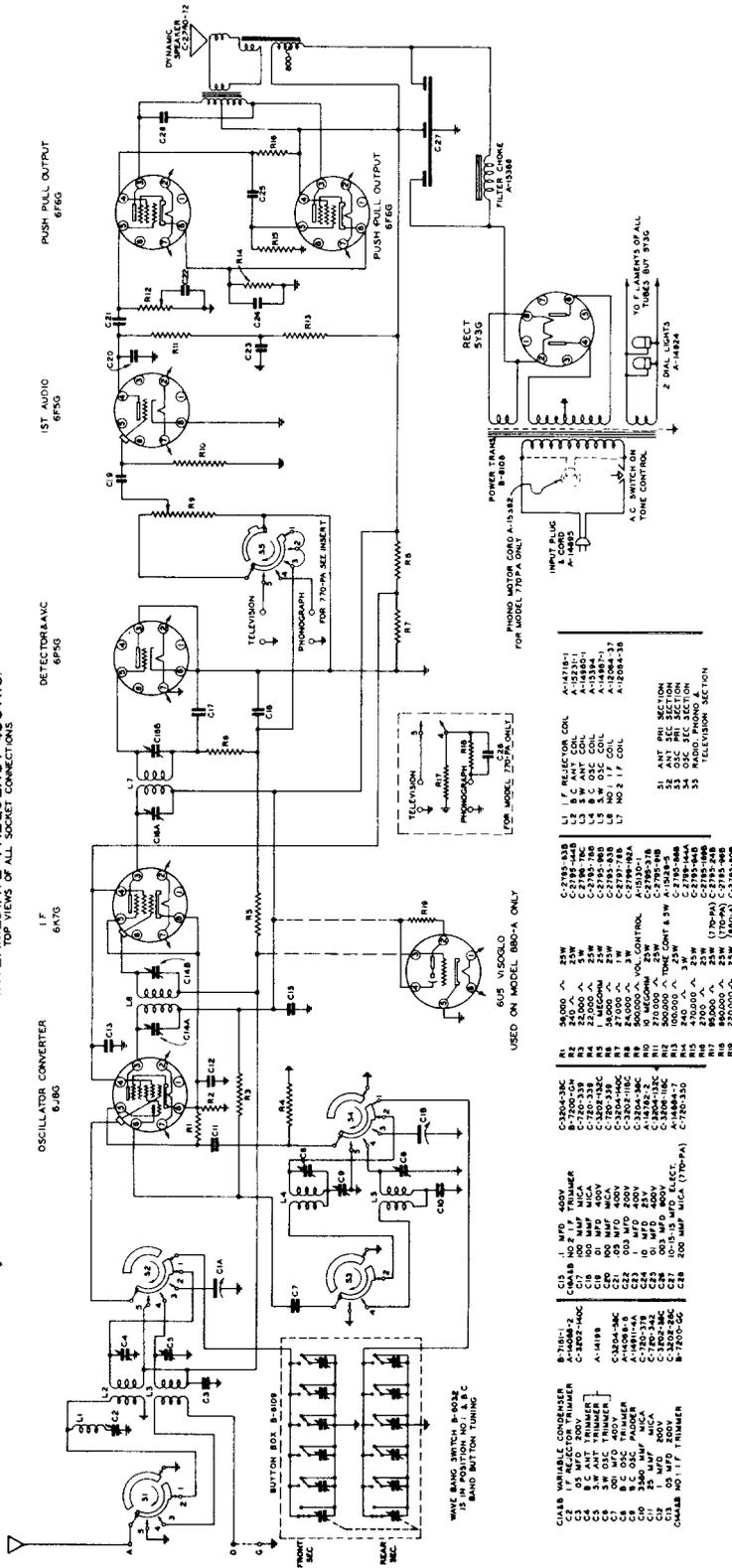
- C1-A45 VARIABLE COND. (550V) B-7218'
- C2-A45 VARIABLE COND. (550V-A) B-7237'-1
- C3 TRIMMERS ON VARIABLE CONDENSER
- C4 I.F. REJECTOR TRIM (550V-A) A-14396
- C5 .05 MFD. 200 V. C-32 04-12C
- C6 .006 MFD. 400 V. C-32 04-12C
- C7 50 MMF. MOLDED C-720-320
- C8 .1 MFD. 200 V. C-32 02-38C
- C9 .1 MFD. 400 V. B-7200-GG
- C10-A45 NO. 2 I.F. TRIMMER C-32 04-38C
- C11 .02 MFD. 200 V. B-7200-GN
- C12 250 MMF. MOLDED C-32 02-22C
- C13 250 MMF. MOLDED C-720-324
- C14 .05 MFD. 400 V. C-32 04-28C
- C15 .01 MFD. 600 V. C-32 08-76C
- C16 10-6-B MFD. ELECT. (550V) A-14715
- C18 10-6-B MFD. ELECT. (550V-A) A-14785
- L1 I.F. REJECTOR COIL C-2795-63B
- L2 ANTENNA COIL C-2795-78C
- L3 OSCILLATOR COIL C-2795-31B
- L4 NO. 1 I.F. TRANS. C-2795-143B
- L5 NO. 2 I.F. TRANS. C-2795-95B
- R1 56,000 Ω, .25 W. C-2795-151B
- R2 22,000 Ω, .5 W. C-2795-78C
- R3 1 MEGOHM, .25 W. C-2795-31B
- R4 220 Ω, .25 W. C-2795-143B
- R5 560,000 Ω, .25 W. C-2795-95B
- R6 470 Ω, .25 W. C-2795-151B
- R7 27,000 Ω, 1 W. C-2797-79B
- R8 33,000 Ω, .5 W. C-2795-60A
- R9 270,000 Ω, .25 W. C-2795-91B
- R10 660,000 Ω, .25 W. C-2795-30B
- R11 680 Ω, .5 W. C-2796-60C
- R12 .5 MEG-VOLUME CONT. & SWITCH A-15128'-3
- L1 I.F. REJECTOR COIL A-14718-1
- L2 ANTENNA COIL B-7494-1
- L3 OSCILLATOR COIL A-15052-4
- L4 NO. 1 I.F. TRANS. A-15044-16
- L5 NO. 2 I.F. TRANS. A-15044-17
- RECT. 80 TO ALL FILAMENTS EXCEPT '80
- DIAL LIGHT A-1319
- STATIC SHIELD
- INPUT PLUG AND CORD A-14988

SCHEMATIC DIAGRAM
SPARTON SUPERHETERODYNE MODEL 590-1
INTERMEDIATE FREQUENCY 456 K.C.
 TOP VIEWS OF ALL SOCKET CONNECTIONS



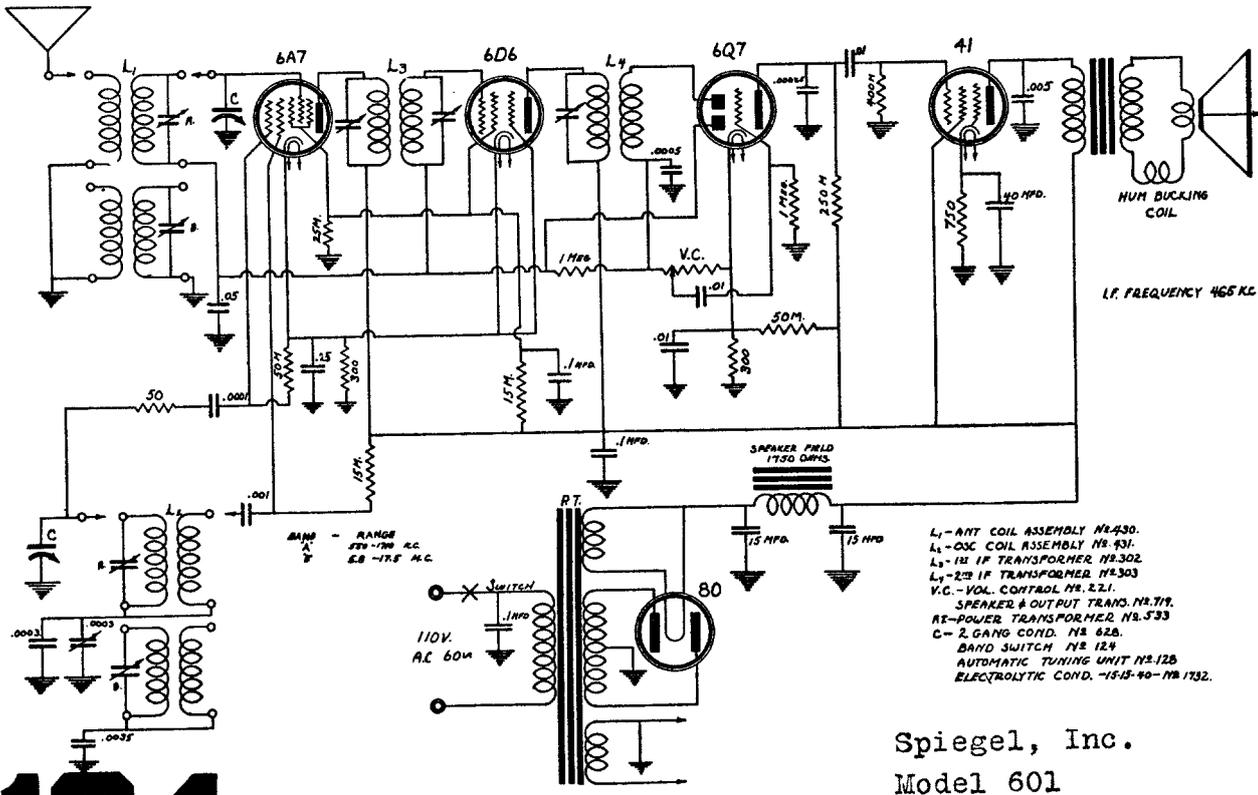
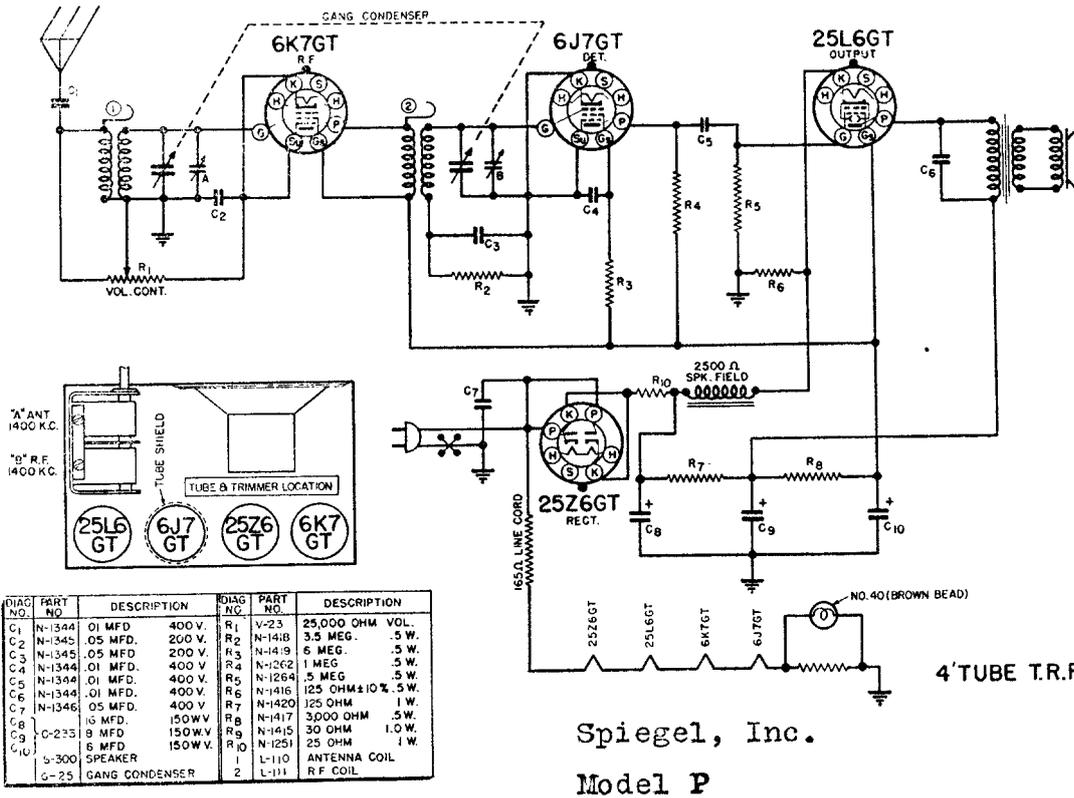
- R1 180,000- Ω . .25 W.
- R2 1 MEGOHM .25 W.
- R3 86,000 Ω . .25 W.
- R4 1 MEGOHM .25 W.
- R5 2.2 MEGOHM .25 W.
- R6 2.2 MEGOHM .25 W.
- R7 56,000 Ω . .25 W.
- R8 500,000 Ω -VOL. CONTROL
- R9 10 MEGOHM .25 W.
- R10 1 MEGOHM .25 W.
- R11 2.2 MEGOHM .25 W.
- R12 1790 Ω . 5 W.
- R13 547 Ω -RESISTANCE CORD
- R14 2700 Ω . .25 W.
- C3 25 MMF. MICA
- C4 250 MMF. MICA
- C5 OSCILLATOR PADDER
- C6 .03 MFD. 200V.
- C7 .05 MFD. 200V.
- C8 .05 MFD. 200V.
- C9 & B NO.1 I.F. TRIMMER
- C10 .05 MFD. 200V.
- C11 .05 MFD. 200V.
- C12 A & B NO.2 I.F. TRIMMER
- C13 100 MMF. MICA
- C14 100 MMF. MICA
- C15 .01 MFD. 400V.
- C16 100 MMF. MICA
- C17 .01 MFD. 400V.
- C18 .001 MFD. 1000V.
- C19 20-20-20 MFD. 150V. ELECT.
- C20 .05 MFD. 400V.

**SCHEMATIC DIAGRAM
SPARTON SUPERHETERODYNE MODEL 770-770-PA & B80-A
INTERMEDIATE FREQUENCY 456 K.C.
TOP VIEWS OF ALL SOCKET CONNECTIONS**



- 6U5 VISOCOLOR SECTION
- FOR MODEL 770-PA ONLY
- TELEVISION
- PHONO MOTOR COIL A-14823
- POWER TRANSFORMER B-800
- RECTIFIER 5Y5G
- TO ELEMENTS OF ALL TUBES BUT 9Y5G A-14824
- 2 250V LIGHTS
- A.C. SWITCH ON TONE CONTROL
- INPUT PLUG A-14820
- PHONO MOTOR COIL A-14823
- FOR MODEL 770PA ONLY
- TELEVISION SECTION
- 31 ANT PH SECTION
- 32 OSC PH SECTION
- 33 OSC PH SECTION
- 34 ANT PH SECTION
- 35 RADIO PHONO A
- 36 TELEVISION SECTION
- 37 TELEVISION SECTION
- 38 TELEVISION SECTION
- 39 TELEVISION SECTION
- 40 TELEVISION SECTION
- 41 TELEVISION SECTION
- 42 TELEVISION SECTION
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- 100 TELEVISION SECTION

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



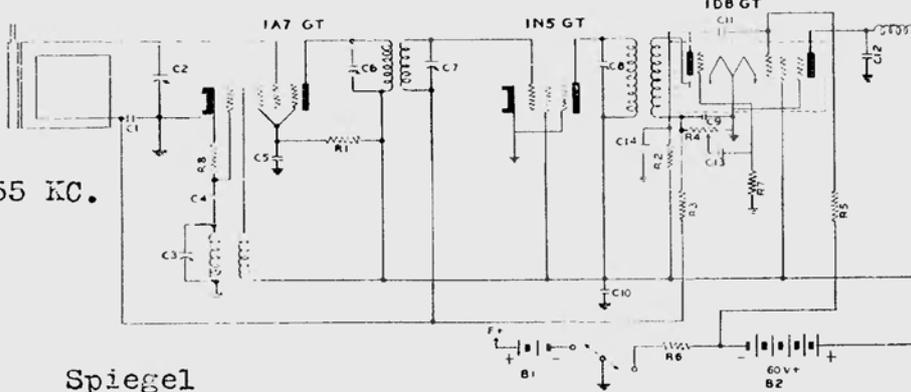
134

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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

SCHEMATIC DIAGRAM MODEL-130

I.F. 455 KC.



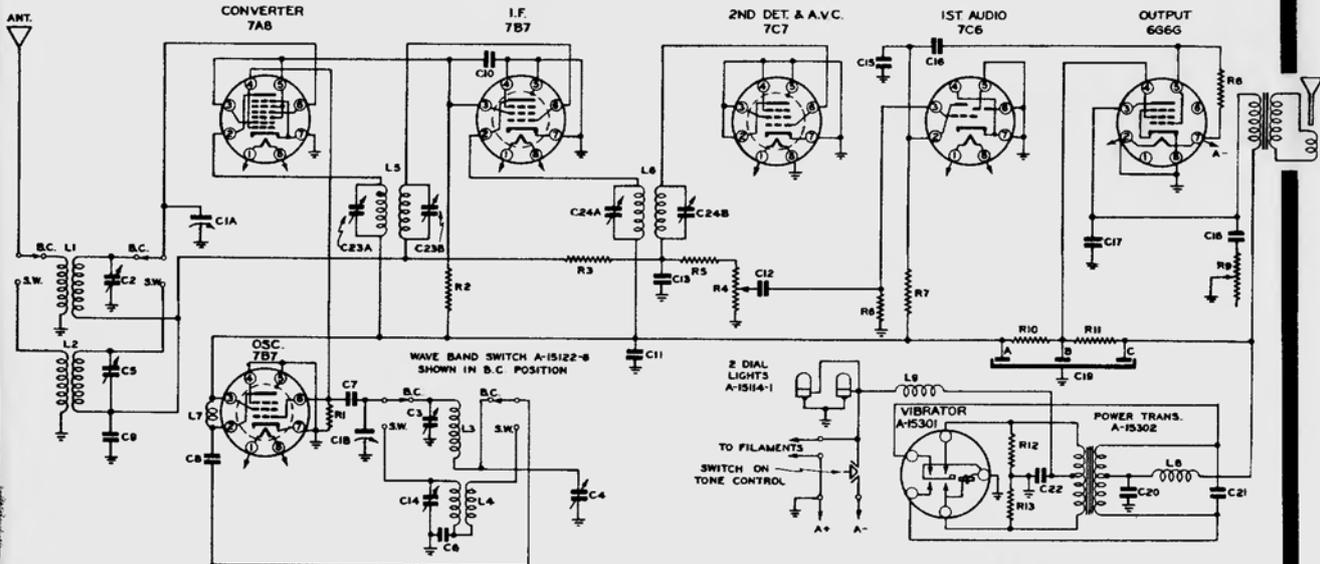
Spiegel

REPLACEMENT PARTS LIST

Schematic Location	Part No.	Description	Schematic Location	Part No.	Description
C1	C-45	Tubular cond. .05 mfd. 200V	R1	R-105	Carbon res. 5K ohm
C2, C3	Y-CV-46	Variable Condenser	R2, R7	R-102	Carbon res. 1 meg.
C4	CM-31	Mica cond. 100 mmfd.	R3, R5	R-101	Carbon res. 2 meg.
C5, C11	C-48	Tubular cond. .01 mfd. 400V	R8	R-113	Carbon res. 100K ohm
C6, C7	CT-1	Trimmer condenser	R6	R-103	Carbon res. 60 ohm
C8	CT-32	Trimmer condenser			
C9, C14	CM-30	Mica cond. 250 mmfd.	B1		
C10	CE-58	4 mfd. 100V Electrolytic	B2		
C12, C13	C-47	Tubular cond. .004 mfd. 400V			

Spiegel

SCHEMATIC DIAGRAM
AIR CASTLE SUPERHETERODYNE MODEL 631-6
INTERMEDIATE FREQUENCY 456 K.C.
BOTTOM VIEWS OF ALL SOCKET CONNECTIONS

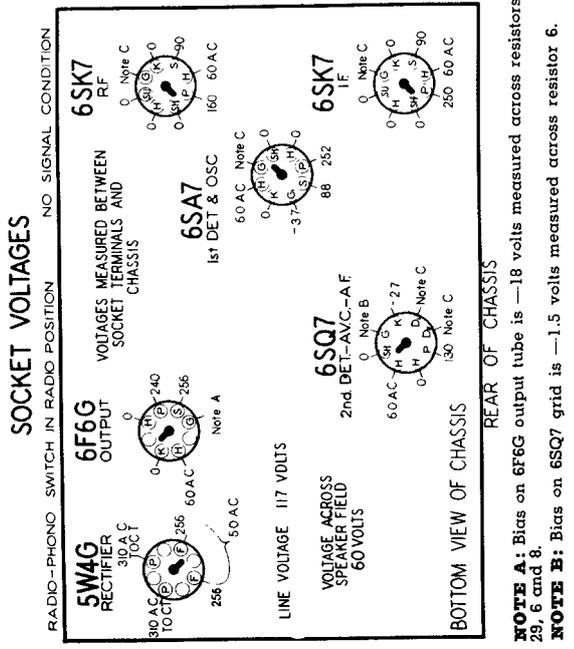
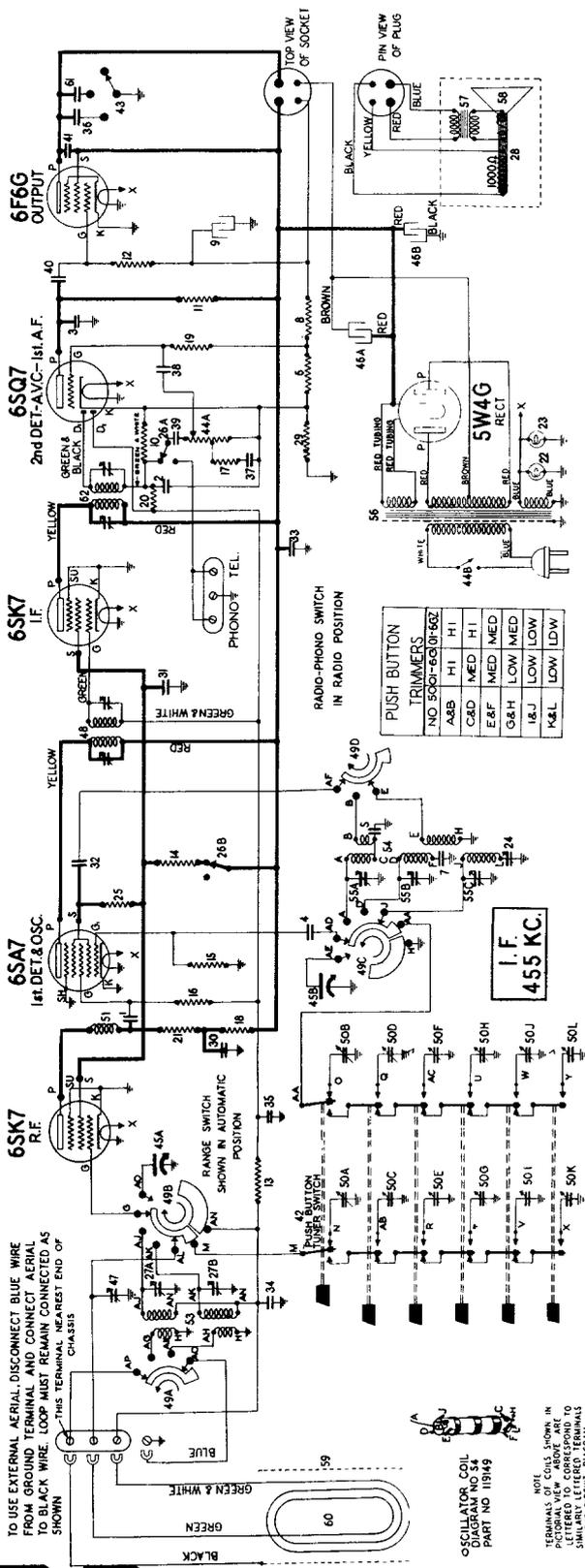


C1A&B VARIABLE CONDENSER	B-7229	C13 250 MMF. MICA	C-720-324	R1 56,000 Ω 25W	C-2795-83B
C2 B.C. ANT. TRIMMER	A-14088-8	C14 5W OSC TRIMMER	A-14088-8	R2 18,000 Ω 5W	C-2798-77C
C3 B.C. OSC. TRIMMER	B-7199-EY	C15 250 MMF MICA	C-720-324	R3 1 MEGOHM 25W	C-2795-98B
C4 B.C. OSC. PADDER	A-14088-5	C16 .05 MFD 200V.	C-3202-28C	R4 500,000 Ω VOLUME CONT.	A-15130-3
C5 S.W. ANT. TRIMMER	A-15451	C17 .01 MFD. 400V.	C-3204-58C	R5 47,000 Ω 25W	C-2795-23B
C6 2700 MMF. MICA	A-15451	C18 .02 MFD. 400V.	C-3204-78C	R6 4.7 MEGOHM 25W	C-2795-35B
C7 50 MMF. MICA	C-720-315	C19 20-20-20 MFD. 150V. ELECT	A-14684-8	R7 220,000 Ω 25W	C-2795-27B
C8 250 MMF. MICA	C-720-324	C20 1000 MMF MICA	C-720-297	R8 1 MEGOHM 25W	C-2795-98B
C9 .05 MFD. 200V.	C-3202-84C	C21 .01 MFD. 600V	C-3208-132C	R9 TONE CONTROL & SWITCH	A-15128-2
C10 .1 MFD. 200V.	C-3202-34C	C22 5 MFD 120V	C-3203-48B	R10 330 Ω 5W	C-2798-10C
C11 .1 MFD. 200V.	C-3202-38C	C23 .01 MFD. TRIMMER	B-7200-GN	R11 88 Ω 5W	C-2798-46C
C12 .02 MFD. 200V.	C-3202-22C	C24 NO. 2 I.F. TRIMMER	B-7200-GH	R12 88 Ω 5W	C-2798-6C
				R13 88 Ω 5W	C-2796-6C

L1 B.C. ANT. COIL	A-15349-1
L2 S.W. ANT. COIL	A-14682-3
L3 B.C. OSC. COIL	A-15352-1
L4 S.W. OSC. COIL	A-15233-5
L5 NO. 1 I.F. COIL	A-12084-39
L6 NO. 2 I.F. COIL	A-12084-17
L7 B+ PLATE CHOKE	A-14881-1
L8 B+ HASH CHOKE	A-14718-2
L9 A LEAD HASH CHOKE	A-14844

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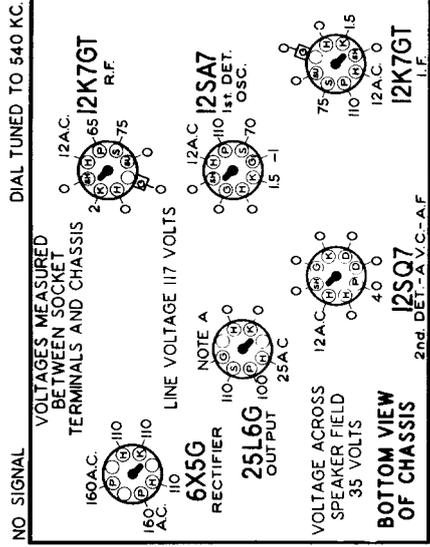
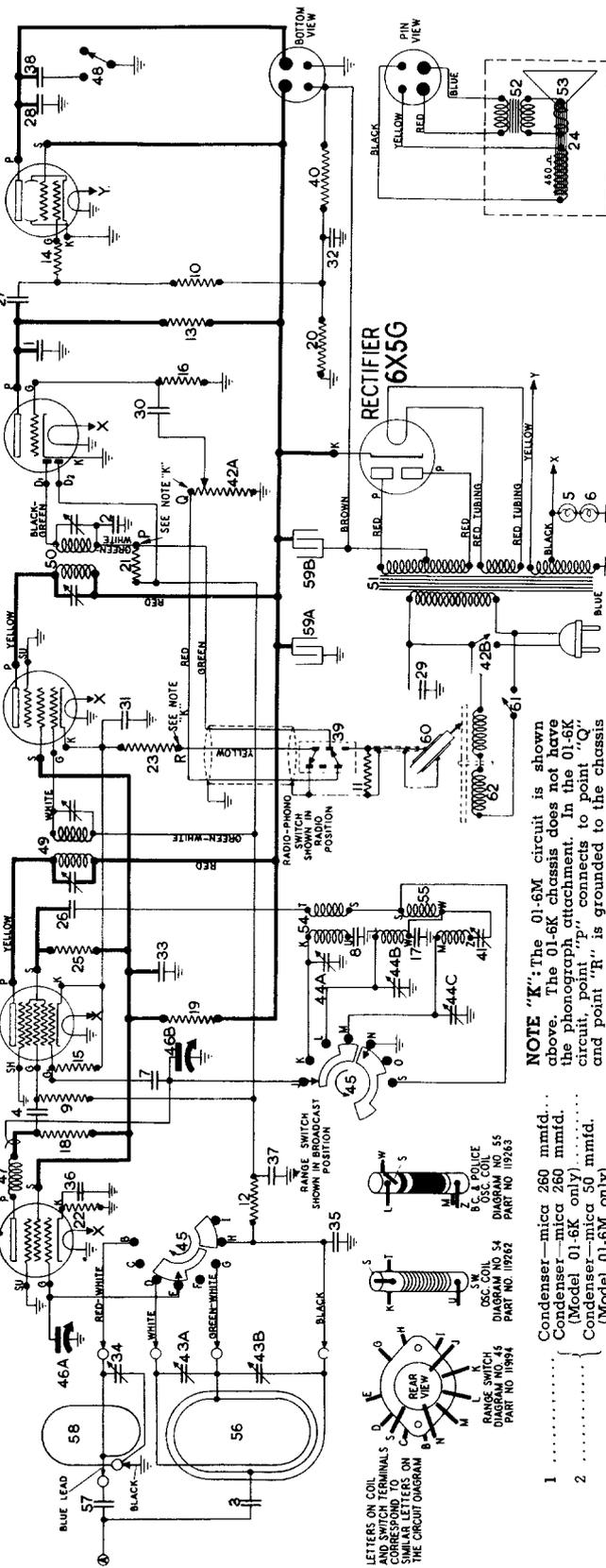
NOTE A: Bias on 6F6G output tube is —18 volts measured across resistors 29, 6 and 8.

NOTE B: Bias on 6SQ7 grid is —1.5 volts measured across resistor 6.

- 1-2-3 Condenser—mica 260 mmfd.
- 4 Condenser—mica 51 mmfd.
- 5 Condenser—mica 00351 mfd. 3%.
- 6 Resistor—wire wound 25 ohms 1/2 watt.
- 7 Condenser—mica 002 mfd.
- 8 Resistor—wire wound 220 ohms 1 watt.
- 9-11-12 Resistor—carbon 220,000 ohms 1/4 watt.
- 13 Resistor—carbon 470,000 ohms 1/4 watt.
- 14 Resistor—carbon 15,000 ohms 2 watts.
- 15-16 Resistor—carbon 100,000 ohms 1/4 watt.
- 17 Resistor—carbon 22,000 ohms 1/4 watt.
- 18 Resistor—carbon 2.2 meg. 1/4 watt.
- 19 Resistor—carbon 3.3 meg. 1/4 watt.
- 20 Resistor—carbon 2,200 ohms 1/4 watt.
- 21 Lamp—6.3 volt 25 amps.
- 22-23 Resistor—padder (530 to 630 mmfd.).
- 24 Resistor—insulated, 470 ohms 1/4 watt.
- 25 Switch—D.P.D.T. (Radio-Phone).
- 26A-26B Condenser—.006 mfd. 600 volt.
- 27A-27B Condenser—.2 section trimmer.
- 28 U. Speaker—dynamic 6 in. (10%).
- 29 Resistor—wire wound 50 ohms 1/2 watt.
- 30-31 Condenser—.1 mfd. 600 volt.
- 32 Condenser—.01 mfd. 600 volt.
- 33 Condenser—.2 mfd. 600 volt.
- 34-35 Condenser—.05 mfd. 600 volt.
- 36-37-38-39-40 Condenser—.02 mfd. 600 volt.
- 41 Switch—push button.
- 42 Tone control switch.
- 43 Volume control with switch—1 meg.
- 44A-44B
- 45A-45B Condenser—gang
- 46A-46B Condenser—electrolytic 10-15 mfd. 450 volts
- 47 Condenser—trimmer
- 48 Transformer—2nd I.F.
- 49A to 49C Range switch—push button trimmer (Low) 340 to 1000 KC.
- 50A to 50L Condenser—push button trimmer (Med.) 750 to 1975 KC.
- 51 Condenser—push button trimmer (Hi) 380 to 1350 KC.
- 52 Coil—compensating
- 53 Transformer—2nd I.F.
- 54 Coil—antenna
- 55A-55B-55C Coil—oscillator
- 56 Condenser—trimmer 3 section.
- 57 U. Transformer—output for U-115086 speaker
- 58 U. Cone & Voice coil for U-115086 speaker
- 59 Shield for loop antenna. Cabinet back and loop antenna complete 01-6G1 & 01-6G1-Z. Cabinet back and loop antenna complete 01-6G4.1 & 01-6G4.1-Z. Cabinet back and loop antenna complete 01-6G4.2 & 01-6G4.2-Z. Cabinet back and loop antenna complete 01-6G4.3 & 01-6G4.3-Z. Cabinet back and loop antenna complete 01-6G4.4 & 01-6G4.4-Z. Condenser—.006 mfd. 600 volt

STEWART-WARNER 01-6K and 01-6M CHASSIS

LOOP CONNECTIONS SHOWN ON BACK OF THIS PAGE.



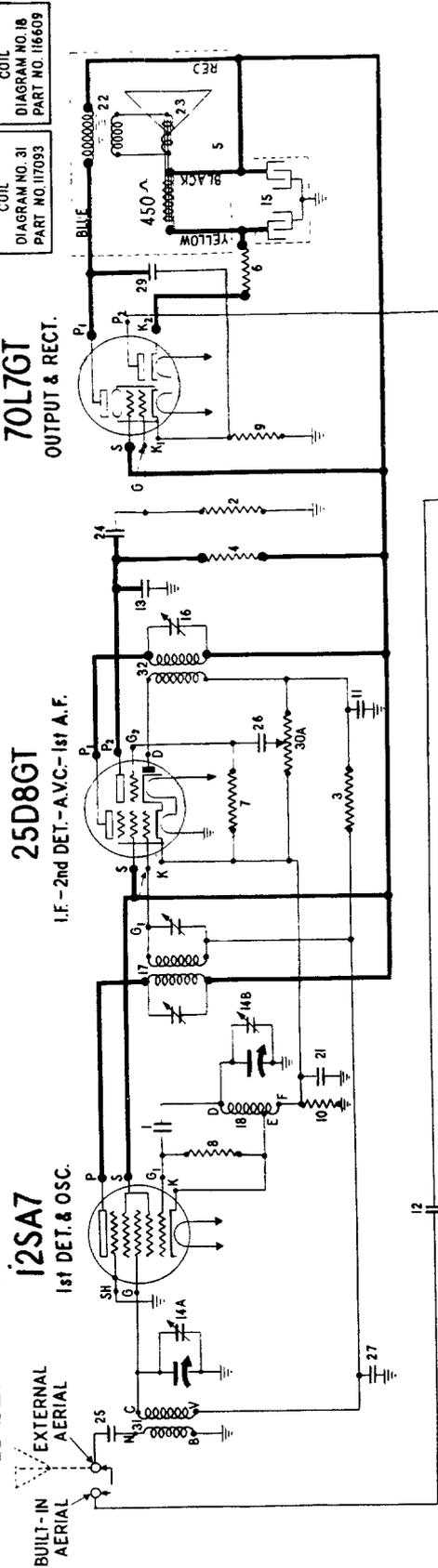
NOTE "K": The 01-6M circuit is shown above. The 01-6K chassis does not have the phonograph attachment. In the 01-6K circuit, point "p" connects to point "Q", and point "R" is grounded to the chassis.

- 1 Condenser—mica 260 mmd.
- 2 Condenser—mica 260 mmd. (Model 01-6K only)
- 3 Condenser—mica 50 mmd. (Model 01-6M only)
- 3-4 Condenser—mica 110 mmd.
- 5-6 Lamp—6.8 volt Mazda No. 51.
- 7 Condenser—mica 50 mmd.
- 8 Condenser—mica 0042 mfd.
- 9 Resistor—carbon 47,000 ohms 1/4 watt
- 10 Resistor—carbon 220,000 ohms 1/4 watt
- 11 Resistor—carbon 220,000 ohms 1/4 watt (Model 01-6M only)
- 12-13 Resistor—carbon 470,000 ohms 1/4 watt
- 14 Resistor—carbon 100 ohms 1/4 watt
- 15 Resistor—carbon 100,000 ohms 1/4 watt
- 16 Resistor—carbon 3.3 meg 1/4 watt
- 17 Condenser—mica 1650 mmd (9%)
- 18-19 Resistor—carbon 3,300 ohms 1/4 watt
- 20 Resistor—carbon 220,000 ohms 1/4 watt
- 21 Resistor—carbon 1.5 meg 1/4 watt
- 22 Resistor—insulated 470 ohms 1/4 watt
- 23 Resistor—150 ohms 1/4 watt
- 24 Resistor—dynamic 6 $\frac{1}{2}$ "
- 25 Resistor—680 ohms 1/4 watt
- 26-27-28 Condenser .01 mfd 600 volt
- 29 Condenser .01 mfd 600 volt (shielded)
- 30 Condenser—.004 mfd 600 volt
- 31-32-33 Condenser—.2 mfd 600 volt
- 34 Condenser—.05 mfd 600 volt
- 35-36-37 Condenser—.04 mfd 600 volt
- 38 Switch "Radio-Phono" with escutcheon (Model 01-6M only)
- 39

LETTERS ON COIL AND SWITCH TERMINALS SHOWN IN BROADCAST POSITION. SIMILAR LETTERS ON REAR VIEW OF THE CIRCUIT DIAGRAM.

STEWART-WARNER "AIR-PAL" RECEIVER MODEL A-6S (07-32 CHASSIS)

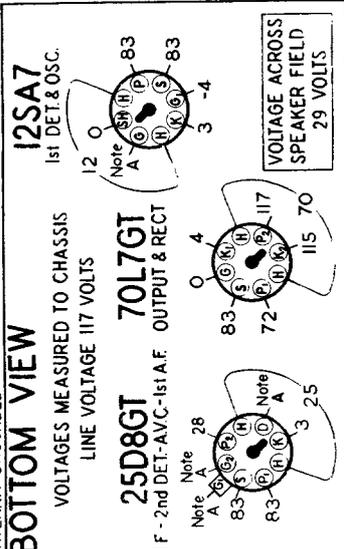
THIS MANUAL APPLIES ONLY TO THE RECEIVER MARKED A-6S.
A SEPARATE MANUAL HAS BEEN ISSUED FOR THE RECEIVER MARKED A-6.



I.F.
455 KC.

SOCKET VOLTAGES

VOLUME CONTROL SET AT MAXIMUM VOLUME POSITION
DIAL TUNED TO 540. KC.



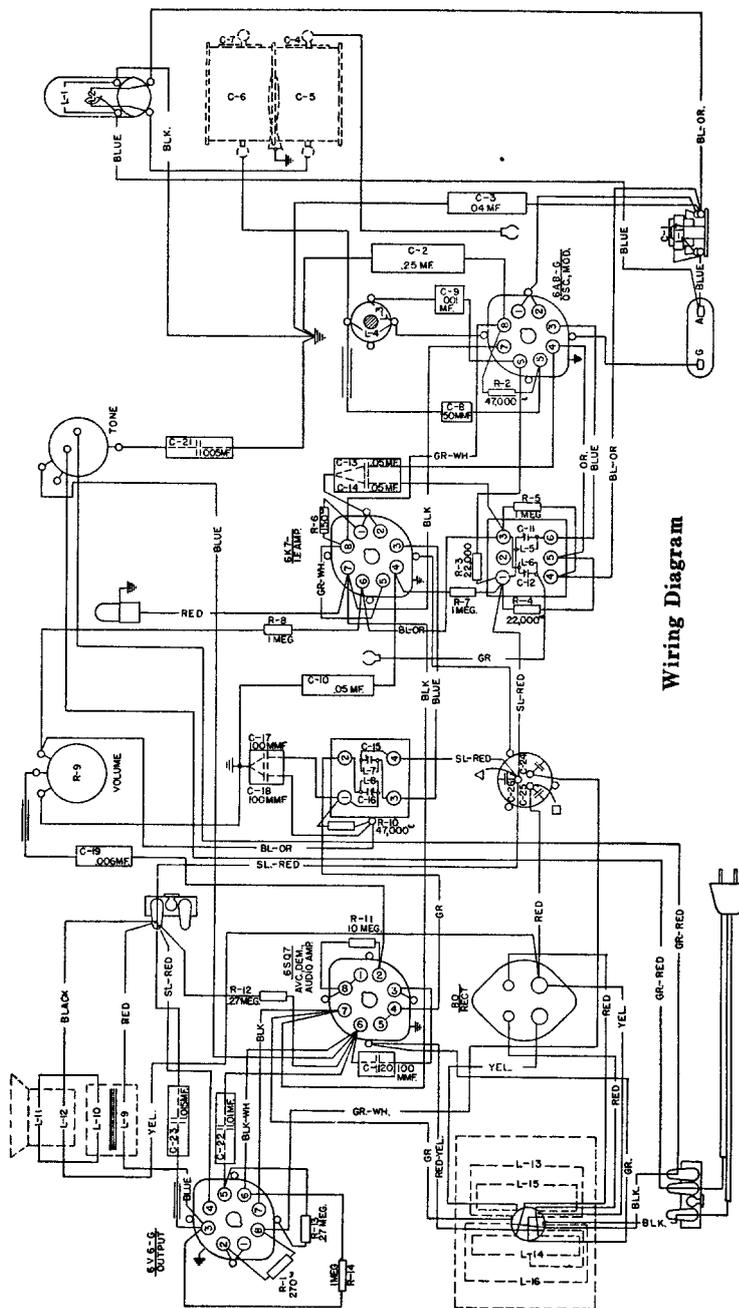
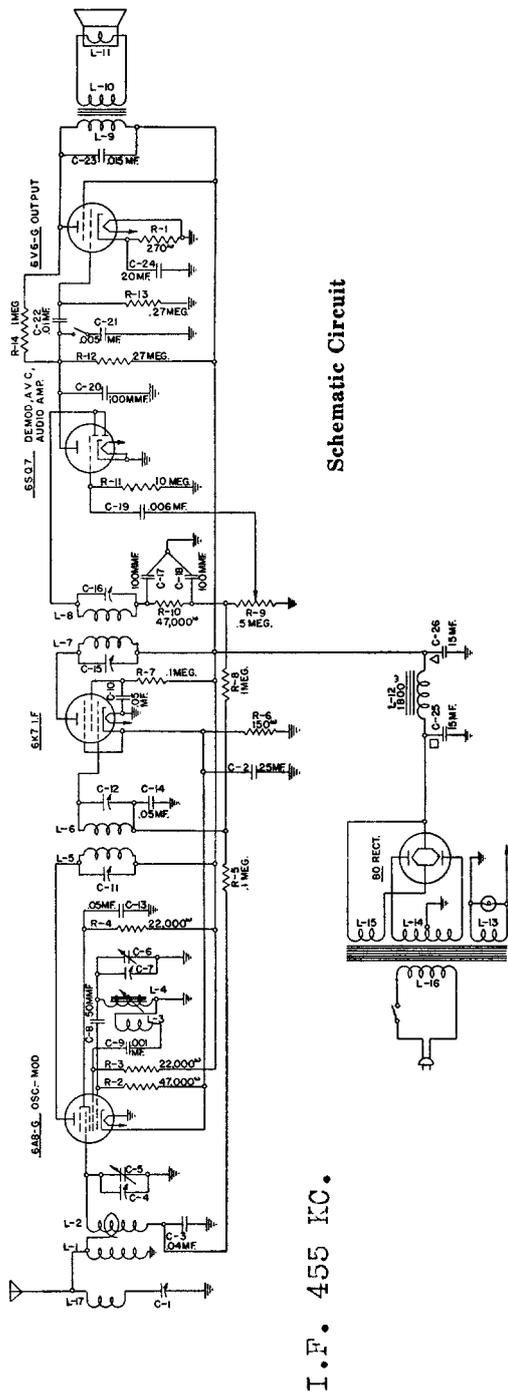
REAR OF CHASSIS

NOTE A: Due to the high resistance of resistors No. 3, No. 7, and No. 30A, only a very slight deflection will be obtained on a meter having a resistance of 1000 ohms per volt.

- | | | | | |
|---------|---|----|--|--|
| 17 | Transformer—1st I.F. | 17 | Condenser—mica, 110 mmf. | |
| 18 | Coil—oscillator | 18 | Resistor—insulated, 470,000 ohms, 1/4 watt | |
| 19 | Coil—R. F. Choke | 19 | Resistor—insulated, 220,000 ohms, 1/4 watt | |
| 20 | Resistor—65 ohms, 2 watts, Wire Wound | 20 | Resistor—insulated, 10 megohm, 1/4 watt | |
| 21 | Condenser—1 mfd., 600 volt | 21 | Resistor—insulated, 220,000 ohms, 1/4 watt | |
| 22 | Transformer—output for R-115053 speaker | 22 | Speaker—dynamic 3" | |
| 23 | Cone & Voice coil assembly for R-115053 speaker | 23 | Resistor—insulated, 10 megohm, 1/4 watt | |
| 24 | Condenser—.01 mfd., 600 volt | 24 | Resistor—insulated, 22,000 ohm, 1/4 watt | |
| 25-26 | Condenser—.004 mfd., 600 volt | 25 | Resistor—insulated, 100 ohm, 1/2 watt | |
| 27 | Condenser—.05 mfd., 600 volt | 26 | Resistor—insulated, 100 ohm, 1/4 watt | |
| 28-29 | Condenser—.02 mfd., 600 volt | 27 | 11-12-13 Condenser—mica, 260 mmfd. | |
| 30A-30B | Volume control (500,000 ohms—with switch) | 28 | 14A-14B Condenser—2 gang tuning | |
| 31 | Coil—antenna | 29 | 15 | Condenser—electrolytic, Dual 20 mfd., 150 volt |
| 32 | Transformer—2nd I.F. | 30 | 16 | Condenser—trimmer for 2nd I.F. |

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

ENGINEERING DATA STROMBERG-CARLSON NO. 400 RADIO RECEIVERS

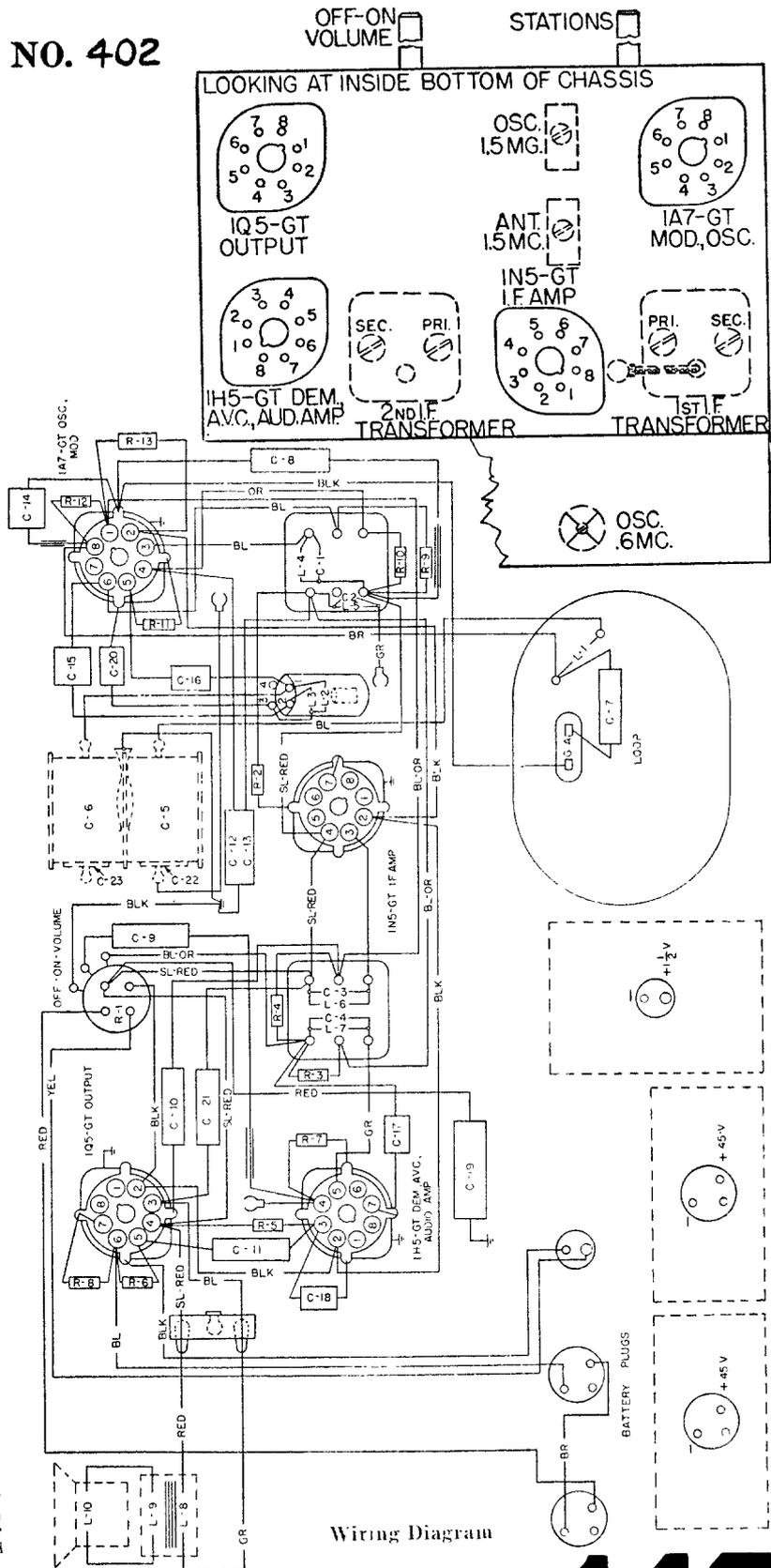
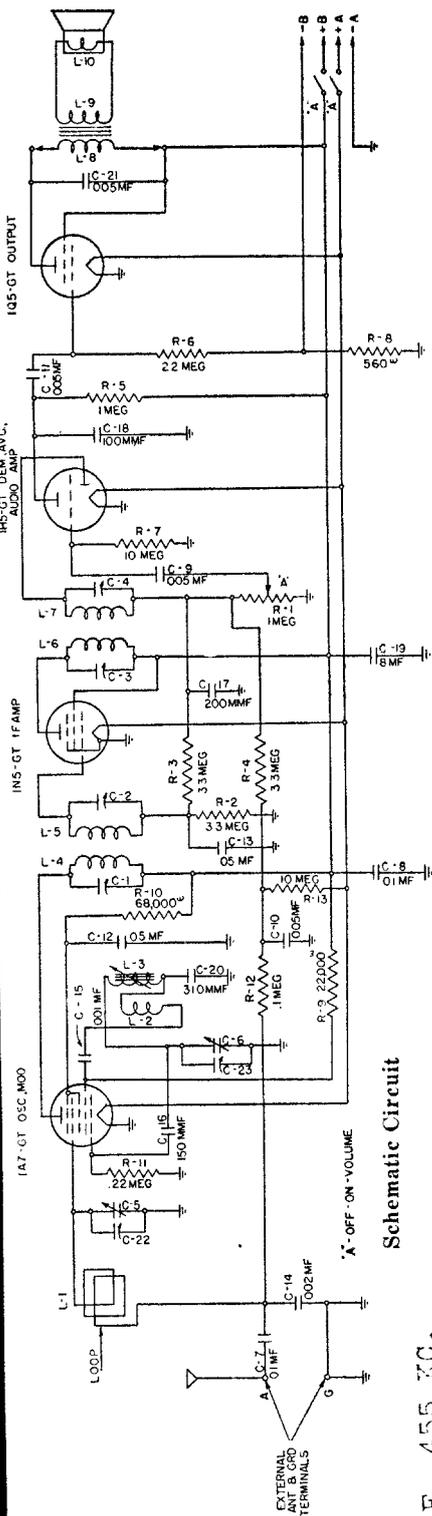


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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

STROMBERG-CARLSON NO. 402

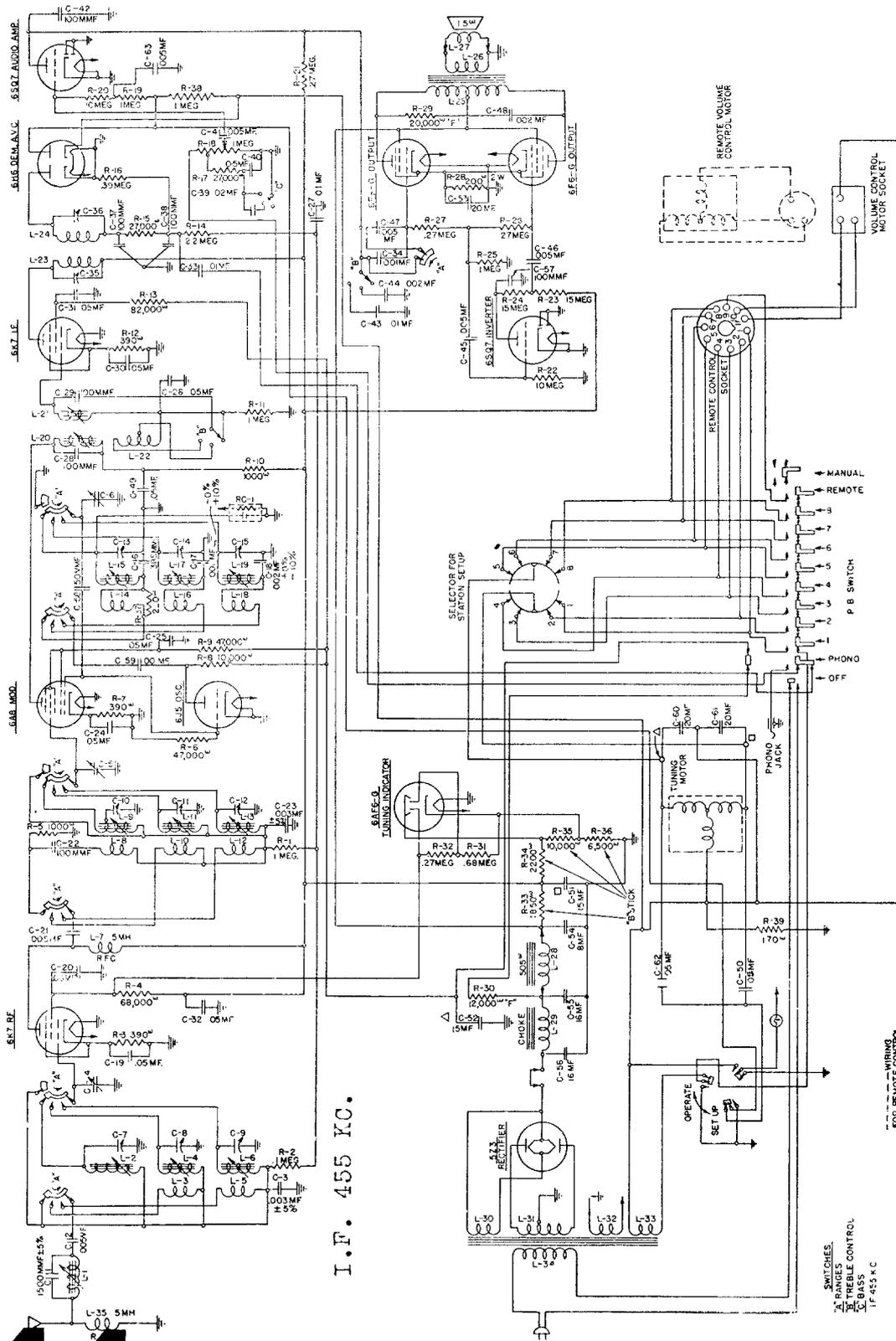


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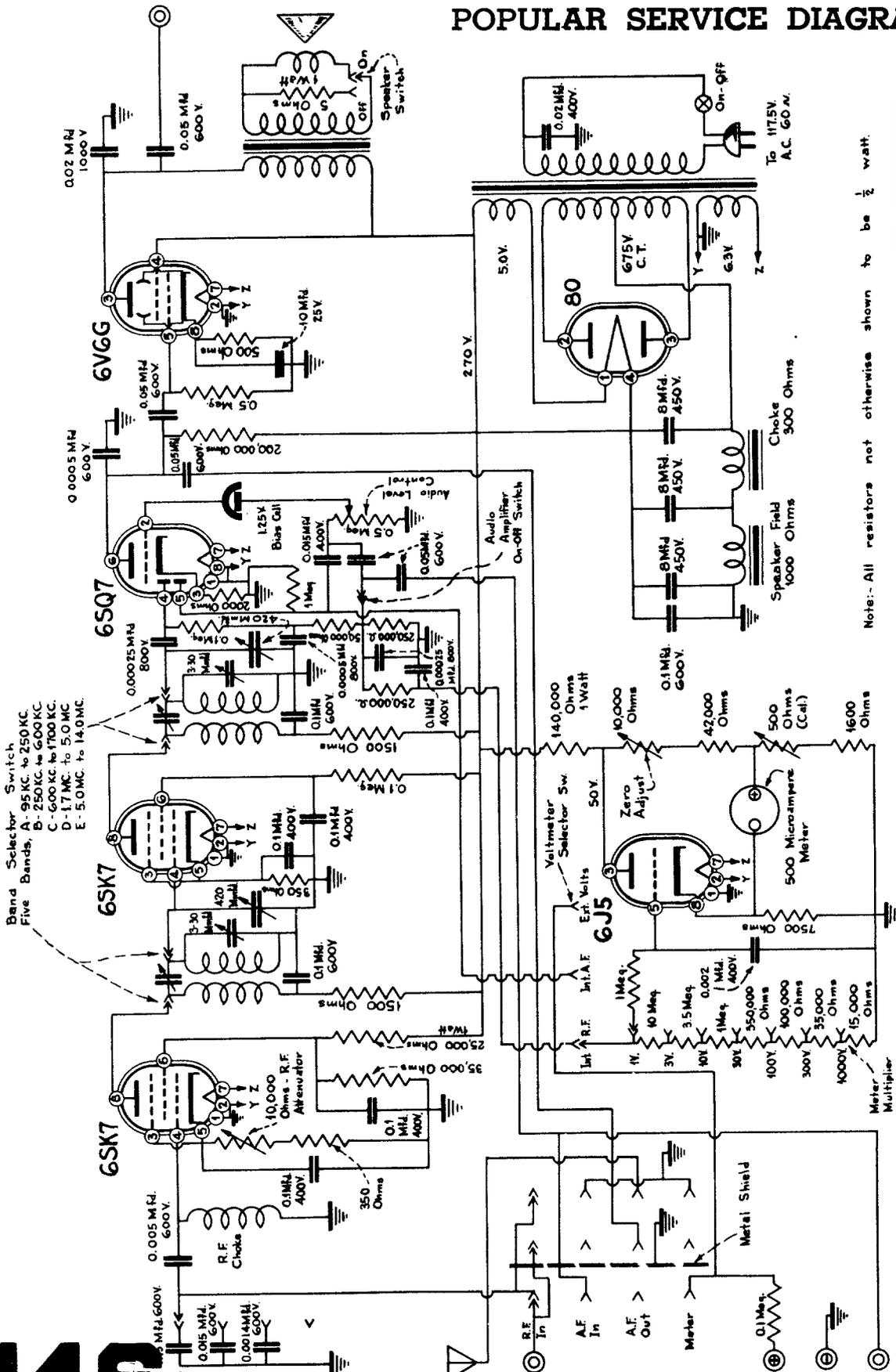
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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

STROMBERG-CARLSON NO. 450 RADIO RECEIVERS



Schematic Circuit



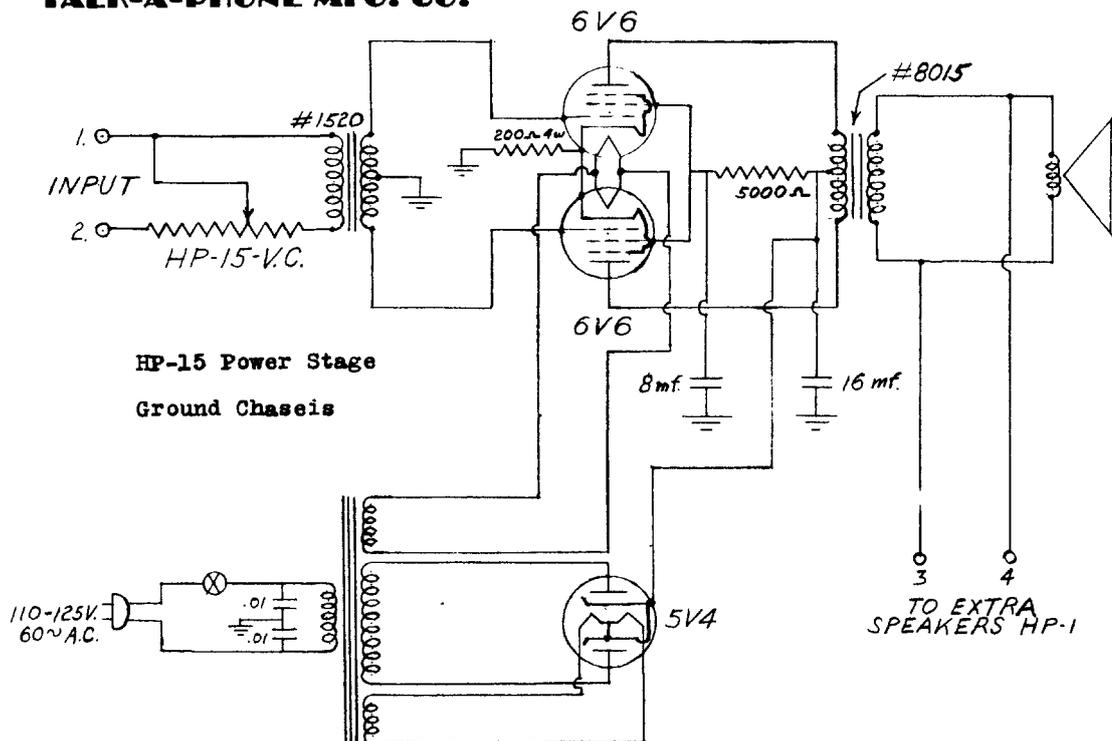
Band Selector Switch
 Five Bands, A-95KC. to 250KC.
 B-250KC. to 600KC.
 C-600KC. to 1700KC.
 D-1.7 MC. to 5.0 MC.
 E-5.0 MC. to 14.0 MC.

Note: All resistors not otherwise shown to be 1/2 watt.

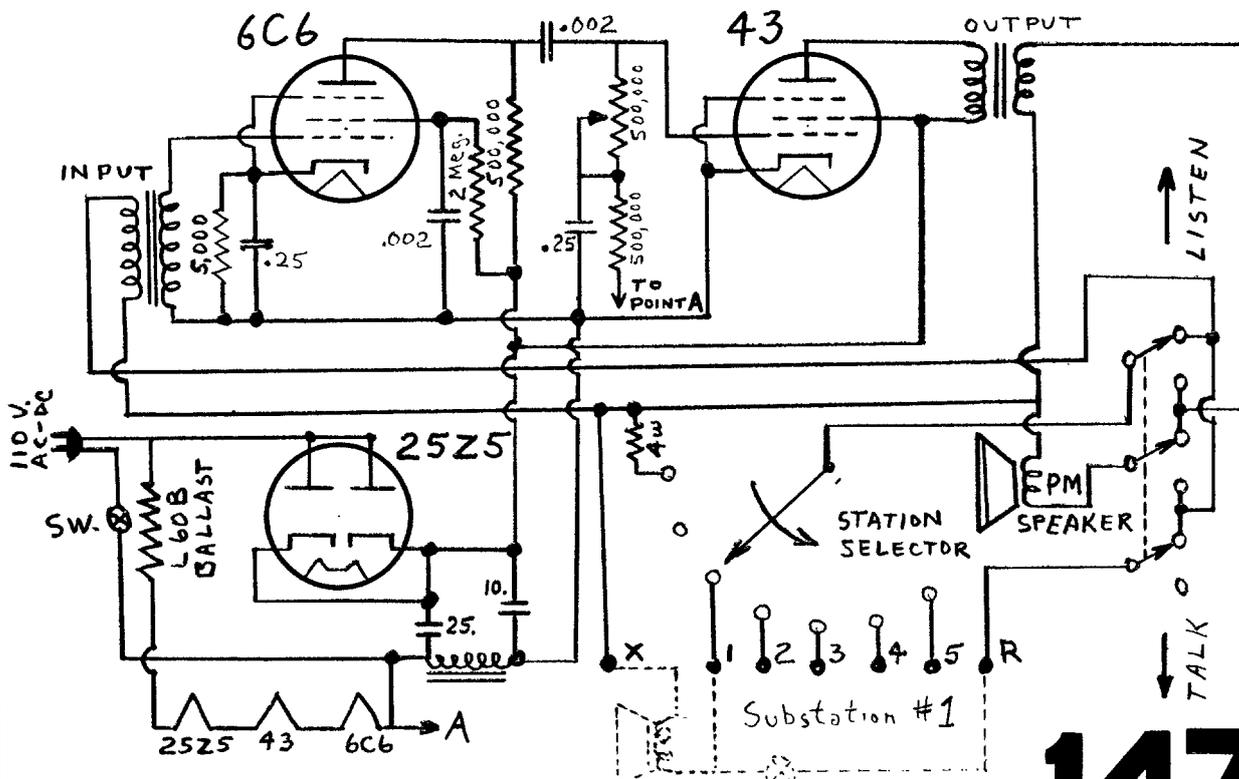
SUPREME LIFE-FACTORS SCHEMATIC GREENWOOD, MISS. U.S.A.		Schematic Wiring Diagram Model 562 - Audolyzer	DATE 7-28-39 2127-C
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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

TALK-A-PHONE MFG. CO.



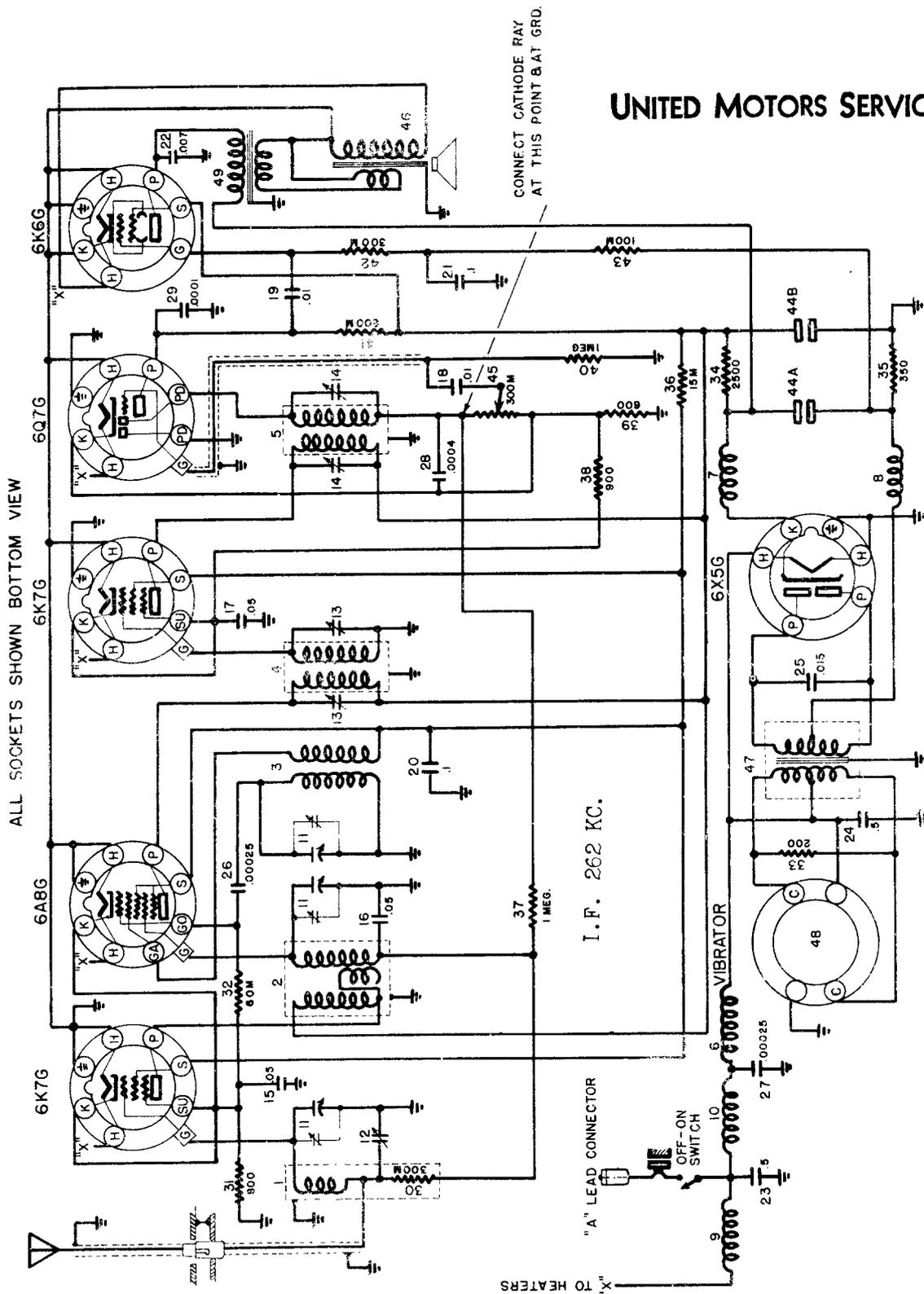
MASTER SYSTEM INTERCOMMUNICATOR



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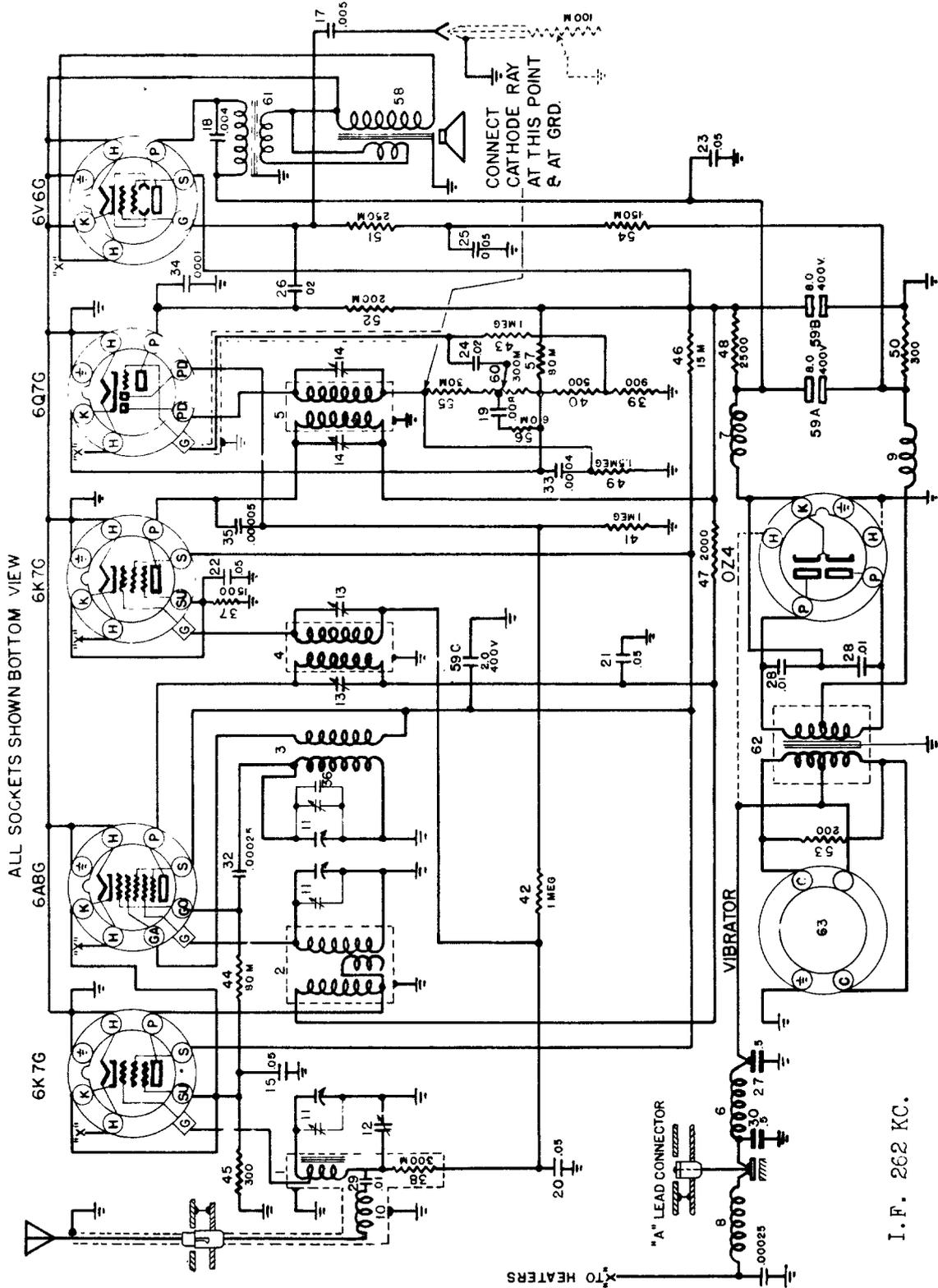
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UNITED MOTORS SERVICE



DELCO MODEL R-663 CIRCUIT DIAGRAM

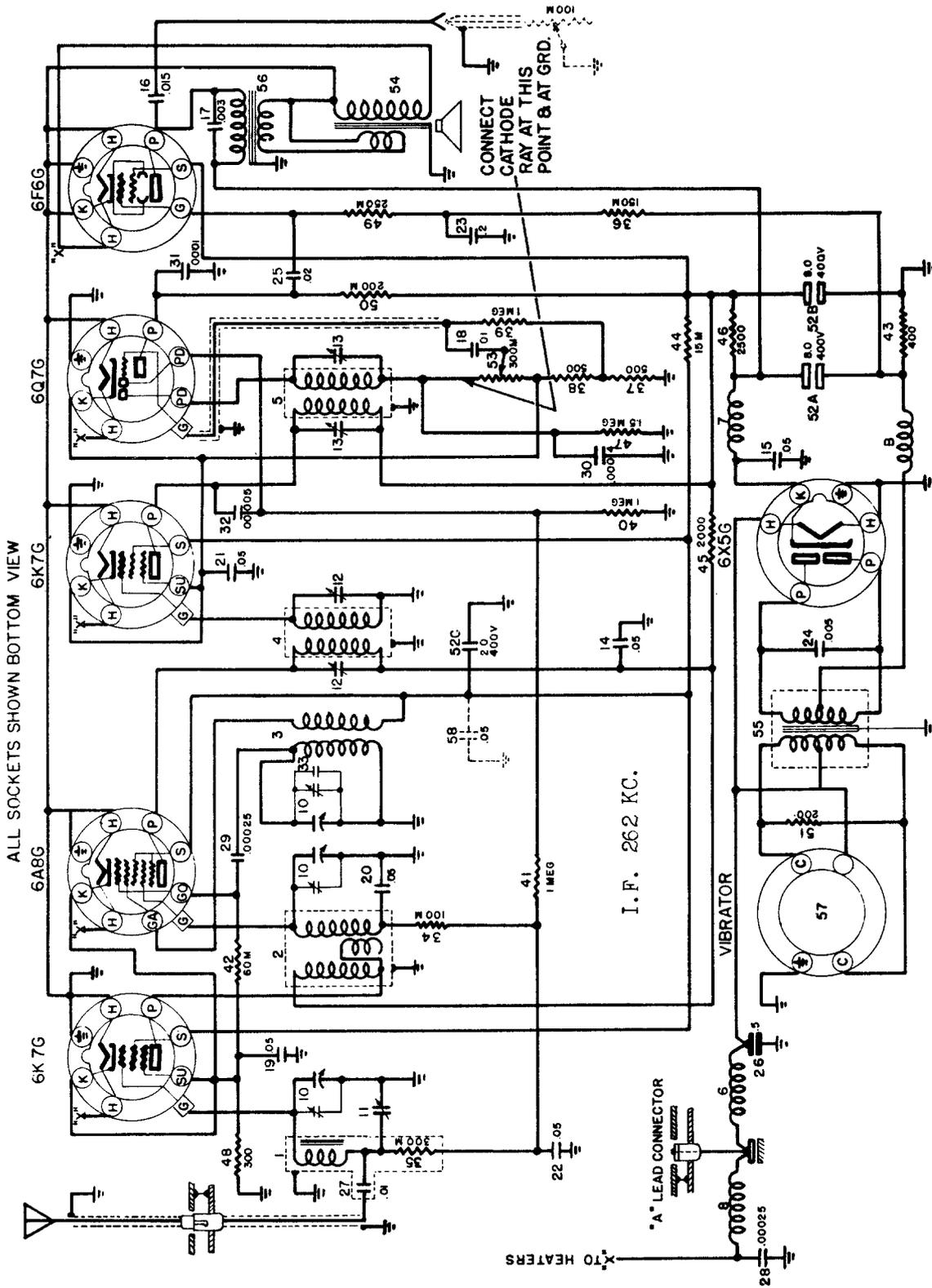
MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



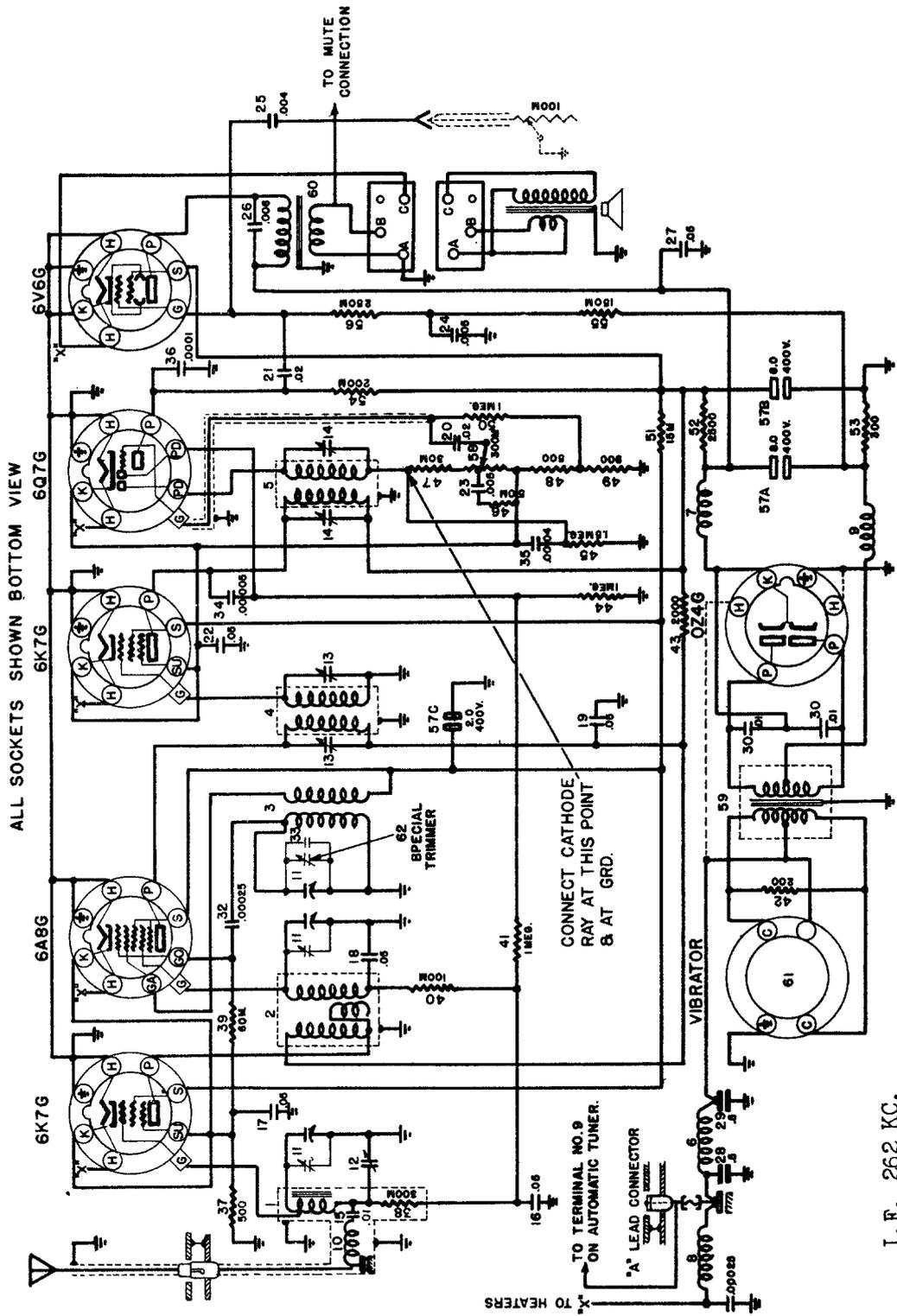
DELCO MODEL R-665 CIRCUIT DIAGRAM

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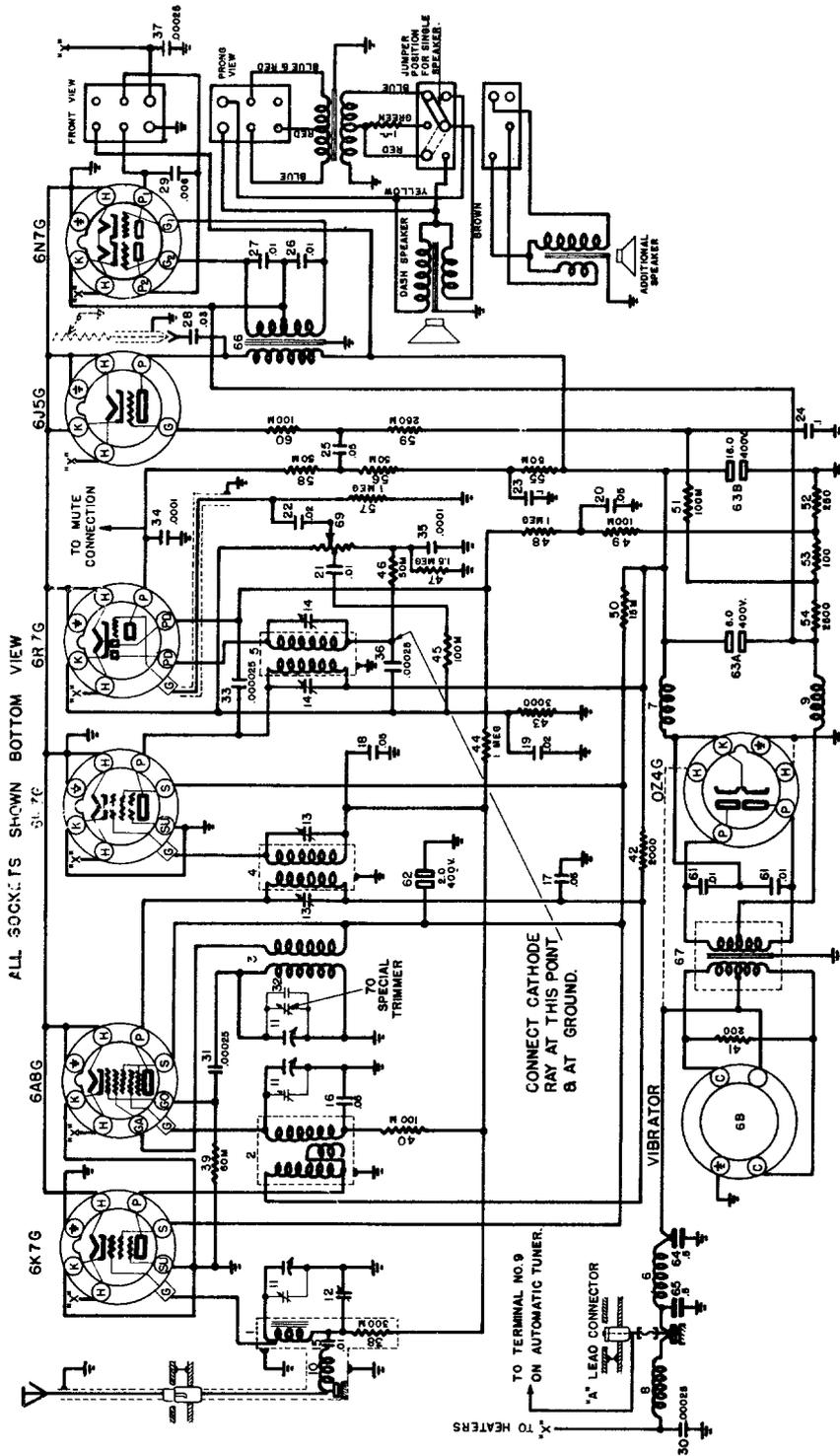


DELCO MODEL R-664 CIRCUIT DIAGRAM



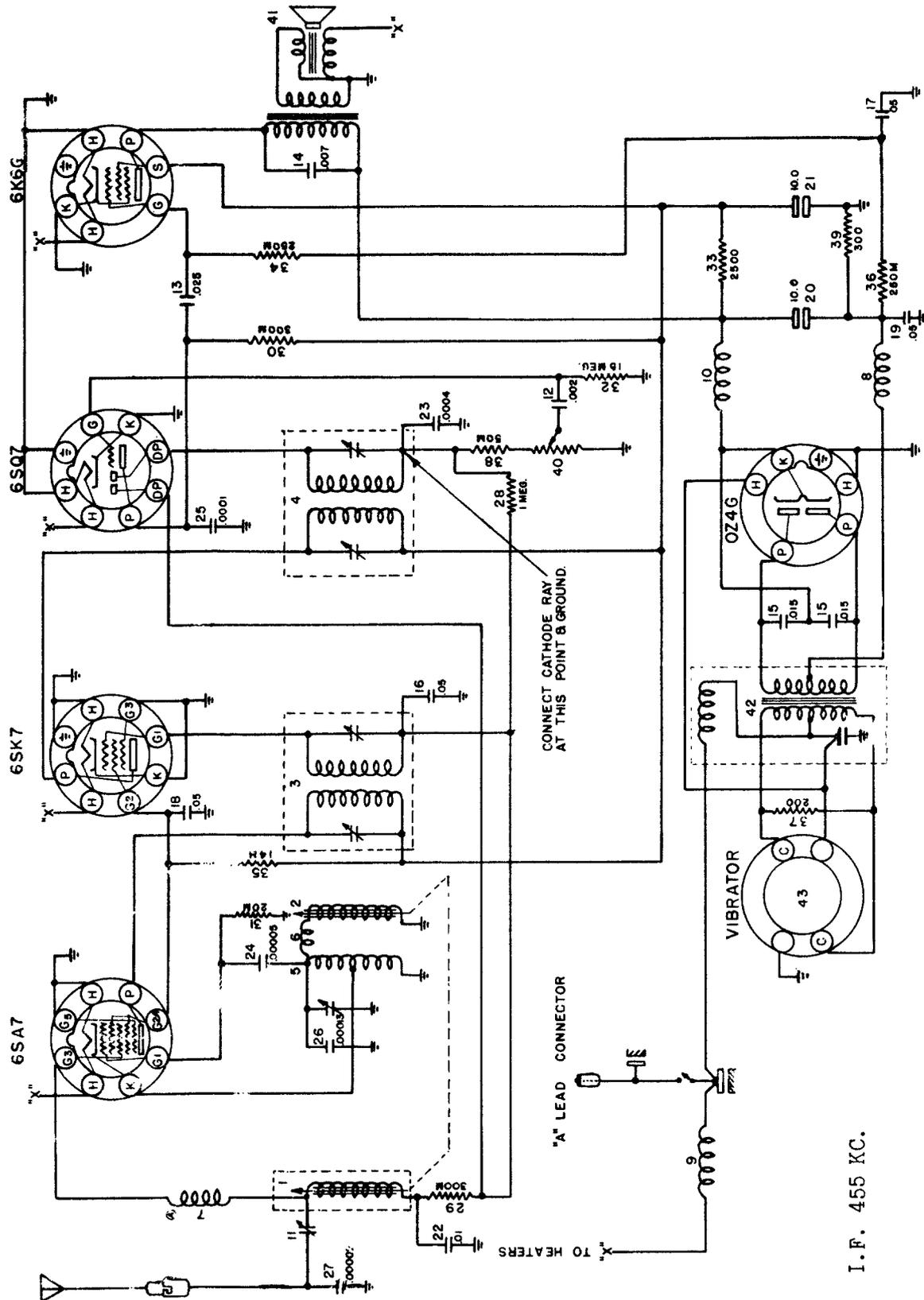
DELCO MODEL R-666-7 CIRCUIT DIAGRAM

I. F. 262 KC.



DELCO MODEL R-668-9 CIRCUIT DIAGRAM

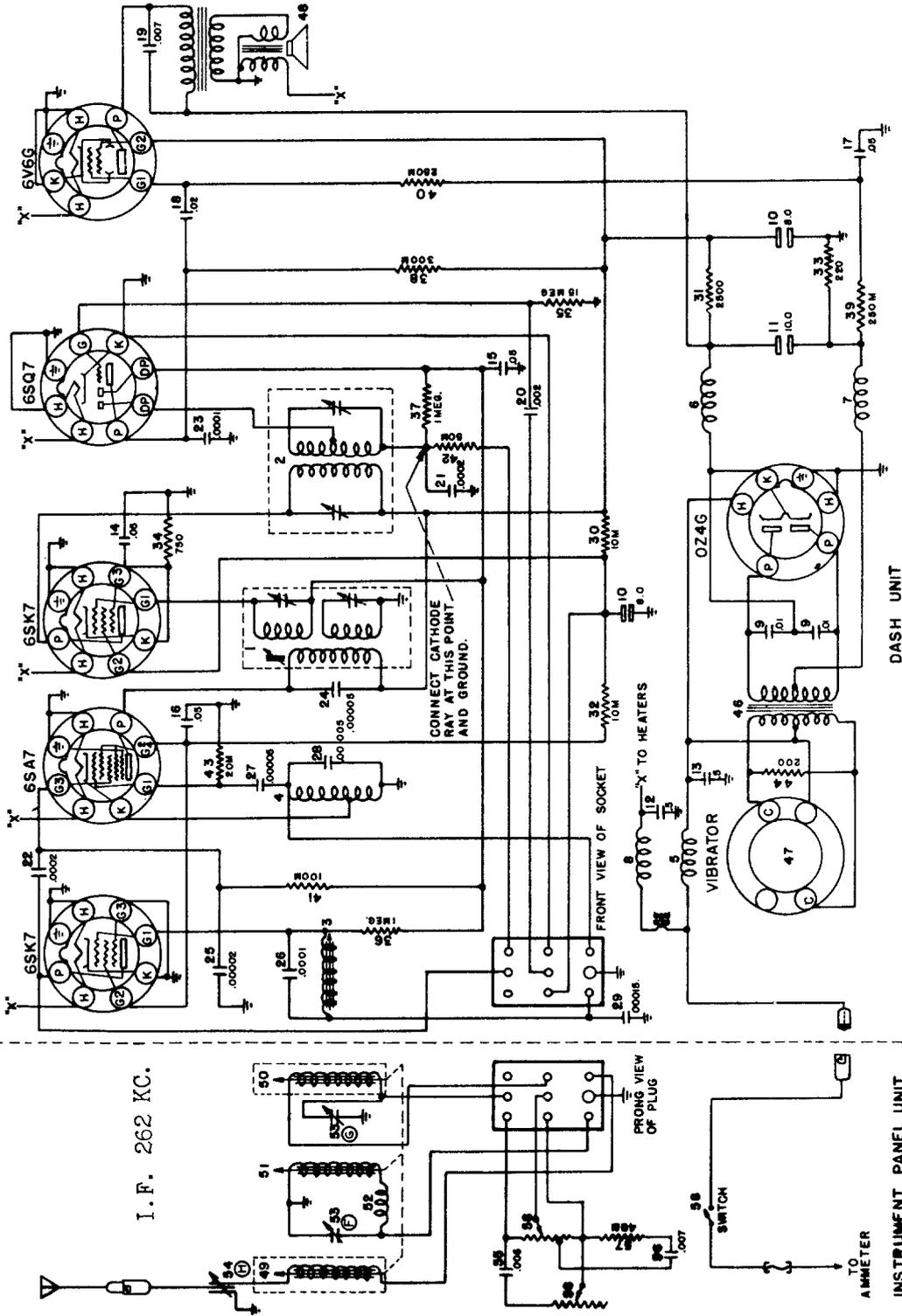
I. F. 262 KC.



DELCO MODEL R-675

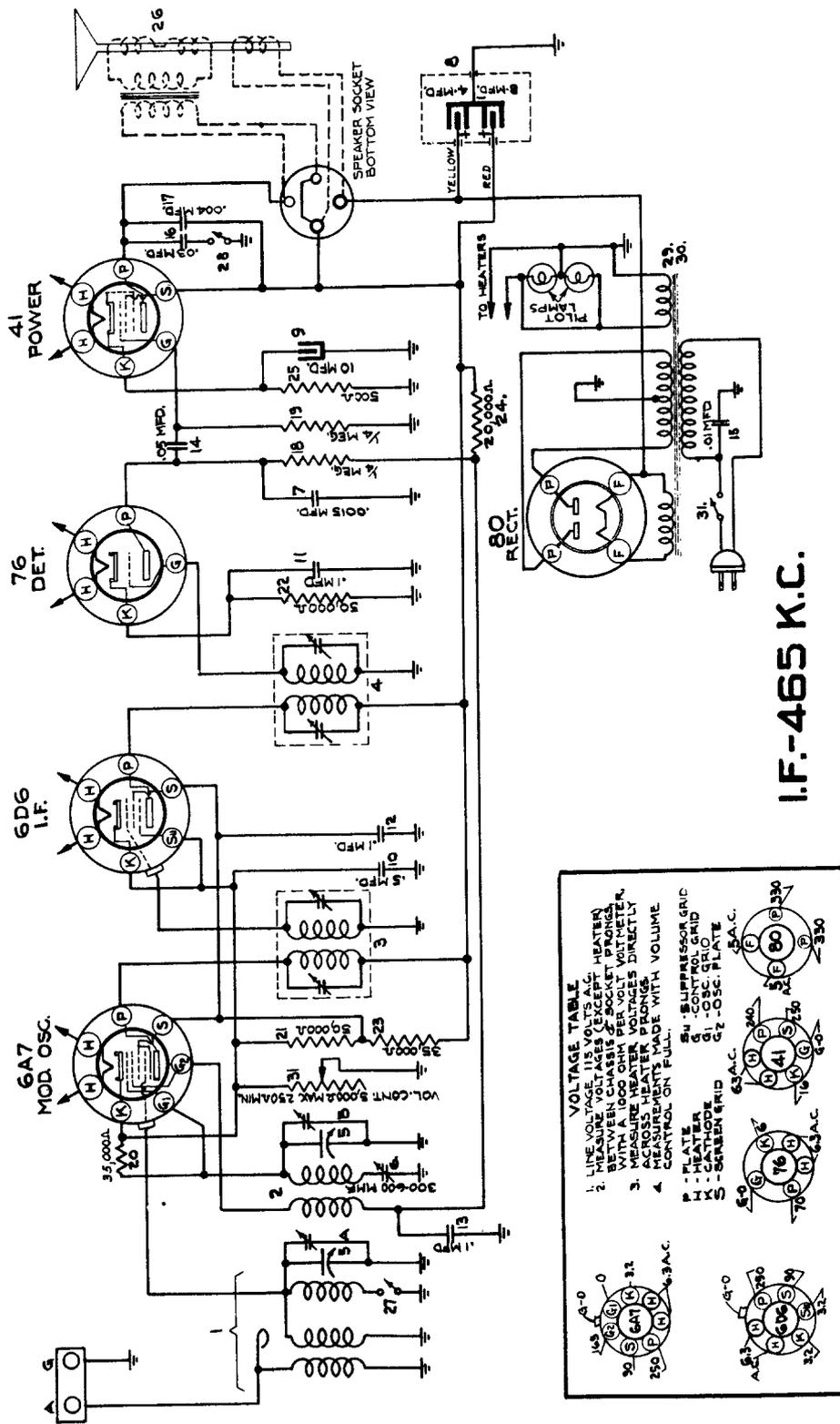
I.F. 455 KC.

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



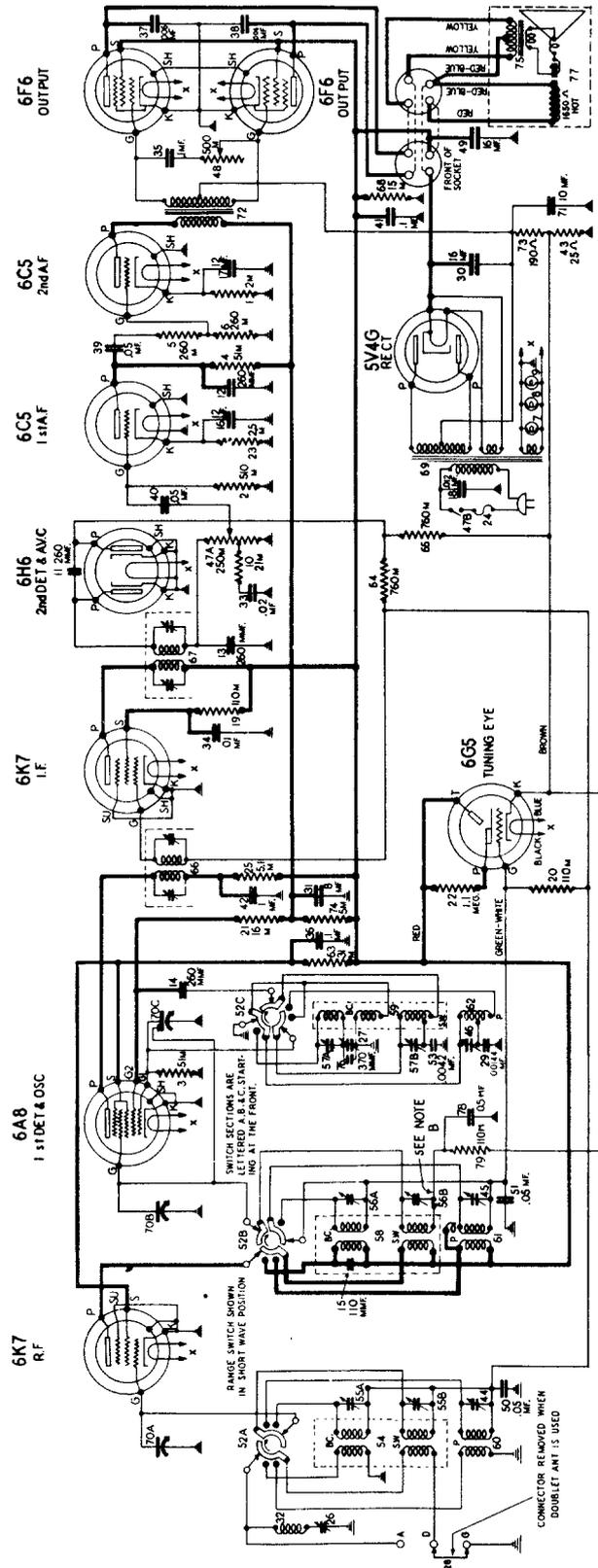
DELCO MODEL R-678 CIRCUIT DIAGRAM

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

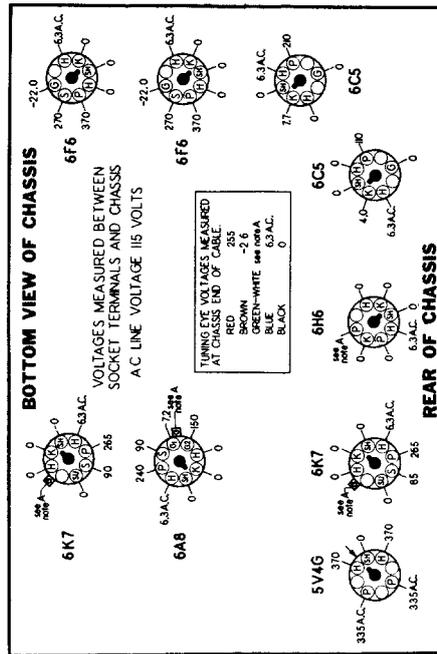


DELCO MODEL R-1115 CIRCUIT DIAGRAM
(Below Serial #100,000)

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



I.F. 456 KC.

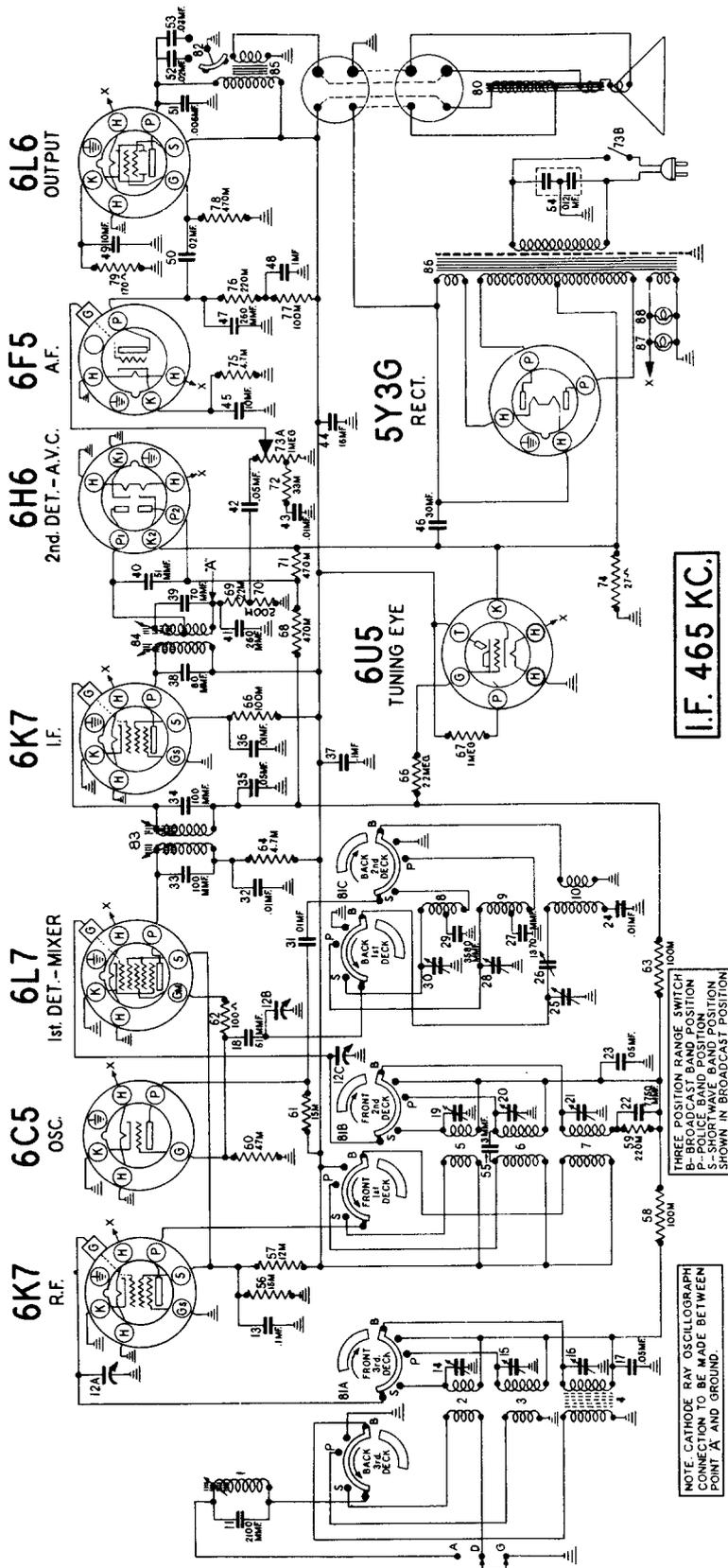


Note A: 2.6 volts measures across resistor #43.

Note B: On sets below serial #415,215, the lead indicated by "Note B" was bypassed directly to ground through the .05 mfd. condenser Illus. #51, and condenser #78 and resistor #79 were not used.

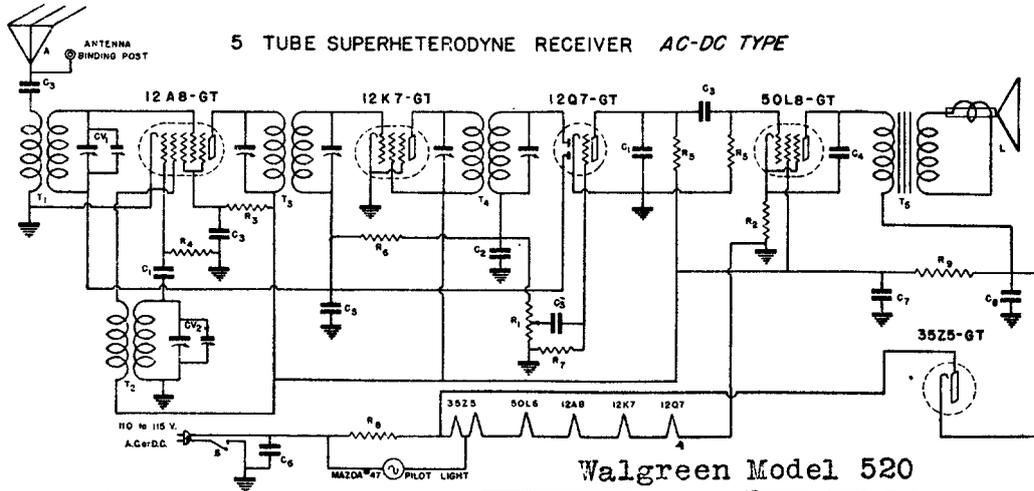
DELCO MODEL R-1118 CIRCUIT DIAGRAM

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

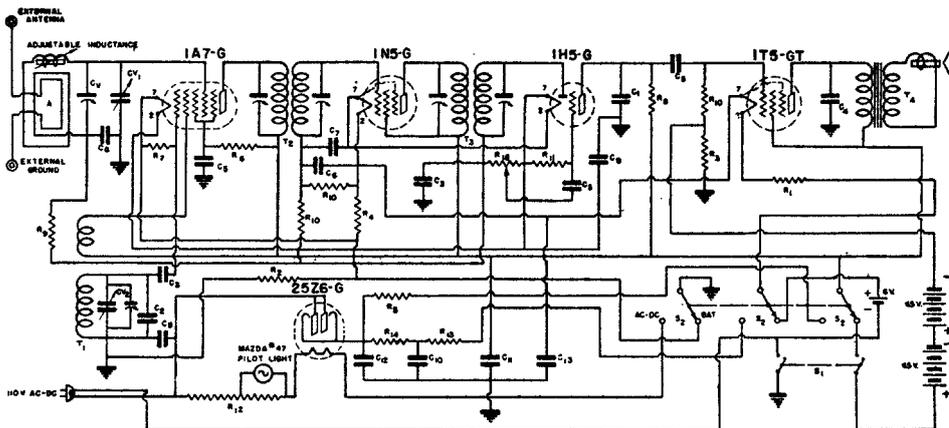
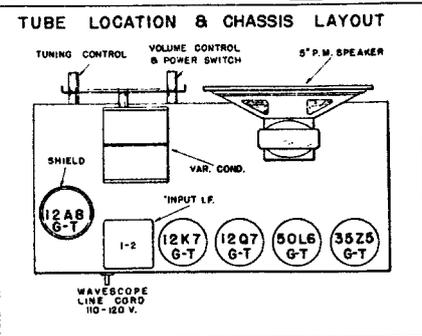


DELCO MODEL R-1131 CIRCUIT DIAGRAM

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



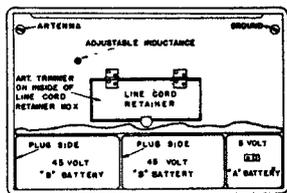
DIA. NO.	PART NO.	DESCRIPTION	DIA. NO.	PART NO.	DESCRIPTION
C1	---	.00025 MFD. 800 V. TUBULAR CONDENSER	R1	200P	500,000 OHM VOLUME CONTROL
C2	---	.0005 MFD. 200V. TUBULAR CONDENSER	R2	---	150 OHM 1/2 WATT CARBON RESISTOR-10%
C3	---	.01 MFD. 400 V. TUBULAR CONDENSER	R3	---	50,000 OHM 1/2 WATT CARBON RESISTOR
C4	---	.02 MFD. 400 V. TUBULAR CONDENSER	R4	---	50,000 OHM 1/2 WATT CARBON RESISTOR
C5	---	.05 MFD. 200 V. TUBULAR CONDENSER	R5	---	500,000 OHM 1/2 WATT CARBON RESISTOR
C6	---	1 MFD. 400 V. TUBULAR CONDENSER	R6	---	2 MEGOHM 1/2 WATT CARBON RESISTOR
C7	345	20 MFD. 150 WV. ELECTROLYTIC COND.	R7	---	6 MEGOHM 1/2 WATT CARBON RESISTOR
C8	346	40 MFD. 150 WV. ELECTROLYTIC COND.	R8	---	10 OHM 1/2 WATT CARBON RESISTOR
CV1	2	2 GANG VARIABLE CONDENSER	T1	A-5-A	ANTENNA COIL
R9	---	2500 OHM 1/2 W. CARBON RESISTOR	T2	D-5	OSCILLATOR COIL
A	---	WAVESCOPE AERIAL	T3	I-2	INPUT I.F. TRANSFORMER
L	838	P. M. SPEAKER	T4	D-2	OUTPUT I.F. TRANSFORMER
S	---	LINE SWITCH ON VOLUME CONTROL	T5	1M	SPEAKER TRANSFORMER



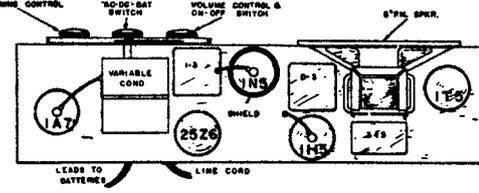
Walgreen Model 530

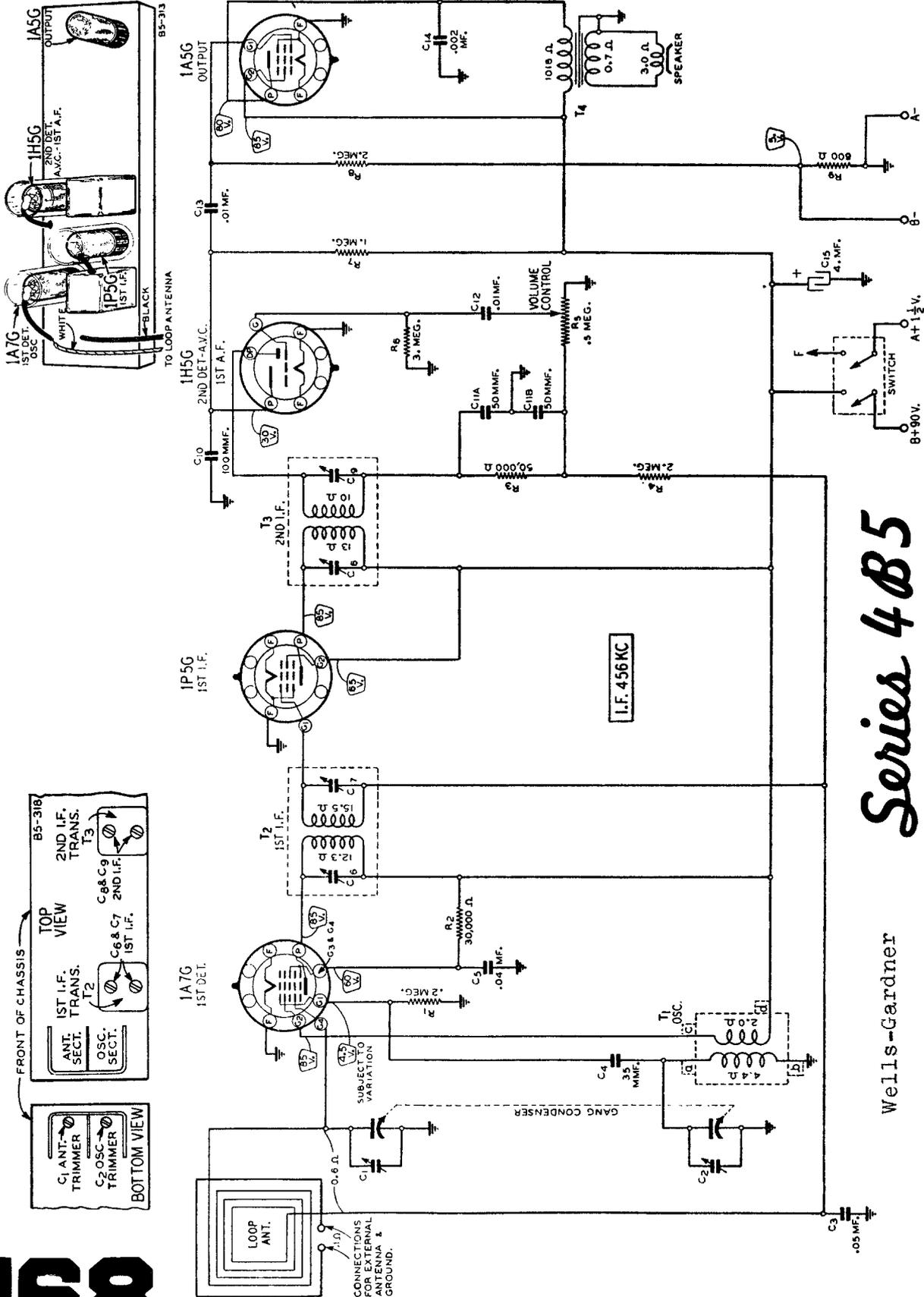
DIA. NO.	PART NO.	DESCRIPTION	DIA. NO.	PART NO.	DESCRIPTION	DIA. NO.	PART NO.	DESCRIPTION
C1	---	.001 MICA CONDENSER	CV1	510	5 TO 40 MMFD TRIMMER CONDENSER	R3	---	5000 OHM 1/2 W CARBON RESISTOR
C2	---	.0005 MICA COND. C-10%	CV1-2	8#-8	5 GANG VARIABLE CONDENSER	R4	---	50,000 OHM 1/2 W CARBON RESISTOR
C3	---	.00025 MFD. 800 V. TUBULAR COND.	Z	830A-3	LOOP ANTENNA	R7	---	100,000 OHM 1/2 W CARBON RESISTOR
C4	---	.002 MFD. 400 V. TUBULAR COND.	T1	D-5	OSCILLATOR COIL	R8	---	1 1/2 MEGOHM 1/2 W CARBON RESISTOR
C5	---	.01 MFD. 400 V. TUBULAR COND.	T2	I-2	INPUT I.F. TRANSFORMER	R9	---	2 MEGOHM 1/2 W CARBON RESISTOR
C6	---	.05 MFD. 200 V. TUBULAR COND.	T3	D-3	OUTPUT I.F. TRANSFORMER	R10	---	2 MEGOHM 1/2 W CARBON RESISTOR
C7	---	.1 MFD. 200 V. TUBULAR COND.	T4	838-R	P. M. SPEAKER	R11	---	2 MEGOHM 1/2 W CARBON RESISTOR
C8	---	1 MFD. 400 V. TUBULAR COND.	R1	---	10 OHM 1/2 W CARBON RESISTOR-10%	R12	181-B	RESISTANCE LINE COND.
C9	---	.25 MFD. 25 V. TUBULAR COND.	R2	---	30 OHM 1/2 W CARBON RESISTOR	R13	1H-180	400 OHM 1 WATT WIRE WOUND RESIST.
C10	345	10 MFD. 35 V. ELECTROLYTIC COND.	R3	---	100 OHM 1/2 W CARBON RESISTOR	R14	1H-180	2500 OHM 1/2 W WIRE WOUND RESIST.
C11	346	20 MFD. 150 V. ELECTROLYTIC COND.	R4	---	100 OHM 1/2 W CARBON RESISTOR	R15	3038-B	VOLUME CONTROL
C12	348	40 MFD. 150 V. ELECTROLYTIC COND.	S1	---	SWITCH ON VOLUME CONTROL			
C13	345	20 MFD. 150 V. ELECTROLYTIC COND.	S2	19-4-3	3 POLE TWO POSITION SWITCH			

BACK VIEW OF CABINET



CHASSIS LAYOUT & TUBE LOCATION



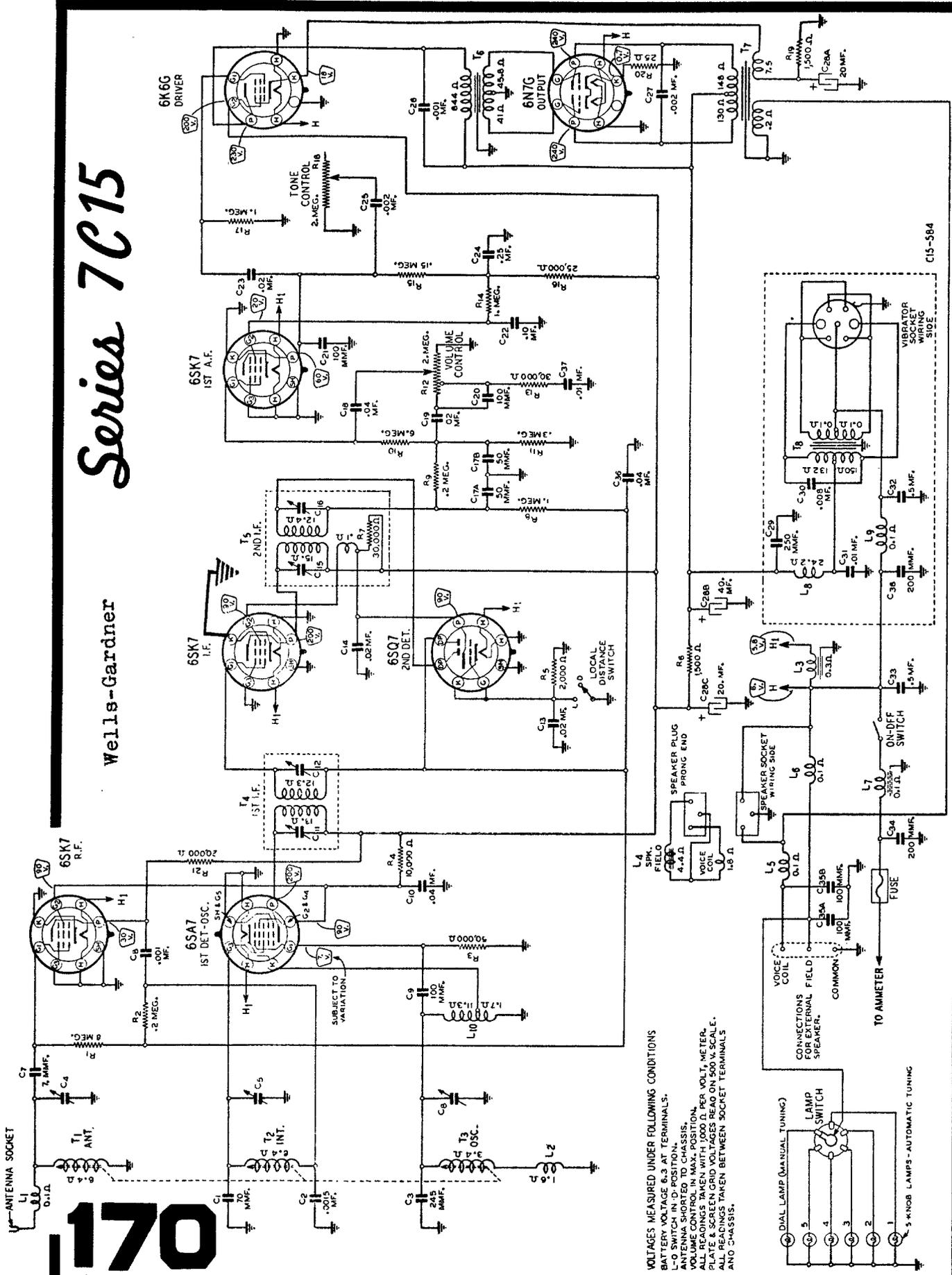


Series 4B5

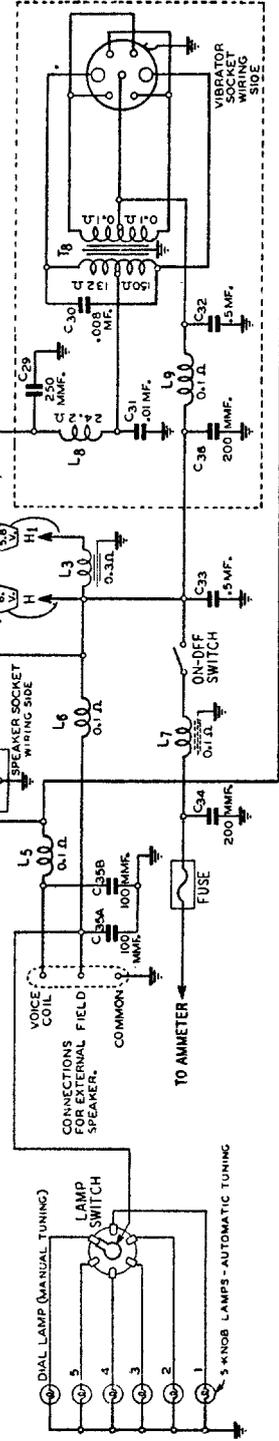
Wells-Gardner

Series 7C15

Wells-Gardner



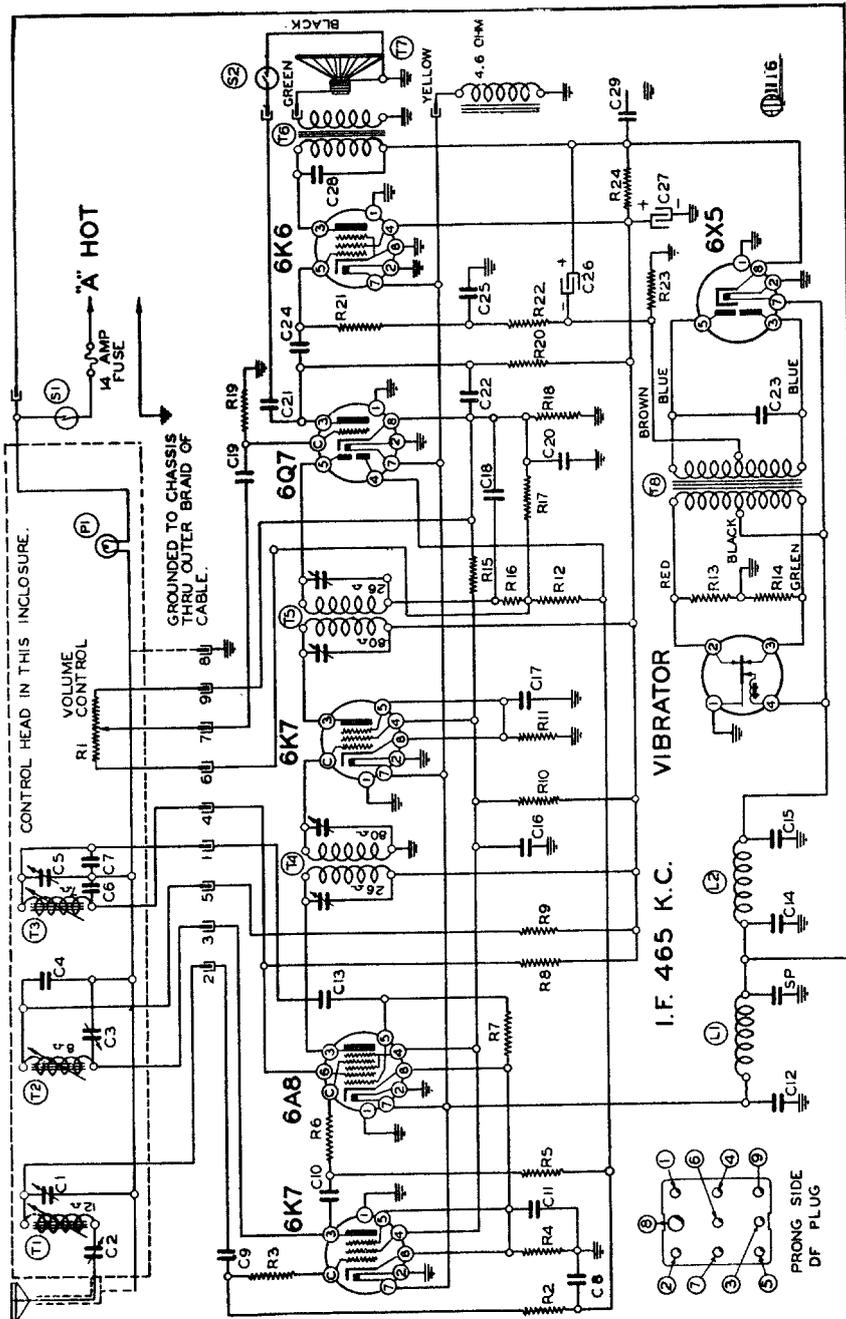
VOLTAGES MEASURED UNDER FOLLOWING CONDITIONS
 BATTERY VOLTAGE 6.3 AT TERMINALS.
 L-O SWITCH IN "O" POSITION.
 ANTENNA SHORTED TO CHASSIS.
 VOLUME CONTROL IN MAX. POSITION.
 ALL READINGS TAKEN WITH 1000 Ω PER VOLT, METER.
 ALL READINGS TAKEN BETWEEN SOCKET TERMINALS
 AND CHASSIS.



C15-584

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TRUETONE MODEL D976



WHEEL STATIC:

Wheel or brake noise is probably the most peculiar type of interference and is due to accumulated static charges. This type of interference is only noticeable while the car is in motion and could very easily be confused with ignition interference. Check for this with car running at a good speed, turn the ignition switch off and the clutch disengaged, apply the brakes. If the noise stops, the source of the static is in the wheels. To overcome the wheel static condition, use graphite grease in the wheel bearings or insert grounding springs in the hub caps. In the case of external brakes, it may be necessary to ground the brake bands to the frame of the car.

Circuit Diagram Reference No. Part No.

Reference No.	Part No.	Description
RESISTORS		
R1	101161	1.2 megohm volume control
R2	13019	1 megohm— $\frac{1}{2}$ w.
R3	13054	500 ohm— $\frac{1}{2}$ w.
R4	13079	400 ohm— $\frac{1}{2}$ w.
R5	13019	1 megohm— $\frac{1}{2}$ w.
R6	13054	500 ohm— $\frac{1}{2}$ w.
R7	13012	50M ohm— $\frac{1}{2}$ w.
R8	13012	50M ohm— $\frac{1}{2}$ w.
R9	13021	20M ohm— $\frac{1}{2}$ w.
R10	13065	30M ohm—1 watt
R11	130235	1500 ohm— $\frac{1}{2}$ w.
R12	13019	1 megohm— $\frac{1}{2}$ w.
R13	13056	100 ohm— $\frac{1}{2}$ w.
R14	13056	100 ohm— $\frac{1}{2}$ w.
R15	130208	40M ohm— $\frac{1}{2}$ w.
R16	13020	100M ohm— $\frac{1}{2}$ w.
R17	130118	600M ohm— $\frac{1}{2}$ w.
R18	130101	600 ohm— $\frac{1}{2}$ w.
R19	13019	1 megohm— $\frac{1}{2}$ w.
R20	13011	250M ohm— $\frac{1}{2}$ w.
R21	1305	300M ohm— $\frac{1}{2}$ w.
R22	13011	250 ohm— $\frac{1}{2}$ w.
R23	130274	360 ohm—1 watt
R24	130273	900 ohm—1 watt

CONDENSERS

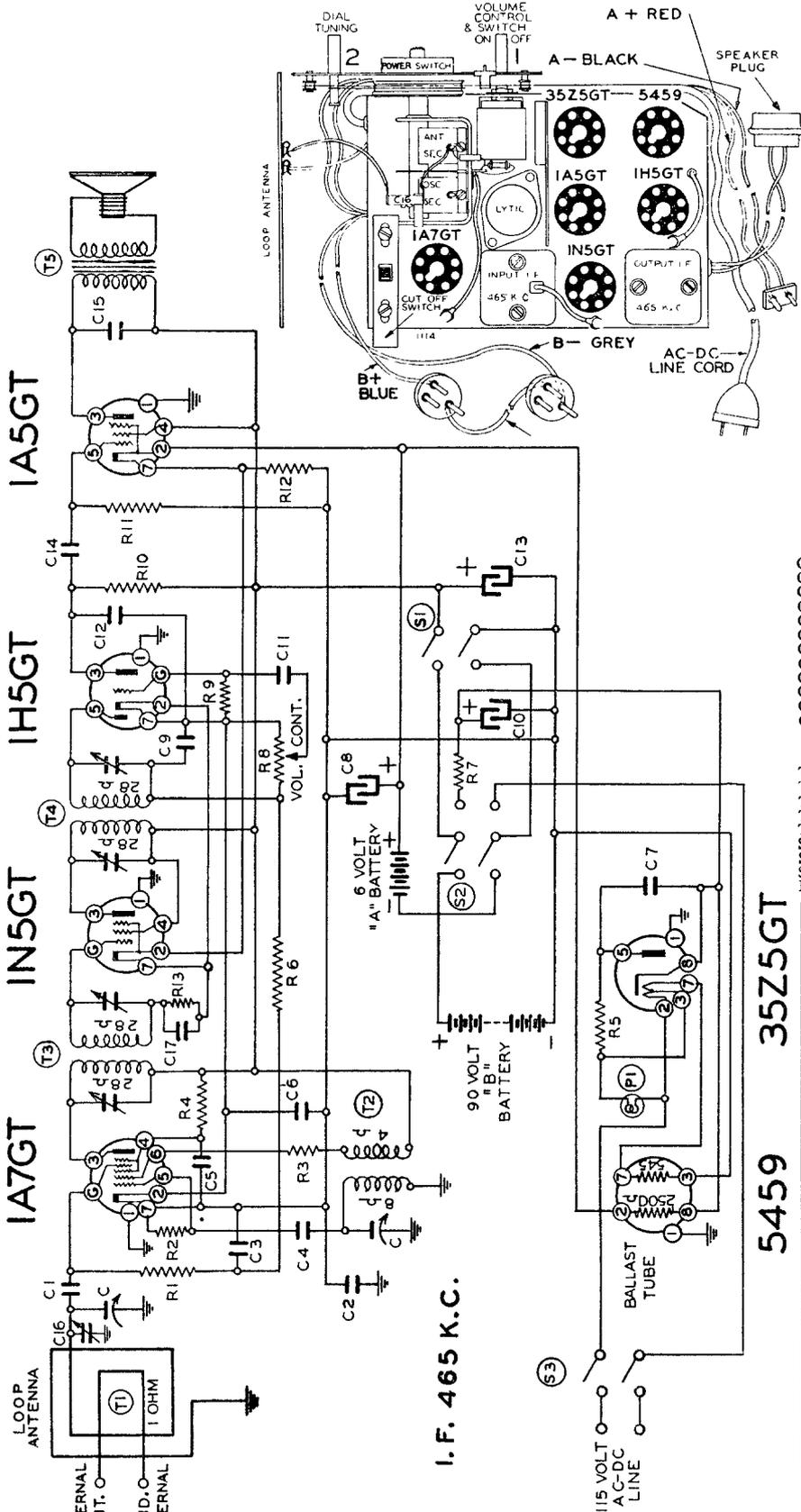
C1	12483	Antenna Shunt Trimmer
C2	12481	Antenna Series Trimmer
C3	12480	R. F. Shunt Trimmer
C4	100102	.15 x 400 v.
C5	12480	Oscillator Shunt Trimmer
C6	129137	.0005 Mica
C7	129136	.00017 Mica
C8	10022	.05 x 200 v.
C9	12939	.00005 Mica
C10	1292	.0005 Mica
C11	10022	.05 x 200 v.
C12	1296	.002 Mica
C13	12912	.00025 Mica
C14	10031	.5 x 120 v.
C15	10031	.5 x 120 v.
C16	11626	.25 x 400 v.
C17	1009	.05 x 200 v.
C18	1295	.0001 Mica
C19	10011	.01 x 400 v.
C20	10026	.02 x 400 v.
C21	10037	.003 x 600 v.
C22	1295	.0001 Mica
C23	100100	.008 x 1600 v.
C24	10011	.01 x 400 v.
C25	11626	.25 x 200 v.
C26	11981	16 mfd.
C27	11981B	16 mfd.
C28	10089	.008 x 800 v.
C29	10074	.1 x 400 v.

PARTS

T1	111118	P. B. Antenna Coil Assembly
T2	10949	P. B. R. F. Coil Assembly
T3	110109	P. B. Oscillator Coil Assembly
T4	108137	Input I. F.—465 kc.
T5	108138	Output I. F.—465 kc.
T6	10586	Output Transformer
T7	114154	6" Dynamic Speaker
T8	104159	Power Transformer
L1	10566	"A" Choke
L2	10519	"A" Choke
S1	101161	Switch on Volume Control
S2	12574	Tone Control Switch
P1	10797	6-8 v. Pilot Lite - T51
	12610	Vibrator

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

Western Auto
Truetone Model
D-1080



RESISTORS

R1	13038	2 megohm— $\frac{1}{4}$ w.
R2	130266	200M ohm— $\frac{1}{4}$ w.
R3	13018	4M ohm— $\frac{1}{4}$ w.
R4	130208	40M ohm— $\frac{1}{4}$ w.
R5	130215	25 ohm— $\frac{1}{4}$ w.
R6	130170	3 megohm— $\frac{1}{4}$ w.
R7	130129	2500 ohm— $\frac{1}{4}$ w.
R8	101210	1 megohm volume control
R9	130257	5 megohm— $\frac{1}{4}$ w.
R10	1303	500M ohm— $\frac{1}{4}$ w.
R11	13038	2 megohm— $\frac{1}{4}$ w.
R12	13792	1M ohm— $\frac{1}{4}$ w.
R13	130100	150M Ohm— $\frac{1}{4}$ w.

CONDENSERS

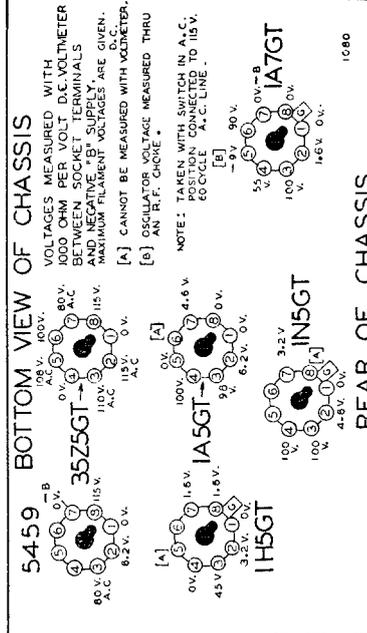
C	102125	2 gang variable condenser
C1	12912	.00025
C2	100110	.2 mfd. x 400 v.
C3	1009	.05 x 200 v.
C4	12912	.00025
C5	1009	.05 x 200 v.
C6	10020	.1 x 200 v.
C7	10011	.01 x 400 v.
C8	119104	Lytic 200 mfd. x 6 w. v.
C9	1295	.0001 mfd.
C10	119104	Lytic 40 mfd. x 150 w. v.
C11	10025	.002 x 600 v.
C12	1292	.0005 mfd.
C13	119104	Lytic 20 mfd. x 150 w. v.
C14	10011	.01 x 400 v.
C15	10025	.002 x 600 v.
C16	124116	Adjustable antenna trimmer
C17	10026	.02 x 400 v.

C8, C10 and C13 in same unit

PARTS

T1	111171	Loop Antenna
T2	110144	Oscillator Coil
T3	108171B	Input I. F. Coil—465 kc.
T4	108172	Output I. F. Coil—465 kc.
T5	114189	Speaker with output transf.
S1	101210	Switch on volume control
S2	125106	Power Switch
S3	125107	Cut-off switch in line cord
P1	107249	Pilot light T47

5459 35Z5GT

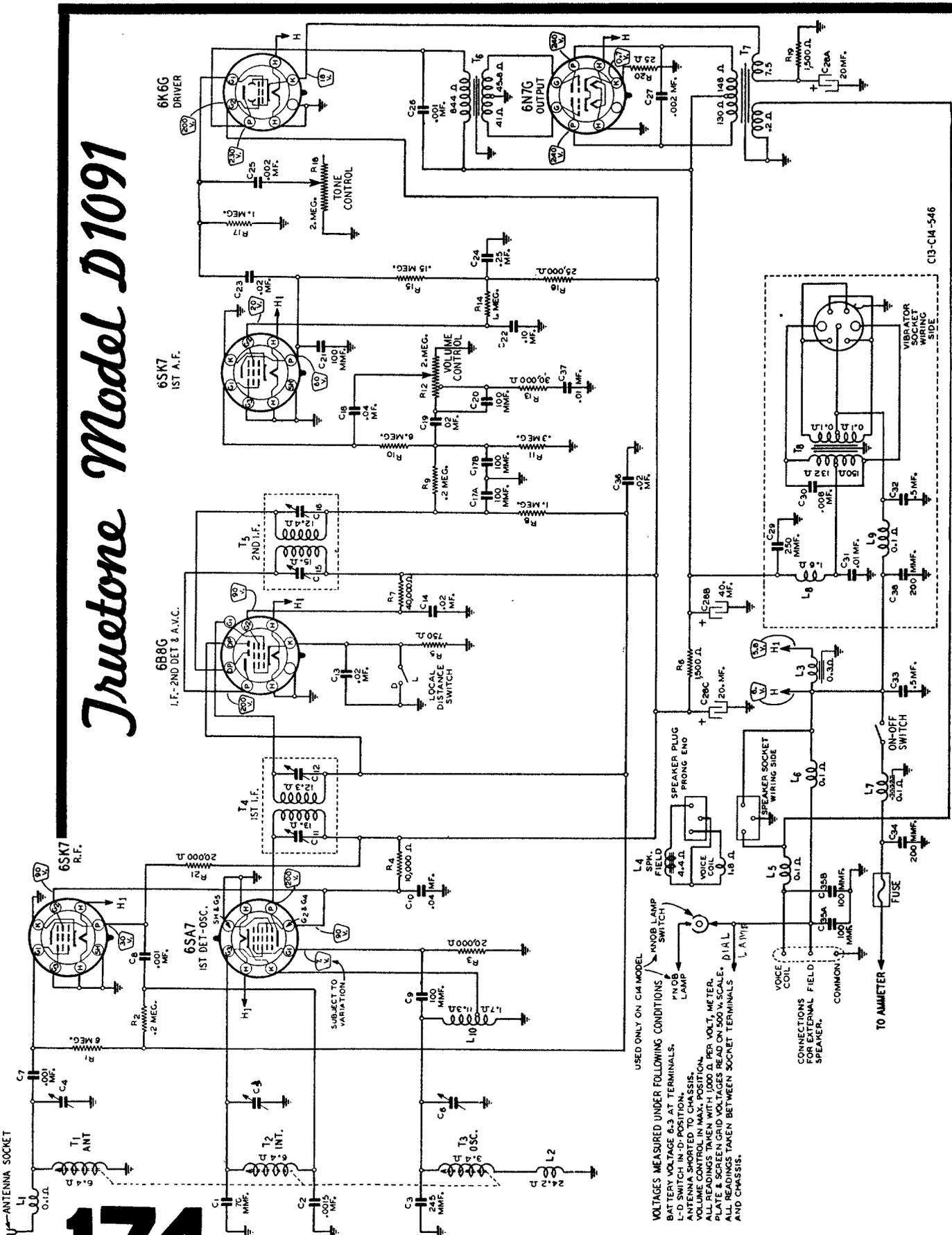


REAR OF CHASSIS

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

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Jruetone Model D1091



C13-C14-546

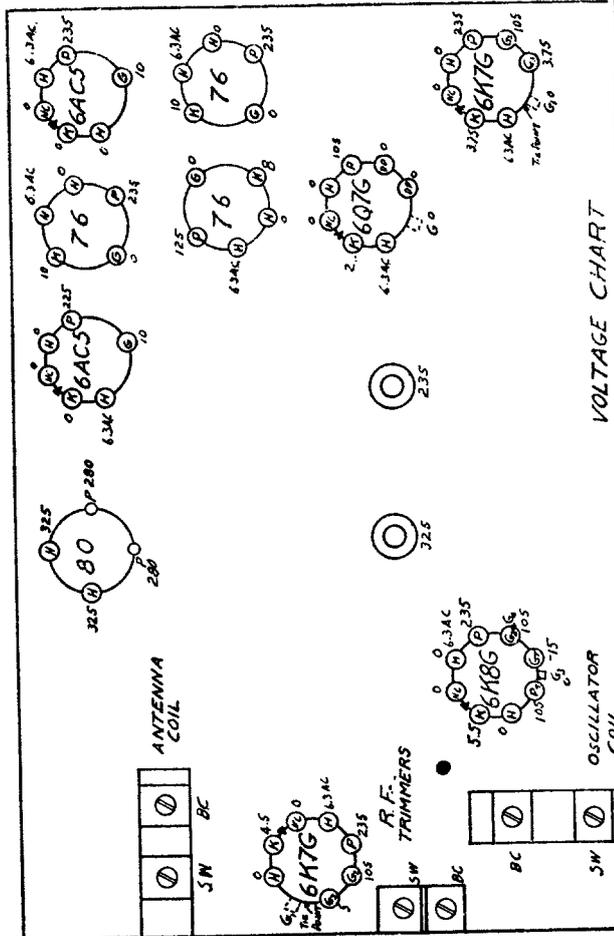
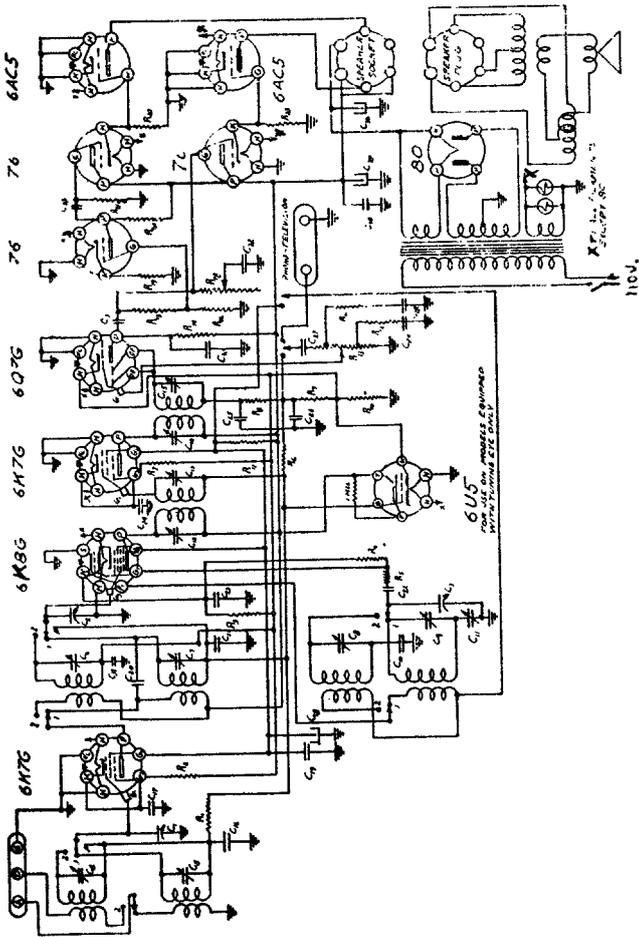
USED ONLY ON C41 MODEL

VOLTAGES MEASURED UNDER FOLLOWING CONDITIONS:
 BATTERY VOLTAGE 6.3 AT TERMINALS.
 L-D SWITCH IN 'D' POSITION.
 ANTENNA SHORTED TO CHASSIS.
 VOLUME CONTROL IN MAX. POSITION.
 SPEAKER FIELD COIL VOLTAGE MEASURED BETWEEN SPEAKER FIELD COIL TERMINALS.
 ALL READINGS TAKEN BETWEEN SOCKET TERMINALS AND CHASSIS.

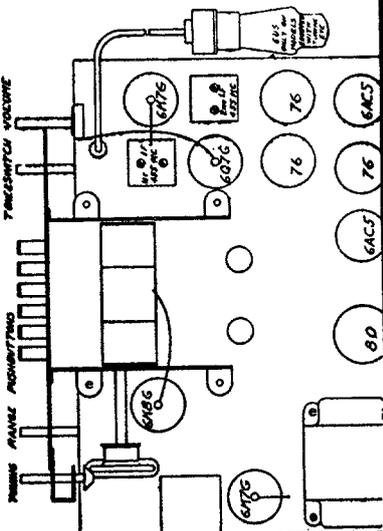
CONNECTIONS FOR EXTERNAL FIELD SPEAKERS:
 VOICE COIL
 COMMON
 TO AMMETER

TRUETONE MODEL D924

SERIES A



- R4,20 Resistor—1/3 w., 50M + or — 10%
- R2,3 Resistor—1/3 w., 300r + or — 10%
- R19 Resistor—1/3 w., 5M + or — 10%
- R7 Resistor—1/3 w., 400r + or — 10%
- R1 Resistor—1/3 w., 10M + or — 10%
- R17 Resistor—3 w., 10 M + or — 10%
- R16 Resistor—1/3 w., 100M + or — 10%
- R11 Resistor—1/3 w., 70r + or — 10%
- R14 Resistor—1/3 w., 200M + or — 20%
- R11 Resistor—1/3 w., 300M + or — 20%
- R15 Resistor—1/3 w., 400M + or — 10%
- R12,22,23 Resistor—1/3 w., 25M + or — 10%
- R6 Resistor—1/3 w., 1 meg. + or — 20%
- R21 Resistor—1/3 w., 500M + or — 10%
- R5 Resistor—1/3 w., 100r + or — 20%
- R18 Control—Tone and Switch.....
- R13 Control—Volume
- C32 Condenser—Paper, .01-.660v
- C1,2,3 Condenser—Var. (Mech. Tuner).....
- C23,24 Condenser—Paper, .1-200v
- C30 Condenser—Mica .0001
- C19,34 Condenser—Paper, .1-400 v.
- C16,17,21 Condenser—Paper, .05-200 v.
- C4,5,6,7,8,9 Condenser—Trimmer
- C10 Condenser—Padder, 3300 mmf.
- C11 Condenser—Padder, 450 mmf., adjustable
- C18 Condenser—Elec., 20 mfd., 150v
- C29 Condenser—Paper, .03-200v
- C27,28 Condenser—Paper, .002-600v
- C36 Condenser—Elec. Wet, 16 mfd.
- C35 Condenser—Elec. Wet, regulator.....
- 1 Cord A. C.
- C22 Condenser—Mica, .00005

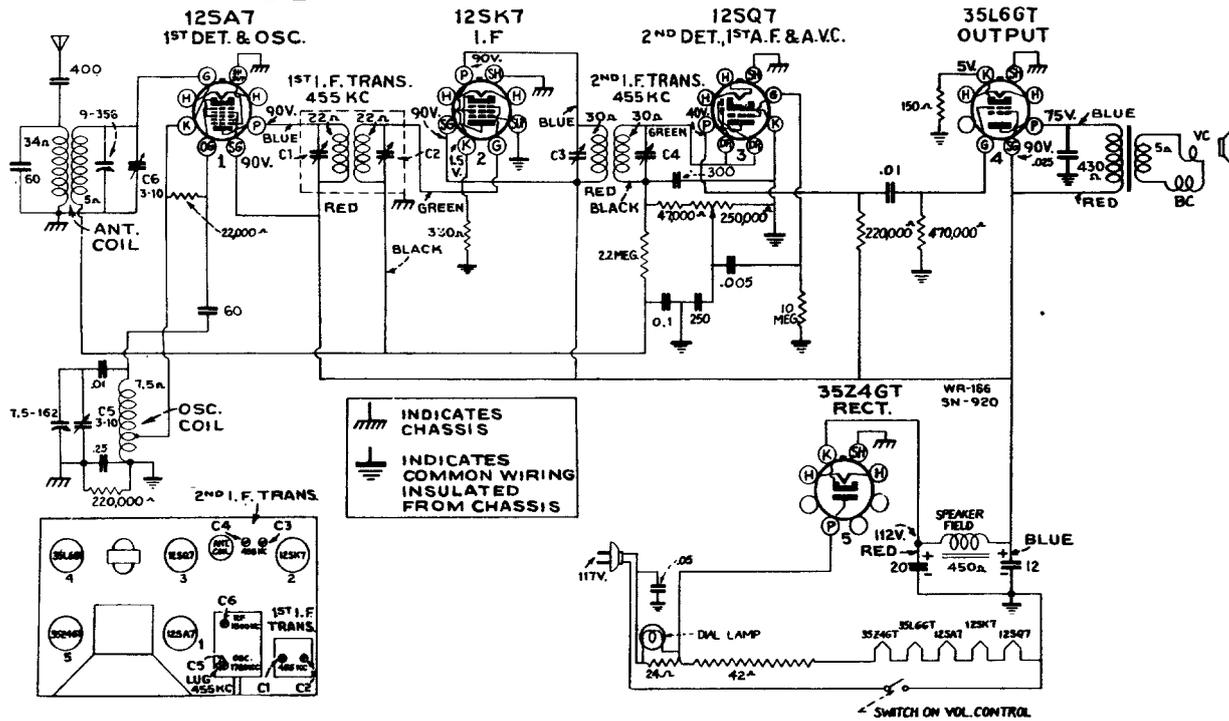


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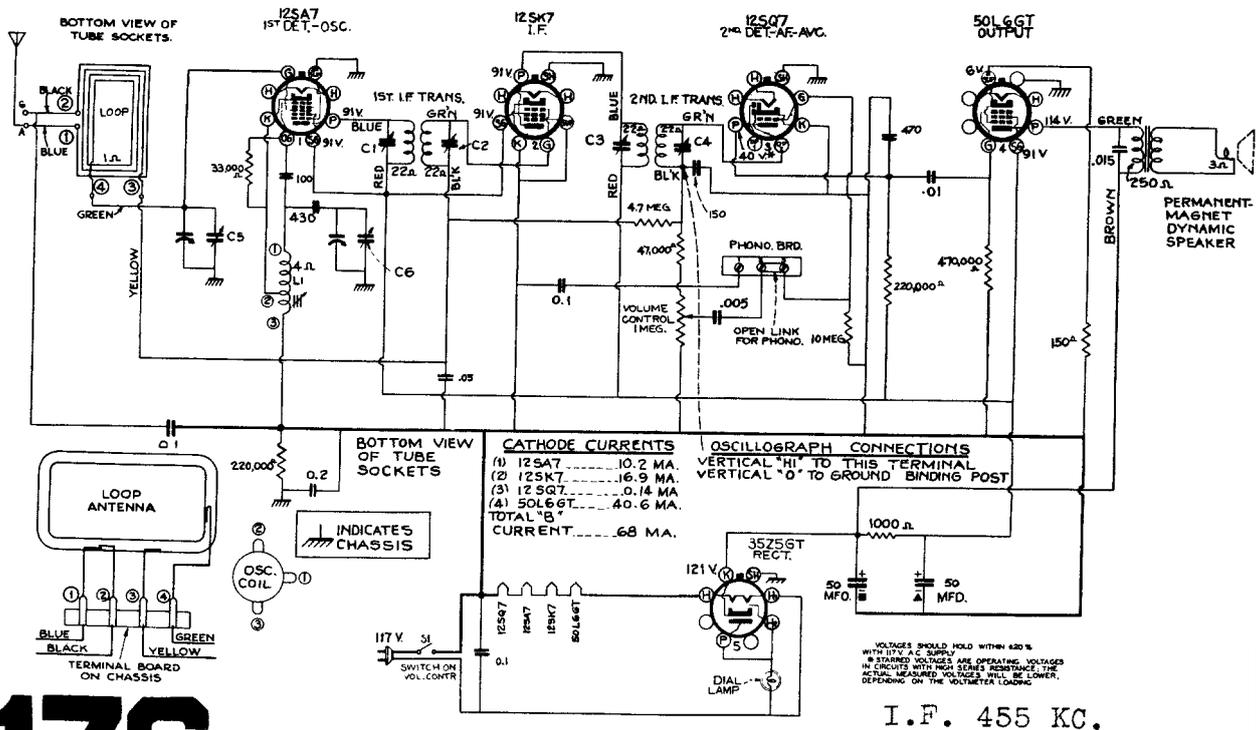
175

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

Westinghouse Model WR-166

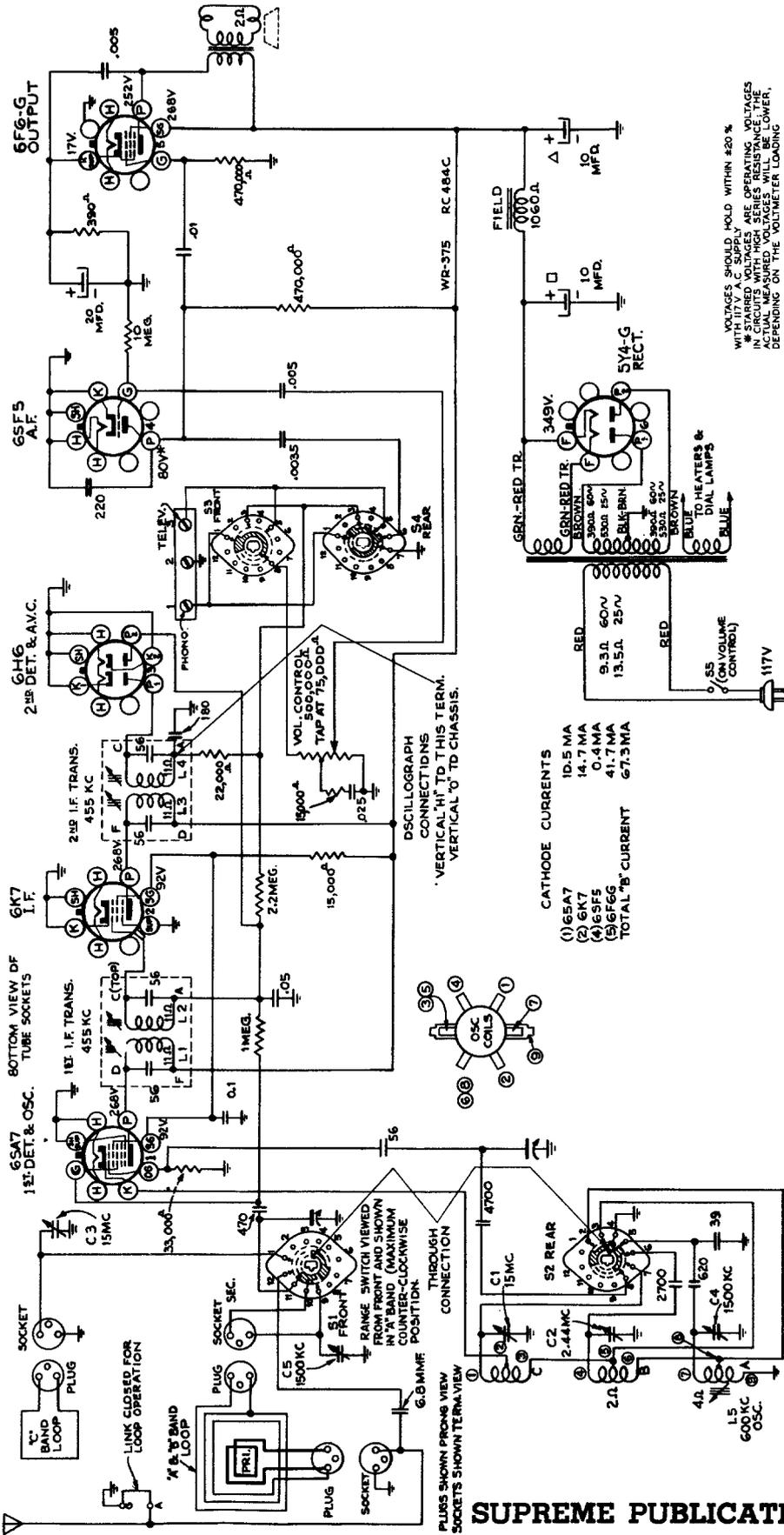


Model WR-170



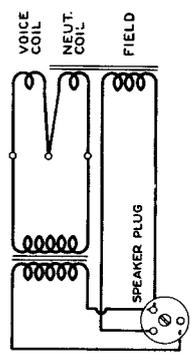
176

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

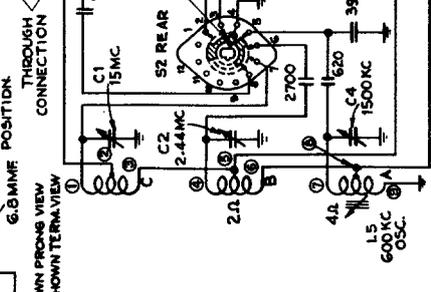
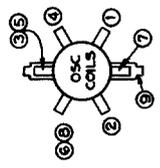


CATHODE CURRENTS
 (1) 6SA7 10.5 MA
 (2) 6K7 14.7 MA
 (4) 6SF5 0.4 MA
 (5) 6F6G 41.7 MA
 TOTAL "B" CURRENT 67.3 MA

VOLTAGES SHOULD HOLD WITHIN ±20% WITH 117 V. A.C. SUPPLY
 * STARRED VOLTAGES ARE OPERATING VOLTAGES
 † VOLTAGES MEASURED WITH NO LOADS
 ‡ ACTUAL MEASURED VOLTAGES WILL BE LOWER DEPENDING ON THE VOLTMETER LOADING



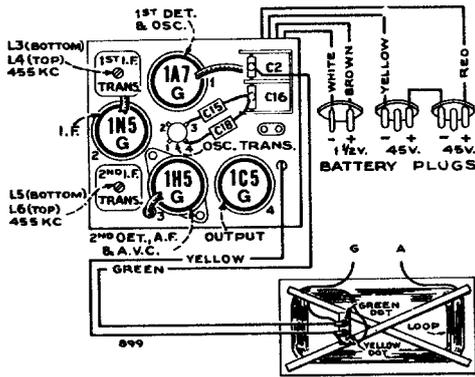
Speaker Connections



SUPREME PUBLICATIONS

Westinghouse Radio Model WR-375 177

Westinghouse Model WR-674



Tube Location

Note: Values with star (*) are operating voltages. Values not starred are actual measured voltages.

Measurements are made to chassis unless otherwise indicated, with set tuned to quiet point.

Output Meter Alignment.—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

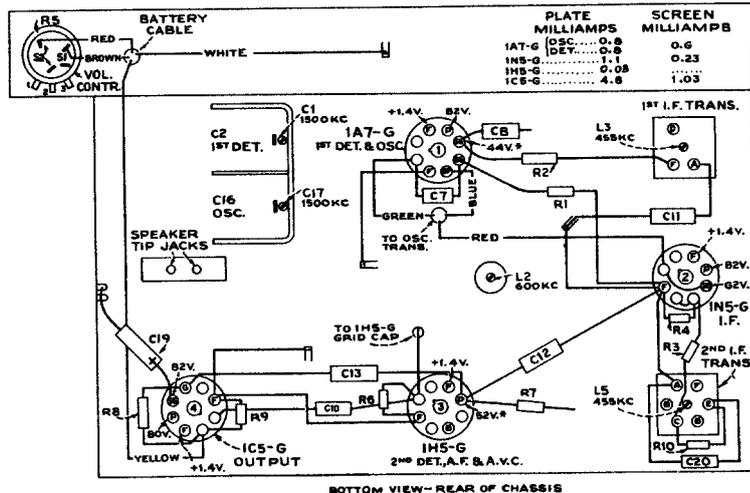
Test-oscillator.—For all alignment operations, keep the output as low as possible to avoid a-v-c action.

Pre-setting Dial.—With gang condenser in full mesh, the pointer should be horizontal.

Precautionary Lead Dress.—

1. Dress speaker leads down to chassis.
2. The green lead from the loop to the antenna section of the gang should be dressed between the output and detector tube shields and pulled toward the far corner of the loop by means of the rubber band.
3. The spiral shield on the 1st-A.F. grid lead should be brought as close as possible to the grid cap.
4. Leads to the high side and tap of the volume control should be dressed down to the chassis and away from the output tube plate lead.

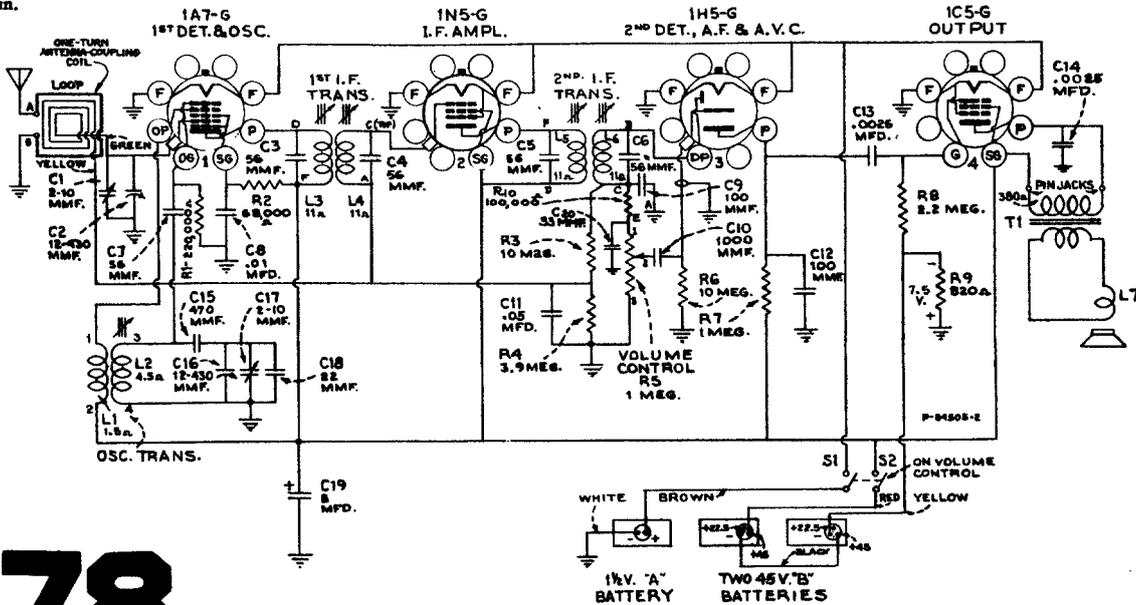
Antenna.—An antenna and ground may be connected to "A" and "G" at bottom of cabinet. If total length of antenna and lead-in is more than 150 feet, connect a 300 mfd capacitor in series with lead-in.



BOTTOM VIEW—REAR OF CHASSIS

Steps	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. peak output—
1	1N5-G grid cap, in series with .001 mfd.	455 kc	Quiet point between 550-750 kc	L5 and L6 (2nd I-F transformer)
2	1A7-G grid cap, in series with .001 mfd.	455 kc		L3 and L4 (1st I-F transformer)
3	Assemble chassis and batteries in correct position in cabinet, and fasten rear cover (loop) in place while making the following adjustments, which are accessible through holes in the bottom of the cabinet.			
4	Antenna terminal, in series with 200 mfd. Connect low side of test-osc. to "G" term.	1500 kc	1500 kc*	C17 (osc.) C1 (ant.)
5		600 kc	600 kc*	L2 (osc.) Rock in
6	Repeat steps 4 and 5.			

* Use bottom of "1" in "1500" for 1500 kc calibration point, and use center of the last "0" in "600" for 600 kc calibration point.

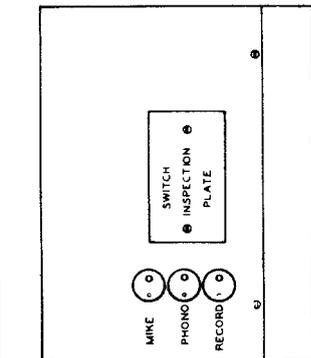
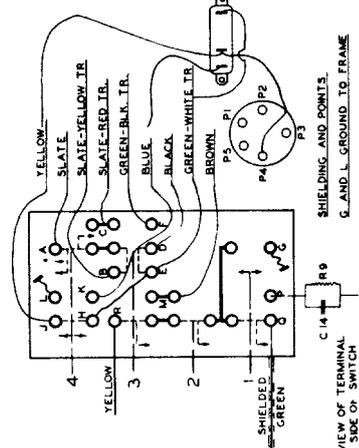
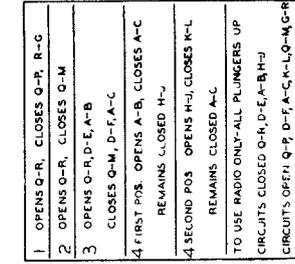
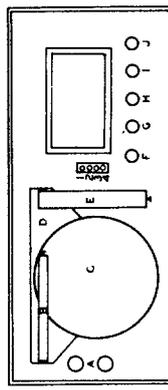
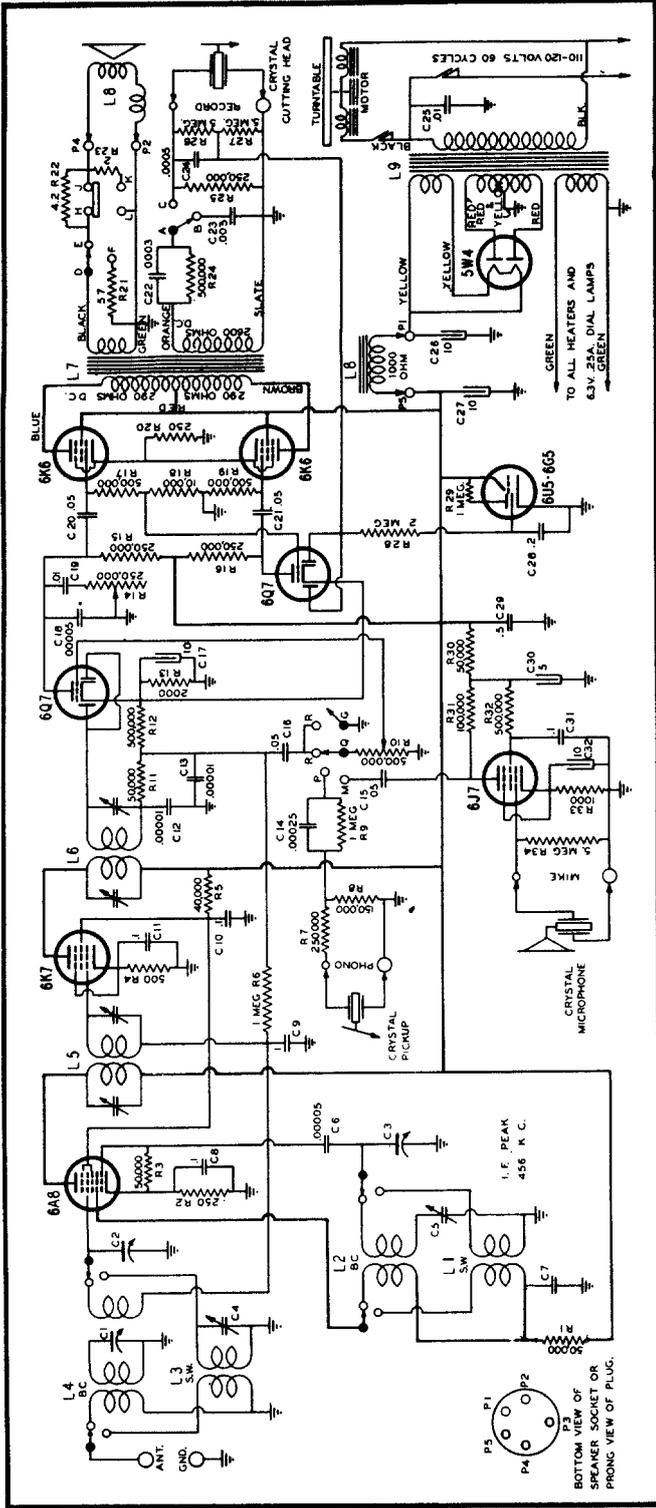


WILCOX-GAY CORPORATION

CHASSIS MODEL 9J9

SCHEMATIC DIAGRAM

MODEL A-70

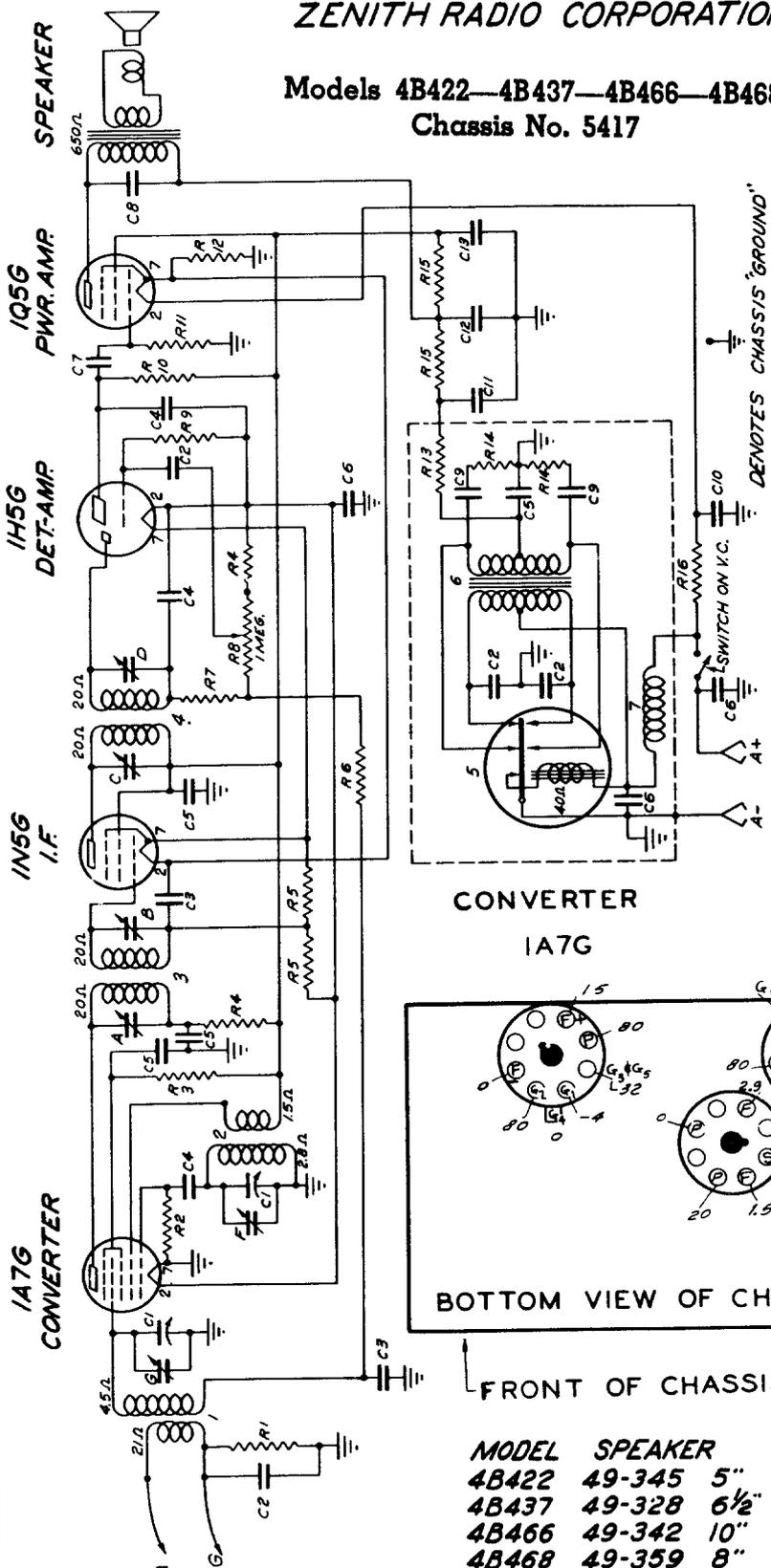


I.F. 456 KC.

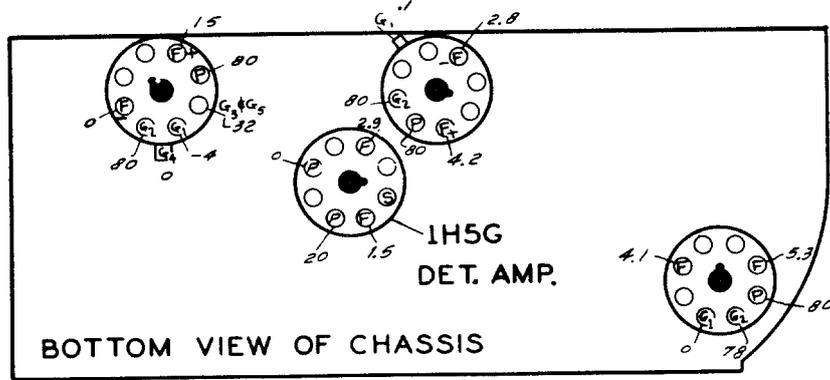
MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

ZENITH RADIO CORPORATION

Models 4B422—4B437—4B466—4B468
Chassis No. 5417



I.F. FREQUENCY 455 KC.



FRONT OF CHASSIS

MODEL	SPEAKER
4B422	49-345 5"
4B437	49-328 6 1/2"
4B466	49-342 10"
4B468	49-359 8"

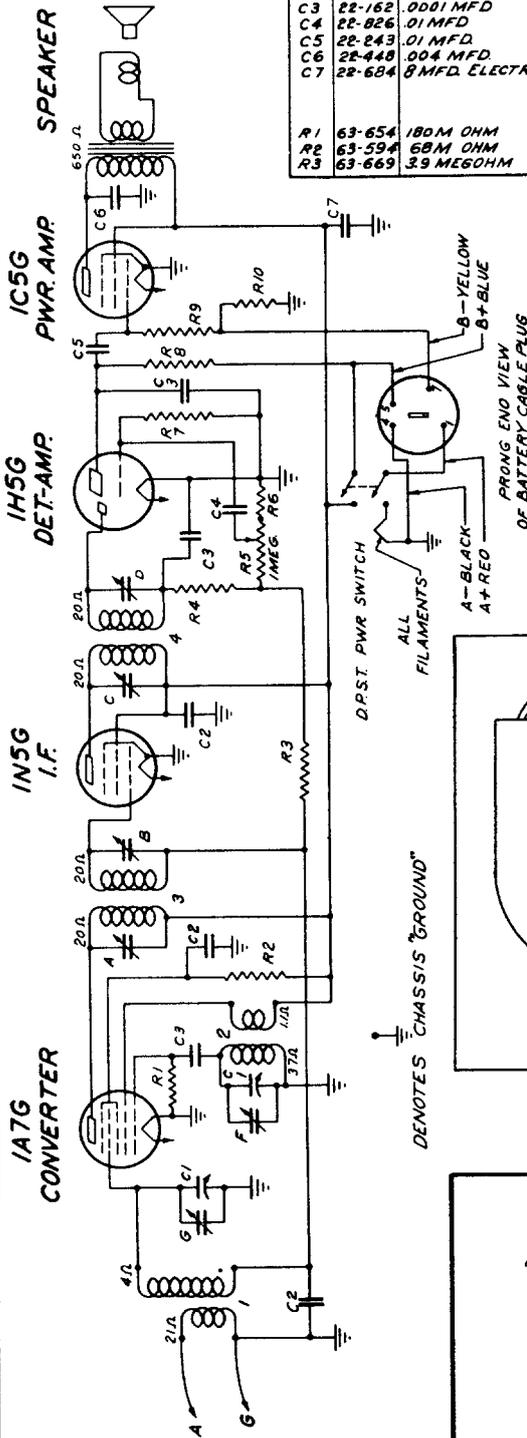
DIA. NO.	PART NO.	DESCRIPTION	DIA. NO.	PART NO.	DESCRIPTION	DIA. NO.	PART NO.	DESCRIPTION
1	20-208	ANTENNA COIL ASSEMBLY	R2	63-595	100M OHM	R1	63-597	470M OHM
2	5-6381	OSCILLATOR COIL ASSEM.	R3	63-594	68M OHM	C1	22-695	TWO GANG VARIABLE
3	95-589	1ST I.F. TRANS.	R4	63-593	1000 OHM	C2	22-825	0.1 MFD.
4	95-590	2ND I.F. TRANS.	R5	63-296	220M OHM	C3	22-829	0.5 MFD.
5	180-17	VARIABLE	R6	63-589	39 MEG OHM	C4	22-102	1000 MFD.
6	95-635	POWER TRANSFORMER	R7	63-595	47M OHM	C5	22-822	0.5 MFD.
7	3-5043	CHOKE ASSEMBLY	R8	63-595	VOLUME CONTROL	C6	22-199	1.5 MFD.
8			R9	63-604	10 MEG OHM	C7	22-243	0.1 MFD.
9			R10	63-271	1 MEG OHM	C8	22-446	0.04 MFD.
10			R11	63-600	E.E. MEG OHM	C9	22-966	300 MFD. ELECTROLYTIC
11			R12	63-700	30 OHM WIRE WOUND	C10	22-967	15 MFD.
12			R13	63-377	100 OHM	C11	22-742	15 MFD.
13			R14	63-697	100 OHM	C12	22-742	15 MFD.
14			R15	63-605	1000 OHM	C13		
15			R16	63-1067	7 OHM			

All voltages measured with a 1000 ohm per volt meter from chassis to socket contacts.

Voltage readings are all positive D.C. unless otherwise indicated.

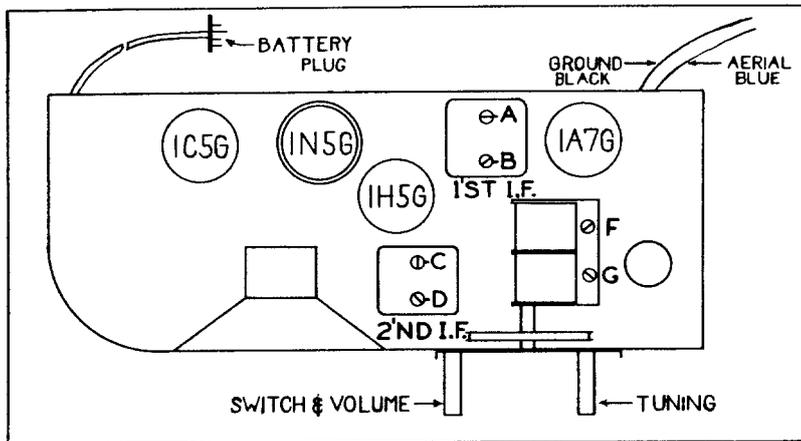
MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

DIAG. NO.	PART NO.	DESCRIPTION	DIAG. NO.	PART NO.	DESCRIPTION	DIAG. NO.	PART NO.	DESCRIPTION
C1	22-695	TWO GANG VARIABLE	R4	63-593	47M OHM	4	95-590	2ND I.F. TRANS. ASSEM.
C2	22-829	.05 MFD.	R5	63-1072	VOLUME CONTROL			
C3	22-162	.0001 MFD	R6	63-587	4700 OHM			
C4	22-826	.01 MFD	R7	63-604	10 MEGOHM			
C5	22-243	.01 MFD	R8	63-271	1 MEGOHM			
C6	22-448	.004 MFD	R9	63-600	2.2 MEGOHM	A		1ST I.F. TRANS. PRI.
C7	22-684	8 MFD. ELECTROLYTIC	R10	63-238	1000 OHM	B		1ST I.F. TRANS. SEC.
						C		2ND I.F. TRANS. PRI.
						D		2ND I.F. TRANS. SEC.
						E		B'DCAST OSC. (ON GANG)
						F		ANT. B'DCAST (ON GANG)
						G		
R1	63-654	180M OHM	1	20-208	ANTENNA COIL			
R2	63-594	68M OHM	2	S-7815	OSCILLATOR COIL ASSEM.			
R3	63-669	39 MEGOHM	3	95-589	1ST I.F. TRANS. ASSEM.			

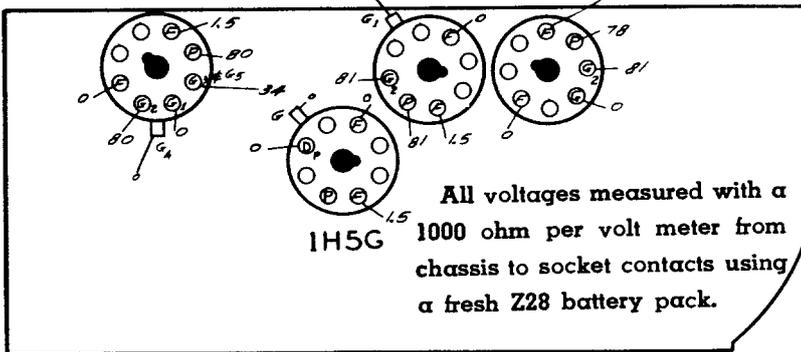


1/2 V. BATTERY PORTABLE
 I.F. FREQUENCY 455 KC.
 4 TUBE SUPERHETERODYNE
 CHASSIS N^o 5420
 ZENITH RADIO CORPORATION

Models 4K422—4K435—4K465—4K466
 Chassis No. 5420



CONVERTER I.F. PWR.-AMP.
 1A7G 1N5G 1C5G



MODEL	SPEAKER
4K422	49-286 5"
4K435	49-328 6 1/2"
4K465	49-359 8"
4K466	49-342 10"

FRONT OF CHASSIS

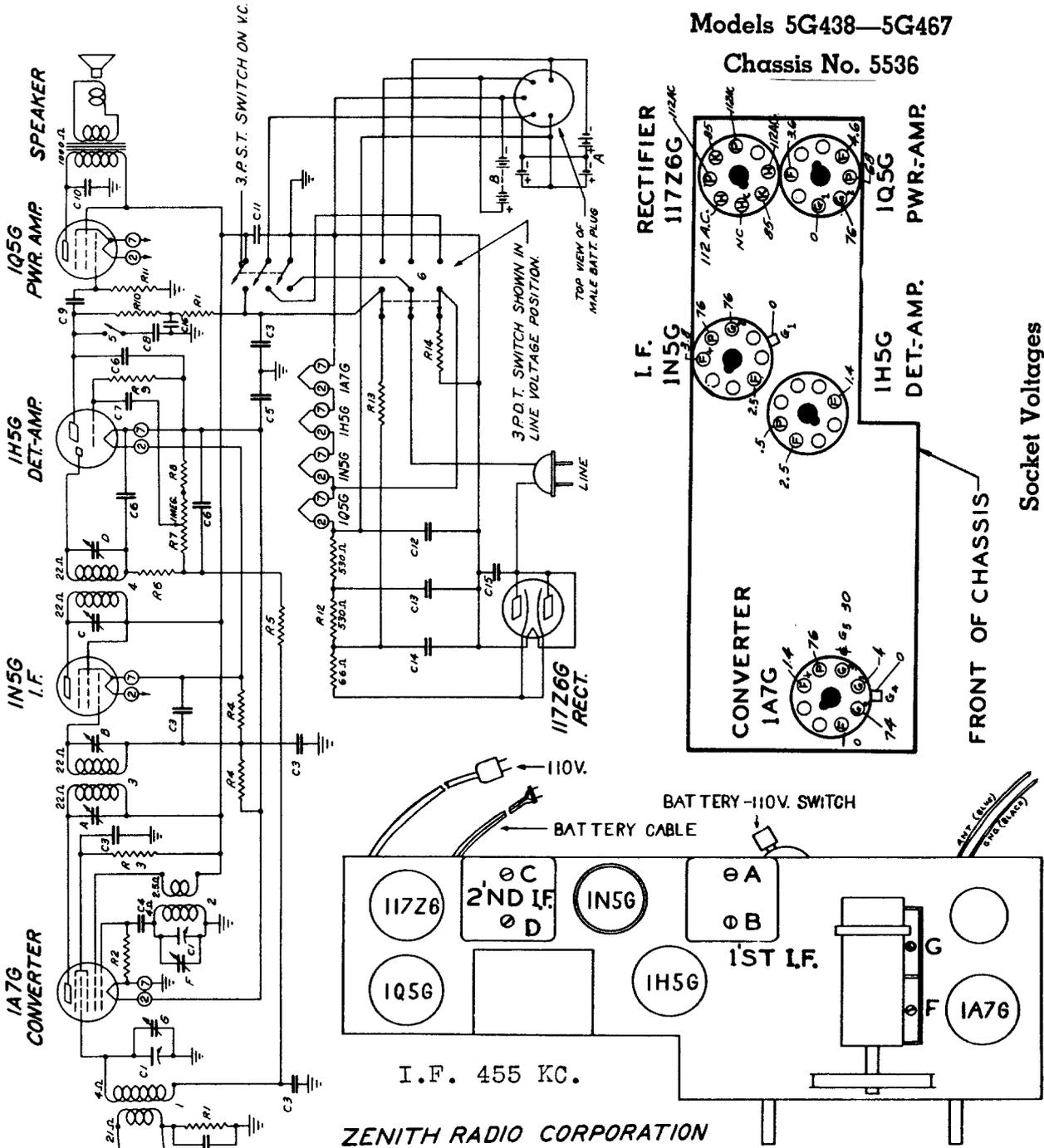
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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

Models 5G438—5G467

Chassis No. 5536



MODEL SPEAKER
5G438 49-332 8"
5G467 49-333 10"

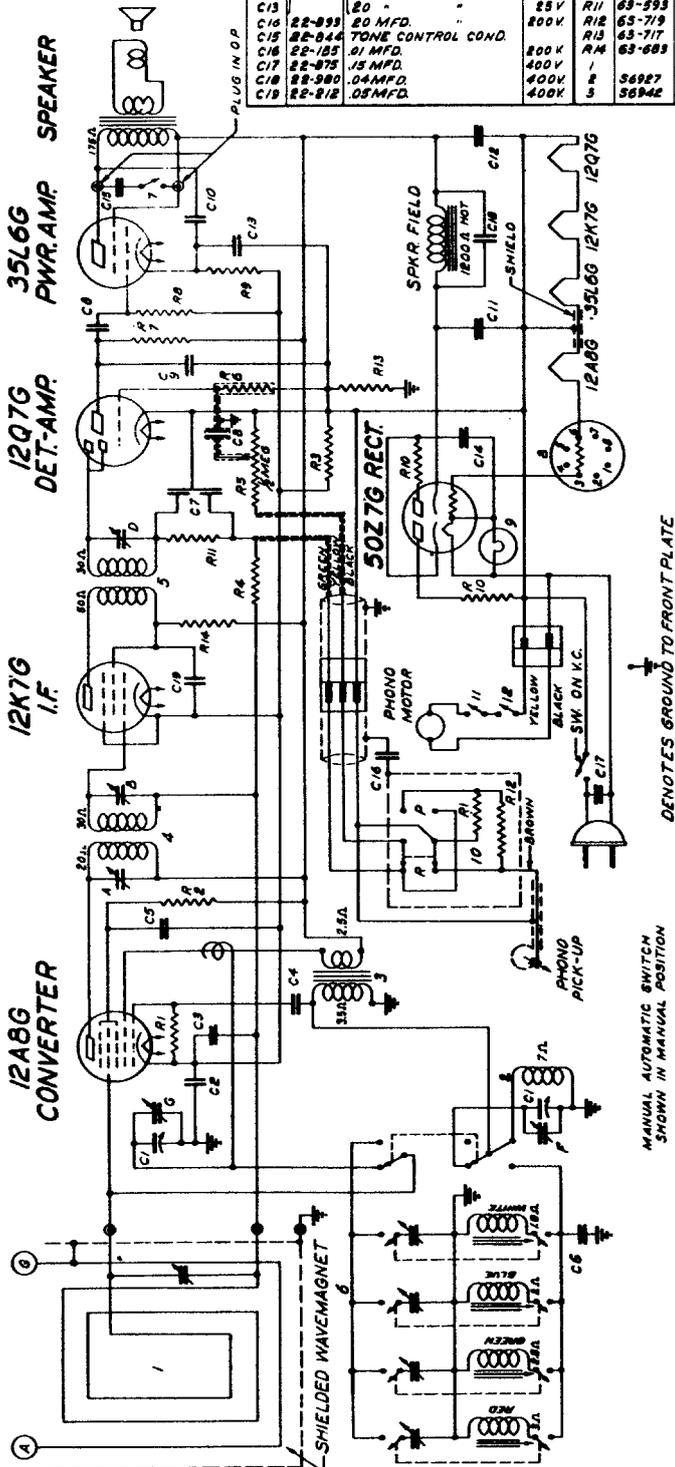
DIAS. N°	PART N°	DESCRIPTION	DIAS. N°	PART N°	DESCRIPTION	DIAS. N°	PART N°	DESCRIPTION
C1	22-90	TWO GANG VARIABLE	R1	63-597	470 M OHM	1/4 W.	1	20-208 ANTENNA COIL
C2	22-196	.01 MFD.	R2	63-652	120 M OHM	1/4 W.	2	3-639 OSC. COIL ASSEMBLY
C3	22-889	.05 MFD.	R3	63-703	47 M OHM	1/4 W.	3	95-593 1ST I.F. TRANS.
C4	22-182	.00025 MFD.	R4	63-296	220 M OHM	1/4 W.	4	95-594 2ND I.F. TRANS.
C5	22-350	.25 MFD.	R5	63-669	3.9 MEGOHM	1/4 W.	5	85-187 TONE CONTROL SWITCH
C6	22-162	.0001 MFD.	R6	63-593	47 M OHM	1/4 W.	6	85-198 POWER SWITCH
C7	22-826	.01 MFD.	R7	63-1081	VOLUME CONTROL			
C8	22-887	TONE CONTROL COND.	R8	63-583	1000 OHM	1/4 W.	A	1ST I.F. TRANS. PRI.
C9	22-243	.01 MFD.	R9	63-604	10 MEGOHM	1/4 W.	B	1ST I.F. TRANS. SEC.
C10	22-448	.004 MFD.	R10	63-271	1 MEGOHM	1/4 W.	C	2ND I.F. TRANS. PRI.
C11	22-928	40 MFD. ELECTROLYTIC	R11	63-600	2.2 MEGOHM	1/4 W.	D	2ND I.F. TRANS. SEC.
C12	22-182	.00025 MFD.	R12	63-1041	3 SECTION CANDOHM		F	BROADCAST OSC. (ON GANG)
C13	22-879	.60 MFD.	R13	63-605	1000 OHM	1/4 W.	G	ANTENNA BROADCAST (ON GANG)
C14	22-879	.60 MFD.	R14	63-1012	90 OHM WIREWOUND	1/4 W.	6	
C15	22-869	.05 MFD.						
C16	22-138	.2 MFD.						

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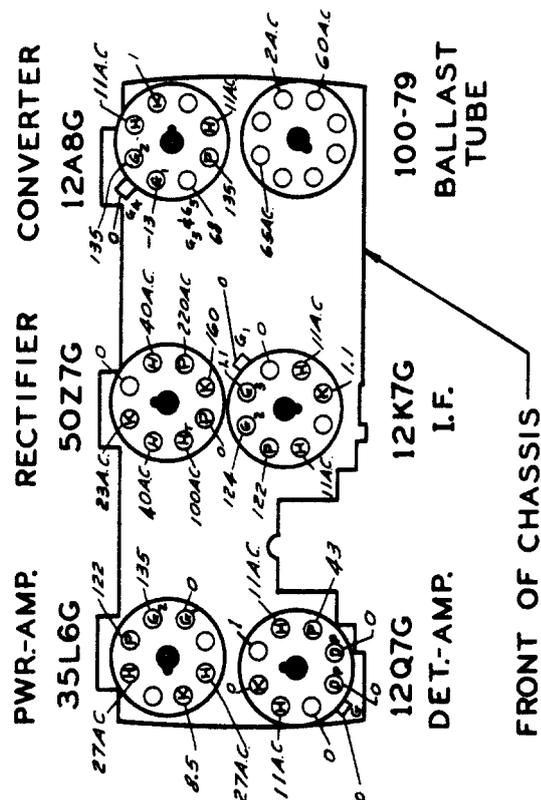
MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

DIAG. NO.	PART NO.	DESCRIPTION	DIAG. NO.	PART NO.	DESCRIPTION	DIAG. NO.	PART NO.	DESCRIPTION
C1	22-225	TWO-BAND VARIABLE				4	56902	1 ST I.F. TRANS. ASSEMBLY
C2	22-228	.2MFD.				5	36903	2 ND I.F. TRANS. "
C3	22-250	.05MFD.	R1	63-713	47M OHM	6	36997	AUTOMATIC TUNING UNIT ASSEM.
C4		100MMFD.	R2	63-591	22M OHM	7	MS517	100-79 TONE CONTROL SWITCH
C5	22-241	.02MFD.	R3	63-572	15 OHM	8	100-79	100-39 BALLAST TUBE
C6	22-268	COMPENSATING COND.	R4	63-600	2.2 MEGOHM	9	100-39	100-39 PILOT LIGHT BULB 2.9V .17A
C7		DUAL 100MMFD.	R5	63-1028	VOLUME CONTROL	10	85-192	85-192 PHONO SWITCH
C8	22-237	.01MFD.	R6	63-724	47 MEGOHM	11	85-191	85-191 AUTOMATIC STOP SWITCH
C9	22-233	.0005MFD.	R7	63-290	220M OHM	12	85-191	85-191 AC SWITCH
C10	22-236	.03MFD.	R8	63-597	470M OHM			
C11	22-286	120MFD. ELECTROLYTIC	R9	63-886	150 OHM WIREWOUND			
C12	22-294	.20 "	R10	63-1023	22 OHM "			
C13		.20 "	R11	63-593	47M OHM	A		1 ST I.F. TRANS. PRI.
C14	22-293	.20MFD.	R12	63-719	470M OHM	B		1 ST I.F. " SEC.
C15	22-244	TONE CONTROL COND.	R13	63-717	220M OHM	C		2 ND I.F. " SEC.
C16	22-185	.01MFD.	RM	63-683	1000 OHM	D		BROADCAST OSC. (ON BAND)
C17	22-275	.15MFD.	1		WAVEMAGNET ASSEMBLY	E		ANTENNA BROADCAST (ON BAND)
C18	22-280	.04MFD.	2	36927	OSCILLATOR COIL ASSEM.	F		
C19	22-212	.05MFD.	3	36942	OSC. COUPLER COIL ASSEM.	G		



I.F. FREQUENCY 455 KC
 6 TUBE SUPERHETERODYNE
 VOLTAGE DOUBLER A.C.
 CHASSIS N°5672-P
 ZENITH RADIO CORPORATION

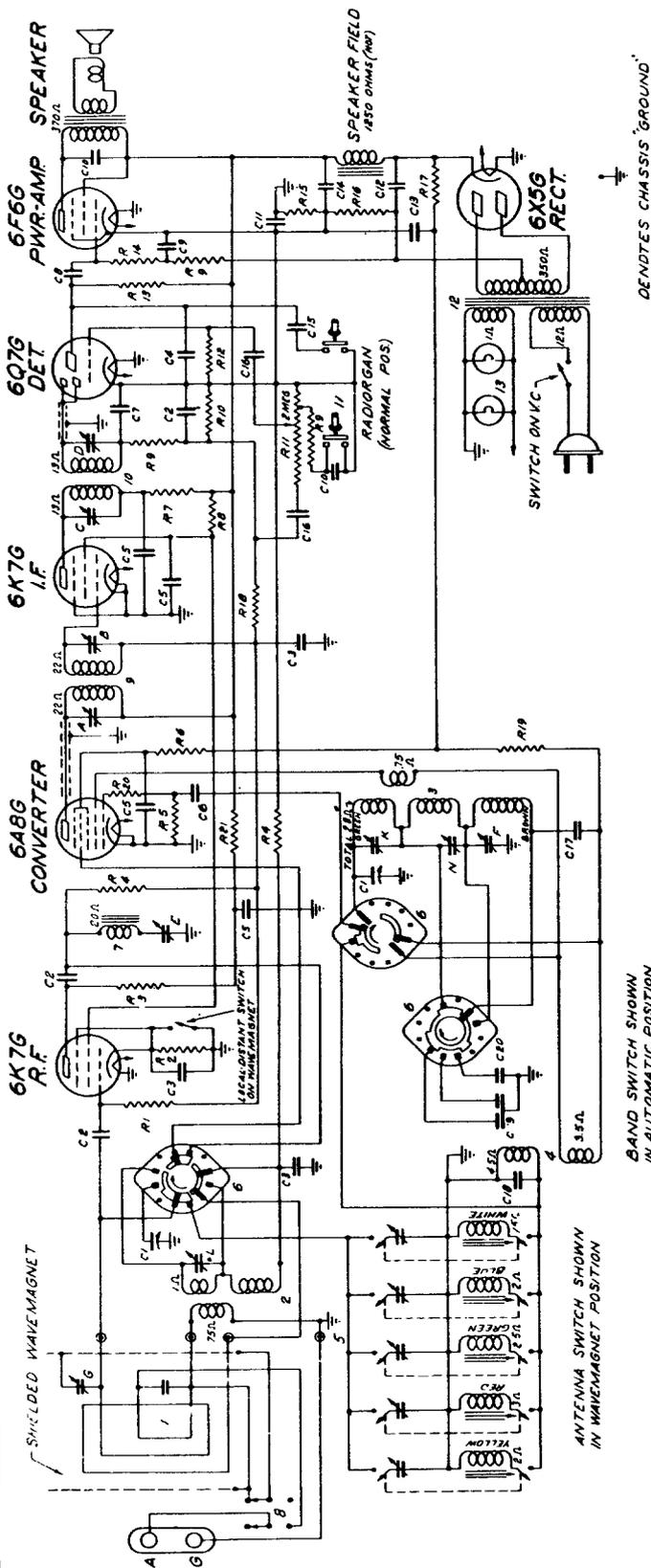
Model 6R485
 Chassis No. 5672P



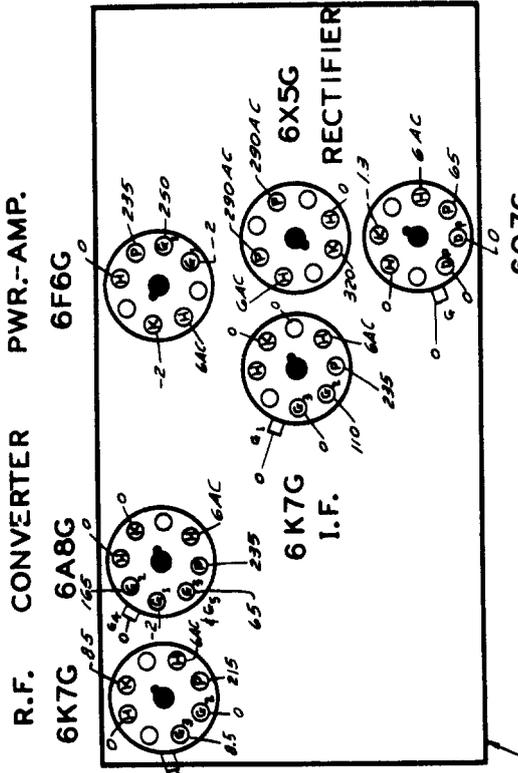
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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



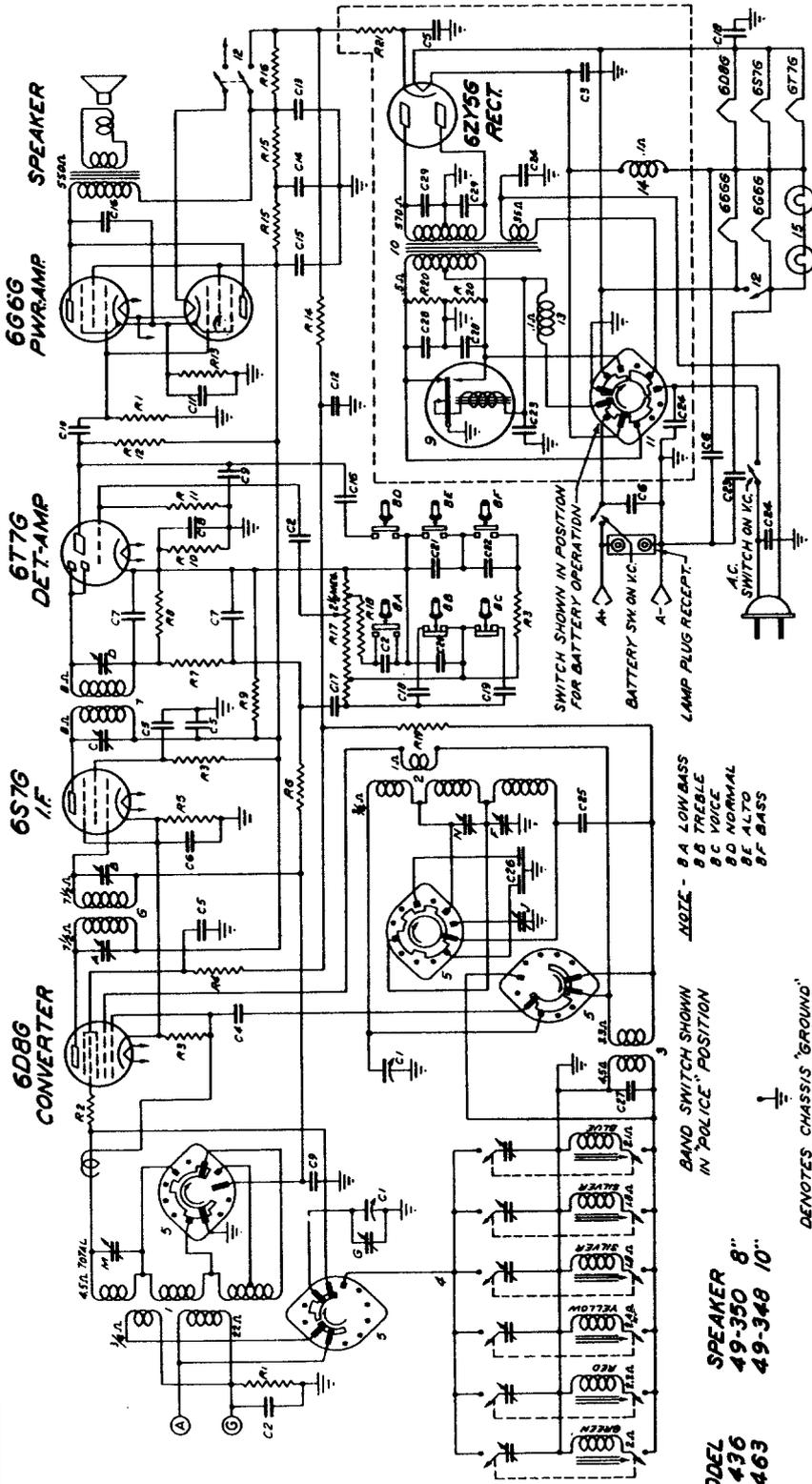
WAVE BAND	ANT. SW. POS.	DESCRIPTION	WAVE BAND	ANT. SW. POS.	DESCRIPTION
C1	1	500K	C10	10	1000
C2	2	500K	C11	11	1000
C3	3	500K	C12	12	1000
C4	4	500K	C13	13	1000
C5	5	500K	C14	14	1000
C6	6	500K	C15	15	1000
C7	7	500K	C16	16	1000
C8	8	500K	C17	17	1000
C9	9	500K			



I.F. FREQUENCY 455 KC.
 6 TUBE SUPERHETERODYNE
 CHASSIS NO. 5678 3BAND
 ZENITH RADIO CORPORATION

NOTE
 All voltages measured with a
 1000 ohm per volt meter from
 chassis to socket contact indi-
 cated.

Models 6S439—6S469
 Chassis No. 5678



I.F. FREQUENCY 455 KC.
6 TUBE SUPERHETERODYNE
CHASSIS N°5679 6K-DC. 110K-AC. 3 BAND
ZENITH RADIO CORPORATION

Models 6J436—6J463
Chassis No. 5679

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY	
C1	25-944 TWO RANGE VARIABLE	1	C14	28-830 0.001 MFD.	1	15	63-605 1000 OHM	1	14	5878	CHROME ASSEMBLY	
C2	22-036 0.1 MFD.	1	C15	22-929 .002 MFD.	1	16	63-946 4700 OHM	1	15	AD-39	PILOT LAMP 2.5V. .17A	
C3	22-038 0.05 MFD.	1	C16	22-929 DUAL OSC. TUNING COND.	1	17	63-990 VOLUME CONTROL	1	A	1	62Y56	RECT.
C4	22-038 0.05 MFD.	1	C17	22-929 0.001 MFD.	1	18	63-990 VOLUME CONTROL	1	B	1	6Z15G	6K-DC. 110K-AC. 3 BAND
C5	22-350 .25 MFD.	1	C18	22-929 0.001 MFD.	1	19	63-921 500 OHM	1	C	1	666G	PWR. AMP.
C6	22-350 .25 MFD.	1	C19	22-929 0.001 MFD.	1	20	63-921 500 OHM	1	D	1	666G	PWR. AMP.
C7	22-162 .001 MFD.	1	C20	22-929 0.001 MFD.	1	21	63-921 500 OHM	1	E	1	666G	PWR. AMP.
C8	22-162 .001 MFD.	1	C21	22-929 0.001 MFD.	1	22	63-921 500 OHM	1	F	1	666G	PWR. AMP.
C9	22-162 .001 MFD.	1	C22	22-929 0.001 MFD.	1	23	63-921 500 OHM	1	G	1	666G	PWR. AMP.
C10	22-162 .001 MFD.	1	C23	22-929 0.001 MFD.	1	24	63-921 500 OHM	1	H	1	666G	PWR. AMP.
C11	22-162 .001 MFD.	1	C24	22-929 0.001 MFD.	1	25	63-921 500 OHM	1	I	1	666G	PWR. AMP.
C12	22-162 .001 MFD.	1	C25	22-929 0.001 MFD.	1	26	63-921 500 OHM	1	J	1	666G	PWR. AMP.
C13	22-162 .001 MFD.	1	C26	22-929 0.001 MFD.	1	27	63-921 500 OHM	1	K	1	666G	PWR. AMP.
C14	22-162 .001 MFD.	1	C27	22-929 0.001 MFD.	1	28	63-921 500 OHM	1	L	1	666G	PWR. AMP.
C15	22-162 .001 MFD.	1	C28	22-929 0.001 MFD.	1	29	63-921 500 OHM	1	M	1	666G	PWR. AMP.
C16	22-162 .001 MFD.	1	C29	22-929 0.001 MFD.	1	30	63-921 500 OHM	1	N	1	666G	PWR. AMP.
C17	22-162 .001 MFD.	1	C30	22-929 0.001 MFD.	1	31	63-921 500 OHM	1				
C18	22-162 .001 MFD.	1	C31	22-929 0.001 MFD.	1	32	63-921 500 OHM	1				
C19	22-162 .001 MFD.	1	C32	22-929 0.001 MFD.	1	33	63-921 500 OHM	1				
C20	22-162 .001 MFD.	1	C33	22-929 0.001 MFD.	1	34	63-921 500 OHM	1				
C21	22-162 .001 MFD.	1	C34	22-929 0.001 MFD.	1	35	63-921 500 OHM	1				
C22	22-162 .001 MFD.	1	C35	22-929 0.001 MFD.	1	36	63-921 500 OHM	1				
C23	22-162 .001 MFD.	1	C36	22-929 0.001 MFD.	1	37	63-921 500 OHM	1				
C24	22-162 .001 MFD.	1	C37	22-929 0.001 MFD.	1	38	63-921 500 OHM	1				
C25	22-162 .001 MFD.	1	C38	22-929 0.001 MFD.	1	39	63-921 500 OHM	1				
C26	22-162 .001 MFD.	1	C39	22-929 0.001 MFD.	1	40	63-921 500 OHM	1				
C27	22-162 .001 MFD.	1	C40	22-929 0.001 MFD.	1	41	63-921 500 OHM	1				
C28	22-162 .001 MFD.	1	C41	22-929 0.001 MFD.	1	42	63-921 500 OHM	1				
C29	22-162 .001 MFD.	1	C42	22-929 0.001 MFD.	1	43	63-921 500 OHM	1				
C30	22-162 .001 MFD.	1	C43	22-929 0.001 MFD.	1	44	63-921 500 OHM	1				
C31	22-162 .001 MFD.	1	C44	22-929 0.001 MFD.	1	45	63-921 500 OHM	1				
C32	22-162 .001 MFD.	1	C45	22-929 0.001 MFD.	1	46	63-921 500 OHM	1				
C33	22-162 .001 MFD.	1	C46	22-929 0.001 MFD.	1	47	63-921 500 OHM	1				
C34	22-162 .001 MFD.	1	C47	22-929 0.001 MFD.	1	48	63-921 500 OHM	1				
C35	22-162 .001 MFD.	1	C48	22-929 0.001 MFD.	1	49	63-921 500 OHM	1				
C36	22-162 .001 MFD.	1	C49	22-929 0.001 MFD.	1	50	63-921 500 OHM	1				
C37	22-162 .001 MFD.	1	C50	22-929 0.001 MFD.	1	51	63-921 500 OHM	1				
C38	22-162 .001 MFD.	1	C51	22-929 0.001 MFD.	1	52	63-921 500 OHM	1				
C39	22-162 .001 MFD.	1	C52	22-929 0.001 MFD.	1	53	63-921 500 OHM	1				
C40	22-162 .001 MFD.	1	C53	22-929 0.001 MFD.	1	54	63-921 500 OHM	1				
C41	22-162 .001 MFD.	1	C54	22-929 0.001 MFD.	1	55	63-921 500 OHM	1				
C42	22-162 .001 MFD.	1	C55	22-929 0.001 MFD.	1	56	63-921 500 OHM	1				
C43	22-162 .001 MFD.	1	C56	22-929 0.001 MFD.	1	57	63-921 500 OHM	1				
C44	22-162 .001 MFD.	1	C57	22-929 0.001 MFD.	1	58	63-921 500 OHM	1				
C45	22-162 .001 MFD.	1	C58	22-929 0.001 MFD.	1	59	63-921 500 OHM	1				
C46	22-162 .001 MFD.	1	C59	22-929 0.001 MFD.	1	60	63-921 500 OHM	1				
C47	22-162 .001 MFD.	1	C60	22-929 0.001 MFD.	1	61	63-921 500 OHM	1				
C48	22-162 .001 MFD.	1	C61	22-929 0.001 MFD.	1	62	63-921 500 OHM	1				
C49	22-162 .001 MFD.	1	C62	22-929 0.001 MFD.	1	63	63-921 500 OHM	1				
C50	22-162 .001 MFD.	1	C63	22-929 0.001 MFD.	1	64	63-921 500 OHM	1				
C51	22-162 .001 MFD.	1	C64	22-929 0.001 MFD.	1	65	63-921 500 OHM	1				
C52	22-162 .001 MFD.	1	C65	22-929 0.001 MFD.	1	66	63-921 500 OHM	1				
C53	22-162 .001 MFD.	1	C66	22-929 0.001 MFD.	1	67	63-921 500 OHM	1				
C54	22-162 .001 MFD.	1	C67	22-929 0.001 MFD.	1	68	63-921 500 OHM	1				
C55	22-162 .001 MFD.	1	C68	22-929 0.001 MFD.	1	69	63-921 500 OHM	1				
C56	22-162 .001 MFD.	1	C69	22-929 0.001 MFD.	1	70	63-921 500 OHM	1				
C57	22-162 .001 MFD.	1	C70	22-929 0.001 MFD.	1	71	63-921 500 OHM	1				
C58	22-162 .001 MFD.	1	C71	22-929 0.001 MFD.	1	72	63-921 500 OHM	1				
C59	22-162 .001 MFD.	1	C72	22-929 0.001 MFD.	1	73	63-921 500 OHM	1				
C60	22-162 .001 MFD.	1	C73	22-929 0.001 MFD.	1	74	63-921 500 OHM	1				
C61	22-162 .001 MFD.	1	C74	22-929 0.001 MFD.	1	75	63-921 500 OHM	1				
C62	22-162 .001 MFD.	1	C75	22-929 0.001 MFD.	1	76	63-921 500 OHM	1				
C63	22-162 .001 MFD.	1	C76	22-929 0.001 MFD.	1	77	63-921 500 OHM	1				
C64	22-162 .001 MFD.	1	C77	22-929 0.001 MFD.	1	78	63-921 500 OHM	1				
C65	22-162 .001 MFD.	1	C78	22-929 0.001 MFD.	1	79	63-921 500 OHM	1				
C66	22-162 .001 MFD.	1	C79	22-929 0.001 MFD.	1	80	63-921 500 OHM	1				
C67	22-162 .001 MFD.	1	C80	22-929 0.001 MFD.	1	81	63-921 500 OHM	1				
C68	22-162 .001 MFD.	1	C81	22-929 0.001 MFD.	1	82	63-921 500 OHM	1				
C69	22-162 .001 MFD.	1	C82	22-929 0.001 MFD.	1	83	63-921 500 OHM	1				
C70	22-162 .001 MFD.	1	C83	22-929 0.001 MFD.	1	84	63-921 500 OHM	1				
C71	22-162 .001 MFD.	1	C84	22-929 0.001 MFD.	1	85	63-921 500 OHM	1				
C72	22-162 .001 MFD.	1	C85	22-929 0.001 MFD.	1	86	63-921 500 OHM	1				
C73	22-162 .001 MFD.	1	C86	22-929 0.001 MFD.	1	87	63-921 500 OHM	1				
C74	22-162 .001 MFD.	1	C87	22-929 0.001 MFD.	1	88	63-921 500 OHM	1				
C75	22-162 .001 MFD.	1	C88	22-929 0.001 MFD.	1	89	63-921 500 OHM	1				
C76	22-162 .001 MFD.	1	C89	22-929 0.001 MFD.	1	90	63-921 500 OHM	1				
C77	22-162 .001 MFD.	1	C90	22-929 0.001 MFD.	1	91	63-921 500 OHM	1				
C78	22-162 .001 MFD.	1	C91	22-929 0.001 MFD.	1	92	63-921 500 OHM	1				
C79	22-162 .001 MFD.	1	C92	22-929 0.001 MFD.	1	93	63-921 500 OHM	1				
C80	22-162 .001 MFD.	1	C93	22-929 0.001 MFD.	1	94	63-921 500 OHM	1				
C81	22-162 .001 MFD.	1	C94	22-929 0.001 MFD.	1	95	63-921 500 OHM	1				
C82	22-162 .001 MFD.	1	C95	22-929 0.001 MFD.	1	96	63-921 500 OHM	1				
C83	22-162 .001 MFD.	1	C96	22-929 0.001 MFD.	1	97	63-921 500 OHM	1				
C84	22-162 .001 MFD.	1	C97	22-929 0.001 MFD.	1	98	63-921 500 OHM	1				
C85	22-162 .001 MFD.	1	C98	22-929 0.001 MFD.	1	99	63-921 500 OHM	1				
C86	22-162 .001 MFD.	1	C99	22-929 0.001 MFD.	1	100	63-921 500 OHM	1				
C87	22-162 .001 MFD.	1	C100	22-929 0.001 MFD.	1	101	63-921 500 OHM	1				
C88	22-162 .001 MFD.	1	C101	22-929 0.001 MFD.	1	102	63-921 500 OHM	1				
C89	22-162 .001 MFD.	1	C102	22-929 0.001 MFD.	1	103	63-921 500 OHM	1				
C90	22-162 .001 MFD.	1	C103	22-929 0.001 MFD.	1	104	63-921 500 OHM	1				
C91	22-162 .001 MFD.	1										

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

ALIGNMENT PROCEDURE

Operation	Connect Test Oscillator to	Dummy Antenna	Input Signal Frequency	Band	Set Dial At	Adjust Trimmers	Purpose
1	6D8 R. F. Grid	0.5 Mfd.	455 Kc.	I. F.	600 Kc.	A, B, C, D	I. F. Alignment
2	Rec. Ant. Post	200 Mfd.	1500 Kc.	Broadcast	1500 Kc.	F	Set Oscillator to Scale
3	Rec. Ant. Post	200 Mfd.	1500 Kc.	Broadcast	1500 Kc.	G	Alignment of Antenna
4	Rec. Ant. Post	200 Mfd.	600 Kc.	Broadcast	600 Kc.	J	Rock Gang and Adjust for Max. Output
5	Rec. Ant. Post	200 Mfd.		Broadcast		F, G	Repeat 2 and 3
6	Rec. Ant. Post	400 Ohms	18000 Kc.	S. W.	18000 Kc.	M	Rock gang & adj. for max. output
7	Rec. Ant. Post	400 Ohms	16000 Kc.	S. W.	16000 Kc.	L	Rock Gang and Adjust for Max. Output
8	Rec. Ant. Post	400 Ohms	6000 Kc.	Police	6000 Kc.	N	Rock Gang and Adjust for Max. Output

Models 6J436—6J463

CHASSIS No. 5679

All voltages measured with a 1000 ohm per volt meter from chassis to socket contact indicated.

All voltages are positive D.C. unless marked otherwise.

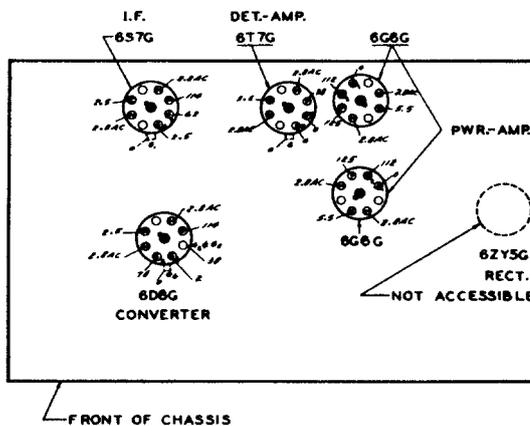
Battery conserver switch in **NORMAL** position.

Volume control full on.

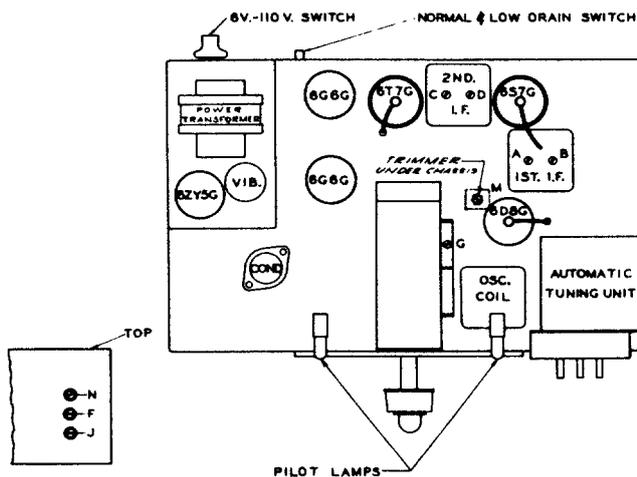
Line voltage 112 v. A.C.

LEGEND

- F—Filament
- H—Heater
- D—Diode
- G1—Control Grid
- G2—Screen Grid
- G3—Suppressor Grid
- P—Plate
- K—Cathode



Socket Voltages



Location of Tubes and Trimmers

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

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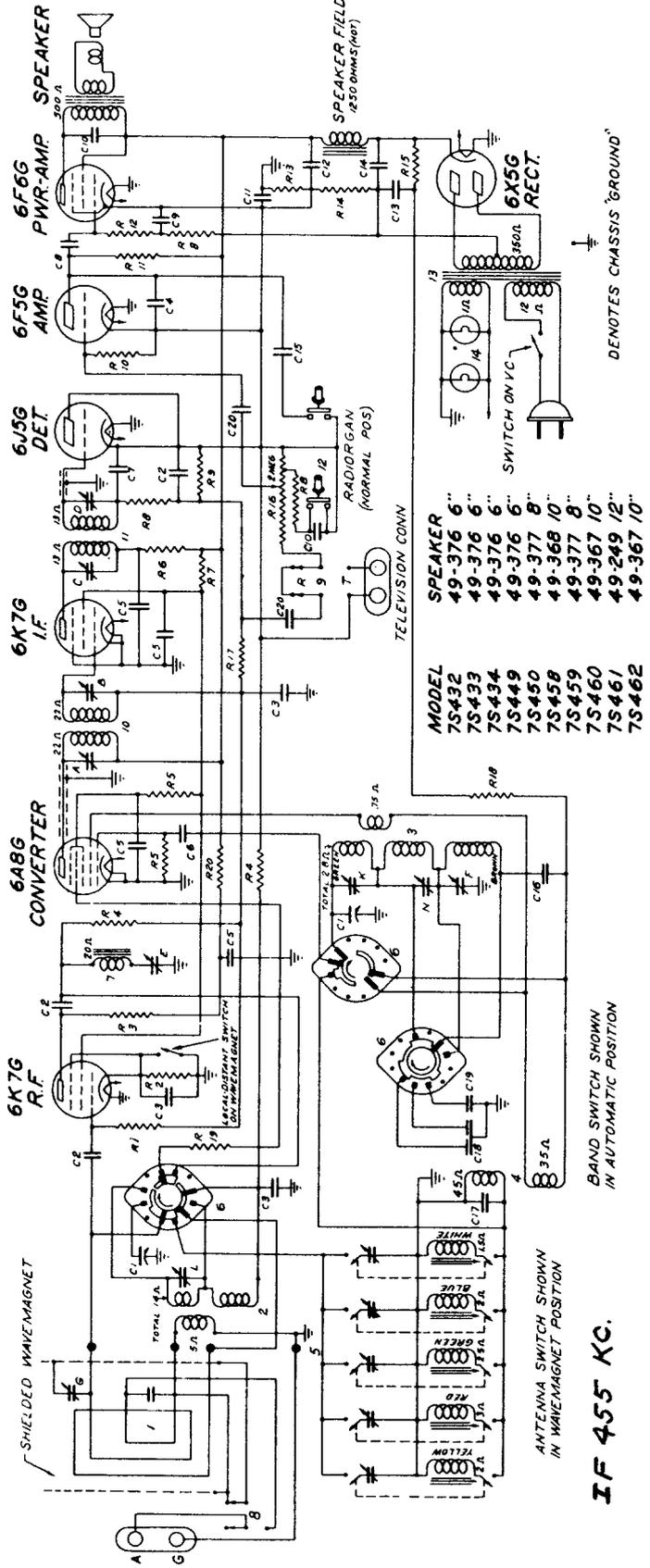
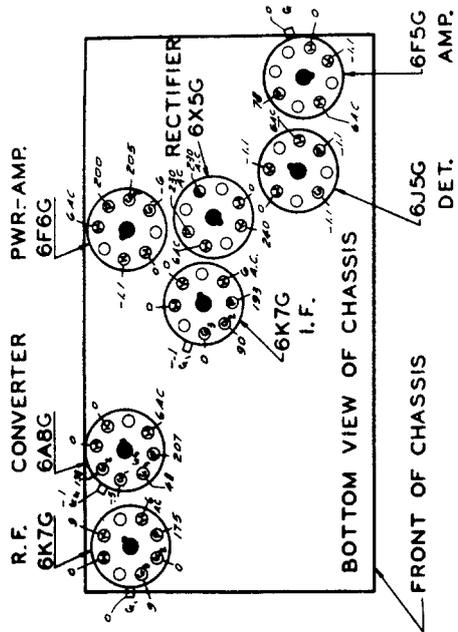
MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

Models 7S432—7S433—7S434—7S449—7S450—7S458—7S459—7S460—7S461—7S462

Chassis No. 5724

ZENITH RADIO CORPORATION

QW	PART NO.	DESCRIPTION	QW	PART NO.	DESCRIPTION
C 1	22-843	2 GANG VARIABLE	R 15	83-1030	VOLUME CONTROL
C 2	22-162	5000 MFD.	R 17	63-559	1/2 MEG OHM
C 3	22-828	50 MFD.	R 18	63-571	100 OHM
C 4	22-126	50 MFD.	R 20	83-705	2200 OHM
C 5	22-289	50 MFD.	S	56938	WAVE-MAGNET ASSEMBLY
C 6	22-182	0.0025 MFD.	3	56937	OSCILLATOR COIL ASSEMBLY
C 7	22-810	0.05 MFD.	4	56992	OSC. COUPLER COIL ASSEM.
C 8	22-229	0.05 MFD.	5	57044	AUTOMATIC TUNING SWITCH
C 9	22-229	0.05 MFD.	6	57500	WAVE TRAP COIL ASSEMBLY
C 10	22-229	0.05 MFD.	7	85-171	WAVE-MAGNET SWITCH
C 11	22-229	0.05 MFD.	8	85-171	TELEVISION SWITCH
C 12	22-719	1/8 MFD. ELECTROLYTIC	9	85-596	250 F. TRANS.
C 13	22-341	10 MFD. ELECTROLYTIC	10	85-596	250 F. TRANS.
C 14	22-341	10 MFD. ELECTROLYTIC	11	85-596	250 F. TRANS.
C 15	22-448	208 MFD. ELECTROLYTIC	12	85-596	250 F. TRANS.
C 16	22-158	208 MFD. ELECTROLYTIC	13	85-596	250 F. TRANS.
C 17	22-158	208 MFD. ELECTROLYTIC			
C 18	22-853	OSCILLATOR PADDER			
C 19	22-856	OSCILLATOR PADDER			



MODEL	SPEAKER
7S432	49-376 6"
7S433	49-376 6"
7S434	49-376 6"
7S449	49-376 6"
7S450	49-377 8"
7S458	49-368 10"
7S459	49-377 8"
7S460	49-367 10"
7S461	49-249 12"
7S462	49-367 10"

IF 455 KC.

BAND SWITCH SHOWN IN AUTOMATIC POSITION

ANTENNA SWITCH SHOWN IN WAVE-MAGNET POSITION

TELEVISION CONV.

SWITCH ON VC

RADIO-GAN (NORMAL POS)

3500 A

1250 OHMS (MUT)

3500 A

6X5G RECT.

6F5G AMP.

6F6G PWR.-AMP.

SPEAKER

6J5G DET.

6K7G I.F.

6K7G R.F.

6A8G CONVERTER

6F5G AMP.

6F6G PWR.-AMP.

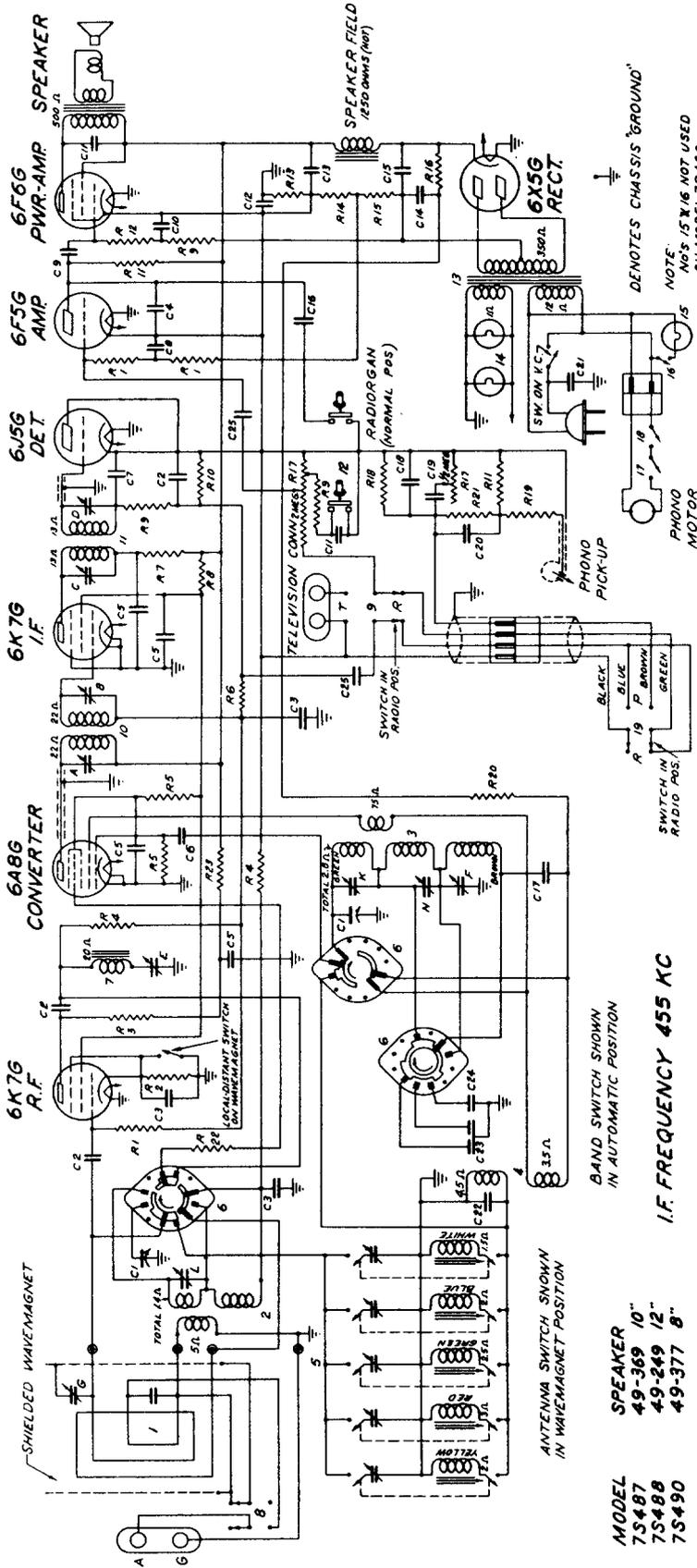
6K7G I.F.

6J5G DET.

6F5G AMP.

6F6G PWR.-AMP.

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

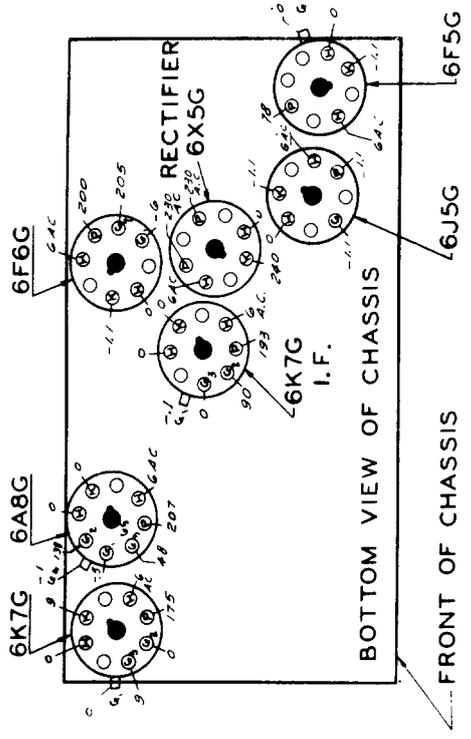


ANTENNA SWITCH SHOWN IN WAVEMAGNET POSITION

BAND SWITCH SHOWN IN AUTOMATIC POSITION

I.F. FREQUENCY 455 KC

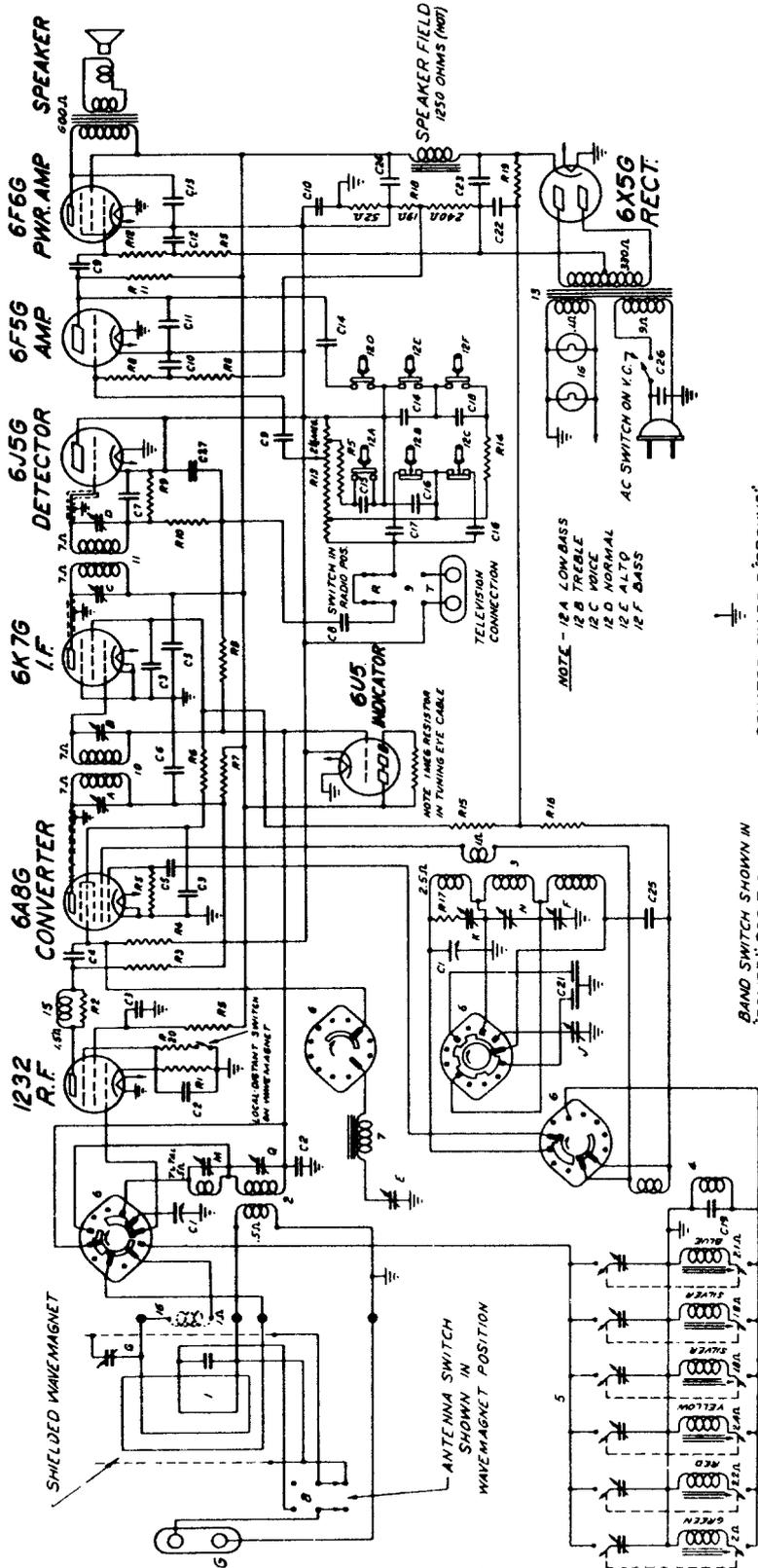
MODEL 7S487 49-369 10"
7S488 49-249 12"
7S490 49-377 8"



DATE	PART NO.	DESCRIPTION	DATE	PART NO.	DESCRIPTION
C1	22-168	220 MFD 50V VARIABLE	A 17	63-1035	VOLUME CONTROL
C2	22-168	0.001 MFD	A 18	63-1035	VOLUME CONTROL
C3	22-168	0.005 MFD	A 19	63-1035	VOLUME CONTROL
C4	22-168	0.005 MFD	A 20	63-1035	VOLUME CONTROL
C5	22-168	0.005 MFD	A 21	63-1035	VOLUME CONTROL
C6	22-168	0.005 MFD	A 22	63-1035	VOLUME CONTROL
C7	22-168	0.005 MFD	A 23	63-1035	VOLUME CONTROL
C8	22-168	0.005 MFD	A 24	63-1035	VOLUME CONTROL
C9	22-168	0.005 MFD	A 25	63-1035	VOLUME CONTROL
C10	22-168	0.005 MFD	A 26	63-1035	VOLUME CONTROL
C11	22-168	0.005 MFD	A 27	63-1035	VOLUME CONTROL
C12	22-168	0.005 MFD	A 28	63-1035	VOLUME CONTROL
C13	22-168	0.005 MFD	A 29	63-1035	VOLUME CONTROL
C14	22-168	0.005 MFD	A 30	63-1035	VOLUME CONTROL
C15	22-168	0.005 MFD	A 31	63-1035	VOLUME CONTROL
C16	22-168	0.005 MFD	A 32	63-1035	VOLUME CONTROL
C17	22-168	0.005 MFD	A 33	63-1035	VOLUME CONTROL
C18	22-168	0.005 MFD	A 34	63-1035	VOLUME CONTROL
C19	22-168	0.005 MFD	A 35	63-1035	VOLUME CONTROL
C20	22-168	0.005 MFD	A 36	63-1035	VOLUME CONTROL
C21	22-168	0.005 MFD	A 37	63-1035	VOLUME CONTROL
C22	22-168	0.005 MFD	A 38	63-1035	VOLUME CONTROL

ZENITH RADIO CORPORATION
Models 7S487—7S488—7S490
Chassis No. 5725

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



Models 8S443—8S451—8S463

Chassis No. 5808

I.F. FREQUENCY 455 KC
 8 TUBE SUPERHETERODYNE
 CHASSIS NO. 5808 3 BAND
 ZENITH RADIO CORPORATION

NOTE - 12 A LOW BASS
 12 B TREBLE
 12 C VOICE
 12 D NORMAL
 12 E ALTD
 12 F BASS

NOTE - 12 A LOW BASS
 12 B TREBLE
 12 C VOICE
 12 D NORMAL
 12 E ALTD
 12 F BASS

BAND SWITCH SHOWN IN
 "POLICE" POSITION

NOTE - 12 A LOW BASS
 12 B TREBLE
 12 C VOICE
 12 D NORMAL
 12 E ALTD
 12 F BASS

NOTE - 12 A LOW BASS
 12 B TREBLE
 12 C VOICE
 12 D NORMAL
 12 E ALTD
 12 F BASS

NOTE - 12 A LOW BASS
 12 B TREBLE
 12 C VOICE
 12 D NORMAL
 12 E ALTD
 12 F BASS

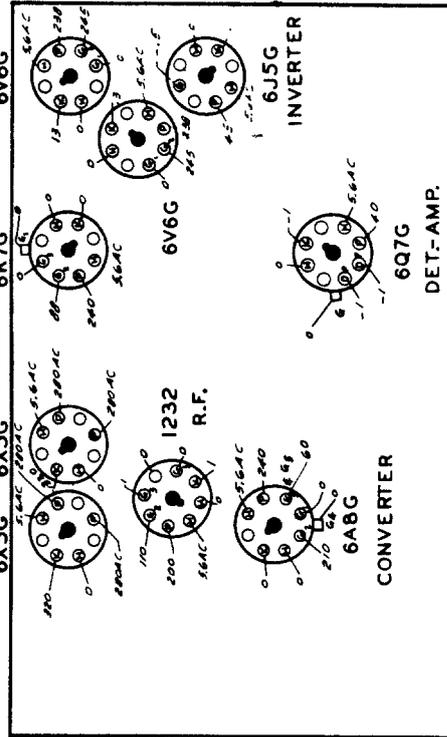
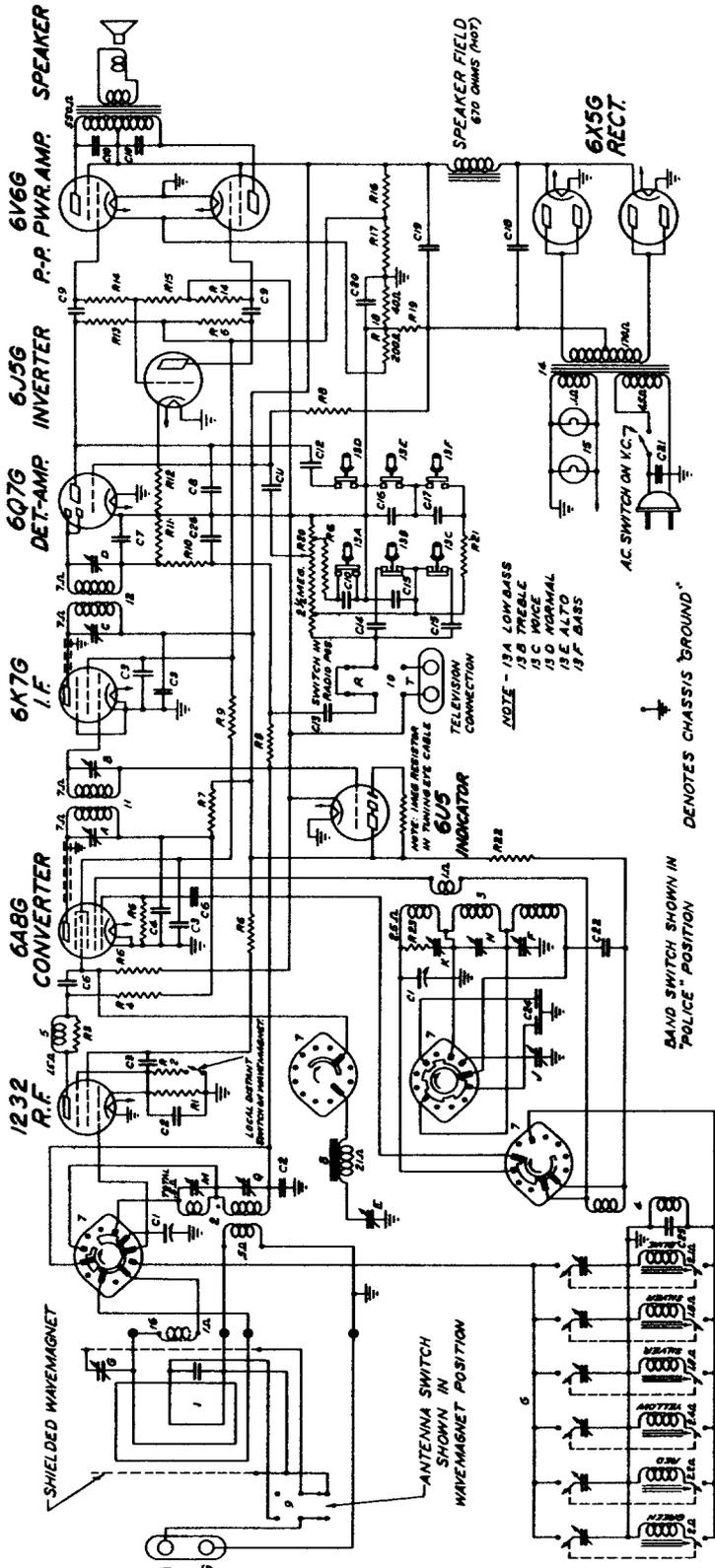
NOTE - 12 A LOW BASS
 12 B TREBLE
 12 C VOICE
 12 D NORMAL
 12 E ALTD
 12 F BASS

QWG. NO.	PART NO.	DESCRIPTION	QWG. NO.	PART NO.	DESCRIPTION	QWG. NO.	PART NO.	DESCRIPTION	QWG. NO.	PART NO.	DESCRIPTION
C1	22-927	2MΩ GANG VARIABLE	R14	63-574	1/4 W	13	63-627	POWER TRANS 50V/15V	14	63-627	POWER TRANS 50V/15V
C2	22-859	.05 MFD	R15	63-574	1/4 W	14	63-627	POWER TRANS 50V/15V	15	63-627	POWER TRANS 50V/15V
C3	22-716	.0005 MFD	R16	63-574	1/4 W	15	63-627	POWER TRANS 50V/15V	16	63-627	POWER TRANS 50V/15V
C4	22-127	.25 MFD	R17	63-574	1/4 W	16	63-627	POWER TRANS 50V/15V	17	63-627	POWER TRANS 50V/15V
C5	22-127	.25 MFD	R18	63-574	1/4 W	17	63-627	POWER TRANS 50V/15V	18	63-627	POWER TRANS 50V/15V
C6	22-825	.1 MFD	R19	63-574	1/4 W	18	63-627	POWER TRANS 50V/15V	19	63-627	POWER TRANS 50V/15V
C7	22-182	.00025 MFD	R20	63-574	1/4 W	19	63-627	POWER TRANS 50V/15V	20	63-627	POWER TRANS 50V/15V
C8	22-327	.05 MFD	1	63-508	10M OHM	20	63-627	POWER TRANS 50V/15V	21	63-627	POWER TRANS 50V/15V
C9	22-327	.05 MFD	2	63-107	10M OHM	21	63-627	POWER TRANS 50V/15V	22	63-627	POWER TRANS 50V/15V
C10	22-627	.1 MFD	3	63-359	4700 OHM	22	63-627	POWER TRANS 50V/15V	23	63-627	POWER TRANS 50V/15V
C11	22-954	.0005 MFD	4	63-359	4700 OHM	23	63-627	POWER TRANS 50V/15V	24	63-627	POWER TRANS 50V/15V
C12	22-219	.02 MFD	5	63-359	4700 OHM	24	63-627	POWER TRANS 50V/15V	25	63-627	POWER TRANS 50V/15V
C13	22-627	.02 MFD	6	63-359	4700 OHM	25	63-627	POWER TRANS 50V/15V	26	63-627	POWER TRANS 50V/15V
C14	22-229	.005 MFD	7	63-604	1000 OHM	26	63-627	POWER TRANS 50V/15V	27	63-627	POWER TRANS 50V/15V
C15	22-229	.005 MFD	8	63-604	1000 OHM	27	63-627	POWER TRANS 50V/15V	28	63-627	POWER TRANS 50V/15V
C16	22-470	.00015 MFD	9	63-271	1 MEG OHM	28	63-627	POWER TRANS 50V/15V	29	63-627	POWER TRANS 50V/15V
C17	22-954	.00015 MFD	10	63-174	220 M OHM	29	63-627	POWER TRANS 50V/15V	30	63-627	POWER TRANS 50V/15V
C18	22-492	.002 MFD	11	63-711	22 M OHM	30	63-627	POWER TRANS 50V/15V	31	63-627	POWER TRANS 50V/15V
C19	22-860	COMPENSATING COND	12	63-256	220 M OHM	31	63-627	POWER TRANS 50V/15V	32	63-627	POWER TRANS 50V/15V
C21	22-330	DUAL OSC PADDER	13	63-1035	VOLUME CONTROL	32	63-627	POWER TRANS 50V/15V	33	63-627	POWER TRANS 50V/15V

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

Models 10S443—10S452—10S464—10S470—10S491—10S492

CHASSIS No. 1005

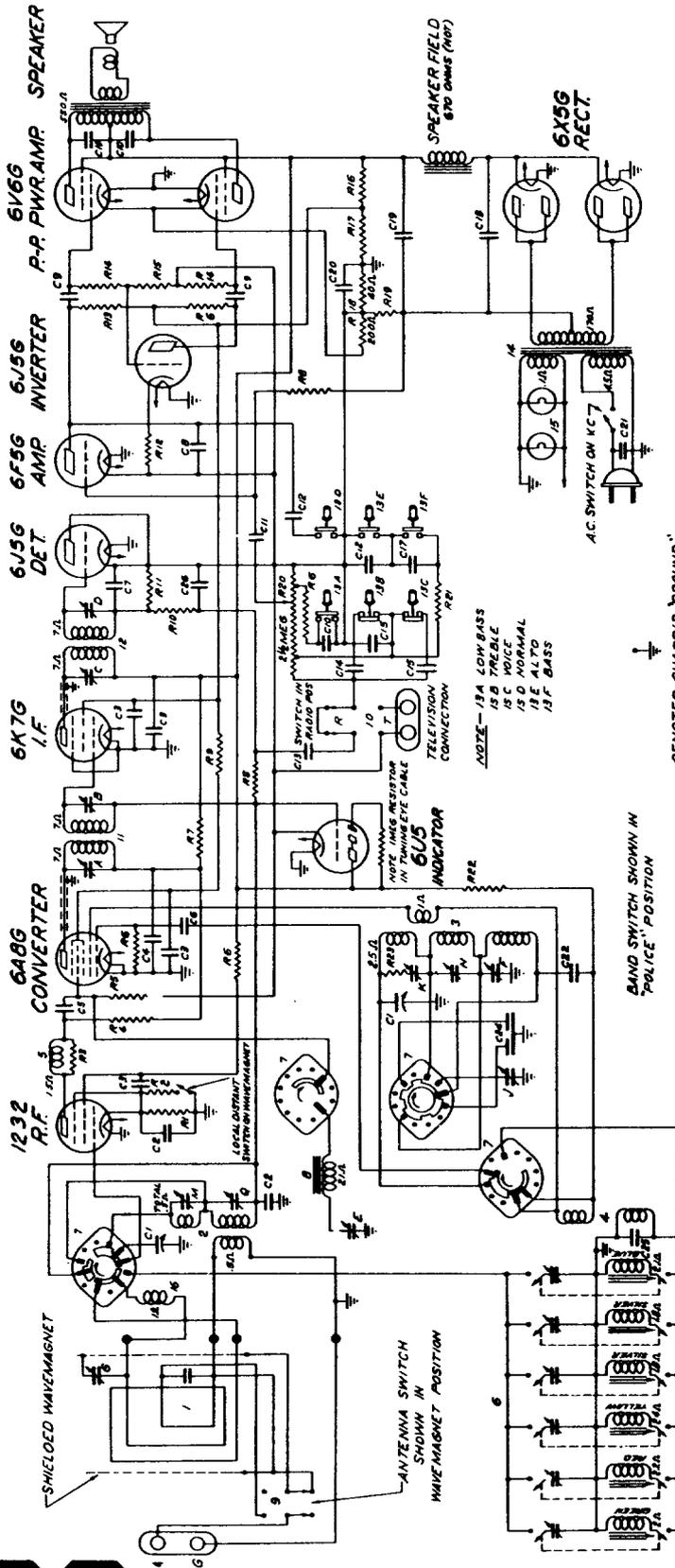


Socket Voltages
FRONT OF CHASSIS

COMPONENT	PART NO.	DESCRIPTION	RESISTANCE	DESCRIPTION	RESISTANCE	
C1	22-287	270 OHMS VARIABLE	270	C1	22-287	270 OHMS VARIABLE
C2	22-289	0.05 MFD.	0.05	C2	22-289	0.05 MFD.
C3	22-290	0.05 MFD.	0.05	C3	22-290	0.05 MFD.
C4	22-291	0.05 MFD.	0.05	C4	22-291	0.05 MFD.
C5	22-292	0.05 MFD.	0.05	C5	22-292	0.05 MFD.
C6	22-293	0.05 MFD.	0.05	C6	22-293	0.05 MFD.
C7	22-294	0.05 MFD.	0.05	C7	22-294	0.05 MFD.
C8	22-295	0.05 MFD.	0.05	C8	22-295	0.05 MFD.
C9	22-296	0.05 MFD.	0.05	C9	22-296	0.05 MFD.
C10	22-297	0.05 MFD.	0.05	C10	22-297	0.05 MFD.
C11	22-298	0.05 MFD.	0.05	C11	22-298	0.05 MFD.
C12	22-299	0.05 MFD.	0.05	C12	22-299	0.05 MFD.
C13	22-300	0.05 MFD.	0.05	C13	22-300	0.05 MFD.
C14	22-301	0.05 MFD.	0.05	C14	22-301	0.05 MFD.
C15	22-302	0.05 MFD.	0.05	C15	22-302	0.05 MFD.
C16	22-303	0.05 MFD.	0.05	C16	22-303	0.05 MFD.
C17	22-304	0.05 MFD.	0.05	C17	22-304	0.05 MFD.
C18	22-305	0.05 MFD.	0.05	C18	22-305	0.05 MFD.
C19	22-306	0.05 MFD.	0.05	C19	22-306	0.05 MFD.
C20	22-307	0.05 MFD.	0.05	C20	22-307	0.05 MFD.
C21	22-308	0.05 MFD.	0.05	C21	22-308	0.05 MFD.
C22	22-309	0.05 MFD.	0.05	C22	22-309	0.05 MFD.
C23	22-310	0.05 MFD.	0.05	C23	22-310	0.05 MFD.
C24	22-311	0.05 MFD.	0.05	C24	22-311	0.05 MFD.
C25	22-312	0.05 MFD.	0.05	C25	22-312	0.05 MFD.
C26	22-313	0.05 MFD.	0.05	C26	22-313	0.05 MFD.
C27	22-314	0.05 MFD.	0.05	C27	22-314	0.05 MFD.
C28	22-315	0.05 MFD.	0.05	C28	22-315	0.05 MFD.
C29	22-316	0.05 MFD.	0.05	C29	22-316	0.05 MFD.
C30	22-317	0.05 MFD.	0.05	C30	22-317	0.05 MFD.
C31	22-318	0.05 MFD.	0.05	C31	22-318	0.05 MFD.
C32	22-319	0.05 MFD.	0.05	C32	22-319	0.05 MFD.
C33	22-320	0.05 MFD.	0.05	C33	22-320	0.05 MFD.
C34	22-321	0.05 MFD.	0.05	C34	22-321	0.05 MFD.
C35	22-322	0.05 MFD.	0.05	C35	22-322	0.05 MFD.
C36	22-323	0.05 MFD.	0.05	C36	22-323	0.05 MFD.
C37	22-324	0.05 MFD.	0.05	C37	22-324	0.05 MFD.
C38	22-325	0.05 MFD.	0.05	C38	22-325	0.05 MFD.
C39	22-326	0.05 MFD.	0.05	C39	22-326	0.05 MFD.
C40	22-327	0.05 MFD.	0.05	C40	22-327	0.05 MFD.
C41	22-328	0.05 MFD.	0.05	C41	22-328	0.05 MFD.
C42	22-329	0.05 MFD.	0.05	C42	22-329	0.05 MFD.
C43	22-330	0.05 MFD.	0.05	C43	22-330	0.05 MFD.
C44	22-331	0.05 MFD.	0.05	C44	22-331	0.05 MFD.
C45	22-332	0.05 MFD.	0.05	C45	22-332	0.05 MFD.
C46	22-333	0.05 MFD.	0.05	C46	22-333	0.05 MFD.
C47	22-334	0.05 MFD.	0.05	C47	22-334	0.05 MFD.
C48	22-335	0.05 MFD.	0.05	C48	22-335	0.05 MFD.
C49	22-336	0.05 MFD.	0.05	C49	22-336	0.05 MFD.
C50	22-337	0.05 MFD.	0.05	C50	22-337	0.05 MFD.
C51	22-338	0.05 MFD.	0.05	C51	22-338	0.05 MFD.
C52	22-339	0.05 MFD.	0.05	C52	22-339	0.05 MFD.
C53	22-340	0.05 MFD.	0.05	C53	22-340	0.05 MFD.
C54	22-341	0.05 MFD.	0.05	C54	22-341	0.05 MFD.
C55	22-342	0.05 MFD.	0.05	C55	22-342	0.05 MFD.
C56	22-343	0.05 MFD.	0.05	C56	22-343	0.05 MFD.
C57	22-344	0.05 MFD.	0.05	C57	22-344	0.05 MFD.
C58	22-345	0.05 MFD.	0.05	C58	22-345	0.05 MFD.
C59	22-346	0.05 MFD.	0.05	C59	22-346	0.05 MFD.
C60	22-347	0.05 MFD.	0.05	C60	22-347	0.05 MFD.
C61	22-348	0.05 MFD.	0.05	C61	22-348	0.05 MFD.
C62	22-349	0.05 MFD.	0.05	C62	22-349	0.05 MFD.
C63	22-350	0.05 MFD.	0.05	C63	22-350	0.05 MFD.
C64	22-351	0.05 MFD.	0.05	C64	22-351	0.05 MFD.
C65	22-352	0.05 MFD.	0.05	C65	22-352	0.05 MFD.
C66	22-353	0.05 MFD.	0.05	C66	22-353	0.05 MFD.
C67	22-354	0.05 MFD.	0.05	C67	22-354	0.05 MFD.
C68	22-355	0.05 MFD.	0.05	C68	22-355	0.05 MFD.
C69	22-356	0.05 MFD.	0.05	C69	22-356	0.05 MFD.
C70	22-357	0.05 MFD.	0.05	C70	22-357	0.05 MFD.
C71	22-358	0.05 MFD.	0.05	C71	22-358	0.05 MFD.
C72	22-359	0.05 MFD.	0.05	C72	22-359	0.05 MFD.
C73	22-360	0.05 MFD.	0.05	C73	22-360	0.05 MFD.
C74	22-361	0.05 MFD.	0.05	C74	22-361	0.05 MFD.
C75	22-362	0.05 MFD.	0.05	C75	22-362	0.05 MFD.
C76	22-363	0.05 MFD.	0.05	C76	22-363	0.05 MFD.
C77	22-364	0.05 MFD.	0.05	C77	22-364	0.05 MFD.
C78	22-365	0.05 MFD.	0.05	C78	22-365	0.05 MFD.
C79	22-366	0.05 MFD.	0.05	C79	22-366	0.05 MFD.
C80	22-367	0.05 MFD.	0.05	C80	22-367	0.05 MFD.
C81	22-368	0.05 MFD.	0.05	C81	22-368	0.05 MFD.
C82	22-369	0.05 MFD.	0.05	C82	22-369	0.05 MFD.
C83	22-370	0.05 MFD.	0.05	C83	22-370	0.05 MFD.
C84	22-371	0.05 MFD.	0.05	C84	22-371	0.05 MFD.
C85	22-372	0.05 MFD.	0.05	C85	22-372	0.05 MFD.
C86	22-373	0.05 MFD.	0.05	C86	22-373	0.05 MFD.
C87	22-374	0.05 MFD.	0.05	C87	22-374	0.05 MFD.
C88	22-375	0.05 MFD.	0.05	C88	22-375	0.05 MFD.
C89	22-376	0.05 MFD.	0.05	C89	22-376	0.05 MFD.
C90	22-377	0.05 MFD.	0.05	C90	22-377	0.05 MFD.
C91	22-378	0.05 MFD.	0.05	C91	22-378	0.05 MFD.
C92	22-379	0.05 MFD.	0.05	C92	22-379	0.05 MFD.
C93	22-380	0.05 MFD.	0.05	C93	22-380	0.05 MFD.
C94	22-381	0.05 MFD.	0.05	C94	22-381	0.05 MFD.
C95	22-382	0.05 MFD.	0.05	C95	22-382	0.05 MFD.
C96	22-383	0.05 MFD.	0.05	C96	22-383	0.05 MFD.
C97	22-384	0.05 MFD.	0.05	C97	22-384	0.05 MFD.
C98	22-385	0.05 MFD.	0.05	C98	22-385	0.05 MFD.
C99	22-386	0.05 MFD.	0.05	C99	22-386	0.05 MFD.
C100	22-387	0.05 MFD.	0.05	C100	22-387	0.05 MFD.

I.F. FREQUENCY 455 KC.
10 TUBE SUPERHETERODYNE
CHASSIS N21005 AC 3 BAND
ZENITH RADIO CORPORATION

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

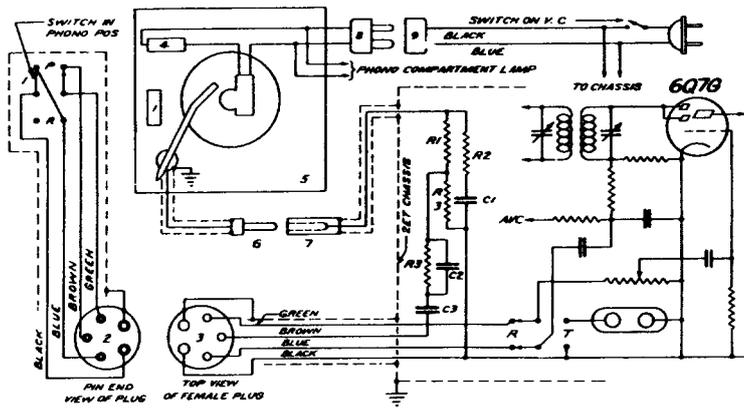


MODEL 11S-474
SPEAKER 49-352 12"

Model 11S474
Chassis No. 1103
IF FREQUENCY 455 KC.
11 TUBE SUPERHETERODYNE
CHASSIS N9/109 AC 3 BAND
ZENITH RADIO CORPORATION

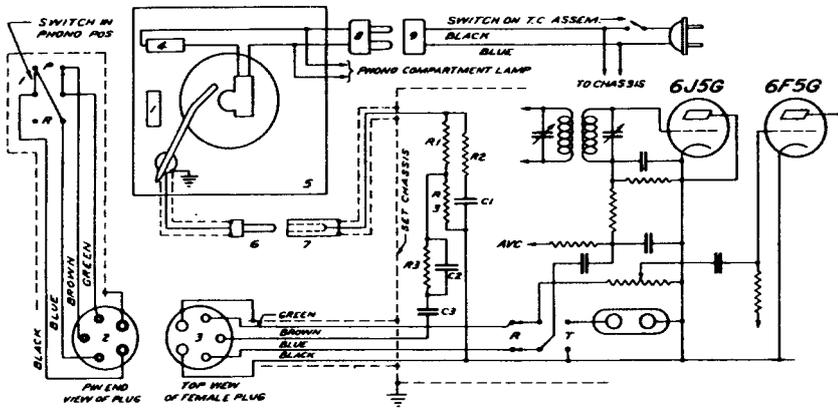
| AMP. NO. | DESCRIPTION |
|----------|--------------------------|----------|--------------------------|----------|--------------------------|----------|--------------------------|
| 12 | 12-000 250V. TRANSFORMER |
| 13 | 13-000 250V. TRANSFORMER |
| 14 | 14-000 250V. TRANSFORMER |
| 15 | 15-000 250V. TRANSFORMER |
| 16 | 16-000 250V. TRANSFORMER |
| 17 | 17-000 250V. TRANSFORMER |
| 18 | 18-000 250V. TRANSFORMER |
| 19 | 19-000 250V. TRANSFORMER |
| 20 | 20-000 250V. TRANSFORMER |
| 21 | 21-000 250V. TRANSFORMER |

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



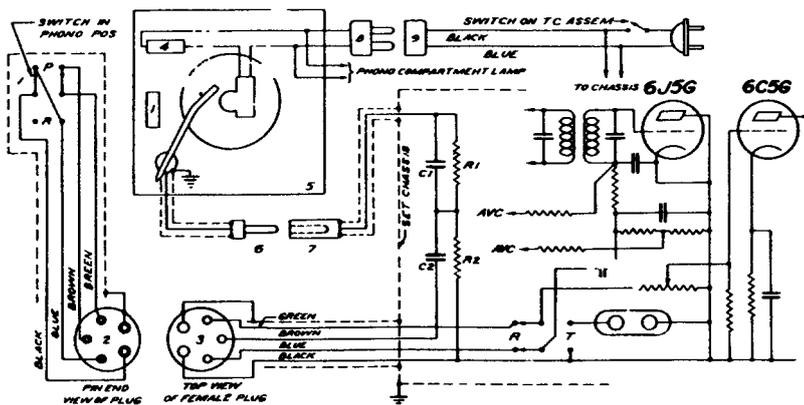
DIAG. NO.	PART NO.	DESCRIPTION	POWER
C1	22-379	.005 MFD.	600K
C2	22-959	.00035 MFD.	600K
C3	22-887	.001 MFD.	600K
R1	63-719	470M OHM	1/4W
R2	63-649	56M OHM	1/4W
R3	63-271	1 MEG OHM	1/4W
1	57224	PHONO SW. WIRE ASSEMBLY	
2	58070	PLUG W. WIRE ASSEMBLY	
3	85-191	A.C. SWITCH	
4	89-36	WEBSTER AUTOMATIC RECORD PLAYER	
5	58069	CINCH "M"-E1 PLUG	
6	58069	RECEPTACLE WIRE ASSEM. CINCH "M"-E1 PLUG WITH P-7002 CAP. & LINER	
7	58069	RECEPTACLE WIRE ASSEM. CINCH "M"-E1 PLUG WITH P-7002 CAP. & LINER	
8	58069	RECEPTACLE WIRE ASSEM. CINCH "M"-E1 PLUG WITH P-7002 CAP. & LINER	
9	58069	RECEPTACLE WIRE ASSEM. CINCH "M"-E1 PLUG WITH P-7002 CAP. & LINER	

PHONO CIRCUIT DATA
MODEL SPEAKER
10S 491 49-356 15"
10S 492 49-352 12"
CHASSIS N°1007



DIAG. NO.	PART NO.	DESCRIPTION	POWER
C1	22-379	.005 MFD.	600K
C2	22-959	.00035 MFD.	600K
C3	22-887	.001 MFD.	600K
R1	63-719	470M OHM	1/4W
R2	63-649	56M OHM	1/4W
R3	63-271	1 MEG OHM	1/4W
1	57224	PHONO SW. WIRE ASSEMBLY	
2	58094	PLUG W. WIRE ASSEMBLY	
3	85-191	A.C. SWITCH	
4	89-36	WEBSTER AUTOMATIC RECORD PLAYER	
5	58093	CINCH "M"-E1 PLUG	
6	58093	RECEPTACLE WIRE ASSEM. CINCH "M"-E1 PLUG WITH P-7002 CAP. & LINER	
7	58093	RECEPTACLE WIRE ASSEM. CINCH "M"-E1 PLUG WITH P-7002 CAP. & LINER	
8	58093	RECEPTACLE WIRE ASSEM. CINCH "M"-E1 PLUG WITH P-7002 CAP. & LINER	
9	58093	RECEPTACLE WIRE ASSEM. CINCH "M"-E1 PLUG WITH P-7002 CAP. & LINER	

PHONO CIRCUIT DATA
MODEL SPEAKER
12S 494 49-355 15"
CHASSIS N°1208



DIAG. NO.	PART NO.	DESCRIPTION	POWER
C1	22-182	.00025 MFD.	600K
C2	22-887	.001 MFD.	600K
R1	63-597	470M OHM	1/4W
R2	63-649	56M OHM	1/4W
1	57224	PHONO SW. WIRE ASSEMBLY	
2	58100	PLUG W. WIRE ASSEMBLY	
3	85-191	A.C. SWITCH	
4	89-36	WEBSTER AUTOMATIC RECORD PLAYER	
5	58107	CINCH "M"-E1 PLUG	
6	58107	RECEPTACLE WIRE ASSEM. CINCH "M"-E1 PLUG WITH P-7002 CAP. & LINER	
7	58107	RECEPTACLE WIRE ASSEM. CINCH "M"-E1 PLUG WITH P-7002 CAP. & LINER	
8	58107	RECEPTACLE WIRE ASSEM. CINCH "M"-E1 PLUG WITH P-7002 CAP. & LINER	
9	58107	RECEPTACLE WIRE ASSEM. CINCH "M"-E1 PLUG WITH P-7002 CAP. & LINER	

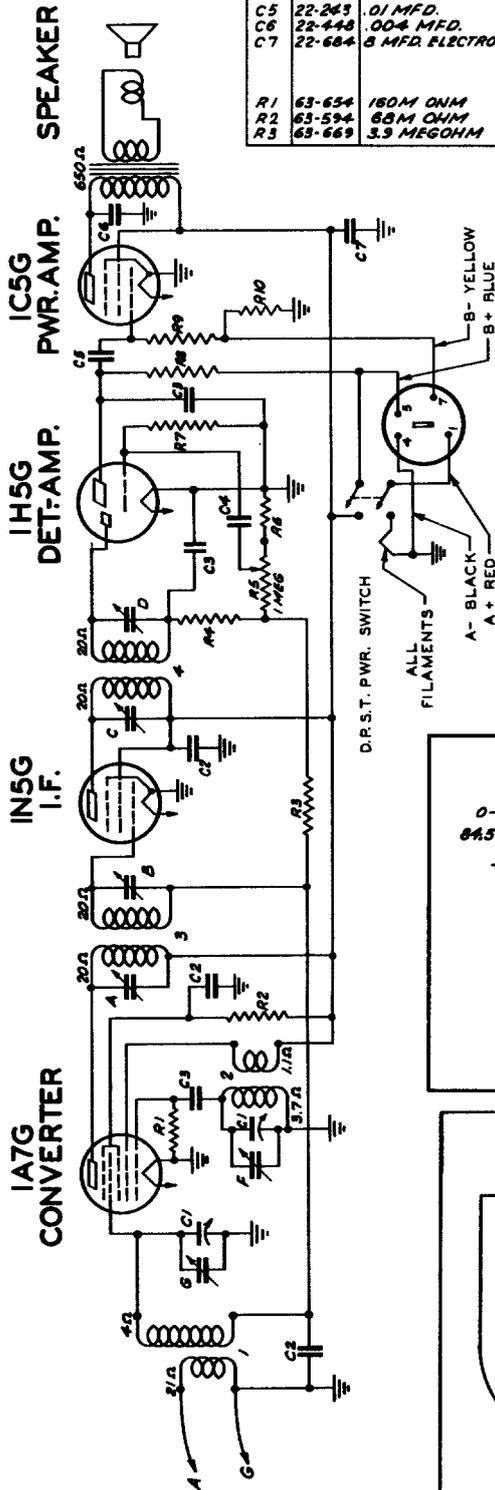
PHONO CIRCUIT DATA
MODEL SPEAKER
15S 495 49-375 15"
CHASSIS N°1504

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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

DIAG. N ^o	PART. N ^o	DESCRIPTION	DIAG. N ^o	PART. N ^o	DESCRIPTION	DIAG. N ^o	PART. N ^o	DESCRIPTION
C1	22-695	TND GANG VARIABLE	A4	63-593	47M OHM	4	95-590	2 ND I.F. TRANS. ASSEM.
C2	22-829	.05 MFD.	A5	63-1072	VOLUME CONTROL			
C3	22-182	.0001 MFD.	A6	63-587	4700 OHM			
C4	22-886	.01 MFD.	A7	63-976	18 MEGOHM			
C5	22-243	.01 MFD.	A8	63-271	1 MEGOHM			
C6	22-448	.004 MFD.	A9	63-600	8.2 MEGOHM			
C7	22-684	8 MFD. ELECTROLYTIC	A10	63-238	1000 OHM			
R1	63-654	180M OHM	1	20-208	ANTENNA COIL	A		1 ST I.F. TRANS. PRI.
R2	63-594	68M OHM	2	3-7815	OSCILLATOR COIL ASSEM.	B		1 ST I.F. TRANS. SEC.
R3	63-669	3.9 MEGOHM	3	95-589	1 ST I.F. TRANS. ASSEM.	C		2 ND I.F. TRANS. PRI.
						D		2 ND I.F. TRANS. SEC.
						E		BROADCAST OSC. (ON GANG)
						F		ANT. BROADCAST (ON GANG)



I.F. FREQUENCY 455 KC.
 4 TUBE SUPERHETERODYNE
 CHASSIS N^o 4A02 & 4A04-1 1/2 V.- SINGLE BAND
 ZENITH RADIO CORPORATION

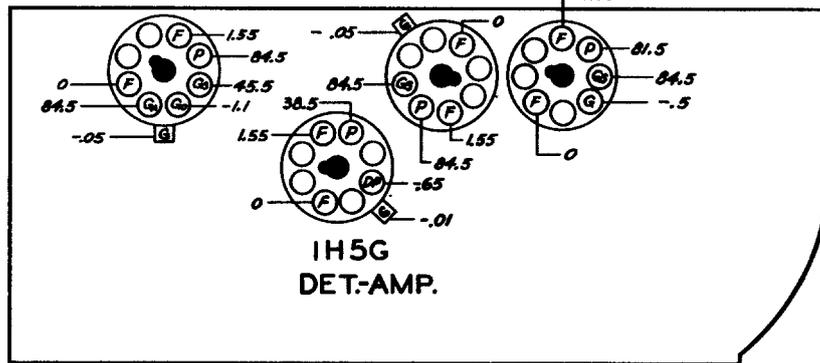
All voltages measured with a 1000 ohm per volt meter from chassis to socket contacts using a fresh Z28 battery pack.

Antenna disconnected — volume control full on.

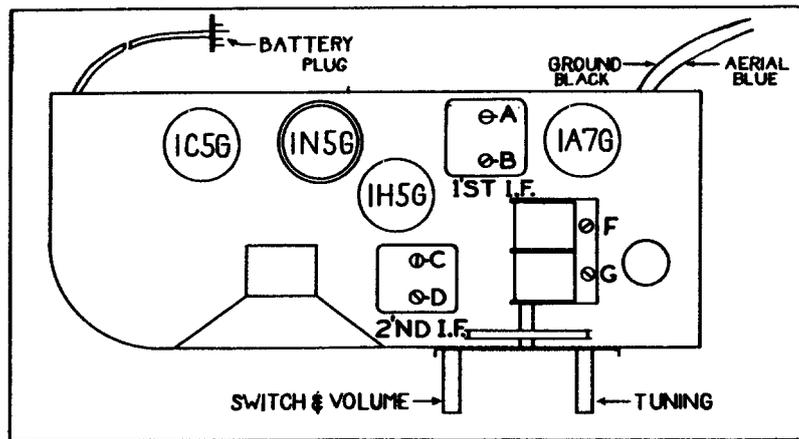
CONVERTER
1A7G

I.F.
IN5G

PWR. AMP.
IC5G

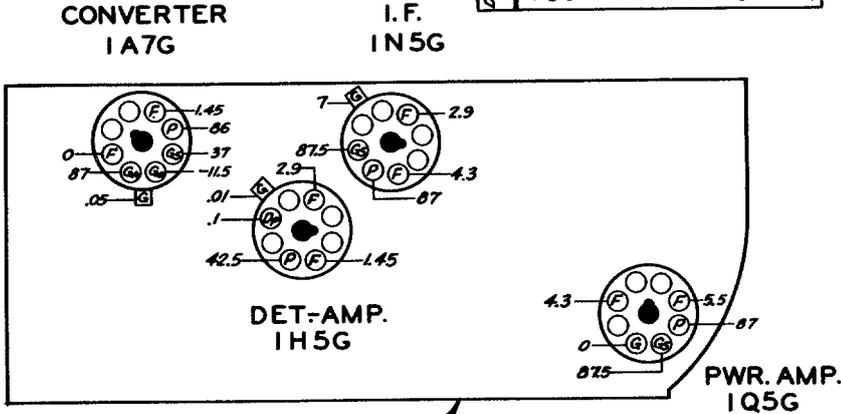
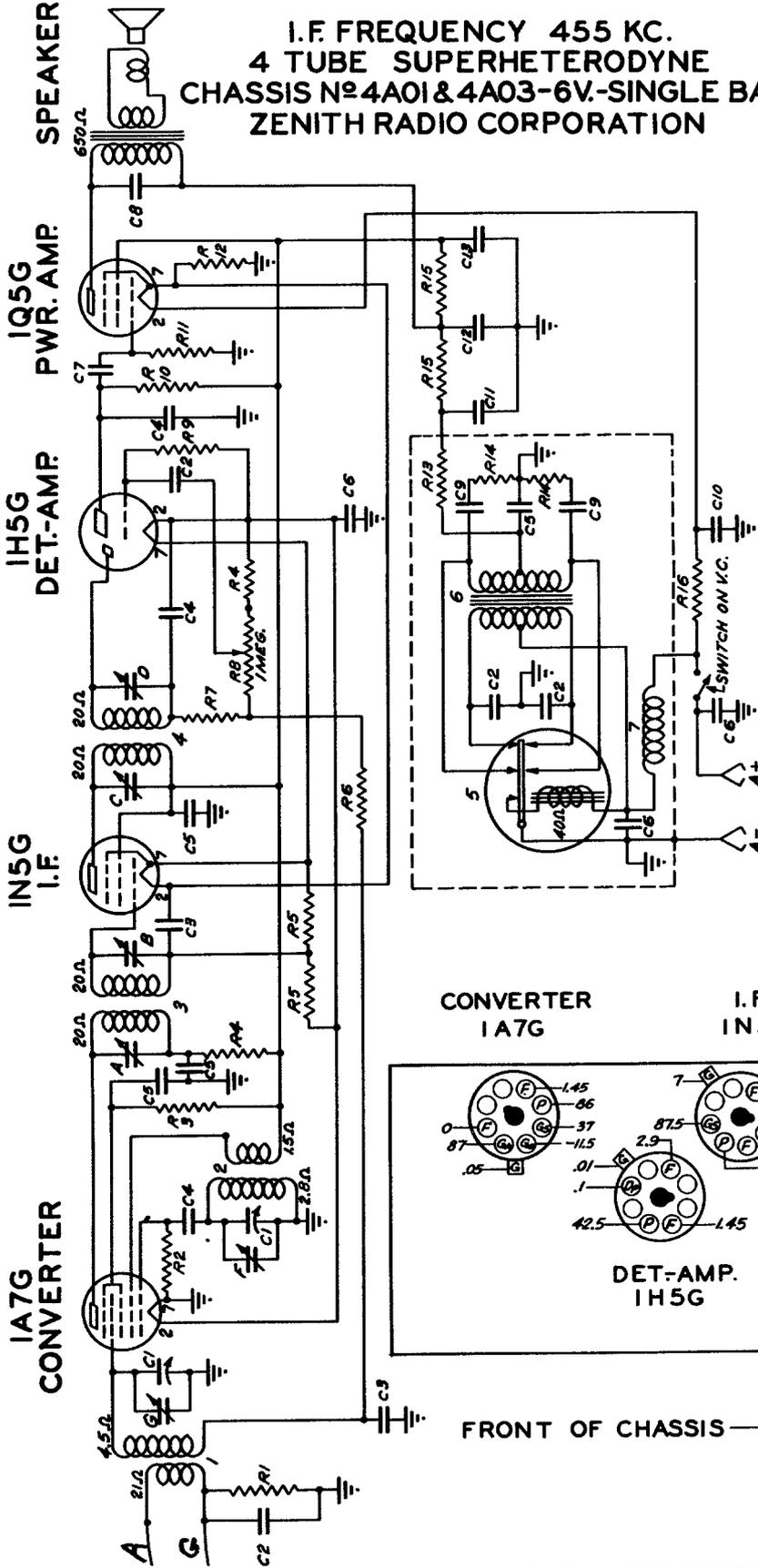


IH5G
DET.-AMP.



MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

I.F. FREQUENCY 455 KC.
 4 TUBE SUPERHETERODYNE
 CHASSIS N^o 4A01 & 4A03-6V.-SINGLE BAND
 ZENITH RADIO CORPORATION

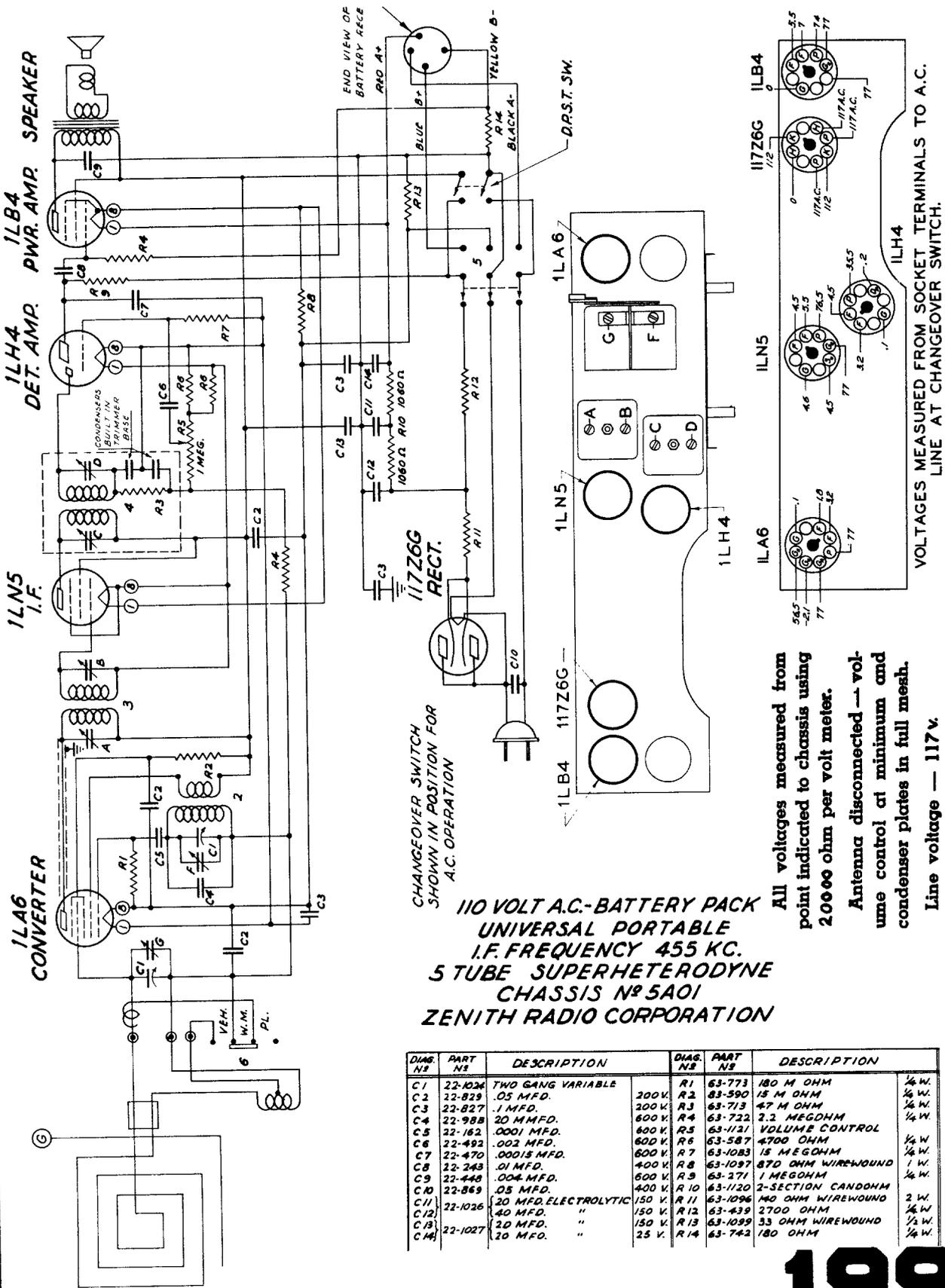


DIAG. N ^o	PART N ^o	DESCRIPTION	DIAG. N ^o	PART N ^o	DESCRIPTION
C1	22-695	TWO GANG VARIABLE	R2	63-595	100M OHM
C2	22-826	.01 MFD.	R3	63-594	68M OHM
C3	22-829	.05 MFD.	R4	63-583	1000 OHM
C4	22-162	.0001 MFD.	R5	63-296	2200 OHM
C5	22-828	.05 MFD.	R6	63-569	39 MEGOHM
C6	22-159	.5 MFD.	R7	63-593	47M OHM
C7	22-243	.01 MFD.	R8	63-1079	VOLUME CONTROL
C8	22-445	.004 MFD.	R9	63-976	15 MEGOHM
C9	22-966	100MFD. ELECTROLYTIC	R10	63-271	1 MEGOHM
C10	22-967	150MFD. ELECTROLYTIC	R11	63-600	22 MEGOHM
C11	22-742	10MFD. ELECTROLYTIC	R12	63-1060	90 OHM WIREWOUND
C12	22-742	10MFD. ELECTROLYTIC	R13	63-577	100 OHM
C13	22-742	10MFD. ELECTROLYTIC	R14	63-597	100 OHM
			R15	63-605	1000 OHM
			R16	63-1061	7 OHM
R1	63-597	470M OHM			

DIAG. N ^o	PART N ^o	DESCRIPTION	DIAG. N ^o	PART N ^o	DESCRIPTION
1	57681	ANTENNA COIL ASSEMBLY	1	57681	ANTENNA COIL ASSEMBLY
2	36381	OSCILLATOR COIL ASSEMBLY	2	36381	OSCILLATOR COIL ASSEMBLY
3	95-589	1ST. I.F. TRANS.	3	95-589	1ST. I.F. TRANS.
4	95-590	2ND. I.F. TRANS.	4	95-590	2ND. I.F. TRANS.
5	190-17	VIBRATOR	5	190-17	VIBRATOR
6	95-635	POWER TRANSFORMER	6	95-635	POWER TRANSFORMER
7	55043	CHOKE ASSEMBLY	7	55043	CHOKE ASSEMBLY
4		1ST. I.F. TRANS. PRI	4		1ST. I.F. TRANS. PRI
5		1ST. I.F. TRANS. SEC	5		1ST. I.F. TRANS. SEC
6		2ND. I.F. TRANS. PRI	6		2ND. I.F. TRANS. PRI
7		2ND. I.F. TRANS. SEC	7		2ND. I.F. TRANS. SEC
		BROADCAST OSC. (ON GANG)			BROADCAST OSC. (ON GANG)
		ANT. BROADCAST (ON GANG)			ANT. BROADCAST (ON GANG)

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



CHANGEOVER SWITCH FOR SHOWN IN POSITION FOR A.C. OPERATION

110 VOLT A.C.-BATTERY PACK
UNIVERSAL PORTABLE
I.F. FREQUENCY 455 KC.
5 TUBE SUPERHETERODYNE
CHASSIS No 5A01
ZENITH RADIO CORPORATION

All voltages measured from point indicated to chassis using 20000 ohm per volt meter.

Antenna disconnected → volume control at minimum and condenser plates in full mesh.

Line voltage — 117 v.

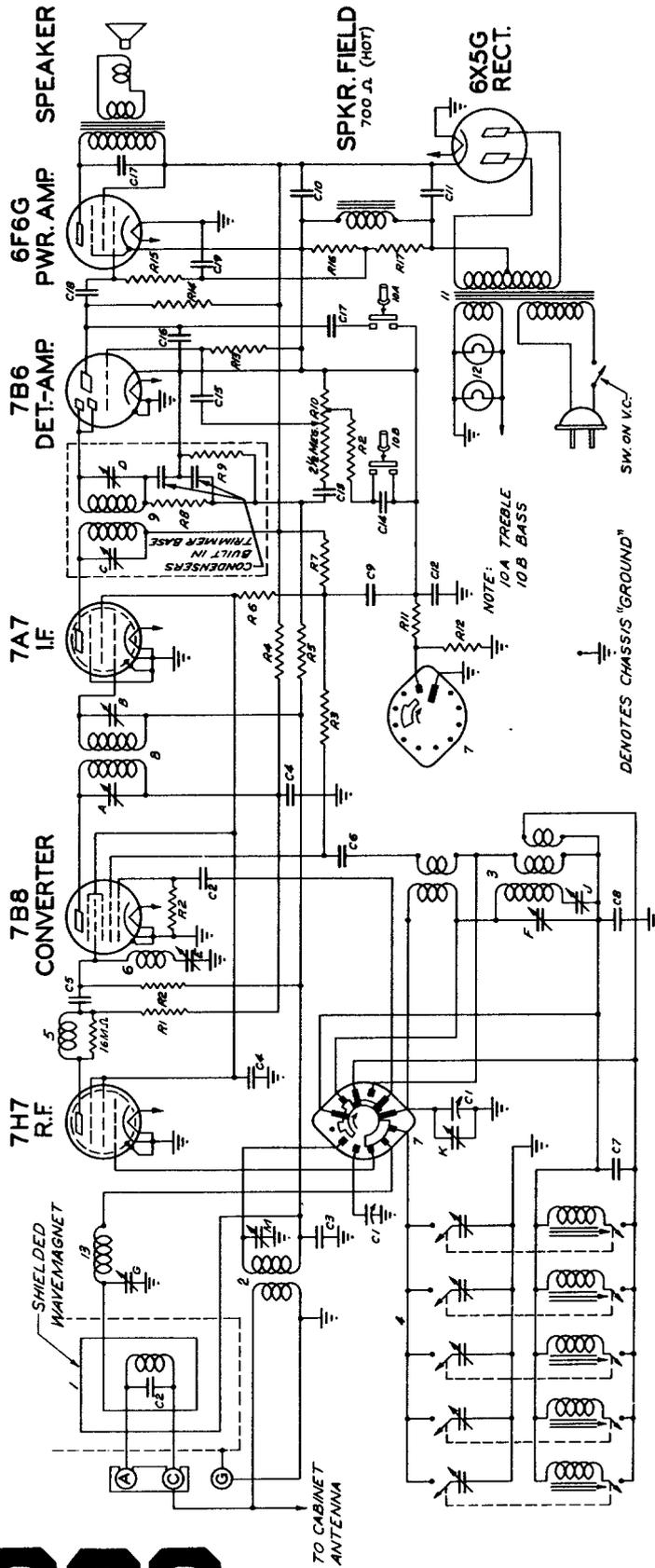
VOLTAGES MEASURED FROM SOCKET TERMINALS TO A.C. LINE AT CHANGEOVER SWITCH.

DIAG. NO.	PART NO.	DESCRIPTION	DIAG. NO.	PART NO.	DESCRIPTION	
C1	22-1026	TWO GANG VARIABLE	R1	63-773	180 M OHM	1/4 W.
C2	22-829	.05 MFD.	R2	63-590	15 M OHM	1/4 W.
C3	22-827	1 MFD.	R3	63-713	47 M OHM	1/4 W.
C4	22-988	20 M MFD.	R4	63-722	2.2 MEGOHM	1/4 W.
C5	22-162	.0001 MFD.	R5	63-1121	VOLUME CONTROL	
C6	22-492	.002 MFD.	R6	63-587	4700 OHM	1/2 W.
C7	22-470	.00015 MFD.	R7	63-1083	15 MEGOHM	1/4 W.
C8	22-243	.01 MFD.	R8	63-1097	870 OHM WIREWOUND	1 W.
C9	22-448	.004 MFD.	R9	63-271	1 MEGOHM	1/4 W.
C10	22-869	.05 MFD.	R10	63-1120	2-SECTION CANDOHM	
C11	22-1026	20 MFD. ELECTROLYTIC	R11	63-1096	140 OHM WIREWOUND	2 W.
C12	22-1026	.40 MFD. "	R12	63-639	2700 OHM	1/4 W.
C13	22-1027	20 MFD. "	R13	63-1099	33 OHM WIREWOUND	1/2 W.
C14	22-1027	20 MFD. "	R14	63-742	180 OHM	1/4 W.

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MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



I.F. FREQUENCY 455 KC.
 6 TUBE SUPERHETERODYNE
 CHASSIS № 6A05 2 BAND AC.
 ZENITH RADIO CORPORATION

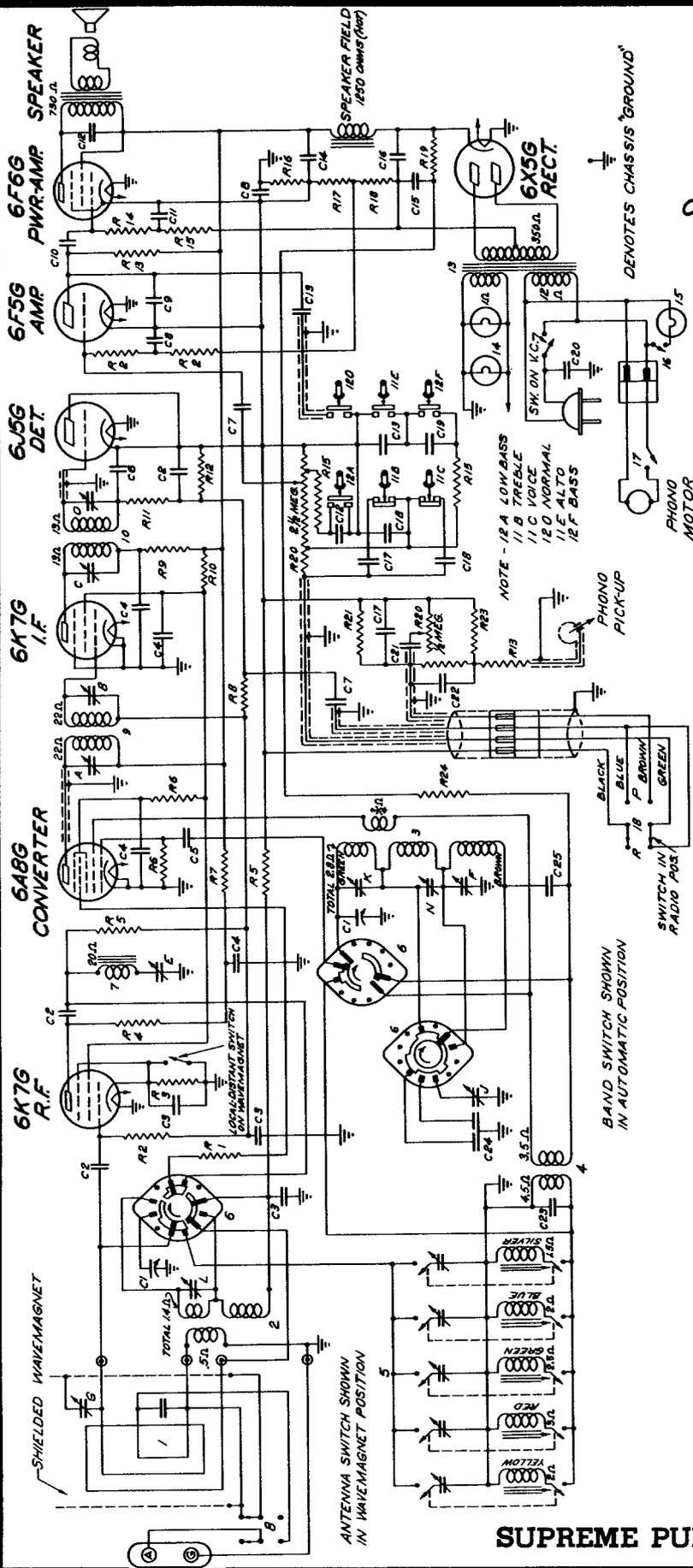
DIAG. NO.	PART NO.	DESCRIPTION	VOLTS	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
C1	22-1044	TWO GANG VARIABLE	600V	R15	63-597 470M OHM	73	LOOP LOADING COIL
C2	22-289	50 MFD.	200V	R16	63-598 470M OHM	A	1ST I.F. TRANS. PRI. SEC.
C3	22-829	.05 MFD.	400V	R16	63-598 470M OHM	B	1ST I.F. " PRI. SEC.
C4	22-628	.05 MFD.	600V	R17	63-656 270M OHM	C	2ND I.F. " PRI. SEC.
C5	22-162	.0001 MFD.	600V	1	S8507 WAVE TRAP	D	2ND I.F. " SEC.
C6	22-162	.00025 MFD.	600V	2	S8508 ANTENNA COIL ASSEMBLY	E	22-1015 WAVE TRAP
C7	22-866	COMPENSATING COND.	600V	3	S8509 OSCILLATOR COIL ASSEMBLY	F	22-1042 BROADCAST OSCILLATOR
C8	22-1023	.005 MFD.	350V	4	S8457 AUTOMATIC TUNING UNIT	G	22-1042 BROADCAST ANTENNA
C9	22-1034	.5 MFD. ELECTROLYTIC	450V	5	S8359 R.F. CHOKER & RES. ASSEMBLY	H	22-1023 BROADCAST BUDDER
C10	22-1036	.15 MFD.	400V	6	S8553 WAVE TRAP ASSEMBLY	K	22-1023 BROADCAST BUDDER
C11	22-1036	.15 MFD.	400V	7	S8523 BAND SELECTOR SWITCH	M	22-1042 SHORT WAVE OSC. (ON GANG)
C12	22-827	.1 MFD.	400V	8	S5-239 I.F. TRANSFORMER		
C13	22-169	.02 MFD.	600V	9	S5-709 I.F. TRANSFORMER		
C14	22-429	.005 MFD.	600V	10	S8531 TONE CONTROL SWITCH		
C15	22-82	.002 MFD.	600V	11	S5-710 I.F. TRANSFORMER		
C16	22-44	.004 MFD.	600V	12	100-36 PILOT LIGHT 6.3V .25A.		
C17	22-44	.004 MFD.	600V				
C18	22-810	.02 MFD.	600V				

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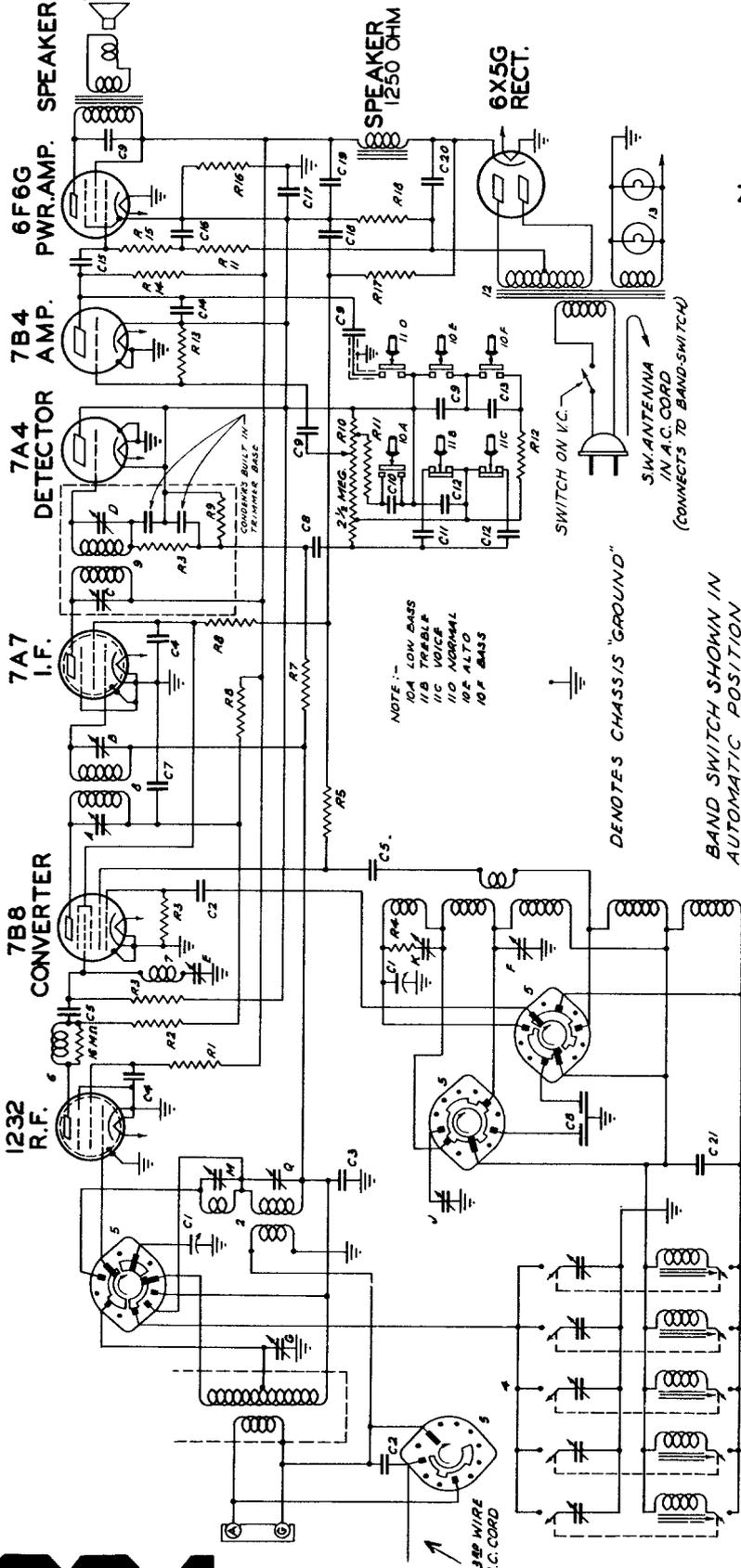
SERVICE DIAGRAMS

I.F. FREQUENCY 455 KC.
7 TUBE SUPERHETERODYNE
CHASSIS N° 7A01 PHONO 3BAND
ZENITH RADIO CORPORATION



TUBE PART NO.	DESCRIPTION	QMS PART NO.	DESCRIPTION	QMS PART NO.	DESCRIPTION
C1	TRAP, BAND VARIABLE	600K		18	1.5 MEG OHM
C2	TRAP, BAND	600K		19	470M OHM
C3	.05 MFD.	600K		20	200M OHM
C4	.05 MFD.	600K		21	10M OHM
C5	.05 MFD.	600K		22	10M OHM
C6	.00025 MFD.	600K		23	10M OHM
C7	.01 MFD.	600K		24	10M OHM
C8	.00025 MFD.	600K		25	10M OHM
C9	.00025 MFD.	600K		26	10M OHM
C10	.02 MFD.	600K		27	10M OHM
C11	.03 MFD.	600K		28	10M OHM
C12	.005 MFD.	600K		29	10M OHM
C13	.005 MFD.	600K		30	10M OHM
C14	.005 MFD.	600K		31	10M OHM
C15	.005 MFD.	600K		32	10M OHM
C16	.005 MFD.	600K		33	10M OHM
C17	.0035 MFD.	600K		34	10M OHM
C18	.002 MFD.	600K		35	10M OHM
C19	.002 MFD.	600K		36	10M OHM
C20	.005 MFD.	600K		37	10M OHM
C21	.005 MFD.	600K		38	10M OHM
C22	.005 MFD.	600K		39	10M OHM
C23	.005 MFD.	600K		40	10M OHM
C24	DUAL OSC. PADDER	600K		41	10M OHM
R1	100 OHM	600K		42	10M OHM
R2	100 OHM	600K		43	10M OHM
R3	100 OHM	600K		44	10M OHM
R4	100 OHM	600K		45	10M OHM
R5	100 OHM	600K		46	10M OHM
R6	100 OHM	600K		47	10M OHM
R7	100 OHM	600K		48	10M OHM
R8	100 OHM	600K		49	10M OHM
R9	100 OHM	600K		50	10M OHM
R10	100 OHM	600K		51	10M OHM
R11	100 OHM	600K		52	10M OHM
R12	100 OHM	600K		53	10M OHM
R13	100 OHM	600K		54	10M OHM
R14	100 OHM	600K		55	10M OHM
R15	100 OHM	600K		56	10M OHM
R16	100 OHM	600K		57	10M OHM
R17	100 OHM	600K		58	10M OHM
R18	100 OHM	600K		59	10M OHM
R19	100 OHM	600K		60	10M OHM
R20	100 OHM	600K		61	10M OHM

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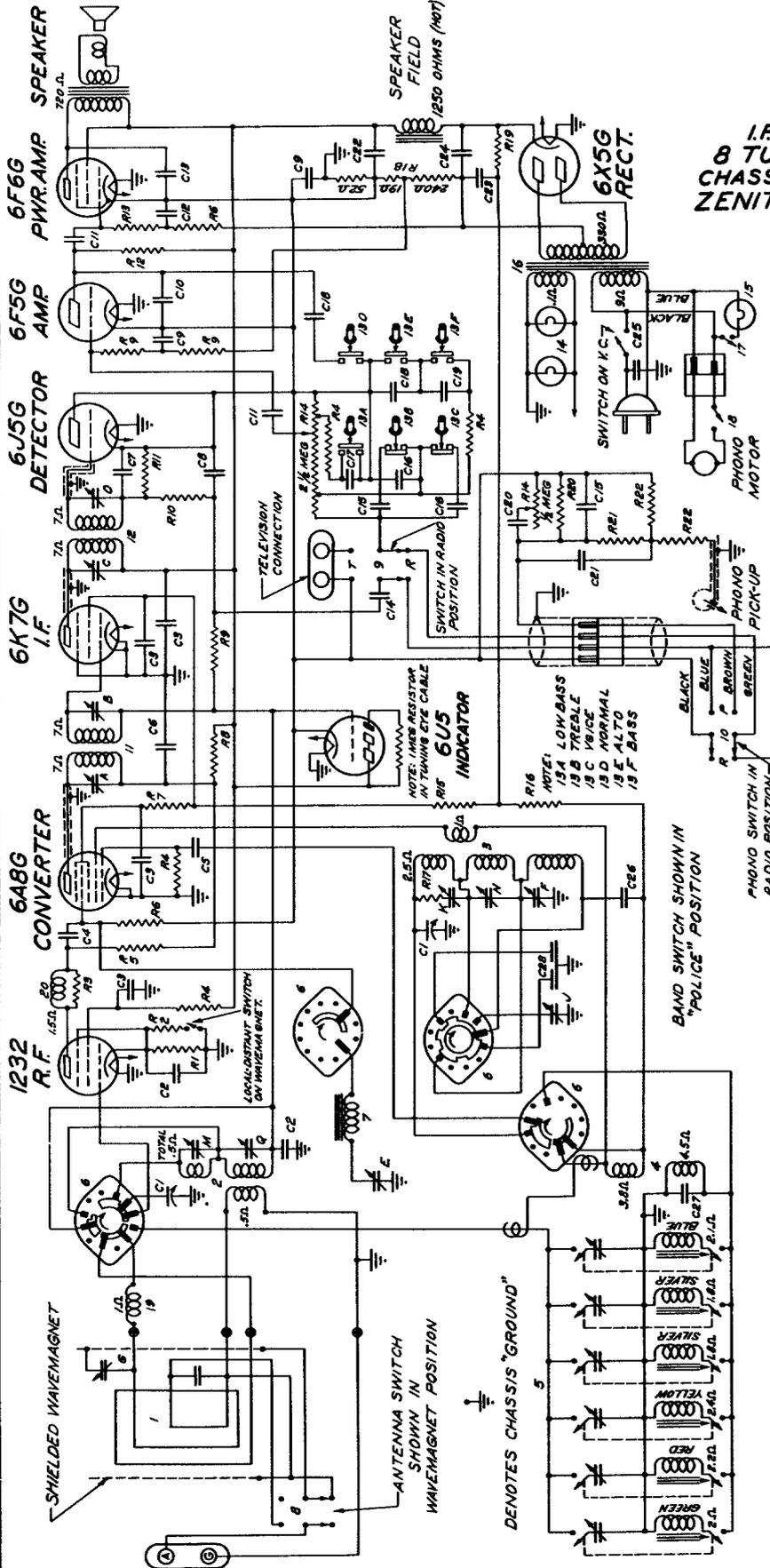


I.F. FREQUENCY 455 K.C.
 7 TUBE SUPERHETERODYNE
 CHASSIS № 7A02 3 BAND A.C.
 ZENITH RADIO CORPORATION

Q/NO. PART NO.	DESCRIPTION	Q/NO. PART NO.	DESCRIPTION	Q/NO. PART NO.	DESCRIPTION
C1 22-830	TWO GANG VARIABLE	C21 22-886	COMPENSATING COND.	R17 63-973	15M OHM
C2 22-829	50 MFD.	R18 63-1058	200 OHM WIREWOUND 1/2 W	R18 63-1058	200 OHM WIREWOUND 1/2 W
C3 22-828	.05 MFD.	1	36404	1	WAVEMAGNET ASSEMBLY
C4 22-828	.05 MFD.	2	36404	2	ANTENNA COIL ASSEMBLY
C5 22-182	.00025 MFD.	3	36404	3	ANTENNA COIL ASSEMBLY
C6 22-1037	DUAL PADDER	4	36404	4	ANTENNA COIL ASSEMBLY
C7 22-827	.02 MFD.	5	36404	5	ANTENNA COIL ASSEMBLY
C8 22-827	.02 MFD.	6	36404	6	ANTENNA COIL ASSEMBLY
C9 22-827	.02 MFD.	7	36404	7	ANTENNA COIL ASSEMBLY
C10 22-827	.02 MFD.	8	36404	8	ANTENNA COIL ASSEMBLY
C11 22-827	.02 MFD.	9	36404	9	ANTENNA COIL ASSEMBLY
C12 22-827	.02 MFD.	10	36404	10	ANTENNA COIL ASSEMBLY
C13 22-827	.02 MFD.	11	36404	11	ANTENNA COIL ASSEMBLY
C14 22-827	.02 MFD.	12	36404	12	ANTENNA COIL ASSEMBLY
C15 22-827	.02 MFD.	13	36404	13	ANTENNA COIL ASSEMBLY
C16 22-827	.02 MFD.	14	36404	14	ANTENNA COIL ASSEMBLY
C17 22-827	.02 MFD.	15	36404	15	ANTENNA COIL ASSEMBLY
C18 22-827	.02 MFD.	16	36404	16	ANTENNA COIL ASSEMBLY
C19 22-827	.02 MFD.	17	36404	17	ANTENNA COIL ASSEMBLY
C20 22-1036	15 MFD. ELECTROLYTIC	18	36404	18	ANTENNA COIL ASSEMBLY
		19	36404	19	ANTENNA COIL ASSEMBLY
		20	36404	20	ANTENNA COIL ASSEMBLY

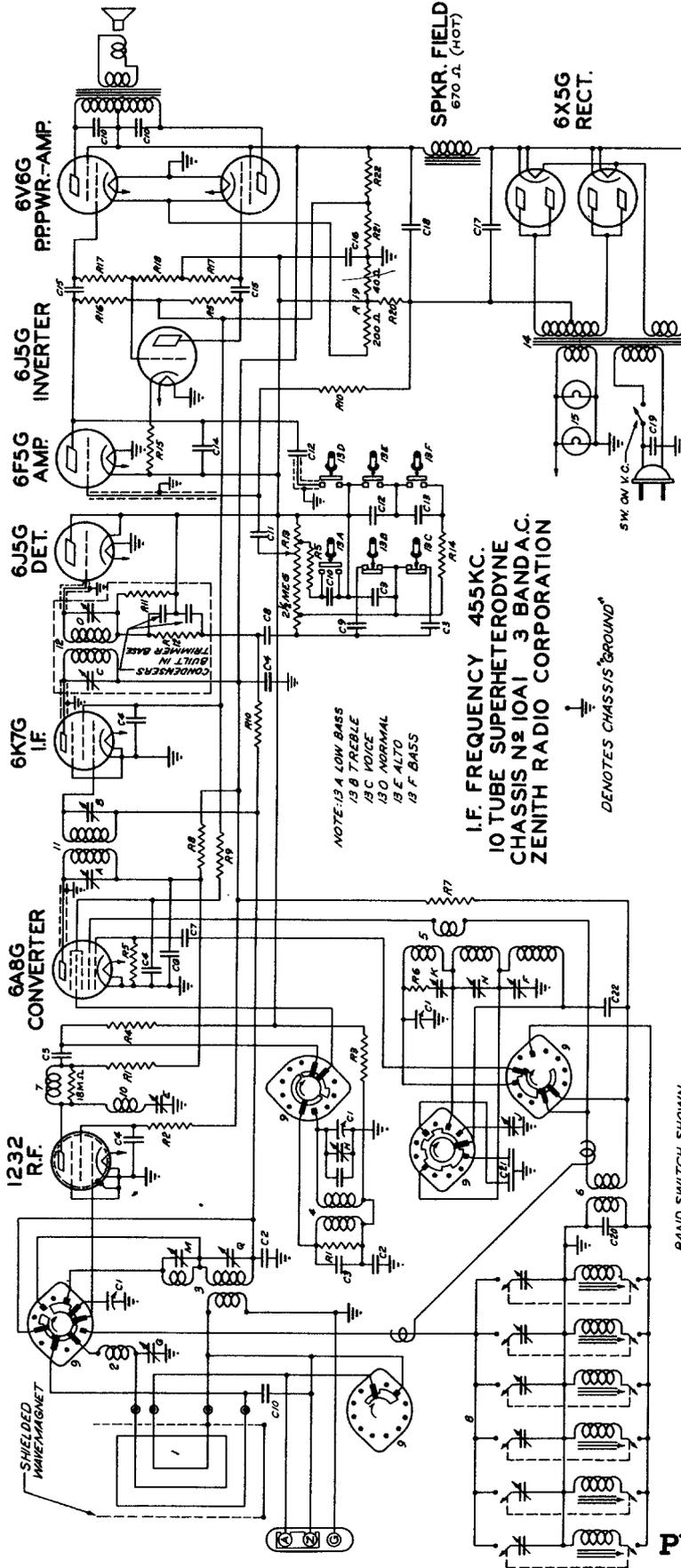
MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

I.F. FREQUENCY 455 KC.
8 TUBE SUPERHETERODYNE
CHASSIS N^o 8A01 3BAND PHONO
ZENITH RADIO CORPORATION

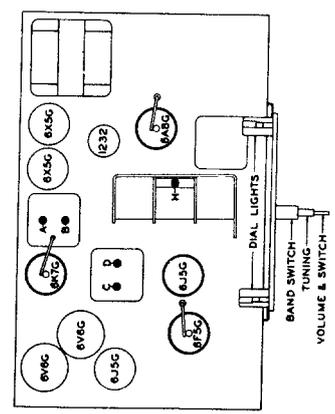


PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
C1	2P-887 200-250 MFD	R1	100K	17	65-903 DOOR SWITCH	1	WAVE MAGNET ASSEMBLY
C2	2P-889 0.5 MFD	R2	1K	18	65-901 1/2M OHM	2	ANTENNA COIL ASSEMBLY
C3	2P-888 0.5 MFD	R3	1K	19	65-902 1/2M OHM	3	OSCILLATOR COIL ASSEMBLY
C4	2P-885 0.0005 MFD	R4	1K	20	65-904 475M OHM	4	OSC. COIL ASSEMBLY
C5	2P-887 25 MFD	R5	1K	21	65-905 475M OHM	5	OSC. COIL ASSEMBLY
C6	2P-885 1 MFD	R6	1K	22	65-906 475M OHM	6	OSC. COIL ASSEMBLY
C7	2P-885 1 MFD	R7	1K	23	65-907 475M OHM	7	OSC. COIL ASSEMBLY
C8	2P-885 1 MFD	R8	1K	24	65-908 475M OHM	8	OSC. COIL ASSEMBLY
C9	2P-885 1 MFD	R9	1K	25	65-909 475M OHM	9	OSC. COIL ASSEMBLY
C10	2P-885 1 MFD	R10	1K	26	65-910 475M OHM	10	OSC. COIL ASSEMBLY
C11	2P-885 1 MFD	R11	1K	27	65-911 475M OHM	11	OSC. COIL ASSEMBLY
C12	2P-885 1 MFD	R12	1K	28	65-912 475M OHM	12	OSC. COIL ASSEMBLY
C13	2P-885 1 MFD	R13	1K	29	65-913 475M OHM	13	OSC. COIL ASSEMBLY
C14	2P-885 1 MFD	R14	1K	30	65-914 475M OHM	14	OSC. COIL ASSEMBLY
C15	2P-885 1 MFD	R15	1K	31	65-915 475M OHM	15	OSC. COIL ASSEMBLY
C16	2P-885 1 MFD	R16	1K	32	65-916 475M OHM	16	OSC. COIL ASSEMBLY
C17	2P-885 1 MFD	R17	1K	33	65-917 475M OHM	17	OSC. COIL ASSEMBLY
C18	2P-885 1 MFD	R18	1K	34	65-918 475M OHM	18	OSC. COIL ASSEMBLY
C19	2P-885 1 MFD	R19	1K	35	65-919 475M OHM	19	OSC. COIL ASSEMBLY
C20	2P-885 1 MFD	R20	1K	36	65-920 475M OHM	20	OSC. COIL ASSEMBLY
C21	2P-885 1 MFD	R21	1K	37	65-921 475M OHM	21	OSC. COIL ASSEMBLY
C22	2P-885 1 MFD	R22	1K	38	65-922 475M OHM	22	OSC. COIL ASSEMBLY
C23	2P-885 1 MFD	R23	1K	39	65-923 475M OHM	23	OSC. COIL ASSEMBLY
C24	2P-885 1 MFD	R24	1K	40	65-924 475M OHM	24	OSC. COIL ASSEMBLY
C25	2P-885 1 MFD	R25	1K	41	65-925 475M OHM	25	OSC. COIL ASSEMBLY
C26	2P-885 1 MFD	R26	1K	42	65-926 475M OHM	26	OSC. COIL ASSEMBLY
C27	2P-885 1 MFD	R27	1K	43	65-927 475M OHM	27	OSC. COIL ASSEMBLY
C28	2P-885 1 MFD	R28	1K	44	65-928 475M OHM	28	OSC. COIL ASSEMBLY
C29	2P-885 1 MFD	R29	1K	45	65-929 475M OHM	29	OSC. COIL ASSEMBLY
C30	2P-885 1 MFD	R30	1K	46	65-930 475M OHM	30	OSC. COIL ASSEMBLY
C31	2P-885 1 MFD	R31	1K	47	65-931 475M OHM	31	OSC. COIL ASSEMBLY
C32	2P-885 1 MFD	R32	1K	48	65-932 475M OHM	32	OSC. COIL ASSEMBLY
C33	2P-885 1 MFD	R33	1K	49	65-933 475M OHM	33	OSC. COIL ASSEMBLY
C34	2P-885 1 MFD	R34	1K	50	65-934 475M OHM	34	OSC. COIL ASSEMBLY
C35	2P-885 1 MFD	R35	1K	51	65-935 475M OHM	35	OSC. COIL ASSEMBLY
C36	2P-885 1 MFD	R36	1K	52	65-936 475M OHM	36	OSC. COIL ASSEMBLY
C37	2P-885 1 MFD	R37	1K	53	65-937 475M OHM	37	OSC. COIL ASSEMBLY
C38	2P-885 1 MFD	R38	1K	54	65-938 475M OHM	38	OSC. COIL ASSEMBLY
C39	2P-885 1 MFD	R39	1K	55	65-939 475M OHM	39	OSC. COIL ASSEMBLY
C40	2P-885 1 MFD	R40	1K	56	65-940 475M OHM	40	OSC. COIL ASSEMBLY
C41	2P-885 1 MFD	R41	1K	57	65-941 475M OHM	41	OSC. COIL ASSEMBLY
C42	2P-885 1 MFD	R42	1K	58	65-942 475M OHM	42	OSC. COIL ASSEMBLY
C43	2P-885 1 MFD	R43	1K	59	65-943 475M OHM	43	OSC. COIL ASSEMBLY
C44	2P-885 1 MFD	R44	1K	60	65-944 475M OHM	44	OSC. COIL ASSEMBLY
C45	2P-885 1 MFD	R45	1K	61	65-945 475M OHM	45	OSC. COIL ASSEMBLY
C46	2P-885 1 MFD	R46	1K	62	65-946 475M OHM	46	OSC. COIL ASSEMBLY
C47	2P-885 1 MFD	R47	1K	63	65-947 475M OHM	47	OSC. COIL ASSEMBLY
C48	2P-885 1 MFD	R48	1K	64	65-948 475M OHM	48	OSC. COIL ASSEMBLY
C49	2P-885 1 MFD	R49	1K	65	65-949 475M OHM	49	OSC. COIL ASSEMBLY
C50	2P-885 1 MFD	R50	1K	66	65-950 475M OHM	50	OSC. COIL ASSEMBLY
C51	2P-885 1 MFD	R51	1K	67	65-951 475M OHM	51	OSC. COIL ASSEMBLY
C52	2P-885 1 MFD	R52	1K	68	65-952 475M OHM	52	OSC. COIL ASSEMBLY
C53	2P-885 1 MFD	R53	1K	69	65-953 475M OHM	53	OSC. COIL ASSEMBLY
C54	2P-885 1 MFD	R54	1K	70	65-954 475M OHM	54	OSC. COIL ASSEMBLY
C55	2P-885 1 MFD	R55	1K	71	65-955 475M OHM	55	OSC. COIL ASSEMBLY
C56	2P-885 1 MFD	R56	1K	72	65-956 475M OHM	56	OSC. COIL ASSEMBLY
C57	2P-885 1 MFD	R57	1K	73	65-957 475M OHM	57	OSC. COIL ASSEMBLY
C58	2P-885 1 MFD	R58	1K	74	65-958 475M OHM	58	OSC. COIL ASSEMBLY
C59	2P-885 1 MFD	R59	1K	75	65-959 475M OHM	59	OSC. COIL ASSEMBLY
C60	2P-885 1 MFD	R60	1K	76	65-960 475M OHM	60	OSC. COIL ASSEMBLY
C61	2P-885 1 MFD	R61	1K	77	65-961 475M OHM	61	OSC. COIL ASSEMBLY
C62	2P-885 1 MFD	R62	1K	78	65-962 475M OHM	62	OSC. COIL ASSEMBLY
C63	2P-885 1 MFD	R63	1K	79	65-963 475M OHM	63	OSC. COIL ASSEMBLY
C64	2P-885 1 MFD	R64	1K	80	65-964 475M OHM	64	OSC. COIL ASSEMBLY
C65	2P-885 1 MFD	R65	1K	81	65-965 475M OHM	65	OSC. COIL ASSEMBLY
C66	2P-885 1 MFD	R66	1K	82	65-966 475M OHM	66	OSC. COIL ASSEMBLY
C67	2P-885 1 MFD	R67	1K	83	65-967 475M OHM	67	OSC. COIL ASSEMBLY
C68	2P-885 1 MFD	R68	1K	84	65-968 475M OHM	68	OSC. COIL ASSEMBLY
C69	2P-885 1 MFD	R69	1K	85	65-969 475M OHM	69	OSC. COIL ASSEMBLY
C70	2P-885 1 MFD	R70	1K	86	65-970 475M OHM	70	OSC. COIL ASSEMBLY
C71	2P-885 1 MFD	R71	1K	87	65-971 475M OHM	71	OSC. COIL ASSEMBLY
C72	2P-885 1 MFD	R72	1K	88	65-972 475M OHM	72	OSC. COIL ASSEMBLY
C73	2P-885 1 MFD	R73	1K	89	65-973 475M OHM	73	OSC. COIL ASSEMBLY
C74	2P-885 1 MFD	R74	1K	90	65-974 475M OHM	74	OSC. COIL ASSEMBLY
C75	2P-885 1 MFD	R75	1K	91	65-975 475M OHM	75	OSC. COIL ASSEMBLY
C76	2P-885 1 MFD	R76	1K	92	65-976 475M OHM	76	OSC. COIL ASSEMBLY
C77	2P-885 1 MFD	R77	1K	93	65-977 475M OHM	77	OSC. COIL ASSEMBLY
C78	2P-885 1 MFD	R78	1K	94	65-978 475M OHM	78	OSC. COIL ASSEMBLY
C79	2P-885 1 MFD	R79	1K	95	65-979 475M OHM	79	OSC. COIL ASSEMBLY
C80	2P-885 1 MFD	R80	1K	96	65-980 475M OHM	80	OSC. COIL ASSEMBLY
C81	2P-885 1 MFD	R81	1K	97	65-981 475M OHM	81	OSC. COIL ASSEMBLY
C82	2P-885 1 MFD	R82	1K	98	65-982 475M OHM	82	OSC. COIL ASSEMBLY
C83	2P-885 1 MFD	R83	1K	99	65-983 475M OHM	83	OSC. COIL ASSEMBLY
C84	2P-885 1 MFD	R84	1K	100	65-984 475M OHM	84	OSC. COIL ASSEMBLY
C85	2P-885 1 MFD	R85	1K	101	65-985 475M OHM	85	OSC. COIL ASSEMBLY
C86	2P-885 1 MFD	R86	1K	102	65-986 475M OHM	86	OSC. COIL ASSEMBLY
C87	2P-885 1 MFD	R87	1K	103	65-987 475M OHM	87	OSC. COIL ASSEMBLY
C88	2P-885 1 MFD	R88	1K	104	65-988 475M OHM	88	OSC. COIL ASSEMBLY
C89	2P-885 1 MFD	R89	1K	105	65-989 475M OHM	89	OSC. COIL ASSEMBLY
C90	2P-885 1 MFD	R90	1K	106	65-990 475M OHM	90	OSC. COIL ASSEMBLY
C91	2P-885 1 MFD	R91	1K	107	65-991 475M OHM	91	OSC. COIL ASSEMBLY
C92	2P-885 1 MFD	R92	1K	108	65-992 475M OHM	92	OSC. COIL ASSEMBLY
C93	2P-885 1 MFD	R93	1K	109	65-993 475M OHM	93	OSC. COIL ASSEMBLY
C94	2P-885 1 MFD	R94	1K	110	65-994 475M OHM	94	OSC. COIL ASSEMBLY
C95	2P-885 1 MFD	R95	1K	111	65-995 475M OHM	95	OSC. COIL ASSEMBLY
C96	2P-885 1 MFD	R96	1K	112	65-996 475M OHM	96	OSC. COIL ASSEMBLY
C97	2P-885 1 MFD	R97	1K	113	65-997 475M OHM	97	OSC. COIL ASSEMBLY
C98	2P-885 1 MFD	R98	1K	114	65-998 475M OHM	98	OSC. COIL ASSEMBLY
C99	2P-885 1 MFD	R99	1K	115	65-999 475M OHM	99	OSC. COIL ASSEMBLY
C100	2P-885 1 MFD	R100	1K	116	65-1000 475M OHM	100	OSC. COIL ASSEMBLY

MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS

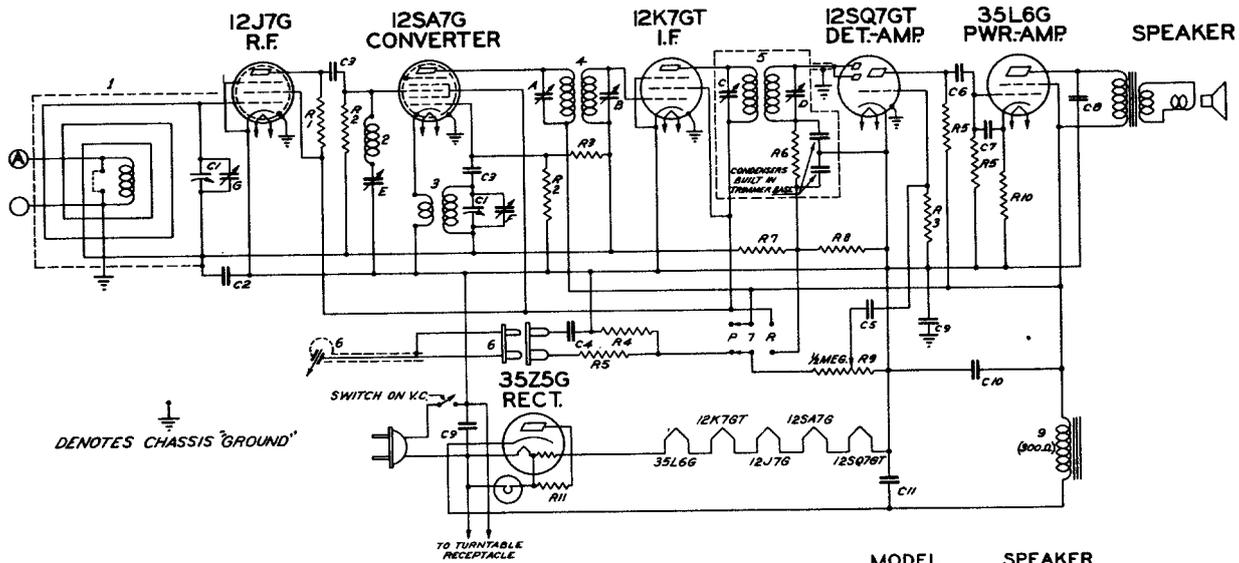


DIAL NO.	PART NO.	DESCRIPTION	DIAL NO.	PART NO.	DESCRIPTION	DIAL NO.	PART NO.	DESCRIPTION
C 1	22-1043	THREE GANG VARIABLE	A 1	63-581	470 Ω OHM	A 1	22-1043	22 M OHM
C 2	22-829	.05 MFD.	A 2	63-582	10 M OHM	A 2	63-582	22 M OHM
C 3	22-829	.05 MFD.	A 3	63-583	10 M OHM	A 3	63-583	22 M OHM
C 4	22-829	.05 MFD.	A 4	63-584	10 M OHM	A 4	63-584	22 M OHM
C 5	22-147	.0005 MFD.	A 5	63-585	10 M OHM	A 5	63-585	22 M OHM
C 6	22-825	.1 MFD.	A 6	63-586	10 M OHM	A 6	63-586	22 M OHM
C 7	22-827	.25 MFD.	A 7	63-587	10 M OHM	A 7	63-587	22 M OHM
C 8	22-828	.5 MFD.	A 8	63-588	10 M OHM	A 8	63-588	22 M OHM
C 9	22-824	.001 MFD.	A 9	63-589	10 M OHM	A 9	63-589	22 M OHM
C 10	22-829	.001 MFD.	A 10	63-590	10 M OHM	A 10	63-590	22 M OHM
C 11	22-829	.001 MFD.	A 11	63-591	10 M OHM	A 11	63-591	22 M OHM
C 12	22-448	.004 MFD.	A 12	63-592	10 M OHM	A 12	63-592	22 M OHM
C 13	22-825	.1 MFD.	A 13	63-593	10 M OHM	A 13	63-593	22 M OHM
C 14	22-825	.1 MFD.	A 14	63-594	10 M OHM	A 14	63-594	22 M OHM
C 15	22-171	.05 MFD.	A 15	63-595	10 M OHM	A 15	63-595	22 M OHM
C 16	22-827	.25 MFD.	A 16	63-596	10 M OHM	A 16	63-596	22 M OHM
C 17	22-934	.5 MFD. ELECTROLYTIC	A 17	63-597	10 M OHM	A 17	63-597	22 M OHM
C 18	22-1041	.001 MFD. ELECTROLYTIC	A 18	63-598	10 M OHM	A 18	63-598	22 M OHM
C 19	22-1041	.001 MFD. ELECTROLYTIC	A 19	63-599	10 M OHM	A 19	63-599	22 M OHM
C 20	22-1041	.001 MFD. ELECTROLYTIC	A 20	63-600	10 M OHM	A 20	63-600	22 M OHM
C 21	22-1039	DUAL OSCILLATOR PADDER	A 21	63-601	10 M OHM	A 21	63-601	22 M OHM
C 22	22-339	.002 MFD.	A 22	63-602	10 M OHM	A 22	63-602	22 M OHM



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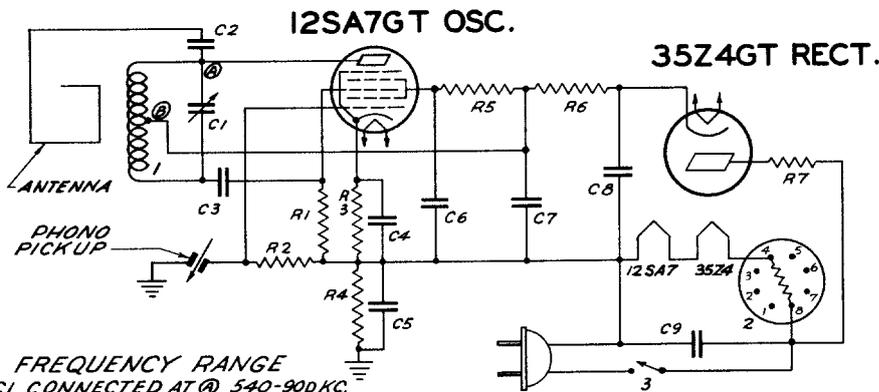
MANUAL OF 1940 MOST POPULAR SERVICE DIAGRAMS



MODEL 6R583
SPEAKER 49-403 4"

I.F. FREQUENCY 455 KC.
6 TUBE SUPERHETERODYNE
CHASSIS N° 6A08 - A.C. PHONO
ZENITH RADIO CORPORATION

DIAG. N°	PART N°	DESCRIPTION	DIAG. N°	PART N°	DESCRIPTION	DIAG. N°	PART N°	DESCRIPTION
C1	22-1000	TWO-BAND VARIABLE	R2	63-1092	15 MEGOHM	5	95-697	2ND I.F. TRANS.
C2	22-825	.05 MFD.	R4	63-715	100 M OHM	6	ME-31	PICKUP & PLUS
C3	22-162	.0001 MFD.	R6	63-719	470 M OHM	7	85-210	PHONO-RADIO SWITCH
C4	22-327	.02 MFD.	R7	63-728	47 M OHM	8	100-87	PILOT LIGHT 6.3V. .15 A.
C5	22-492	.002 MFD.	R8	63-726	22 MEGOHM	9	95-713	FILTER CHoke
C6	22-542	.01 MFD.	R9	63-726	10 MEGOHM			
C7	22-554	.0005 MFD.	R9	63-112	VOLUME CONTROL			
C8	22-849	.03 MFD.	R10	63-686	150 OHM WIREWOUND			
C9	22-1017	.05 MFD.	R11	63-1023	22 OHM WIREWOUND			
C10	22-1016	.20 MFD. ELECTROLYTIC						
C11	22-1016	.20 MFD. ELECTROLYTIC						
			1		WAVE MAGNET ASSEMBLY		A	1ST I.F. TRANS. PRI.
			2	58326	WAVE TRAP COIL ASSEMBLY		B	1ST I.F. TRANS. SEC.
			3	58356	OSC. COIL ASSEMBLY		C	2ND I.F. TRANS. PRI.
			4	95-696	1ST I.F. TRANS.		D	2ND I.F. TRANS. SEC.
							E	22-1015
							F	WAVE TRAP
							G	BROADCAST OSC. (2N-GANG)
							H	BROADCAST ANT. (2N-GANG)
R1	63-709	10M OHM						
R2	63-711	22M OHM						



FREQUENCY RANGE
C1 CONNECTED AT @ 540-900 KC.
C1 CONNECTED AT @ 900-1500 KC.

MODELS
S 8500
S 8501

DIAG. N°	PART N°	DESCRIPTION	DIAG. N°	PART N°	DESCRIPTION
C1	22-690	TUNING CONDENSER	R3	63-701	470 OHM
C2	22-162	.0001 MFD.	R4	63-296	220M OHM
C3	22-182	.00025 MFD.	R5	63-964	4700 OHM
C4	22-825	.05 MFD.	R6	63-803	2200 OHM
C5	22-827	.1 MFD.	R7	63-375	47 OHM
C6	22-243	.01 MFD.			
C7	22-876	.8 MFD. ELECTROLYTIC	1	58611	OSC. COIL ASSEM.
C8	22-876	.40 MFD. "	2	100-76	BALLAST TUBE
C9	22-828	.05 MFD.	3	85-170	A.C. SWITCH
R1	63-591	22 M OHM			
R2	63-271	1 MEGOHM			

PHONOGRAPH OSCILLATOR
ZENITH RADIO CORPORATION