

Most - Often - Needed

1926-1938

**RADIO
DIAGRAMS**
and Servicing Information

Compiled by

M. N. BEITMAN



SUPREME PUBLICATIONS
CHICAGO

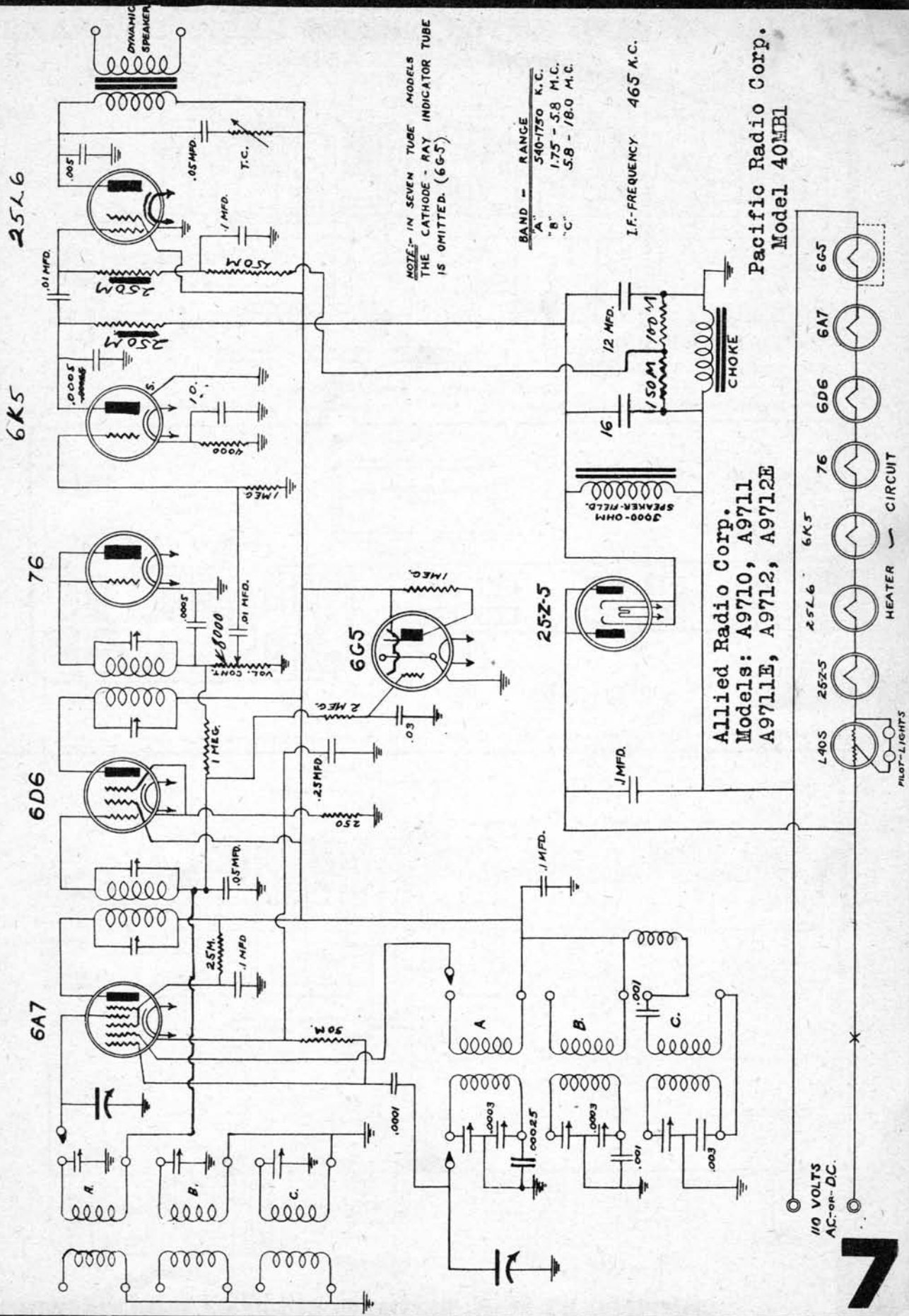
INDEX

MODEL	PAGE	MODEL	PAGE	MODEL	PAGE
ALLIED RADIO		BELMONT RADIO		CROSLEY (Cont'd)	
SG-8	6	525	29	170	43
A9710	7			171	44
A9711	7	BOSCH		172	32
A9712	7	60, 61	204	515	45
				517	46
APEX		BRANDES RADIO		536	34
10	213	B15, B16	28	547	46
46, 47	214			555	47
		BUCKINGHAM RADIO		666	48
ARVIN		80	29	706	49
(See Noblitt Sparks)				716	51
		CHEVROLET, DELCO		726	50
ATWATER KENT		364441	208	5515	45
Chassis F	16	600565	209	5536	34
30	8	601574	210	5555	47
32	8	985100	211	5666	48
35	8				
37	9	CHRYSLER, PHILCO		DAY-FAN	
38	11	CT-11	116	5091	78
40	10				
42	10	CLARION		DELCO	
43	12-13	51, 53	202	(See United Motors)	
44, 45	10	55	202		
46	12-13	480	203	DETROLA RADIO	
47	12			5W, 5X	52
48	8	COLUMBIA RADIO		100A	53
52	10	SG-8	6	106	53
53	12-13			134	53
55, 55C	14	CORONA RADIO			
56	10	127	187	EDISON	
57	10			R-6, R-7	55
60, 60C	15	CROSLEY CORP.			
70	16	5B3	31	EMERSON RADIO	
81	17	6H2	35	UV4	56
82	18	30-S	30	U6A	54
84 early	19	31-S	30	19	56
84 late	20	33-S	30	107	54
84F early	19	34-S	30	AD-108	57
84F late	20	40-S	30	AD-110	57
85	18	41-S	30	111	54
145	21	42-S	30	AD-125	57
155	22	48	33	AL-130	56
165	23	54	33	AL-132	56
317	24	57	33	AL-149	56
325	21	61	35	AL-168	56
328	25	82-S	30		
337	24	124	36	EVEREADY	
856	26	125	32	50	113
976	26	147	37	52-54	113
		148	37		
BALDWIN RADIO		158	38	FADA RADIO	
80	27	160	39	360	59
		167	40		
		168	41	FAIRBANKS MORSE	
		169	42	9A	58

MODEL	PAGE	MODEL	PAGE	MODEL	PAGE
GALVIN MFG. CO.		GEN. HOUSEHOLD (Cont'd)		MAJESTIC (Cont'd)	
5T1	60	801.....	74	20.....	81
5T2	60	1191, 1191B.....	75	55 to 58.....	82
5Y, 5-2	60	1291.....	72	59.....	82
6T, 6Y, 6-2	60	1297.....	72	60 to 62.....	83
50	61	GENERAL MOTORS		66.....	84
60	61	120.....	77	70.....	85-86
GENERAL ELECTRIC		130.....	77	70B.....	85-86
S-22.....	159	140.....	77	71, 72.....	85-86
S-22A.....	160	A5003.....	78	90.....	87
H-31.....	177	A5004.....	78	90B.....	88
H-32.....	175	A5010.....	78	91, 92.....	87
B-40.....	169	5091.....	78	93.....	88
F-40.....	62	GRAYBAR ELECTRIC		116.....	89
T-41.....	174	GT-7.....	157	130 to 132.....	90
S-42.....	159	GB-8.....	159	130A.....	90
S-42B.....	171	GB-8-A.....	160	131, 132.....	90
K-43.....	179	GT-8.....	161	160, 163.....	91
K-50-P.....	169	GB-9.....	163	200 to 204.....	92
H-51.....	177	GC-13.....	157	220, 223.....	93
K-51-P.....	169	GC-14.....	161	230A, 233.....	94
K-52.....	179	GB-100.....	175	290-294.....	95
K-53.....	179	GB-300.....	165	330, 336.....	96
L-53.....	180	GB-310.....	167	360, 363.....	97
E-61.....	64-65	GB-330.....	176	400, 413.....	98
E-62.....	64-65	500, 550.....	172	400A, 413A.....	99
K-62.....	163	GB-678.....	174	460, 463.....	100
A-63.....	63	GB-700.....	177	MID-WEST RADIO	
F-63.....	67	GB-770.....	177	16-34.....	105
K-63.....	181	GB-900.....	177	MONTGOMERY WARD	
A-65.....	63	GB-989.....	162	62-49.....	106
F-65.....	67	GRISBY-GRUNOW		62-68.....	106
F-66.....	67	(See Majestic)		62-70.....	106
E-68.....	64-65	GRUNOW		62-72.....	106
J-70.....	157	(See General Household)		62-97.....	107
H-71.....	177	HALLICRAFTERS		62-99.....	107
J-75.....	157	Sky Buddy.....	101	62-123.....	110
J-80.....	161	5T.....	101	62-131.....	110
E-81.....	69	INTERNATIONAL		62-133.....	110
A-82.....	68	40, 41.....	103	62-142.....	110
A-83.....	70	43, 44	103	62-144.....	110
A-85.....	70	66X.....	103	62-152.....	110
E-86.....	69	86.....	103	62-158.....	110
A-87.....	68	96.....	103	62-185.....	108
E-101.....	71	1019.....	102	62-187.....	108
E-105, E-106.....	71	KADETTE		62-190.....	108
E-126.....	66	(See International)		62-196.....	108
S-132.....	162	KOLSTER RADIO		62-233.....	109
GENERAL HOUSEHOLD		K20, K22.....	104	62-265.....	111
5B.....	73	K27.....	104	62-425.....	111
7B.....	76	MAJESTIC (Old)		MOTOROLA	
8A.....	74	7BP3.....	79	(See Galvin)	
11G.....	75	7P3.....	79		
12B, 12W.....	72	7BP6.....	79		
501.....	73	7P6.....	79		
520, 530.....	73	8P3.....	79		
550.....	73	8P6.....	79		
750-753	76	9P3.....	79		
		9P6.....	79		
		QP6.....	79		
		15, 15B.....	80		

MODEL	PAGE	MODEL	PAGE	MODEL	PAGE
NATIONAL CARBON		RCA MFG. CO.		SEARS, ROEBUCK (Cont'd)	
50.....	113	4X.....	156	1386.....	184
52 to 54.....	113	4X3, 4X4.....	156	1450.....	184
NOBLITT SPARKS		R-4.....	157	1454, 1456.....	184
RE-29.....	112	5T6.....	158	1531.....	184
RE-35.....	112	5T7, 5T8.....	158	1907.....	187
58, 58-A.....	112	R-6.....	157	1923.....	185
88.....	112	R-7.....	159	1933.....	185
OLDSMOBILE		R-7-A.....	160	1939.....	187
982006.....	212	R-8.....	161	1957.....	187
PACIFIC RADIO		R-9.....	159	1983.....	185
40MB1.....	7	R-10.....	162	1993.....	185
PHILCO RADIO		R-11.....	163	4414, 4415.....	186
5.....	115	R-12.....	161	4500.....	186
T11, CT-11.....	116	13K.....	164	4505, 4506.....	186
16.....	117	Radiola 16.....	165	4509-4511.....	186
20, 20A.....	118	Radiola 17.....	166	7004.....	184
21.....	118	R-17-M.....	171	SPARTON	
45.....	119	Radiola 18.....	167	518, 518X.....	191
50.....	120	R-28-P.....	169	558.....	191
50A.....	120	R-32.....	168	568.....	191
53.....	121-122	M-34.....	169	578, 578X.....	191
54.....	121-122	R-35.....	170	589.....	192
57.....	123	R-39.....	170	591.....	189
60.....	124	R-43.....	171	593.....	189
66.....	114	44.....	172	600.....	192
70, 70A.....	125-126	RE-45.....	168	610.....	192
70 AVC.....	127	46.....	172	620.....	192
70A AVC.....	127	Radiola 47.....	173	737 AC.....	192
71.....	128-129	Radiola 48.....	174	930.....	188
80.....	130-131	R-50.....	175	931 AC.....	189
82.....	133	R-52.....	168	1068.....	190
84.....	132	R-55.....	175	1078.....	190
86.....	133	RE-57.....	170	STEWART-WARNER	
87.....	134-135	Radiola 60.....	176	R-100-A, B, E.....	193
89 (123).....	136	RE-75.....	168	R-102.....	195
90, 90A.....	137-140	Radiola 80.....	177	112.....	194
96, 96A.....	141-142	Radiola 82, 86..	177	R-134.....	197
118.....	143	94BK2.....	175	R-136.....	196
610.....	143	94BT2.....	175	R-160.....	198
620 (late).....	144	96K2.....	178	950 AC.....	199
623.....	145	96T3.....	178	1121.....	194
650.....	146	97E.....	178	1341-1349.....	197
37-10.....	147	97KG.....	178	1361-1369.....	196
37-11.....	147	97T.....	178	1601-1609.....	198
37-33.....	148	R-100.....	179	STROMBERG-CARLSON	
37-38.....	149	R-101.....	179	635.....	200
37-84.....	149	110.....	179	SUPREME INSTRUMENTS	
37-93.....	150	111.....	179	504.....	201
37-602.....	151	U-111.....	180	TRANSF. C. OF A.	
37-623.....	152	114.....	180	51.....	202
37-640.....	153	115.....	179	53.....	202
37-650.....	154	120.....	181	55.....	202
38-116.....	155	810K, 810T.....	182	480.....	203
		811K.....	183	UNITED AMERICAN BOSCH	
		SEARS, ROEBUCK		60, 61.....	204
		1320.....	184		
		1322.....	184		
		1324.....	184		
		1326X.....	184		

MODEL	PAGE	MODEL	PAGE	MODEL	PAGE
UNITED MOTORS		ZENITH RADIO (Cont'd)		ZENITH RADIO (Cont'd)	
R-640.....	205	5-S-250.....	220	12-A-57.....	235
4037.....	207	5-S-252.....	220	12-A-58.....	235
364441.....	208	5-X-230.....	221	12-L-57.....	235
600565.....	209	5-X-248.....	221	12-L-58.....	235
601574.....	210	5-X-274.....	221	12-S-205.....	236
980441.....	207	6-S-27.....	222	12-S-232.....	236
982006.....	212	6-S-52.....	222	12-S-245.....	236
985100.....	211	6-S-128.....	223	12-S-265.....	236
		6-S-137.....	223	12-S-266.....	236
U. S. RADIO & TELEVISION		6-S-147.....	223	12-S-267.....	236
10.....	213	6-S-152.....	223	12-S-268.....	236
46, 46A.....	214	6-S-157.....	223	12-U-158.....	237
47, 47A.....	214	6-S-203.....	224	12-U-159.....	237
		6-S-222.....	224	50, 52.....	238
WARDS		6-S-223.....	224	54.....	238
(See Montgomery)		6-S-229.....	224	60 to 62.....	238
WELLS GARDNER		6-S-239.....	224	64.....	238
7D.....	110	6-S-241.....	224	67.....	238
		6-S-254.....	225	474.....	239
		6-S-256.....	225	585.....	239
WESTINGHOUSE EL.		6-V-27.....	226	602.....	238
WR-4.....	174	6-V-62.....	226	612.....	238
WR-5, 6, 7.....	177	7-D-119.....	227	622.....	238
WR-10.....	159	7-D-126.....	227	642.....	238
WR-10-A.....	160	7-D-127.....	227	672.....	238
WR-12.....	159	7-D-138.....	227	705-07.....	240
WR-15.....	163	7-D-148.....	227	711, 712.....	240
WR-15-A.....	162	7-D-151.....	227	715.....	239
WR-17.....	157	7-D-162.....	227	750.....	240
WR-18.....	161	7-D-168.....	227	755, 756.....	239
WR-27.....	169	7-J-232.....	229	785.....	239
WR-32.....	179	7-J-259.....	229	1004.....	234
WR-33.....	169	7-S-28.....	230	1202.....	235
WR-35.....	179	7-S-53.....	230	1203.....	237
WR-36.....	181	7-S-204.....	228	1204.....	236
		7-S-240.....	228	2052A, B, C.....	240
ZENITH RADIO		7-S-242.....	228	2053.....	239
4-F-227.....	215	7-S-258.....	228	5408.....	215
5-F-134.....	216	7-S-260.....	228	5513.....	219
5-F-166.....	216	7-S-261.....	228	5516.....	206
5-J-217.....	217	7-S-323.....	231	5518.....	216
5-J-247.....	217	7-S-342.....	231	5521.....	220
5-J-255.....	217	7-S-343.....	231	5523.....	221
5-R-303.....	218	7-S-363.....	231	5524.....	217
5-R-312.....	218	7-S-364.....	231	5528.....	218
5-R-316.....	218	7-S-366.....	231	5619.....	222
5-R-317.....	218	8-S-129.....	232	5621.....	226
5-R-337.....	218	8-S-154.....	232	5634.....	223
5-S-29.....	219	9-S-203.....	233	5638.....	224
5-S-56.....	219	9-S-232.....	233	5644.....	225
5-S-119.....	206	9-S-242.....	233	5704.....	230
5-S-126.....	206	9-S-244.....	233	5707.....	227
5-S-127.....	206	9-S-262.....	233	5709.....	228
5-S-150.....	206	9-S-263.....	233	5711.....	229
5-S-151.....	206	9-S-264.....	233	5714.....	231
5-S-161.....	206	10-S-130.....	234	5801.....	232
5-S-201.....	220	10-S-147.....	234	5905.....	233
5-S-218.....	220	10-S-153.....	234		
5-S-220.....	220	10-S-155.....	234		
5-S-228.....	220	10-S-156.....	234		
5-S-237.....	220	10-S-157.....	234		
		10-S-160.....	234		



NOTE: IN SEVEN TUBE MODELS THE CATHODE - RAY INDICATOR TUBE IS OMITTED. (6G5)

BAND	RANGE
"A"	540-1750 K.C.
"B"	1.75 - 5.8 M.C.
"C"	5.8 - 18.0 M.C.

I.F. FREQUENCY 465 K.C.

Allied Radio Corp.
Models: A9710, A9711
A9711E, A9712, A9712E

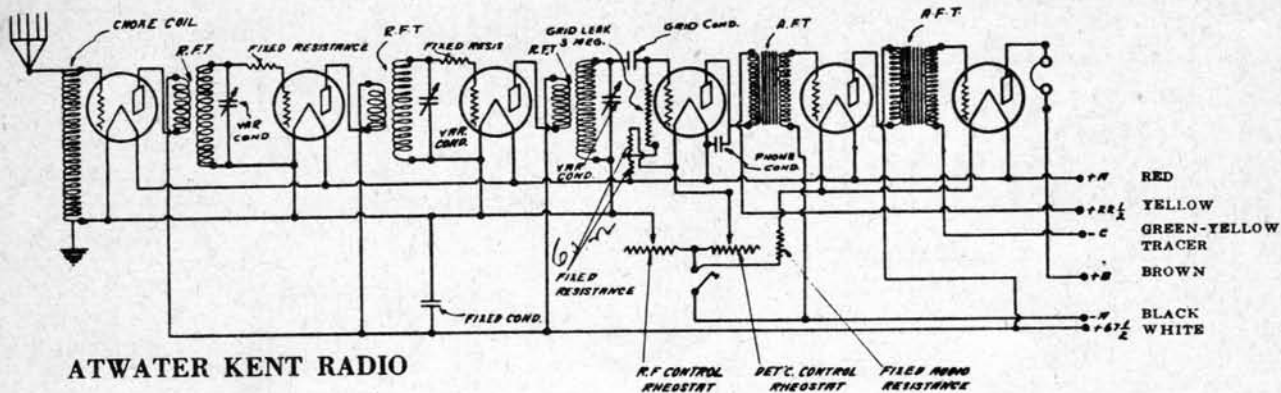
Pacific Radio Corp.
Model 40MB1

110 VOLTS
AC-or-DC.



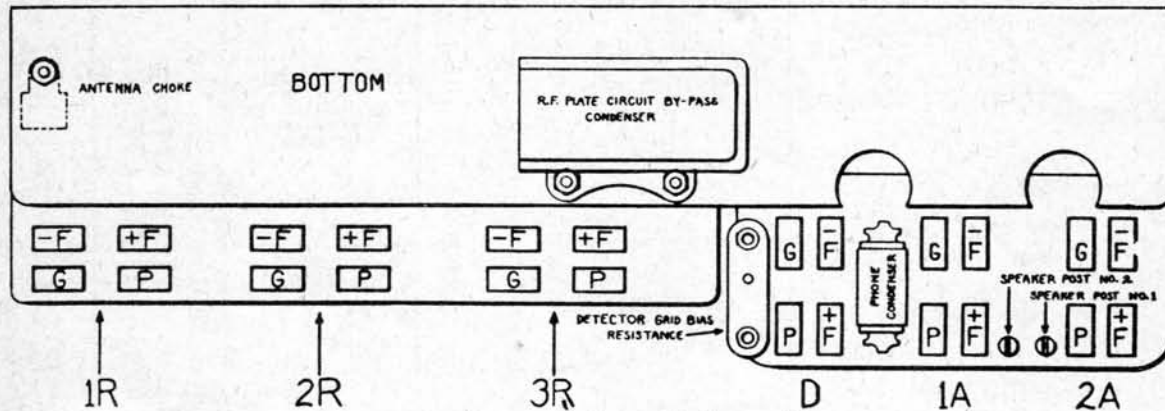
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

MODEL 30, 32, 35 AND 48

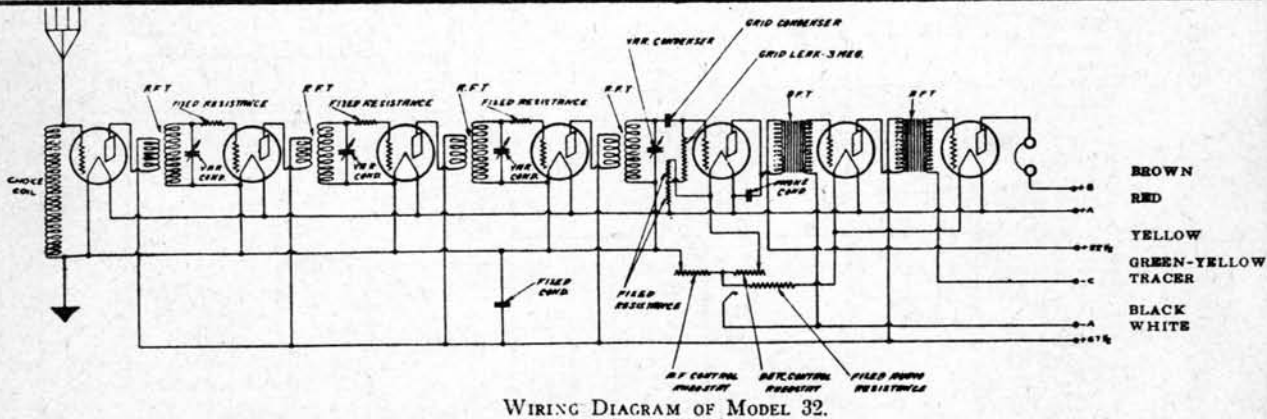


WIRING DIAGRAM OF MODEL 30, 35 AND 48.

In Model 35, one rheostat controls the three R. F. filaments and a fixed resistor is connected in series with the detector and two A. F. filaments



Early Model 30 Sets have separate R. F. sockets, but the socket contacts are in same relative position as shown in above chart.



WIRING DIAGRAM OF MODEL 32.

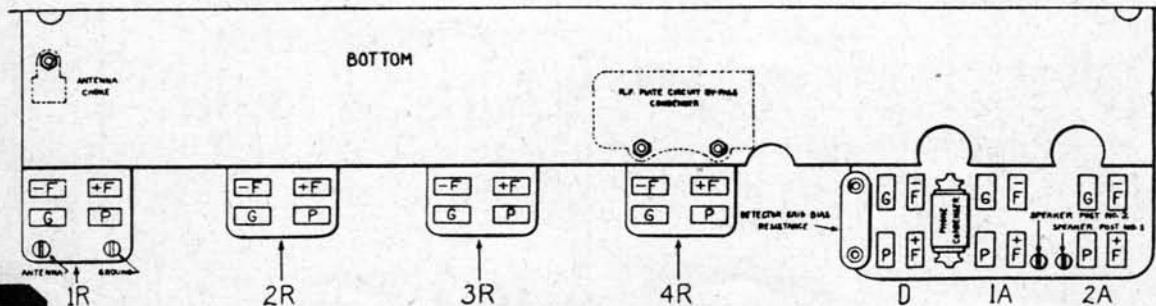


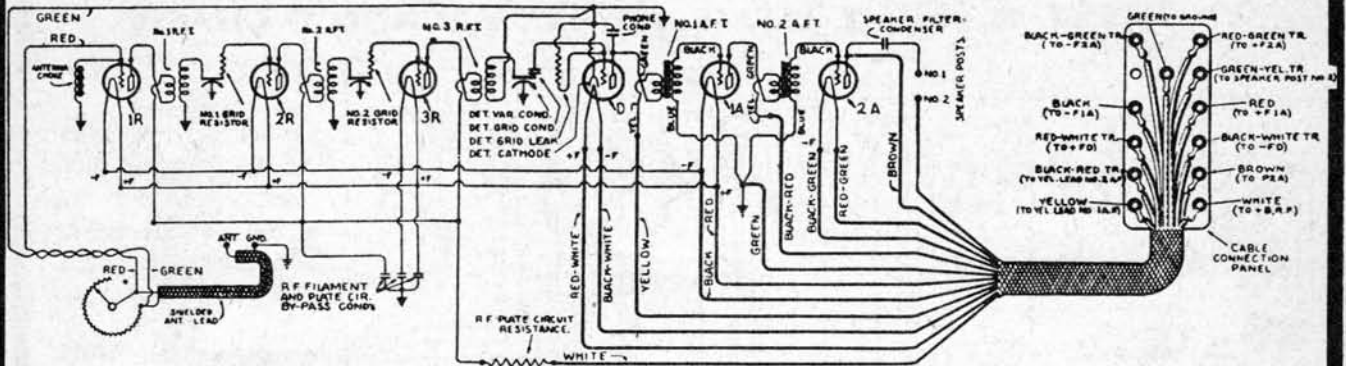
CHART FOR MODEL 32.

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

ATWATER KENT RADIO

MODEL 37, 37-F, 37-C CHASSIS



WIRING DIAGRAM OF MODEL 37, 37-F, 37-C.

A 2nd-A. F. filament-shunt resistor is used before Serial No. 1,385,000, in which case speaker post No. 2 connects to the centre-tap of this resistor, and the green-yellow tracer lead is not used. The R. F. plate circuit resistor is used after Serial No. 1,385,000.

In Model 37-C the on-off switch is connected to the two terminals on either side of the ground eyelet. A 2nd A. F. filament-shunt resistor is used in the chassis of all Model 37-C receivers.

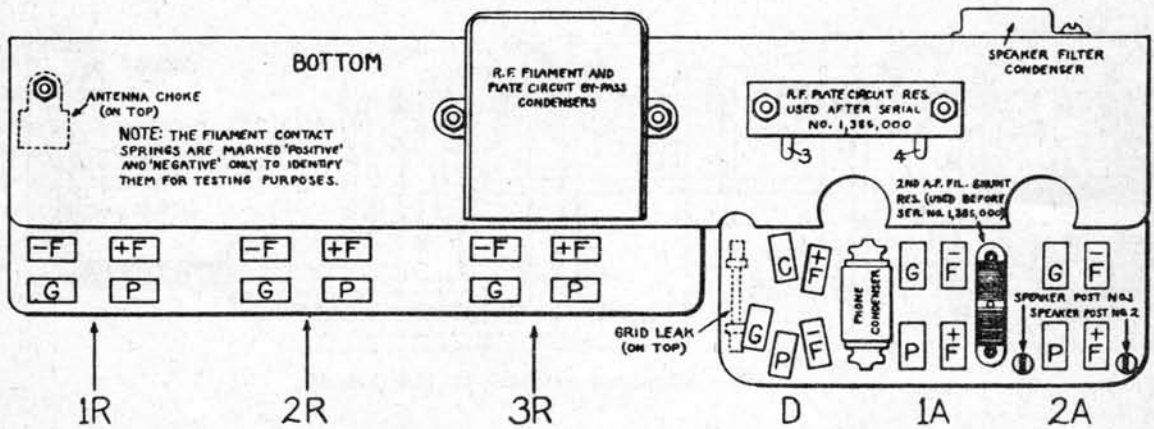
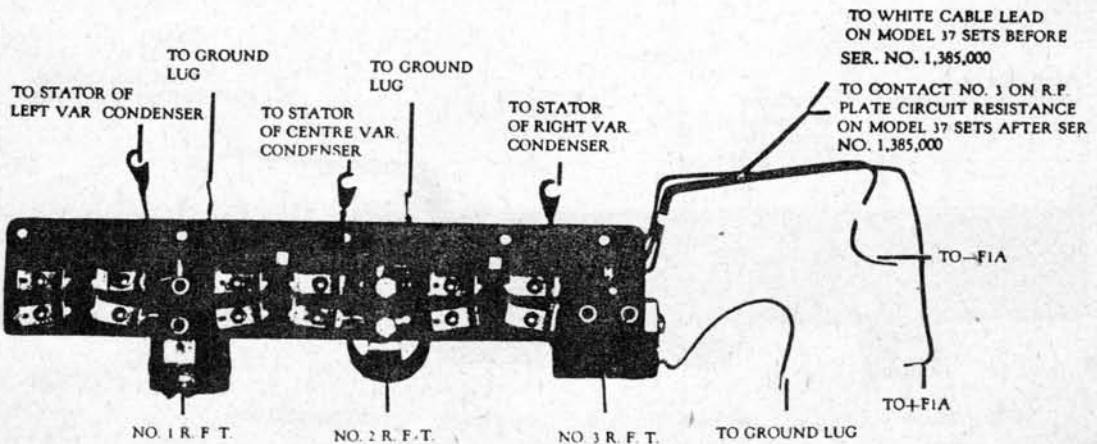


CHART FOR MODEL 37, 37-F, 37-C.

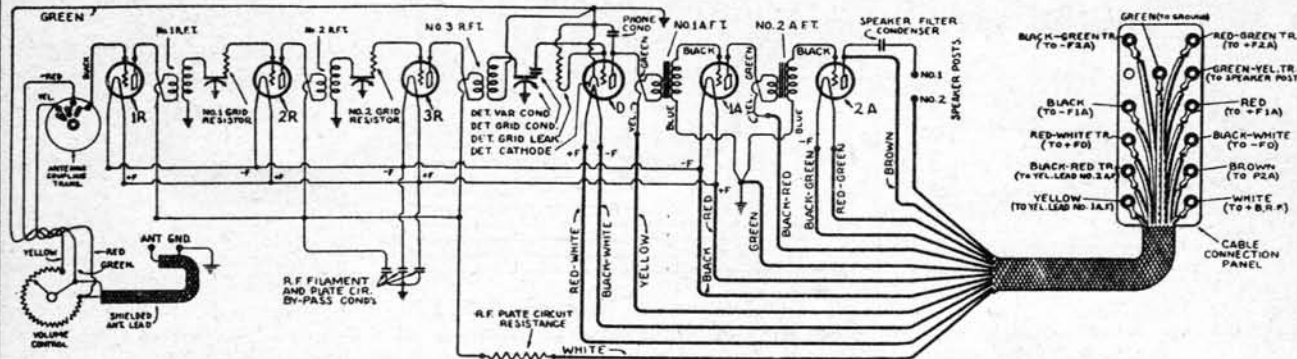


VIEW OF R. F. AMPLIFIER.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

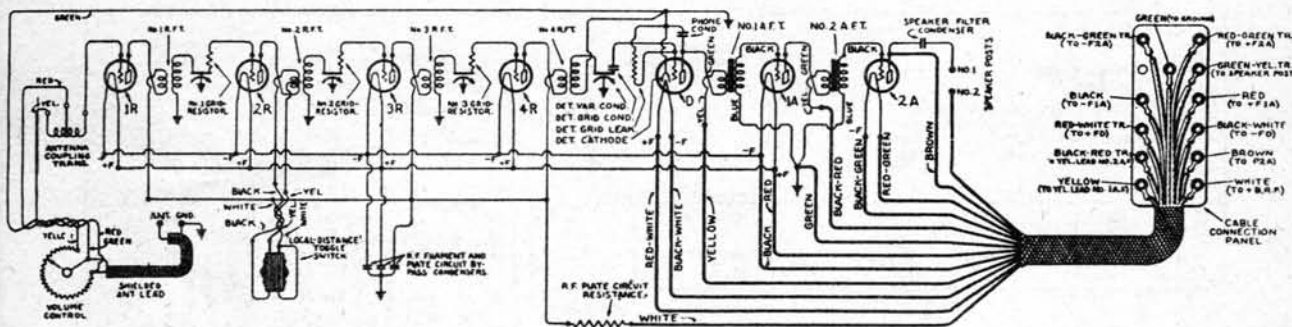
ATWATER KENT RADIO

MODEL 40, 40-F, 42, 42-F, 44, 44-F, 45, 52, 56 AND 57 CHASSIS

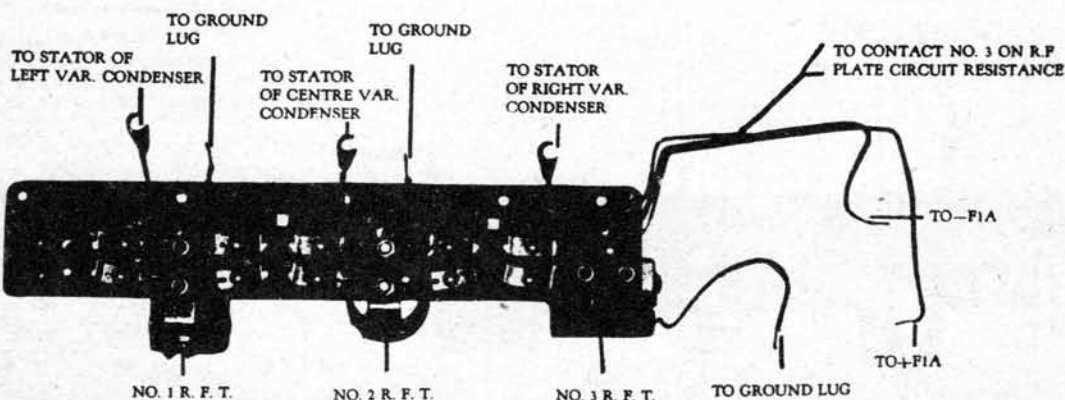


WIRING DIAGRAM OF MODEL 40, 40-F, 42, 42-F, 52, 56 AND 57.

Model 52 does not have the shielded antenna lead, but is provided with two twenty-foot leads which are connected to the volume control, black antenna and black-green tracer for ground. Model 56 and 57 have antenna and ground posts at the bottom of the cabinet.



WIRING DIAGRAM OF MODEL 44, 44-F AND 45.

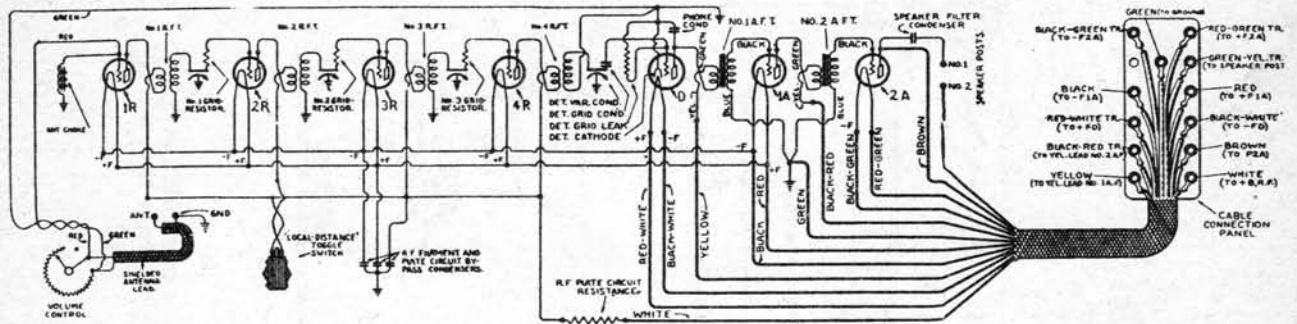


VIEW OF R. F. AMPLIFIER ASSEMBLY IN MODEL 40, 40-F, 42, 42-F, 52, 56 AND 57.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

ATWATER KENT RADIO

MODEL 38 CHASSIS



WIRING DIAGRAM OF MODEL 38.

A 2nd-A. F. filament-shunt resistor is used before Serial No. 1,752,000 and the green-yellow tracer cable lead is not used.

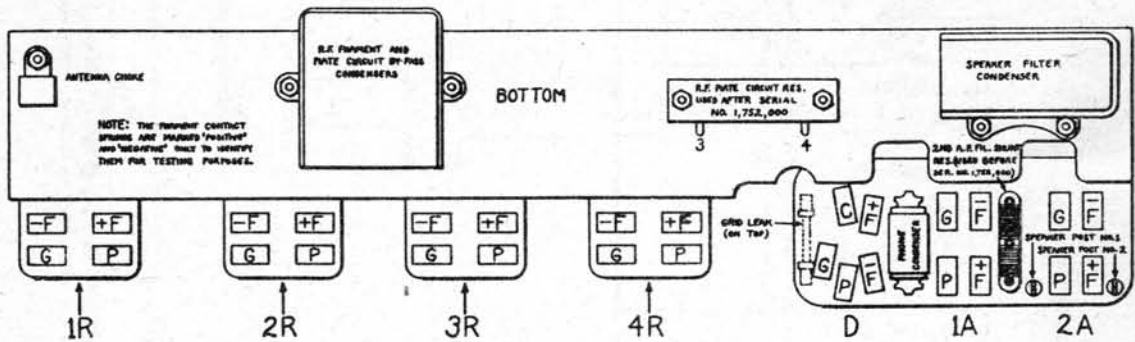
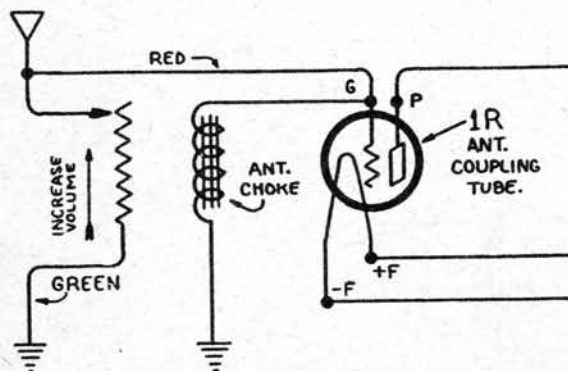
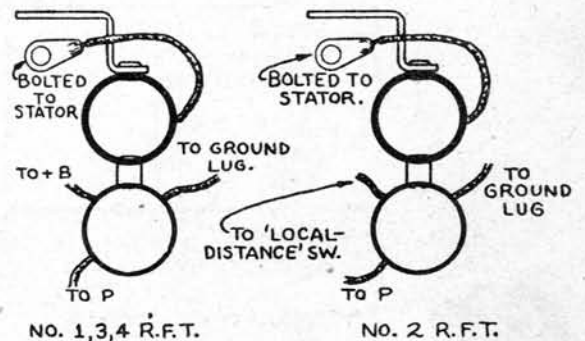


CHART FOR MODEL 38.



SCHEMATIC DIAGRAM OF VOLUME CONTROL IN MODEL 37, 37-F, 37-C AND 38.



SKETCH SHOWING CONNECTIONS FROM R.F. TRANSFORMERS, MODEL 38.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

ATWATER KENT RADIO

MODEL 43, 46, 47 AND 53

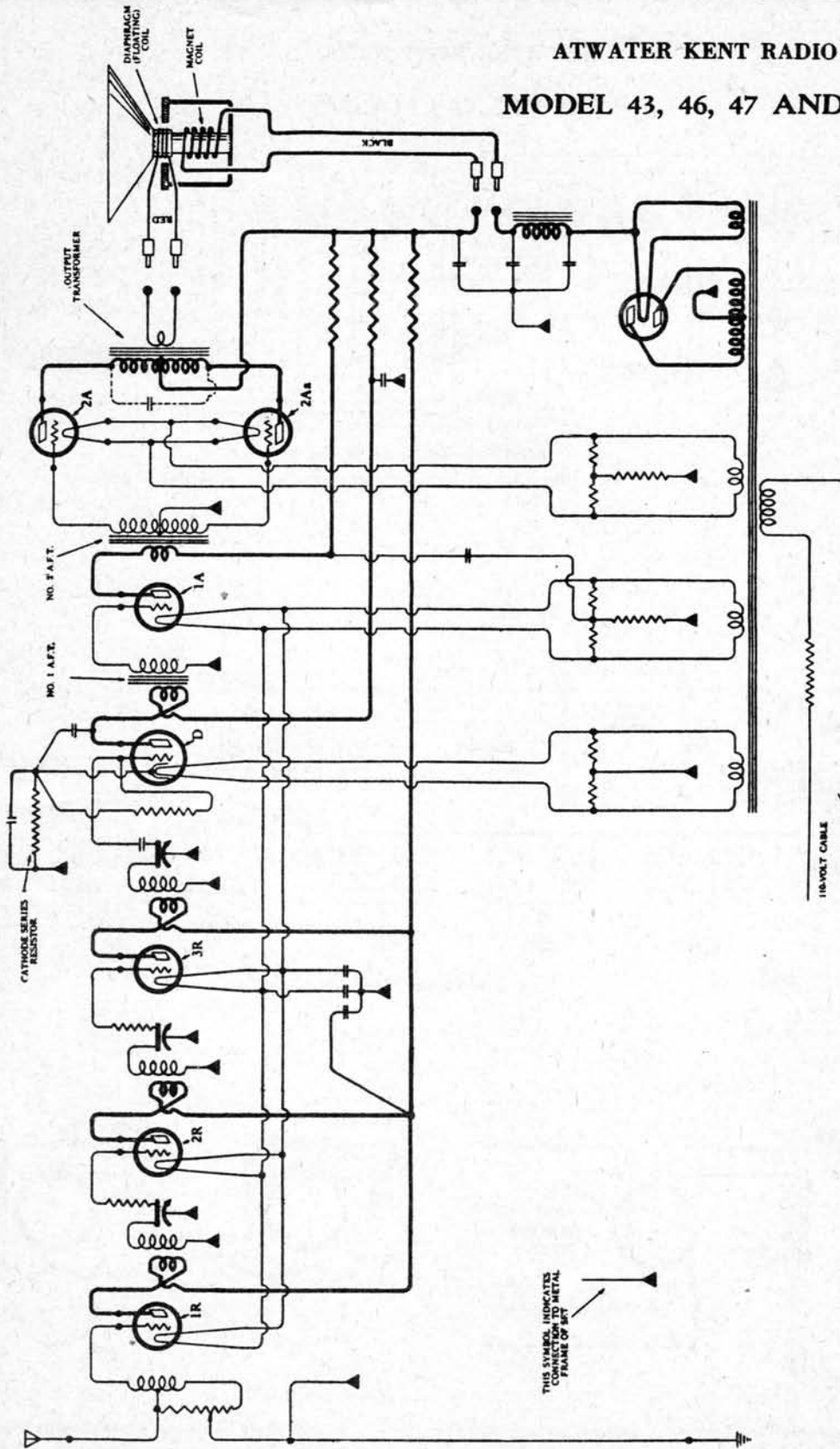
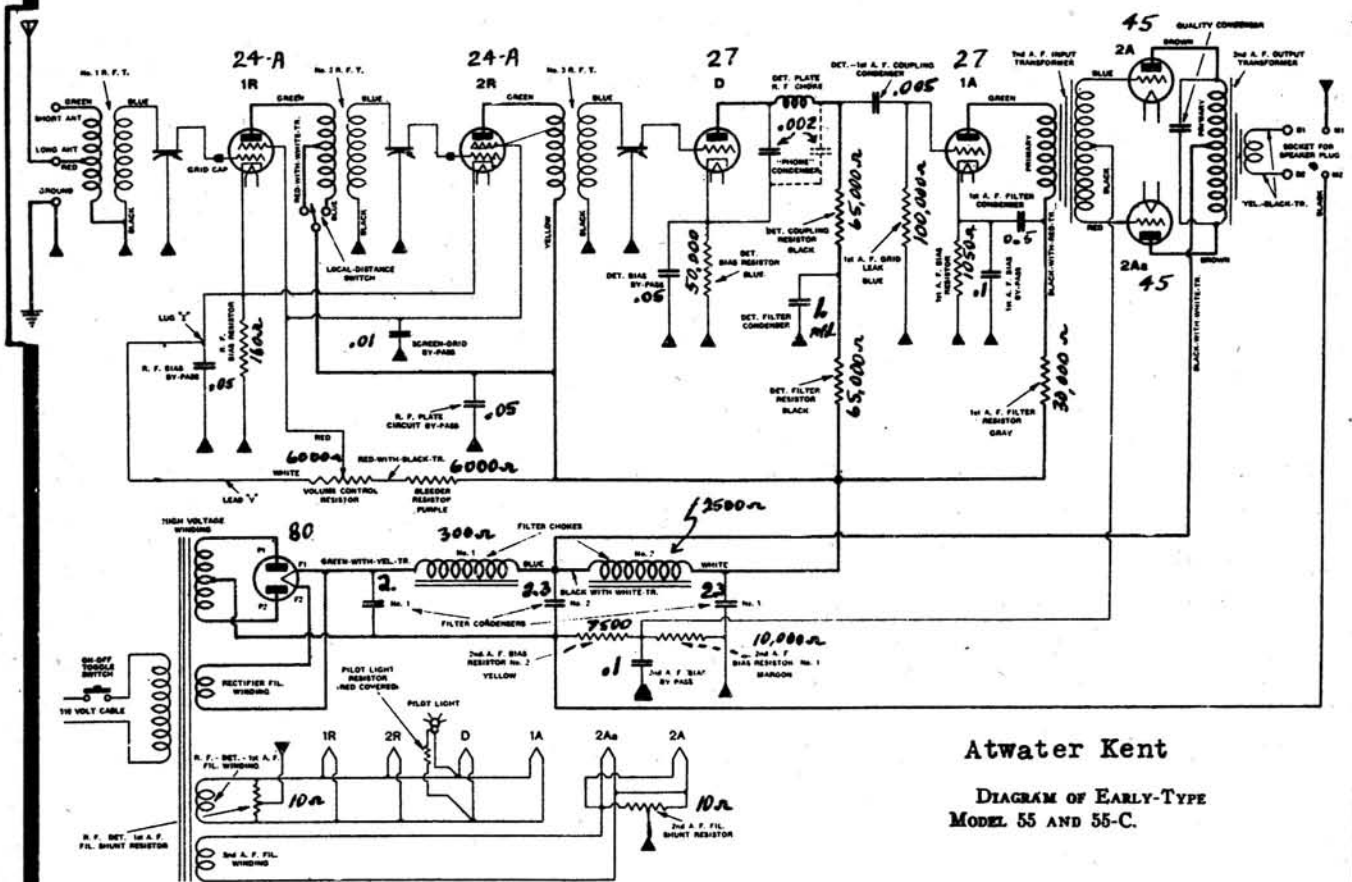


DIAGRAM OF MODEL 43, 46 AND 53. (The output transformer is sealed in the power unit.)
 Model 47 is similar to this but has one extra stage of R. F. amplification and a local-distance switch similar to that in Model 44.

THIS SYMBOL INDICATES
 CONNECTION TO METAL
 FRAME OF SET

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



Atwater Kent
 DIAGRAM OF EARLY-TYPE
 MODEL 55 AND 55-C.

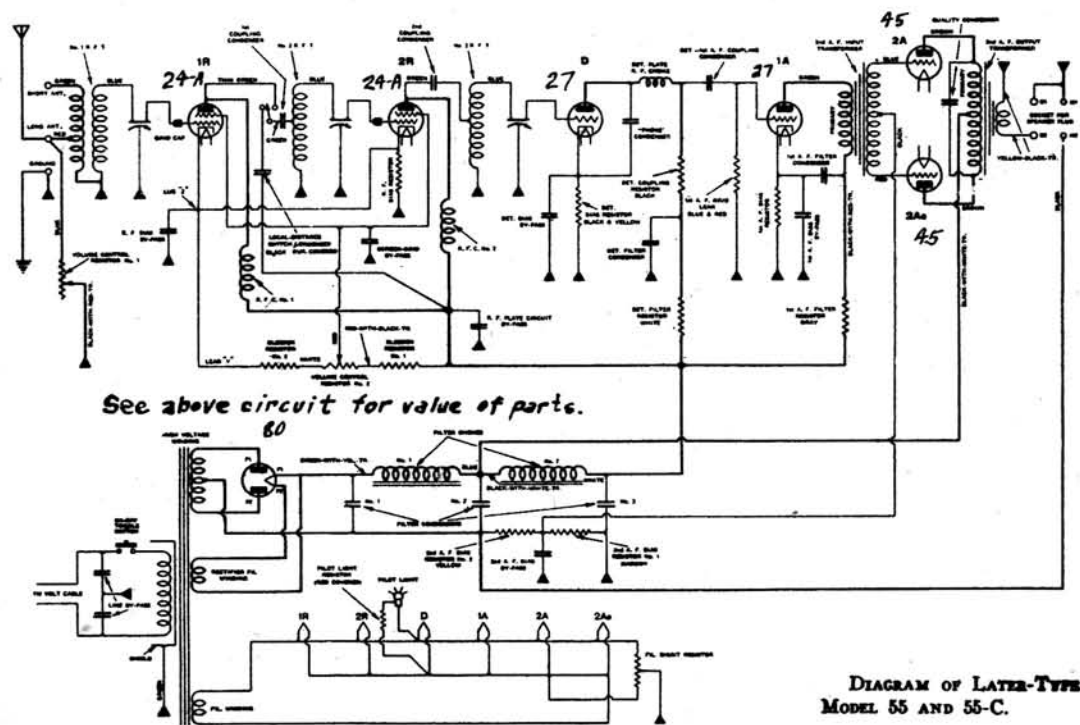
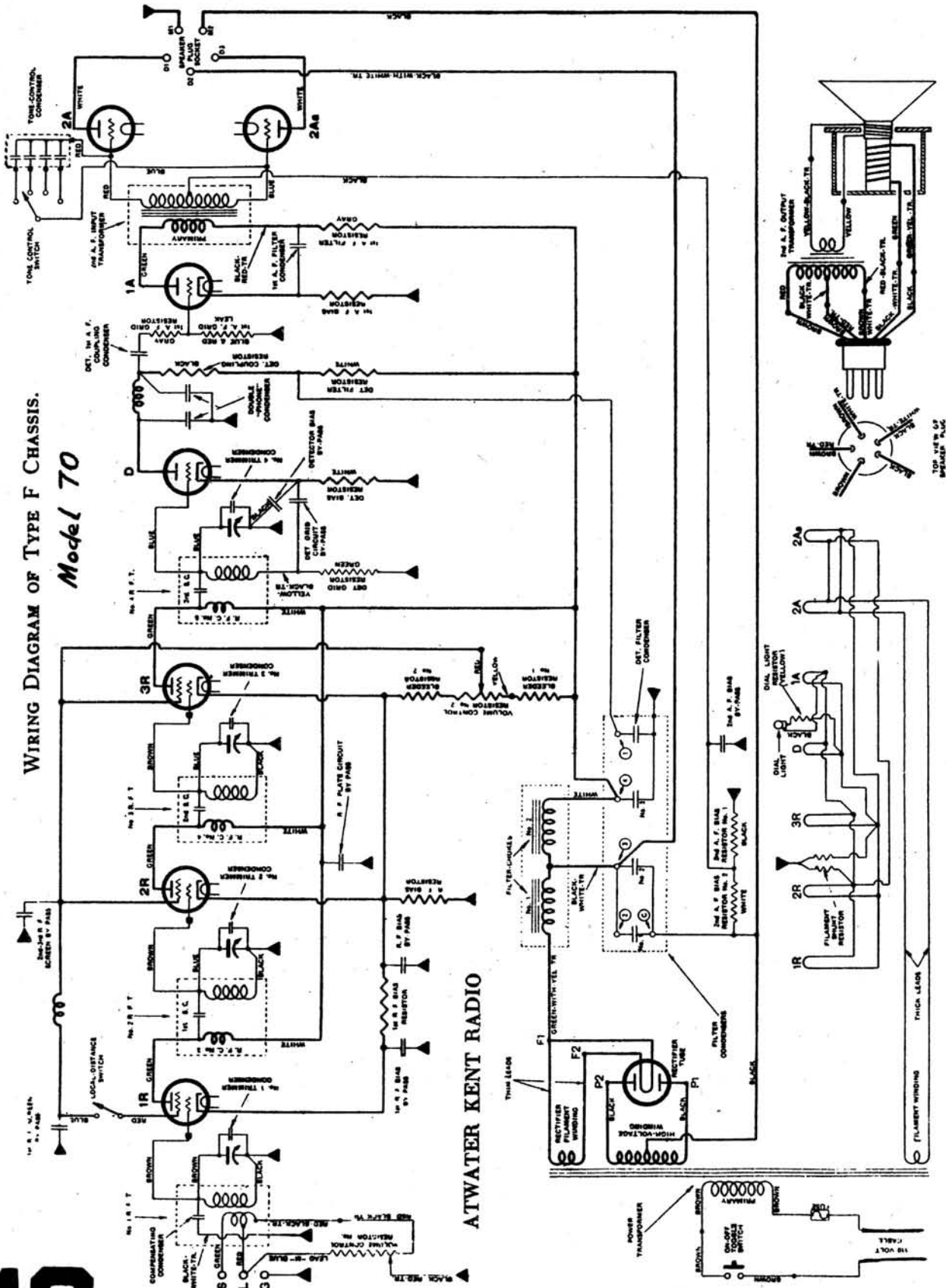


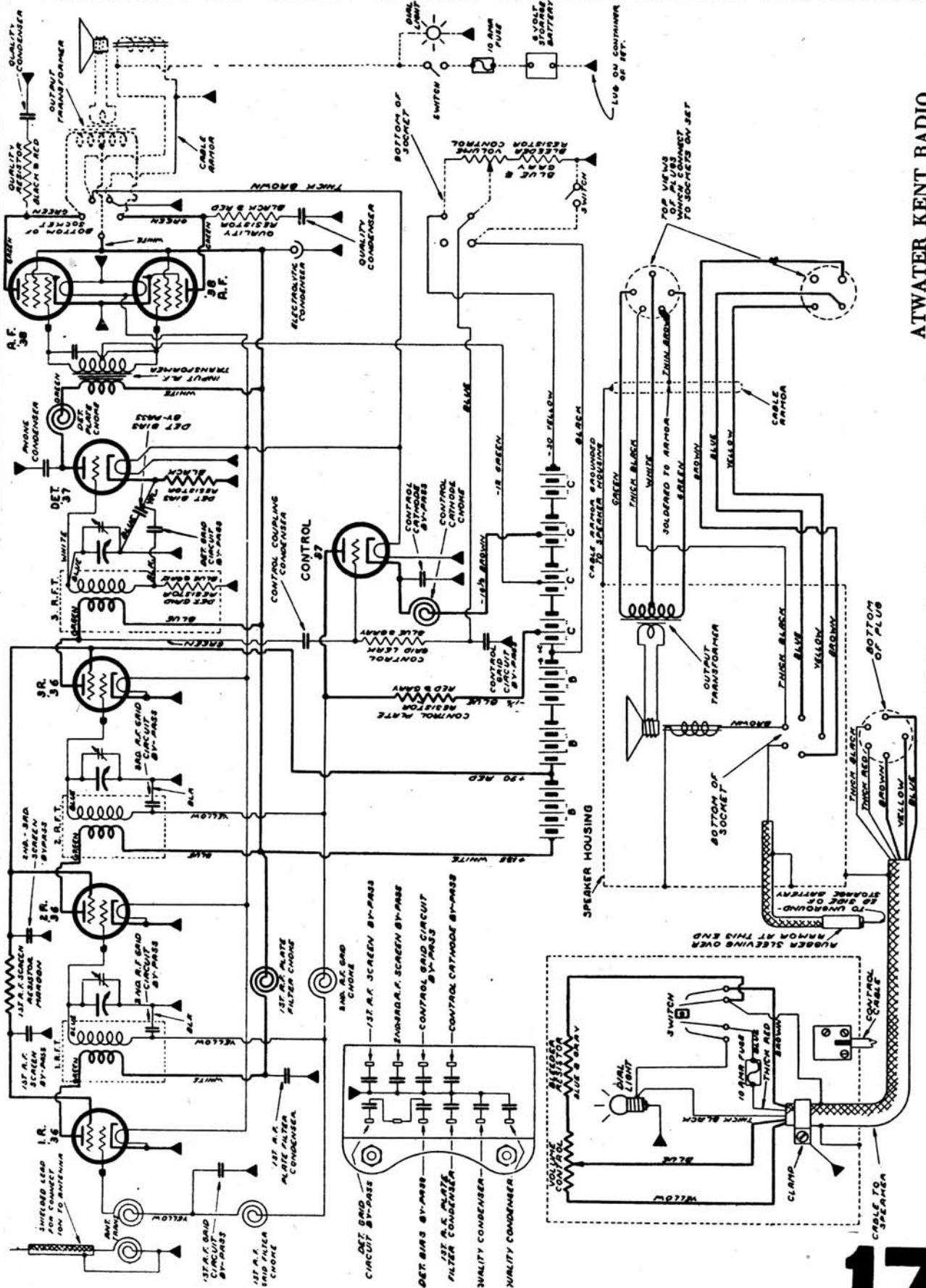
DIAGRAM OF LATER-TYPE
 MODEL 55 AND 55-C.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

WIRING DIAGRAM OF TYPE F CHASSIS. Model 70



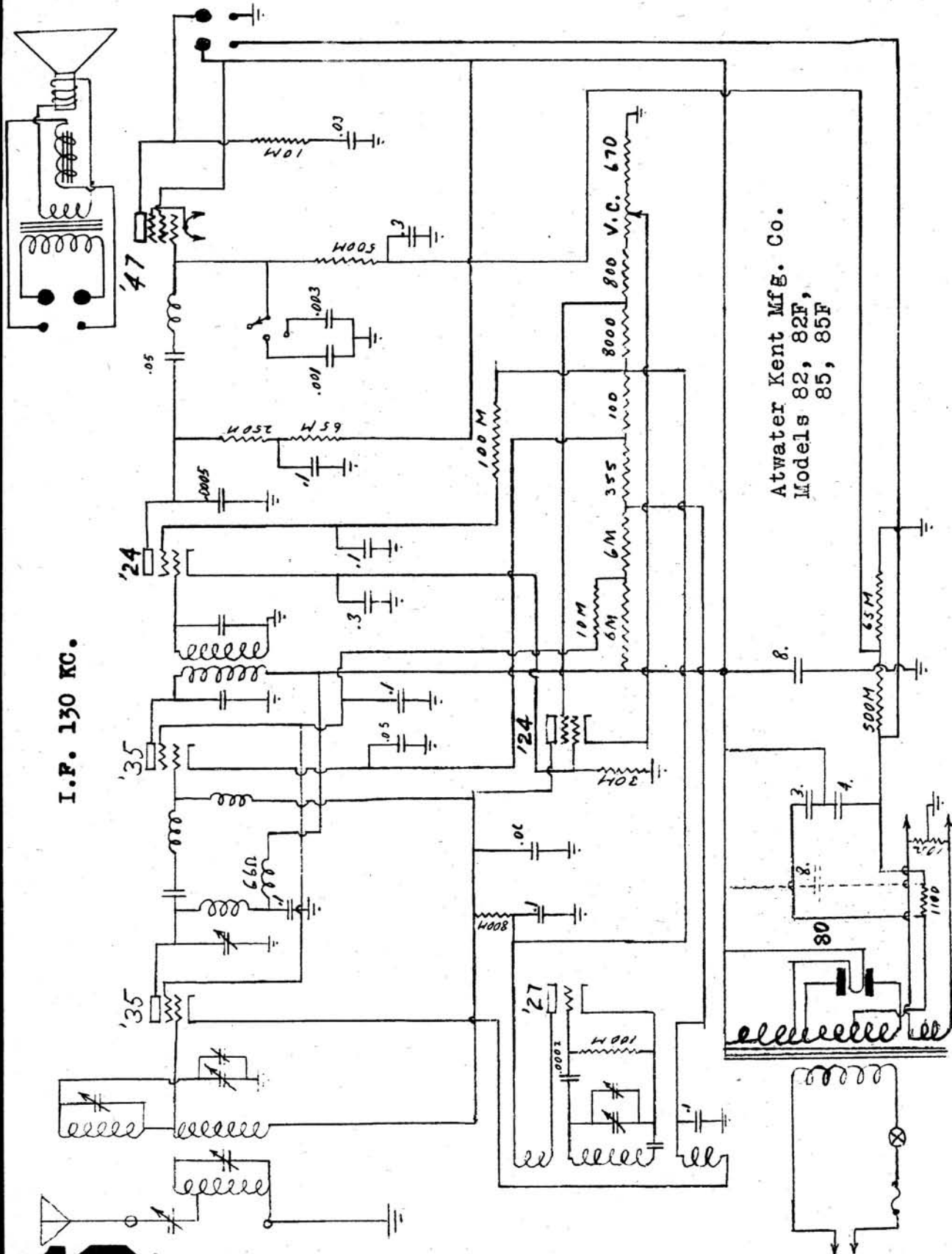
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



ATWATER KENT RADIO

DIAGRAM OF MODEL 81 MOTOR CAR RADIO (BATTERY-OPERATED).

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



I.F. 130 KC.

Atwater Kent Mfg. Co.
Models 82, 82F,
85, 85F

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

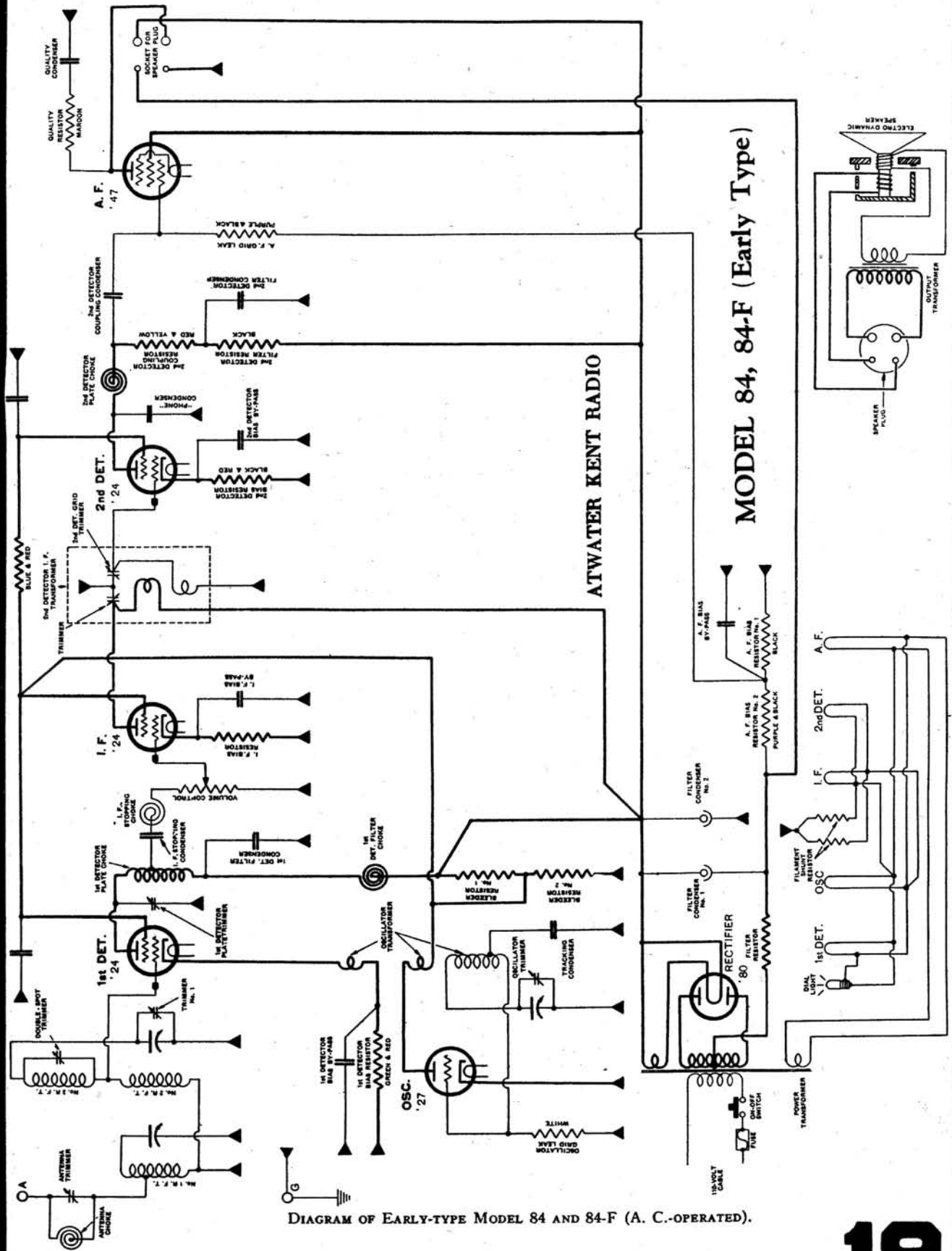


DIAGRAM OF EARLY-TYPE MODEL 84 AND 84-F (A. C.-OPERATED).

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

ATWATER KENT RADIO

MODEL 84, 84-F (Late Type)

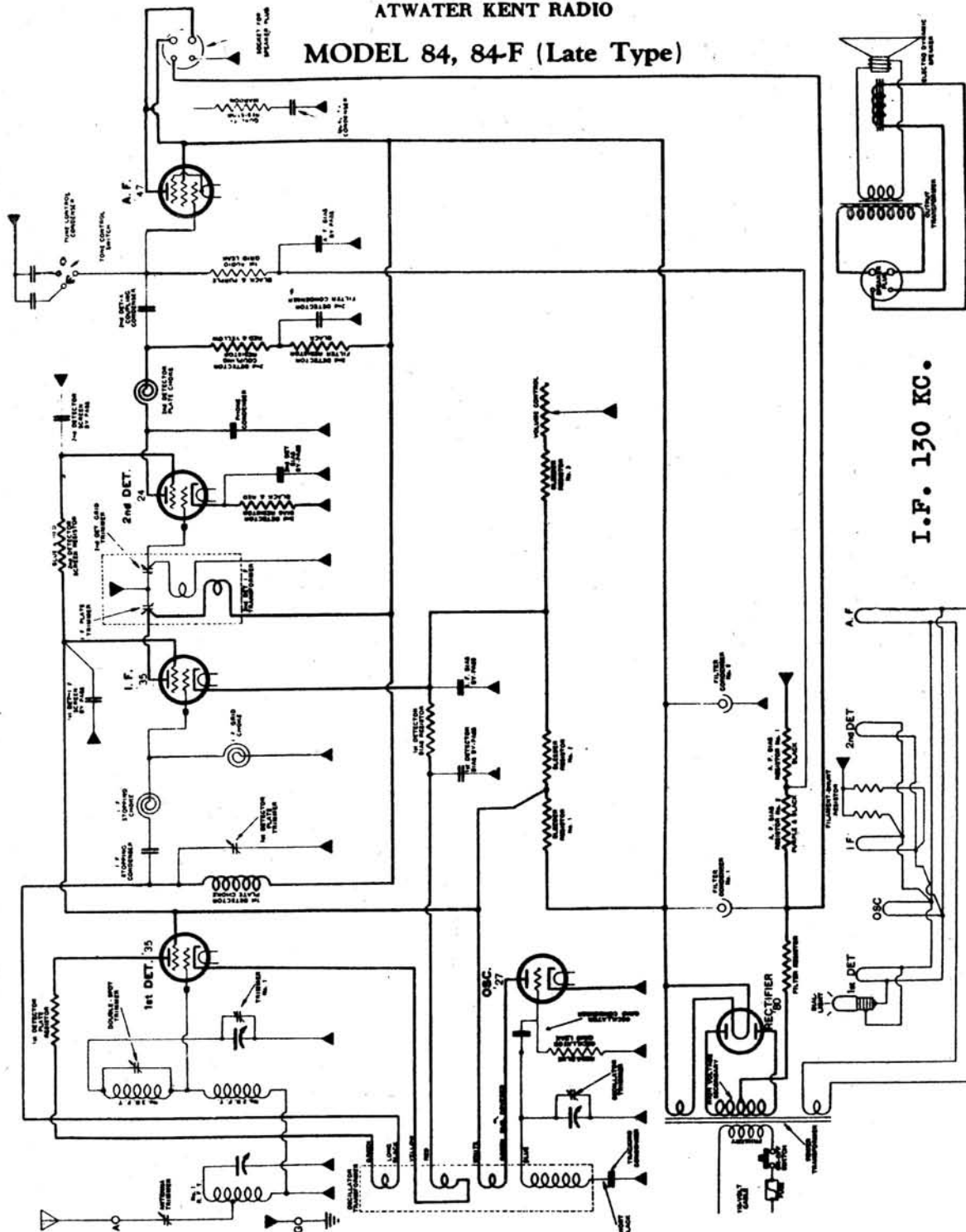


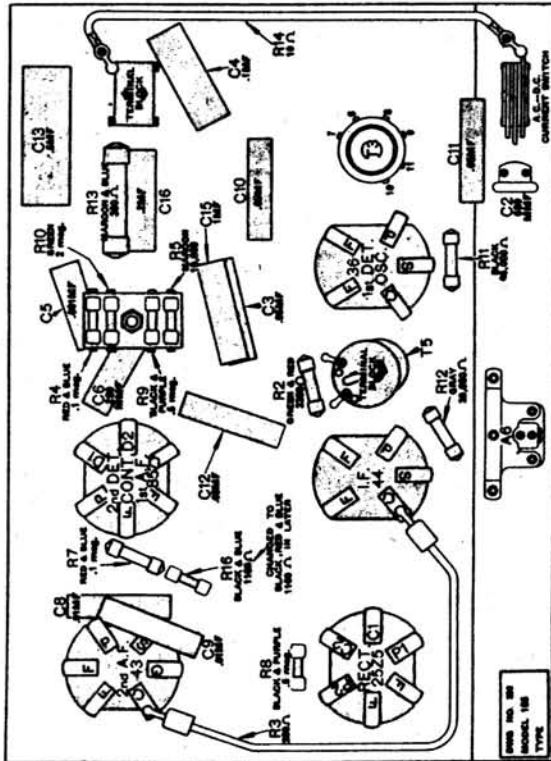
DIAGRAM OF LATE-TYPE MODEL 84 AND 84-F (A. C.-OPERATED).

A few late-type Model 84 and 84-F receivers have slightly different oscillator transformers, as explained in the notes accompanying the parts list for these sets. The filter resistor shown in the above diagram is NOT used in Model 84-F. This set has a 1st-detector plate filter choke and condenser not shown in the diagram.

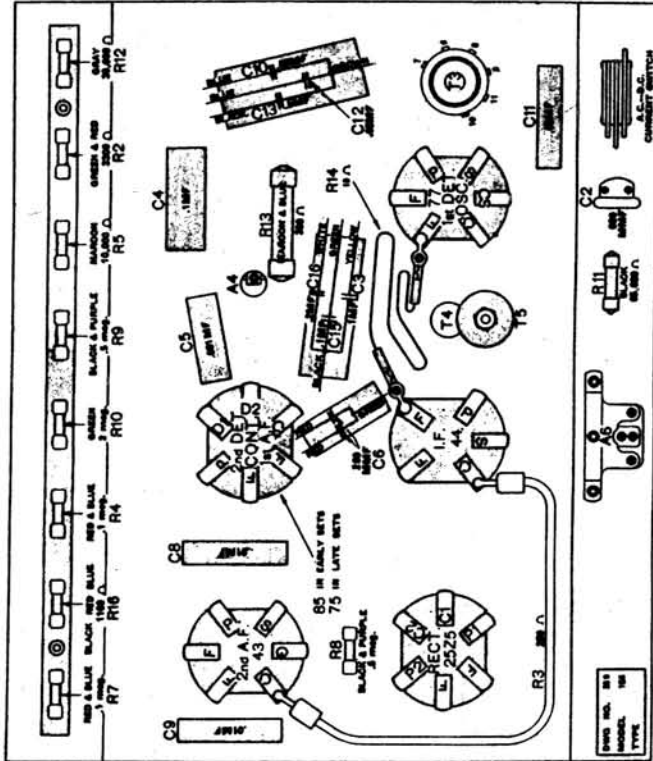
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

ATWATER KENT RADIO

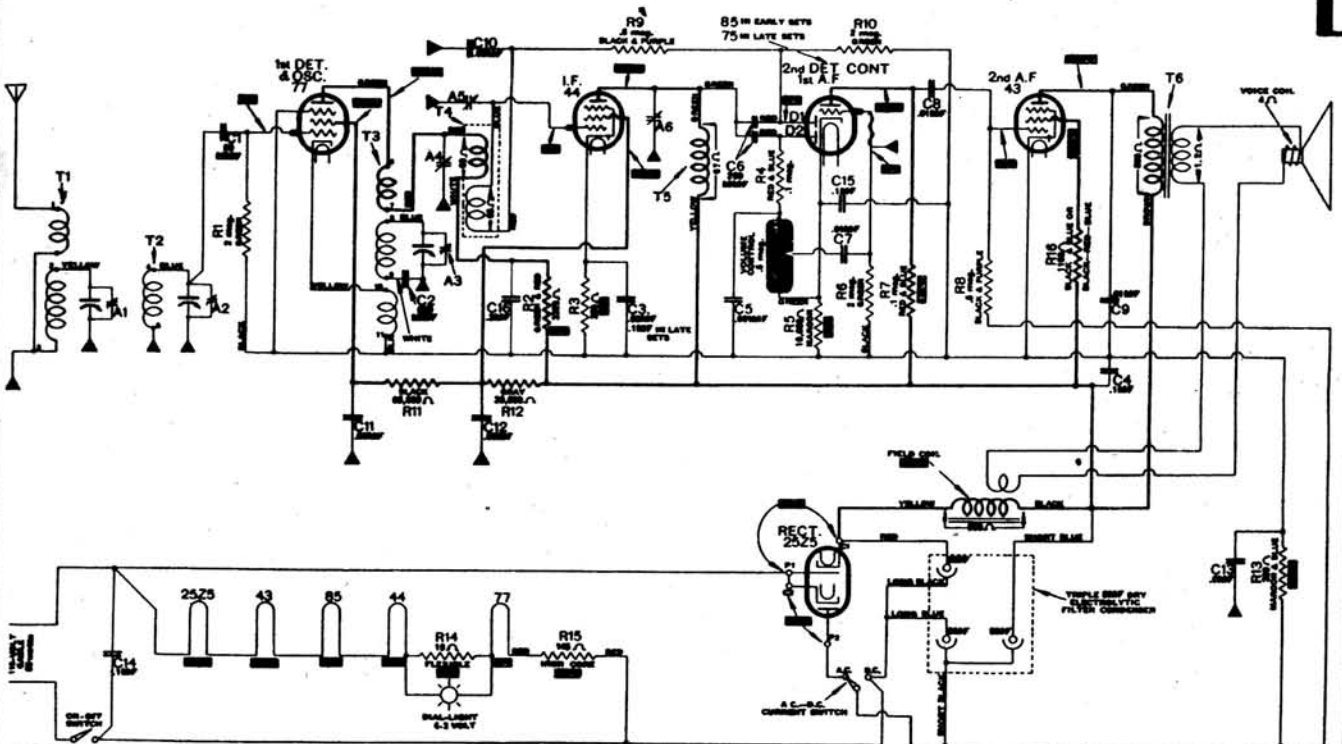
MODEL 155, 1st TYPE, Below Serial No. 7086900



First arrangement of parts under chassis in 1st-type Model 155.

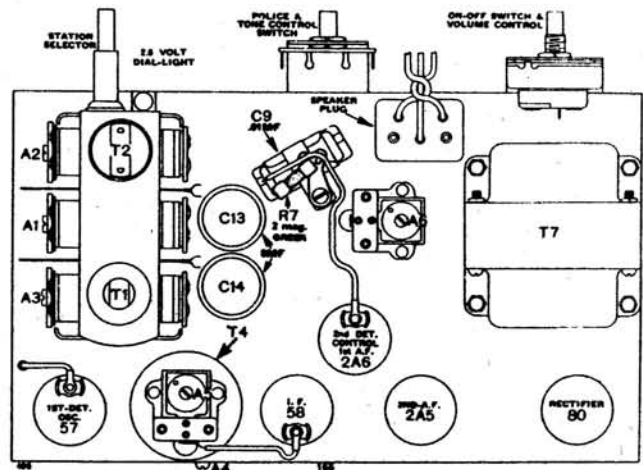
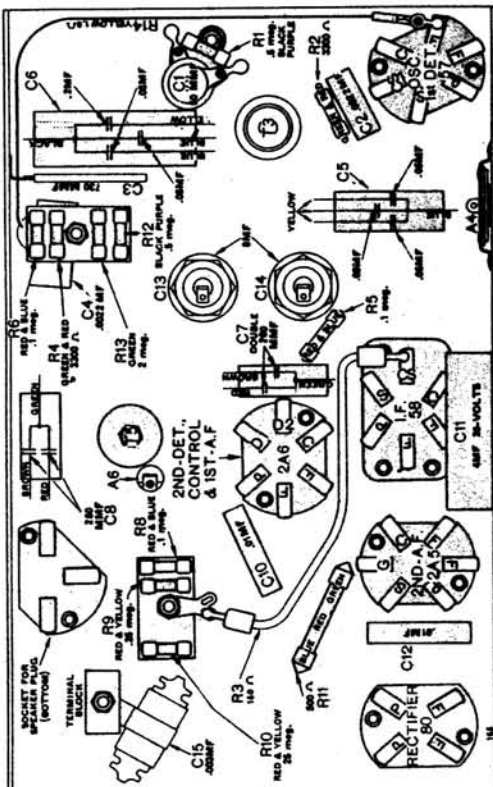
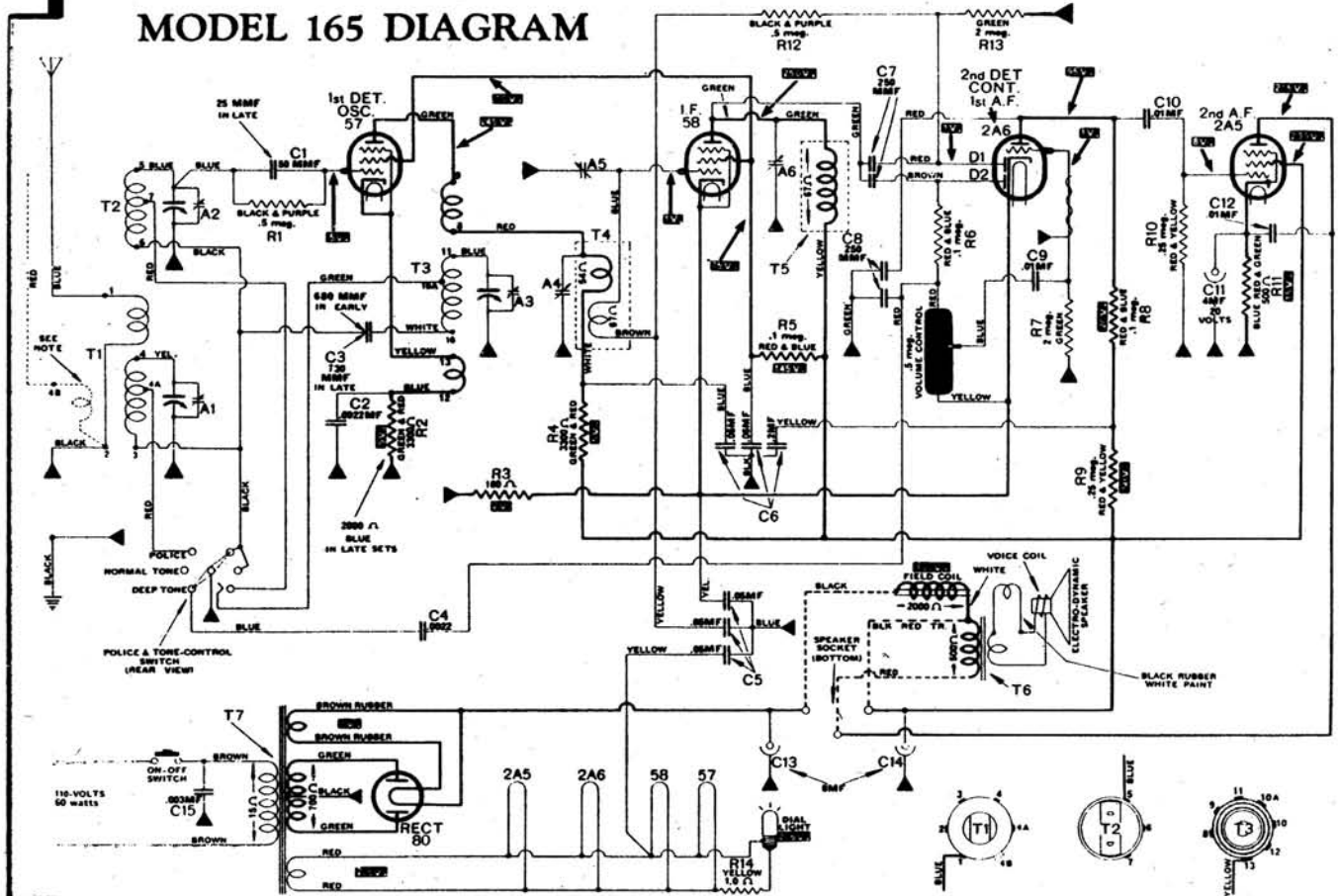


Third arrangement of parts under chassis in 1st-type Model 155.



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

MODEL 165 DIAGRAM



In late type 165, the 1st-detector bias resistor R2 is 200K ohms, $\frac{1}{2}$ watt (blue).

In a few early 165 sets, the tracking condenser C3 is 680MMF.

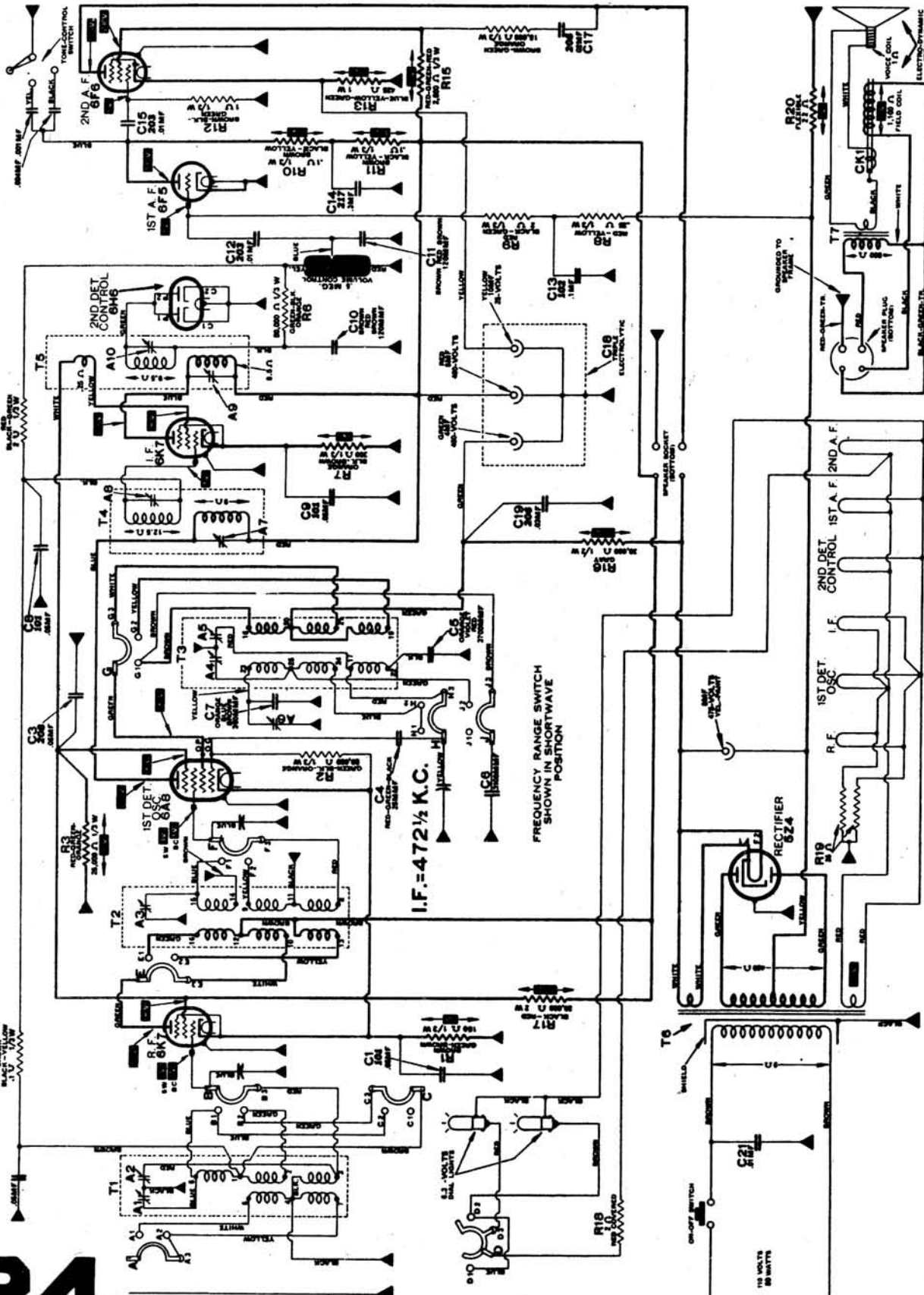
In late sets, C1 is 25MMF instead of 50MMF.

The additional primary, shown in dotted lines on No. 1 R.F.T., is used in some 165 sets.

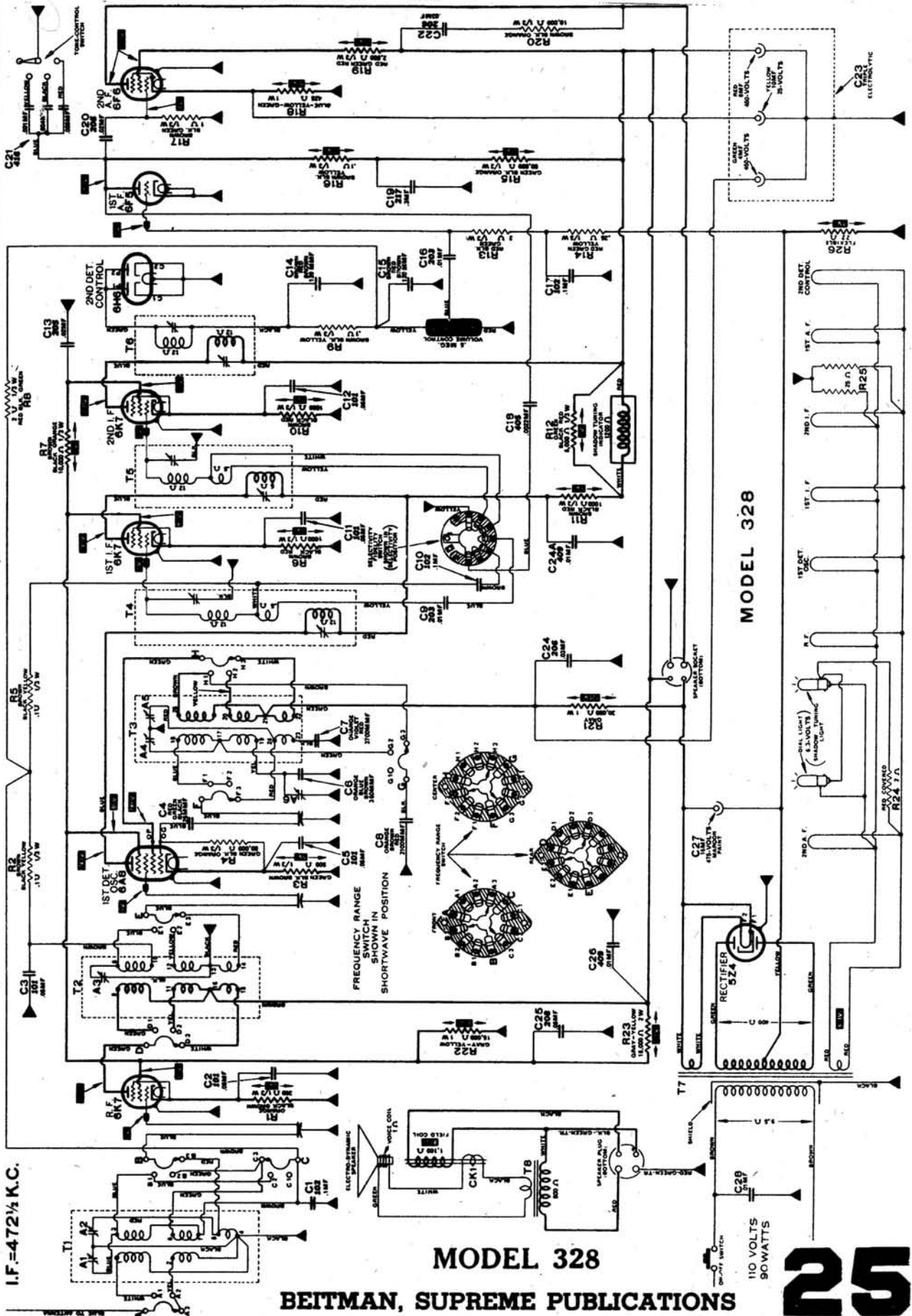
I.F. 262.5 KC.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS MODELS 317 AND 337

ATWATER KENT RADIO



I.F. = 472½ K.C.



MODEL 328

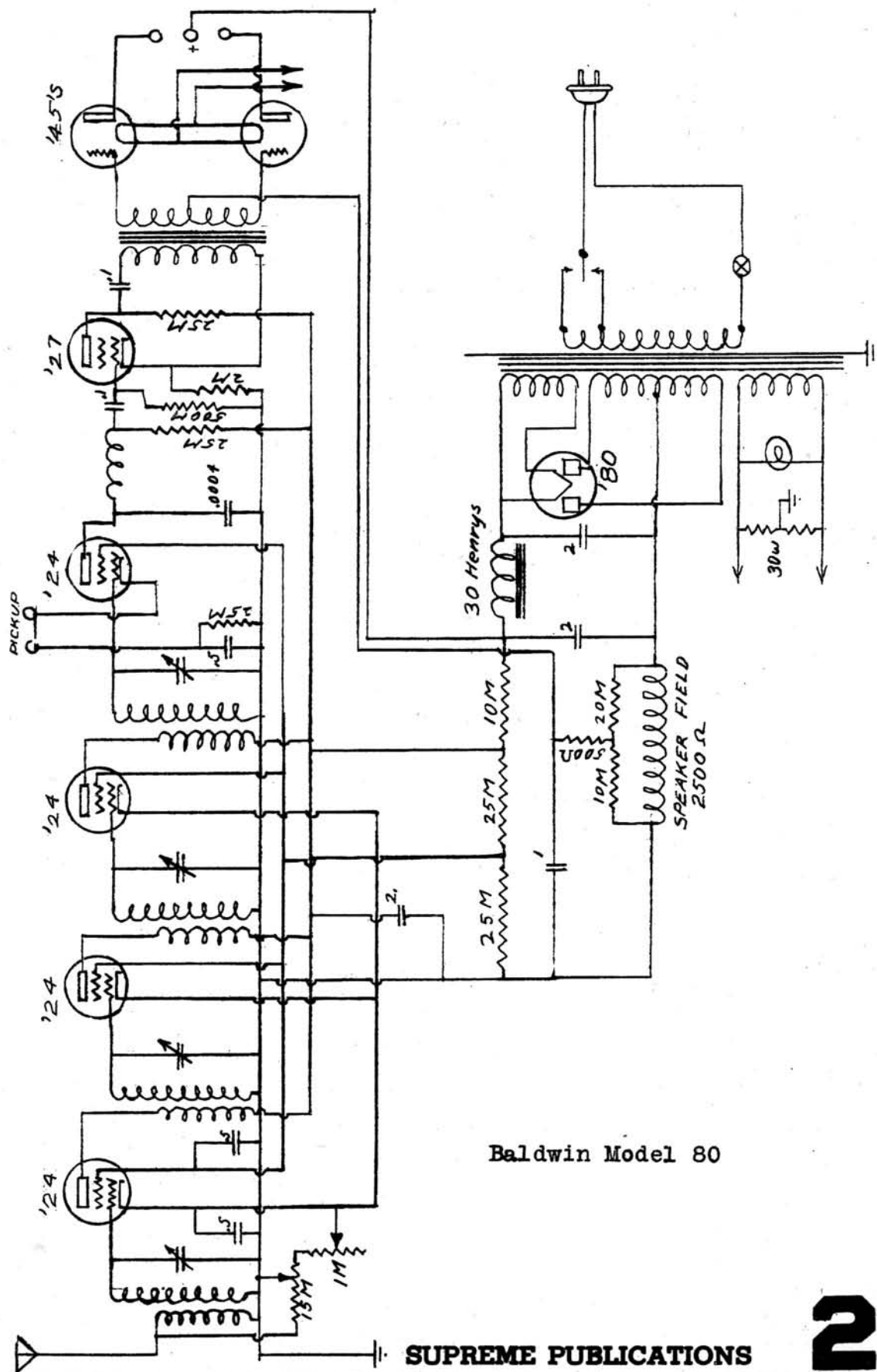
MODEL 328

BEITMAN, SUPREME PUBLICATIONS

110 VOLTS
90 WATTS

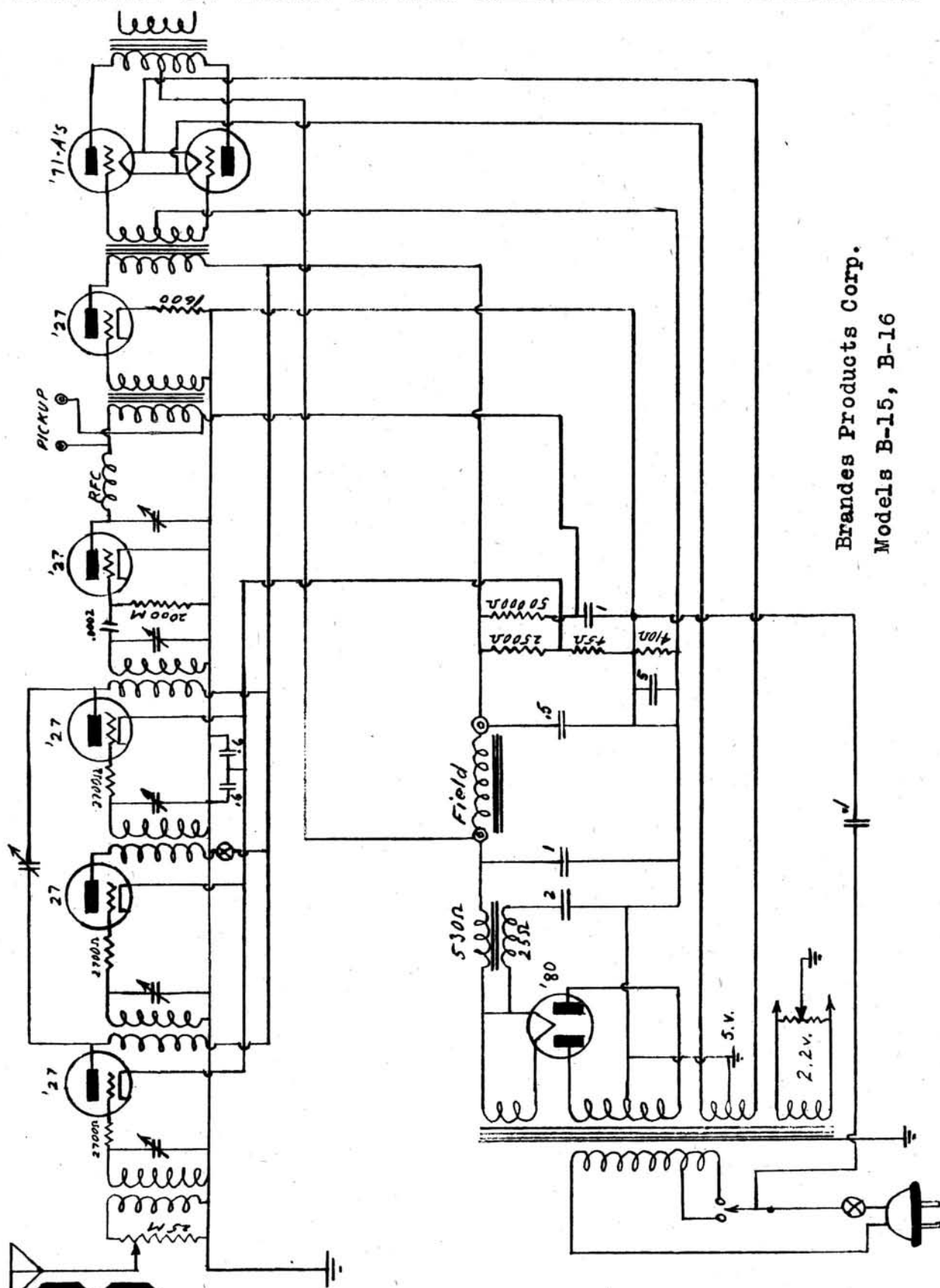
25

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



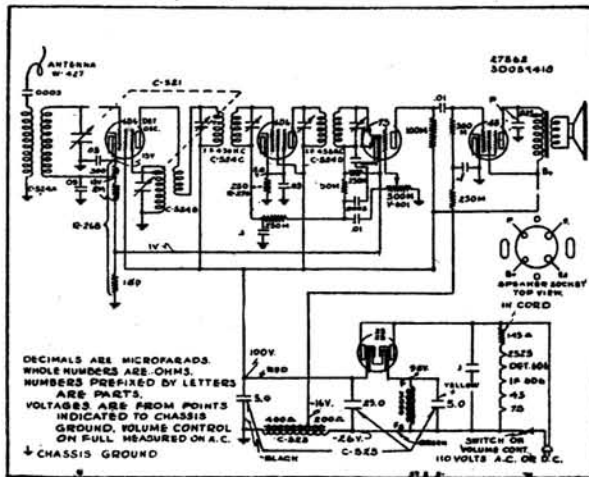
Baldwin Model 80

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



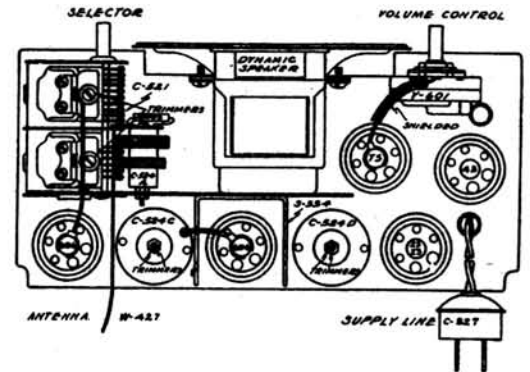
Brandes Products Corp.
Models B-15, B-16

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



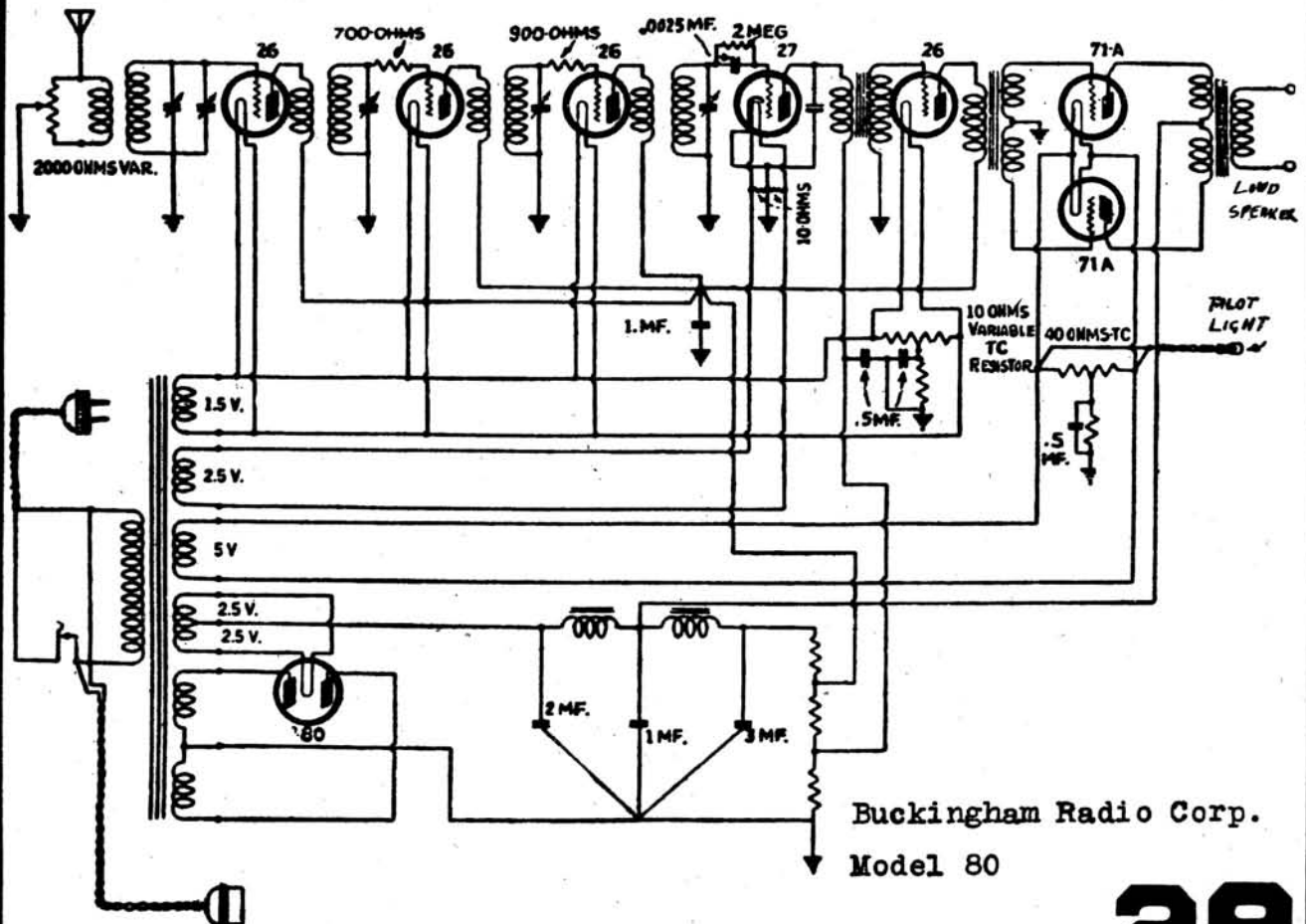
Schematic circuit diagram Model 525 AC-DC Superheterodyne, with automatic volume control. Should it be necessary, at any time, to rebalance this set the procedure is as follows: Attach a 450 kilocycle oscillator to the grid of the 6D6 tube in back of the variable condenser and adjust the trimming condensers of the I. F. transformers to maximum deflection on an output meter connected across the primary of the speaker input transformer. While adjusting these trimmers, the variable condenser should be at the maximum capacity position—at the extreme right of its rotation.

Next disconnect the antenna wire and connect an oscillator in series with a 75 mmf. condenser to the antenna coil. Rotate the condenser plates to the minimum capacity position—extreme left turn, and adjust the trimmer condenser of the rear section of the variable condenser to resonance with an oscillator set at 1725 kilocycles, then adjust the condenser of the front section of the variable condenser to resonance. Align at 1400—1200—1000—800—600—520 kilocycles. Lead slotted plates of variable condenser if necessary.



Belmont Radio Corp.

MODEL 525

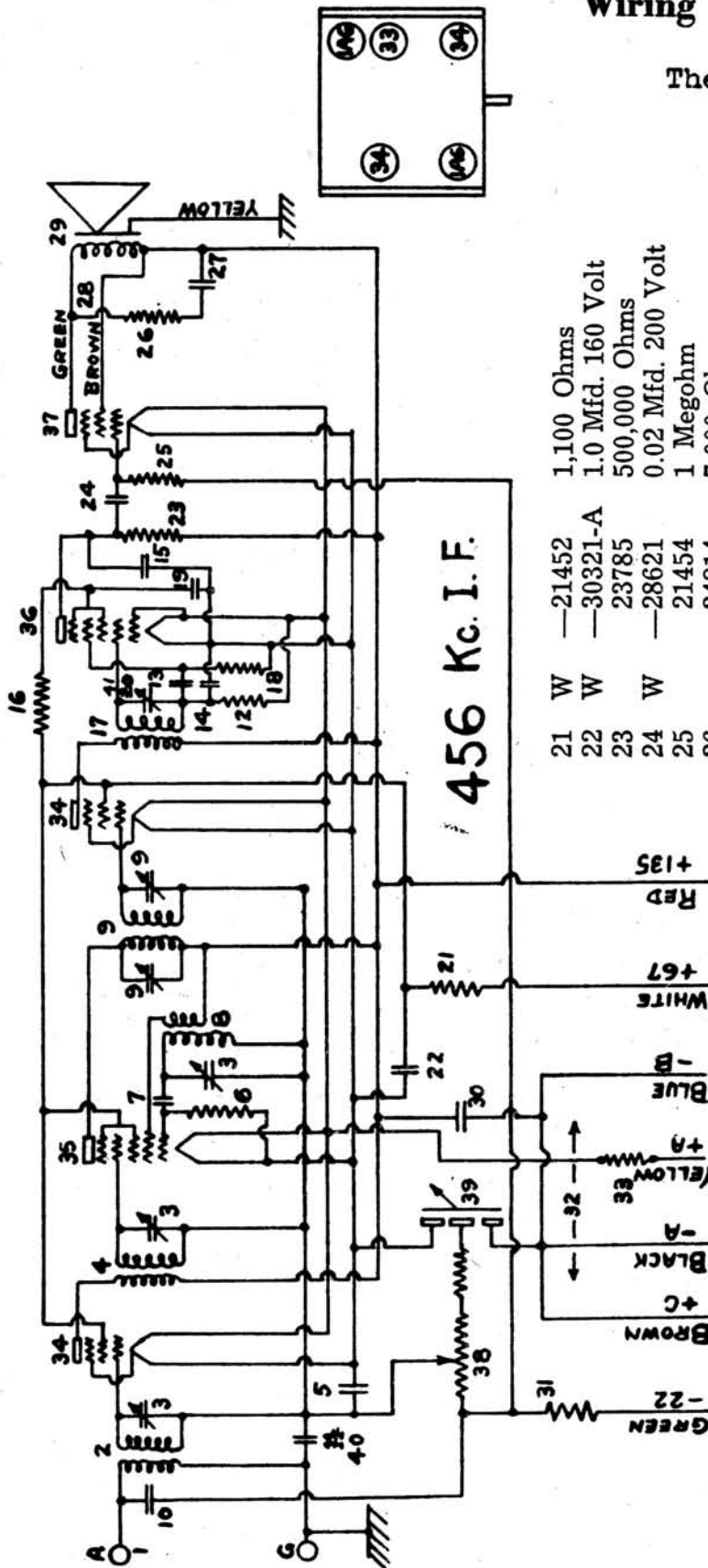


Buckingham Radio Corp.
Model 80

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Wiring Diagram For Model 5B3

The Crosley Corp.



21	W	-21452	1,100 Ohms
22	W	-30321-A	1.0 Mfd. 160 Volt
23	W	23785	500,000 Ohms
24	W	-28621	0.02 Mfd. 200 Volt
25	W	21454	1 Megohm
26	W	24814	7,000 Ohms
27	W	-28619	.006 Mfd.
28	W	-27933	Speaker Cable
29	W	30418	336-3B Speaker
30	W	-29910-A	0.25 Mfd. 200 Volt
31	W	27121	5,000 Ohms
32	G2	-29237	Battery Cable
33	G2	-23300	Air Cell Resistor .53 Ohms
34	G31	-27975	34 Socket
35	G55	-27975	1A6 Socket
36	G4	-33070	1A6 Flex. Socket
37	G36	-27975	33 Socket
38	W	-32649	{ Volume Cont. 10,000 Ohms
39	W	-24049-B	{ Switch 3. P. S. T.
40	W	-24049-B	{ O.1 Mfd. 200 Volt

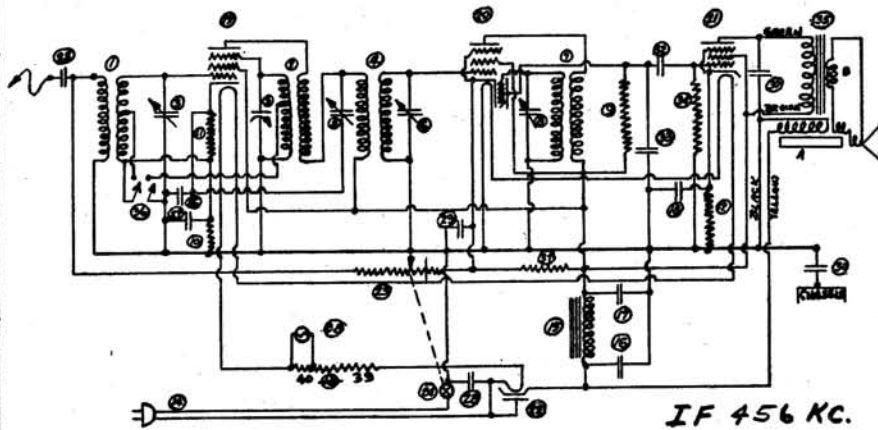
4	G17	-32001	R. F. Transformer
5	W	-24049-B	0.1 Mfd. 200 Volt
6	W	21875	100,000 Ohms
7	G1	-34004	.025 Mfd. (Mica)
8	G9	-32002	Oscillator Coil
9	G9	-32004	1st I. F. Trans.
10	W	-28621	.02 Mfd. 200 Volt
12	W	23785	500,000 Ohms
13	W	-28621	.02 Mfd. 200 Volt
14	W	-25152-A	{ .00015 Mfd. 400 Volt
15	W	-25152-A	{ .0001 Mfd. 400 Volt
16	W	21237-A	60,000 Ohms
17	G13	-32004	2nd I. F. Trans.
18	W	21454	1 Megohm
19	W	-24049-B	0.1 Mfd. 200 Volt

Figures in first column correspond to figures in diagram

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

1	6A5-2495	ANTENNA COIL
2	6B5-2496	OSCILLATOR COIL
3	D-2452	GRID CONDENSER
4	G-2444	1st I.F. TRANS.
5	6B-2594A	1st I.F. TUNING COND.
6	6B-2594B	2nd I.F. TUNING COND.
7	6B-2594C	3rd I.F. TUNING COND.
8	6B-2594D	4th I.F. TUNING COND.
9	26577	3 MFD.
10	26578	2700 Ω
11	W-2453	180 Ω
12	W-2454	750 Ω
13	W-2455	800 Ω
14	W-2456	800 Ω
15	W-2457	CORD PLUG
16	W-2458	POWER SUPPLY PLUG
17	W-2459	18 MFD. 125 V. D.C.
18	W-2460	10 MFD. 100 V. D.C.
19	W-2461	5 MFD. 100 V. D.C.
20	W-2462	7A SOCKET
21	W-2463	6T7 SOCKET
22	W-2464	6X4 SOCKET
23	W-2465	7A 3 SOCKET
24	W-2466	VOLUME CONTROL
25	W-2467	5 P.S.T. SWITCH
26	W-2468	0.005 MFD. 200V.
27	W-2469	0.01 MFD. 200V.
28	W-2470	0.02 MFD. 200V.
29	W-2471	0.02 MFD. 400V.
30	W-2472	0.02 MFD. 400V.
31	W-2473	0.02 MFD. 400V.
32	W-2474	0.02 MFD. 400V.
33	W-2475	0.02 MFD. 400V.
34	W-2476	5 MFD.
35	W-2477	5 MFD.
36	W-2478	5 MFD.
37	W-2479	5 MFD.
38	W-2480	5 MFD.
39	W-2481	5 MFD.
40	W-2482	5 MFD.
41	W-2483	5 MFD.
42	W-2484	5 MFD.
43	W-2485	5 MFD.
44	W-2486	5 MFD.
45	W-2487	5 MFD.

Crosley Model 172



IF 456 KC.

Control Grid Voltages

- Pentode ...0.5 to 1.5
- I. F.1.5 to 2.5 (20-30 vol. cont. off)
- 1st Det. ...5.5 to 7.5
- 2nd Det. ...4.0 to 6.0

Screen Grid Voltages

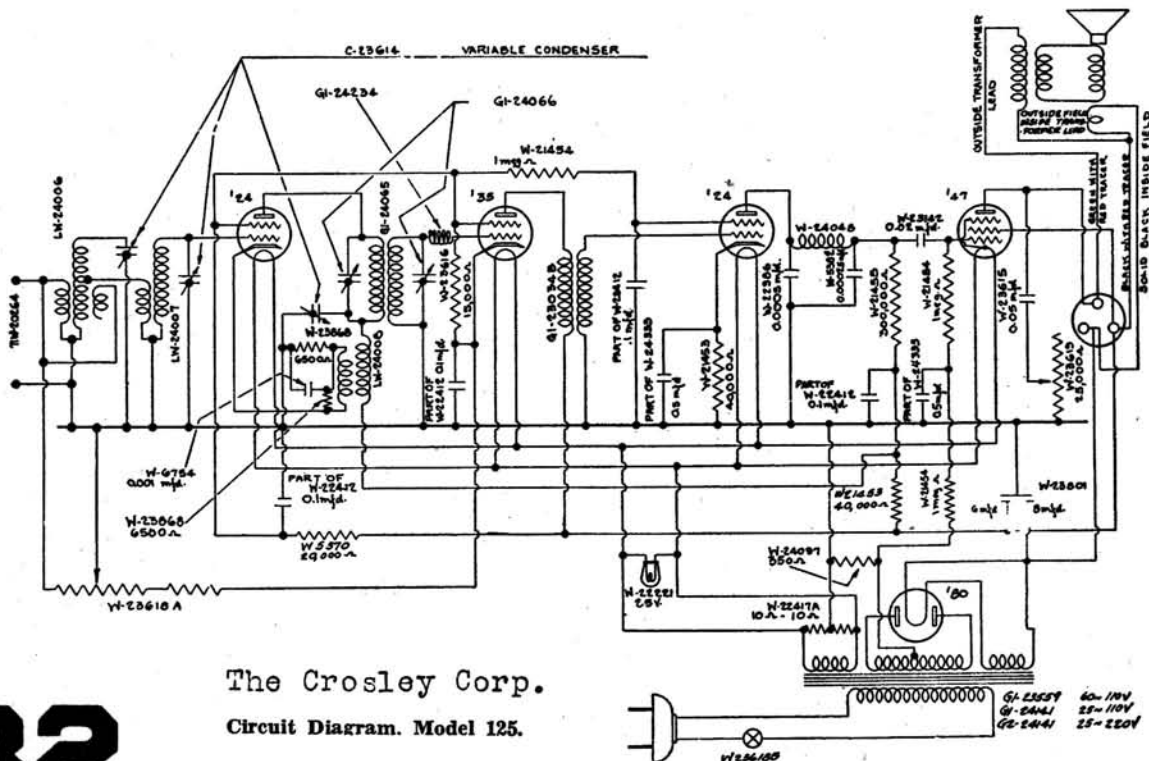
- Pentode ...200 to 230
- I. F. 75 to 95
- 1st Det. .. 75 to 95
- 2nd Det. 15 to 25 (250V scale), 3-8 (50V scale)

Filament Voltages

- All tubes but rectifier2.3 to 2.5
- Rectifier tube4.6 to 5.0

Plate Voltages

- Pentode 200 to 230
- I. F.200 to 230
- 1st Det. ...160 to 180
- 2nd Det. 75 to 90 (250V scale), 20-30 (50V scale)



The Crosley Corp.

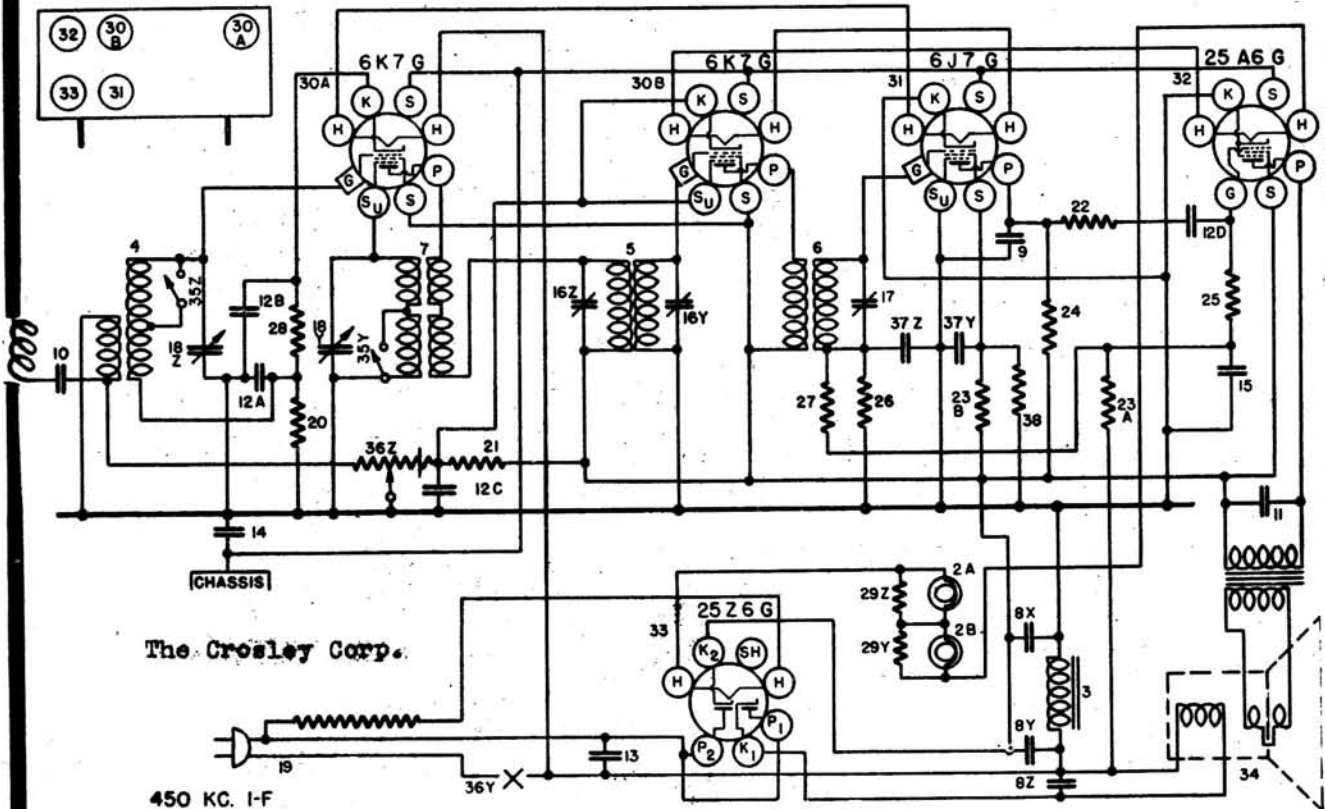
Circuit Diagram. Model 125.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

MODEL 536 AND 5536

Figures in first column refer to parts in Diagrams.

Item No.	Part No.	Description	Item No.	Part No.	Description
1	W -29784B	Antenna—Flexible		W -41162	Drive Chain—5536 only
2A	W -4099B	Dial Light		W -41160	Bearing Bracket—5536 only
2B	W -4099B	Dial Light		W -41159A	Shaft—5536 only
	G6 -27134	Dial Light Socket Assembly		W -40909	Spring Washer—5536 only
3	G4 -28859	Filter Choke		W -31840A	Snap Ring—5536 only
4	G106—32000	Ant. Coil		B -40999	Power Cord & Plug
5	G104—32004	1st I-F Coil	19	-36316	Resistor, 2700 Ohm 1/4 W.
6	G103—32004	2nd I-F Coil	20	-4921C	Resistor, 10,000 Ohm 1W.
7	G94 -32002	Osc. Coil	21	-35928	Resistor, 60,000 Ohm 1/4 W.
8Z		(8 Mfd. 125 V.	22A	-35600	Resistor, 100,000 Ohm 1/4 W.
8Y	W -29804A	Condenser, 16 Mfd. 125 V.	23B	-35600	Resistor, 100,000 Ohm 1/4 W.
8X		25 Mfd. 100 V.	24	-35601	Resistor, 300,000 Ohm 1/4 W.
9	G1 -34002	Condenser, .00025 Mfd. (Molded)	25	-36322	Resistor, 500,000 Ohm 1/4 W.
10	W -28620	Condenser, .003 Mfd. 200 V.	26	-35927	Resistor, 2 Megohm 1/4 W.
11	W -23191A	Condenser, .01 Mfd. 400 V.	27	-33490	Resistor, 10 Megohm 1/4 W.
12A	W -36541	Condenser, .02 Mfd. 160 V.	28	W -28589	Resistor, 350 Ohm 1/2 W. Flex.
12B	W -36541	Condenser, .02 Mfd. 160 V.	29	W -41000	Candohm—2 Sections
12C	W -36541	Condenser, .02 Mfd. 160 V.	30A	G151—3F400	Socket Type 6K7
12D	W -36541	Condenser, .02 Mfd. 160 V.	30B	G151—3F400	Socket Type 6K7
13	W -32780B	Condenser, .05 Mfd. 400 V.	31	G157—3F400	Socket Type 6J7
14	W -24049C	Condenser, 1 Mfd. 160 V.	32	G161—36400	Socket Type 25A6
16	W -37075	Condenser, 2 Section Trimmer	33	G162—36400	Socket Type 25Z6
17	W -40998	Condenser, 1 Section Trimmer		W -40911	Tube Shield
18	G22 -33001	2 Section Var. Tuning Condenser		W -27981A	Tube Shield Base
	C -40926	Dial Glass—536 only	34	B -41012	Speaker 237BL9
	W -40632B	Pointer Disc—536 only		W -40593	Speaker Mtg. Bracket
	W -41014A	Dial Glass Bracket R-H—536 only		W -6415	Mtg. Bracket Screw
	W -41013A	Dial Glass Bracket L-H—536 only		W -41004	Band Selector Switch
	W -41227	Drive Chain—536 only	35		Volume Control 4800 Ohm Tap 160 Ohm
	W -40633B	Bearing Support—536 only	36Z		Line Switch
	W -41112A	Driven Sprocket—536 only	36Y		
	W -41113A	Driver Sprocket		B -40590	Escutcheon
	W -40486	Pointer Disc Mtg. Screw		D -28	Escutcheon Mtg. Screws (4) 536 only
	C -40927	Dial Glass—5536 only		W -41019	Knob
	B -40818B	Pointer Disc—5536 only		W -40839	Escutcheon
	W -41158	Support Bracket L-H—5536 only		W -40840	Escutcheon Plate
	W -41143	Support Bracket R-H—5536 only		W -29760A	Escutcheon Pin 5536 only
	W -40797	Dial Glass Bracket—5536 only		W -41019	Knob (2)
				W -41021	Knob (1)



The Crosley Corp.

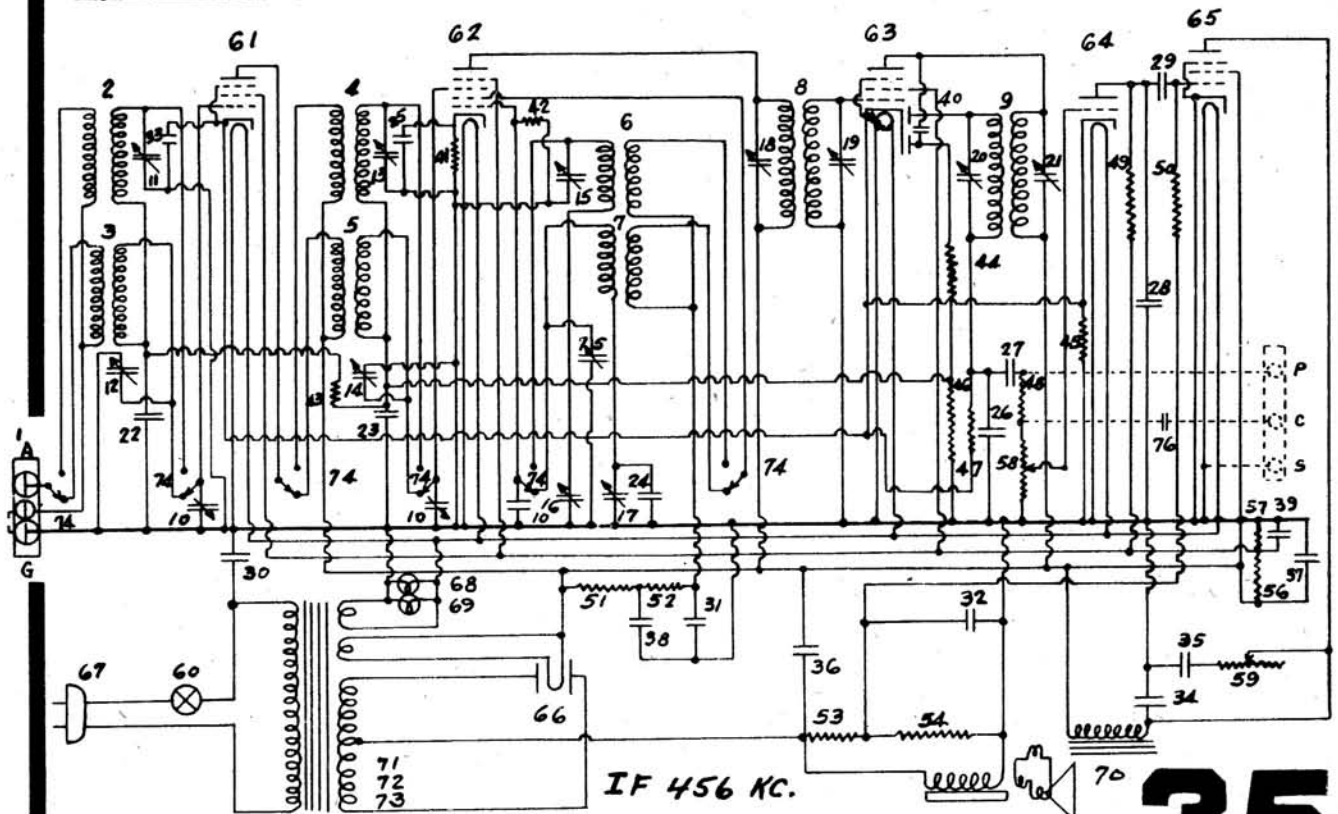
450 KC. I-F

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

PARTS LIST—MODEL 6H2

* Figures in 2nd last column refer to parts shown in wiring diagram of Model 6H2

Qty.	Part No.	Description	Item	Qty.	Part No.	Description	Item
1	G3-32000	Antenna Coil (Low Freq.)	2	1	B30375A	Cable & Plug	67
1	G1-32002	Antenna Coil (High Freq.)	3	1	W28552	Level Control (Volume) (3 Megohms)	56
1	G2-32001	R. F. Trans. Coil (L. F.)	4	2	G4-27134	Dial Light Brkt Assm.	58
1	G1-32001	R. F. Trans. Coil (H. F.)	5	1	W23594B	Tone Control (80000 Ohm) & Line Switch	59-60
1	G2-32002	Oscillator Coil (L. F.)	6	1	G16-26719	Ant.-Gnd. Terminal	1
1	G1-32002	Osc. Coil (H. F.)	7	FILTER & BY-PASS CONDENSERS 8-.8-.8 Mfd. 450 V.-450 V.-250 V. 37-38 12. Mfd. 475 V. 39 1. Mfd. 160 V. 32 0.02 Mfd. 200 V. 22-23 0.0014 Mfd. 25 0.00017-0.006 Mfd. 200 V.-200 V. 24 0.001-0.03 Mfd. 400 V.-400 V. 26-27 0.01 Mfd. 400 V. 30 0.01 Mfd. 400 V. 31 0.25 Mfd. 200 V. 33 0.008-0.05 Mfd. 400 V.-400 V. 34-35 0.0005 Mfd. 400 V. 40			
1	G9-32004	1st I. F. Trans. (With Trimmers)	8-18 19				
1	G10-32004	2nd I. F. Trans. (With Trimmers)	9-20 21				
6	W25200	Coil Shield Socket					
3	W30802	Coil Shield					
2	W25025A	Coil Shield					
1	W25025A	Coil Shield					
3	W26891	Insulating Washer L. F. Ant.-R. F. and Osc.	2-4-6				
3	W21541B	Retaining Ring	2-4-6				
2	W30026	Retaining Ring	3-5-7				
1	G1-33008	L. F. & H. F. Antenna Trimmer Cond.	11-12				
1	G1-33008	L. F. & H. F. R. F. Trimmer Cond.	13-14				
1	G15-33009	L. F. & H. F. Osc. Trimmer Condenser	15-75				
1	G2-33007	L. F. & H. F. Osc. Series Trimmer Cond.	16-17				
1	G19-33002	Variable Tuning Condenser Gang	10				
1	G5-32066	Dial Drive Assm.					
1	W32208A	Dial Hand					
2	W32293	Dial Hand Nut					
1	G75-27456	6D6 Socket	61				
1	G47-27456	6A7 Socket	62				
1	G48-27456	6B7 Socket	63				
1	G80-27456	76 Socket	64				
1	G25-27456	42 Socket	65				
1	G6-27456	80 Socket	66				
3	W26010	Tube Shield Base					
2	W27328A	Tube Shield (6A7, 6B7)					
1	B26009C	Tube Shield (6D6)					
1	G6-30745	Power Transformer 60 cy. 110 V.	71				
1	G7-30745	Power Transformer 25 cy. 110 V.	72				
1	G8-30745	Power Transformer 25 cy. 220 V.	73				
1	B32285	Band Change Switch	74				
1	W28580	350 Ohms (Flexible)	41				
1	21453	40000 Ohms	42				
4	23785	500000 Ohms	43-48				
2	26577	3 Megohms	44-46				
1	W27504	100 Ohms (Flexible)	45				
1	21454	1 Megohm	47				
1	23403	150000 Ohms	49				
1	21876	10000 Ohms	51				
1	24814	7000 Ohms	52				
1	33474	120000 Ohms	54				
1	W31883	8500-25000 Ohms	56-57				
3	W32352	Knob					
1	W32353	Knob					
1	W31007A	Speaker Cord (4 Lead)					
1	W32219A	Dial Glass					
1	W3220A	Dial Glass Retainer					
1	B32190C	Escutcheon					
1	W33106A	Escutcheon Gasket					
4	D28	Escutcheon Screws (.10 doz)					



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

The Crosley Radio Corporation, Cincinnati, Ohio

Model 158

Specifications

Model 158 is a seven tube superheterodyne designed for operation from A. C. electric circuits. The intermediate frequency used is 181.5 KC.

Tubes And Voltage Limits

The following are the voltages measured with the receiver in operating condition, but with no signal to the antenna circuit. Use a high resistance D. C. Voltmeter (1000 ohms per volt, or more) for all but filament voltages. In measuring filament or heater voltages use

a low range A. C. meter. The voltage limits are + or - 10% of values given in the following table.

Line voltage—117.5 (235 for 220 volt receivers).

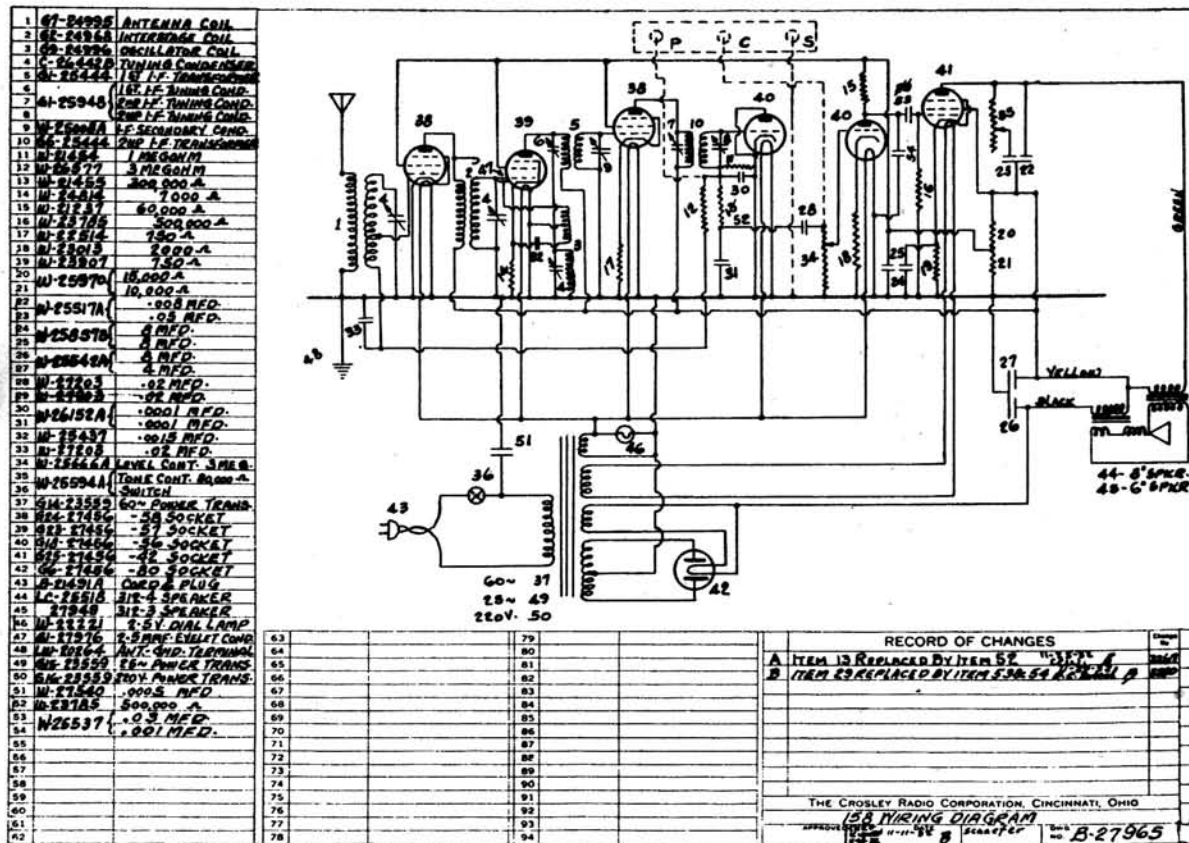
Plate voltage measured from plate contact to cathode contact.

Screen grid voltage measured from screen grid contact to cathode contact.

Suppressor grid voltage measured from suppressor grid contact to cathode contact.

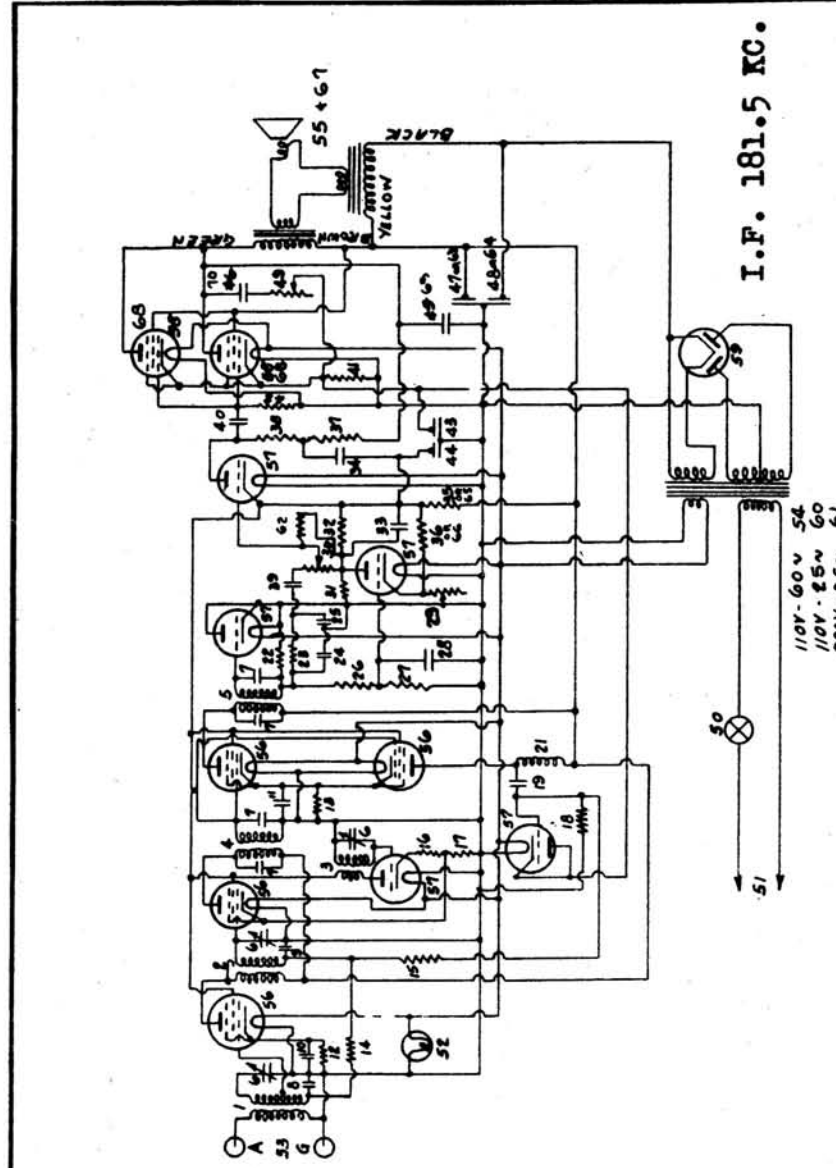
Bias voltage measured from cathode contact to chassis.

Tube	Position	Plate	Screen Grid	Voltages Supp. Grid	Bias	FIL
-58	R. F. Amplifier	270	85	0	0	2.5
-57	Oscillating Detector	270	80	0	6.0	2.5
-58	I. F. Amplifier	275	80	0	4.0	2.5
-56	Detector	0				2.5
-56	A. F. Amplifier	40			1.6	2.5
-42	Output	245	250		22.0	6.3
-80	Rectifier	350				4.8



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Model 160



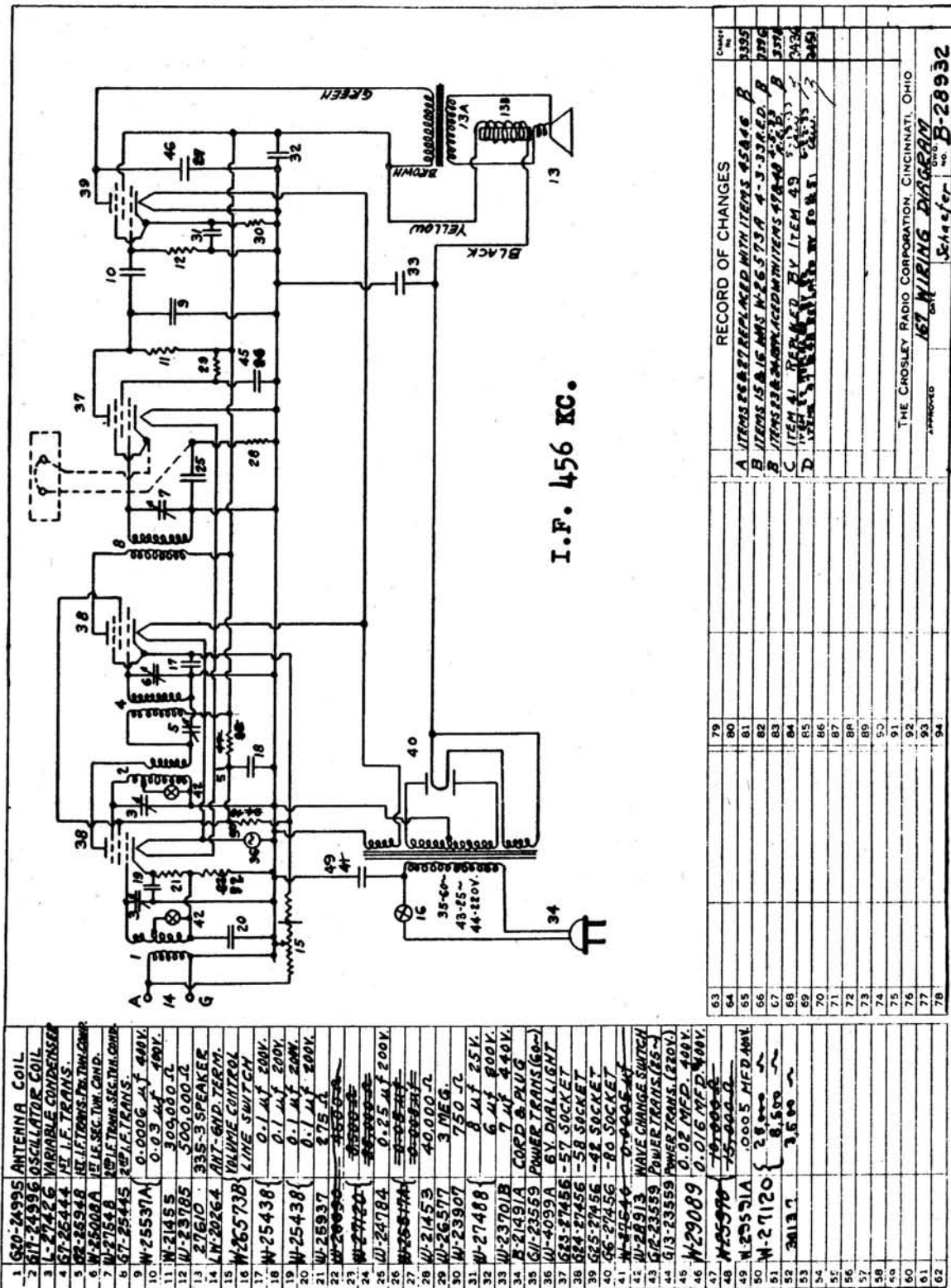
I.F. 181.5 KC.

RECORD OF CHANGES	
ITEM	ADDED
63	W-28468
64	W-28471
65	W-28470
66	W-28471
67	W-28470
68	W-28471
69	W-28470
70	W-28471
71	W-28470
72	W-28471
73	W-28470
74	W-28471
75	W-28470
76	W-28471
77	W-28470
78	W-28471
79	W-28470
80	W-28471
81	W-28470
82	W-28471
83	W-28470
84	W-28471
85	W-28470
86	W-28471
87	W-28470
88	W-28471
89	W-28470
90	W-28471
91	W-28470
92	W-28471
93	W-28470
94	W-28471

- 1 6T-24995 BATTERY COIL
- 2 6Z-25969 INTERSTAGE COIL
- 3 6M-24996 OSCILLATOR COIL
- 4 6S-24065 157 I.F. TRANS.
- 5 6Q-24065 250 I.F. TRANS.
- 6 C-66442B TUNING CAPACITOR
- 7 G3-25948 I.F. TUNING COND.
- 8 WJ-27204 .02 MFD.
- 9 WJ-25438 .01 MFD.
- 10 WJ-25937 .01 MFD.
- 11 WJ-21964 275 Ω
- 12 WJ-25785 165 Ω
- 13 WJ-21454 500,000 Ω
- 14 WJ-23013 1 MEGOHM
- 15 WJ-23013 2000 Ω
- 16 WJ-23013 750 Ω
- 17 WJ-21455 300,000 Ω
- 18 WJ-27540 .0005 MFD.
- 19 WJ-25445 COUPLING CHOKE
- 20 W-21454 1-MEGOHM
- 21 W-23785 500,000 Ω
- 22 W-26158 .0005 MFD.
- 23 W-26578 .001 MFD.
- 24 W-26577 .02 MFD.
- 25 W-26577 .02 MFD.
- 26 W-26577 .02 MFD.
- 27 W-26577 .02 MFD.
- 28 W-26577 .02 MFD.
- 29 W-26577 .02 MFD.
- 30 W-26577 .02 MFD.
- 31 W-26577 .02 MFD.
- 32 W-26577 .02 MFD.
- 33 W-26577 .02 MFD.
- 34 W-26577 .02 MFD.
- 35 W-26577 .02 MFD.
- 36 W-26577 .02 MFD.
- 37 W-26577 .02 MFD.
- 38 W-26577 .02 MFD.
- 39 W-26577 .02 MFD.
- 40 W-26577 .02 MFD.
- 41 W-26577 .02 MFD.
- 42 W-26577 .02 MFD.
- 43 W-26577 .02 MFD.
- 44 W-26577 .02 MFD.
- 45 W-26577 .02 MFD.
- 46 W-26577 .02 MFD.
- 47 W-26577 .02 MFD.
- 48 W-26577 .02 MFD.
- 49 W-26577 .02 MFD.
- 50 W-26577 .02 MFD.
- 51 W-26577 .02 MFD.
- 52 W-26577 .02 MFD.
- 53 W-26577 .02 MFD.
- 54 W-26577 .02 MFD.
- 55 W-26577 .02 MFD.
- 56 W-26577 .02 MFD.
- 57 W-26577 .02 MFD.
- 58 W-26577 .02 MFD.
- 59 W-26577 .02 MFD.
- 60 W-26577 .02 MFD.
- 61 W-26577 .02 MFD.
- 62 W-26577 .02 MFD.
- 63 W-26577 .02 MFD.
- 64 W-26577 .02 MFD.
- 65 W-26577 .02 MFD.
- 66 W-26577 .02 MFD.
- 67 W-26577 .02 MFD.
- 68 W-26577 .02 MFD.
- 69 W-26577 .02 MFD.
- 70 W-26577 .02 MFD.
- 71 W-26577 .02 MFD.
- 72 W-26577 .02 MFD.
- 73 W-26577 .02 MFD.
- 74 W-26577 .02 MFD.
- 75 W-26577 .02 MFD.
- 76 W-26577 .02 MFD.
- 77 W-26577 .02 MFD.
- 78 W-26577 .02 MFD.
- 79 W-26577 .02 MFD.
- 80 W-26577 .02 MFD.
- 81 W-26577 .02 MFD.
- 82 W-26577 .02 MFD.
- 83 W-26577 .02 MFD.
- 84 W-26577 .02 MFD.
- 85 W-26577 .02 MFD.
- 86 W-26577 .02 MFD.
- 87 W-26577 .02 MFD.
- 88 W-26577 .02 MFD.
- 89 W-26577 .02 MFD.
- 90 W-26577 .02 MFD.
- 91 W-26577 .02 MFD.
- 92 W-26577 .02 MFD.
- 93 W-26577 .02 MFD.
- 94 W-26577 .02 MFD.

THE CROSLY RADIO CORPORATION, CINCINNATI, OHIO
 160 WIRING DIAGRAM
 12-27-32

Model 167



1	620-24995	ANTENNA COIL
2	611-24996	OSCILLATOR COIL
3	1-27426	VARIABLE CONDENSER
4	67-26444	IF I.F. TRANS.
5	67-26444	IF I.F. TRANS.
6	67-26444	IF I.F. TRANS.
7	67-26444	IF I.F. TRANS.
8	67-26444	IF I.F. TRANS.
9	67-26444	IF I.F. TRANS.
10	67-26444	IF I.F. TRANS.
11	67-26444	IF I.F. TRANS.
12	67-26444	IF I.F. TRANS.
13	67-26444	IF I.F. TRANS.
14	67-26444	IF I.F. TRANS.
15	67-26444	IF I.F. TRANS.
16	67-26444	IF I.F. TRANS.
17	67-26444	IF I.F. TRANS.
18	67-26444	IF I.F. TRANS.
19	67-26444	IF I.F. TRANS.
20	67-26444	IF I.F. TRANS.
21	67-26444	IF I.F. TRANS.
22	67-26444	IF I.F. TRANS.
23	67-26444	IF I.F. TRANS.
24	67-26444	IF I.F. TRANS.
25	67-26444	IF I.F. TRANS.
26	67-26444	IF I.F. TRANS.
27	67-26444	IF I.F. TRANS.
28	67-26444	IF I.F. TRANS.
29	67-26444	IF I.F. TRANS.
30	67-26444	IF I.F. TRANS.
31	67-26444	IF I.F. TRANS.
32	67-26444	IF I.F. TRANS.
33	67-26444	IF I.F. TRANS.
34	67-26444	IF I.F. TRANS.
35	67-26444	IF I.F. TRANS.
36	67-26444	IF I.F. TRANS.
37	67-26444	IF I.F. TRANS.
38	67-26444	IF I.F. TRANS.
39	67-26444	IF I.F. TRANS.
40	67-26444	IF I.F. TRANS.
41	67-26444	IF I.F. TRANS.
42	67-26444	IF I.F. TRANS.
43	67-26444	IF I.F. TRANS.
44	67-26444	IF I.F. TRANS.
45	67-26444	IF I.F. TRANS.
46	67-26444	IF I.F. TRANS.
47	67-26444	IF I.F. TRANS.
48	67-26444	IF I.F. TRANS.
49	67-26444	IF I.F. TRANS.
50	67-26444	IF I.F. TRANS.
51	67-26444	IF I.F. TRANS.
52	67-26444	IF I.F. TRANS.
53	67-26444	IF I.F. TRANS.
54	67-26444	IF I.F. TRANS.
55	67-26444	IF I.F. TRANS.
56	67-26444	IF I.F. TRANS.
57	67-26444	IF I.F. TRANS.
58	67-26444	IF I.F. TRANS.
59	67-26444	IF I.F. TRANS.
60	67-26444	IF I.F. TRANS.
61	67-26444	IF I.F. TRANS.
62	67-26444	IF I.F. TRANS.

63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		

RECORD OF CHANGES

Item	Change
A	ITEMS 68-71 REPLACED WITH ITEMS 45-48 B
B	ITEMS 15 & 16 W/AS N-26-573A 4-3-33 R.D. B
C	ITEMS 22-24 REPLACED WITH ITEMS 47-49 B
D	ITEM 41 REPLACED BY ITEM 43 B
E	ITEM 31 REPLACED BY ITEM 33 B
F	ITEM 32 REPLACED BY ITEM 34 B
G	ITEM 33 REPLACED BY ITEM 35 B
H	ITEM 34 REPLACED BY ITEM 36 B
I	ITEM 35 REPLACED BY ITEM 37 B
J	ITEM 36 REPLACED BY ITEM 38 B
K	ITEM 37 REPLACED BY ITEM 39 B
L	ITEM 38 REPLACED BY ITEM 40 B
M	ITEM 39 REPLACED BY ITEM 41 B
N	ITEM 40 REPLACED BY ITEM 42 B
O	ITEM 41 REPLACED BY ITEM 43 B
P	ITEM 42 REPLACED BY ITEM 44 B
Q	ITEM 43 REPLACED BY ITEM 45 B
R	ITEM 44 REPLACED BY ITEM 46 B
S	ITEM 45 REPLACED BY ITEM 47 B
T	ITEM 46 REPLACED BY ITEM 48 B
U	ITEM 47 REPLACED BY ITEM 49 B
V	ITEM 48 REPLACED BY ITEM 50 B
W	ITEM 49 REPLACED BY ITEM 51 B
X	ITEM 50 REPLACED BY ITEM 52 B
Y	ITEM 51 REPLACED BY ITEM 53 B
Z	ITEM 52 REPLACED BY ITEM 54 B

THE CROSBLEY RADIO CORPORATION, CINCINNATI, OHIO

APPROVED: *Schaefer* NO. B-28932

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

The Crosley Radio Corporation, Cincinnati, Ohio

Model 168

Specifications

Model 168 is a seven tube dual band super-heterodyne designed for operation from A.C. electric circuits. The intermediate frequency is 181.5 Kc.

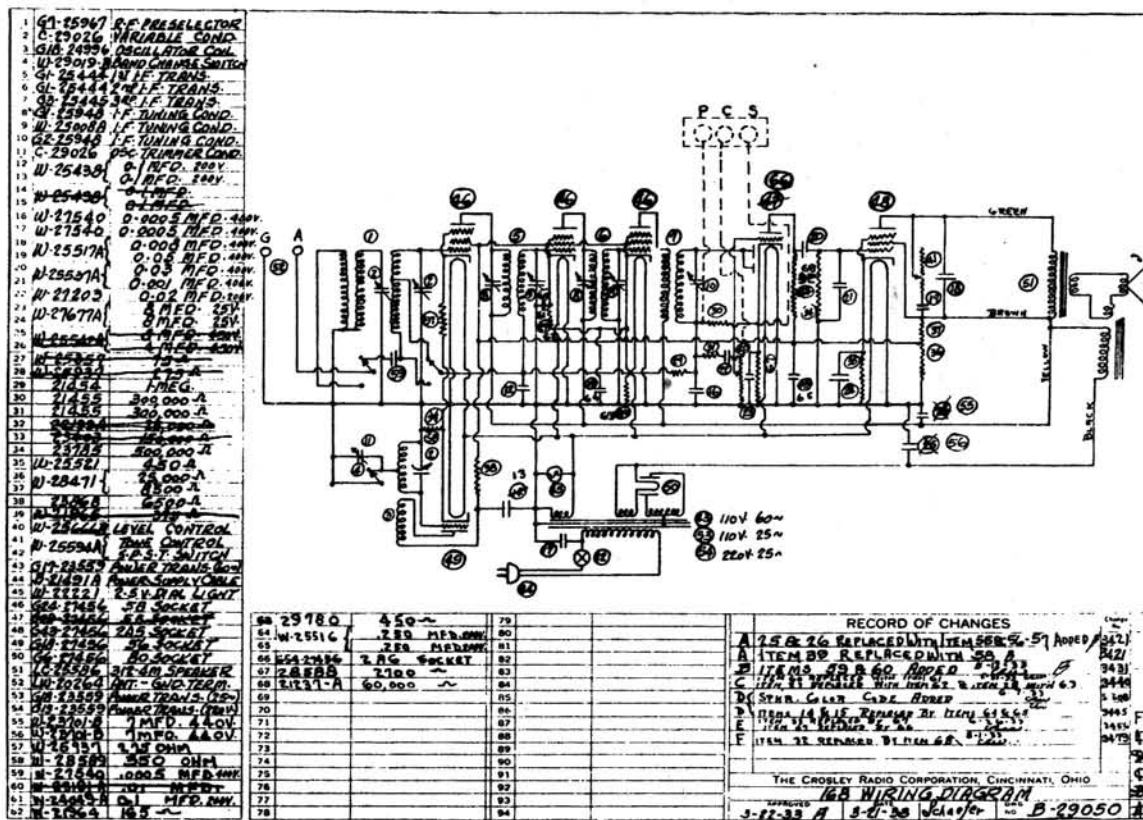
Tubes and Voltage Limits

The following are the tubes and voltages

measured with the receiver in operating condition but with no signal to the antenna circuit. Line voltage should be 117.5 volts (235 volts for 220 volt receivers). All voltages, except filament, are measured from tube contact to chassis with a 500 volt D.C. voltmeter (1000 ohms per volt). Filament voltages are measured with a low range A.C. voltmeter.

Tube	Position	Plate	Screen Grid	Cathode	Suppressor Grid	Filament
56	Oscillator	66		6.5		2.5
58	Modulator	270	122	8.0	8.0	2.5
58	I. F. Amplifier	270	122	8.5	8.5	2.5
58	I. F. Amplifier	270	122	7.0	7.0	2.5
2A6	Detector and A. F. Amplifier	231		2.0		2.5
2A5	Output	257	270	18.0		2.5
80	Rectifier	380				4.9

Voltage limits are plus or minus 10% of values given.



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

The Crosley Radio Corporation, Cincinnati, Ohio

Model 169

Specifications

Model 169 is a four tube dual band super-heterodyne designed for operation from A.C. electric circuits. The intermediate frequency is 456 Kc.

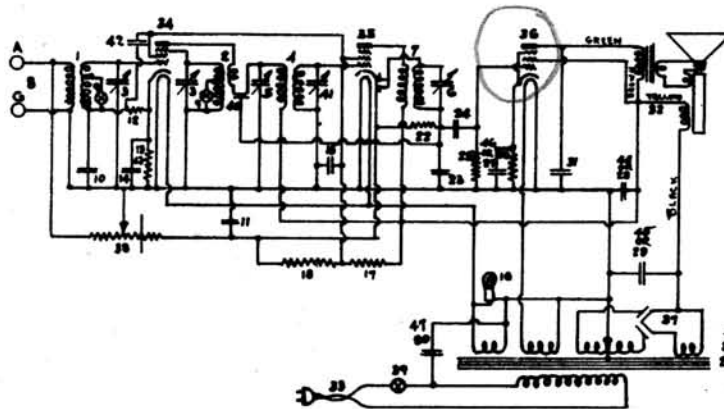
Tubes and Voltage Limits

The following are the tubes and voltages measured with the receiver in operating con-

dition but with no signal to the antenna circuit, with a line voltage of 117.5 volts (235 volts for 220 volt receivers). All voltages, except filament, are measured with a 500 volt D.C. voltmeter (1000 ohms per volt) from tube contact to chassis. Filament voltages are measured with a low range A.C. voltmeter.

Tube	Position	Plate	Screen Grid	Cathode	Suppressor Grid	Filament
58	Oscillator-Modulator	188	88	28	0	2.5
2B7	I. F. Amplifier and Detector	188	88	2		2.5
42	Output	178	188	14.5		2.5
80	Rectifier	322				4.9

Voltage limits are plus or minus 10% of values given.



10 - 60 cys. 110V.
20 - 25 cys. 110V.
21 - 25 cys. 220V.

83	79
84	80
85	81
86	82
87	83
88	84
89	85
90	86
91	87
92	88
93	89
94	90
95	91
96	92
97	93
98	94

RECORD OF CHANGES		Change
D	ITEM 12 REPLACED BY ITEM 48 4-28-33	3418
E	ITEM 20 REPLACED BY ITEM 47 1-2-33	2436
F	ITEM 44 HAS N-29150 (SPEAKER) - 3-23-33	928

THE CROSLY RADIO CORPORATION, CINCINNATI, OHIO
169 WIRING DIAGRAM
 4-11-33 Schaefer - D-29074

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

The Crosley Radio Corporation, Cincinnati, Ohio

Model 170

Specifications

Model 170 is a ten tube dual band super-heterodyne designed for operation from A.C. electric circuits. The intermediate frequency used is 181.5 Kc.

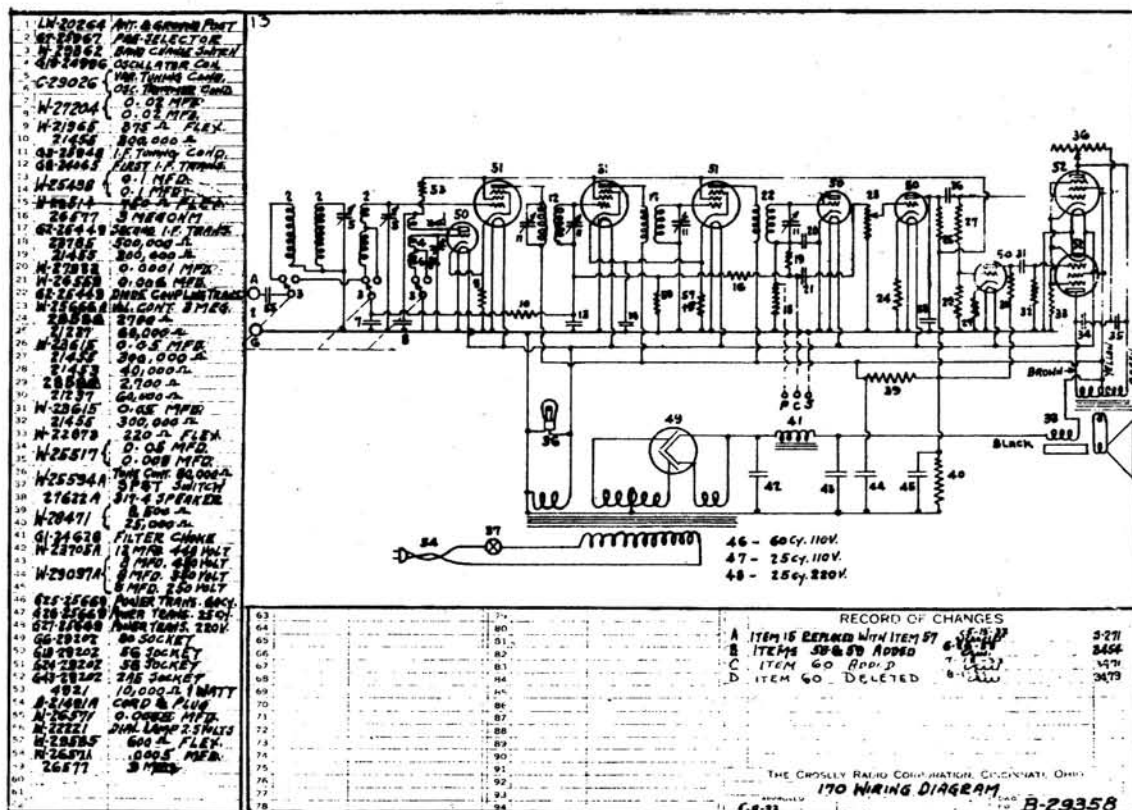
Tubes and Voltage Limits

The following are the tubes and voltages measured with the receiver in operating con-

dition but with no signal to the antenna circuit, and with a line voltage of 117.5 volts (235 volts for 220 volt receivers). All voltages, except filament, are measured with a 500 volt D.C. voltmeter (1000 ohms per volt) from tube contact to chassis. Filament voltages are measured with a low range A.C. voltmeter.

Tube	Position	Plate	Screen Grid	Cathode	Suppressor Grid	Filament
58	Modulator	276	120	6.0	6.0	2.5
56	Oscillator	50		6.0		2.5
58	I. F. Amplifier	276	120	8.0	8.0	2.5
58	I. F. Amplifier	276	120	8.0	8.0	2.5
56	Detector	0				
56	Phase Shifter	55		0		2.5
56	A. F. Amplifier	56		2.0		2.5
2-2A5	Output	269		3.0		2.5
80	Rectifier	355	276	18.0		2.5
						4.9

Voltage limits are plus or minus 10% of values given.



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

The Crosley Radio Corporation, Cincinnati, Ohio

Model 171

Specifications

Model 171 is a twelve tube dual band superheterodyne designed for operation from A.C. electric circuits. The intermediate frequency is 181.5 Kc.

Voltages and Tube Limits

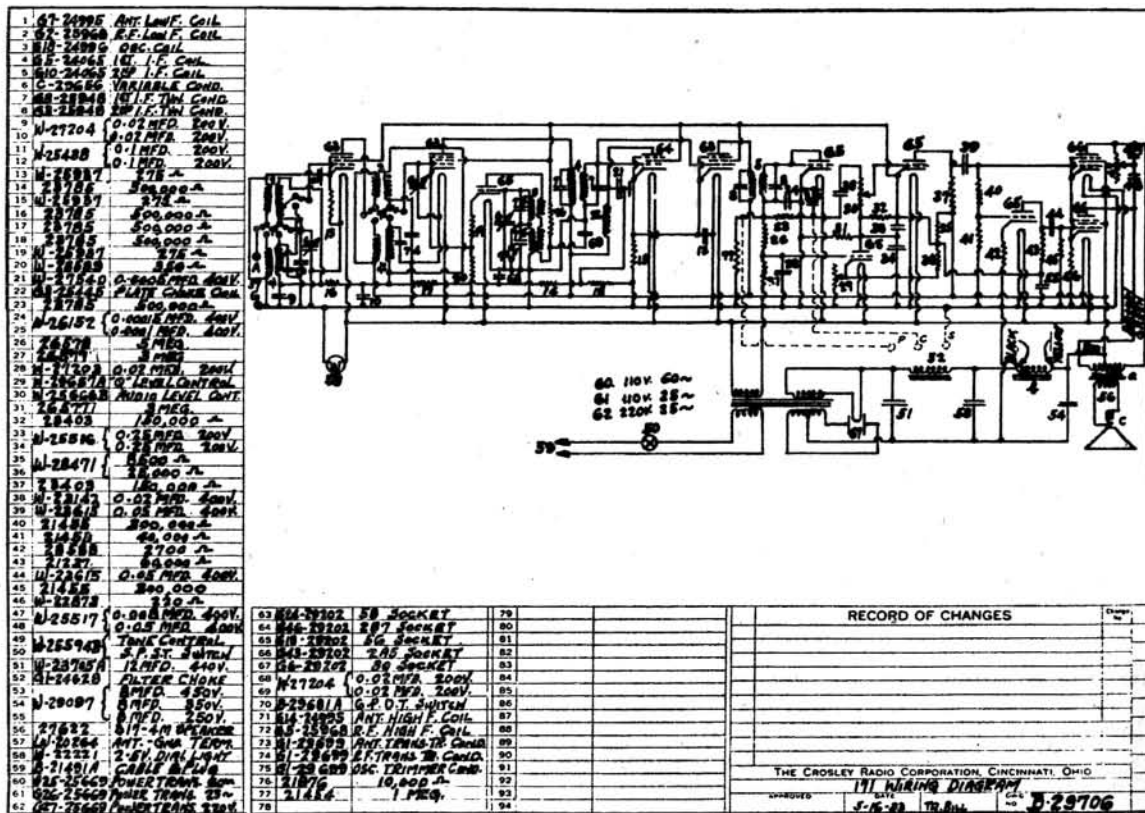
The following are the tubes and voltages measured with the receiver in operating con-

dition but with no signal to the antenna circuit, and with a line voltage of 117.5 volts (235 volts for 220 volt receivers). All voltages, except filament are measured with a 500 volt D.C. voltmeter (1000 ohms per volt) from tube contact to chassis. Filament voltages are measured with a low range A.C. voltmeter.

Tube	Position	Plate	Screen Grid	Cathode	Suppressor Grid	Filament
58	R. F. Amplifier	267	115	3.0	3.0	2.5
56	Oscillator	60		7.0		2.5
58	Modulator	267	115	5.5	5.5	2.5
58	I. F. Amplifier	267	115	4.5	4.5	2.5
2B7	A. V. C. Tube	267	115	4.5	4.5	2.5
56	QAVC Tube	70		0-20.0*		2.5
56	Detector	0		0		2.5
56	Phase Shifter	58		2.5		2.5
56	A. F. Amplifier	170		115		2.5
2-2A5	Output	260	267	17.5		2.5
80	Rectifier	355				4.9

Voltage limits are plus or minus 10% of values given.

*Voltage depends on position of "Q" control.

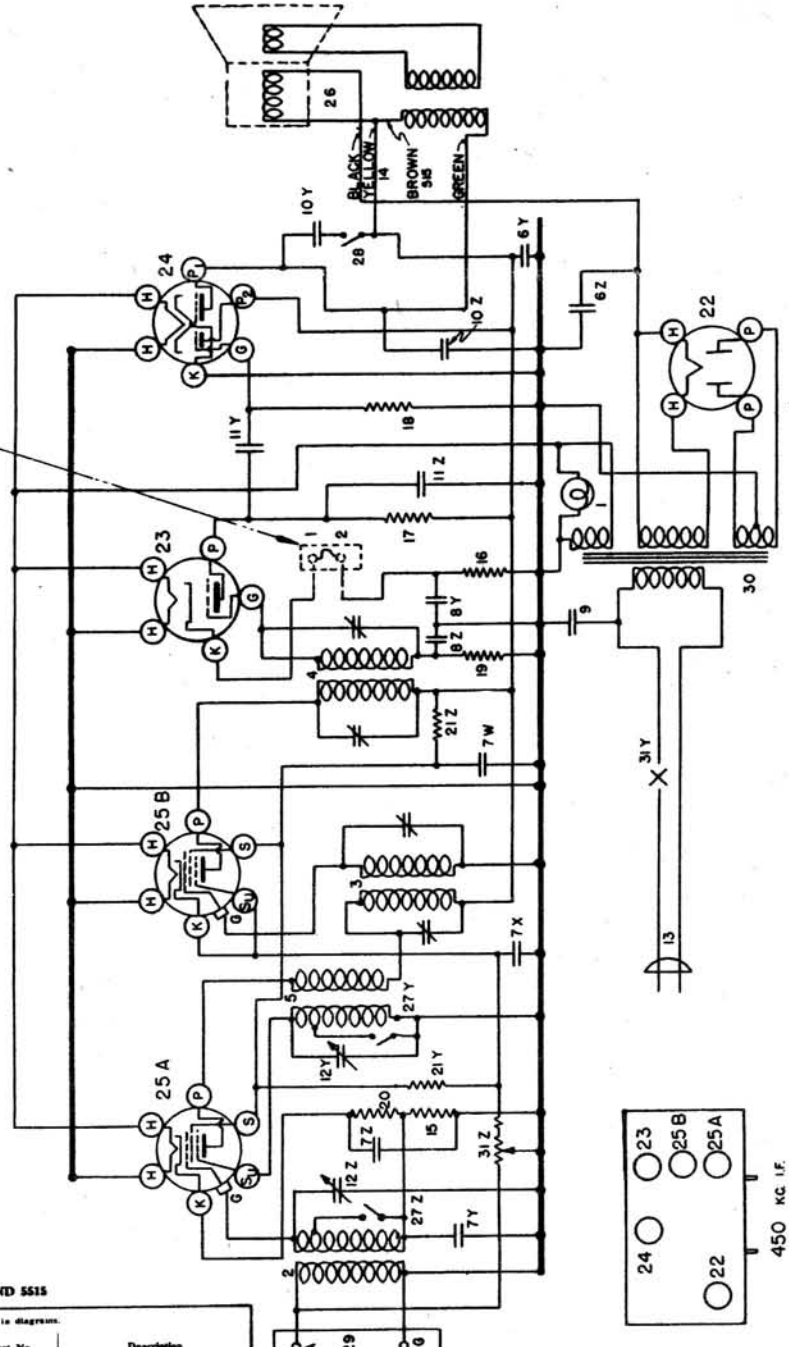


MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Crosley Radio

I.F. 450 KC.

NOTE: TERMINALS 1 & 2 TO BE STRAPPED TOGETHER WHEN PHONO ADAPTER IS NOT IN USE.

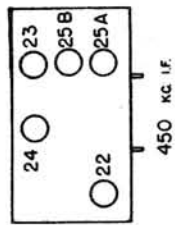


WIRING DIAGRAM OF MODELS 515 AND 5515

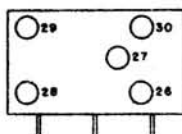
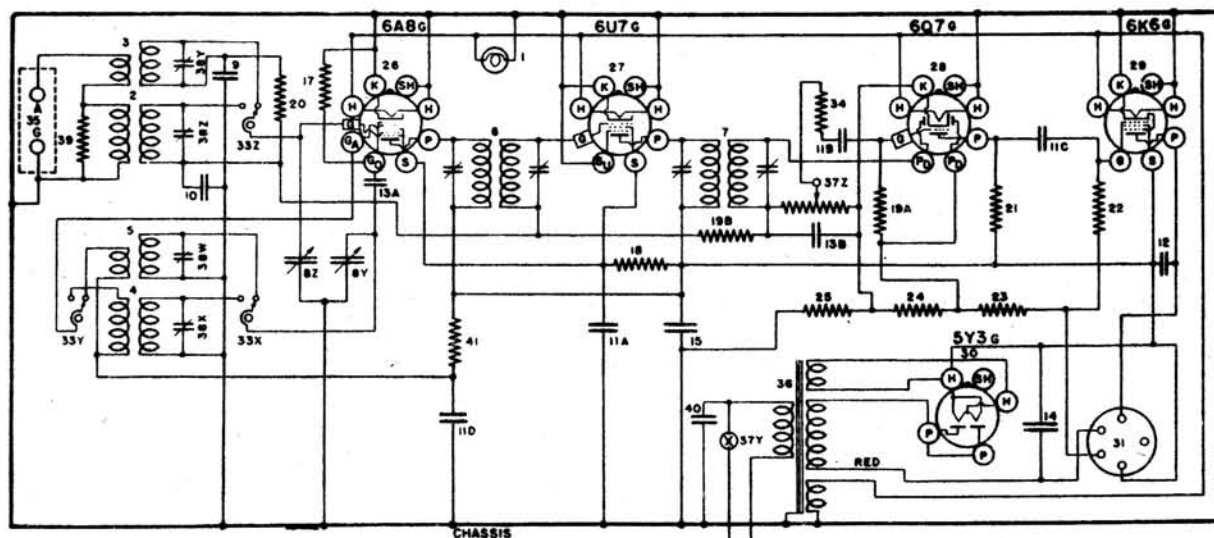
PARTS LIST—MODELS 515 AND 5515

Figure in first column refer to parts shown in diagram.

Item No.	Part No.	Description	Item No.	Part No.	Description
1	G4—27134	Dial Light Socket Assembly.	30	W—25937	Resistor, 275 Ohms Plex.
2	G45—33000	Coil Ast.	31Z	W—35963	Resistor, 8,500 Ohms.
3	G48—33004	1st. I. F. Trans.	31Y	G6—28807	Resistor, 25,000 Ohms.
4	G49—33004	2nd. I. F. Trans.	32	C80—28807	Socket, 80.
5	G47—33002	Osc. Coil	23	C90—28807	Socket, 6B5.
6Z	W—36719	Condenser, 8 Mfd., 450 Volta.	25A	G75—28807	Socket, 6D6.
7Z	W—28623	Condenser, 6 Mfd., 450 Volt.	25B	G75—28807	Socket, 6D6.
8Y	W—28623	Condenser, 0.02 Mfd. 200 Volt.	26	W—35772	Tube Shield, Half.
9	W—28623	Condenser, 0.02 Mfd. 200 Volt.	27Y	W—35773	Tube Shield, Half.
10Z	W—28622	Condenser, 0.1 Mfd. 200 Volt.	28	W—35774	Tube Shield Base.
11Y	W—30805	Condenser, 0.1 Mfd. 200 Volt.	29	W—219-DL9	Speaker.
12Y	W—35011	Condenser, 0.02 Mfd. 400 Volt.	31Z	W—35753A	Band Change Switch.
13Y	W—25537A	Condenser, 0.001 Mfd. 400 Volt.	31Y	W—36184A	Tone Control Switch.
14	G14—33001	Variable Tuning Condenser Gang.	31Y	G1—26719	Ant. Genl. Terminal.
15	B—36148	Dial Assembly complete.	30	G5—28550	Power Transformer, 60 Cy., 110 V.
16	C3—35956A	Card—Power Supply.	30	G6—28500	Power Transformer, 25 Cy., 110 V.
17	31094	Resistor, 4,500 Ohms.	30	G7—28500	Power Transformer, 25 Cy., 220 V.
18	21257A	Resistor, 62,000 Ohms.			Volume Control.
19	21455	Resistor, 300,000 Ohms.			On-Off Switch.
	23785	Resistor, 500,000 Ohms.			Ecutechcon.
	21454	Resistor, 1 Megohm.			Dial Glass.
					Dial Pointer.
					Pointer Screw.
					Knob (2) large.
					Knob (2) small.



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



MODELS 517 & 547 455 K.C. IF

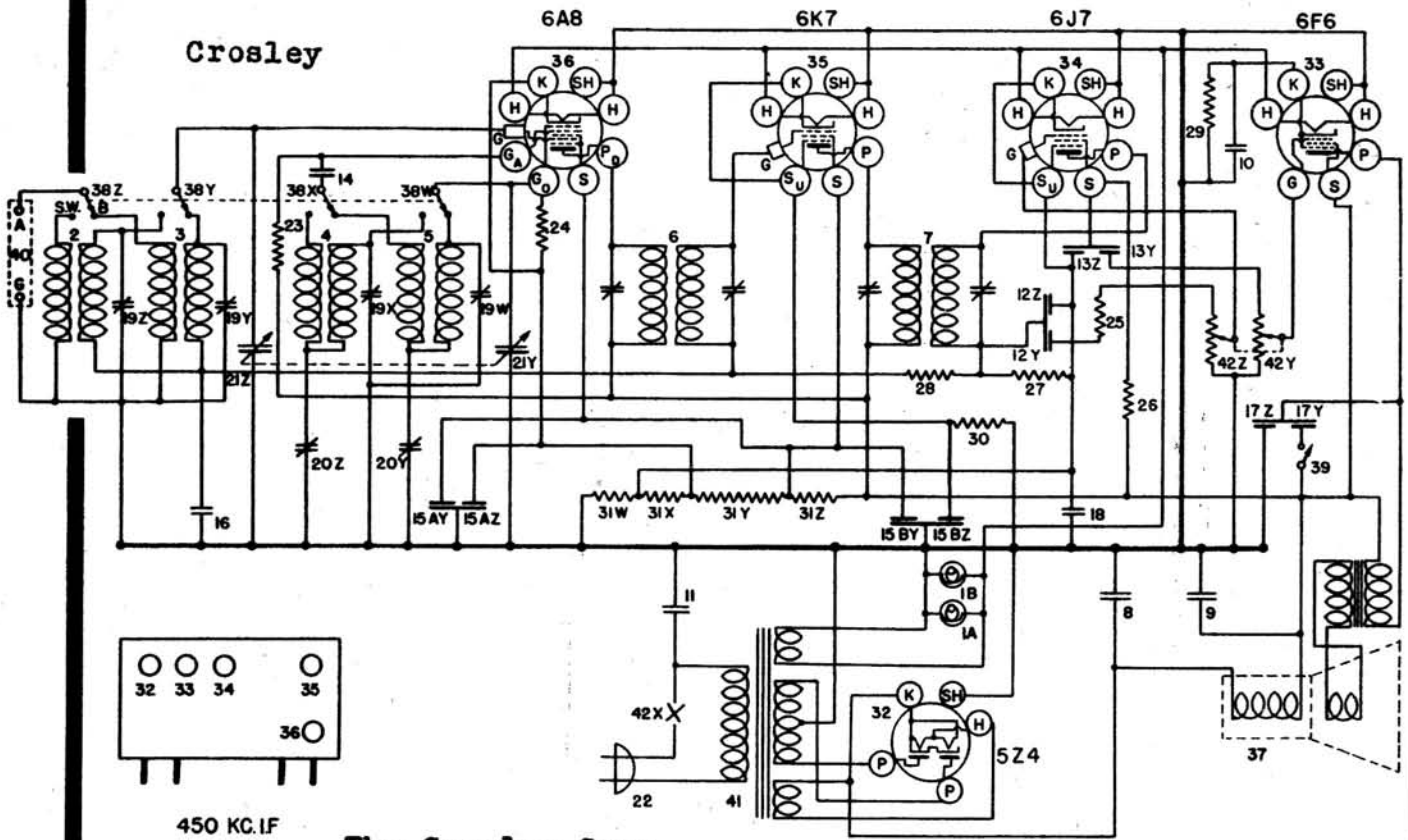
The Crosley Corp.

WIRING DIAGRAM—MODEL 517 AND 547

PARTS LIST — MODEL 517 AND 547

Figures in first column refer to parts in Diagrams.					
Item No.	Part No.	Description	Item No.	Part No.	Description
1	W —43567	Bulb—Dial Light	30	G173—36400	Socket Type 5Y3
	W —43568	Light Bracket		W —40911	Tube Shield
2	G132—32000	Ant. Coil, B. C.	31	G103—28807	Socket—Speaker
3	G133—32000	Ant. Coil, H. F.	32	257BP11 "B"	Speaker, Spec. No. 51-A-5
4	G132—32002	Osc. Coil, B. C.			(Cab. 6K & 7KA)
5	G133—32002	Osc. Coil, H. F.		—42927	Cone for 257BP11 "B" Speaker
6	G136—32004	1st I-F Assembly		—41473	O. P. Trans. for 257BP11 "B" Spkr.
7	G137—32004	2nd I-F Assembly		—43539	Cardb'd Ring for 257BP11 "B" Spk.
8	G33—33001	2 Sect. Var. Tuning Cond. (547 only)		257BP18 "B"	Speaker, Spec. No. 51-A-8
	G31—33001	2 Sect. Var. Tuning Cond. (517 only)			(Cab. 7H & 7HA)
	B —43551	Dial Face (517 only)		—42927	Cone for 257BP18 "B" Speaker
	B —43729	Dial Face (Tel. Tun. Dial only)		—43986	O. P. Trans. for 257BP18 "B" Spkr.
	W —43694	Disc—Center of Dial		—43539	Cardb'd Ring for 257BP18 "B" Spk.
	W —43693	Mask Ring (Dial)		462CP11 "M"	Spkr., Spec. No. 1-D-971 (Cab. 6FF)
	W —43778	Dial Support Ring		—40405	Cone for 462CP11 "M" Speaker
	B —43544	Dial Glass Support		—43989	O. P. Trans. for 462CP11 "M" Spkr.
	G1 —43564	Pulley Assembly		—43988	Field Coil for 462CP11 "M" Spkr.
	W —43548	Drive Shaft		464BP15 "M"	Spkr., Spec. No. 1-D-1017 (Cab. 7M)
	W —43549	Retaining Ring		—43993	Cone for 464BP15 "M" Speaker
	W —43550	Pointer (517 only)		—43994	Field Coil for 464BP15 "M" Spkr.
	W —43542A	Drive Shaft Bracket		—43995	O. P. Trans. for 464BP15 "M" Spkr.
	W —43561	Drive Cable Spring		—43448	Switch Band Selector
	W —41582	Drive Cable		—36761	Resistor 40,000 Ohm 1/4W.
9	G12—34002	Condenser .0005 Mf. H.F. Osc. Ser.	33	W —43448	Ant. and Ground Terminal Board
10	—36541	Condenser .02 Mf. 160 V.	34	G1 —26719	Power Trans. 110 V. 60 Cy.
11ABCD	W —28621	Condenser .02 Mf. 200 V.	35	—43479	Power Trans. 110 V. 25 Cy.
12	W —34647	Condenser .01 Mf. 400 V.	36	—43480	Power Trans. 220 V. 25 Cy.
13AB	G1 —34002	Condenser .00025 Mf. Molded		—43481	Power Trans. 220 V. 25 Cy.
14	W —41081	Condenser 16 Mf. 250 V.	37Z	—43449	Volume Control, 1 Megohm
15	W —43450	Condenser 16 Mf. 200 V.	37Y		Line Switch
16	B —33906A	Power Cord and Plug	38Z		Trimmer Cond. B. C. Ant.
17	—21237A	Resistor 60,000 Ohm 1/4W.	38Y	W —41247A	Trimmer Cond. H. F. Ant.
18	—24814	Resistor 7,000 Ohm 1/4W.	38X		Trimmer Cond. B. C. Osc.
19AB	—36688	Resistor 3 Megohm 1/4W.	38W		Trimmer Cond. H. F. Osc.
20	—21455	Resistor 300,000 Ohm 1/4W.	39	—22196	Resistor 20,000 Ohm 1/4W.
21	—35601	Resistor 300,000 Ohm 1/4W.	40	W —30605	Condenser .01 Mf. 400 V.
22	—23785	Resistor 500,000 Ohm 1/4W.	41	—30137	Resistor 3,500 Ohm 1/4W.
23	W —28589	Resistor 350 Ohm 1/4W. Flex.		G1 —43724	Tel. Tun. Escutcheon
24	W —33012A	Resistor 40 Ohm 1/4W. Flex.		W —43769	Pointer—Cabinet (547 only)
25	W —24537	Resistor 60 Ohm 1/4W. Flex.		W —43554	Knob (1 required) Small
26	G156—36400	Socket Type 6A8		W —43625	Knob (2 required) Large
27	G171—36400	Socket Type 6U7		W —43553	Rubber Mtg. Foot
28	G160—36400	Socket Type 6Q7		W —43552	Clamp—Speaker Plug
29	G172—36400	Socket Type 6K6		W —43726	Celluloid Disc (547 only)

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



The Crosley Corp.

WIRING DIAGRAMS—MODELS 555 AND 5555

Item No.	Part No.	Description	Item No.	Part No.	Description		
1A	G6 —27134	Dial Light Assm.	22	B —33906A	A. C. Cord & Plug		
1B	G6 —27134	Dial Light Assm.	23	—5370A	Resistor, 20,000 Ohm		
2	G82 —32000	Ant. Coil, S. W. B.	24	—21237	Resistor, 60,000 Ohm		
3	G81 —32000	Ant. Coil, B. C. B.	25	—21875	Resistor, 100,000 Ohm		
4	G65 —32002	Osc. Coil, S. W. B.	26	—21455	Resistor, 300,000 Ohm		
5	G66 —32002	Osc. Coil, B. C. B.	27	—33344	Resistor, 400,000 Ohm		
6	G71 —32004	1st I. F. Assm.	28	—37245	Resistor, 1.5 Megohm		
7	G72 —32004	2nd I. F. Assm.	29	W —25291	Resistor, 500 Ohm 1/2 W. (Flex)		
8	W —36055	Condenser, 35. Mfd. 400 Volt	30	W —28106	Resistor, 500 Ohm 1/2 W. (Flex)		
9	W —36057	Condenser, 40. Mfd. 300 V.	31Z	W —37246A	Resistor, 10,000 Ohm Candohm		
10	W —36931	Condenser, 12 Mfd. 25 V.	31Y		Resistor, 25,000 Ohm Candohm		
11	W —30805	Condenser, 0.01 Mfd. 400 V.	31X		Resistor, 185. Ohm Candohm		
12Z	W —30322A	Condenser, 0.00017 Mfd. 200 V.	31W	Resistor, 185. Ohm Candohm			
12Y		Condenser, 0.006 Mfd. 200 V.	32	G154—36400	Socket, 5Z4		
13Z	W —25537A	Condenser, 0.001 Mfd. 400 V.	33	G153—36400	Socket, 6F6		
13Y		Condenser, 0.03 Mfd. 400 V.	34	G157—36400	Socket, 6J7		
14	W —23191A	Condenser, 0.01 Mfd. 400 V.	35	G151—36400	Socket, 6K7		
15AZ	W —28623	Condenser, 0.02 Mfd. 200 V.	36	G156—36400	Socket, 6A8		
15AY		Condenser, 0.02 Mfd. 200 V.	37	331—CL—9	Speaker, (555)		
15BZ	W —28623	Condenser, 0.02 Mfd. 200 V.		432—CJ—3M	Speaker, (5555) Console		
15BY		Condenser, 0.02 Mfd. 200 V.		G3 —35696	Speaker Cable (5555)		
16	W —27216	Condenser, 0.05 Mfd. 200 V.	38W	—37247	Band Change Switch		
17Z	W —35011	Condenser, 0.006 Mfd. 400 V.	To				
17Y	W —36541	Condenser, 0.03 Mfd. 400 V.	38Z	W —36184A	Tone Control Switch		
18		Condenser, 0.02 Mfd. 160 V.	39				
19Z	W —37241A	4 Section Trimmer Cond.	40	G1 —26719	Ant. & Grd. Terminal		
19Y				41	G12 —28500	Power Trans. 60 Cy. 110 V.	
19W					G13 —28500	Power Trans. 25 Cy. 110 V.	
20Z					G14 —28500	Power Trans. 25 Cy. 220 V.	
20Y	G29 —33006	S. W. Osc. Series Padder	42Z	—37395	Volume Control A. F. Grid		
21Z	G17 —33001	B. C. Osc. Series Padder	42Y			Volume Control Output Grid	
21Y		Var. Tuning Cond. Gang	42X				On-Off Switch
		—37353C	Dial Assm. Complete				
		—37158	Dial Glass				
	—37156	Dial Pointer					
	—37157	Pointer Screw					

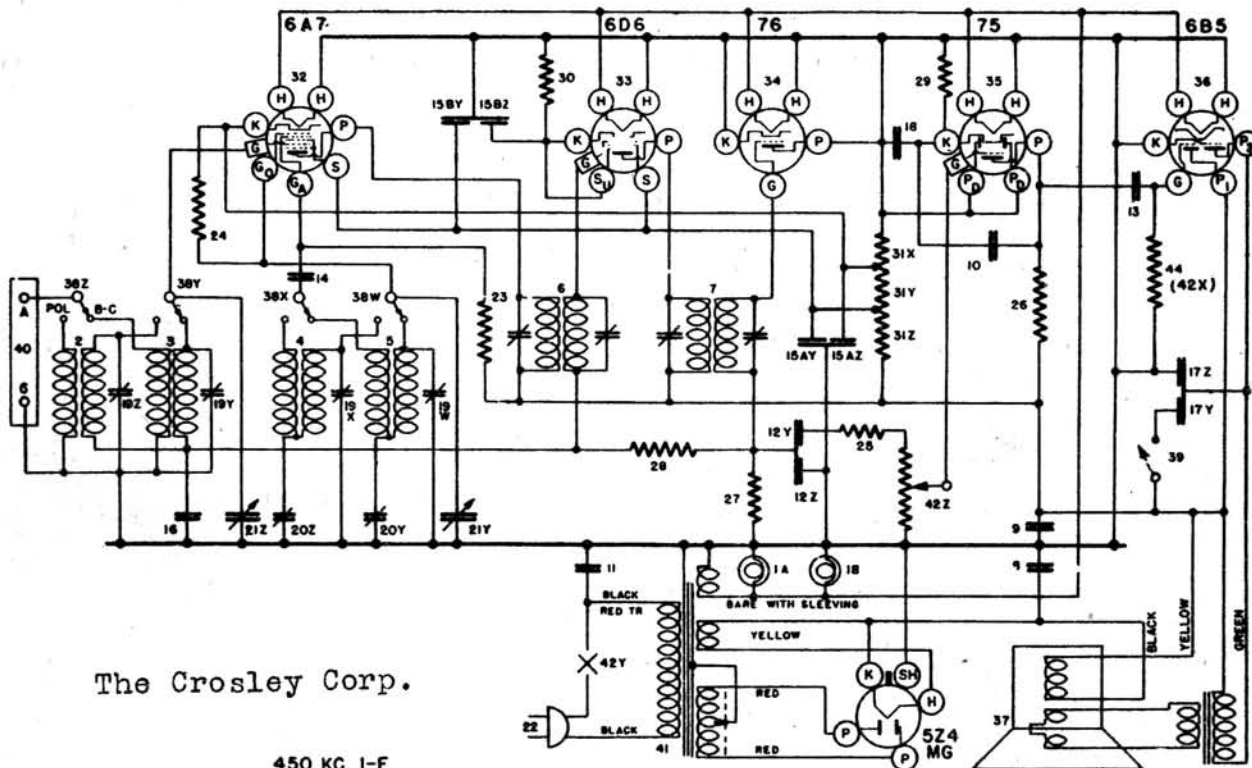
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

PARTS LIST—MODELS 666 and 5666

Figures in first column refer to parts in Diagrams.

Item No.	Part No.	Name	Item No.	Part No.	Name
1	W -37922	6-8 V. Bulb, Dial Light	25	--21875	Resistor, 100,000 Ohm. 1/2 W
2	G3 -37965	Socket Assy., Dial Light	26	--35929-C	Resistor, 150,000 Ohm. 1/2 W
3	CB2 -32000	Coil Antenna—2350—7000 Kc.	27	--33344	Resistor, 400,000 Ohm. 1/2 W
4	G81 -32000	Coil Antenna—540—1725 Kc.	28	--37245-C	Resistor, 1.5 Megohm. 1/2 W
5	G 65 -32002	Coil—2350—7000 Kc., Osc.	29	--36316	Resistor, 2,700 Ohm. 1/2 W
6	G 66 -32002	Coil—540—1725 Kc., Osc.	30	W -28106	Resistor, 500 Ohm. 1/2 W. Flex.
7	G118 -32004	Coil—Assy., 1st I-F.	31Z		Resistor, 1,000 Ohm
8	G 72 -32004	Coil—Assy., 2nd I-F.	31Y	W -37246	Resistor, 2,000 Ohm
9	W -36055	Cond. 35 Mf. 400 V.	31X		Resistor, 185-185 Ohm } Candohm
10	W -36057	Cond. 40 Mf. 300V.	32	G47 -28807	Socket—Type 6A7
11	W -30270	Cond. 001 Mf. 400V.	33	G75 -28807	Socket—Type 6D6
12Z	W -30805	Cond. 01 Mf. 400V.	34	G80 -28807	Socket—Type 76
13	W -30322-A	(Cond. 00017 Mf. Cond. 006 Mf.)	35	G41 -28807	Socket—Type 75
14	W -23615	Cond. 05 Mf. 400V.	36	G90 -28807	Socket—Type 6B5
15 AZ	W -23191-A	Cond. 01 Mf. 400V.		W -27981	Base—Tube Shield
15 AY	W -28623	Cond. 02 Mf. 400V.		W -40911	Shield—Tube
15 BZ	W -28623	Cond. 02 Mf. 400V.	37	244 -BL—3	Speaker, "B" Spec. 50A-2
15 BY	W -28623	Cond. 02 Mf. 400V.		--42928	Cone Assy., For above Speaker
16	W -27216	Cond. 05 Mf. 200V.		--41473	Output Trans., For above Speaker
17 Z	W -31052	(Cond. 004 Mf. 400V. Cond. 05 Mf. 400V.)		632 -CJ—3	Speaker, "M" Spec. 1-D-610
17 Y	W -31052	(Cond. 004 Mf. 400V. Cond. 05 Mf. 400V.)		--42879	Cone Assy., For above Speaker
18	W -37732	Cond. 3 Mf. 160V.		--42890	Field Coil, For above Speaker
19	W -37241	Cond. 4 Section Trimmer		--42881	Output Trans., For above Speaker
20	G 31 -33006	Cond. Series Trimmers	38	--37247	Switch, Band Sel.
21	G 17 -33001	Cond. Var. Tuning	39	W -36184-A	Switch, Tone Con.
	W -41736	Drive Unit, 8Pt. Disc Assy.	40	G1 -26719	Terminal Board, Ant. & Grid
	W -41897	Dial-Calibrated Glass	41	--41978	Transformer, 110V.—60 Cy. Power
	W -41737	Mtg. Brkt. Dial Glass R.H.	42Z		Volume Control (3 Meg.) 1st A-F
	W -41738	Mtg. Brkt. Dial Glass L.H.	43		Line Switch
	W -41739	Drive Unit	44	NONE	Volume Control (1 Meg.) Output Grid
	B -42617	Dial (Calibrated)		--35601	Resistor, 300,000 Ohm 1/2 W. Output Grid to Grd.*
	MG-14 -41980	Dial Glass, Mtg. Brkt. R.H.	B	--40590	Escutcheon, (666)
	W -40798	Dial Glass, Mtg. Brkt. L.H.	W	--42345	Escutcheon, (5666)
	W -40797-A	Dial Glass Retaining Brkt.	D	--28	Escutcheon Mtg. Screws
	W -42629	Pointer—Dial	W	--37339	Knob, (2) V.C. & S.S.
	W -40795	Shaft—Pointer	W	--37341	Knob, (2) T. C. & B. S. W.
	W -40809	Washer (Spring) Shaft	W	--36297	Volume Control, 3 Meg.*
	W -41611	Ring-Shaft, Retaining	AC		Cabinet Model 666
	W -42374-A	Mask (Metal) Dial	MA		Cabinet Model 5666
22	W -33906-A	Cord & Plug—Power			
23	W -5370-A	Resistor, 20,000 Ohm 1W			
24	W -35928	Resistor, 60,000 Ohm 1/2 W			

*May be used in place of Dual Volume Control.



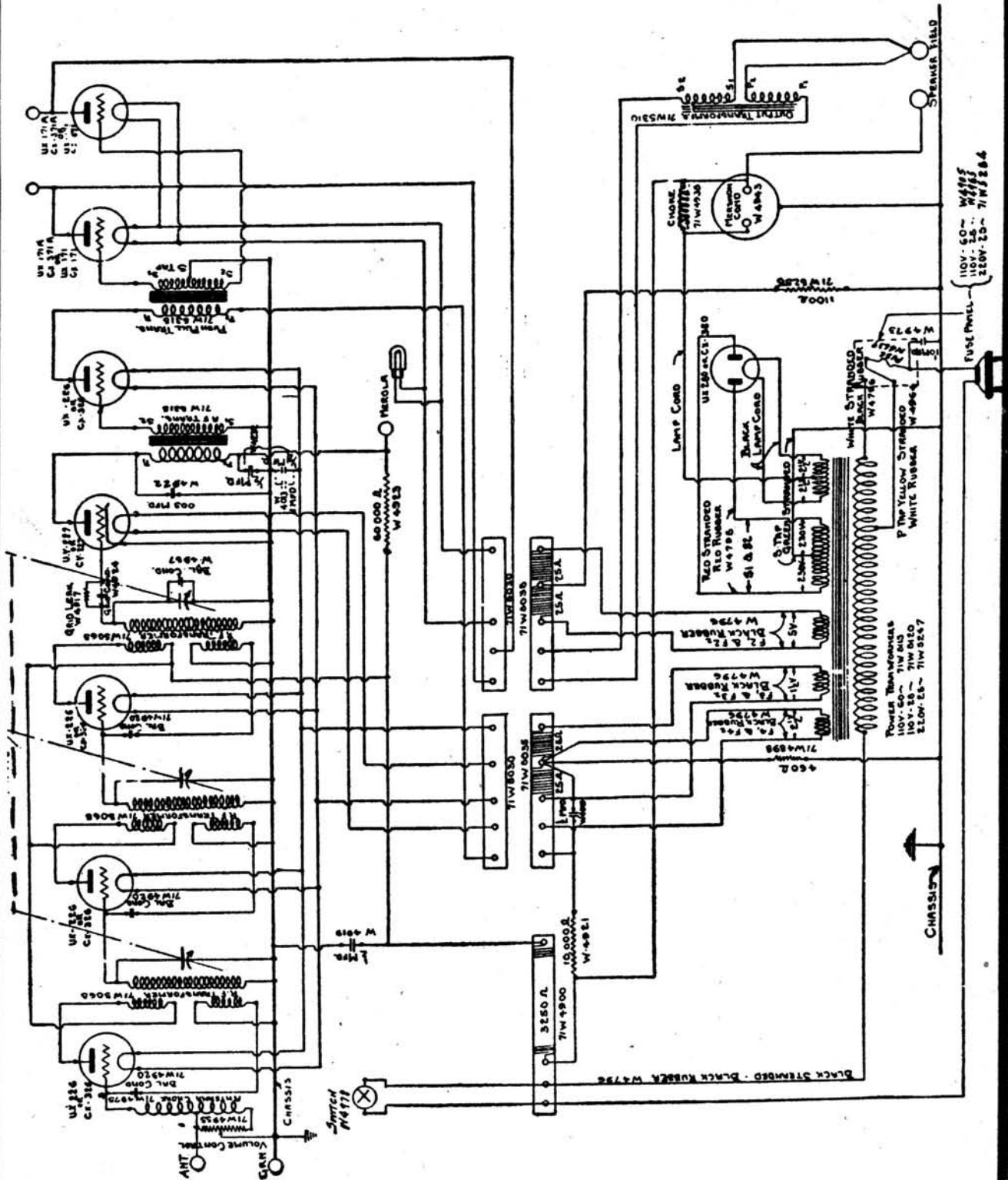
The Crosley Corp.

450 KC. I-F

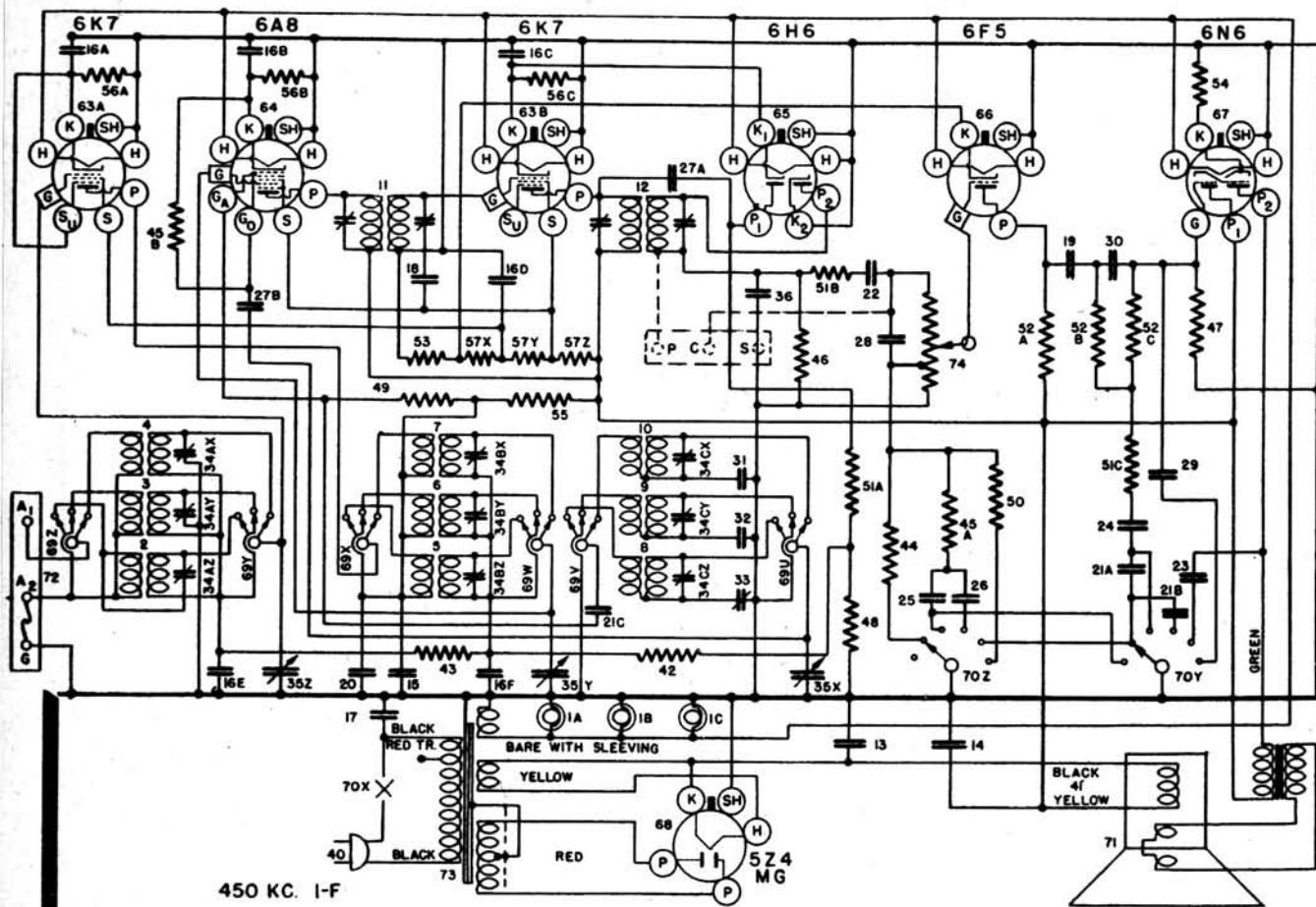
WIRING DIAGRAM—MODELS 666 AND 5666

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Crosley Model 706



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



WIRING DIAGRAM—MODEL 726

The Crosley Corp.

PARTS LIST—MODEL 726

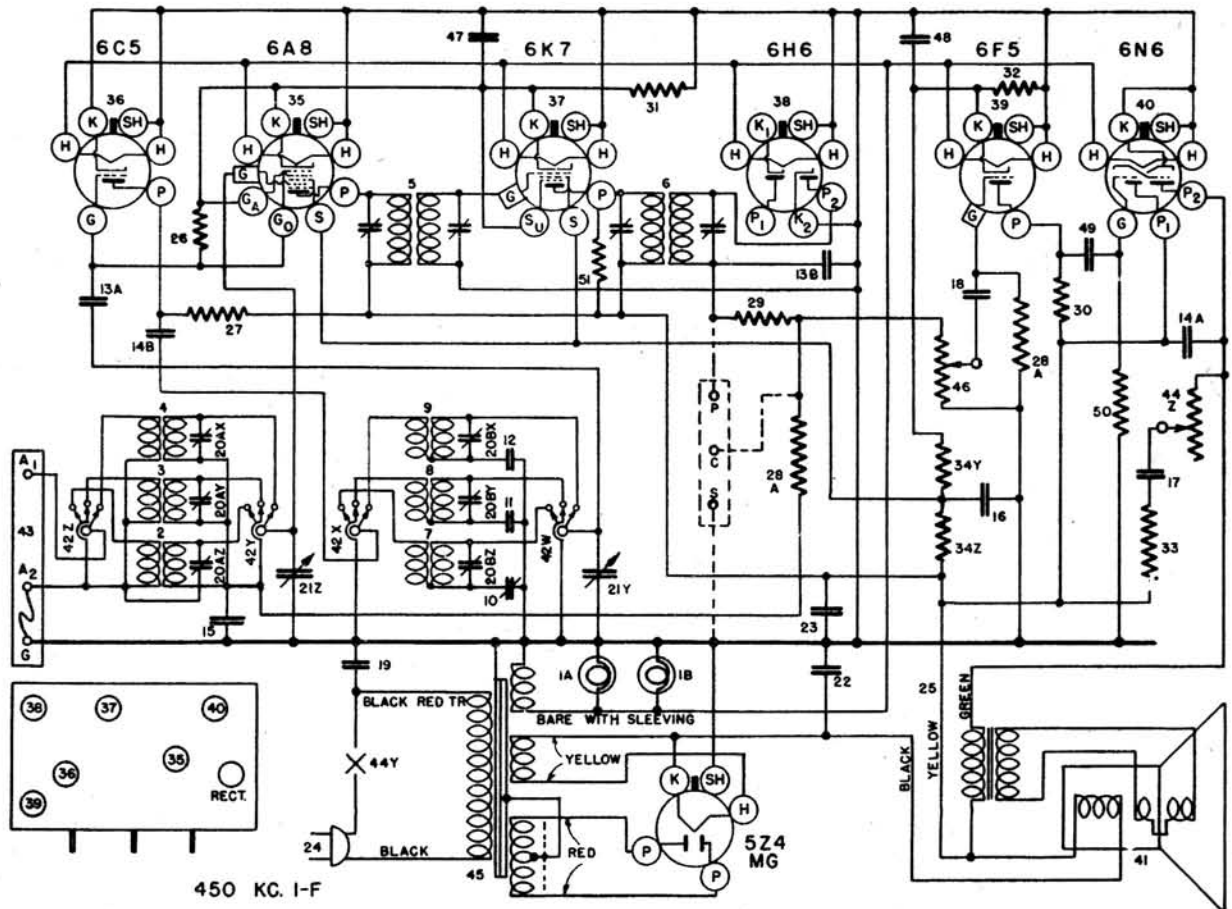
Figures in first column refer to parts in Diagrams.

Item No.	Part No.	Description	Item No.	Part No.	Description
1A/B/C	W-37922	Dial Light	44	-38319	Resistor, 75,000 Ohm, 1/4 W.
2	C2-37965	Socket Assy. Dial Light	45A	-38428	Resistor, 60,000 Ohm, 1/4 W.
3	G110-32000	Coil Ant. 540-1800 Kc.	45B	-38528	Resistor, 60,000 Ohm, 1/4 W.
4	G111-32000	Coil Ant. 1800-6000 Kc.	46	-38321	Resistor, 400,000 Ohm, 1/4 W.
5	G112-32000	Coil Ant. 6-18 Mc.	47	-38623	Resistor, 750,000 Ohm, 1/4 W.
6	G76-32001	Coil R. F. 540-1800 Kc.	48	-38322	Resistor, 500,000 Ohm, 1/4 W.
7	G88-32001	Coil R. F. 1800-6000 Kc.	49	-37377	Resistor, 30,000 Ohm, 1 W.
8	G90-32001	Coil R. F. 6-18 Mc.	50	-38229	Resistor, 150,000 Ohm, 1/4 W.
9	G115-32002	Coil Oc. 900-1800 Kc.	51A	-35001	Resistor, 300,000 Ohm, 1/4 W.
10	G121-32002	Coil Oc. 1800-6000 Kc.	51B	-35001	Resistor, 300,000 Ohm, 1/4 W.
11	G122-32002	Coil Oc. 6-18 Mc.	51C	-35001	Resistor, 300,000 Ohm, 1/4 W.
12	G123-32001	1st. I.F. Assy.	52A	-35030	Resistor, 200,000 Ohm, 1/4 W.
13	G120-32004	2nd. I.F. Assy.	52B	-35030	Resistor, 200,000 Ohm, 1/4 W.
14	W-36055	Condenser, 35Mf. 400V.	53	-38127	Resistor, 350 Ohm, 1/2 W. Flex.
15	W-36057	Condenser, 40Mf. 300V.	54	W-23012A	Resistor, 40 Ohm 1/2 W. Flex.
16A	W-41081	Condenser 16Mf. 250V.	55	G76	Resistor, 3500 Ohm, 1 W.
16B	W-36541	Condenser, 02Mf. 160V.	56A	W-28289	Resistor, 350 Ohm, 1/2 W. Flex.
17	W-36541	Condenser, 02Mf. 160V.	56B	W-28289	Resistor, 350 Ohm, 1/2 W. Flex.
18	W-30805	Condenser, 01Mf. 400V.	56C	W-28289	Resistor, 350 Ohm, 1/2 W. Flex.
19	W-35926	Condenser, 05Mf. 200V.	57	W-37781	Resistor, 16,500 Ohm (Cand. Ohm.)
20	W-32790B	Condenser, 03Mf. 400V.	57X		Resistor, 18,500 Ohm (Cand. Ohm.)
21A	W-35139	Condenser, 004Mf. 400V.	63A	G151-36400	Socket Type 6K7
21B	W-35139	Condenser, 004Mf. 400V.	63B	G151-36400	Socket Type 6K7
21C	W-35139	Condenser, 004Mf. 400V.	64	G156-36400	Socket Type 6A8
22	W-29821	Condenser, 02Mf. 200V.	65	G155-36400	Socket Type 6F5
23	W-29812	Condenser, 05Mf. 400V.	66	G158-36400	Socket Type 6F5
24	W-30353	Condenser, 01Mf. 200V.	67	G115-36400	Socket Type 6N6
25	W-29819	Condenser, 007Mf. 200V.	68	G154-W400	Socket Type 524
26	W-25435	Condenser, 000Pf. 400V.	69	C-4910A	Band Selector Switch
27A	G2-34002	Condenser, 0001Mf. (Mica)	70Z	H-42387C	Fidelity Switch
27B	G2-34002	Condenser, 0001Mf. (Mica)	70X		Line Switch
28	G2-34002	Condenser, 0002Mf. (Mica)	71	-645C13	Speaker "4" Spec. 1D640
29	G2-34002	Condenser, 0002Mf. (Mica)		-42883	Cone Ass'y.
30	G6-34002	Condenser, 00025Mf. (Mica)		-40406	Field Coil
31	C29-34001	Condenser, 40 Ohm (Mica)		-42885	Not a Trans.
32	G7-34002	Condenser, 1450Mf. (Mica)		G27-28719	Ant. & Grid Terminal Assy.
33	W-40789	Condenser, B. C. Oc. Series Trim.	72	W-42280	Power Trans. 60 Cy. 110 V.
34	W-32851	Condenser, 3 Section Trimmer	73	W-42280	Power Trans. 25 Cy. 110 V.
35	G32-30002	Condenser, 3 Gang Var. Tuning		-42261	Volume Control 3 Meg.
MC21	C-42255	Dial Drive Assy.	74		Misc. Parts
C	-42191	Dial Case (Calibrated)		C-42045	Eucutcheon
	-42300	Drive Unit		B-42043	Eucutcheon Rubber
	-42190	Dial Mask (Cardboard)		D-40	Screws - Eucutcheon Mtg.
W	41144	Dial Hand, Pointer		C-42044	Lens - Eucutcheon
W	40486	Dial Hand, Time Log		W-40230F	Emblem
36	G1-34002	Printer Mtg. Screw		W-28285	Not - Emblem Mtg.
37	W-36270	Condenser, 001 Mf. 400V.		W-31117	Rubber Mtg. Foot
40	H-32906A	Power Cord & Plug		W-37338	Knob (2 Req.)
41	G3-35096	Cable, Speaker		W-40192B	Knob, B. S. Sec. (1 Req.)
42	-37245	Resistor, 100,000 Ohm, 1/4 W.		W-42490	Knob, S. S. (1 Req.)
43	-35600	Resistor, 100,000 Ohm, 1/4 W.		6-NG	Cabinet

50

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

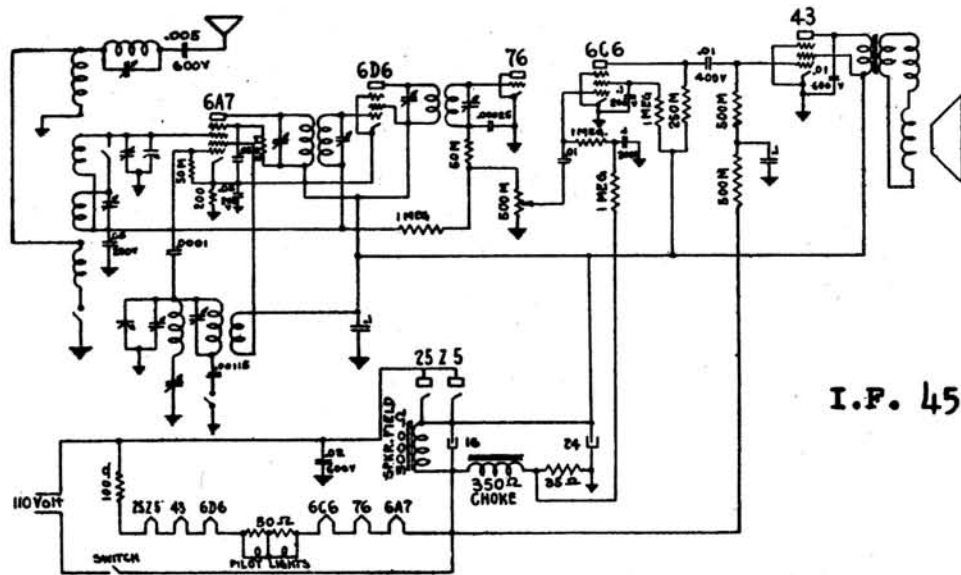
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



WIRING DIAGRAM—MODEL 716

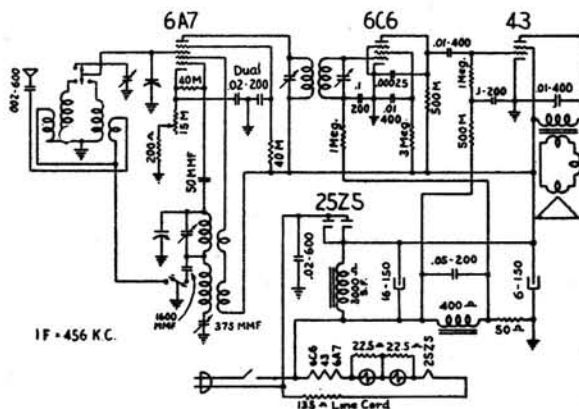
Item No.	Part No.	Name	Item No.	Part No.	Name
-AB	W -37922	Bulb 6-8V., Dial Light	28A	-36688	Resistor, 3 Megohm 1/4 W. (Car.)
	G3 -37965	Socket Assv., Dial Light	28B	-36688	Resistor, 3 Megohm 1/4 W. (Car.)
2	G120 -32000	Coil, Ant. (540-1800 Kc.)	29	-21455	Resistor, 300,000 Ohm 1/4 W. (Car.)
3	G119 -32000	Coil, Ant. (1800-6000 Kc.)	30	-35930	Resistor, 200,000 Ohm 1/4 W. (Car.)
4	G121 -32000	Coil, Ant. (5800-18000 Kc.)	31	W -21964	Resistor, 165 Ohm 3/4 W. (Flex.)
5	G122 -32004	Coil Assv. 1st I-F (450Kc.)	32	W -35457	Resistor, 210 Ohm 3/4 W. (Flex.)
6	G123 -32004	Coil Assv. 2nd I-F (450Kc.)	33	W -27503	Resistor, 1400 Ohm 3/4 W. (Flex.)
7	G112 -32002	Coil, Osc. (510-1800 Kc.)	34Z	W -32301	Resistor, 10,000 Ohm Candohm
8	G111 -32002	Coil, Osc. (1800-6000 Kc.)	34Y		Resistor, 15,000 Ohm Candohm
9	G123 -32002	Coil, Cs. (5800-18000 Kc.)	35	G156 -36400	Socket Type 6A8
10	-40769	Con.J. 400-500 M.m.	36	G152 -36400	Socket Type 6C5
11	G7 -34007	Cond. 1750 Mmf.	37	G151 -36400	Socket Type 6K7
12	G 8 -34007	Cond. 4350 Mmf.	38	G155 -36400	Socket Type 6H6
13A	G 2 -34002	Cond., .0001Mf. (Molded)	39	G158 -36400	Socket Type 6F5
13B	G 2 -34002	Cond., .0001Mf. (Molded)	40	G165 -36400	Socket Type 6N6
14A	W -35139	Cond., .004Mf. 400V. (Tub.)	41	332-BJ3	Speaker "M" Snc., 1-D-390
14B	W -35139	Cond., .004Mf. 400V. (Tub.)		-41638	Core Assv. for "M" 332BJ3
15	W -35936	Cond., .05Mf. 200V. (Tub.)		-40275	Field Coil for "M" 332BJ3
16	W -24049-B	Cond., .1Mf. 200V. (Tub.)		-41639	Output Trans. for "M" 332BJ3
17	W -37873	Cond., .1Mf. 400V. (Tub.)	42	-40770-A	Switch, Band Selector
18	W -30488	Cond., .02Mf. 400 V. (Tub.)	43	G27 -26719	Terminal Board, Antenna & Grd.
19	W -30805	Cond., .01 Mf. 400V. (Tub.)	44Z		Tone Control, 100,000 Ohm
20	W -35951	Cond.-3 Section Trimmer	44Y		Switch, Line
21	G21 -33001	Cond.-2 Section Tuning	45	-41978	Transformer, 110V. 60 Cy.
	B -42142-A	Dial-Calibrated Glass		-42149	Transformer, 110V. 25 Cy.
	-42346	Drive Unit		-42150	Transformer, 220V. 25 Cy.
	B -42338	Mask-Metal	46	-37967	Volume Control 1Megohm
	-41145	Pointer-Dial	47	W -29910-A	Cond., .25Mf. 200V. (Tub.)
	W -40486	Screw, Pointe, Mtg.	48	W -28621	Cond., .02Mf. 200V. (Tub.)
	MG27 -42151	Dial Drive Complete	49	W -35758	Cond., .008, 400V. (Tub.)
	-41582	Cable, Drive	50	-23785	Resistor, 500,000 Ohm 1/4 W. (Car.)
22	W -36055	Cond., .35Mf. 400V. (Elect.)		W -42345	Escutcheon
23	W -36057	Cond., .40Mf. 300V. (Elect.)	D	-28	Screw Escutcheon Mtg.
24	B -33906-A	Cord and Plug, Power			
25	G4 -35696	Speaker Cable			
26	-40757	Resistor, 50,000 Ohm 1/4 W. (Car.)			
27	W -37987	Resistor, 15,000 Ohm 1W (WireWound)			

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



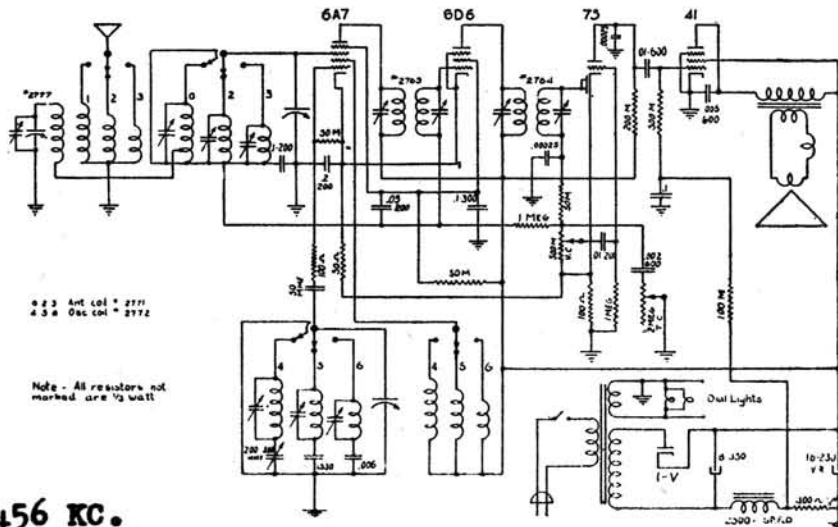
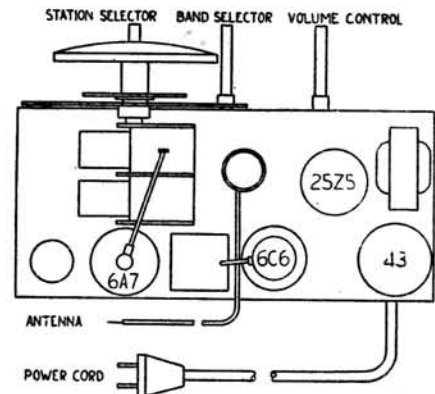
I.F. 456 KC.

MODEL 100A Detrola Radio & Tel. Corp.



IF - 456 KC.

MODEL 134



2 777 Ant. coil - 2777
2 772 Osc. coil - 2772

Note - All resistors not marked are 1/2 watt

I.F. 456 KC.

MODEL 106

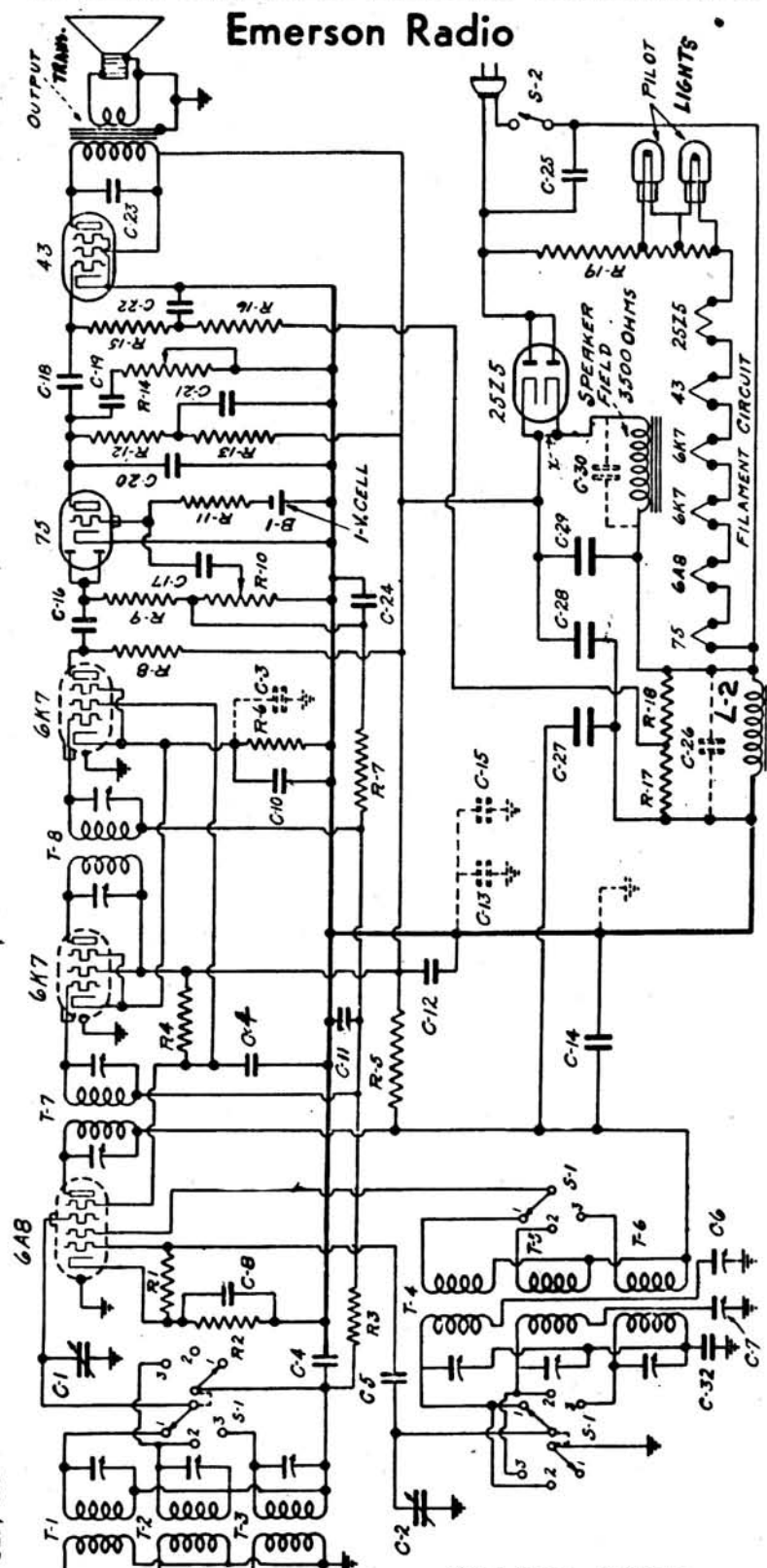
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

MODELS 107 and 111

Chassis Model U6A

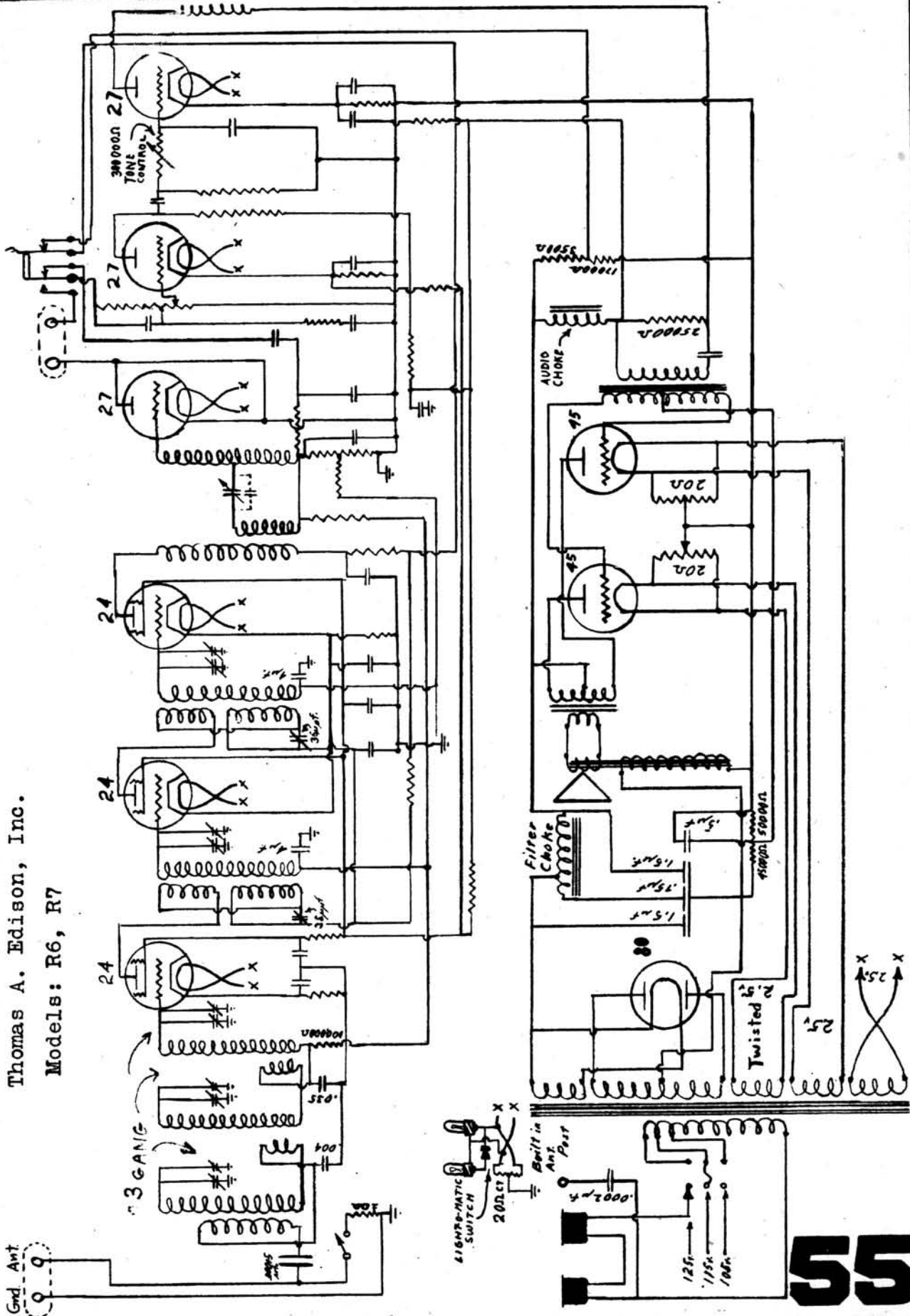
Emerson Radio

- | | | | |
|-----------------------|--|---------------------|-----------------------------------|
| L1 | 456 kc adjustable wave-trap | C5 | 0.0001 mf mica condenser |
| L2 | Filter choke—500 ohms | C6, C7 | Dual adjustable padding condenser |
| T1, T2, T3 | Three-band antenna coil assembly | C8—0.1 mf, 200 v. | |
| T4, T5, T6 | Three-band oscillator coil assembly | C9—0.1 mf, 200 v. | |
| T7 | 456 kc first i-f transformer | C10—0.2 mf, 200 v. | |
| T8 | 456 kc second i-f transformer | C11—0.05 mf, 200 v. | |
| R1, R8 | 50,000 ohm, 1/4 watt carbon resistor | C12—0.1 mf, 200 v. | |
| R2 | 500 ohm, 1/2 watt wire-wound resistor | C13—0.1 mf, 200 v. | |
| R3, R7, R11 | 1 megohm, 1/4 watt carbon resistor | C14—0.1 mf, 200 v. | |
| R4 | 30,000 ohm, 1/4 watt carbon resistor | | |
| R5 | 10,000 ohm, 1/4 watt carbon resistor | | |
| R6 | 850 ohm, 1/2 watt wire-wound resistor | | |
| R9, R13 | 100,000 ohm, 1/4 watt carbon resistor | | |
| R10, S2 | Volume control with line switch—0.5 megohms | | |
| R12 | 200,000 ohm, 1/4 watt carbon resistor | | |
| R14 | Tone control—0.25 megohms | | |
| R15, R16 | 500,000 ohm, 1/4 watt carbon resistor | | |
| R18 | 5,000 ohm, 1/4 watt carbon resistor | | |
| R19 | Wire-wound ballast resistor—130 ohms | | |
| C1, C2 | Two-gang variable condenser | | |
| C8, C4, C21, C22, C25 | 0.1 mf, 200 volt tubular condenser | | |
| C3 | 0.00025 mf mica condenser | | |
| C4 | 0.01 mf, 200 v. tubular condenser | | |
| C5 | 0.006 mf, 200 v. tubular condenser | | |
| C6 | 0.001 mf mica condenser | | |
| C7 | 0.25 mf, 200 v. tubular condenser | | |
| C8 | 4, 8 and 16 mf electrolytic filter condenser block | | |
| C9 | C27—4 mf, 150 v. | | |
| C10 | C29—16 mf, 150 v. | | |
| C11 | C28—8 mf, 150 v. | | |
| C12 | Tubular 4 mf, 150 v. electrolytic condenser | | |
| C13 | 0.005 mf mica condenser | | |
| C14 | | | |
| C15 | | | |
| C16 | | | |
| C17 | | | |
| C18 | | | |
| C19 | | | |
| C20 | | | |
| C21 | | | |
| C22 | | | |
| C23 | | | |
| C24 | | | |
| C25 | | | |
| C26 | | | |
| C27 | | | |
| C28 | | | |
| C29 | | | |
| C30 | | | |
| C31 | | | |
| C32 | | | |



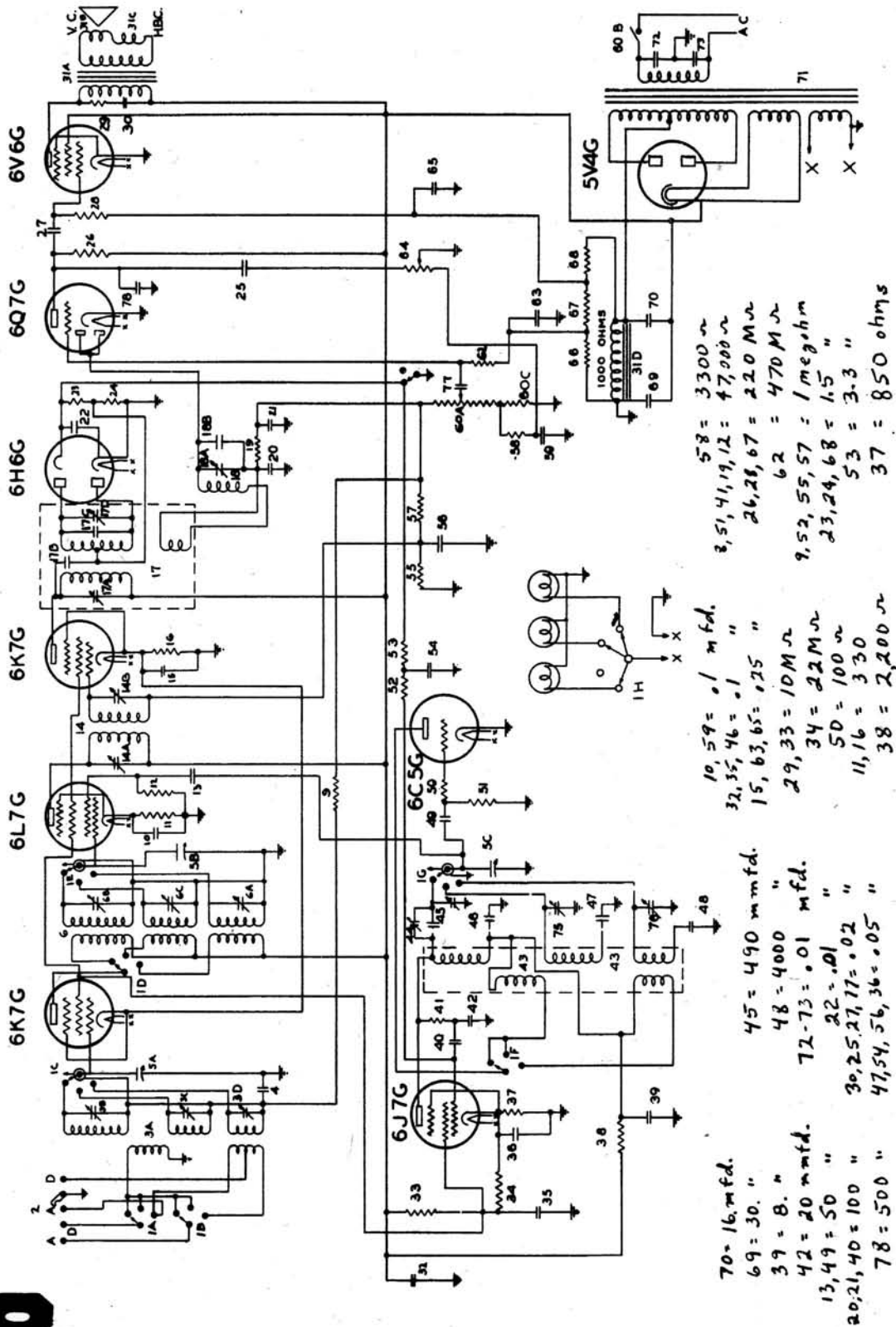
WAVE BAND SWITCH
 POSITION N°1 - BC.
 POSITION N°2 - POLICE
 POSITION N°3 - SW

Thomas A. Edison, Inc.
Models: R6, R7



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

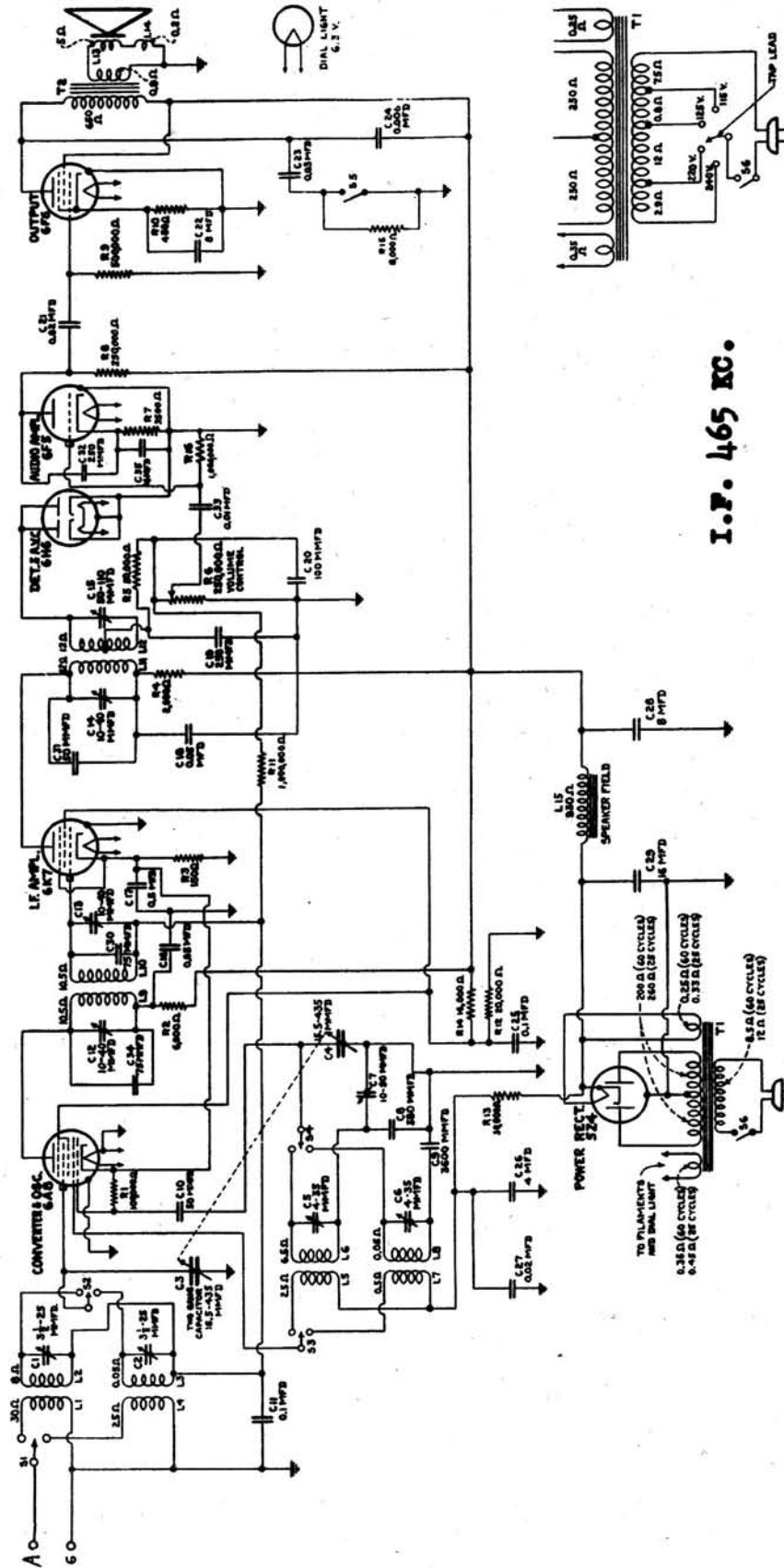
Fairbanks-Morse Radio, Chassis Model 9A



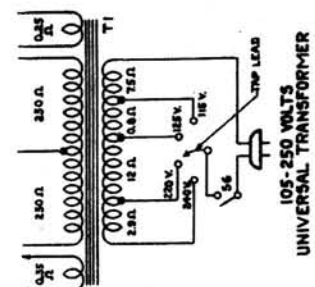
I.F. 456 KC.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Models A-63 and A-65 General Electric Co.

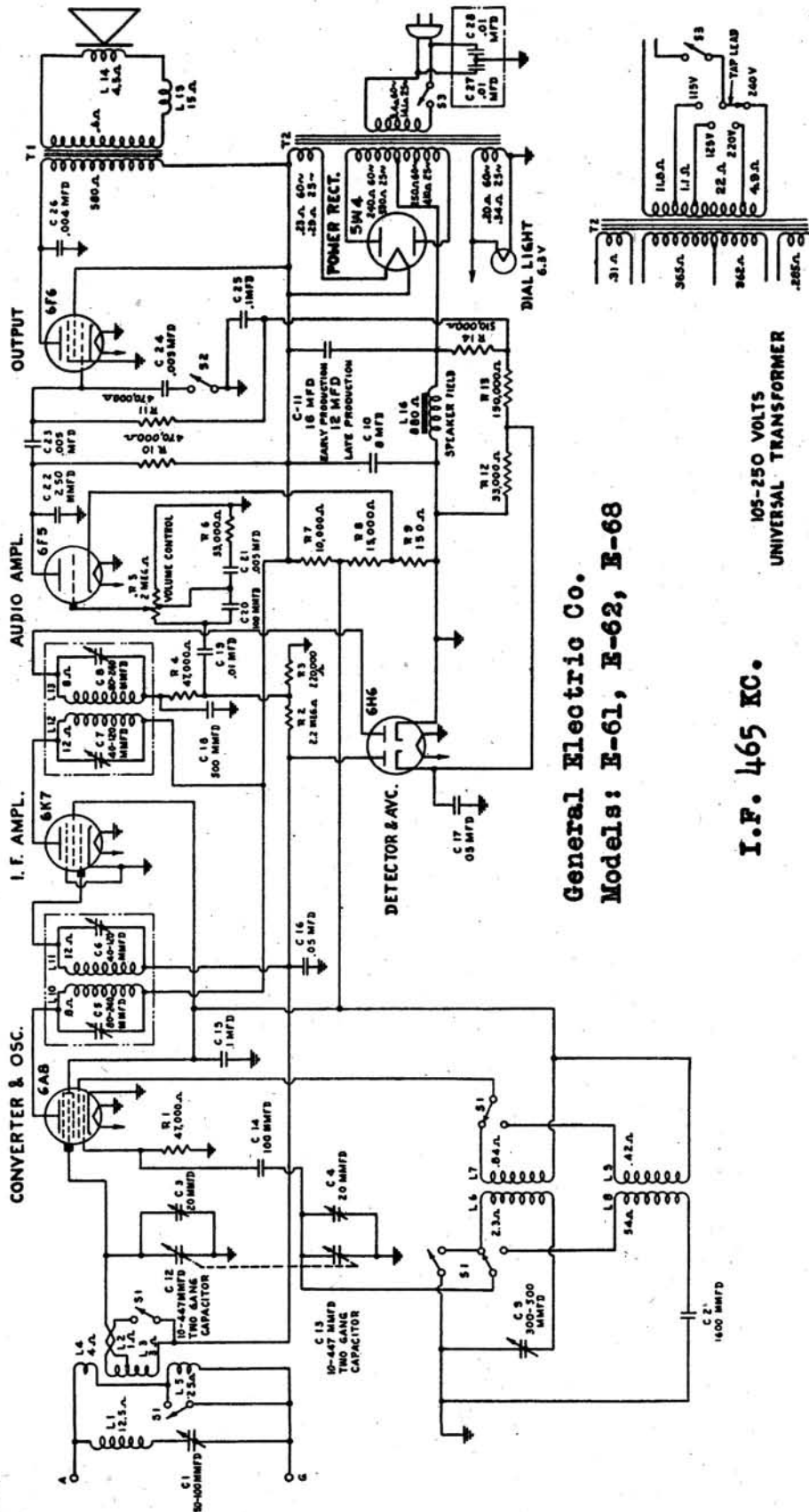


I.F. 465 KC.



105-250 VOLTS
UNIVERSAL TRANSFORMER

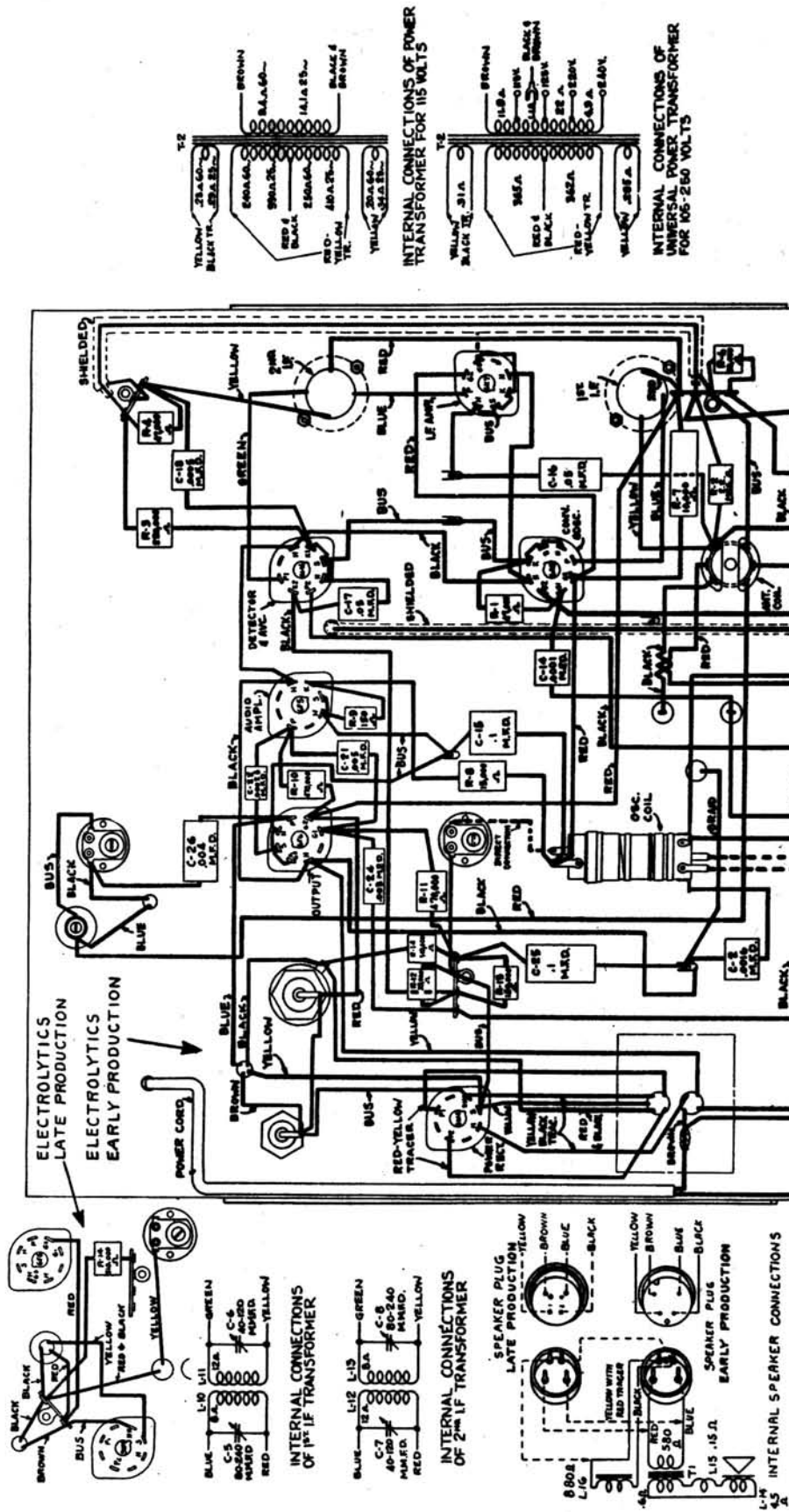
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



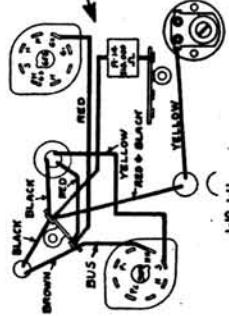
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

General Electric Radio Receivers, Models E-61, E-62, and E-68

General Electric



ELECTROLYTICS
LATE PRODUCTION
ELECTROLYTICS
EARLY PRODUCTION

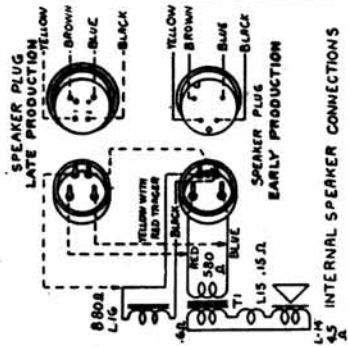


INTERNAL CONNECTIONS
OF 115V TRANSFORMER

BLUE L-10
 GREEN C-6
 BROWN 500
 RED M.F.D.
 YELLOW

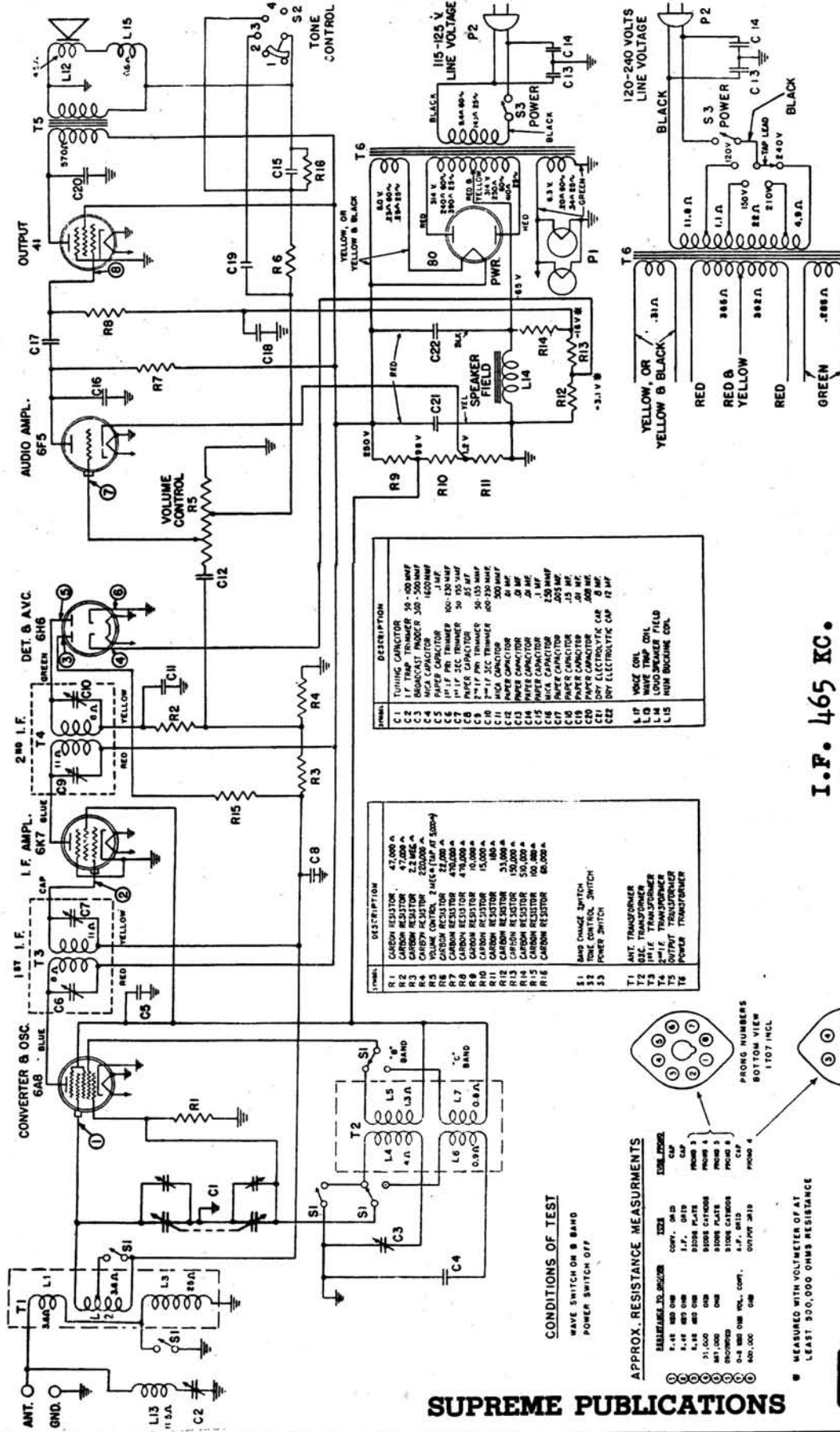
INTERNAL CONNECTIONS
OF 2m LF TRANSFORMER

BLUE L-12
 GREEN C-7
 BROWN 40-100
 RED M.F.D.
 YELLOW



INTERNAL SPEAKER CONNECTIONS

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



SYMBOL	DESCRIPTION
C1	TUNING CAPACITOR 50-100 MMF
C2	17 TRAP TRANSFORMER 300-1500 MMF
C3	500KΩ RESISTOR 300-1500 MMF
C4	100KΩ CAPACITOR 100-150 MMF
C5	100KΩ CAPACITOR 100-150 MMF
C6	100KΩ CAPACITOR 100-150 MMF
C7	100KΩ CAPACITOR 100-150 MMF
C8	100KΩ CAPACITOR 100-150 MMF
C9	100KΩ CAPACITOR 100-150 MMF
C10	100KΩ CAPACITOR 100-150 MMF
C11	100KΩ CAPACITOR 100-150 MMF
C12	100KΩ CAPACITOR 100-150 MMF
C13	100KΩ CAPACITOR 100-150 MMF
C14	100KΩ CAPACITOR 100-150 MMF
C15	100KΩ CAPACITOR 100-150 MMF
C16	100KΩ CAPACITOR 100-150 MMF
C17	100KΩ CAPACITOR 100-150 MMF
C18	100KΩ CAPACITOR 100-150 MMF
C19	100KΩ CAPACITOR 100-150 MMF
C20	100KΩ CAPACITOR 100-150 MMF
C21	100KΩ CAPACITOR 100-150 MMF
C22	100KΩ CAPACITOR 100-150 MMF
C23	100KΩ CAPACITOR 100-150 MMF
C24	100KΩ CAPACITOR 100-150 MMF
C25	100KΩ CAPACITOR 100-150 MMF
C26	100KΩ CAPACITOR 100-150 MMF
C27	100KΩ CAPACITOR 100-150 MMF
C28	100KΩ CAPACITOR 100-150 MMF
C29	100KΩ CAPACITOR 100-150 MMF
C30	100KΩ CAPACITOR 100-150 MMF
C31	100KΩ CAPACITOR 100-150 MMF
C32	100KΩ CAPACITOR 100-150 MMF
C33	100KΩ CAPACITOR 100-150 MMF
C34	100KΩ CAPACITOR 100-150 MMF
C35	100KΩ CAPACITOR 100-150 MMF
C36	100KΩ CAPACITOR 100-150 MMF
C37	100KΩ CAPACITOR 100-150 MMF
C38	100KΩ CAPACITOR 100-150 MMF
C39	100KΩ CAPACITOR 100-150 MMF
C40	100KΩ CAPACITOR 100-150 MMF
C41	100KΩ CAPACITOR 100-150 MMF
C42	100KΩ CAPACITOR 100-150 MMF
C43	100KΩ CAPACITOR 100-150 MMF
C44	100KΩ CAPACITOR 100-150 MMF
C45	100KΩ CAPACITOR 100-150 MMF
C46	100KΩ CAPACITOR 100-150 MMF
C47	100KΩ CAPACITOR 100-150 MMF
C48	100KΩ CAPACITOR 100-150 MMF
C49	100KΩ CAPACITOR 100-150 MMF
C50	100KΩ CAPACITOR 100-150 MMF
C51	100KΩ CAPACITOR 100-150 MMF
C52	100KΩ CAPACITOR 100-150 MMF
C53	100KΩ CAPACITOR 100-150 MMF
C54	100KΩ CAPACITOR 100-150 MMF
C55	100KΩ CAPACITOR 100-150 MMF
C56	100KΩ CAPACITOR 100-150 MMF
C57	100KΩ CAPACITOR 100-150 MMF
C58	100KΩ CAPACITOR 100-150 MMF
C59	100KΩ CAPACITOR 100-150 MMF
C60	100KΩ CAPACITOR 100-150 MMF
C61	100KΩ CAPACITOR 100-150 MMF
C62	100KΩ CAPACITOR 100-150 MMF
C63	100KΩ CAPACITOR 100-150 MMF
C64	100KΩ CAPACITOR 100-150 MMF
C65	100KΩ CAPACITOR 100-150 MMF
C66	100KΩ CAPACITOR 100-150 MMF
C67	100KΩ CAPACITOR 100-150 MMF
C68	100KΩ CAPACITOR 100-150 MMF
C69	100KΩ CAPACITOR 100-150 MMF
C70	100KΩ CAPACITOR 100-150 MMF
C71	100KΩ CAPACITOR 100-150 MMF
C72	100KΩ CAPACITOR 100-150 MMF
C73	100KΩ CAPACITOR 100-150 MMF
C74	100KΩ CAPACITOR 100-150 MMF
C75	100KΩ CAPACITOR 100-150 MMF
C76	100KΩ CAPACITOR 100-150 MMF
C77	100KΩ CAPACITOR 100-150 MMF
C78	100KΩ CAPACITOR 100-150 MMF
C79	100KΩ CAPACITOR 100-150 MMF
C80	100KΩ CAPACITOR 100-150 MMF
C81	100KΩ CAPACITOR 100-150 MMF
C82	100KΩ CAPACITOR 100-150 MMF
C83	100KΩ CAPACITOR 100-150 MMF
C84	100KΩ CAPACITOR 100-150 MMF
C85	100KΩ CAPACITOR 100-150 MMF
C86	100KΩ CAPACITOR 100-150 MMF
C87	100KΩ CAPACITOR 100-150 MMF
C88	100KΩ CAPACITOR 100-150 MMF
C89	100KΩ CAPACITOR 100-150 MMF
C90	100KΩ CAPACITOR 100-150 MMF
C91	100KΩ CAPACITOR 100-150 MMF
C92	100KΩ CAPACITOR 100-150 MMF
C93	100KΩ CAPACITOR 100-150 MMF
C94	100KΩ CAPACITOR 100-150 MMF
C95	100KΩ CAPACITOR 100-150 MMF
C96	100KΩ CAPACITOR 100-150 MMF
C97	100KΩ CAPACITOR 100-150 MMF
C98	100KΩ CAPACITOR 100-150 MMF
C99	100KΩ CAPACITOR 100-150 MMF
C100	100KΩ CAPACITOR 100-150 MMF

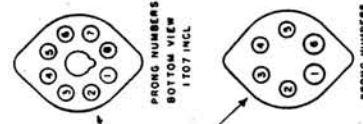
SYMBOL	DESCRIPTION
R1	CARBON RESISTOR 47,000 Ω
R2	CARBON RESISTOR 27,000 Ω
R3	CARBON RESISTOR 22,000 Ω
R4	CARBON RESISTOR 22,000 Ω
R5	VOLUME CONTROL 2 MEG (TRAP AT 500K)
R6	CARBON RESISTOR 22,000 Ω
R7	CARBON RESISTOR 22,000 Ω
R8	CARBON RESISTOR 22,000 Ω
R9	CARBON RESISTOR 22,000 Ω
R10	CARBON RESISTOR 22,000 Ω
R11	CARBON RESISTOR 22,000 Ω
R12	CARBON RESISTOR 22,000 Ω
R13	CARBON RESISTOR 22,000 Ω
R14	CARBON RESISTOR 22,000 Ω
R15	CARBON RESISTOR 22,000 Ω
R16	CARBON RESISTOR 22,000 Ω
R17	CARBON RESISTOR 22,000 Ω
R18	CARBON RESISTOR 22,000 Ω
R19	CARBON RESISTOR 22,000 Ω
R20	CARBON RESISTOR 22,000 Ω
R21	CARBON RESISTOR 22,000 Ω
R22	CARBON RESISTOR 22,000 Ω
R23	CARBON RESISTOR 22,000 Ω
R24	CARBON RESISTOR 22,000 Ω
R25	CARBON RESISTOR 22,000 Ω
R26	CARBON RESISTOR 22,000 Ω
R27	CARBON RESISTOR 22,000 Ω
R28	CARBON RESISTOR 22,000 Ω
R29	CARBON RESISTOR 22,000 Ω
R30	CARBON RESISTOR 22,000 Ω
R31	CARBON RESISTOR 22,000 Ω
R32	CARBON RESISTOR 22,000 Ω
R33	CARBON RESISTOR 22,000 Ω
R34	CARBON RESISTOR 22,000 Ω
R35	CARBON RESISTOR 22,000 Ω
R36	CARBON RESISTOR 22,000 Ω
R37	CARBON RESISTOR 22,000 Ω
R38	CARBON RESISTOR 22,000 Ω
R39	CARBON RESISTOR 22,000 Ω
R40	CARBON RESISTOR 22,000 Ω
R41	CARBON RESISTOR 22,000 Ω
R42	CARBON RESISTOR 22,000 Ω
R43	CARBON RESISTOR 22,000 Ω
R44	CARBON RESISTOR 22,000 Ω
R45	CARBON RESISTOR 22,000 Ω
R46	CARBON RESISTOR 22,000 Ω
R47	CARBON RESISTOR 22,000 Ω
R48	CARBON RESISTOR 22,000 Ω
R49	CARBON RESISTOR 22,000 Ω
R50	CARBON RESISTOR 22,000 Ω
R51	CARBON RESISTOR 22,000 Ω
R52	CARBON RESISTOR 22,000 Ω
R53	CARBON RESISTOR 22,000 Ω
R54	CARBON RESISTOR 22,000 Ω
R55	CARBON RESISTOR 22,000 Ω
R56	CARBON RESISTOR 22,000 Ω
R57	CARBON RESISTOR 22,000 Ω
R58	CARBON RESISTOR 22,000 Ω
R59	CARBON RESISTOR 22,000 Ω
R60	CARBON RESISTOR 22,000 Ω
R61	CARBON RESISTOR 22,000 Ω
R62	CARBON RESISTOR 22,000 Ω
R63	CARBON RESISTOR 22,000 Ω
R64	CARBON RESISTOR 22,000 Ω
R65	CARBON RESISTOR 22,000 Ω
R66	CARBON RESISTOR 22,000 Ω
R67	CARBON RESISTOR 22,000 Ω
R68	CARBON RESISTOR 22,000 Ω
R69	CARBON RESISTOR 22,000 Ω
R70	CARBON RESISTOR 22,000 Ω
R71	CARBON RESISTOR 22,000 Ω
R72	CARBON RESISTOR 22,000 Ω
R73	CARBON RESISTOR 22,000 Ω
R74	CARBON RESISTOR 22,000 Ω
R75	CARBON RESISTOR 22,000 Ω
R76	CARBON RESISTOR 22,000 Ω
R77	CARBON RESISTOR 22,000 Ω
R78	CARBON RESISTOR 22,000 Ω
R79	CARBON RESISTOR 22,000 Ω
R80	CARBON RESISTOR 22,000 Ω
R81	CARBON RESISTOR 22,000 Ω
R82	CARBON RESISTOR 22,000 Ω
R83	CARBON RESISTOR 22,000 Ω
R84	CARBON RESISTOR 22,000 Ω
R85	CARBON RESISTOR 22,000 Ω
R86	CARBON RESISTOR 22,000 Ω
R87	CARBON RESISTOR 22,000 Ω
R88	CARBON RESISTOR 22,000 Ω
R89	CARBON RESISTOR 22,000 Ω
R90	CARBON RESISTOR 22,000 Ω
R91	CARBON RESISTOR 22,000 Ω
R92	CARBON RESISTOR 22,000 Ω
R93	CARBON RESISTOR 22,000 Ω
R94	CARBON RESISTOR 22,000 Ω
R95	CARBON RESISTOR 22,000 Ω
R96	CARBON RESISTOR 22,000 Ω
R97	CARBON RESISTOR 22,000 Ω
R98	CARBON RESISTOR 22,000 Ω
R99	CARBON RESISTOR 22,000 Ω
R100	CARBON RESISTOR 22,000 Ω

CONDITIONS OF TEST
 WAVE SWITCH ON B BAND
 POWER SWITCH OFF

APPROX. RESISTANCE MEASUREMENTS

RELATIVE RESISTANCE	TEST POINTS
1.45 MΩ	COMP. SW 2
1.45 MΩ	COMP. SW 3
1.45 MΩ	COMP. SW 4
1.45 MΩ	COMP. SW 5
1.45 MΩ	COMP. SW 6
1.45 MΩ	COMP. SW 7
1.45 MΩ	COMP. SW 8
1.45 MΩ	COMP. SW 9
1.45 MΩ	COMP. SW 10
1.45 MΩ	COMP. SW 11
1.45 MΩ	COMP. SW 12
1.45 MΩ	COMP. SW 13
1.45 MΩ	COMP. SW 14
1.45 MΩ	COMP. SW 15
1.45 MΩ	COMP. SW 16
1.45 MΩ	COMP. SW 17
1.45 MΩ	COMP. SW 18
1.45 MΩ	COMP. SW 19
1.45 MΩ	COMP. SW 20
1.45 MΩ	COMP. SW 21
1.45 MΩ	COMP. SW 22
1.45 MΩ	COMP. SW 23
1.45 MΩ	COMP. SW 24
1.45 MΩ	COMP. SW 25
1.45 MΩ	COMP. SW 26
1.45 MΩ	COMP. SW 27
1.45 MΩ	COMP. SW 28
1.45 MΩ	COMP. SW 29
1.45 MΩ	COMP. SW 30
1.45 MΩ	COMP. SW 31
1.45 MΩ	COMP. SW 32
1.45 MΩ	COMP. SW 33
1.45 MΩ	COMP. SW 34
1.45 MΩ	COMP. SW 35
1.45 MΩ	COMP. SW 36
1.45 MΩ	COMP. SW 37
1.45 MΩ	COMP. SW 38
1.45 MΩ	COMP. SW 39
1.45 MΩ	COMP. SW 40
1.45 MΩ	COMP. SW 41
1.45 MΩ	COMP. SW 42
1.45 MΩ	COMP. SW 43
1.45 MΩ	COMP. SW 44
1.45 MΩ	COMP. SW 45
1.45 MΩ	COMP. SW 46
1.45 MΩ	COMP. SW 47
1.45 MΩ	COMP. SW 48
1.45 MΩ	COMP. SW 49
1.45 MΩ	COMP. SW 50

MEASURED WITH VOLTMETER OF AT LEAST 500,000 OHMS RESISTANCE



I.F. 465 KC.

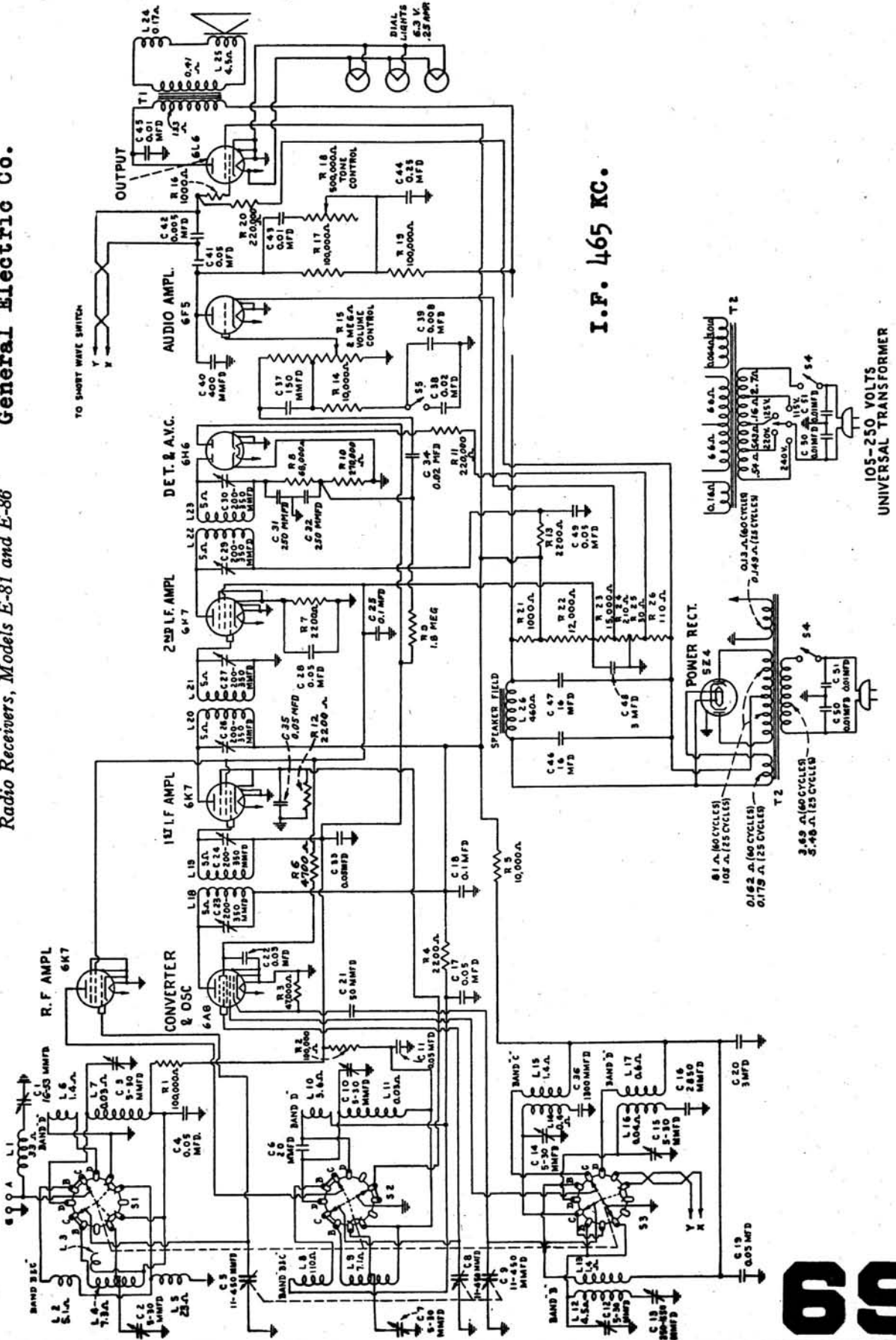
Receivers, Models F-68, F-65 and F-66

General Electric Co.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

General Electric Co.

Radio Receivers, Models E-81 and E-86

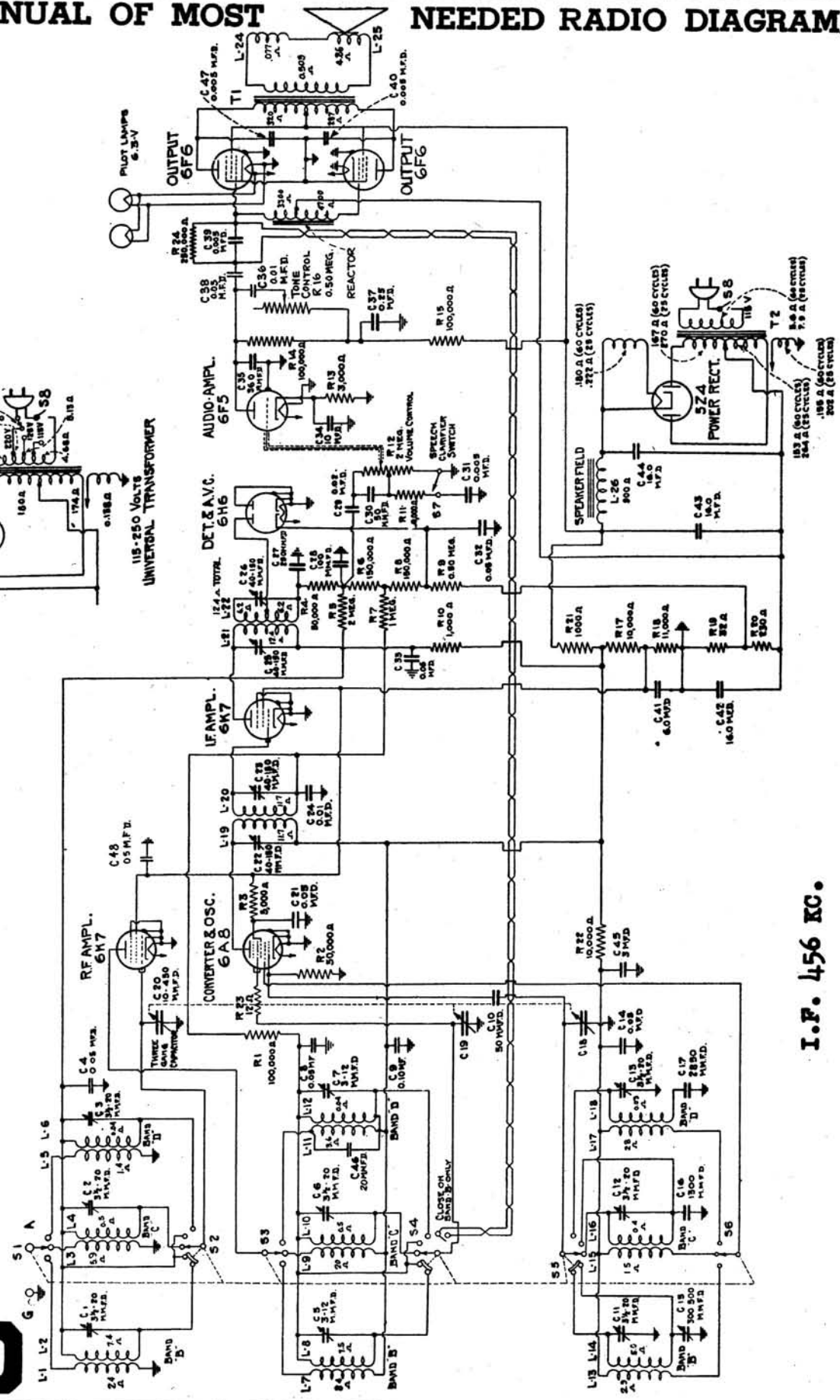


I.F. 465 KC.

MANUAL OF MOST NEEDED RADIO DIAGRAMS

General Electric Co. Models: A-83, A-85

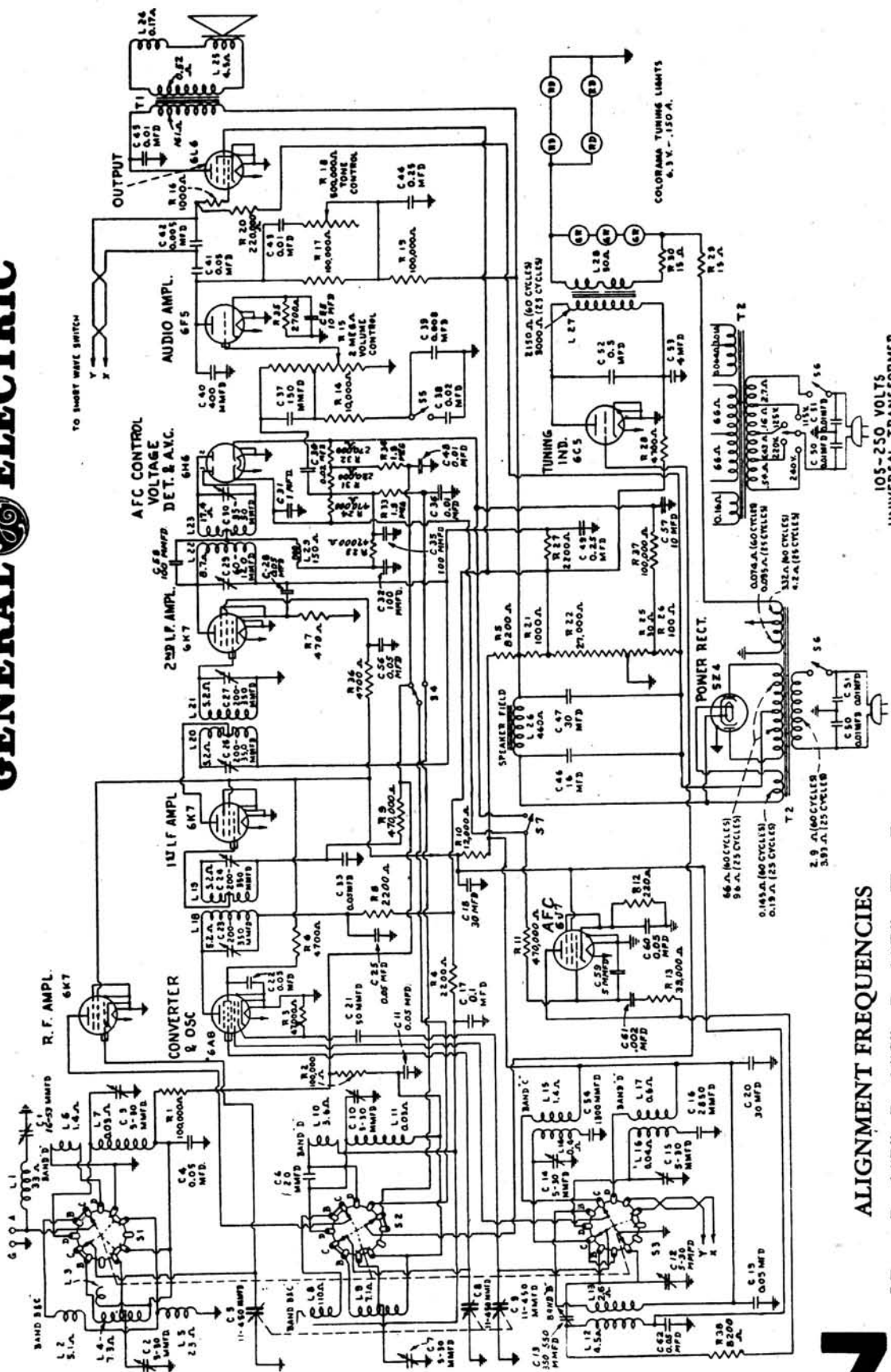
70



I.P. 456 KC.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

GENERAL ELECTRIC

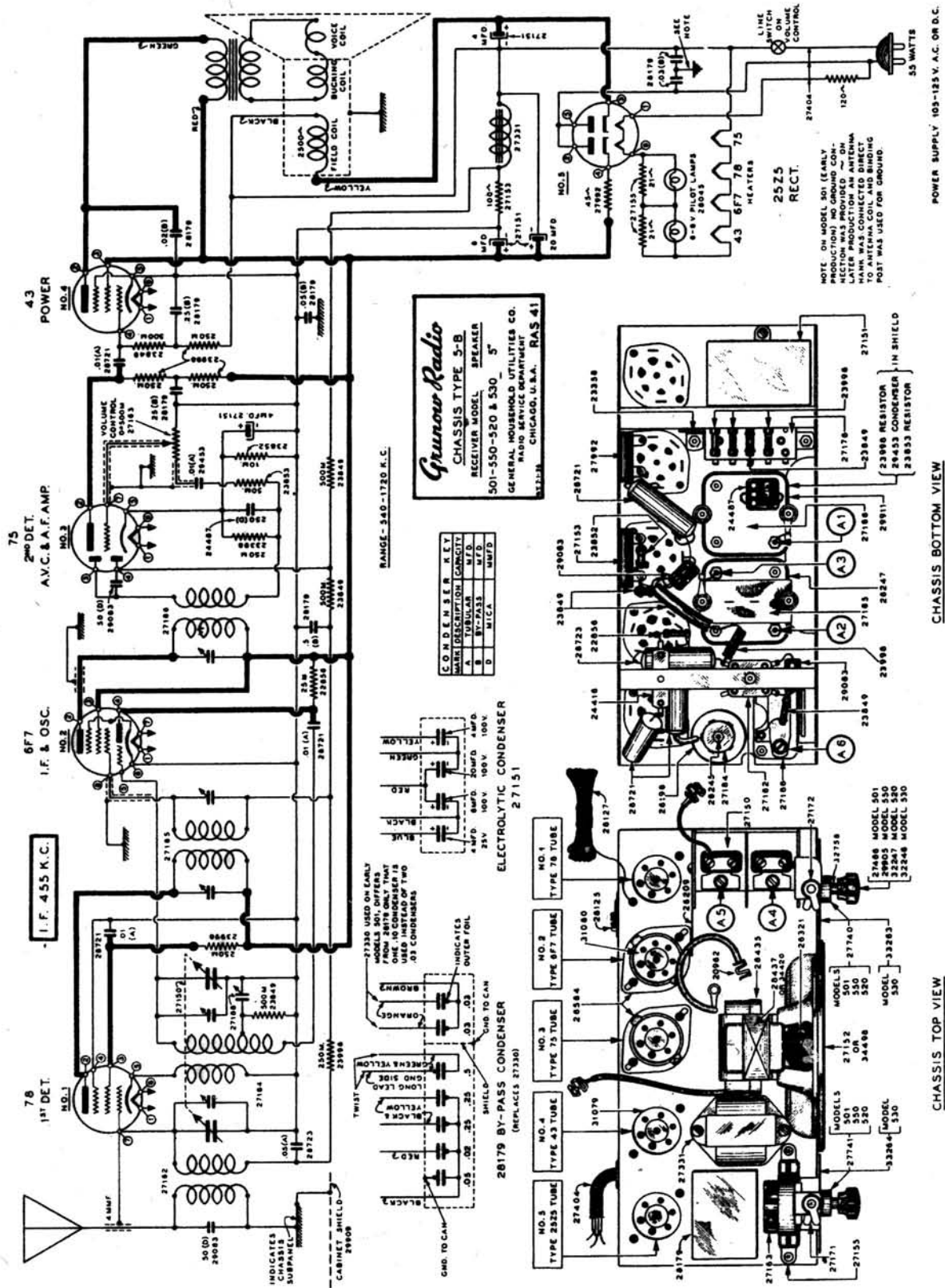


ALIGNMENT FREQUENCIES

I.F. Band "B" 580 kc.
 I.F. Band "C" 5220 kc.
 Band "D" 18,000 kc.
 Wave Trap 465 kc.
 1500 kc.

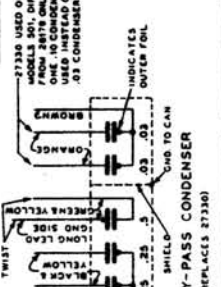
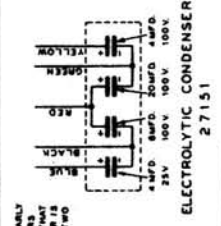
Radio Receivers, Models E-101, E-105 and E-106

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

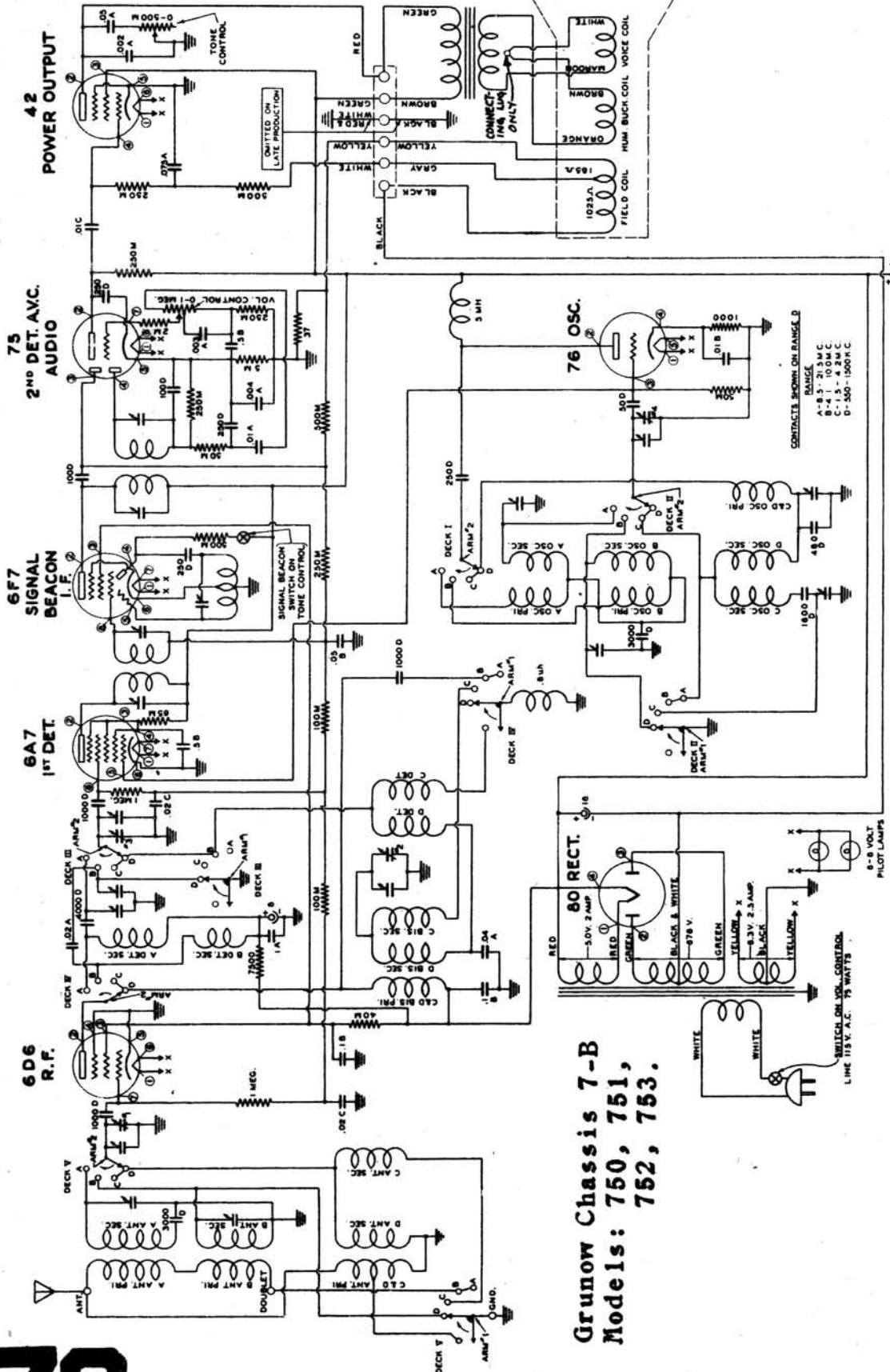


Grunow Radio
 CHASSIS TYPE 5-B
 RECEIVER MODEL
 501-550-520 & 530 5"
 GENERAL HOUSEHOLD UTILITIES CO.
 RADIO SERVICE DEPARTMENT
 CHICAGO, U.S.A. RAS 41

MARK	DESCRIPTION	CAPACITY	VOLTAGE
A	TUBULAR	MFD	100V
B	BY-PASS	MFD	25V
C	MICA	MFD	100V
D	MICA	MFD	50V



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



**Grunow Chassis 7-B
Models: 750, 751,
752, 753.**

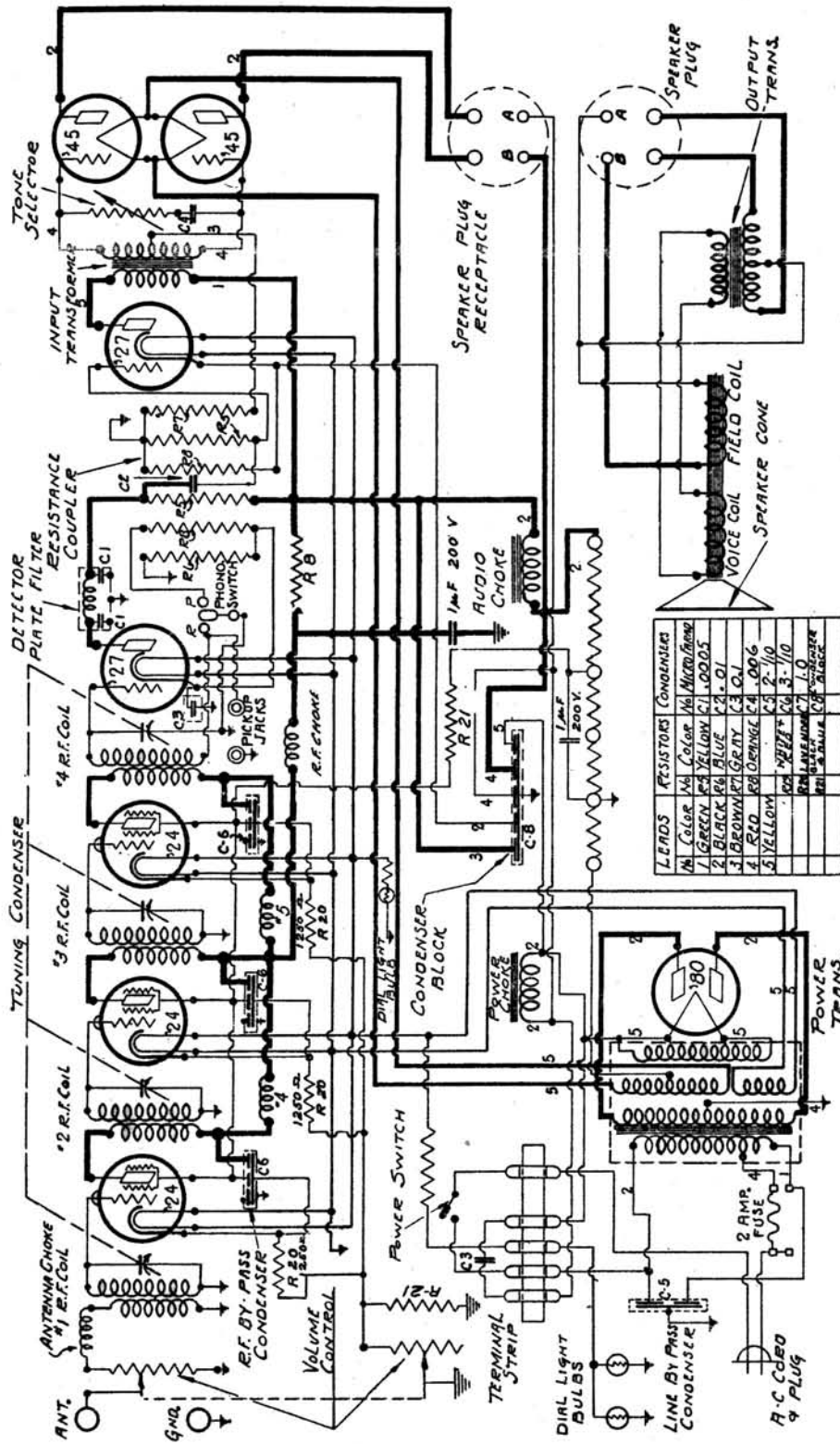
I.F. 262 KC.

76

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

MODELS 120, 130 and 140 CHASSIS MODELS "A" and "B"

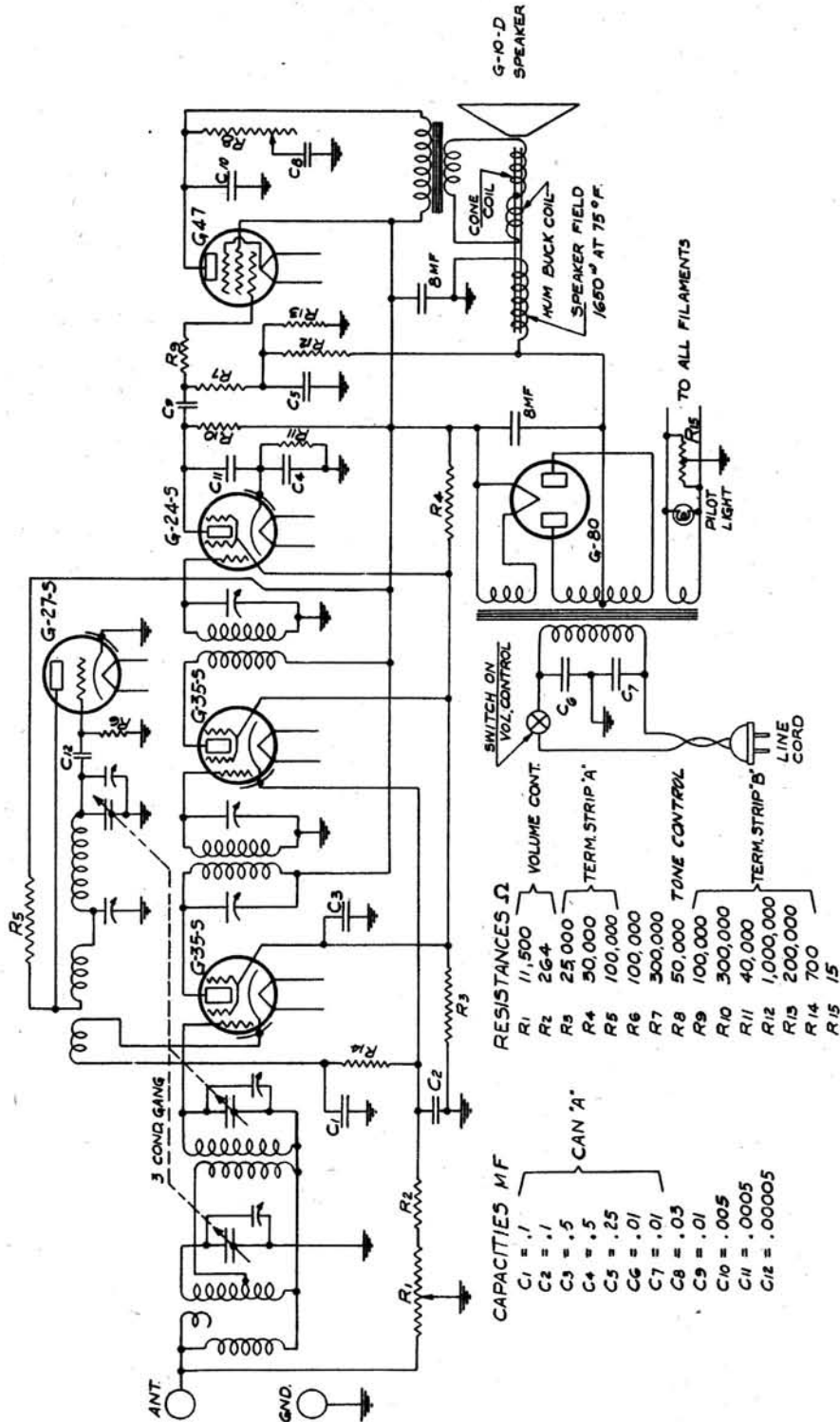
General Motors



Circuit Diagram of Chassis with Serial Numbers Between 29100A and 6200A; and 1700B and 1946B.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

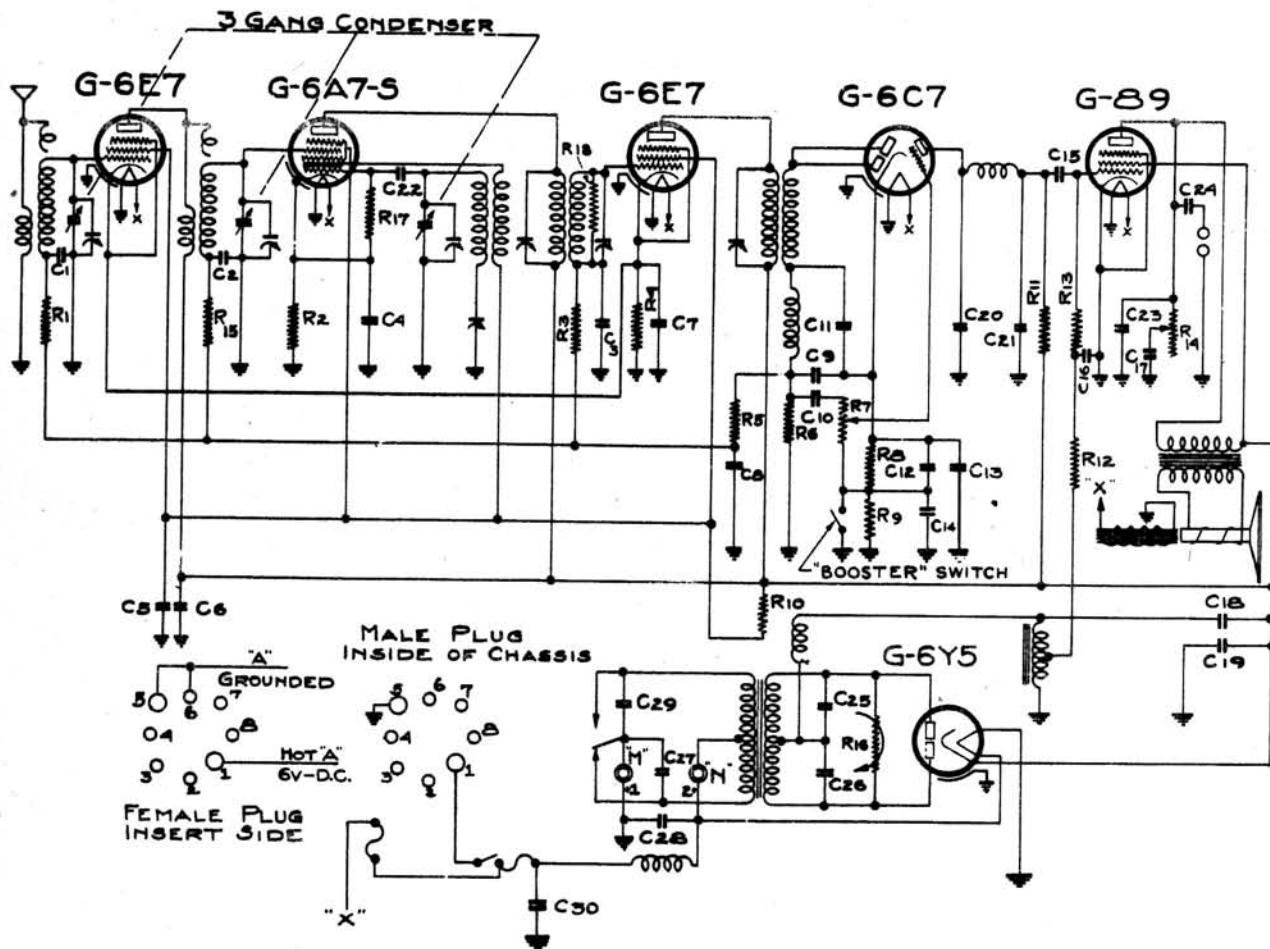
*Schematic Diagram of Majestic Screen Grid Superheterodyne Receiver
Model 55 Chassis — 115 Volts 50-60 Cycles 70 Watts*



I.F. 175 KC.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

SCHEMATIC DIAGRAM OF MAJESTIC MODEL 66 AUTOMOBILE RECEIVER.



CONDENSERS

C1—.03	C16—.25
C2—.03	C17—.02
C3—.01	C18—.0.0
C4—.1	C19—.0.0
C5—.25	C20—.0005
C6—.25	C21—.0005
C7—.25	C22—.00025
C8—.03	C23—.005
C9—.0005	C24—.1
C10—.03	C25—.000.0
C11—.0005	C26—.000.0
C12—.10.	C27—.1
C13—.25	C28—.5
C14—.25	C29—.1
C15—.03	C30—.5

RESISTORS

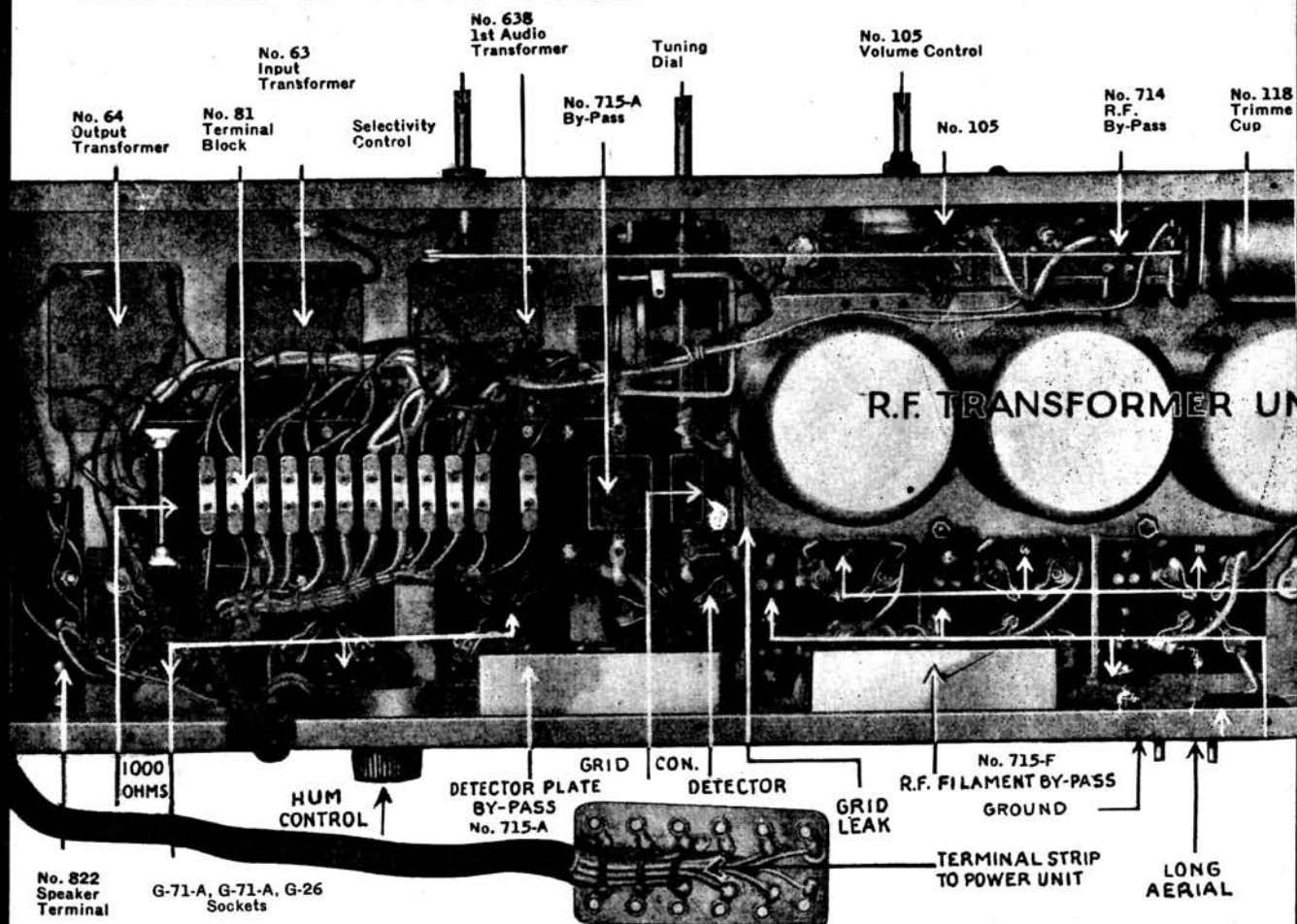
R1—300,000	R10—10,000
R2—250	R11—200,000
R3—300,000	R12—250,000
R4—400	R13—250,000
R5—300,000	R14—50,000
R6—100,000	R15—300,000
R7—200,000	R16—500,000 GLUCHAR
R8—2,500	R17—50,000
R9—10,000	R18—1,000,000

NOTE

WHEN A+ IS GROUNDED VIBRATOR LEAD #1 (BLUE) SHOULD CONNECT TO TERMINAL "M" (VIBRATOR ARMATURE) AND LEAD #2 (BLACK) SHOULD CONNECT TO TRANS. PRIMARY CENTER TAP (TERMINAL "N") WHEN A- IS GROUNDED REVERSE ABOVE CONNECTIONS.

I.F. 175 KC.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



CHASSIS 70 and 70-B Models 71 and 72

TUBES

R. F.	G-26	1st A. F.	G-26
R. F.	G-26	P. P. Ampl.	G-71-A
R. F.	G-26	P. P. Ampl.	G-71-A
Det.	G-27	G-80 Rect.	Power Unit

THE CIRCUIT

Tuned Radio Frequency. Built upon unit assembly plan.

Chassis. Has the 3 A.F. transformers, the volume control and input circuit, sockets, balancing condensers and by-pass condensers.

Tuning Condenser. 4 gang variable condenser, dial lamp and dial.

R.F. Transformers. Entirely Contained in shield, with leads that connect to various parts.

Terminal Strip. Includes power cable, grid condenser, grid leak, detector plate R.F. by-pass condenser, 2 center tapped resistances and 2 bias resistance units.

Wiring Cable. Accomplishes the internal wiring of receiver.

INPUT SYSTEM AND VOLUME CONTROL

The volume control is effected in the input circuit, making a smooth control due to the fact that R.F. amplifiers are functioning at maximum efficiency at any degree of volume. A potentiometer is placed across the .001 condenser with the movable arm attached to the antenna and controls signal voltage impressed across this condenser.

SELECTIVITY CONTROL

Integral with the input system is the antenna trimmer, which operates to vary the inductance of the antenna input coil and permits adjusting the input circuit to exact resonance with the other 3 tuned circuits.

CHASSIS 90

Models 91, 92

METHOD OF BIASING

Grid Biasing of the various tubes is accomplished by grounding the grids and applying a positive potential to the cathodes of three tubes. The biasing of the first, second and third R.F. Tubes is accomplished by the use of a variable resistance from 500 to 2,500 Ohm, which is in series with the volume control resistor and is known as the Equalizer. It is mounted on the rotor shaft of the variable gang condenser and the movable arm turns as the rotor plates are moved. A potential from 8 to 15 Volt is applied, depending on the tuning dial frequency. The Equalizer is adjusted for a resistance of 1,500 Ohm at 1,000 kilocycles, 500 Ohm at 550 kilocycles, 2,500 Ohm at 1,500 kilocycles, with 15% allowable variation for the last two measurements. The equalizer adjustment arm is secured by a set screw to the back of the gang condenser frame. The position and tightness of this arm is important. Make sure that the set screw holding the Equalizer Shaft to the gang condenser just inside the gang frame is against the flat portion of the equalizer shaft.

BIASING
4th R. F. Stage
Detector

RESISTOR
1,800 Ohm
35,000 Ohm
800 Ohm

BIAS VOLTAGE
9
32
On Power Unit Terminal Strip

ALIGNING AND BALANCING

Make certain that resonance is obtained for each stage, using both Master Tuning Control and Trimmer. When using dummy tube for balancing, place shield over it, to include capacity effect of shield. A dummy tube having a Grid to Plate of appr. 3.4 m.m.f. is suggested, as this capacity is used when receiver was originally balanced. **PROCEDURE OF BALANCING IS THE SAME AS FOR CHASSIS 70, 70B**

ANTENNA SWITCH

To prevent distortion of tone from close-by powerful transmitters on moderately long antenna, snap switch to "Local" position. Use "Distance" position for stations with less powerful reception.

The Power Unit 9-P-6 and 9-P-3 is described on Page 79.

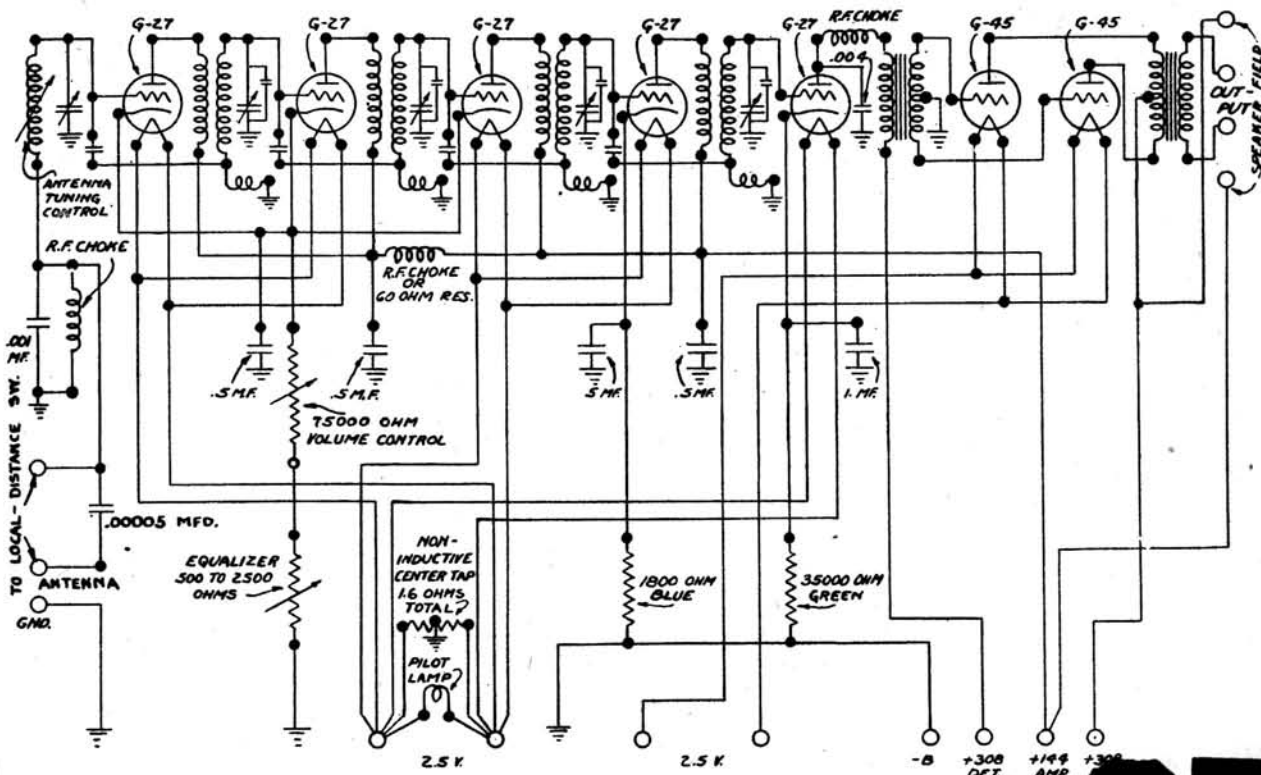
INPUT CIRCUIT

On early production models, a fixed condenser of .0001 MFD. capacity is used, on later production a condenser of .00005 MFD. for the input circuit.

TABLE OF VOLTAGES

The voltage readings given below were taken with the receiver turned to 550 Kilocycles, and the volume control set at maximum. When taking comparative readings, be certain that receiver is tuned to 550 kilocycles and volume control is set at maximum.

Purpose	Tube	Type	A Volts	B Volts	C Volts	Cathode Volts	Plate M.A.
1st R. F.	27		2.35	130	8	8	5.5
2nd R. F.	27		2.35	130	8	8	5.5
3rd R. F.	27		2.35	130	8	8	5.5
4th R. F.	27		2.35	130	9	9	5.0
Detector	45		2.35	270	30	30	1
Power	45		2.45	250	50	50	32
Rectifier	80		2.45	250	50	50	32
Line Voltage		115 A. C.	...	...	...	...	...



CHASSIS 90-B

Models 90, 91, 93

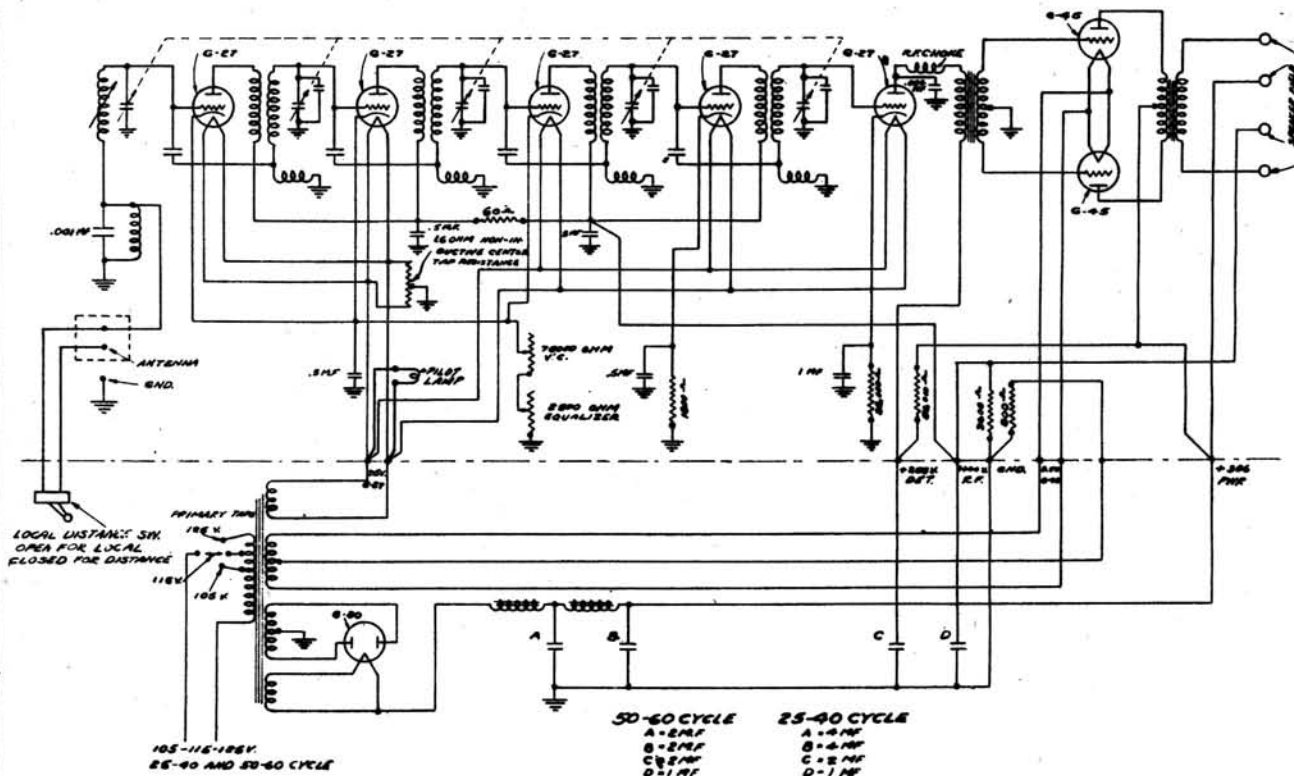


TABLE OF VOLTAGES

The voltage readings given below were taken with the receiver turned to 550 kilocycles, and the volume control set at maximum. When taking comparative readings, be certain that receiver is tuned to 550 kilocycles and volume control is set at maximum.

Tube Purpose	Type	Filament Voltage	Plate Voltage	Grid Bias Voltage	Cathode Volts	Normal Plate Milli-amperes
1st R. F.	G-27	2.35	130	8	8	5.5
2nd R. F.	G-27	2.35	130	8	8	5.5
3rd R. F.	G-27	2.35	130	8	8	5.5
4th R. F.	G-27	2.35	130	9	9	5.0
Detector	G-27	2.35	230	25	25	.8
Power	G-45	2.45	250	50	..	32
Power	G-45	2.45	250	50	..	32
Rectifying	G-80	..	..	..	..	..

Line Voltage 115 A. C. on 115 volt tap.

THE CIRCUIT

The T.R.F. balanced circuit is employed with a single control, five gang condenser. The detector output is fed directly to the push-pull audio stage. The selectivity control or trimmer functions by varying the inductance of the antenna input coil and permits adjustment in the input circuit to exact resonance with the other tuned circuits.

The R. F. Unit assembly (No. 1434) includes the radio frequency transformers with shields, the R. F. Sockets, the balancing condensers and the radio frequency, cathode and plate By-Pass Condensers. The terminal strip includes one 800 Ohm, one 1,800 Ohm and one 50,000 Ohm Resistor, being the bias resistors of the Power Tubes, the 4th R.F. Tube and the Detector Plate resistance respectively.

POWER SUPPLY

Composed of Power Transformer, a Choke Unit and Condenser Bank for the filter system. The resistors (800 and 3,600 Ohm) are placed on terminal strip. A Type G-80 Rectifying tube is used.

ANTENNA SWITCH

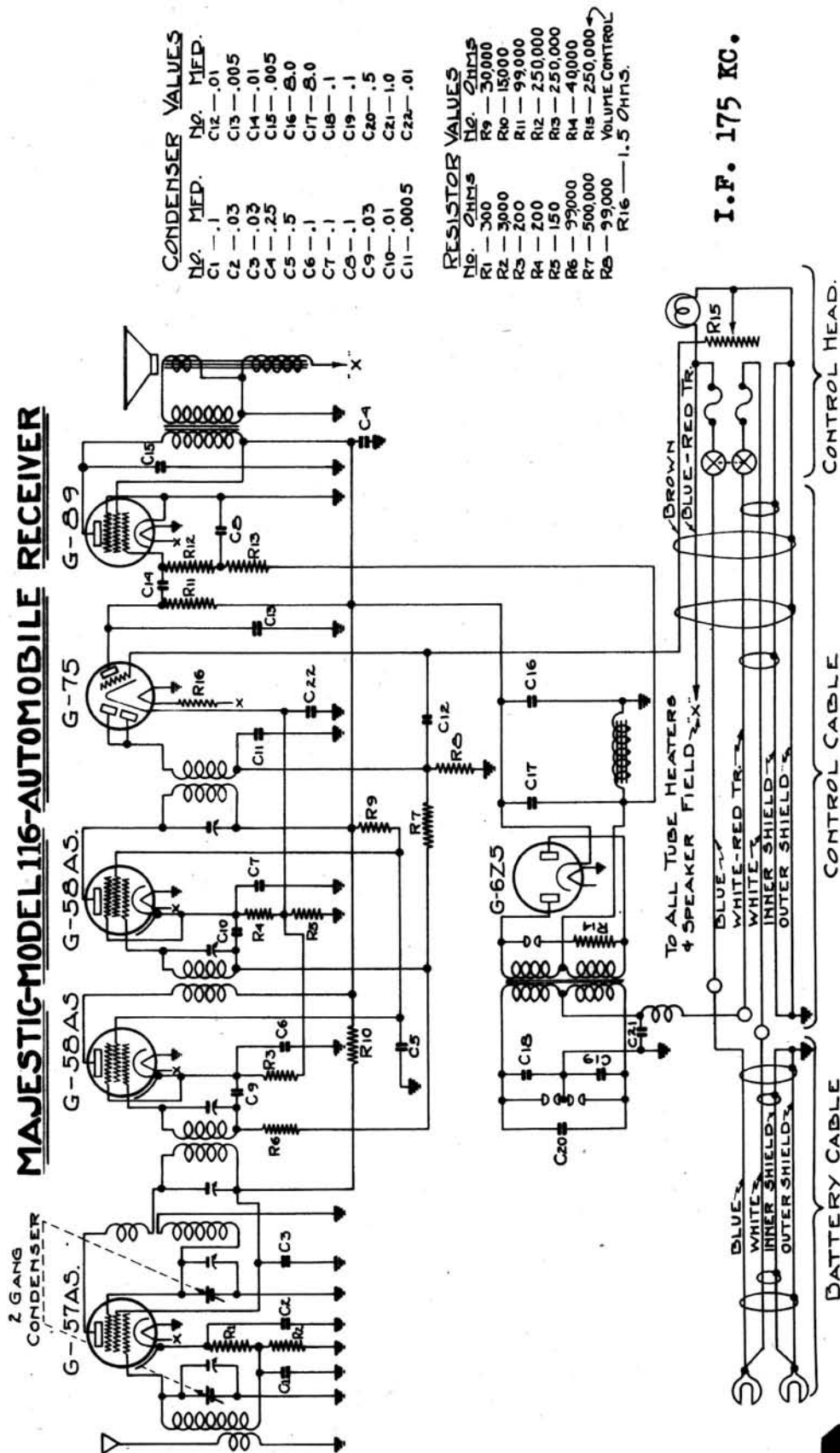
To prevent distortion of tone from close-by powerful transmitters on moderately long antenna, snap switch to "Local" position. Use "Distance" position for stations with less powerful reception.

ADJUSTMENT FOR LINE VOLTAGE

On the left side, directly in front of the G-80 Socket, you will note a small plate. Determine with A. C. Voltmeter or from local power company the average line voltage.

Upon removing the adjustment plate, you will find three taps, marked 105 Volts, 115 Volts and 125 Volts.

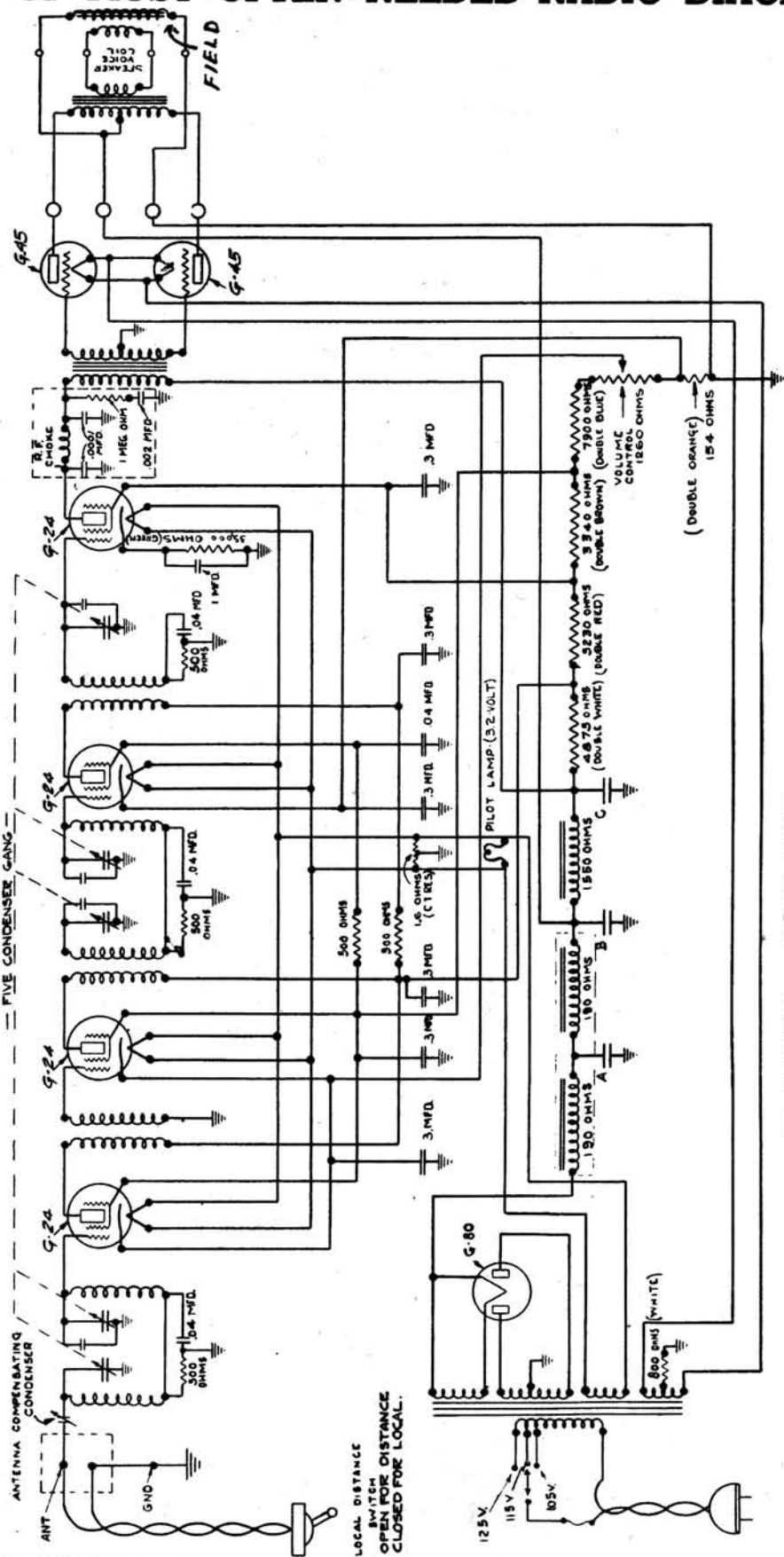
MAJESTIC-MODEL 116-AUTOMOBILE RECEIVER



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

SCHEMATIC DIAGRAM of MAJESTIC SUPER SCREEN GRID RECEIVER

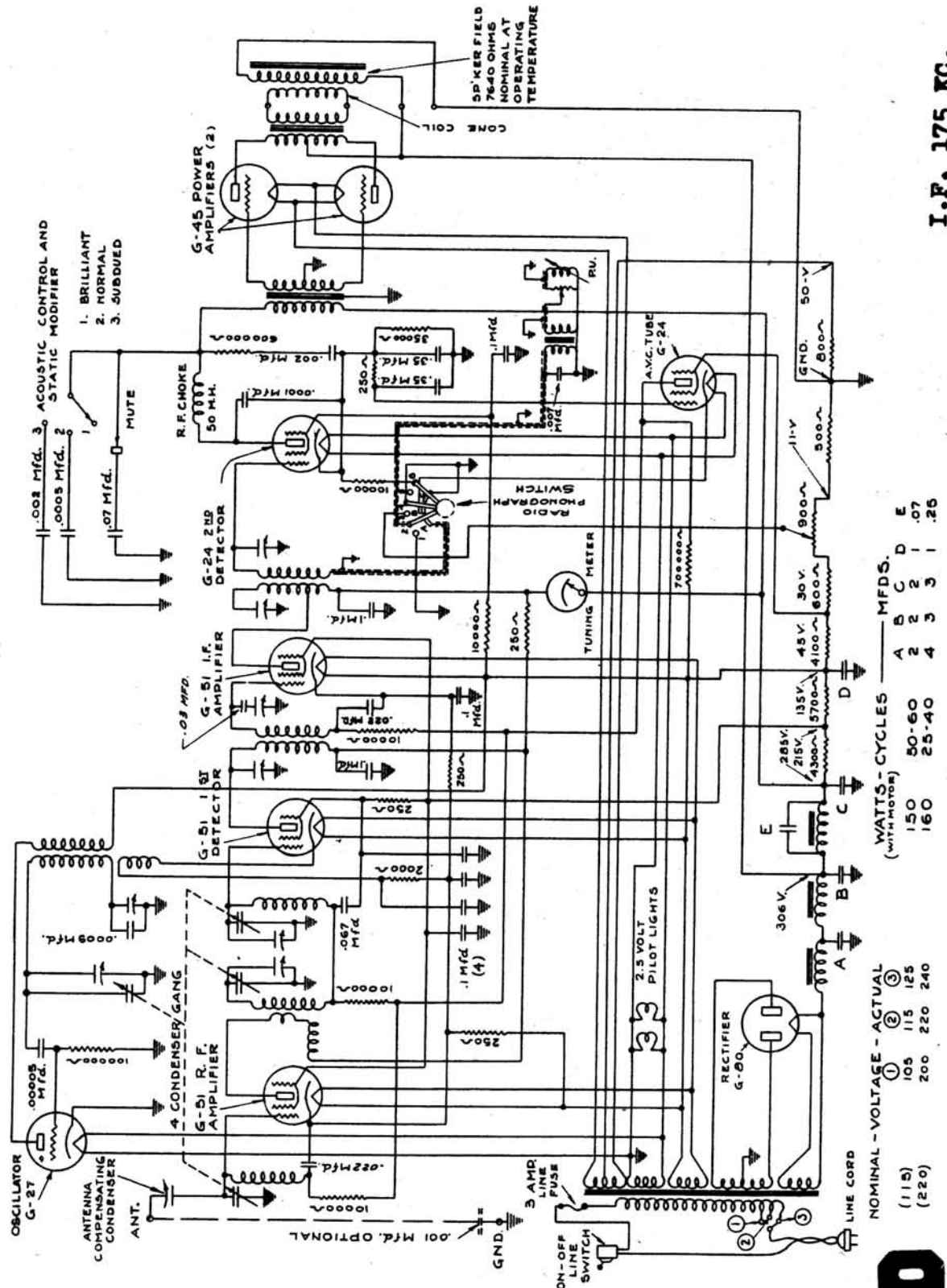
MODEL 130-A CHASSIS 25-40 & 50-60 CYCLE



- 50-60 CYCLE
 - A - 5 MF
 - B - 5 MF
 - C - 2 MF
- 25-40 CYCLE
 - A - 4 MF
 - B - 4 MF
 - C - 2 MF

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

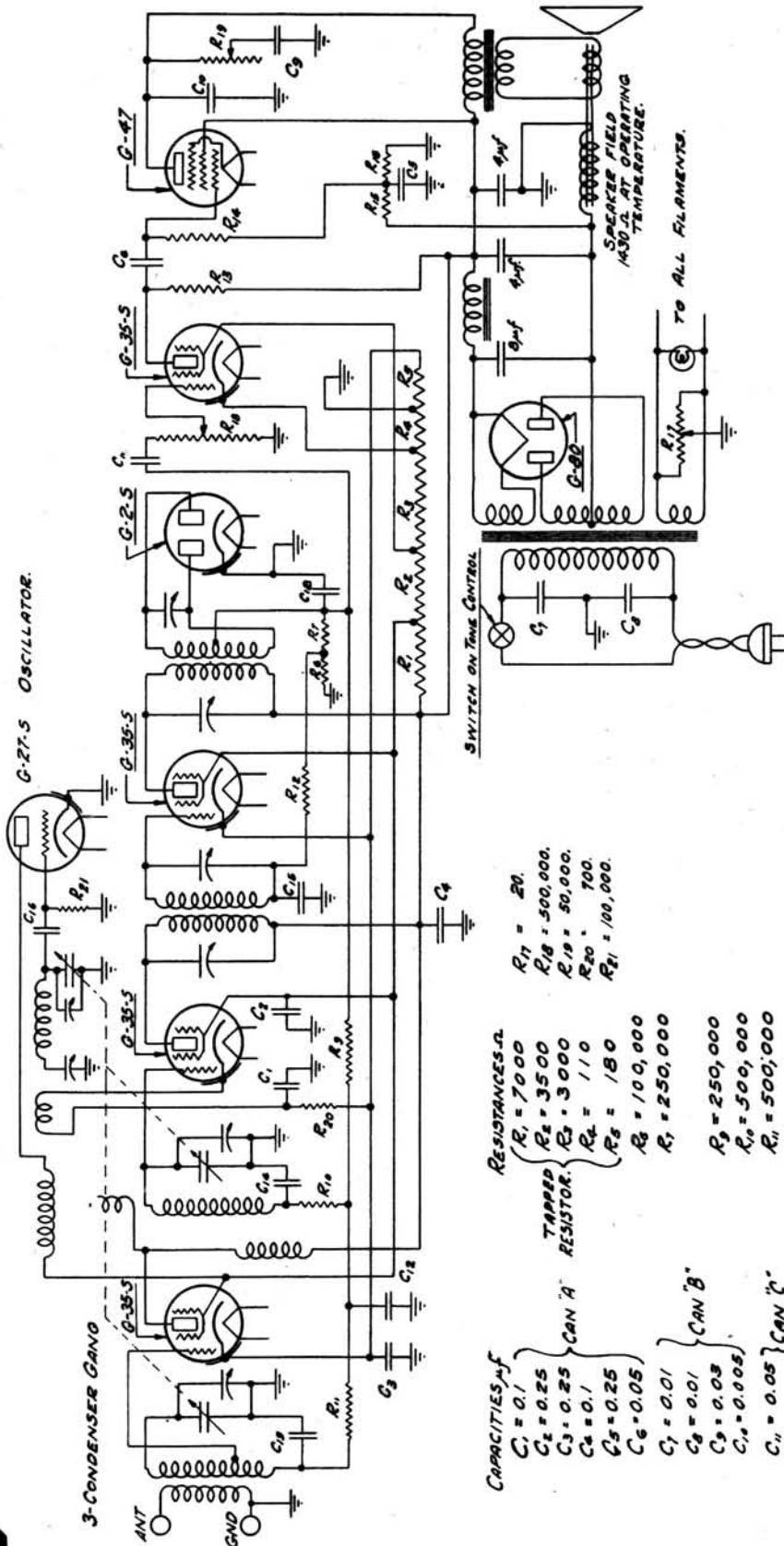
SCHEMATIC DIAGRAM OF MAJESTIC SCREEN GRID SUPERHETERODYNE AUTOMATIC VOLUME CONTROL RECEIVER AND ELECTRIC PHONOGRAPH COMBINATION MODEL 160 CHASSIS 115 AND 220 VOLTS, 25 - 40 AND 50 - 60 CYCLES.



I.F. 175 KC.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

SCHEMATIC DIAGRAM OF MAJESTIC SCREEN GRID SUPERHETERODYNE
AUTOMATIC VOLUME CONTROL RECEIVER - MODEL 200 CHASSIS.



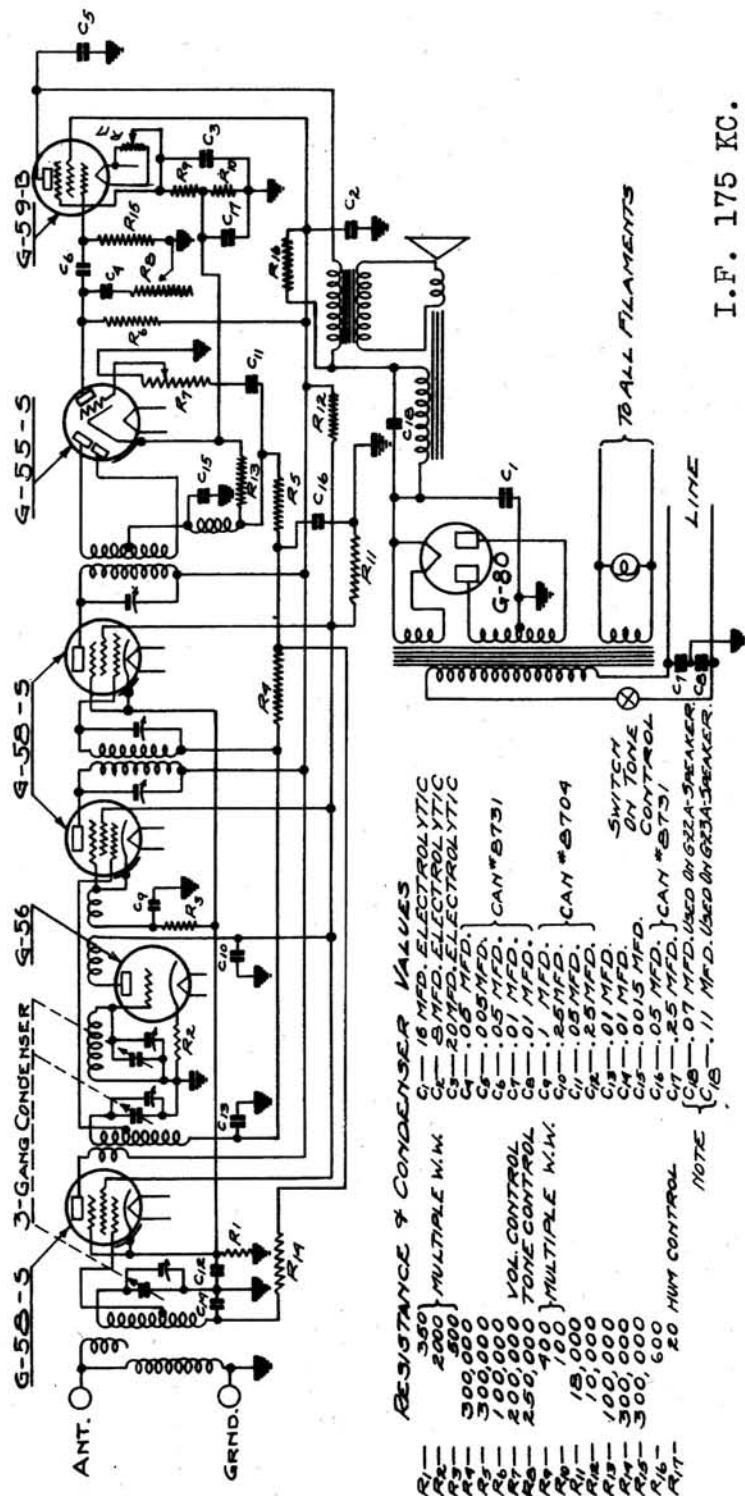
115 VOLTS - 60 CYCLES - 85 WATTS.

I.F. 175 KC.

- CAPACITIES-μf**
- C₁ = 0.1
 - C₂ = 0.25
 - C₃ = 0.25
 - C₄ = 0.1
 - C₅ = 0.25
 - C₆ = 0.05
 - C₇ = 0.01
 - C₈ = 0.01
 - C₉ = 0.03
 - C₁₀ = 0.005
 - C₁₁ = 0.05
 - C₁₂ = 0.01
 - C₁₃ = 0.01
 - C₁₄ = 0.01
 - C₁₅ = 0.01
 - C₁₆ = 0.00005
 - C₁₇ = 0.0008
- RESISTANCES-Ω**
- R₁ = 7000
 - R₂ = 3500
 - R₃ = 3000
 - R₄ = 110
 - R₅ = 180
 - R₆ = 100,000
 - R₇ = 250,000
 - R₈ = 250,000
 - R₉ = 500,000
 - R₁₀ = 500,000
 - R₁₁ = 500,000
 - R₁₂ = 500,000
 - R₁₃ = 100,000
 - R₁₄ = 300,000
 - R₁₅ = 1,000,000
 - R₁₆ = 200,000
- TAPPED RESISTOR.**
- R₁₇ = 20
 - R₁₈ = 500,000
 - R₁₉ = 50,000
 - R₂₀ = 100
 - R₂₁ = 100,000

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

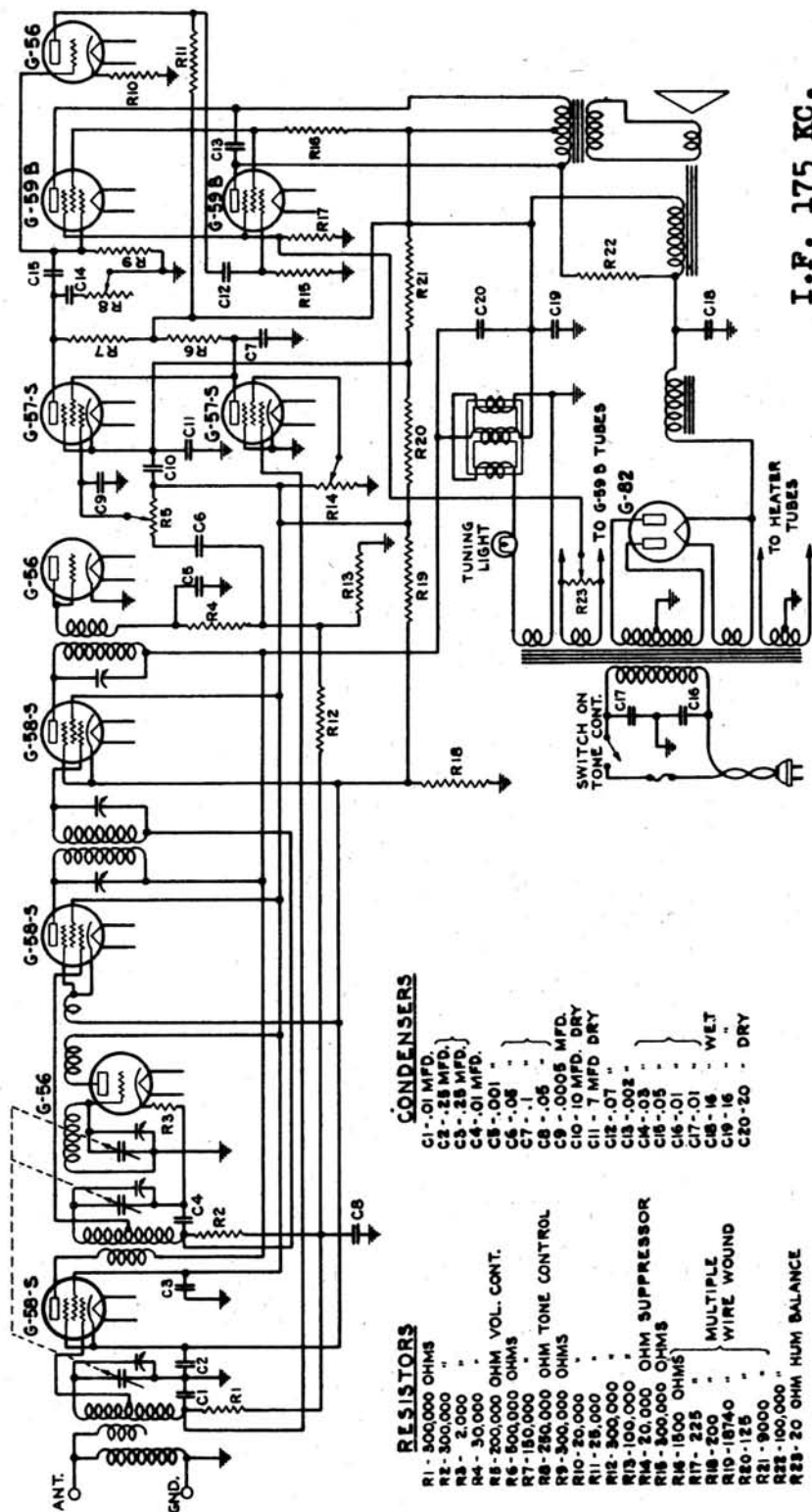
DIAGRAM OF MAJESTIC AUTOMATIC VOLUME CONTROL SUPERHETERODYNE MODEL 330



Automatic volume control bias voltage is developed across resistors R-13 and R-10 and is applied to the grid of the radio frequency, first detector and intermediate frequency tubes to control their amplification.

The manual volume control is a 200,000 ohm potentiometer which is connected in the grid circuit of the G-55-S tube and works entirely independent of the automatic volume control.

MAJESTIC MODEL 360 RECEIVER



I.F. 175 KC.

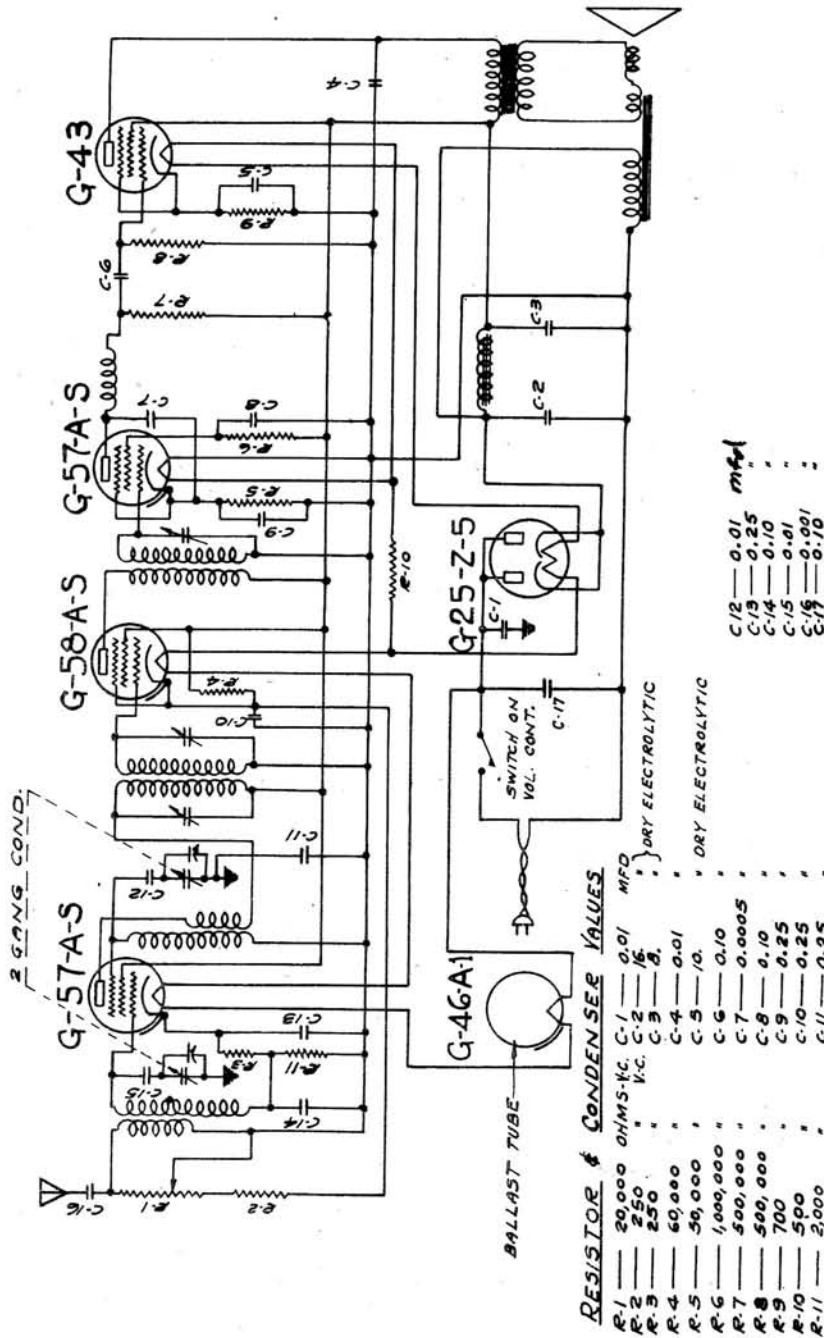
The Model 360 is an eleven tube chassis designed for single speaker operation in the Model 363 receiver. This chassis is very similar to the Model 300 chassis in that it provides Synchro-Silent Tuning, resistance coupled push-pull output, reactance dimmer action and automatic volume control. The tubes employed and their respective stages are as follows: G-58-S, R.F. amplifier; G-56, Oscillator; G-58-S, first detector; G-58-S, I.F. amplifier; G-56, second detector; G-57-S, first audio amplifier, G-57-S, suppressor; G-56, phase rotator; two G-59-B push-pull output and G-82 rectifier.

MODEL 400 CHASSIS

and

MODEL G-26-C SPEAKER

SCHEMATIC DIAGRAM OF MAJESTIC SCREEN GRID AC.-D.C. SUPERHETERODYNE RECEIVER MODEL - 400



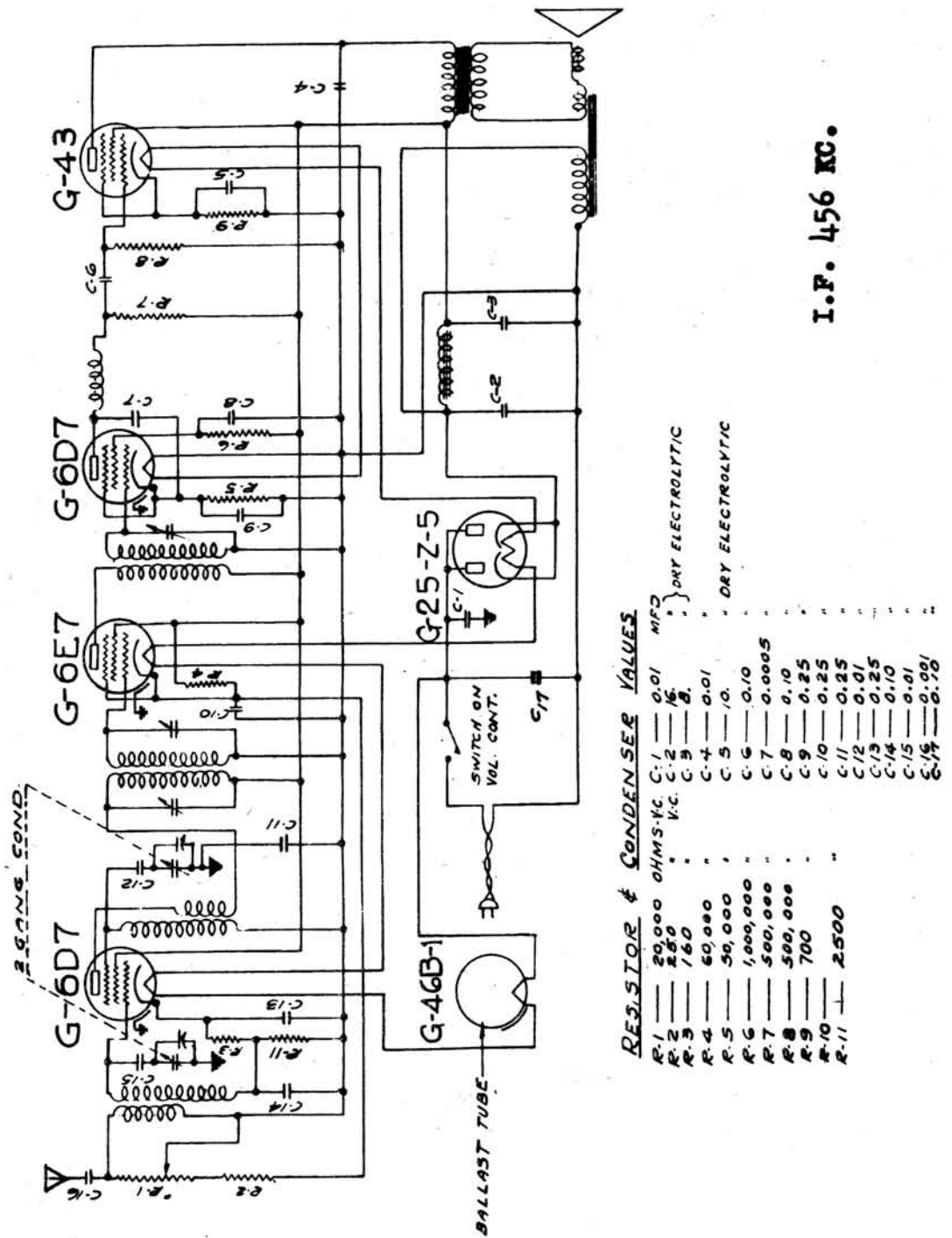
1 - With the volume control in maximum volume position and the gang condenser completely out of mesh, supply a 456 K.C. signal to the grid of the modulator tube and adjust the 4 I.F. tuning condensers for maximum sensitivity.

ALIGNMENT PROCEDURE

2 - With the gang condenser and volume control in the same position, supply a 1750 K.C. signal to the input of the receiver and align the 2 R.F. trimmer condensers for maximum sensitivity.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

SCHEMATIC DIAGRAM OF MAJESTIC SCREEN GRID A.C.-D.C. SUPERHETERODYNE RECEIVER MODEL - 400-A



RESISTOR & CONDENSER VALUES

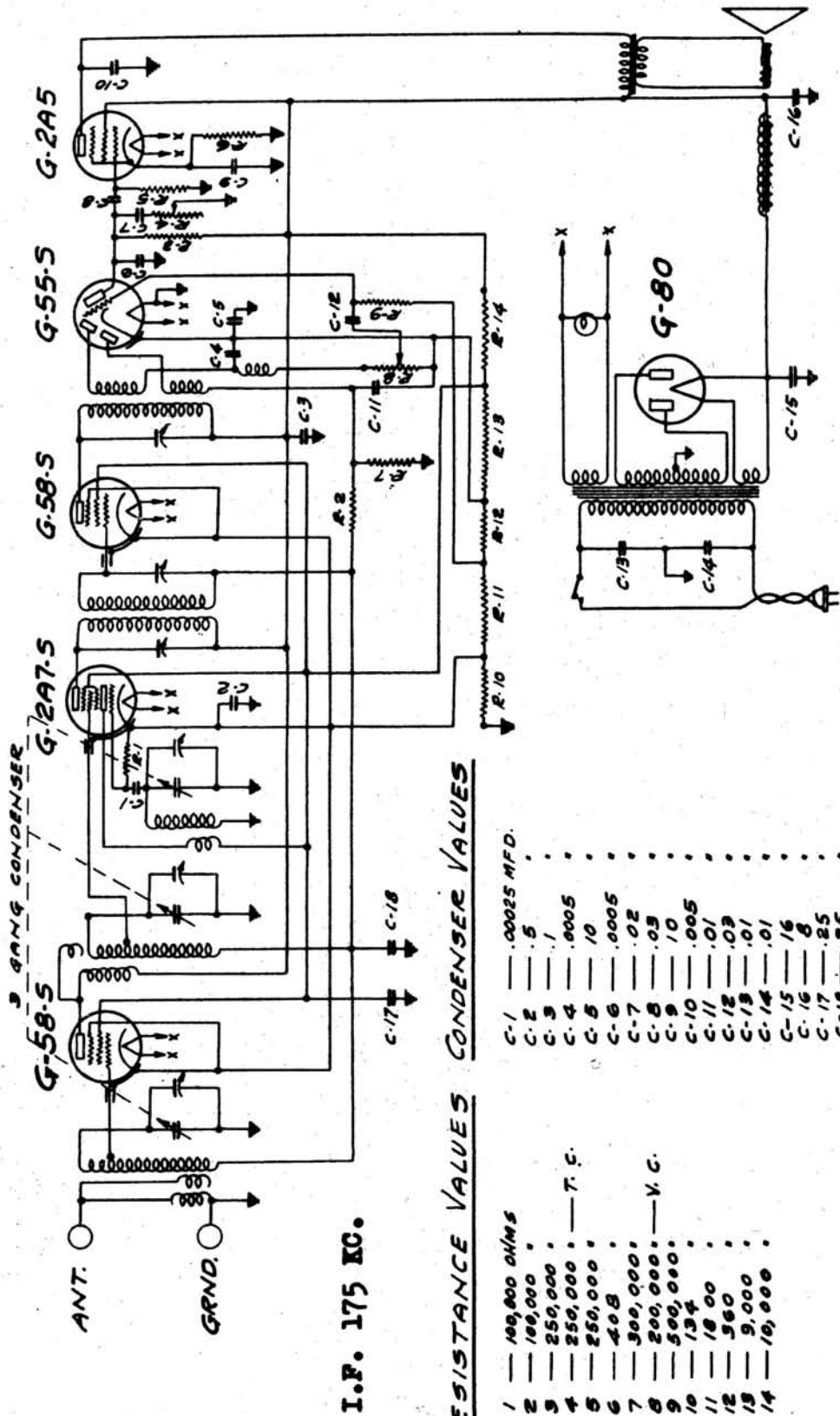
RESISTOR	OHMS-KC.	C-1	0.01	MFD
R-1	20,000	C-2	16	DRY ELECTROLYTIC
R-2	160	C-3	0.01	DRY ELECTROLYTIC
R-3	160	C-4	0.01	DRY ELECTROLYTIC
R-4	50,000	C-5	0.10	DRY ELECTROLYTIC
R-5	50,000	C-6	0.10	DRY ELECTROLYTIC
R-6	1,000,000	C-7	0.0005	DRY ELECTROLYTIC
R-7	500,000	C-8	0.10	DRY ELECTROLYTIC
R-8	500,000	C-9	0.25	DRY ELECTROLYTIC
R-9	700	C-10	0.25	DRY ELECTROLYTIC
R-10	700	C-11	0.25	DRY ELECTROLYTIC
R-11	2500	C-12	0.01	DRY ELECTROLYTIC
		C-13	0.25	DRY ELECTROLYTIC
		C-14	0.10	DRY ELECTROLYTIC
		C-15	0.01	DRY ELECTROLYTIC
		C-16	0.01	DRY ELECTROLYTIC
		C-17	0.01	DRY ELECTROLYTIC

I.F. 456 KC.

The circuit of the Model 400-A chassis is practically the same as that of the Model 400. The main differences being that the types G-6D7 and G-6E7 tubes are used in place of types G-57A-S and G-58A-S respectively; and that a type G-46A-1 tube is used as a ballast in place of the G-46B-1.

Resistors R-3 and R-11 have a value of 160 and 2500 ohms respectively in the Model 400-A chassis while they have a value of 250 and 200 ohms in the Model 400 chassis. Resistor R-10 is omitted entirely.

SCHEMATIC DIAGRAM
OF
MAJESTIC MODEL-460 RECEIVER



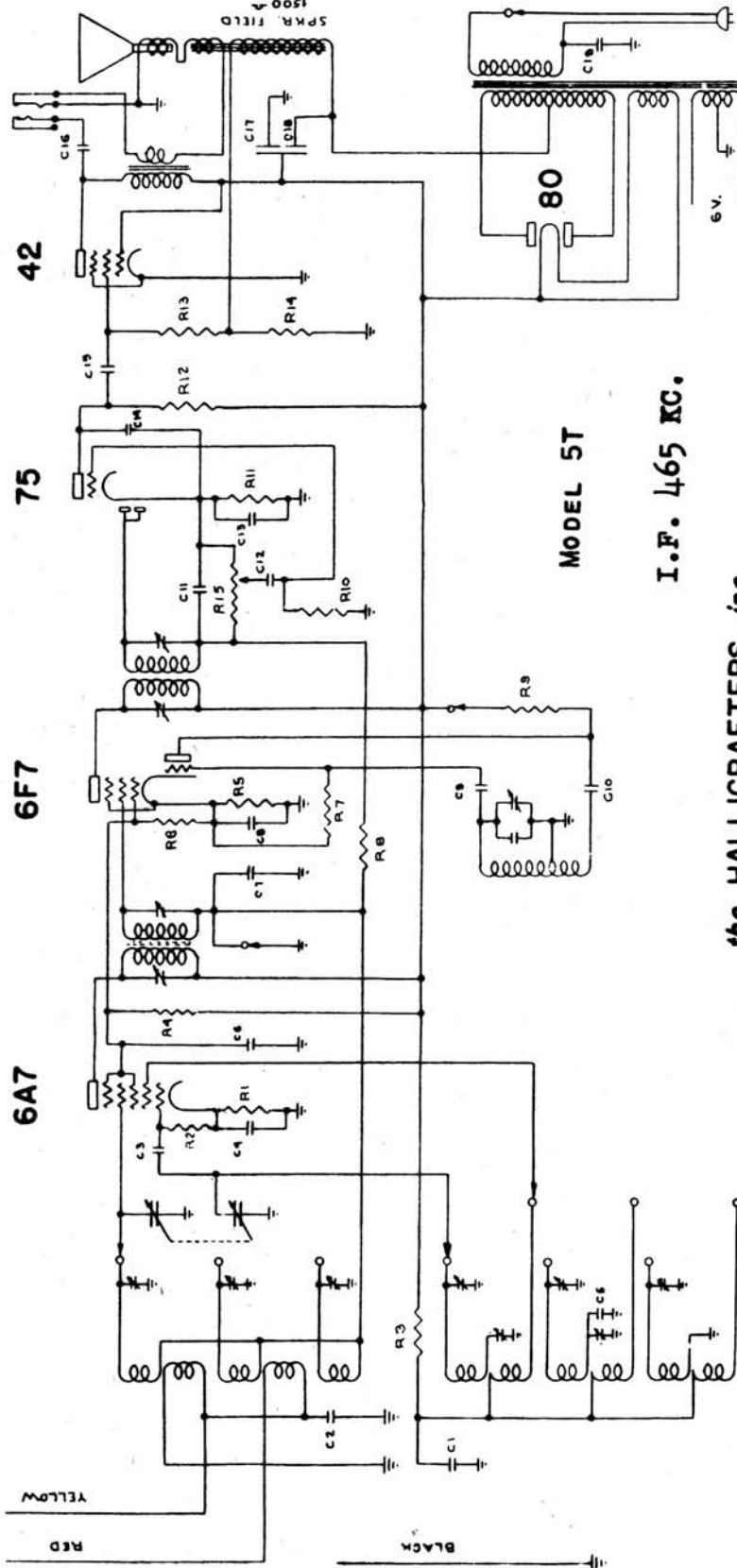
I.F. 175 KC.

RESISTANCE VALUES CONDENSER VALUES

R-1	100,000 ohms
R-2	100,000 "
R-3	250,000 "
R-4	250,000 "
R-5	250,000 "
R-6	400 "
R-7	300,000 "
R-8	200,000 "
R-9	500,000 "
R-10	134 "
R-11	1800 "
R-12	560 "
R-13	9,000 "
R-14	10,000 "

C-1	.00025 MFD.
C-2	.5
C-3	1
C-4	.0005
C-5	10
C-6	.0005
C-7	.02
C-8	.03
C-9	10
C-10	.005
C-11	.01
C-12	.03
C-13	.01
C-14	.01
C-15	.16
C-16	8
C-17	.25
C-18	.25

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



- R1 250
- R2 30,000
- R3 25,000
- R4 25,000
- R5 200
- R6 25,000
- R7 100,000
- R8 1 meg
- R9 100,000
- R10 1 meg
- R11 4000
- R12 250,000
- R13 400,000
- R14 250

the HALLICRAFTERS inc.

SKY BUDDY

- C1 .1
- C2 10 mmf
- C3 100 mmf
- C4 .1
- C5 1000 mmf
- C6 .1
- C7 .05
- C8 .1
- C9 250
- C10 .01
- C11 250 mmf
- C12 .01
- C13 .1
- C14 250 mmf
- C15 .01
- C16 .05
- C17 8.mfd
- C18 4.mfd
- C19 .01

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

□ PRACTICAL RADIO for War Training

This new, 1943 manual will clarify the important radio facts, explain the principles which may have puzzled you, and point the way to faster radio repairing. You will find hundreds of practical hints for mounting parts, testing components, trouble-shooting, using instruments. Needed useful theory in each chapter is followed with practical applications. This is the book that will help you repair radios faster, or obtain a good radio War-job, or get ahead in the Armed Forces. Written by M. N. Beitman. 336 large pages, 6x9 inches. Printed on thick, enamel paper. Almost 300 illustrations and diagrams to help you. Seal **\$2.95** leatherette cover. Price only.....

Supreme Publications

PUBLISHERS OF RADIO BOOKS, MANUALS, AND DIAGRAMS

328 South Jefferson Street

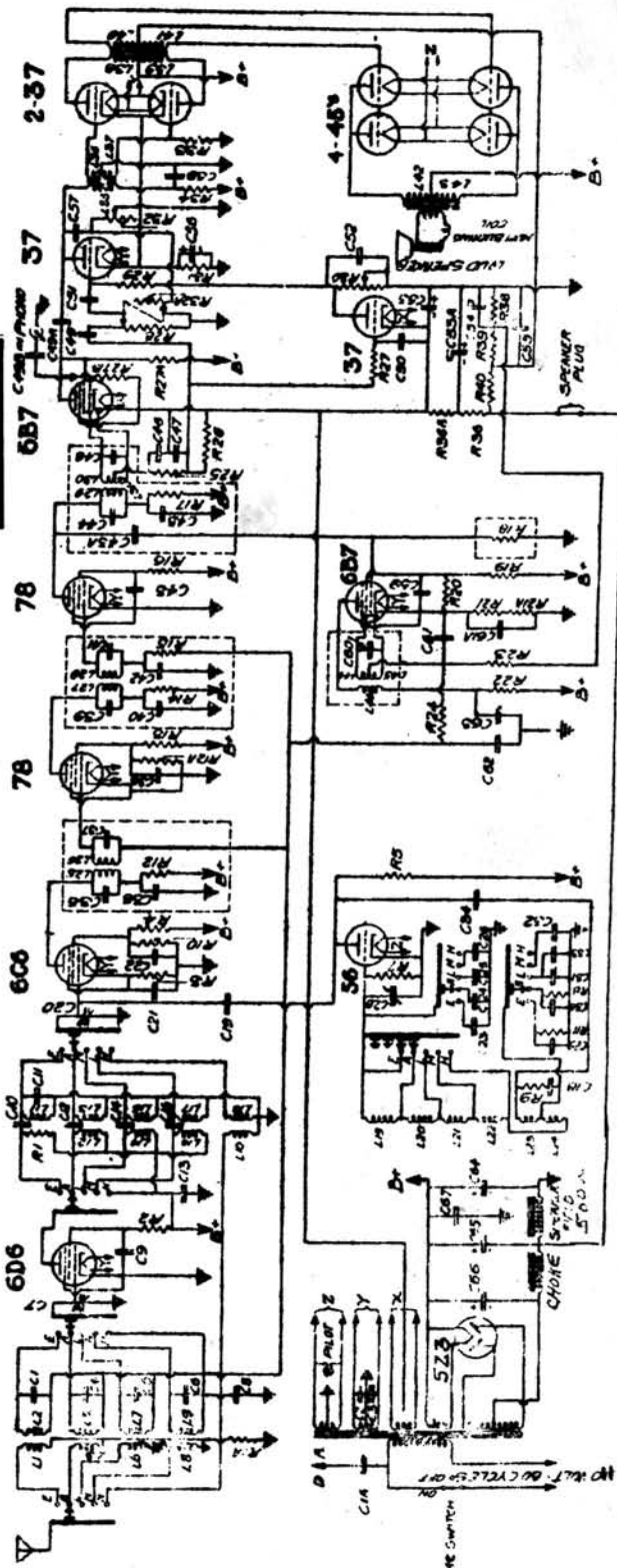
Chicago, Illinois

C1A - 250 MMFD - MICA	C57 - .05	400
C1 - 80	C58 - .10	300
C2 - .05 MFD - 200 VOLT	C59 - .25	400
C3 - .05	C60 - I.F.T.	TRIMMER
C4 - 20 MMFD - TRIMMER	C61 - .500 MFD	600 VOLT
C5 - 20	C62 - .05	200
C6 - 20	C63 - .05	600
C7 - 365	C64 - .05	400
C8 - .05 MFD - 200 VOLT	C65 - 8	ELECTROLYTIC
C9 - .05	C66 - 8	
C10 - 20 MMFD - MICA	C67 - .25	400 VOLT
C11 - 80		
C12 - 20		
C13 - .05 MFD - 400 VOLT	R1A - 5 000	25 MHT
C14 - 20 MMFD - TRIMMER	R1 - 75 000	25
C15 - 20	R2 - 200 000	25
C16 - 25	R3 - 5 000	25
C17 - 20	R4 - 50 000	25
C18 - 25	R5 - 10 000	1
C19 - 20	R6 - 500 000	25
C20 - 365	R7 - 200 000	25
C21 - .05 MFD - 500 VOLT	R8 - 1 000	25
C22 - .05	R9 - 10 000	25
C23 - 80 MMFD - TRIMMER	R10 - 50 000	25
C24 - 20	R11 - 5 000	25
C25 - 20	R12 - 5 000	25
C26 - 20	R13 - 100 000	25
C27 - 365	R14 - 200 000	25
C28 - 180	R15 - 5 000	25
C29 - 365	R16 - 200 000	25
C30 - 700	R17 - 5 000	25
C31 - 500	R18 - 5 MEG	25
C32 - 500	R19 - 25 000	25
C33 - 500	R20 - 50 000	25
C34 - 2000	R21 - 4 000	25
C35 - I.F.T.	R22 - 4 000	25
C36 - .05 MFD - 400 VOLT	R23 - 5 000	25
C37 - I.F.T.	R24 - 100 000	25
C38 - .05 MFD - 400 VOLT	R25 - 100 000	25
C39 - I.F.T.	R26 - 500 000	25
C40 - .05 MFD - 200 VOLT	R27 - 500 000	25
C41 - I.F.T.	R28 - 500 000	25
C42 - .05 MFD - 400 VOLT	R29 - 100 000	25
C43 - .05	R30 - 250 000	25
C44 - 25 MMFD - MICA	R31 - 50 000	25
C45 - I.E.C.	R32 - 50 000	25
C46 - .05 MFD - 400 VOLT	R33 - 10 000	25
C47 - 250 MMFD - MICA	R34 - 10 000	25
C48 - I.F.T.	R35 - 25 000	25
C49 - .05 MFD - 200 VOLT	R36 - 25 000	25
C50 - .05	R37 - 25 000	25
C51 - .05	R38 - 10 000	25
C52 - .05	R39 - 10 000	25
C53 - .05	R40 - 10 000	25
C54 - .05	R41 - 10 000	25
C55 - .05	R42 - 10 000	25
C56 - .05	R43 - 10 000	25

THE MIDWEST RADIO CORP.

909 BROADWAY, CINCINNATI, OHIO.

SCHEMATIC CIRCUIT DIAGRAM
OF THE
MODEL 10-34 SET



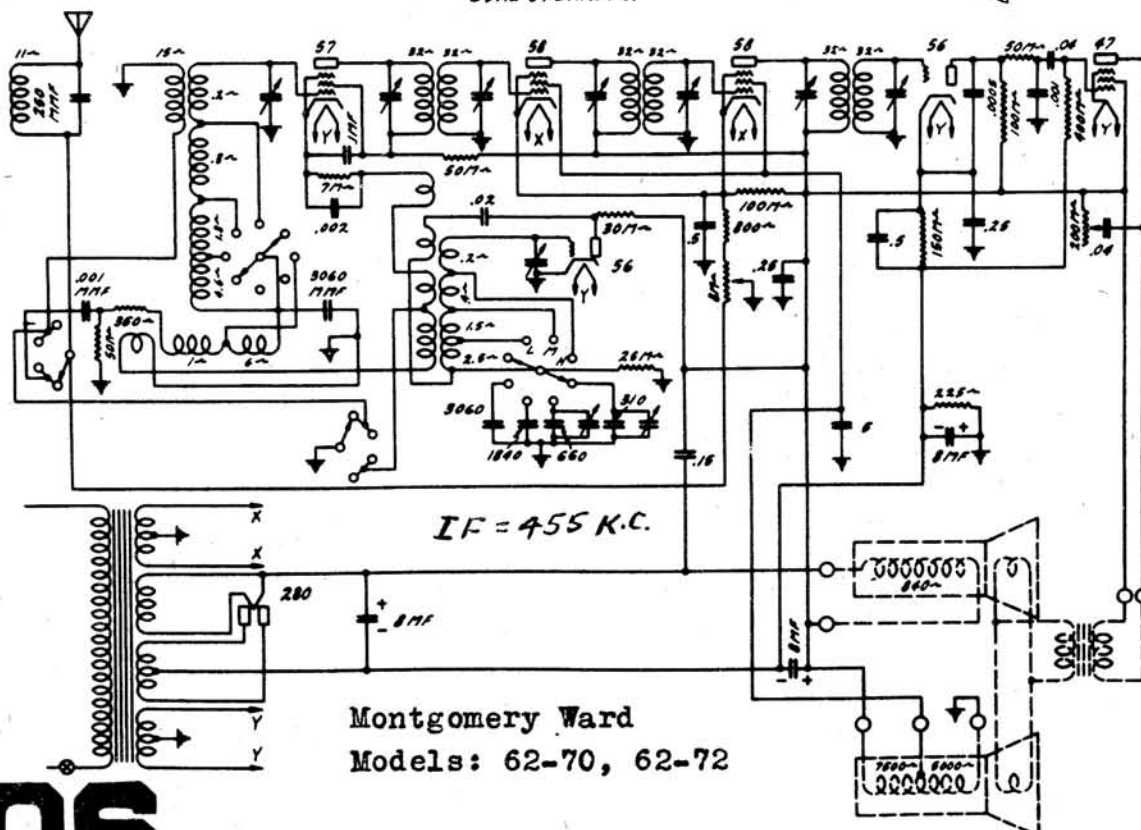
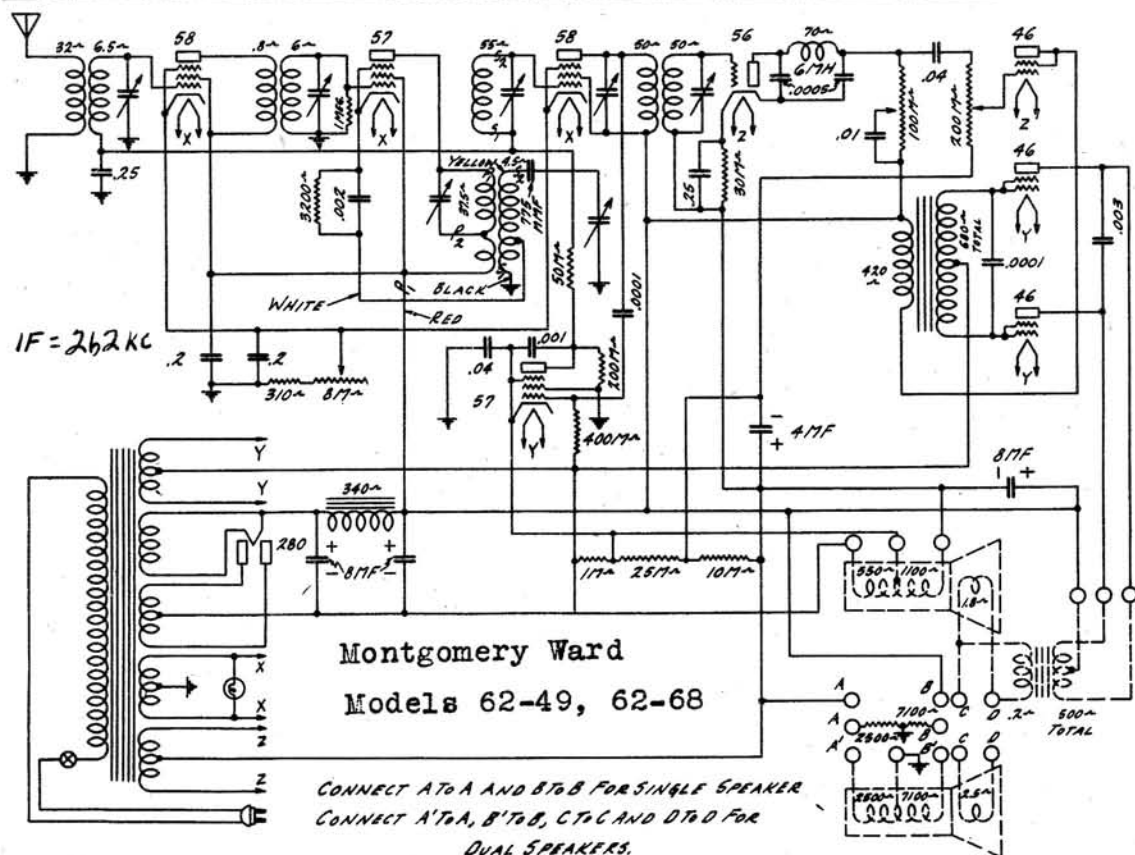
I.F. 450 KC.

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

105

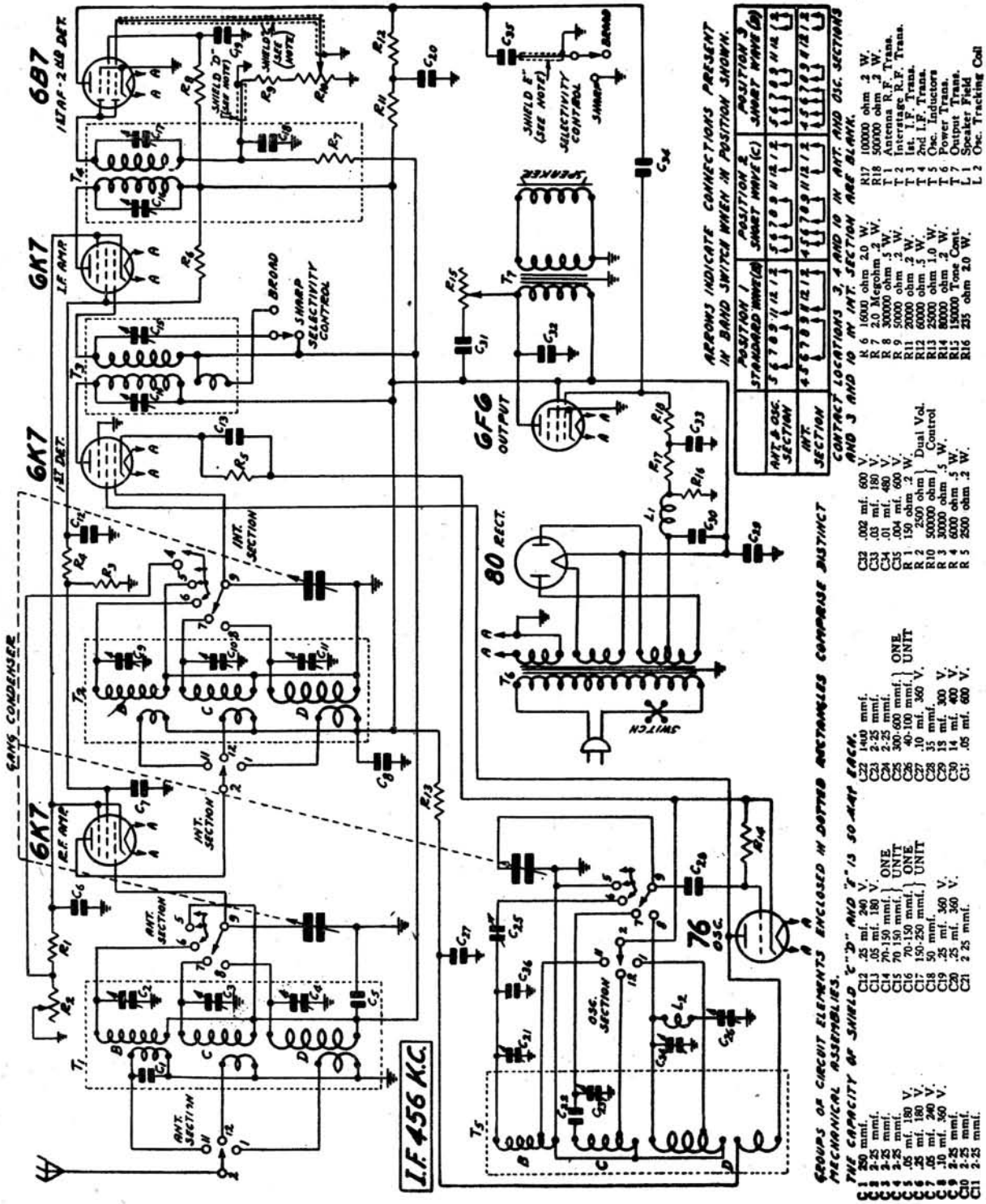
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

MONTGOMERY WARD & Co.



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Montgomery Ward Models 62-185, 62-187, 62-190, 62-196



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Montgomery Ward Radio Model 62-233

DESCRIPTION

Tubes

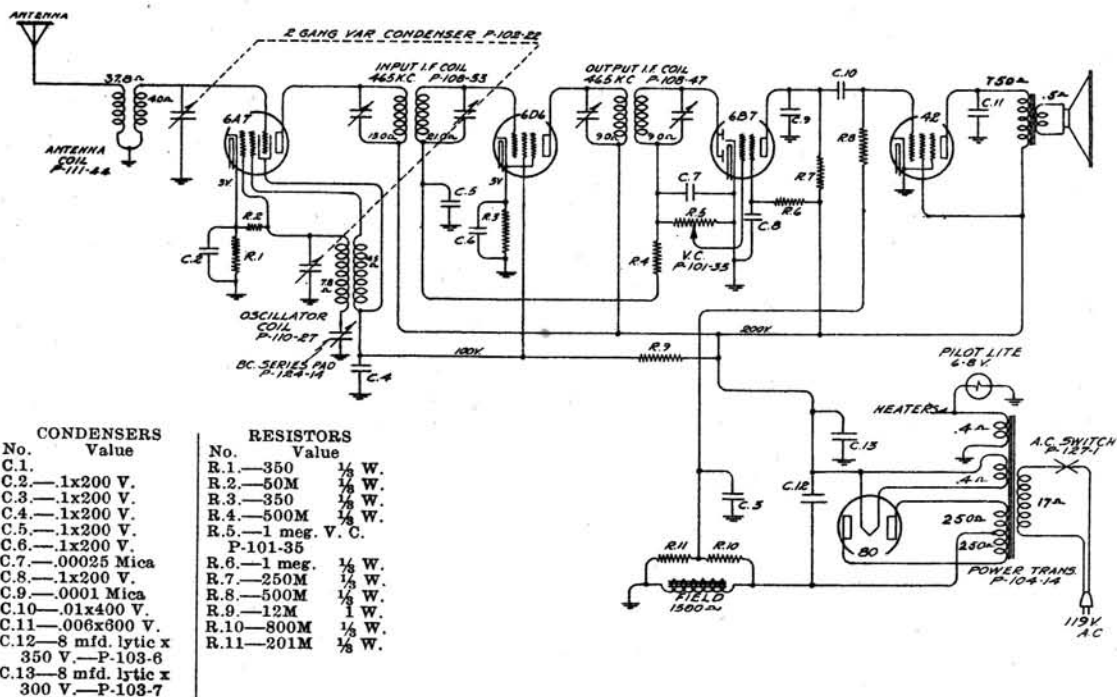
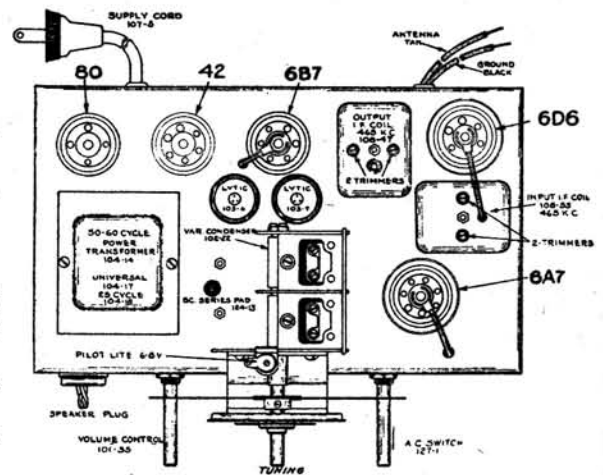
The Tube complement of this chassis is as follows:

- 1 Type 6A7—pentagrid electron coupled oscillator and first detector.
- 1 Type 6D6—remote cut-off pentode as I.F. amplifier.
- 1 Type 6B7—duplex diode pentode as diode detector, A.V.C. and A.F.
- 1 Type 42—pentode output tube.
- 1 Type 80—high vacuum rectifier.

Voltages taken from different points of circuit to chassis are measured with volume control full on, all tubes in their sockets and speaker connected, with a volt meter having a resistance of 1000 ohms per volt. These voltages are clearly indicated on the circuit diagram.

All voltages are measured with 119 volts on the primary of the power transformer.

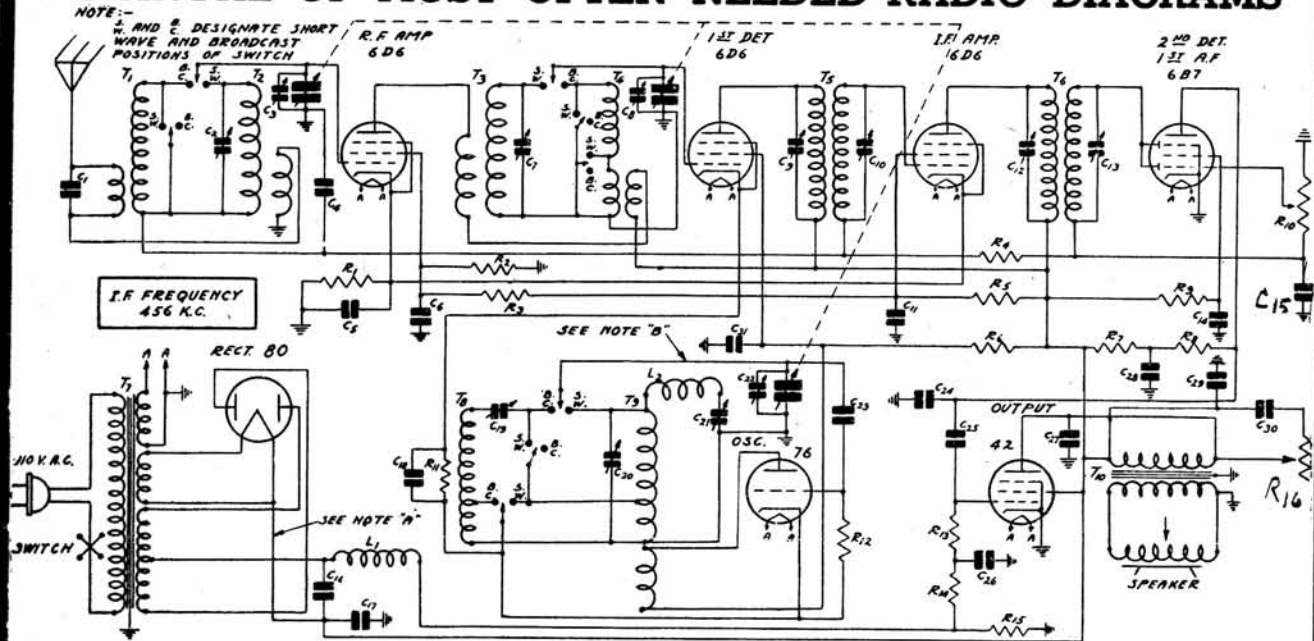
Resistance of coils and transformer windings are indicated in ohms on schematic circuit diagram.



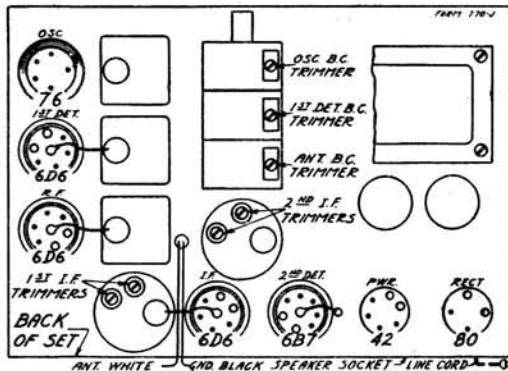
Service Notes

To check for open by-pass condensers, shunt each condenser with another of similar capacity and of the same voltage rating, which is known to be good, until the defective unit is located. Open by-pass condensers frequently cause oscillation and distorted tone. Defective and shorted electrolytic filter condensers cause excessive hum, motor-boating, low volume and a reduction in all D.C. voltages. Open or shorted electrolytic and by-pass condensers (across bias resistor of type 42 tube) will cause low volume and distorted tone.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



Montgomery Ward Models
 62-123, 62-131, 62-133,
 62-142, 62-144, 62-152,



Voltages at Sockets

LINE VOLTAGE — 115
 ANTENNA SHORTED TO GROUND

Type of Tube	Function	Across Fila. or Heater	Plate to Cath.	Screen to Cath.	Control Grid to Cath.	Normal Plate M. A.
6D6	R. F.	6.3	246	100	3.6(1)	5.3
6D6	1st Det.	6.6	237	97	8.0(2)	3.4
76	Osc.	6.3	115		0	4.8
6D6	I. F.	6.3	246	130	3.6(1)	8.3
6B7	2nd Det.	6.3	50(3)	40(3)	0	2.7
42	Power	6.3	230	245	17.0(4)	33.0
80	Rectifier	5.0				37.0 per plate

- (1) Cathode to ground
- (2) Subject to variation
- (3) Read with 1,000,000 ohm meter
- (4) As read across R15

Code	Capacity	Volts	Type
C1	.00025 mfd.		Moulded
C2	3-40 mmfd.		Ant. S. W. Trimmer
C3	(See 3 Gang Cond.)		Gang Trimmer
C4	.05 mfd.	200V.	Tubular
C5	.25 mfd.	200V.	Tubular
C6	.05 mfd.	400V.	Tubular
C7	3-40 mmfd.		1st Det. S. W. Trim
C8	(See 3 Gang Cond.)		Gang Trimmer
C9	90±30 mmfd. }		Dual Trimmer
C10	90±30 mmfd. }		Part of I. F. Assem.
C11	.25 mfd.	300V.	Tubular
C12	90±30 mmfd. }		Dual Trimmer
C13	90±30 mmfd. }		Part of I. F. Assem.
C14	.25 mfd.	400V.	Tubular
C15	.0001 mfd.		Moulded
C16	18.0 mfd.	300V.	Electrolytic Wet ..
C16	8.0 mfd.	450V.	Electrolytic Wet ..
C-17	8.0 mfd.	500V.	Electrolytic Wet ..
C17	14.0 mfd.	400V.	Electrolytic Wet ..
C18	.05 mfd.	200V.	Tubular
C19	300-500 mmfd.		600 K. C. Trimmer
C20	3-40 mmfd.		Osc. S. W. Trimmer
C21	70±30 mmfd.		6000 K. C. Trimmer
C22	(See 3 Gang Cond.)		Gang Trimmer
C23	.000035 mfd.		Moulded
C24	.002 mfd.	600V.	Tubular
C25	.01 mfd.	400V.	Tubular
C26	.03 mfd.	400V.	Tubular
C27	.002 mfd.	600V.	Tubular
C28	.25 mfd.	400V.	Tubular
C29	.1 mfd.	400V.	Tubular
C30	.05 mfd.	400V.	Tubular
C31	.1 mfd.	400V.	Tubular

Code	Resistance	Watts	Type
R1	200 ohm	.2	Flex. Wire Wound ..
R2	30,000 ohm	.5	Carbon
R3	6,000 ohm	.5	Carbon
R4	2.0 megohm	.2	Carbon
R5	16,000 ohm	1.5	Armored
R6	25,000 ohm	1.0	wire wound
R7	20,000 ohm	.2	Carbon
R8	60,000 ohm	.5	Carbon
R9	250,000 ohm	.5	Carbon
R10	500,000 ohm		Vol. Control & Switch
R11	2,500 ohm	.2	Carbon
R12	100,000 ohm	.2	Carbon
R13	500,000 ohm	.2	Carbon
R14	100,000 ohm	.2	Carbon
R15	235 ohm	2.0	Flex. Wire Wound ...
R16	150,000 ohm		Tone Control

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

WARDS AIRLINE RADIO

MODELS 62-425 and 62-265

The tube complement of this chassis is as follows:

- 1 Type 6A7—pentagrid oscillator and first detector.
- 1 Type 78 —remote cut-off pentode as I.F. amplifier.
- 1 Type 75 —duplex diode triode as diode detector, A.V.C. and A.F.
- 1 Type 41—pentode output tube.
- 1 Type 5Z4 or 5Y3—high vacuum rectifier.

ALIGNING INSTRUCTIONS:

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 voltages, defective tubes, condensers and resistors. In order to properly align this chassis, an oscillator (generator) is absolutely necessary. No aligning adjustments should be attempted with the chassis in the cabinet. Remove the knobs and the two bolts which are used to fasten the chassis.

All adjustments should be made with a non-metallic screw driver.

RESONANCE INDICATOR:

Use as a resonance indicator an output meter connected across the primary of the speaker input transformer, or by

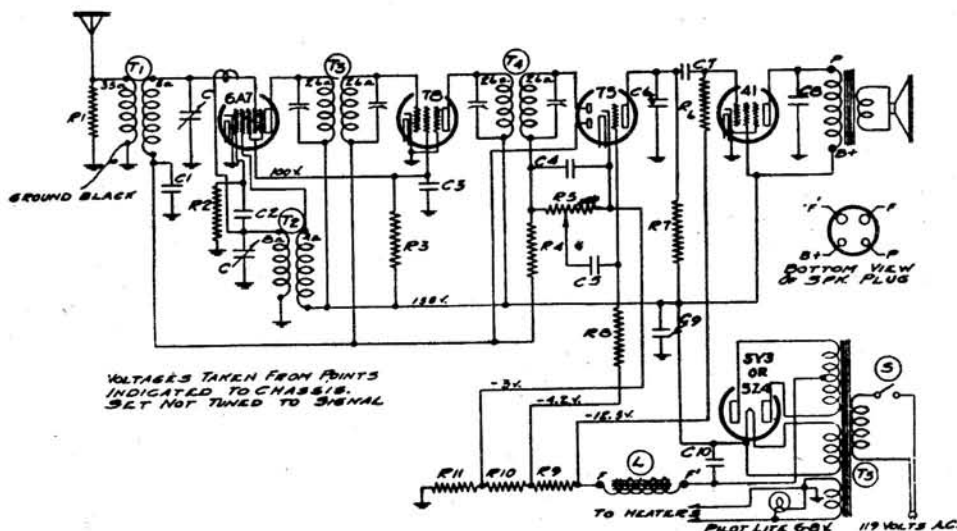
means of an adapter between the plate and screen terminals of the type 41 output tube. Use only enough signal to get a readily readable output. A low range output meter or the low scale of a multi-range voltmeter should be used.

ALIGNING I. F. TRANSFORMERS: (465 K. C.)

Connect external oscillator which has been adjusted to 465 kilocycles in series with .1 mfd. condenser, to the control grid cap of the type 6A7 tube. Ground the chassis to the oscillator. Adjust output I.F. transformer (No. 108-83) and input I.F. transformer (No. 108-82) to resonance. See label on bottom of cabinet for location of these transformers.

R. F. ALIGNMENT: (535-1720 K. C.)

1. With gang condenser in its minimum capacity position, plates entirely out of mesh, connect an external oscillator in series with a 200 mmf. condenser to tan antenna and black ground leads and make the following adjustments:
 - (a) With external oscillator set at 1720 kilocycles, adjust oscillator trimmer (rear of gang condenser).
 - (b) Re-set external oscillator to 1400 kilocycles, rotate condenser, pick up oscillator signal and adjust antenna trimmer to resonance (front section of gang condenser).
 - (c) Check sensitivity at 600 and 1000 kilocycles.



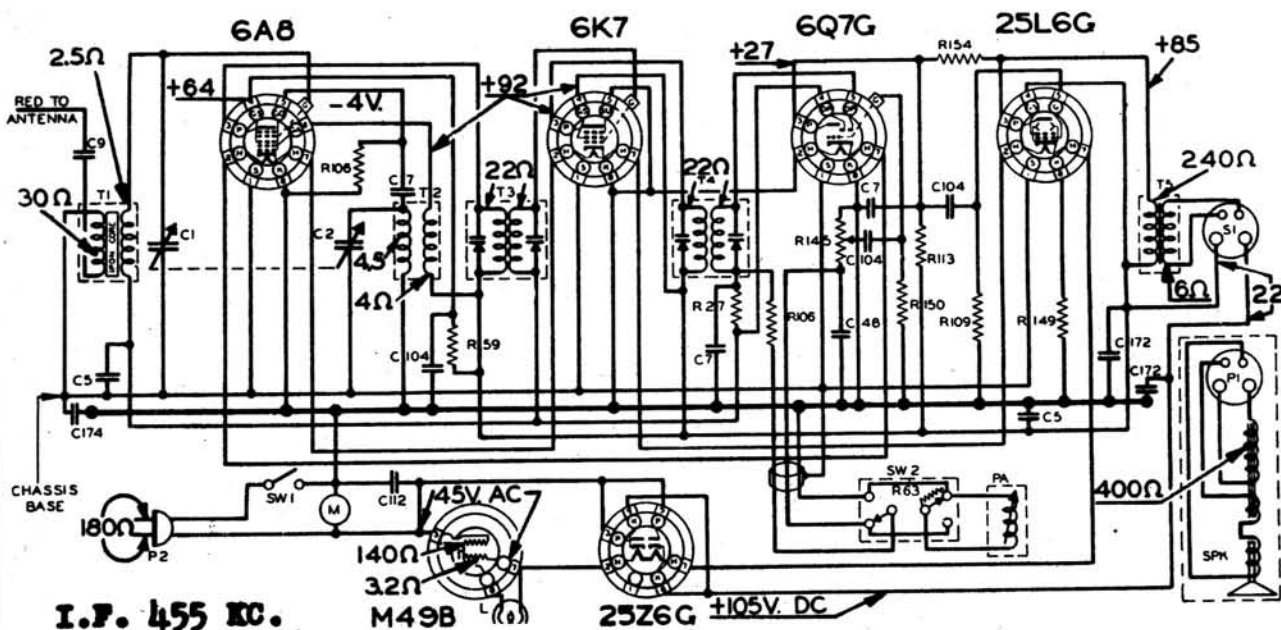
CONDENSERS			
Part No.	Schematic Reference	Description	No. Used In Set
BE 100-11	C-5:C-7	.01 x 400 Volt Tubular	2
BE 100-19	C-8	.006 x 600 Volt Tubular	1
BE 100-1	C-3	.1 x 400 Volt Tubular	1
BE 100-22	C-1	.05 x 200 Volt Tubular	1
BE 119-24	C-9:C-10	Dual 5 mfd. x 200 Volt Electrolytic	1
BE 129-5	C-6	.0001 Mica—Type MT—20%	1
BE 129-12	C-2:C-4	.00025 Mica—Type MT—20%	2
RESISTORS			
BE 106-29	R-9:R-10	(R9, 200 ohm); (R10, 33 ohm); (R11, 100 ohm) Metal clad resistor	1
BE 130-17	R-1	10M Ohm-1/3 Watt-20% -20 V. Carbon	1
BE 130-109	R-3	750M Ohm-1/4 Watt-20% -10 V. Carbon	1
BE 130-117	R-2	50M Ohm-1/10 Watt-20% -50 V. Carbon	1
BE 130-118	R-6	600M Ohm-1/3 Watt-20% -100 V. Carbon	1
BE 130-121	R-4:R-8	3.2 Meg Ohm-1/3 Watt-30%-100 V. Carbon	2
BE 130-122	R-7	210M Ohm-1/10 Watt-30%-20% -50 V. Carbon	1
COILS			
BE 108-82	T3	Input I.F. Coil Assem. Comp. with Can.	1
BE-108-83	T4	Output I.F. Coil Assem. Comp. with Can.	1
BE 110-46	T2	Oscillator Coil Assembly Complete	1
BE 111-58	T1	Antenna Coil Assembly Complete	1
SOCKETS			
BE 121-6		Six Prong Socket—Marked "41"	1
BE 121-6		Six Prong Socket—Marked "75"	1
BE 121-6		Six Prong Socket—Marked "78"	1
BE 121-7		Seven Prong Socket—Marked "6A7"	1
BE-121-9		Four Prong Socket—Marked "5PR"	1
BE 121-16		Five Prong Socket—Marked "5Z4"(Octal)	1

MISCELLANEOUS			
Part No.	Schematic Reference	Description	No. Used In Set
BE 101-54	R-5	Volume Control and Switch (1 meg ohm)	1
BE 102-33	C	Two Gang Variable Condenser	1
BE 107-39		Line Cord & Plug	1
BE 128-8		Ivory Bakelite Knob (Model 62-265)	2
BE 131-2		Brown Bakelite Knob	1
BE 131-8		Spring for above knob	2
DIAL PARTS LIST			
BE 107-28		Pilot Light Socket	1
BE 112-15		Dial Crystal only—less escutcheon	1
BE 112-160		Dial Pointer Complete with screw	1
BE 112-164		Brown Bakelite Escutcheon complete with crystal	1
BE 112-226		Ivory Bakelite Escutcheon complete with glass (Model 62-265)	1
BE 112-167A		Dial Scale	1
BE 116-13		6-8 Volt, T-51 Pilot Light Bulb	1
BE 117-59		Pointer Bushing Stud	1
BE 117-60		Pointer Bushing Assembly	1
BE 117-61		Drive Pulley	1
BE 117-68		Dial Bracket	1
BE 120-7A		Take-up Spring	1
BE 131-52		Drive Belt	1
BE 134-9		House Shoe Washer	1

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

ARVIN RADIO CHASSIS RE29 AND RE35

MODEL NUMBERS 58, 58A AND 88



RESISTORS		
Ref. No.	Part No.	Description
R59	17-4171	15,000 ohms 1 watt
R27	17-4788	2,000,000 ohms watt
R106	17-14171	50,000 ohms watt
R109	17-14174	500,000 ohms watt
R-113	17-14178	250,000 ohms watt
R149	17-14241	150 ohms watt
R150	17-14242	5,000,000 ohms watt
R154	17-14244	1,500,000 ohms 1 watt

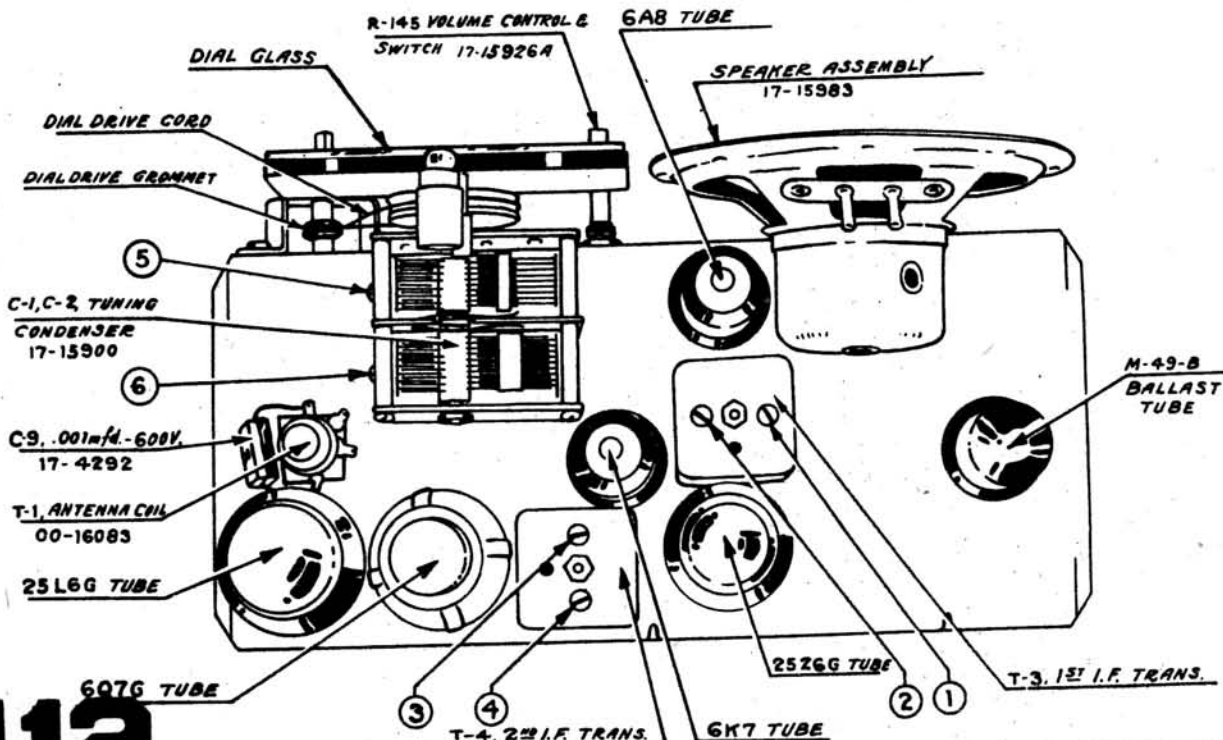
CAPACITORS		
Ref. No.	Part No.	Description
C7	17-2054	.0001 mfd. 600 volt
C104	17-4205	.01 mfd. 200 volt
C48	17-4207	.00025 mfd. 600 volt
C9	17-4292	.001 mfd. 600 volt
C5	17-14015	.05 mfd. 200 volt
C112	17-14139	.05 mfd. 400 volt
C172 A & B	17-14239	20-20 mfd. 150 volt
C174	17-14240	.2 mfd. 400 volt
C1-2	17-19900	Tuning Condenser

COILS AND TRANSFORMERS		
Ref. No.	Part No.	Description
T2	00-19779	Oscillator Coil
T-5	00-19980	Output Transformer
T3	00-16050	1st I.F. Transformer
T4	00-16051	2nd I.F. Transformer
T1	00-16083	Antenna Coil

SPRINGS, DIAL PARTS, GRILLETS & MICROWELDS

Part No.	Description
10-5181	Chassis Mounting Screw per dot.
28-5188	Dial drive pulley (rubber)
83-2357	Grille cloth (ivory rayon)
29-13470	Tuning shaft retaining washer
29-33583	Dial drive cord (16" long)
34-13360	Dial drive tabstop spring
17-14997	Needle cup
17-14998	Needle cup cover
19-15476	Tuning condenser drive pulley

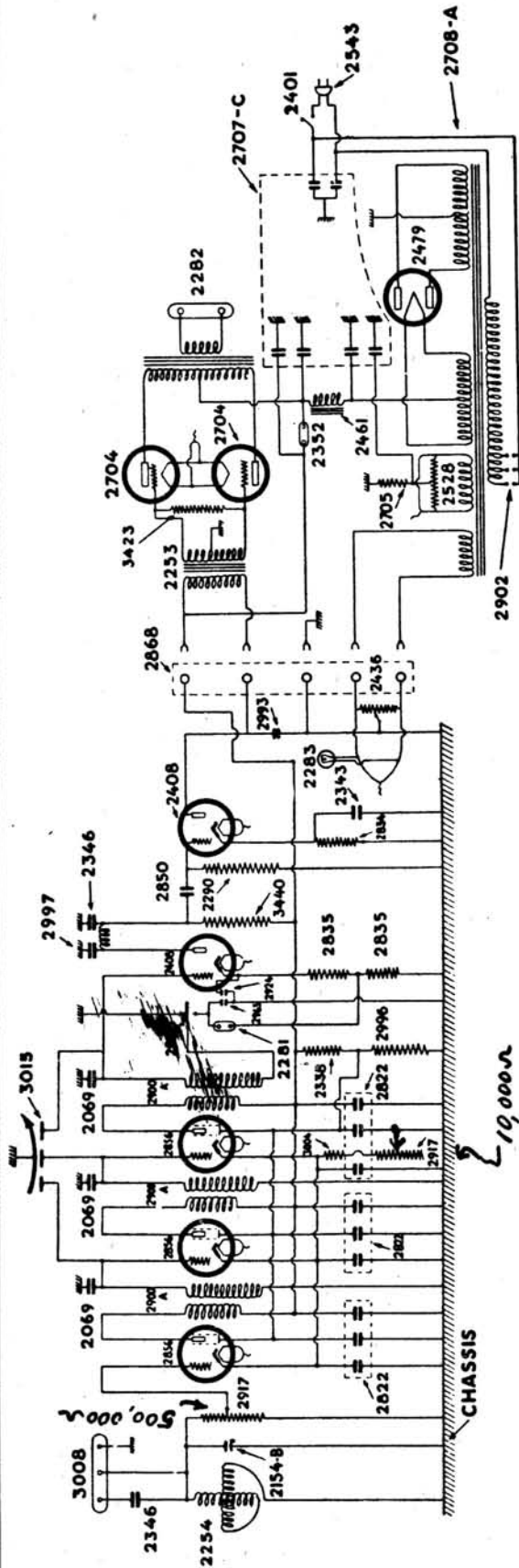
17-15791E	Line cord and plug
29-19905	Cabinet (58A - Ivory)
32-15907	Chassis bottom cover
29-19909	Cabinet (58-Black)
32-19915	Tuning shaft bracket
29-19916	Cabinet back cover
17-19926A	Volume control switch
29-19929	Knob (wood-walnut finish)
29-19937	Knob (walnut bachelite)
23-19958	Tuning Shaft
17-19973	Dial light socket and clip
81-19974	Dial glass (black background)
17-19983	Speaker (5" diameter)
17-19989	Speaker (6" diameter)
81-16015	Dial glass (brown background)
27-16020	Cabinet (Model 88)
17-16021	Phone pickup and arm
17-16022	Phone turntable and motor
29-16024	Knob (ivory bachelite)
17-16025	Radio-Phone switch
26-16048	Knob (Radio-Phone switch)



112

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



FIXED CONDENSERS

The fixed condensers used in Series 50 Receivers are listed below:

Part Number	Capacity, mfd.	Function
2346	.0001	Antenna series and detector plate by-pass.
2822	three 0.5 in one can	Screen grid, plate and cathode by-pass.
2924	1.0	Detector bias resistor by-pass.
2850	.01	AF coupling condenser.
2343	2.0	AF bias resistor by-pass.
2963	.002	Phonograph pick-up by-pass.
2993	.004	Audio by-pass.
2997	.0005	RF filter condenser.

National Carbon Co.

Models 50, 52, 53, 54

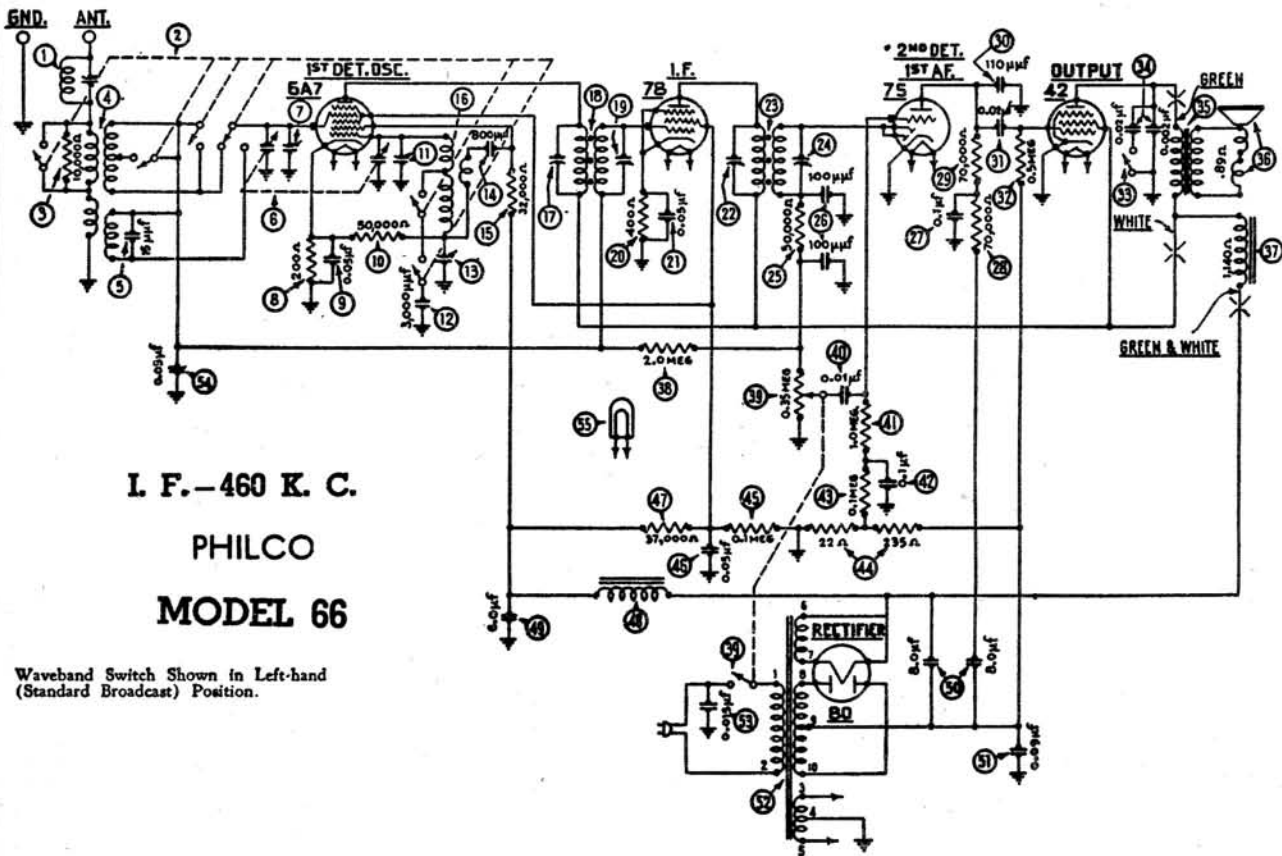
FIXED RESISTORS

Part Number	Resistance
2290	2 megohm
2835	4000 ohms
3440	125000 ohms
3004	200 ohms
2834	3000 ohms
2338	2500 ohms
2996	2250 ohms

VOLUME CONTROL: 500,000 Ω

AND 10,000 Ω

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



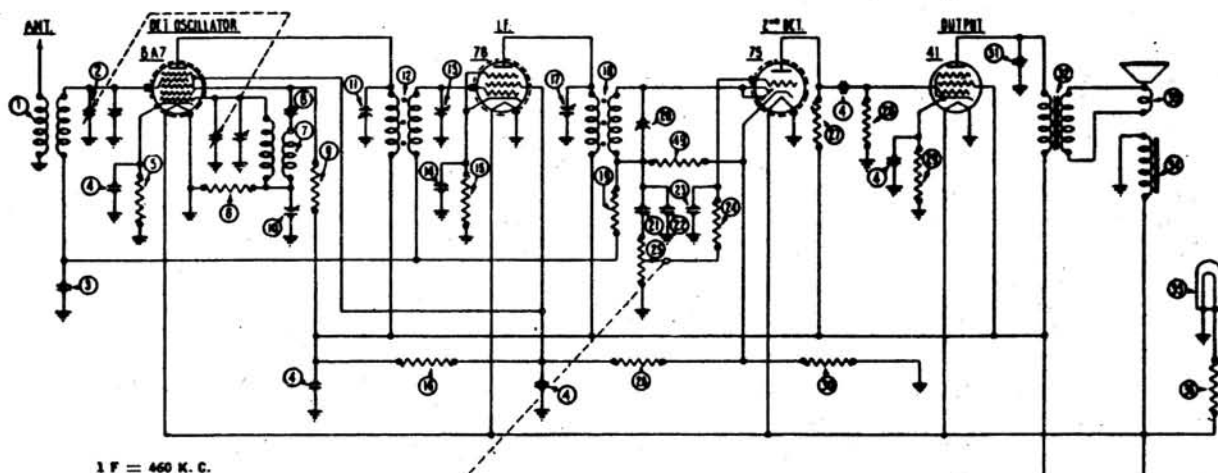
I. F. - 460 K. C.
PHILCO
MODEL 66

Waveband Switch Shown in Left-hand
(Standard Broadcast) Position.

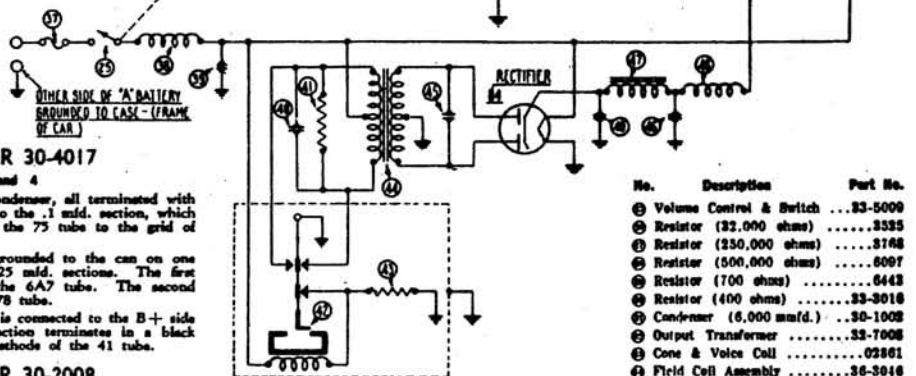
No. on Figs.	Description	Part No.	No. on Figs.	Description	Part No.
1	Wave Trap.....	33-5199	35	Output Transformer.....	32-7019
2	Wave-band Switch.....	42-1066	36	Voice Coil & Cone Assembly (S-12).....	36-3014
3	Resistor (10,000 ohms) (Brown-Black-Orange).....	33-1000	37	Field Coil and Pot. Assembly (S-12).....	36-3341
4	Antenna Transformer.....	32-1412	38	Resistor (2 Megohms) (Red-Black-Green).....	33-1025
5	Condenser (.000015 Mfd.).....	30-1030	39	Volume Control and On-Off Switch.....	33-5006
6	Tuning Condenser Assembly.....	31-1231	40	Condenser (.01 Mfd.) (Bakelite Block).....	3903-AB
7	Compensating Condenser (ANT).....	Part of 6	41	Resistor (1 Megohm) (Brown-Black-Green).....	33-1096
8	Resistor (200 ohms Flexible) (Red-Black-Brown).....	7217	42	Condenser (.1 Mfd.).....	30-4122
9	Condenser (.05 Mfd. Tubular).....	30-4020	43	Resistor (.1 Meg.) (White-White-Orange).....	6099
10	Resistor (50,000 ohms) (Green-Green-Orange).....	6098	44	Resistor (B. C. Wire-wound) (22, 235 ohms).....	33-3037
11	Compensating Condenser (OSC. HF).....	Part of 4	45	Resistor (.1 Meg.) (White-White-Orange).....	6099
12	Condenser (.003 Mfd. Mica).....	30-1022	46	Condenser (.05 Mfd. Tubular).....	30-4123
13	Compensating Condenser (Osc. I. F.).....	04000-S	47	Resistor (37,000 ohms) (Orange-Violet-Orange).....	33-1098
14	Condenser (.0008 Mfd. Mica).....	5378	48	Filter Choke.....	32-7018
15	Resistor (32,000 ohms) (Orange-Red-Orange).....	5279	49	Condenser (Electrolytic—6 Mfd.).....	30-2021
16	Oscillator Transformer.....	32-1413	50	Condenser (Electrolytic—8-8 Mfd.).....	30-2028
17	Compensating Condenser (1st I. F. Pri.).....	04000M	51	Condenser (.09 Mfd. Bakelite Block).....	4989-D
18	1st I. F. Transformer.....	32-1414	52	Power Transformer.....	8046
19	Compensating Condenser (1st I. F. Secondary).....	04000M	53	Condenser (.015 Mfd. Bakelite Block).....	3793-W
20	Resistor (400 ohms Flexible).....	33-3016	54	Condenser (.05 Mfd. Tubular).....	30-4020
21	Condenser (.05 Mfd. Tubular).....	30-4020	55	Dial Light.....	6608
22	Compensating Condenser (2d I. F. Primary).....	04000M	56	Four Prong Socket.....	7544
23	2d I. F. Transformer.....	32-1415	57	Six Prong Socket.....	27-6006
24	Compensating Condenser (2d I. F. Secondary).....	04000J	58	Tube Shield.....	28-1107
25	Resistor (50,000 ohms) (Green-Brown-Orange).....	6098	59	Chassis Mounting Screw.....	W-567
26	Condenser (.0001 Mfd. Twin Bakelite Block).....	8035-B	60	Chassis Mounting Washer (Metal).....	W-315
27	Condenser (.1 Mfd. Tubular).....	30-4170	61	Chassis Mounting Washer (Rubber).....	5189
28	Resistor (70,000 ohms) (Violet-Black-Orange).....	33-1115	62	Knob (Large).....	27-4061
29	Resistor (70,000 ohms) (Violet-Black-Orange).....	33-1115	63	Knob (Small).....	27-4052
30	Condenser (.00011 Mfd. Mica).....	30-1006	64	Dial Assembly.....	31-1234
31	Condenser (.02 Mfd. Tubular).....	30-4113	65	Dial Scale.....	27-5057
32	Resistor (500,000 ohms) (Yellow-White-Yellow).....	6097	66	A. C. Cord and Plug Assembly.....	L-943A
33	Tone Control.....	30-4192			
34	Condensers in Tone Control.....	Inside 33			

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

PHILCO AUTO RADIO MODEL 5



1 F = 460 K. C.



FILTER CONDENSER 30-4017

ⓐ on Figures 3 and 4

There are five sections in this filter condenser, all terminated with wire leads. The two green leads connect to the .1 mfd. section, which is used for coupling the plate output of the 75 tube to the grid of the 41 tube.

The remaining four sections are all grounded to the can on one side. The white leads connect to two .25 mfd. sections. The first section is connected to the cathode of the 6A7 tube. The second section is connected to the screen of the 78 tube.

The red lead from the .5 mfd. section is connected to the B+ side of all the plate circuits. A .20 mfd. section terminates in a black lead, which in turn is connected to the cathode of the 41 tube.

FILTER CONDENSER 30-2008

ⓑ on Figures 3 and 4

The condenser consists of two sections, a 4 mfd. section and an 8 mfd. section, both of them grounded on one side.

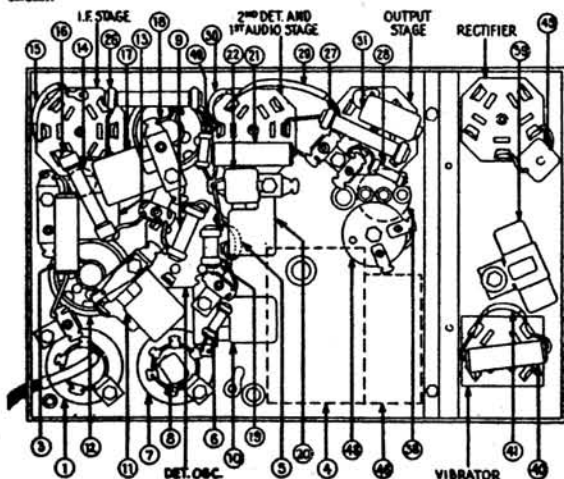
The 4 mfd. section terminates in a red lead, which is connected to the cathode of the 84 tube. The 8 mfd. section terminates in a green lead, which is connected between the two chokes in the rectifier filter circuit.

FIGURE 3

PARTS LIST

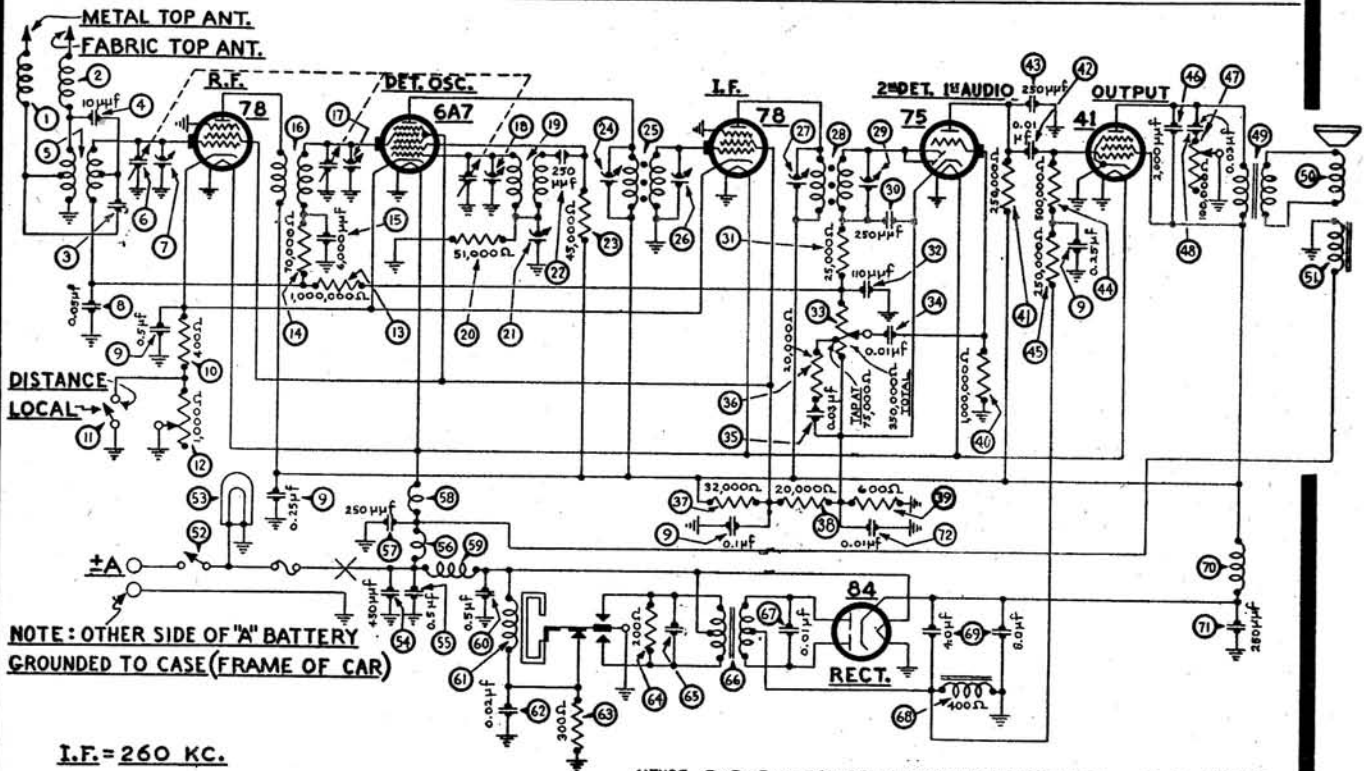
No.	Description	Part No.
ⓐ	Antenna Transformer	32-1084
ⓑ	Tuning Condenser	31-1019
ⓒ	Condenser (.05 mfd.)	30-4020
ⓓ	Filter Condenser (.25, .25, .5, .20 mfd.)	30-4017
ⓔ	Resistor (200 ohms)	7217
ⓕ	Resistor (13,000 ohms)	8287
ⓖ	Oscillator Transformer	32-1085
ⓗ	Condenser (250 mfd.)	3082
ⓓ	Resistor (15,000 ohms)	8208
ⓓ	Padder	040008
ⓓ	Padder	04000J
ⓓ	First I. F. Transformer	33-1086
ⓓ	Padder	04000Y
ⓓ	Condenser (.5 mfd.)	30-4018
ⓓ	Resistor (1000 ohms)	33-3017
ⓓ	Resistor (10,000 ohms)	4412
ⓓ	Padder	04000D
ⓓ	Second I. F. Transformer	33-1087
ⓓ	Resistor (1,000,000 ohms)	4409
ⓓ	Padder	040003
ⓓ	Condenser (.05 mfd.)	30-4020
ⓓ	Condenser (250 mfd.)	3082
ⓓ	Condenser (500 mfd.)	3016
ⓓ	Resistor (100,000 ohms)	6090

No.	Description	Part No.
ⓓ	Volume Control & Switch	33-5009
ⓓ	Resistor (32,000 ohms)	3335
ⓓ	Resistor (250,000 ohms)	3768
ⓓ	Resistor (500,000 ohms)	6097
ⓓ	Resistor (700 ohms)	6443
ⓓ	Resistor (400 ohms)	33-3016
ⓓ	Condenser (6,000 mfd.)	30-1002
ⓓ	Output Transformer	33-7006
ⓓ	Cone & Voice Coil	02801
ⓓ	Field Coil Assembly	36-3046
ⓓ	Pilot Lamp	6008
ⓓ	Resistor (7 ohms)	5110
ⓓ	Fuse (15 amp.)	7237
ⓓ	R. F. Choke	33-1083
ⓓ	Condenser (.5 mfd.)	30-4015
ⓓ	Condenser (.05 mfd.)	30-4020
ⓓ	Resistor (200 ohms)	7217
ⓓ	Vibrator	41-3196
ⓓ	Resistor (200 ohms)	7217
ⓓ	Transformer	33-7030
ⓓ	Condenser (6000 mfd.)	30-1002
ⓓ	Condenser (4 mfd., 8 mfd.)	30-3008
ⓓ	Filter Choke	32-7028
ⓓ	R. F. Choke (high voltage)	33-1078
ⓓ	Resistor (250,000 ohms)	4410
Control Assembly		
	(direct drive)	42-6008
	Tuning Shaft	28-8006
	Volume Shaft	28-8007
	Dial	27-5006
	Knob	03324
	Fuse	7237
	Fuse Insulator	27-7131
	Antenna Lead	38-5131
	"A" Lead	38-5296
	Bracket (control mtg.)	6035
	Studs (not mtg.)	28-8036
	Plugs (not mtg.)	W55A
	Strap (control mtg.)	04344



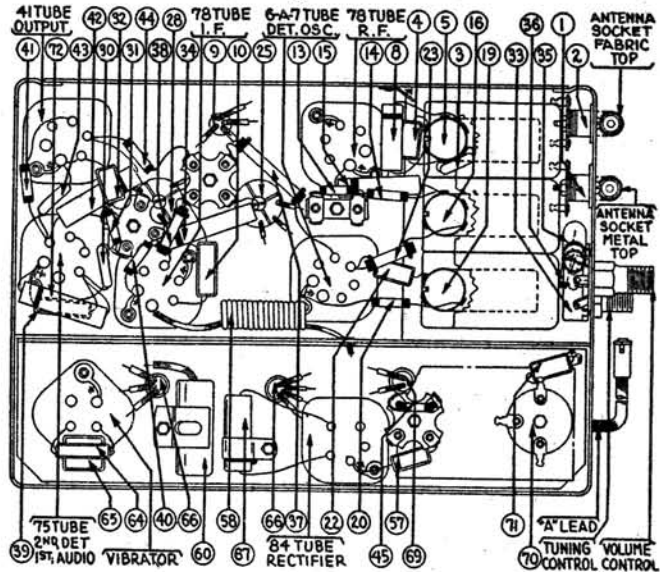
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

PHILCO AUTO RADIO MODEL T11



PARTS LIST

No.	Description	Part No.	No.	Description
①	Antenna Choke	38-7210	⑤	Tone Control
②	Antenna Choke	38-7210	⑥	Condenser (.03 mfd.)
③	Condenser (70 mmfd.)	30-1088	⑦	Output Transformer
④	Condenser (10 mmfd.)	30-1065	⑧	Cone & Voice Coil
⑤	Antenna Transformer	32-1925	⑨	Field Coil Assembly
⑥	Tuning Condenser	31-1674	⑩	On & Off Switch
⑦	First Padder (on Tun. Cond.)		⑪	Pilot Lamp
⑧	Condenser (.05 mfd.)	30-4444	⑫	Condenser (450 mmfd.)
⑨	Condenser (1.1-25-25-.5 mfd.)	30-4374	⑬	Condenser (.5 mfd.)
⑩	Resistor (400 ohms)	33-1211	⑭	"A" Choke
⑪	Sensitivity Control Switch	42-1140	⑮	Condenser (250 mmfd.)
⑫	Sensitivity Control	33-5129	⑯	Filament Choke
⑬	Resistor (1,000,000 ohms)	33-510344	⑰	Vibrator Choke
⑭	Resistor (70,000 ohms)	33-370334	⑱	Condenser (.5 mfd.)
⑮	Condenser (6,000 mmfd.)	30-4445	⑲	Vibrator
⑯	R. F. Transformer	32-1926	⑳	Condenser (.02 mfd.)
⑰	Second Padder (on Tun. Cond.)		㉑	Resistor (300 ohms)
⑱	Third Padder (on Tun. Cond.)		㉒	Resistor (200 ohms)
⑲	Oscillator Transformer	32-1927	㉓	Condenser (.05 mfd.)
⑳	Resistor (51,000 ohms)	33-351344	㉔	Power Transformer
㉑	Low Frequency Padder	31-6056	㉕	Condenser (.01 mfd.)
㉒	Condenser (250 mmfd.)	30-1032	㉖	Filter Choke
㉓	Resistor (45,000 ohms)	33-345344	㉗	Filter Condenser (4-8 mfd.)
㉔	Padder (Pri. 1st I. F. Trans.)		㉘	R. F. Choke
㉕	First I. F. Transformer	32-1260	㉙	Condenser (250 mmfd.)
㉖	Padder (Sec. 1st I. F. Trans.)		㉚	Condenser (.01 mfd.)
㉗	Padder (Pri. 2nd I. F. Trans.)			
㉘	Second I. F. Transformer	32-2164		
㉙	Padder (Sec 2nd I. F. Trans.)			
㉚	Condenser (250 mmfd.)	30-1032		
㉛	Resistor (25,000 ohms)	33-325344		
㉜	Condenser (110 mmfd.)	30-1031		
㉝	Volume Control (350,000 ohms)	33-5121		
㉞	Condenser (.01 mfd.)	30-4124		
㉟	Condenser (.03 mfd.)	30-4449		
㊱	Resistor (20,000 ohms)	33-320334		
㊲	Resistor (32,000 ohms)	33-332434		
㊳	Resistor (20,000 ohms)	33-320334		
㊴	Resistor (600 ohms)	33-1212		
㊵	Resistor (1,000,000 ohms)	33-510344		
㊶	Resistor (250,000 ohms)	33-424344		
㊷	Condenser (.01 mfd.)	30-4145		
㊸	Condenser (250 mmfd.)	30-1032		
㊹	Resistor (500,000 ohms)	33-440344		
㊺	Resistor (250,000 ohms)	33-424344		
㊻	Condenser (2,000 mmfd.)	30-4177		



CHANGES — "Run Numbers" are stamped on the chassis sub-base for identification. These "Run Numbers" are changed consecutively as major changes are made in the Receiver wiring and parts.

RUN No. 3 — A 250 mmfd. condenser has been added to the Receiver. One side is connected between resistors ⑫ and ⑬ and the other side to ground.

RUN No. 4 — The 250 mmfd. condenser added in Run No. 3 has been removed.

RUN No. 5 — The Antenna Transformer ⑤ is replaced with a new type having the same part number. It can be identified by the red and blue paint marks on the fibre.

RUN No. 6 — Condenser ⑪ has been removed from the cathode side of the "B" choke ⑮ and connected to the plate side of choke ⑮.

RUN No. 6A — A 250 mmfd. condenser has been added to the Receiver. One side is connected between resistors ⑫ and ⑬ and the other side to ground.

RUN No. 8 — Condenser ⑥ removed (1250 mmfd.). Part No. 30-4020 added. (.05 mfd.).

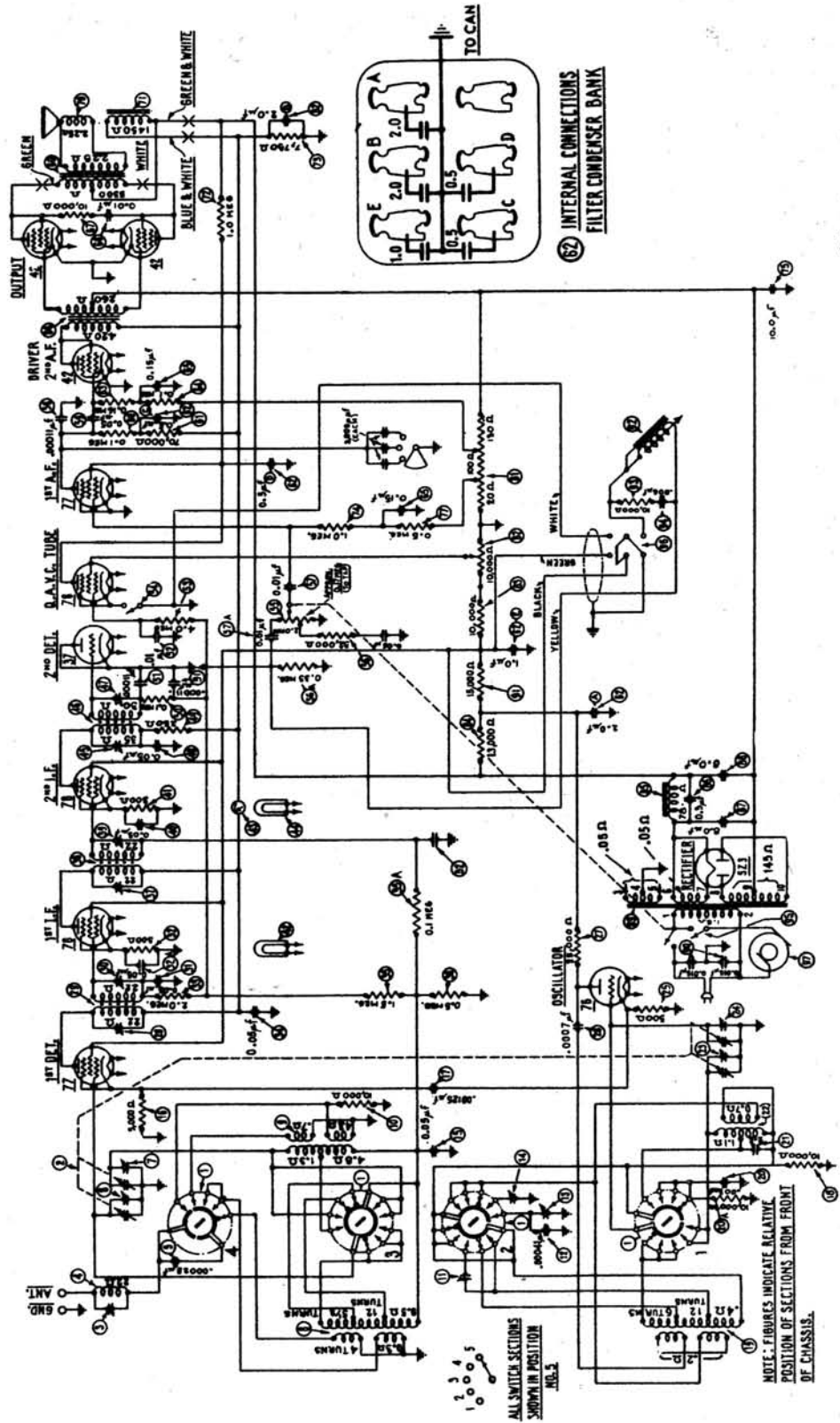
RUN No. 13 — The 250 mmfd. condenser that was added in Run No. 6A has been removed.

RUN No. 14 — Resistor ⑩ removed (400 ohms). Part No. 33-1225 added. (350 ohms).

No major changes were involved in Run Nos. 2, 7, 9, 10, 11, 12.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

MODEL 16

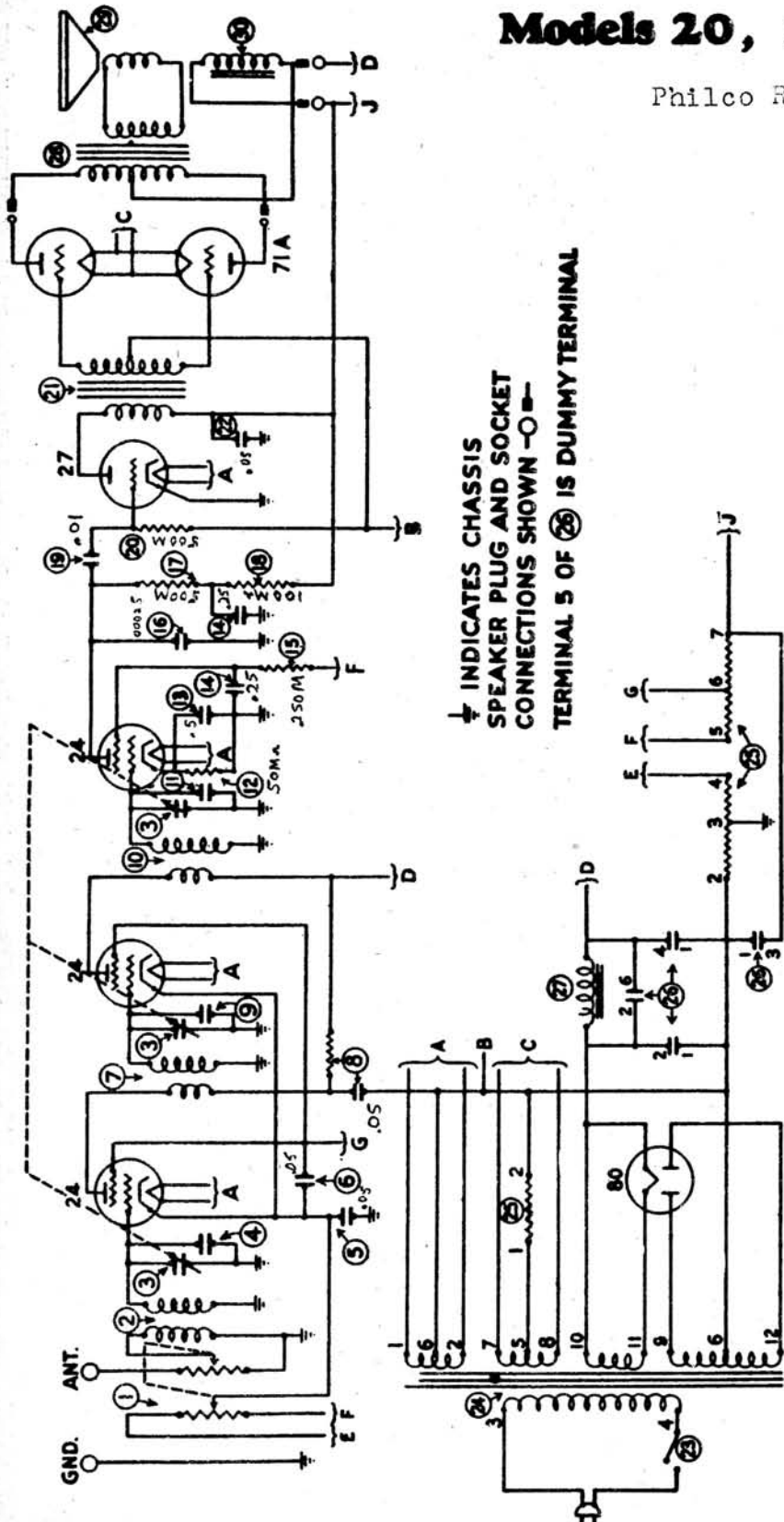


Philco Model 16
I.F. 460 KC.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Models 20, 20-A and 21

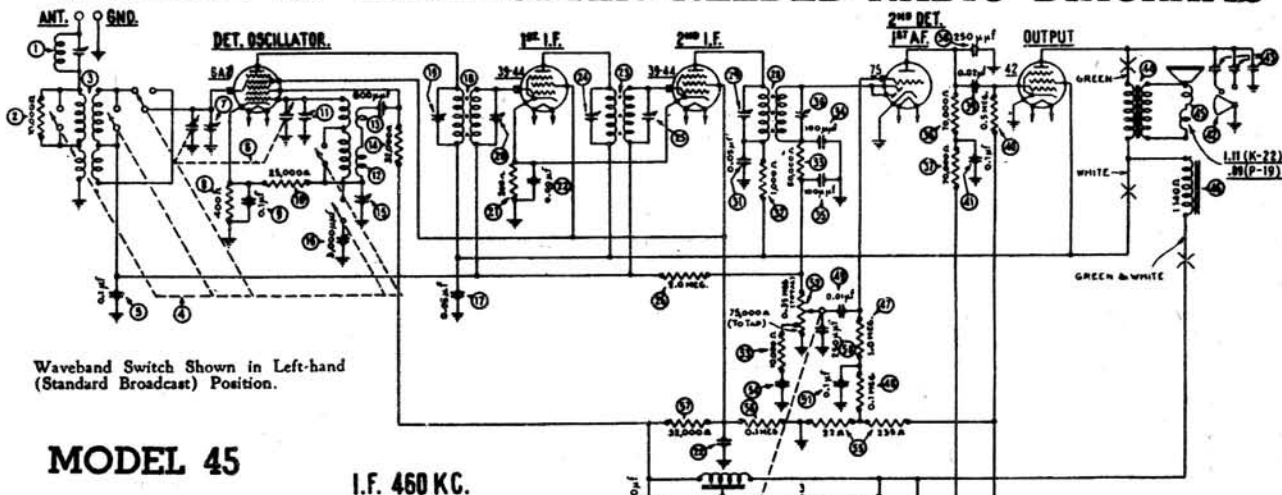
Philco Radio



△ INDICATES CHASSIS
SPEAKER PLUG AND SOCKET
CONNECTIONS SHOWN - ○ -
TERMINAL 5 OF 24 IS DUMMY TERMINAL

No.	Description	Part No.
①	Volume Control	4094
②	First R. F. Transformer	3884-N
③	Tuning Condenser	4200-A
④	First Compensating Condenser (Part of Tuning Condenser Assembly)	4237
⑤	By-Pass Condenser (.05)	3583
⑥	By-Pass Condenser (.05)	3587
⑦	Second R. F. Transformer	3768
⑧	By-Pass Condenser (.05)	3082
⑨	By-Pass Condenser (.00025)	3769
⑩	Second Compensating Condenser (Part of Tuning Condenser Assembly)	3767
⑪	Resistor (50,000)	3903-F
⑫	Resistor (250,000)	3769
⑬	Resistor (500,000)	3767
⑭	Resistor (100,000)	3903-F
⑮	Resistor (1,000,000)	3769
⑯	Resistor (.01)	4232
⑰	Resistor (500,000)	3769
⑱	Push-pull Input Transformer	4232
⑲	By-Pass Condenser (.05)	3615-L
⑳	On-off Switch	4095
㉑	Third Compensating Condenser (Part of Tuning Condenser Assembly)	4237
㉒	Resistor (50,000)	4237
㉓	By-Pass Condenser (.5)	3583
㉔	By-Pass Condenser (double .25)	3587
㉕	Resistor (250,000)	3768
㉖	By-Pass Condenser (.00025)	3082
㉗	Resistor (500,000)	3769
㉘	Resistor (100,000)	3767
㉙	Resistor (.01)	3903-F
㉚	Resistor (500,000)	3769
㉛	Push-pull Input Transformer	4232
㉜	By-Pass Condenser (.05)	3615-L
㉝	On-off Switch	4095
㉞	Power Transformer (50-60 cycle)	4234
㉟	Power Transformer (25-60 cycle)	4268
㊱	B. C. Resistor	4230
㊲	Filter Condenser (50-60 cycle)	4235
㊳	Filter Condenser (25-60 cycle)	4269
㊴	Filter Choke	4231
㊵	Push-Pull Output Transformer	2766
㊶	Voice Coil and Cons.	2768-B
㊷	Field Coil	2768

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



Waveband Switch Shown in Left-hand (Standard Broadcast) Position.

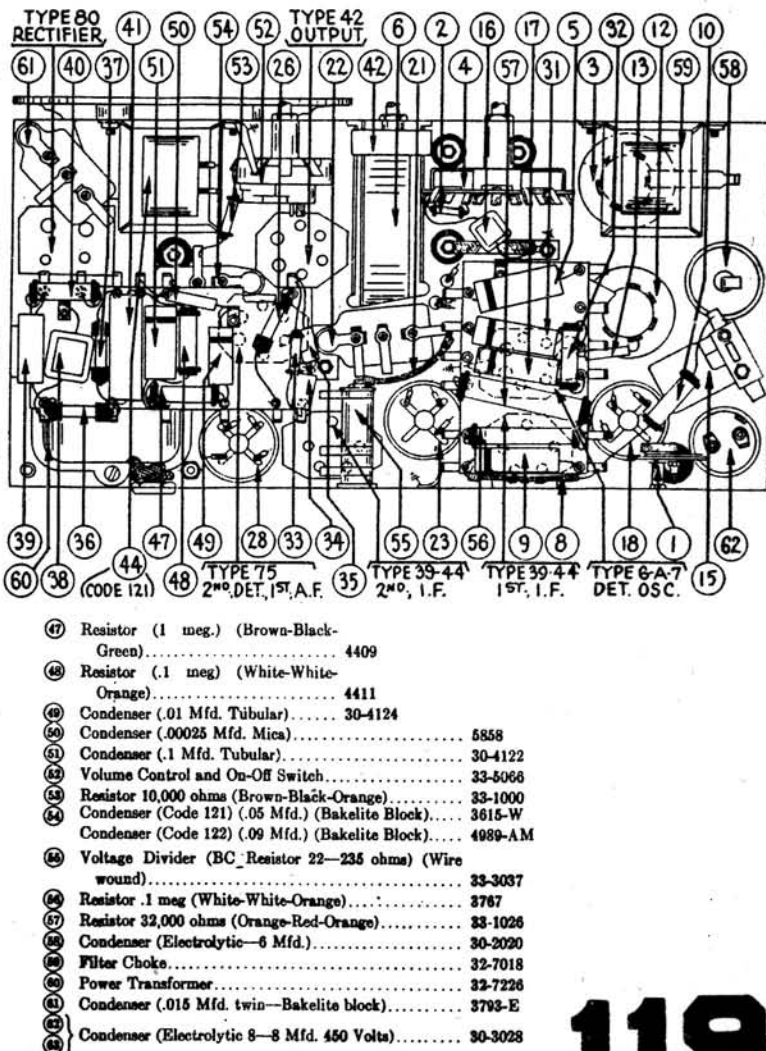
MODEL 45

I.F. 450 KC.

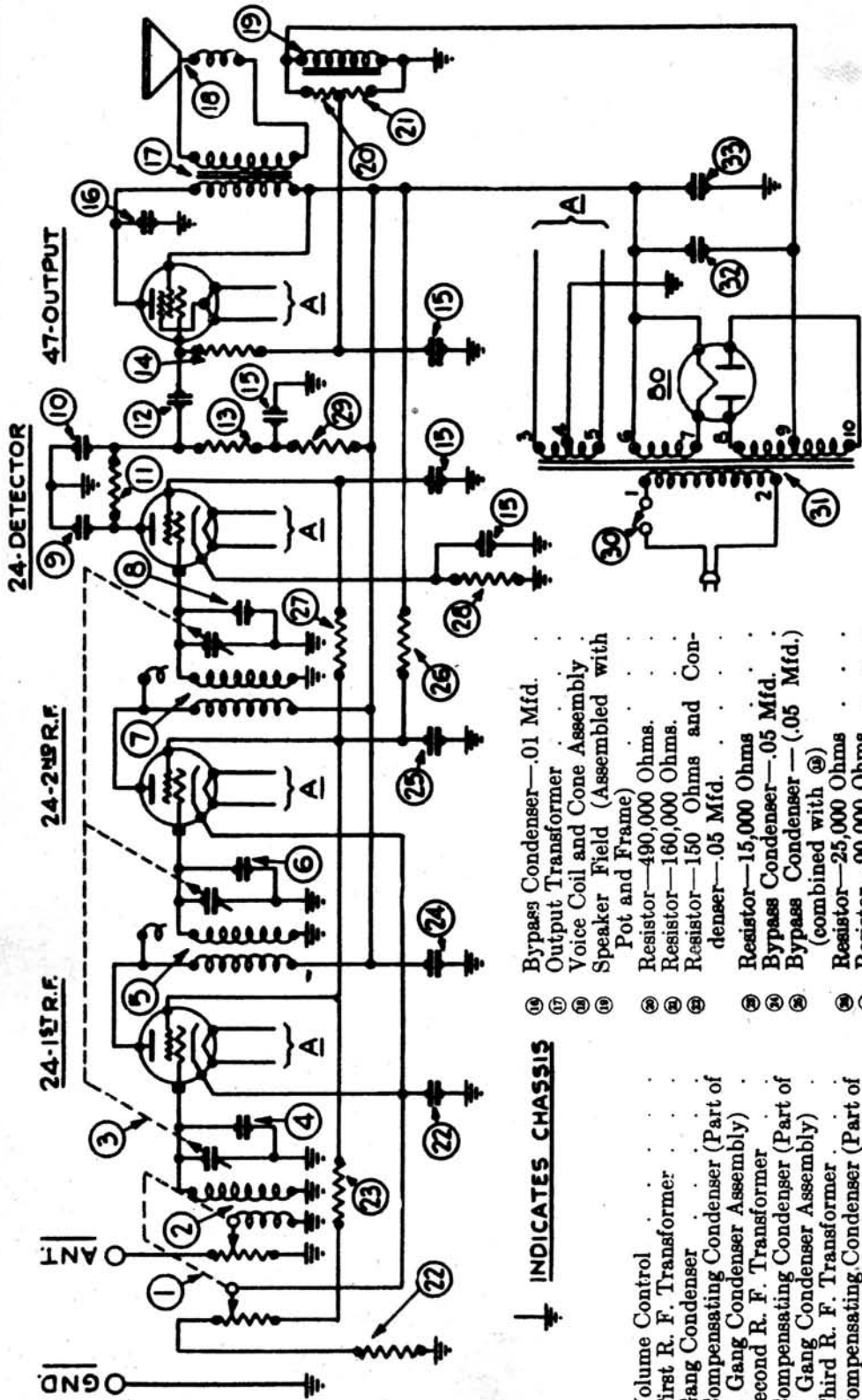
No. on Figs.	Description	Part No.
1	Wave Trap.....	38-5199
2	Resistor (10,000 ohms) (Brown-Black-Orange).....	4412
3	Antenna Transformer.....	32-1360
4	Wave Band Switch.....	42-1062
5	Condenser (.1 Mfd.) (Tubular).....	30-4122
6	Tuning Condenser Assembly.....	31-1169
7	Compensating Condenser (Det.).....	Part of 6
8	Resistor (400 ohms—Flexible wire wound).....	33-3016
9	Condenser (.1 Mfd.) (Tubular).....	30-4122
10	Resistor (25,000 ohms) (Red-Green-Orange).....	4516
11	Compensating Condenser (Osc. H. F.).....	Part of 6
12	Oscillator Transformer.....	32-1361
13	Condenser (.0008 Mfd.—Mica).....	5878
14	Resistor (32,000 ohms) (Orange-Red-Orange).....	3525
15	Compensating Condenser (Osc. L. F.).....	04000-S
16	Condenser (.003 Mfd.—Mica).....	7301
17	Condenser (.06 Mfd.—Tubular).....	30-4123
18	1st I. F. Transformer.....	32-1363
19	Compensating Condenser (1st I. F. Primary).....	Part of 18
20	Compensating Condenser (1st I. F. Secondary).....	Part of 18
21	Resistor (500 ohms—Flexible wire wound).....	6977
22	Condenser (.09 Mfd. twin) (Bakelite block).....	4989-Z
23	2d I. F. Transformer.....	32-1363
24	Compensating Condenser (2d I. F. Primary).....	Part of 23
25	Compensating Condenser (2d I. F. Secondary).....	Part of 23
26	Resistor (2 megs.) (Red-Black-Green).....	5872
27	Pilot Lamp.....	6608
28	3d I. F. Transformer.....	32-1364
29	Compensating Condenser—3d I. F. Primary.....	Part of 28
30	Compensating Condenser—3d I. F. Secondary.....	Part of 28
31	Condenser (.06 Mfd. Tubular).....	30-4123
32	Resistor (1,000 ohms) (Brown-Black-Red).....	5837
33	Resistor (50,000 ohms) (Green-Brown-Orange).....	4518
34	Condenser (.0001 Mfd. Mica).....	30-1031
35	Condenser (.0001 Mfd. Mica).....	30-1031
36	Resistor (70,000 ohms) (Violet-Black-Orange).....	5385
37	Resistor (70,000 ohms) (Violet-Black-Orange).....	5385
38	Condenser (.00025 Mfd. Mica).....	5858
39	Condenser (.02 Mfd. Tubular).....	30-4113
40	Resistor (.5 meg.) (Yellow-White-Yellow).....	4517
41	Condenser (.1 Mfd.) (Tubular).....	30-4170
42	Tone Control.....	30-4178
43	Condensers.....	Inside 42
44	Output Transformer (Code 121).....	32-7041
45	Output Transformer (Code 122).....	2580
46	Voice Coil & Cone Assembly P-19 (Compact).....	36-3027
47	K-22 (Lowboy).....	36-3174
48	Field Coil and Pot Assembly P-19 (Compact).....	36-3298
49	K-22 (Lowboy).....	02767

Philco

Note: Resistor 29 is 500 ohms in current production.



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

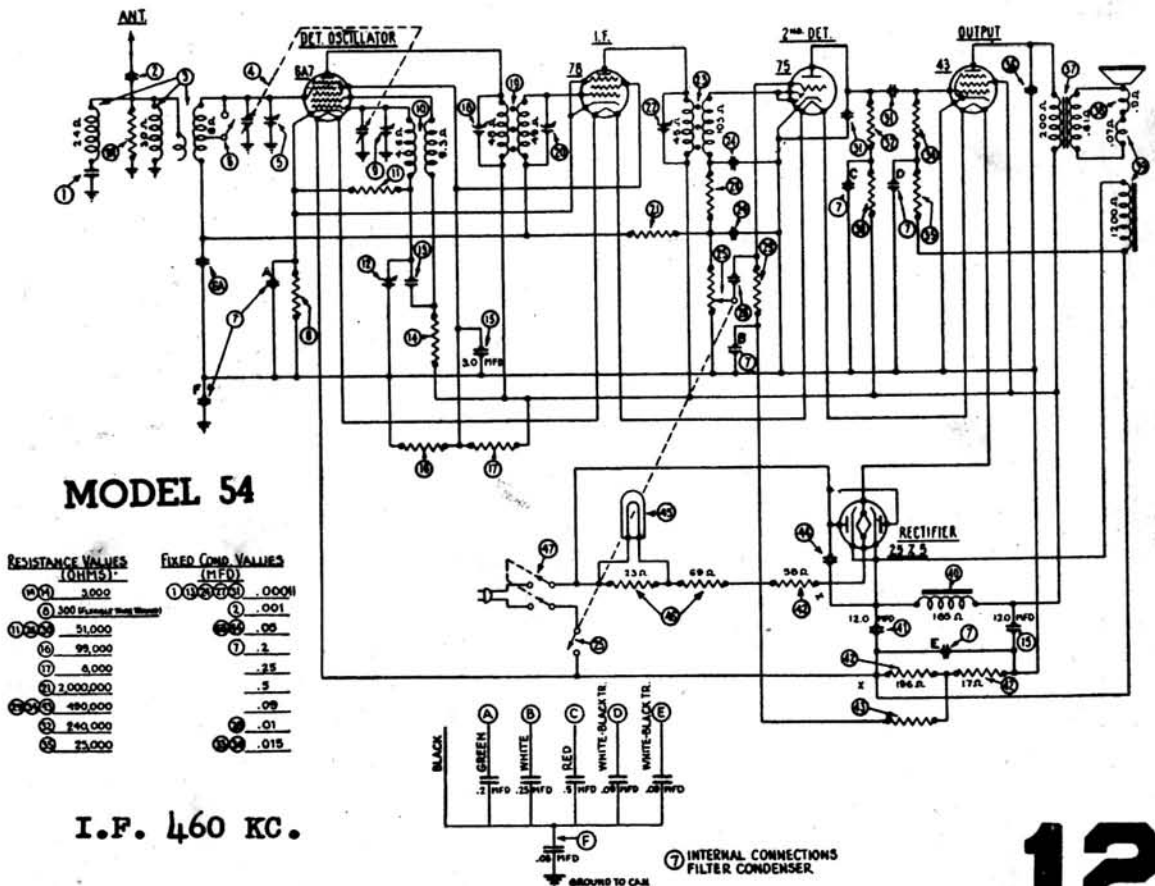
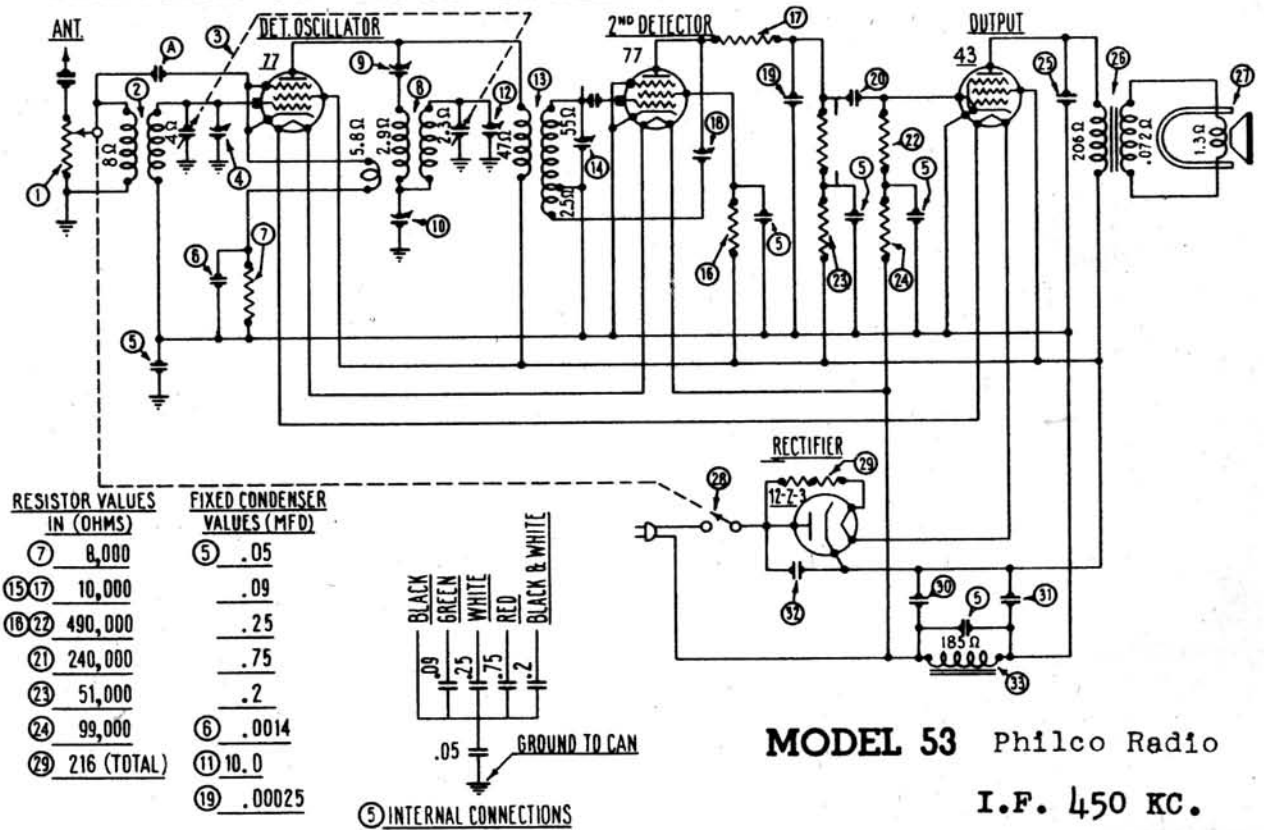


Philco Radio

MODELS 50 AND 50-A

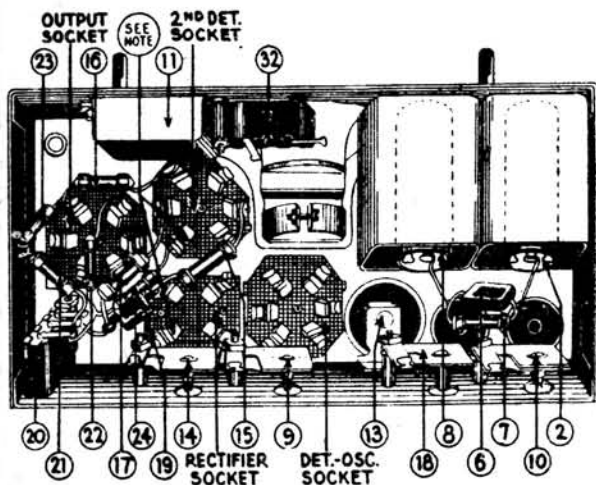
- INDICATES CHASSIS**
- ① Volume Control
 - ② First R. F. Transformer
 - ③ Gang Condenser
 - ④ Compensating Condenser (Part of Gang Condenser Assembly)
 - ⑤ Second R. F. Transformer
 - ⑥ Compensating Condenser (Part of Gang Condenser Assembly)
 - ⑦ Third R. F. Transformer
 - ⑧ Compensating Condenser (Part of Gang Condenser Assembly)
 - ⑨ Condenser—250 Mmf.
 - ⑩ Resistor—10,000 Ohms
 - ⑪ Condenser—.01 Mfd.
 - ⑫ Resistor—240,000 Ohms
 - ⑬ Resistor—490,000 Ohms
 - ⑭ Bypass Condenser (.15 Mfd., 25-40 cycles
 - ⑮ Mfd., 2-5 Mfd., .1 Mfd.) 50-60 cycles
 - ⑯ Bypass Condenser—.01 Mfd.
 - ⑰ Output Transformer
 - ⑱ Voice Coil and Cone Assembly
 - ⑲ Speaker Field (Assembled with Pot and Frame)
 - ⑳ Resistor—490,000 Ohms.
 - ㉑ Resistor—160,000 Ohms.
 - ㉒ Resistor—150 Ohms and Condenser—.05 Mfd.
 - ㉓ Resistor—15,000 Ohms
 - ㉔ Bypass Condenser—.05 Mfd.
 - ㉕ Bypass Condenser (combined with ㉔)
 - ㉖ Resistor—25,000 Ohms
 - ㉗ Resistor—99,000 Ohms
 - ㉘ Resistor—32,000 Ohms
 - ㉙ Resistor—99,000 Ohms
 - ㉚ On-Off Switch
 - ㉛ Power Transformer—50-60 cycles
 - ㉜ Electrolytic Condenser—6 Mfd.—50-60 cycles
 - ㉝ Electrolytic Condenser—10 Mfd.—25-40 cycles
 - ㉞ Electrolytic Condenser—6 Mfd.—

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

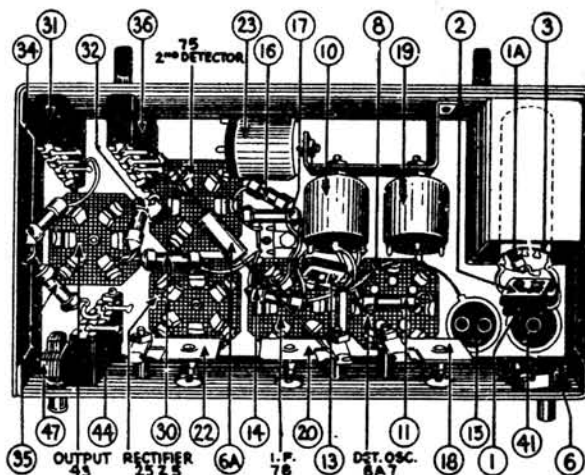
Model 53



No. on Figs. 2, 3 and 4	Description	Part No.
①	Volume Control	33-5001
②	Antenna Transformer	32-1000
③	Tuning Condenser Assembly	31-1000
④	Compensating Condenser (Part of Tuning Condenser Assembly)	
⑤	Filter Condenser Block (.05-.09-.25-.75-2 Mfd.)	30-4000
⑥	Condenser (.0014 Mfd.)	7007
⑦	Resistor (8,000 ohms) Gray-Black-Red	5838
⑧	Oscillator Transformer	32-1001
⑨	Compensating Condenser (I.F. Primary)	04000-A
⑩	Compensating Cond. (Low Frequency)	04000-S
⑪	Condenser (10.0 Mfd.)	7440
⑫	Compensating Condenser (Part of Tuning Condenser Assembly)	
⑬	I.F. Transformer	32-1002
⑭	Compensating Cond. (I.F. Secondary)	04000-A
⑮	Resistor (10,000 ohms) Brown-Black-Orange	4412
⑯	Resistor (490,000 ohms) Yellow-White-Yellow	4517
⑰	Resistor (10,000 ohms) Brown-Black-Orange	4412
⑱	Compensating Condenser (Regeneration)	04000
⑲	Condenser (.00025 Mfd.)	3082
⑳	Condenser (.01 Mfd.)	3903-AM
㉑	Resistor (240,000 ohms) Red-Yellow-Yellow	4410
㉒	Resistor (490,000 ohms) Yellow-White-Yellow	4517
㉓	Resistor (51,000 ohms) Green-Brown-Orange	4518
㉔	Resistor (99,000 ohms) White-White-Orange	4411
㉕	Condenser (.015 Mfd.)	3793-S
㉖	Output Transformer	32-7000
㉗	Voice Coil and Cone Assembly	36-3000
㉘	A. C. Switch (Part of Volume Control Assembly)	33-5001
㉙	Resistors (2 Wire Wound-108 ohms each)	33-3000
㉚	Electrolytic Condenser (8 Mfd.)	33-3001
㉛	Electrolytic Condenser (8 Mfd.)	30-2000
㉜	Condenser (.05 Mfd.)	3615-E
㉝	Filter Choke	32-7001
㉞	Tube Shield	7172
㉟	Knobs (Both Controls)	03064
㊱	Four Prong Socket	7544

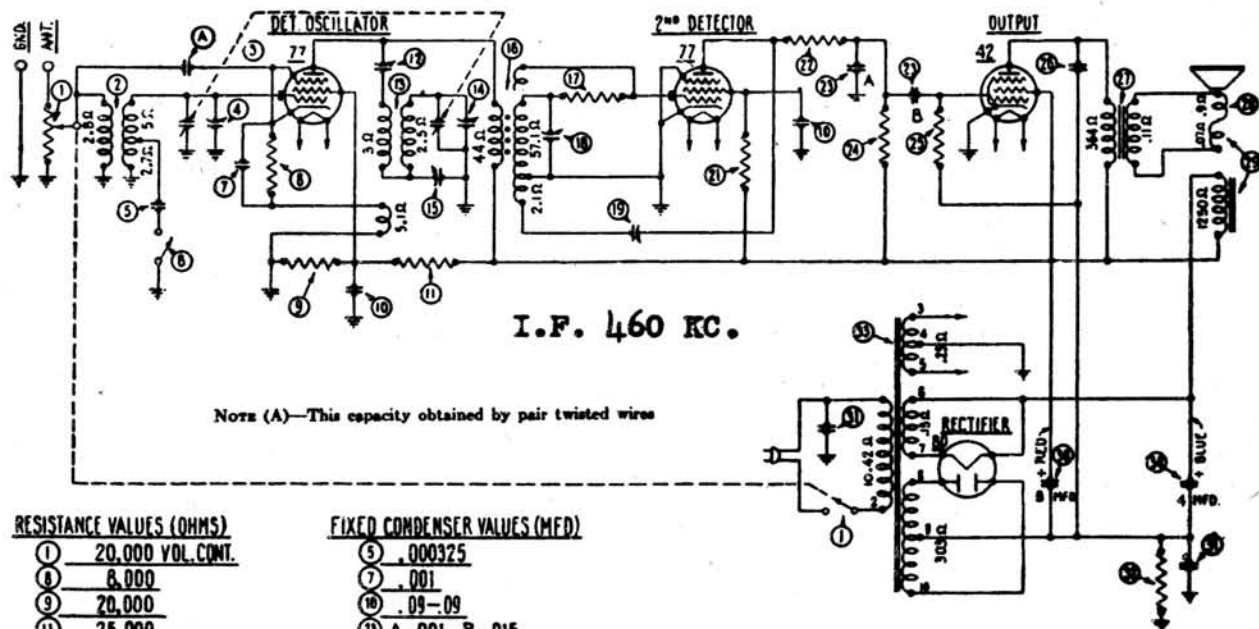
Model 54

(A. C. — D. C.)



No. on Figs.	Description	Part No.
①	Condenser	30-1005
①a	Resistor (Green-Black-Red)	6096
②	Condenser	5215
③	Antenna Transformer Assembly	32-1117
④	Tuning Condenser Assembly	31-1027
⑤	Compensating Condenser (Part of ④)	
⑥	Wave Band Switch	42-1027
⑥a	Condenser	30-4020
⑦	Filter Condenser (Block)	30-4023
⑧	Resistor (Flexible)	33-3010
⑨	Compensating Condenser (High Frequency 1400) Part of ④	
⑩	Oscillator Coil	32-1118
⑪	Resistor (Green-Brown-Orange)	4518
⑫	Compensating Condenser (Low Freq.)	04000-B
⑬	Condenser	4519
⑭	Resistor (Green-Black-Red)	5310
⑮	Electrolytic Condenser (Double)	30-2002
⑯	Resistor (White-White-Orange)	4411
⑰	Resistor (Gray-Black-Red)	5838
⑱	Compensating Cond. (1st I. F. Primary)	04000-A
⑲	1st I. F. Transformer	32-1115
㉑	Compensating Condenser (1st I. F. Secondary)	04000-A
㉒	Resistor (Red-Black-Green)	5872
㉓	Compensating Cond. (2nd I. F. Primary)	04000-A
㉔	2nd I. F. Transformer	32-1116
㉕	Condenser (Double)	8035-G
㉖	Volume Control and "On-Off" Switch	33-5010
㉗	Resistor (Green-Brown-Orange)	4518
㉘	Condenser	3903-AM
㉙	Resistor (Yellow-White-Yellow)	6097
㉚	Resistor (Green-Brown-Orange)	4518
㉛	Condenser (Double)	8035-F
㉜	Resistor (Red-Yellow-Yellow)	4410
㉝	Resistor (Yellow-White-Yellow)	4517
㉞	Resistor (Red-Green-Orange)	4516
㉟	Condenser	3793-Y
㊱	Output Transformer	32-7020
㊲	Voice Coil and Cone Assembly	36-3029
㊳	Field Coil and Pot Assembly	36-3040
㊴	Filter Choke	32-7036
㊵	Electrolytic Condenser	30-2001
㊶	Resistor (Wire Wound)	33-3012
㊷	Resistor (Yellow-White-Yellow)	6097
㊸	Condenser	3615-B
㊹	Pilot Lamp	4567
㊺	Resistor (Wire Wound)	33-3011
㊻	Safety Switch	42-1026
㊼	Tube Shield	28-1130
㊽	Six Prong Socket	7547
㊾	Seven Prong Socket	27-6005

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



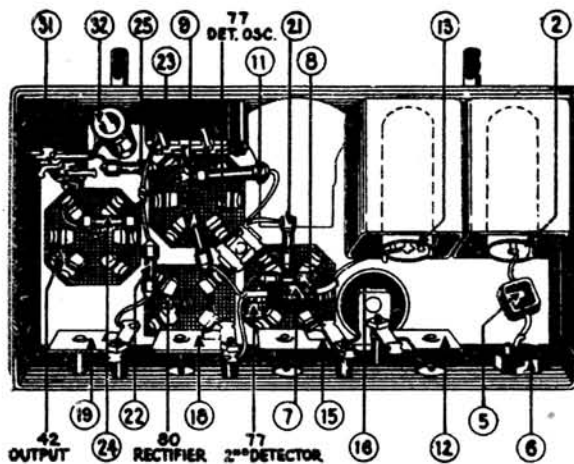
RESISTANCE VALUES (OHMS)

1	20,000 VOL. CONT.
6	8,000
9	20,000
11	25,000
17	400,000
21	1,000,000
22	10,000
24	240,000
25	490,000
32	32.5 (WIRE WOUND)

FIXED CONDENSER VALUES (MFD)

5	.000325
7	.001
16	.09-.09
23	A-.001-B-.015
26	.006
31	.015-.015

PHILCO MODEL 57

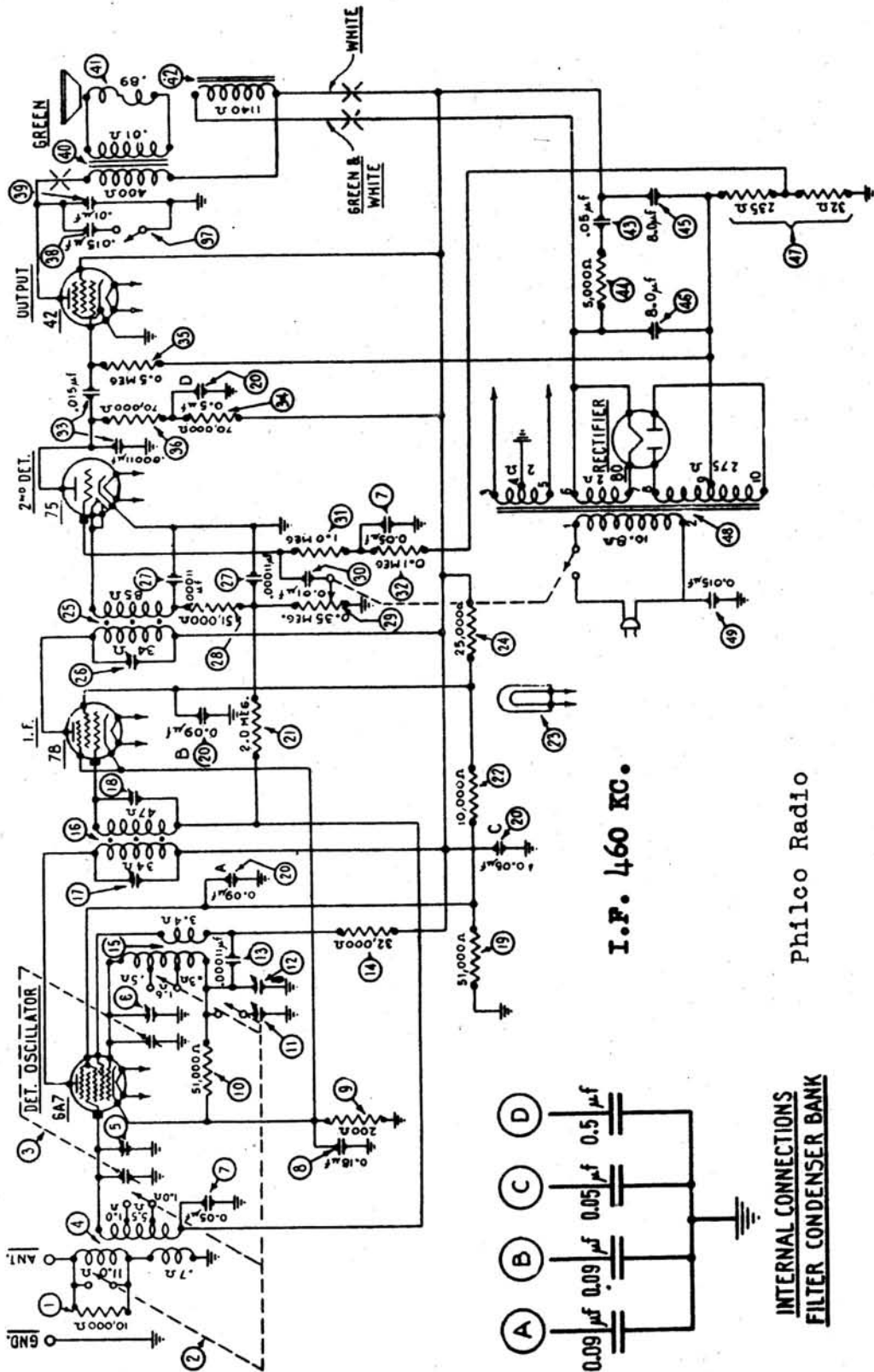


No. on Figs.	Description	Part No.
1	Volume Control and "On-Off" Switch	33-5011
2	Antenna Transformer	32-1153
3	Tuning Condenser Assembly	31-1035
4	Compensating Condenser (Antenna; Part of 3)	
5	Condenser	30-1004
6	Wave Band Switch	42-1027
7	Condenser	3215
8	Resistor (Gray-Black-Red)	5838
9	Resistor (Red-Black-Orange)	6650
10	Condenser (Double)	4989-C
11	Resistor (Red-Green-Orange)	3656
12	Compensating Condenser (I. F. Primary)	04000-A
13	Oscillator Coil	32-1023
14	Compensating Cond. (High Frequency—1400 kilocycles) (Part of 12)	
15	Compensating Cond. (Low Frequency)	04000-S
16	I. F. Transformer	32-1155
17	Resistor (Yellow-Black-Green)	8010

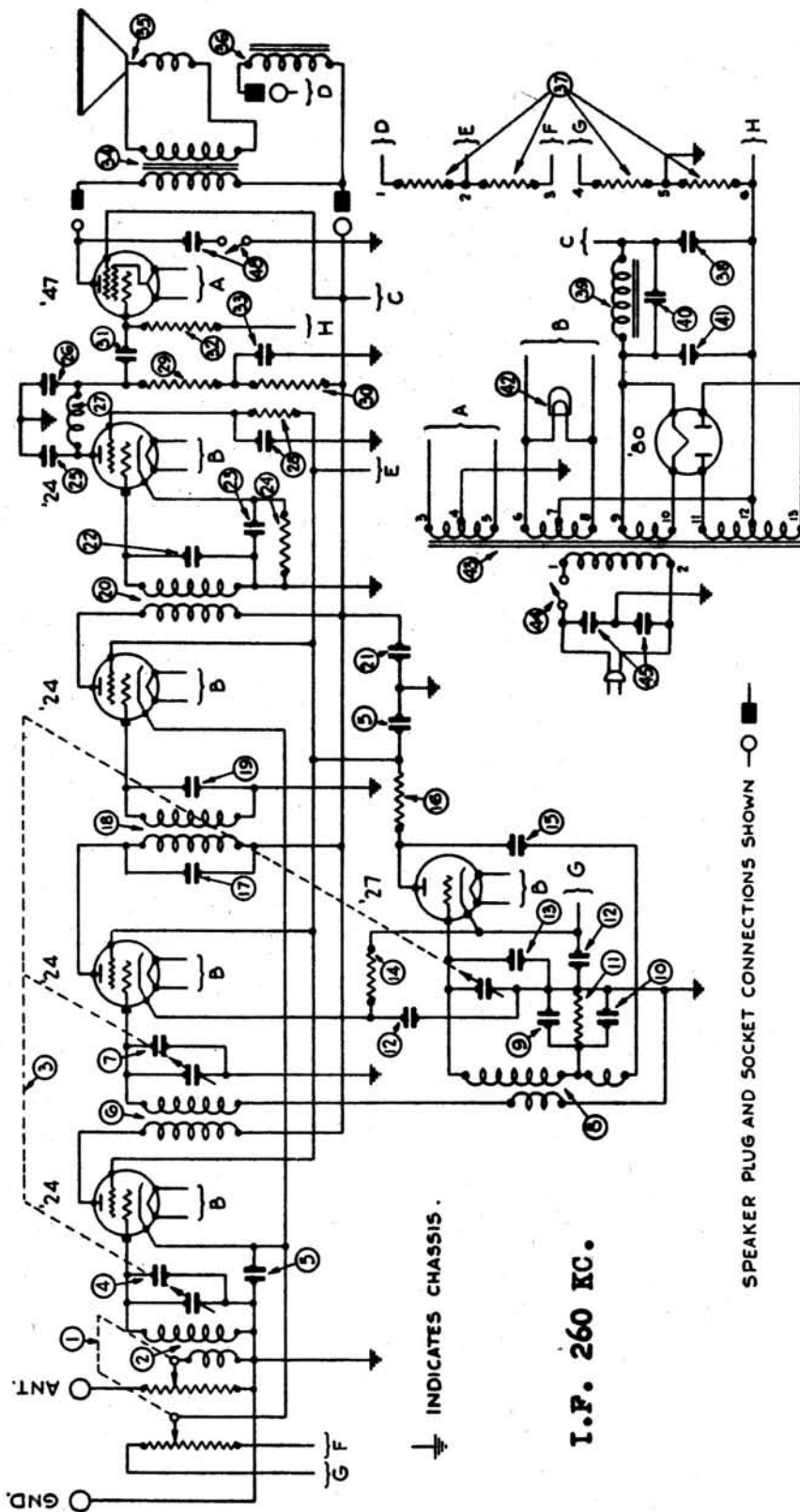
No. on Figs.	Description	Part No.
18	Compensating Cond. (I. F. Secondary)	04000-D
19	Compensating Condenser	04000
21	Resistor (Brown-Black-Green)	4409
22	Resistor (Brown-Black-Orange)	4412
23	Condenser (Double)	7762-B
24	Resistor (Red-Yellow-Yellow)	4410
25	Resistor (Yellow-White-Yellow)	3769
26	Condenser	7625-E
27	Output Transformer	32-7011
28	Voice Coil and Cone Assembly	36-3029
29	Field Coil and Pot Assembly	36-3081
30	Electrolytic Condenser (Double)	30-2004
31	Condenser (Double)	3793-R
32	Resistor (Wire Wound)	7465
33	Power Transformer	32-7046
	Tube Shield	28-1107
	Four Prong Socket	7544
	Six Prong Socket	7547

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Model 60



MODELS 70 AND 70-A

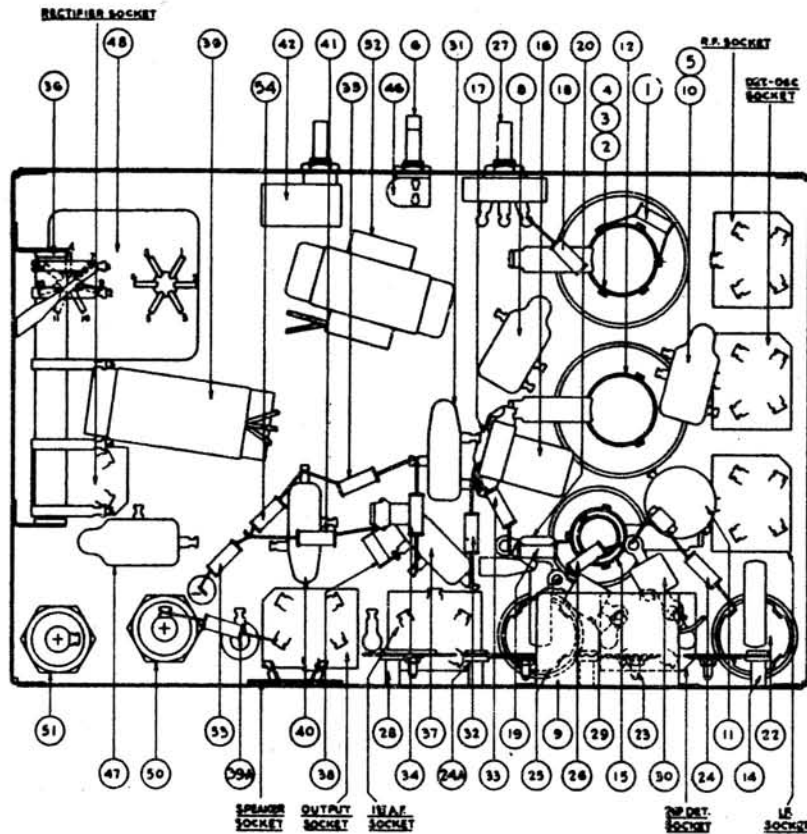


I.F. 260 KC.

SPEAKER PLUG AND SOCKET CONNECTIONS SHOWN

Philco Radio

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

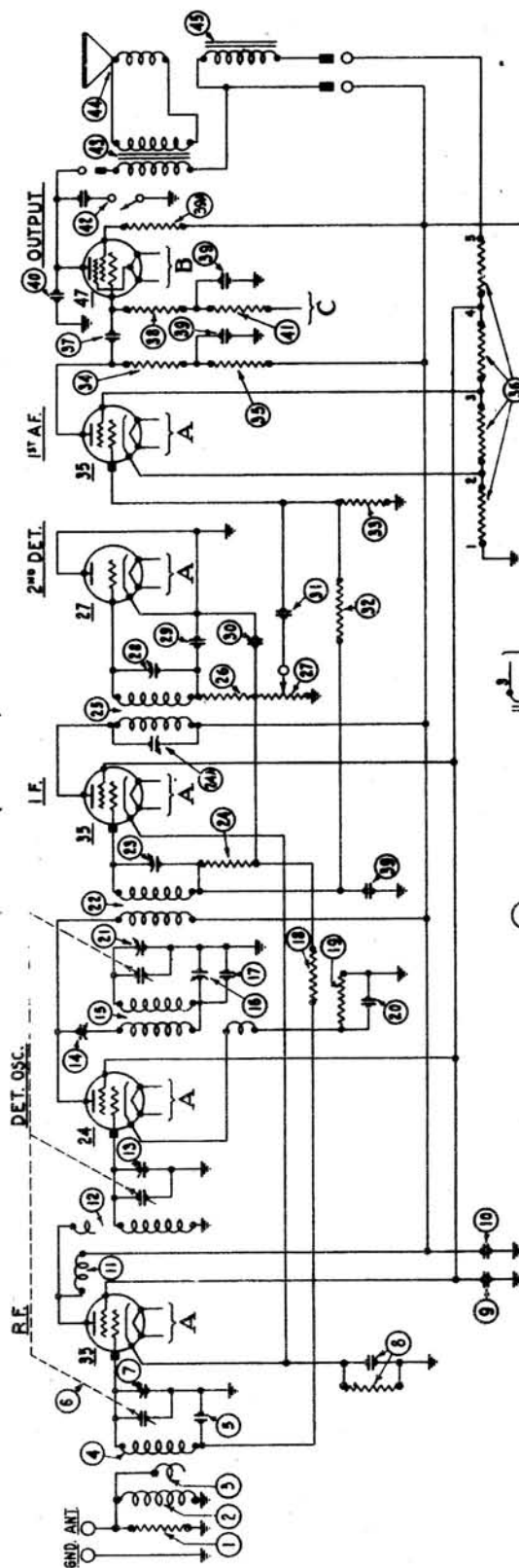


REPLACEMENT PARTS MODELS 70 AND 70-A (Above Serial No. B-22,000)

No. on Figs. 3 and 4	Description	Part No.
①	Resistor (10,000 ohms)	4112
②	Antenna Coil	04339
③	Condenser (.05 mfd.) double	3615-AF
④	Tuning Condenser Assembly 50-60 cycles	04164
⑤	Tuning Condenser Assembly 25-40 cycles	04165
⑥	Compensating Condenser—Antenna— (Part of Tuning Condenser Assembly)	
⑦	Condenser (.09 mfd. and 200 ohm Resistor)	4989-L
⑧	Condenser (.5 mfd.)	3583
⑨	Combined with ⑧	
⑩	R. F. Choke	04196
⑪	Interstage Coil	04185
⑫	Compensating Condenser—Detector— (Part of Tuning Condenser Assembly)	
⑬	Compensating Condenser—Coupling	04000-M
⑭	Oscillator Coil	04186
⑮	Compensating Condenser—Low Fre- quency	04000-F
⑯	Condenser (410 mmf.)	5120
⑰	Resistor (2,000,000 ohms)	5872
⑱	Resistor (10,000 ohms)	4412
⑲	Condenser (700 mmf.)	4520
⑳	Compensating Condenser—High Fre- quency—(part of Tuning Condenser Assembly)	
㉑	First I. F. Transformer	04190
㉒	Compensating Condenser—First I. F.	04000-M
㉓	Resistor (2,000,000 ohms)	5872
㉔	Compensating Condenser 2nd I.F. Primary	04000-M
㉕	Second I. F. Transformer	08039
㉖	Resistor (90,000 ohms)	4411
㉗	Volume Control	6015
㉘	Compensating Condenser—Second I. F.	04000-M
㉙	Condenser (110 mmf.)	4519
㉚	Condenser (110 mmf.)	4519
㉛	Condenser (.01 mfd.)	3903-G
㉜	Resistor (4,000,000 ohms)	6010
㉝	Resistor (1,000,000 ohms)	4409
㉞	Resistor (70,000 ohms)	5385
㉟	Resistor (25,000 ohms)	4516

No. on Figs. 3 and 4	Description	Part No.
㊱	B. C. Resistor	04196
㊲	Condenser (.01 mfd.)	3903-T
㊳	Resistor (490,000 ohms)	4517
㊴	Filter Condenser Block (.05, .25, 1.5 mfd.)	04194
㊵	Resistor (3,000 ohms)	5309
㊶	Condenser (.01 mfd.)	3903-U
㊷	Resistor (330,000 ohms) 50-60 cycles	6046
㊸	Resistor (490,000 ohms) 25-40 cycles	4517
㊹	Tone Control	03637
㊺	Output Transformer	2673
㊻	Voice Coil & Cone Assembly	02996
㊼	Field Coil Assembled with Pot	02966
㊽	On-Off Switch	4096
㊾	Condenser (.015 mfd. Double)	3793-H
㊿	Power Transformer (50-60 cycles)	5117
	Power Transformer (25-40 cycles)	5118
	Power Transformer (50-60 cycles, 230 volts)	5119
Ⓚ	Pilot Light	3463
Ⓛ	Electrolytic Condenser (6 mfd.) 50-90 cycles	4016
	Electrolytic Condenser (14 mfd.) 25-40 cycles	5725
Ⓜ	Electrolytic Condenser (6 mfd.) 50-90 cycles	4016
	Electrolytic Condenser (10 mfd.) 25-40 cycles	5142
Ⓝ	Filter Choke	4819
Ⓞ	Resistor (51,000 ohms)	4518
Ⓟ	Resistor (490,000 ohms)	4517
	Tube Shield	04188
	Knob (Large)	03064
	Knob (Small)	03437
	Knob Spring	4147
	Grid Clip	4897
	Five Prong Socket Assembly	4956
	Four Prong Socket Assembly	4955
	Dial Complete	03031
	Base	5312
	Chassis Mounting Screw	W-468
	Mounting Washer	W-315
	Rubber Washer	5189

MODELS 70 AND 70-A
(A. V. C.)



- ① Volume Control
- ② R. F. Transformer
- ③ Tuning Condenser (50-60 cycles)
- ④ Tuning Condenser (25-40 cycles)
- ⑤ Compensating Condenser
- ⑥ Antenna—(Part of Gang Condenser Assembly)
- ⑦ Condenser (.09 mfd. Double)
- ⑧ Detector Transformer
- ⑨ Compensating Condenser
- ⑩ Detector—(Part of Gang Condenser Assembly)
- ⑪ Oscillator Coil
- ⑫ Condenser (410 mmf.)
- ⑬ Compensating Condenser—Low Frequency
- ⑭ Resistor (51,000 ohms)
- ⑮ Condenser (.09 mfd. Double)
- ⑯ Compensating Condenser—High Frequency—(Part of Gang Condenser Assembly)
- ⑰ Resistor (5,000 ohms)
- ⑱ Condenser (110 mmf.)

- ⑳ Resistor (13,000 ohms)
- ㉑ Compensating Condenser—1st I. F. Primary
- ㉒ First I. F. Transformer
- ㉓ Compensating Condenser—1st I. F. Secondary
- ㉔ Second I. F. Transformer
- ㉕ Condenser (.05 mfd.)
- ㉖ Compensating Condenser—2nd I. F. Secondary
- ㉗ Condenser (.5 mfd.)
- ㉘ Resistor (51,000 ohms)
- ㉙ Condenser (500 mmf.)
- ㉚ Condenser (250 mmf.)
- ㉛ R. F. Choke
- ㉜ Condenser (.09 Combined with 250 ohm Resistor)
- ㉝ Resistor (240,000 ohms)
- ㉞ Resistor (45,000 ohms) 50-60 cycles
- ㉟ Resistor (99,000 ohms) 25-40 cycles

- ㊱ Condenser (.01 mfd.)
- ㊲ Resistor (240,000 ohms)
- ㊳ Condenser (.25 mfd.)
- ㊴ Output Transformer
- ㊵ Voice Coil and Cone Assembly
- ㊶ Field Coil (Assembled with Pot)
- ㊷ B. C. Resistor
- ㊸ Electrolytic Condenser (6 mfd.) 50-60 cycles
- ㊹ Choke
- ㊺ Condenser (.09 mfd.) 50-60 cycles
- ㊻ Electrolytic Condenser (6 mfd.) 40-60 cycles
- ㊼ Pilot Light
- ㊽ Power Transformer (50-60 cycles)
- ㊾ "On-Off" Switch
- ㊿ Condenser (.015 mfd. Double)

I. F. 260 KC.

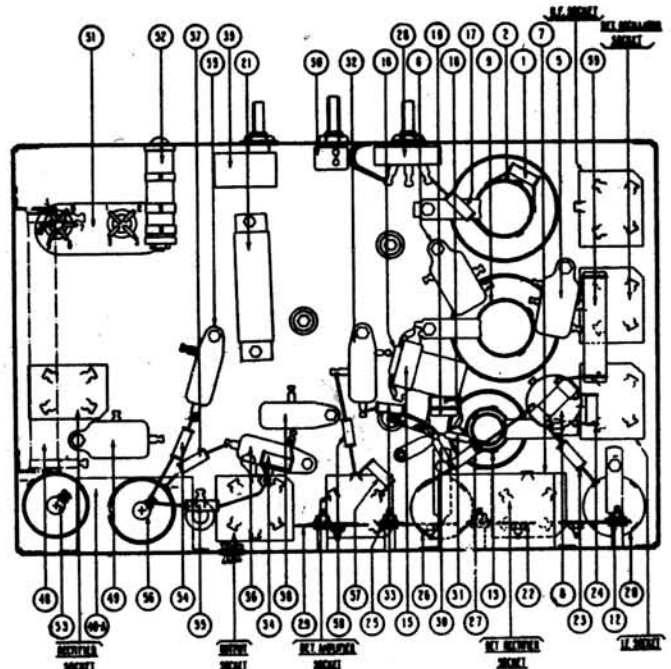
Philco Radio

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Replacement Parts for Model 71 Series

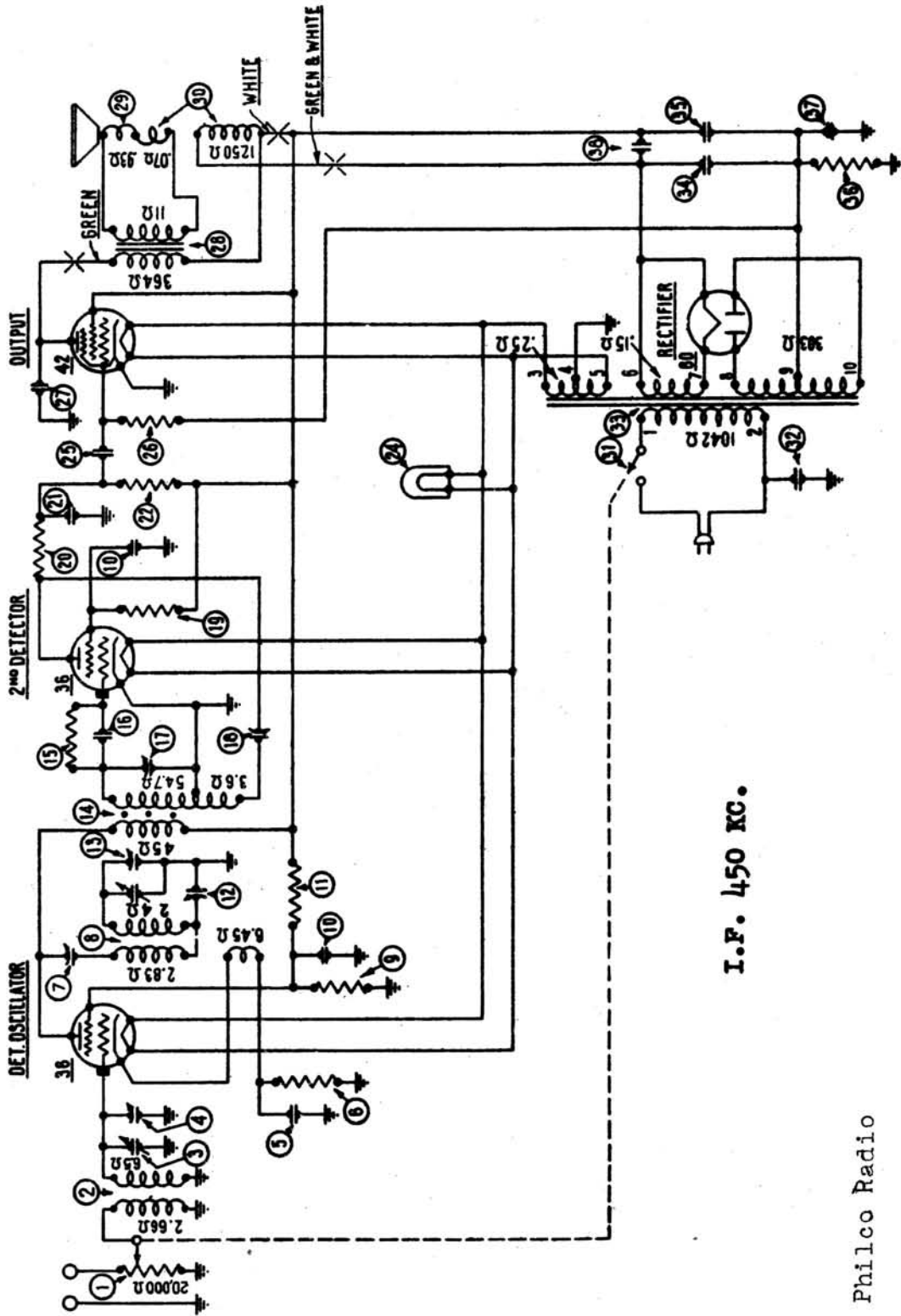
① Resistor (10,000 ohms)	4412	④ Speaker Field and Bucking Coil assembled with pot—(K-7) single speaker models	02761
② R. F. Transformer	04339	⑤ Output Transformer — Twin speaker models	2564
③ Tuning Condenser (50-60 cycles)	04733	⑥ Voice Coil and cone assembly	02823
④ Tuning Condenser (25-40 cycles)	04734	⑦ Speaker Field and Bucking Coil assembled with pot—(K-10) Twin speaker models	02767
⑤ Condenser (.05 Mfd. double)	3615-AF	⑧ Voice coil and cone assembly	02823
⑥ Condenser (.09 Mfd. and 200 ohm resistor)	4989-L	⑨ Speaker field assembled with pot—(K-9) Twin speaker models	02762
⑦ Condenser (.5 Mfd.)	3583	⑩ Resistor (5620 ohms) wire wound—Twin speaker models	6451
⑧ R. F. Choke	04198	⑪ A Condenser (.25 Mfd.) Twin Speaker Models	04997
⑨ Detector Transformer	04185	⑫ Condenser (.015 Mfd. Double)	3793-H
⑩ Compensating Condenser—Detector—Part of tuning condenser assembly		⑬ On-off Switch	6498
⑪ Pilot Light	6608	⑭ Power Transformer—50-60 cycles—single speaker	6454
⑫ Compensating Condenser—1st I. F. primary	04000-M	⑮ Power Transformer—25-40 cycles—single speaker	6455
⑬ Oscillator Coil	04186	⑯ Power Transformer—50-60 cycles—230 volts—single speaker	6456
⑭ Compensating Condenser—High frequency—Part of tuning condenser assembly		⑰ Power Transformer—50-60 cycles—twin speaker	6457
⑮ Compensating condenser—Low frequency	04000-F	⑱ Power Transformer—25-40 cycles—twin speaker	6458
⑯ Condenser (410 Mmf.) (Yellow and Orange)	5120	⑲ Power Transformer—50-60 cycles—230 volts—twin speaker	6459
⑰ Resistor (1,000,000 ohms)	4409	⑳ Resistor—wire wound (245 ohms and 185 ohms)	6452
⑱ Resistor (15,000 ohms)	6208	㉑ Electrolytic Condenser (6 Mfd.) (50-60 cycles) single speaker	6453
㉑ Condenser (700 Mmf.) (White and Yellow)	4520	㉒ 8 Mfd. Twin speaker	6707
㉑ First I.-F. Transformer	04190	㉓ Resistor (10,000 ohms)	4412
㉑ Filter Condenser Bank (2—.05, .25 Mfd.)	04731	㉔ Condenser (.05 Mfd.)	3615-G
㉑ Compensating Condenser—1st I. F. secondary	04000-M	㉕ Electrolytic Condenser (6 Mfd.) (50-60 cycles) single speaker	4916
㉑ Resistor (1,000,000 ohms)	4409	㉖ 8 Mfd. Twin speaker	6706
㉑ Resistor (1,000 ohms)	5837	㉗ Resistor (5,000 ohms)	5310
㉑ Compensating Condenser—2nd I. F. primary	04000-M	㉘ Resistor (5,000 ohms)	5310
㉑ Second I. F. Transformer	04319	㉙ Resistor (13,000 ohms)	6450
㉑ Resistor (99,000 ohms)	4411	㉚ Tube Shield (small)	5387
㉑ Volume Control	6499	㉛ Tube Shield (large)	04735
㉑ Compensating Condenser—2nd I. F. secondary	04000-M		
㉑ Condenser (110 Mmf.) (Blue and Golden Yellow)	4519		
㉑ Condenser (110 Mmf.) (Blue and Golden Yellow)	4519		
㉑ Condenser (.01 Mfd.)	3903-J		
㉑ Resistor (1,000,000 ohms)	4409		
㉑ Resistor (70,000 ohms)	5385		
㉑ Resistor (25,000 ohms) Single Speaker	4516		
Resistor (51,000 ohms) Twin Speaker Models	4518		
㉑ Condenser (.01 Mfd.)	3903-N		
㉑ Resistor (490,000 ohms)	4517		
㉑ Condenser (.01 Mfd.)	3903-AA		
㉑ Tone Control	04757		
㉑ Output Transformer — single speaker models	2580		
㉑ Voice Coil and Cone assembly	02823		

Philco Radio



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

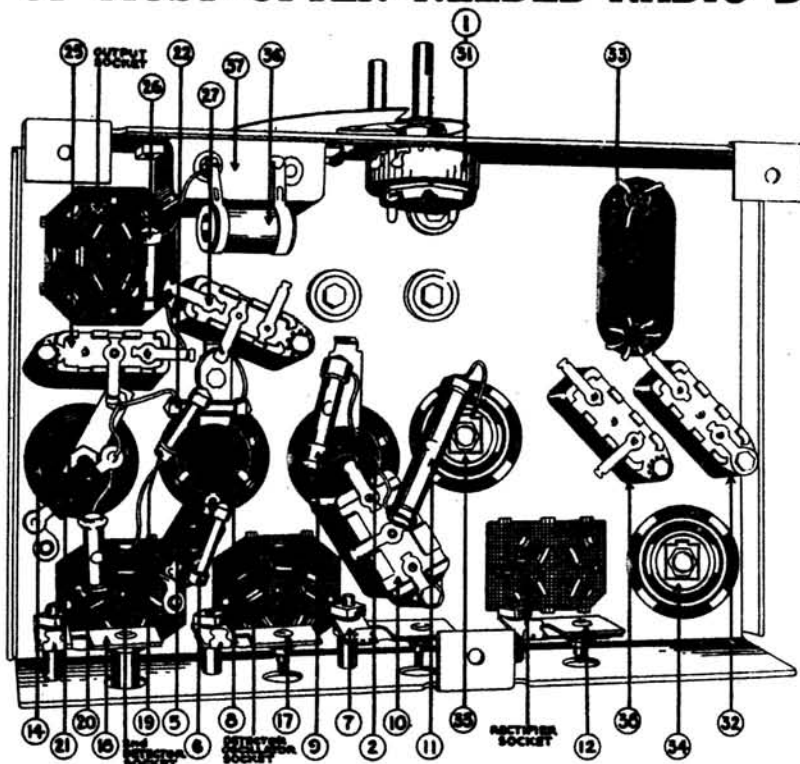
Model 80



I.F. 450 KC.

Philco Radio

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



REPLACEMENT PARTS MODEL 80

No. on Figs. 2 and 3	Description	Part No.
①	Volume Control—Combined with On-Off Switch	7439
②	Antenna Transformer	05831
③	Tuning Condenser Assembly	05794
④	Compensating Condenser—Antenna—Part of Tuning Con. Assembly	
⑤	Condenser (710 Mmf.) White and Yellow	4520
⑥	Resistor (10,000 Ohms)	4412
⑦	Compensating Condenser—I.F. Primary	04000-A
⑧	Oscillator Coil	05832
⑨	Resistor (9,000 Ohms)	7501
⑩	Condenser (.09 Twin)	4989-B
⑪	Resistor (16,000 Ohms)	7500
⑫	Compensating Condenser—Low Frequency	04000-S
⑬	Compensating Condenser—High Frequency—Part of Tuning Con. Assembly	
⑭	I.F. Transformer	05834
⑮	Resistor (4,000,000 Ohms) Mounted on I.F. Transformer	6010
⑯	Condenser (50 Mmf.) White—Mounted on I.F. Transformer	3774
⑰	Compensating Condenser—I.F. Secondary	04000-D
⑱	Compensating Condenser	04000
⑳	Resistor (1,000,000 Ohms)	4409*
㉑	Resistor (10,000 Ohms)	4412
㉒	Condenser (1,000 Mmf.) Green and White	5215
㉓	Resistor (240,000 Ohms)	4410
㉔	Pilot Light	6608

No. on Figs. 2 and 3	Description	Part No.
㉕	Condenser (.015 Mfd.)	3793-B
㉖	Resistor (490,000 Ohms)	4517*
㉗	Condenser (.006 Mfd.)	7625-B*
㉘	Output Transformer	2660
㉙	Voice Coil and Cone Assembly	02861
㉚	Speaker Field and Bucking Coil Assembled with Pot	02677*
㉛	On-Off Switch—Combined with Volume Control	7439
㉜	Condenser (.01 Mfd.)	3903-AH*
㉝	Power Transformer 50-60 Cycles	7421
㉞	Power Transformer 25-40 Cycles	7422
㉟	Power Transformer 50-60 Cycles, 230 Volts	7423
㊱	Electrolytic Condenser (8.0 Mfd.)	6707
㊲	Electrolytic Condenser (4.0 Mfd.)	7467
㊳	Resistor (325 Ohms) Wire Wound	7465*
㊴	Electrolytic Condenser—Dry—(10 Mfd.)	7440*
㊵	Condenser (.01 Mfd.)	3903-AJ*
㊶	Bezel	7417
㊷	Dial Complete	05828
㊸	Tube Shield	7172
㊹	Knob (Large)	03063
㊺	Knob (Small)	03064
㊻	Knob Spring	5262
㊼	Grid Clip	4897
㊽	Four Prong Socket Assembly	5026
㊾	Five Prong Socket Assembly	4956
㊿	Six Prong Socket Assembly	6417
1	Chassis Mounting Screw	W-567
2	Chassis Mounting Washer	W-315
3	Rubber Washer	5189
4	Pilot Lamp Shield	5760

* A number of circuit changes were made on chassis of run No. 3 and above. This run number is rubber stamped in a star on the back of the chassis. Referring to Fig. 2 and 3, the condenser ㉕ connects to the B-end of resistor ㉖ instead of to ground. The bucking coil - that section of ㉚ in series with the voice coil - is shorted out. The 10 mfd. dry electrolytic condenser ㉗ is eliminated, and replaced with a substitute .015 section combined with ㉕, part 3793R. The .01 mfd. condenser ㉘ is eliminated. The positions of ㉙, ㉚ and ㉛ are changed in the chassis from that shown in Fig. 3.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Replacement Parts for Model 86

PART NAME	PART No.	PART No.
Volume Control	3076	2871-A
R. F. Transformer (Antenna Tuning)	3075-B	2898
Tuning Condenser (complete with drum and scale)	3001-B	2896
Range Control	3133	3012
Neutralizing Condenser	3025-A	3035-A
R. F. Transformer	3075-A	3036-A
By-Pass Condenser (.1 mfd. with Plate Resistor Winding)	3292-A	3051-A
Compensating Condensers	3282-A	3054-A
Grid Leak	3083	3103
Grid Condenser	3082	3164
Audio Transformer	3241	3168-A
By-Pass Condenser (.001 mfd.)	3081	3170-A
Detector R. F. Choke	3256-A	3202-A
Phonograph Pick-Up Jack	3087	3231
Push-Pull Input Transformer	3242	3236-A
Power-Toggle Switch	3253	3247-A
Primary Tap Switch	3116	3263-A
Filament By-Pass Condenser (2 sections .5 mfd.)	3080	3272
6-Ohm Hum Adjuster	3096	L-943-A
Pilot Lamp	3271	L-1037
Power Transformer (60 cycle)	3246	L-1039
Filter Condenser Block (60 cycle)	3269	3312
Filter Choke Coil	3232	
B-C Section Resistor	2897	
Push-Pull Output Transformer		
Speaker Plug		2871-A
Speaker Cone and Voice Coil		2898
Speaker Field Coil		2896
Cable Spring		3012
Control Knob Tuning Condenser		3035-A
Control Knob (Volume and Range Control)		3036-A
228 Tube Socket		3051-A
Condenser Drive Cable		3054-A
Knob Spring		3103
Fibre Adjusting Wrench		3164
280 Tube Socket		3168-A
171 Tube Socket		3170-A
Pilot Lamp Socket Assembly		3202-A
Jack Insulator Nut		3231
Terminal Panel Assembly		3236-A
Speaker Socket		3247-A
227 Tube Socket, Spring Type		3263-A
Jack Insulator		3272
A.C. Attachment Cord and Plug		L-943-A
Wiring Cable		L-1037
Speaker Cable		L-1039
Socket Wrench for Speaker Mounting Bolts		3312

Note:—When ordering replacements for 25-cycle Receivers (Model 83) use the following part numbers instead of those given above. All other part numbers remain the same.

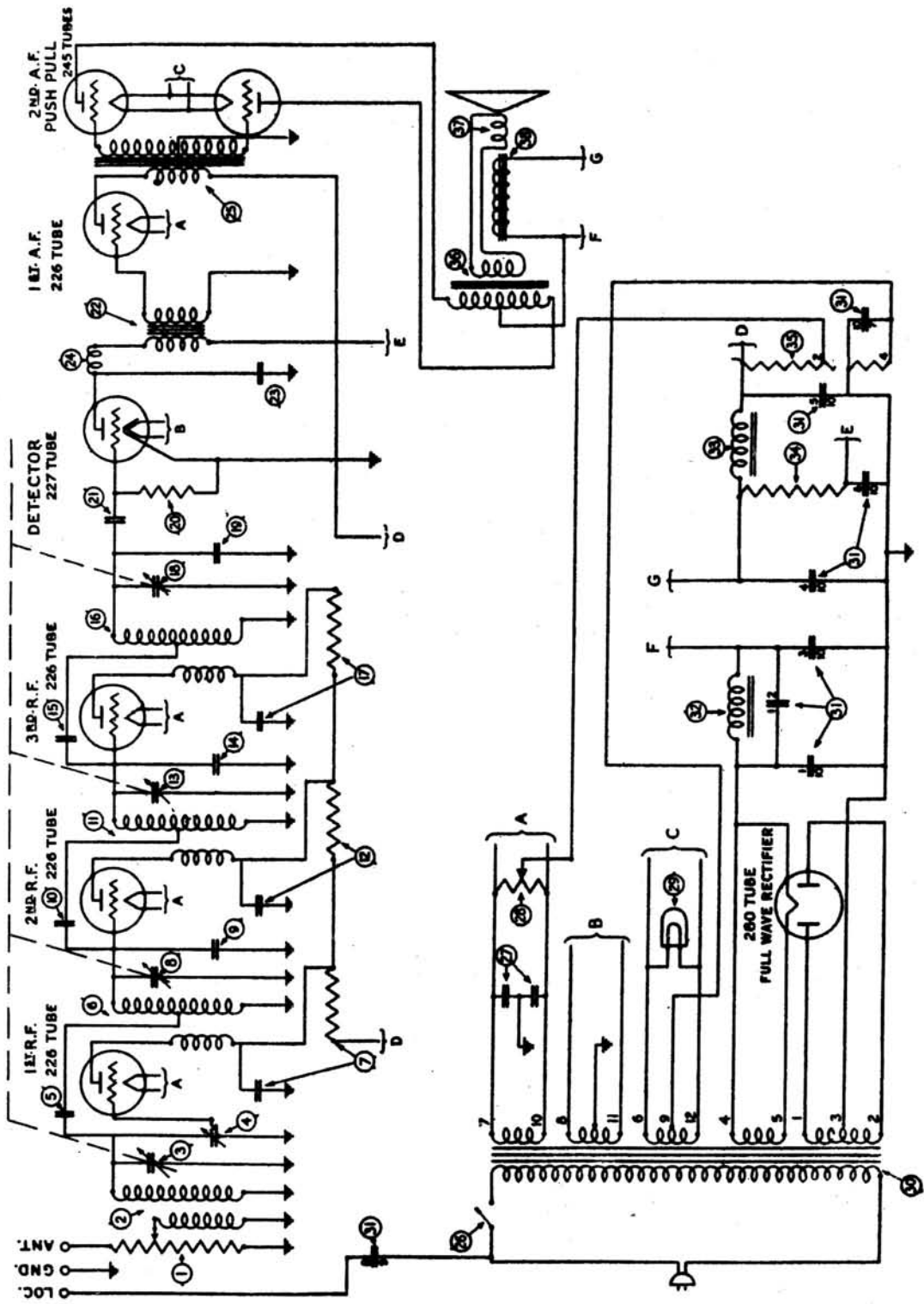
Power Transformer (25 cycle) 3278
Filter Condenser Block (25 cycle) 3279

Replacement Parts for Model 87

PART NAME	PART No.	PART No.
Volume Control	3076	3542
R. F. Transformer (Antenna Tuning)	3075-B	3399
Tuning Condenser (Complete with Drum and Scale)	3001-B	2848
Range Control	3133	2844-A
Neutralizing Condenser	3441-A	2850
R. F. Transformer	3075-A	2871-A
By-Pass Condenser (.1 mfd. with Plate Resistor Winding)	3292-A	3012
Compensating Condensers	3435-A	3301
Grid Leak	3083	3300
Grid Condenser	3082	3484
Audio Transformer	3241	3306
By-Pass Condenser (.001 mfd.)	3081	3164
Detector R. F. Choke	3256-A	3423-A
Push-Pull Input Transformer	3242	3302-A
Power Toggle Switch	3501	3236-A
Filament By-Pass Condenser (2 Sections .5 mfd.)	3080	3444-A
6-Ohm Hum Adjuster	3096	3442-A
Pilot Lamp	3463	L-1037-A
Power Transformer	3400	L-1039-A
Filter Condenser Block	3401	3312
Filter Choke Coil (First)	3422	3306
Filter Choke Coil (Second)	3472	3540
Detector Resistor		3527
B-C Resistor		
Push-Pull Output Transformer		
Speaker Cone and Voice Coil		
Speaker Field Coil		
Speaker Plug		
Cable Spring		
Control Knob Tuning Condenser		
Control Knob (Volume and Range Control)		
Condenser Drive Cable		
Knob Spring		
Fibre Adjusting Wrench		
4-Hole Tube Socket		
Pilot Lamp Socket Assembly		
Terminal Panel Assembly		
Speaker Socket		
5-Hole Tube Socket		
A.C. Attachment Cord and Plug		
Speaker Cable		
Socket Wrench for Speaker Mounting Bolts		
Tuning Scale		
Oscillator Kit		
Wood Switch Plug		

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

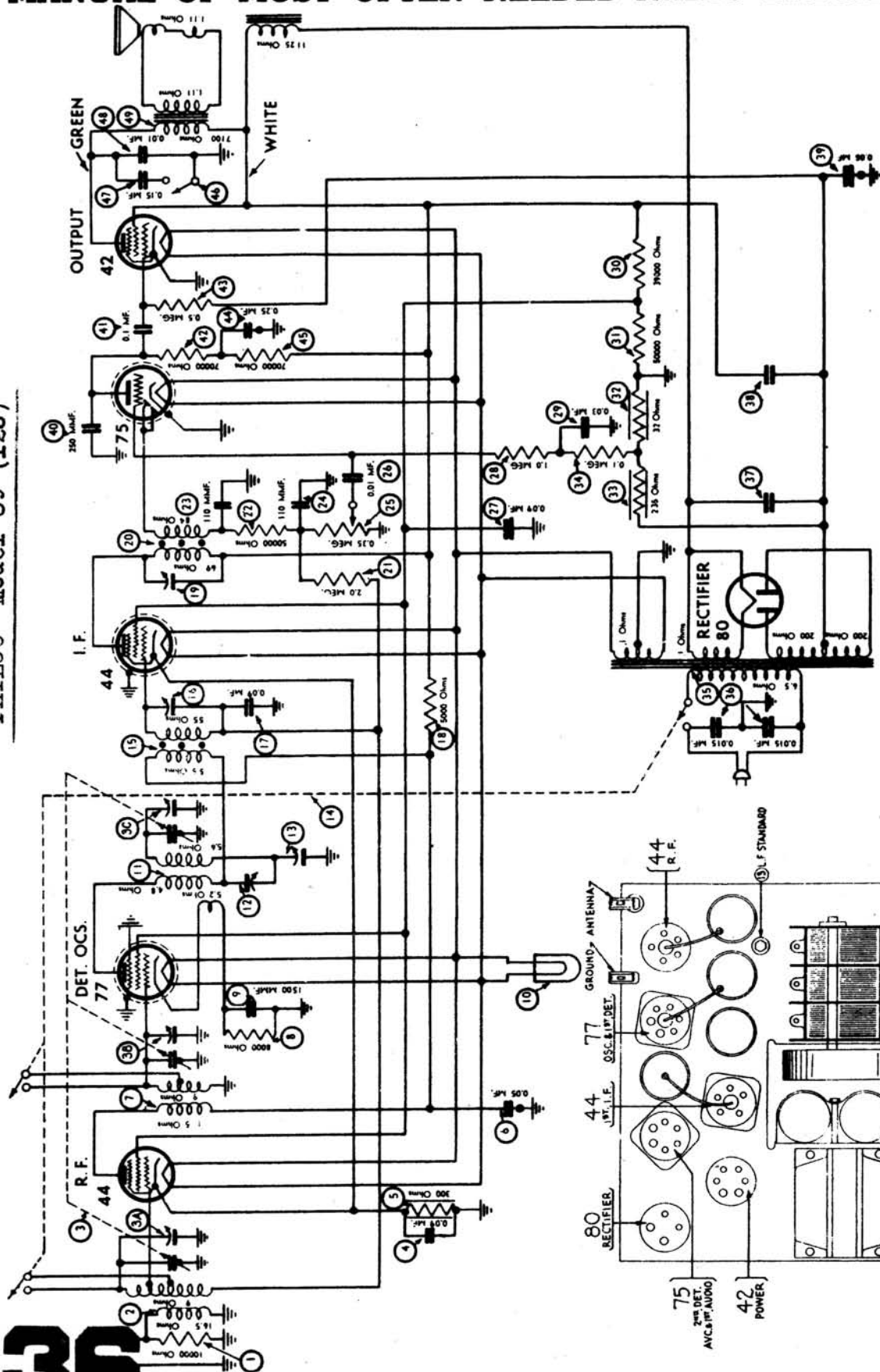
Model 87



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

PHILCO Model 89 (123)

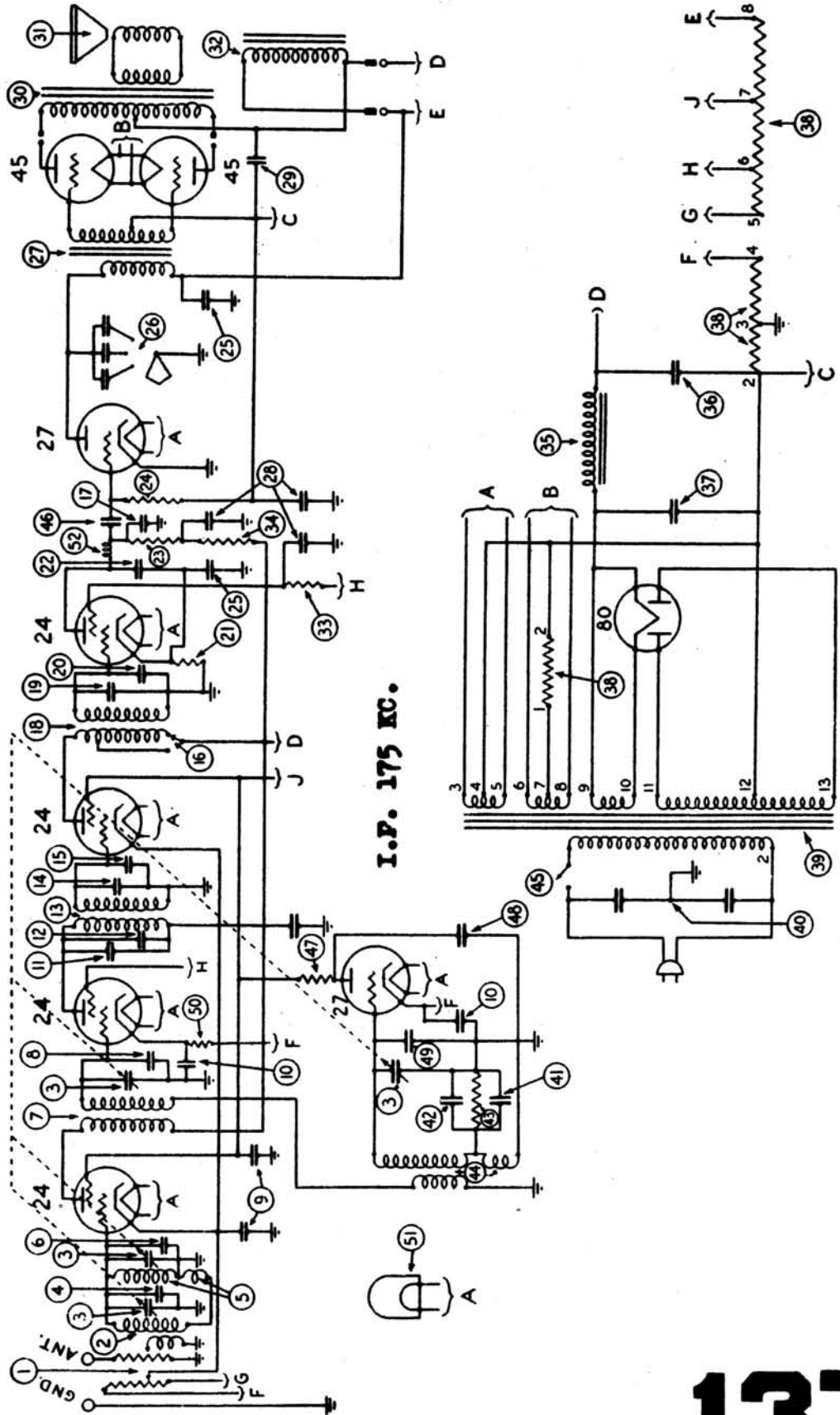
I.F. 260 KC.



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Models 90 and 90-A

WITH 2- TYPE 45 TUBES



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Models 90 and 90-A

WITH 2- TYPE 45 TUBES

No. on Page 3 and 4	Description	Part No.	No. on Page 3 and 4	Description	Part No.
①	Volume Control	5039	⑩	Condenser .015 M. F. (Double)	3793-E
①	1st R. F. Transformer	03013	⑩	Condenser .007 M. F. } Assembled	03060
①	Gang Condenser—50 to 60 cycles	03001	⑩	Compensating Condenser	
①	Gang Condenser—25 to 40 cycles	03078	⑩	Resistor—80,000 Ohms	4237
①	Compensating Condenser (Part of Tuning Condenser Assembly)		⑩	Oscillator Coil	03018
①	2nd R. F. Transformer	03014	⑩	On-Off Switch	4096
①	Compensating Condenser (Part of Tuning Condenser Assembly)		⑩	Condenser .001 M. F.	5215
①	1st Det. Transformer	08015	⑩	Resistor—13,000 Ohms	3768
①	Compensating Condenser (Part of Tuning Condenser Assembly)		⑩	Condenser .0011 M. F.	4519
①	Condenser .09 M. F. (Double)	4980-C	⑩	Compensating Condenser (Part of Tuning Condenser Assembly)	
①	Condenser .09 M. F. (Double)	4980-B	⑩	Resistor—5,000 Ohms	3626
①	Fixed Condenser .00011 } Assembled	3772-C	⑩	Pilot Bulb	3463
①	Compensating Condenser		⑩	R. F. Choke	03066
①	1st I. F. Transformer	03009	⑩	Line Cord and Plug	L-943
①	Compensating Condenser } Assembled	03061	⑩	Tube Shield	03002
①	Fixed Condenser .00011		⑩	Knob (large) Dial Control	4958-A
①	Normal Maximum Switch	3116	⑩	Spring (Dial Knobs)	4147
①	Condenser (.00035 mf)	4990	⑩	Knobs (small) Tone and Volume Control	4909-A
①	2nd I. F. Transformer	03143	⑩	Knob (switch)	4290-A
①	Compensating Condenser } Assembled	03061	⑩	Grid Clip	4997
①	Fixed Condenser .00011		⑩	Speaker Plug and Cable	L-119-A
①	Resistor—80,000 Ohms	4518	⑩	Grommet for R. F. Transformer Shield	5747
①	Condenser .00035	4990	⑩	Rectifier Tube Socket	5226
①	Resistor—250,000 Ohms	4410	⑩	Four Prong Socket Assembly	4956
①	Resistor—1,000,000 Ohms	4409	⑩	Five Prong Socket Assembly	4956
①	Condenser .5 M. F. (Double)	03024	⑩	Speaker Socket	4987
①	Tone Control	4037-A	⑩	Volume Control Insulator	4022
①	1st Audio Transformer	4942	⑩	Volume Control Insulator	4298
①	Condensers 2—.25 M. F. and 1—.5 M. F.	03029	⑩	Fahnstock Clip	L-1128
①	Condenser .05 M. F.	3615-G	⑩	Finishing Rosettes	4987
①	Output Transformer:		⑩	Speaker Mounting Screws (3 used)	W-408
①	H ₁ (For Large Cone Assembly)	2848	⑩	Speaker Mounting Screws (1 used)	W-483
①	K ₁ (For Small Cone Assembly)	2766	⑩	Dial	5021
①	Voice Coil Assembly and Cone:		⑩	Mica for Gang Condenser Compensating Condenser	3473
①	H ₂ (Large Cone)	02997	⑩	Insulating Washer for Compensating Condenser	3600
①	K ₂ (Small Cone)	02996	⑩	Tuning Condenser Mounting Washer	3614
①	Speaker Field—Assembled with Pot and Frame		⑩	Tuning Condenser Mounting Washer	3615
①	Resistor—250,000 Ohms	3768	⑩	Tuning Condenser Mounting Sleeve	3616
①	Resistor—250,000 Ohms	4410	⑩	Spring for Tuning Condenser	4265
①	Filter Choke	4961	⑩	Bezel	5009
①	Condenser 5 M. F. Electrolytic Type (50-60 cycles)	4916	⑩	Complete Pilot Bracket	03061-A
①	Condenser 10 M. F. Electrolytic Type (25-40 cycles)	5142	⑩	Dial Disc	4926
①	Condenser 5 M. F. Electrolytic Type (25-40) and (80-60) cycles	4916	⑩	Light Shield Screen	4937
①	B. C. Resistor	4963	⑩	Friction Drive Bracket	4980
①	Power Transformer (50 to 60 cycles)	4938	⑩	Brass Collar for Friction Drive	4986
①	Power Transformer (25 to 40 cycles)	4939	⑩	Shaft	4931

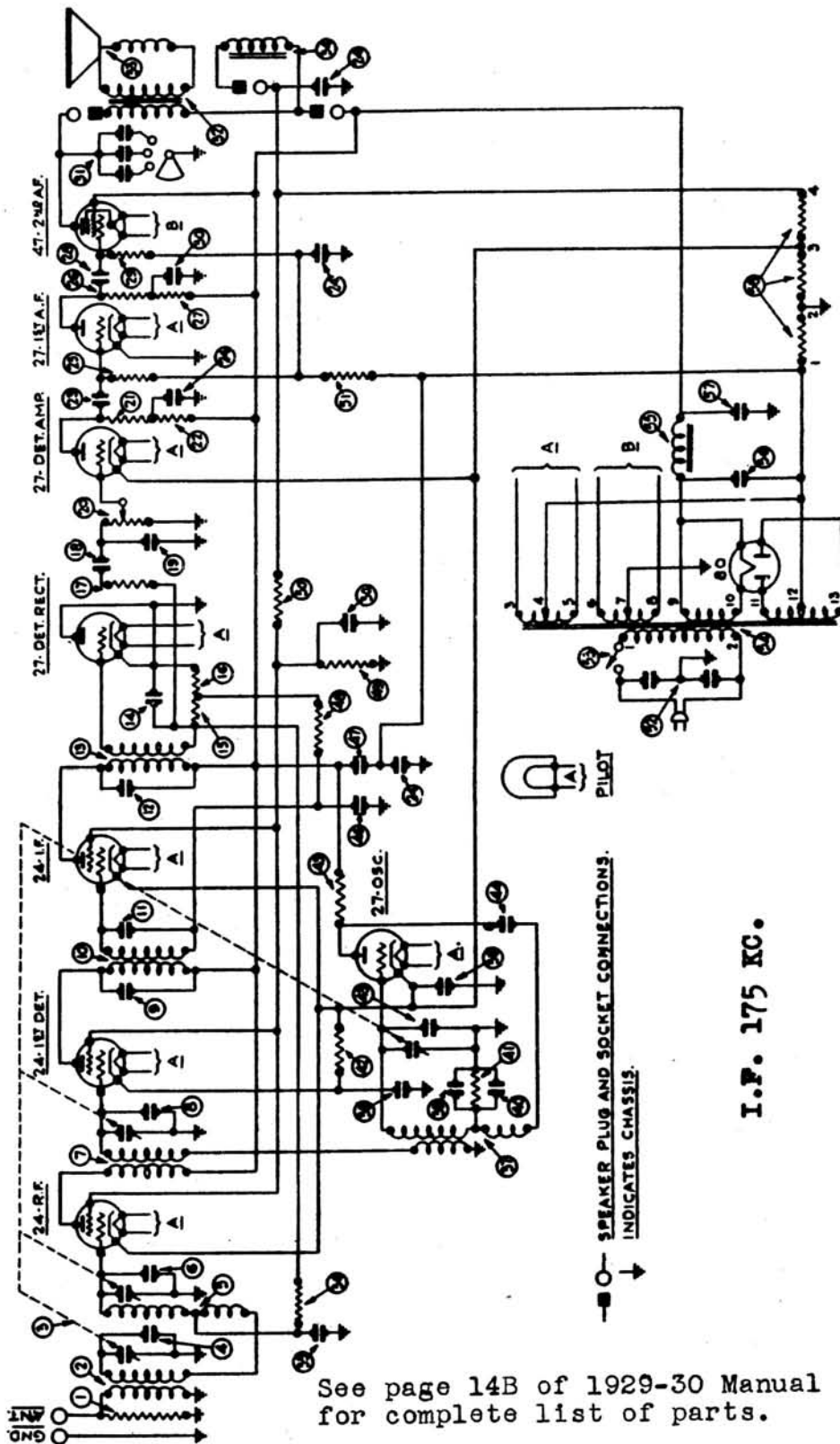
REPLACEMENT PARTS—MODELS 90 and 90-A RECEIVERS

(Above Serial No. 237,001)

No. on Page 3 and 4	Description	Part No.	No. on Page 3 and 4	Description	Part No.
①	Resistor (10,000 ohms)	4412	⑩	Voice Coil Assembly and Cone:	
①	First R. F. Transformer	03360	⑩	H ₁ (Large Cone)	02997
①	Gang Condenser (50-60 cycles)	03001	⑩	K ₁ (Small Cone)	02996
①	Gang Condenser (25-40 cycles)	03078	⑩	Speaker Field (Assembled with pot and frame)	
①	Compensating Condenser (part of gang condenser assembly)		⑩	By-Pass Condenser (.05 mfd.)	3615-W
①	Second R. F. Transformer	03014	⑩	Resistor (490,000 ohms)	4517
①	Compensating Condenser (part of gang condenser assembly)		⑩	Oscillator Coil	03018
①	First Detector Transformer	03015	⑩	By-Pass Condenser (.09 mfd.) double	4989-G
①	Compensating Condenser (part of gang condenser assembly)		⑩	Compensating Condenser } Assembled	03060
①	Compensating Condenser (First I. F. Primary)	03315	⑩	Condenser (.0007 mfd.)	
①	First I. F. Transformer	03009	⑩	Resistor (51,000 ohms)	4518
①	Compensating Condenser (First I. F. Secondary)	03315	⑩	Resistor (5,000 ohms)	5310
①	Compensating Condenser (Second I. F. Primary)	03317	⑩	Compensating Condenser (part of tuning condenser assembly)	
①	Second I. F. Transformer	03345	⑩	Condenser (110 mmf.)	4519
①	Condenser (110 mmf.)	4519	⑩	Resistor (51,000 ohms)	4237
①	Resistor (51,000 ohms)	4518	⑩	By-Pass Condenser (.05 mfd.)	3615-U
①	Resistor (51,000 ohms)	4518	⑩	By-Pass Condenser (.05 mfd.)	3615-E
①	Resistor (99,000 ohms)	4411	⑩	Resistor (490,000 ohms)	4517
①	By-Pass Condenser (.01 mfd.)	3903-M	⑩	Resistor (70,000 ohms)	5385
①	Condenser (.00025 mfd.)	3082	⑩	Resistor (25,000 ohms)	4516
①	Volume Control	5366	⑩	Resistor (240,000 ohms)	3768
①	Resistor (51,000 ohms)	4518	⑩	Condenser (.015 mfd.) double	3793-E
①	Resistor (70,000 ohms)	5385	⑩	On-Off Switch	4096
①	By-Pass Condenser (.01 mfd.)	3903-M	⑩	Power Transformer (50-60 cycles)	5362
①	Condenser (1-1 mfd., 1-13 mfd., 2-25 mfd.)	03325	⑩	Power Transformer (25-40 cycles)	5363
①	Resistor (240,000 ohms)	4410	⑩	Power Transformer (50-60 cycles, 220 volts)	5364
①	Resistor (25,000 ohms)	3656	⑩	Choke	4951
①	Resistor (25,000 ohms)	3656	⑩	Condenser (5 mfd.) Electrolytic type (50-60 cycles)	4916
①	By-Pass Condenser (.01 mfd.)	3903-P	⑩	Condenser (10 mfd.) Electrolytic type (25-40 cycles)	5142
①	Resistor (240,000 ohms)	4410	⑩	Condenser (5 mfd.) Electrolytic type (50-60 cycles)	4916
①	Condenser (.25 mfd., 1 mfd.)	03327	⑩	Condenser (10 mfd.) Electrolytic type (25-40 cycles)	5142
①	Tone Control	4037-A	⑩	B. C. Resistor	5365
①	Output Transformer	2673	⑩	Line Cord and Plug	L-943
			⑩	Tube Shield (Large)	03373

Models 90 and 90-A
ABOVE SERIAL NO. 237,001
WITH I-TYPE 47 TUBE

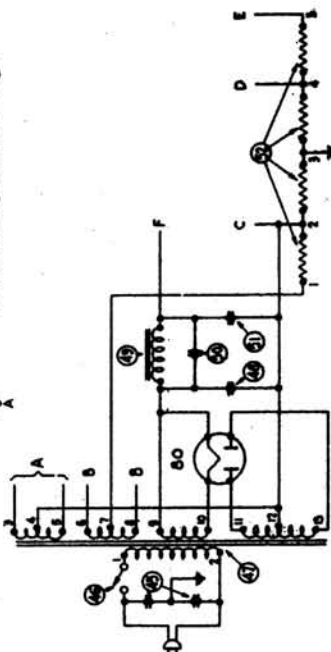
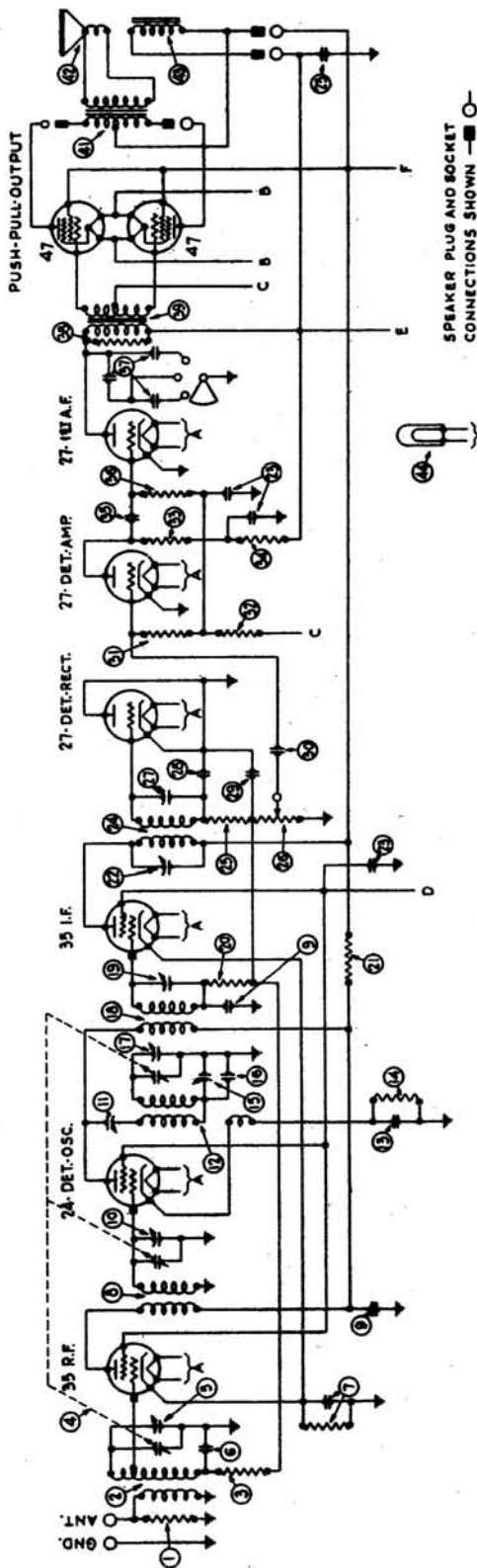
Philco Radio



See page 14B of 1929-30 Manual for complete list of parts.

I.F. 175 KC.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



I.F. 260 KC.

Philco Radio

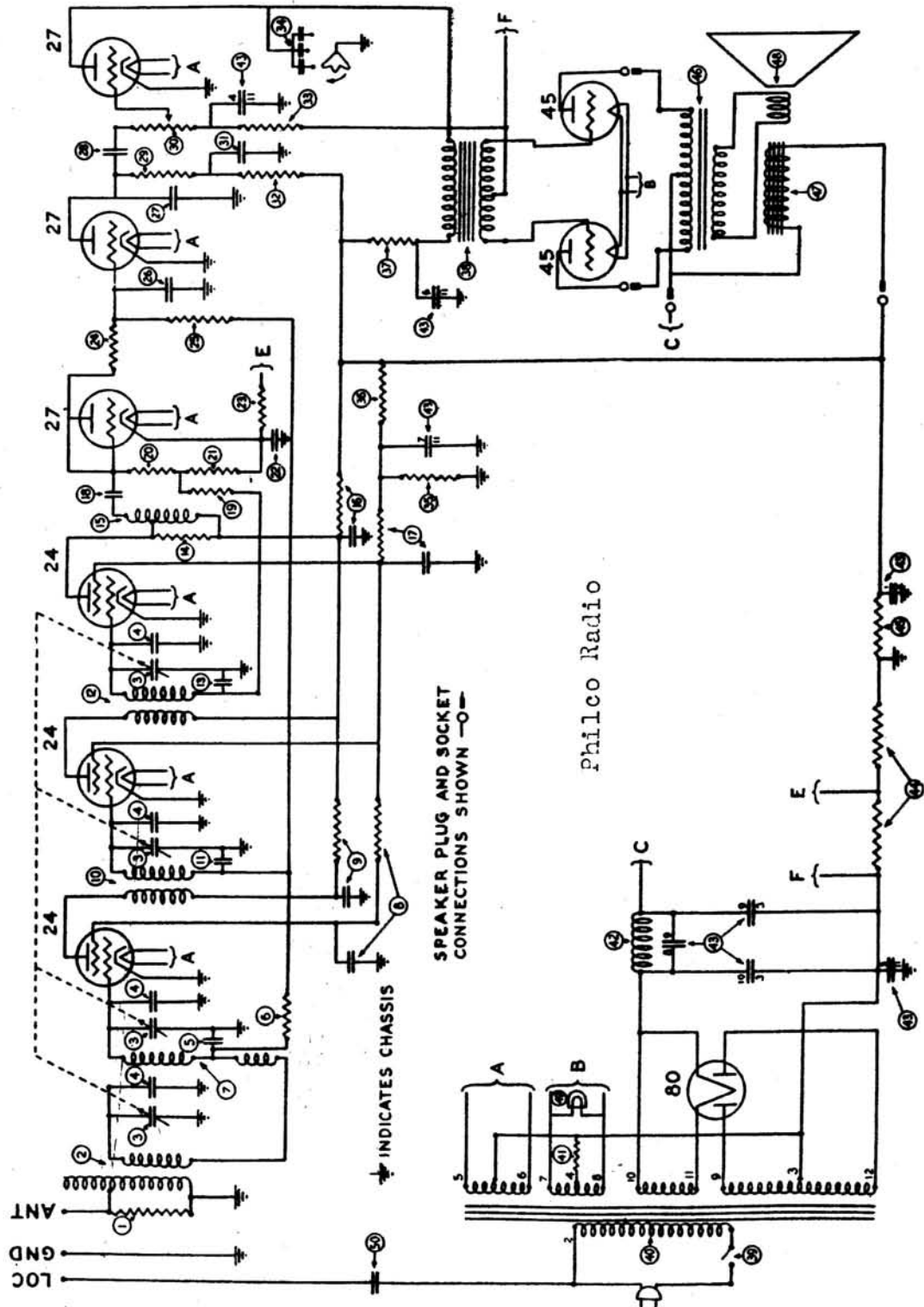
MODEL 90

WITH 2- TYPE 47 TUBES
SERIAL NO. 32,001 TO B35,000
AND ABOVE B53,100

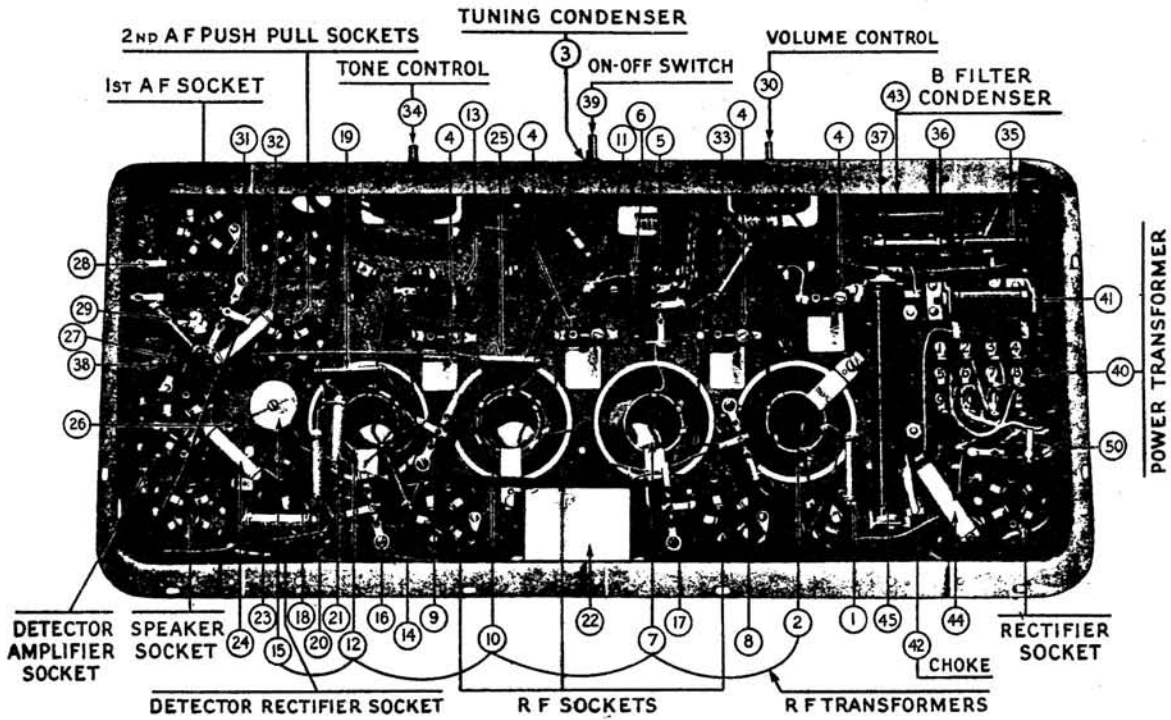
No. on Fig. 1 and 2	Description	Part No.
1	Resistor (10,000 Ohms)	4412
2	Antenna Transformer	04317
3	Resistor (1,000,000 Ohms)	4409
4	Tuning Condenser (50-60 cycles)	04309
5	Tuning Condenser (25-40 cycles)	04310
6	Compensating Condenser - Antenna Part of Tuning Condenser Assembly	
7	Condenser (.05 Mfd.)	3615-L
8	Condenser (.09 Mfd. and 200 Ohm Resistor)	4698-L
9	Detector Transformer	04408
10	Condenser (.09 Mfd.)	3615-AJ
11	Compensating Condenser - Detector Part of Tuning Condenser Assembly	
12	Compensating Condenser - Coupling	04000-M
13	Oscillator Coil	04409
14	Condenser (700 Mmf.)	4530
15	Resistor (15,000 Ohms)	6208
16	Compensating Condenser - Low Frequency	04000-B
17	Condenser (410 Mfd.)	5120
18	Resistor (1,000,000 Ohms)	4409
19	Resistor (1,000 Ohms)	4590
20	Compensating Condenser - Second I.F. Primary	04000-M
21	Condenser (2-25, 2-3 Mfd.)	04407
22	Second I.F. Transformer	04320
23	Resistor (99,000 Ohms)	4411
24	Volume Control	6015
25	Condenser (110 Mmf.)	4519
26	Condenser (110 Mmf.)	4519
27	Condenser (.01 Mfd.)	3608-N
28	Resistor (1,000,000 Ohms)	4517
29	Resistor (490,000 Ohms)	4516
30	Resistor (25,000 Ohms)	4409
31	Resistor (25,000 Ohms)	4409
32	Resistor (.01 Mfd.)	3608-X
33	Resistor (1,000,000 Ohms)	4409
34	Tone Control	08137
35	Resistor (81,000 Ohms)	4518
36	Push-Pull Input Transformer	6004
37	Push-Pull Output Transformer	6215
38	Voice Coil and Core Assembly	2086
39	Speaker Field Assembled with Pot	02874
40	Pilot Light	02892
41	Condenser (.015 Mfd. Double)	3468
42	On-Off Switch	5798-E
43	Power Transformer (50-60 cycles)	4095
44	Power Transformer (25-40 cycles)	6073
45	Power Transformer (90-60 cycles, 290 volts)	6073
46	Electrolytic Condenser (5 Mfd.) 50-60 cycles	6074
47	Filter Choke	4916
48	Condenser (.15 Mfd.)	6287-B
49	Condenser (5 Mfd.)	4916
50	B. C. Resistor	6071

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

MODEL 96



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



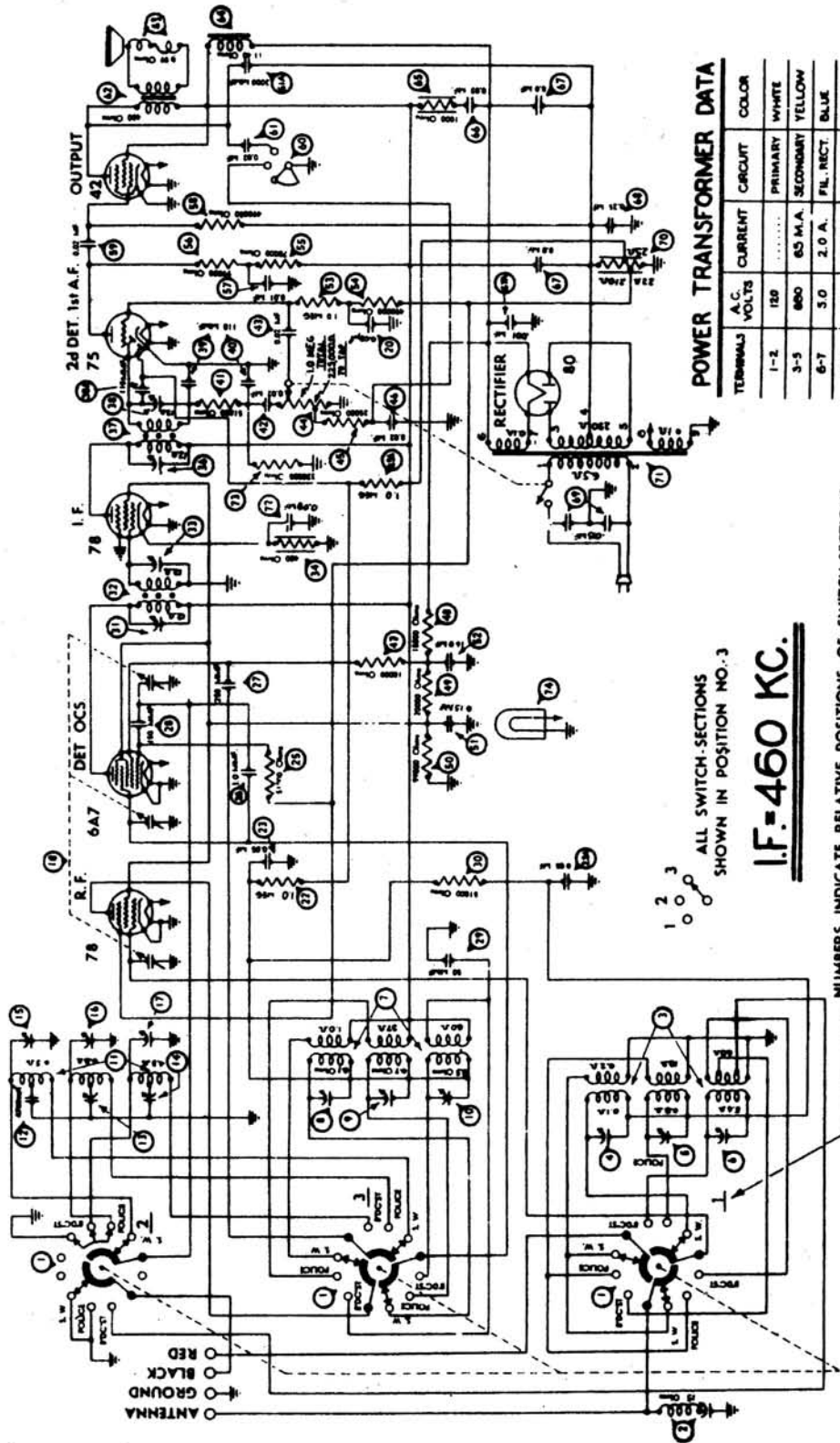
Replacement Parts for Model 96

No.	Description	Part No.	No.	Description	Part No.
1	Antenna Resistor	3526	30	Volume Control	4093
2	First R. F. Transformer	3744-A	31	By-Pass Condenser	3615-D
3	Tuning Condenser	4000-D	32	Resistor	3768
4	Compensating Condenser	3772-A	33	Resistor	3542
5	By-Pass Condenser	3615-F	34	Tone Control	4037-A
6	Resistor	3542	35	Resistor	3542
7	Second R. F. Transformer	3744-B	36	Resistor	3766
8	By-Pass Condenser and Resistor	3615-C	37	Resistor	3656
9	By-Pass Condenser and Resistor	3615-B	38	Input Transformer	3537
10	Third R. F. Transformer	3744-C	39	On-Off Switch	4095
11	By-Pass Condenser	3615-E	40	Power Transformer (60 Cycle)	3752
12	Fourth R. F. Transformer	3744-C	41	Power Transformer (25 Cycle)	3753
13	By-Pass Condenser	3615-E	42	C Resistor	3763
14	Resistor	3766	43	Choke	3422
15	Fifth R. F. Transformer	3775-B	44	Filter Condenser (60 Cycle)	3754
16	By-Pass Condenser and Resistor	3615-B	45	Filter Condenser (25 Cycle)	3755
17	By-Pass Condenser and Resistor	3615-C	46	Resistor	3764
18	Condenser	3774	47	B Resistor	3762
19	Resistor	3769	48	Out-Put Transformer	2848
20	Resistor	3767	49	Field Coil	2850
21	Resistor	3767	50	Voice Coil and Cone	2794-B
22	By-Pass Condenser	3583		Pilot Lamp	3463
23	Resistor	3767		Condenser (LOC)	3793-B
24	Resistor	3768		Knob (Vol. Control)	3579
25	Resistor	3769		Knob (Tuning Condenser)	3580
26	By-Pass Condenser	3082		Dial Indicator	4006
27	By-Pass Condenser	3082		Scale	4118
28	Condenser	3793-C		Speaker Plug and Cable (Short)	L-1101-A
29	Resistor	3769		Speaker Plug and Cable (Long)	L-1102-A

NOTE: The first two Compensating Condensers ① are 3772-A; the third and fourth Condensers are 3968-A.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

MODEL 620
(Later Production)



POWER TRANSFORMER DATA

TERMINALS	A.C. VOLTS	CURRENT	CIRCUIT	COLOR
1-2	100	.....	PRIMARY	WHITE
3-5	600	65 M.A.	SECONDARY	YELLOW
6-7	5.0	2.0 A.	FIL. RECT.	BLUE
8-9	8.3	2.0 A.	FILAMENTS	BLACK
4	.....	.....	CENTER TAP OF 3-5	YELLOW, GREEN TRACES

ALL SWITCH-SECTIONS SHOWN IN POSITION NO. 3



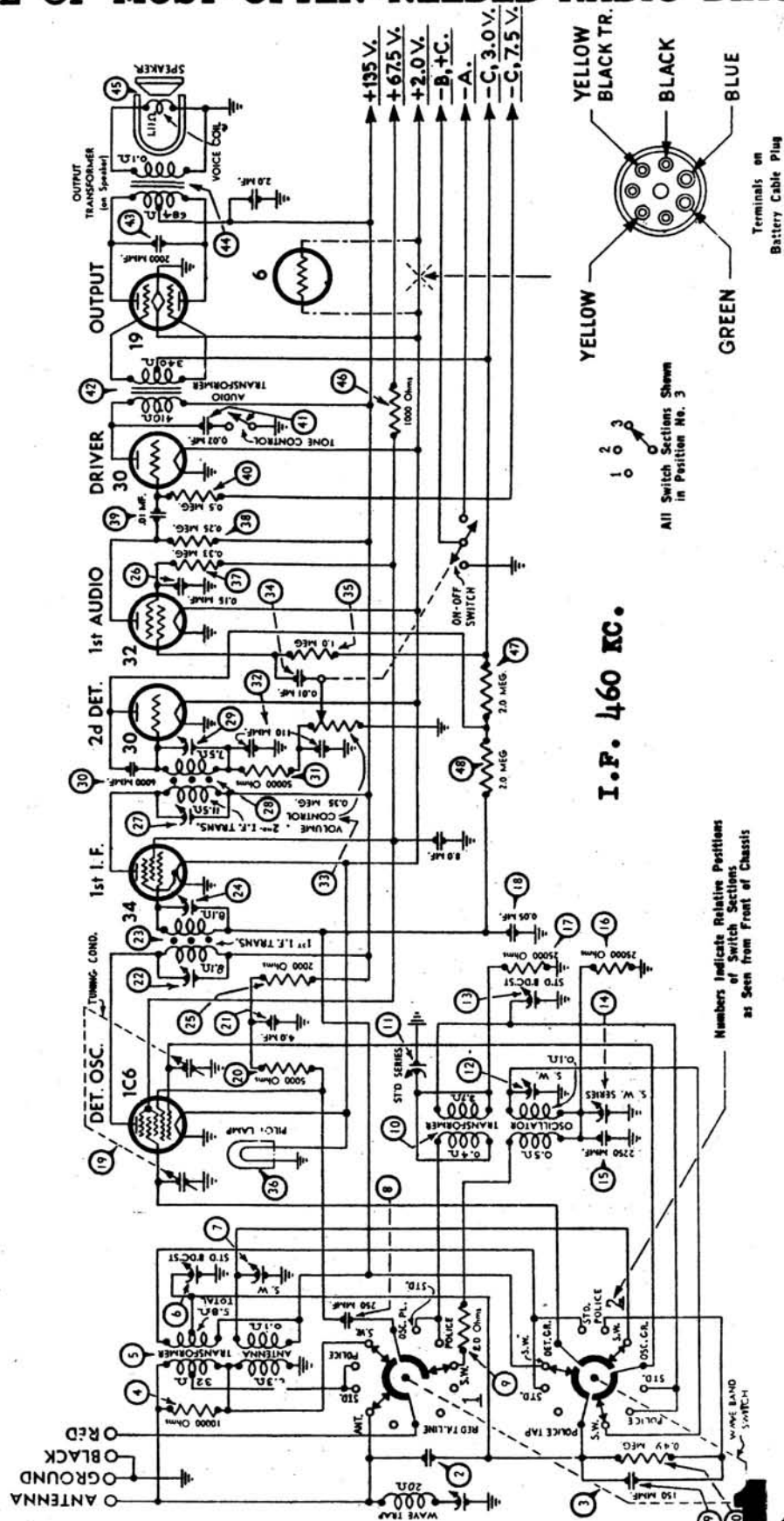
I.F. = 460 KC.

NUMBERS INDICATE RELATIVE POSITIONS OF SWITCH-SECTIONS FROM FRONT OF CHASSIS.

Philco Radio

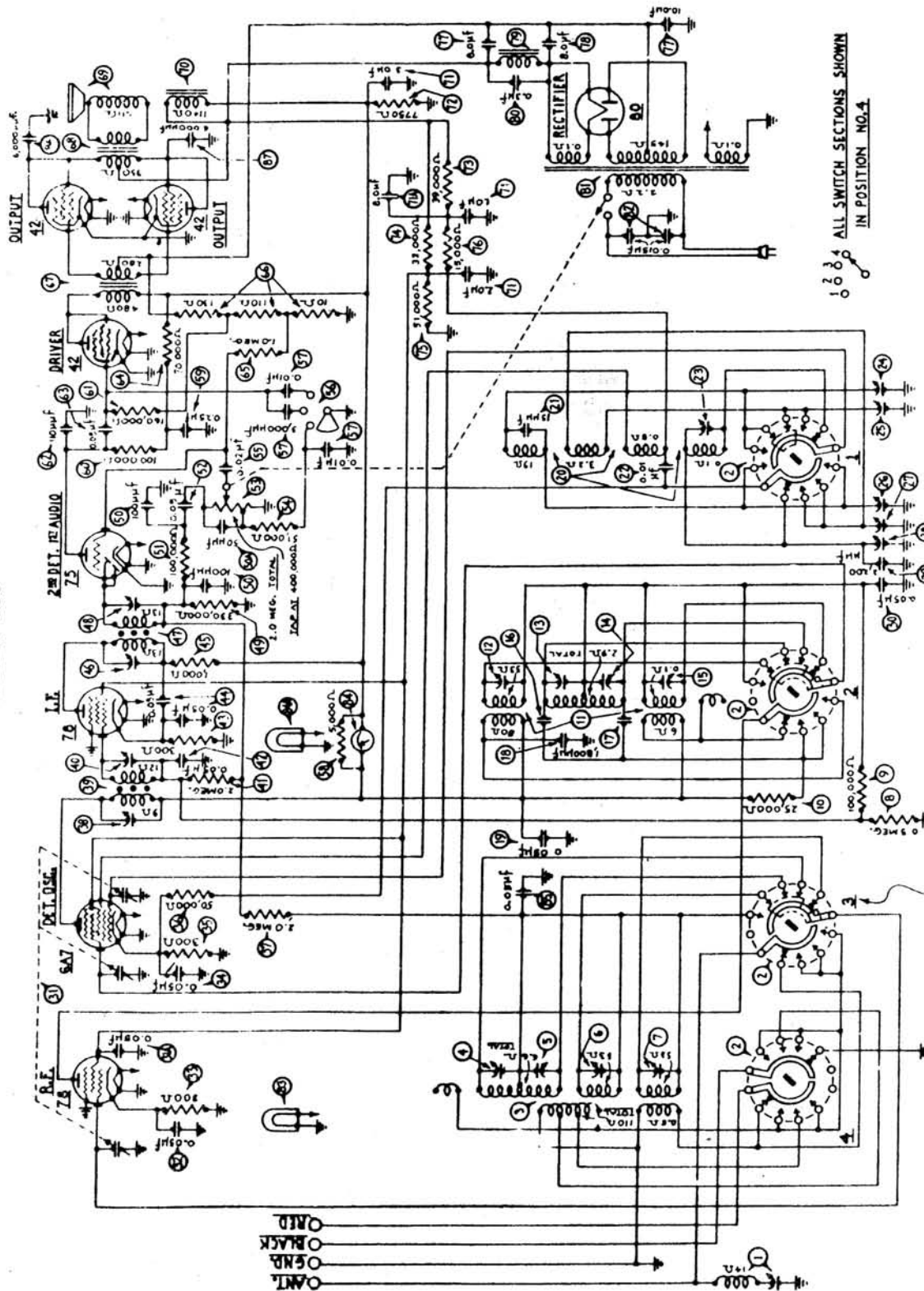
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

MODEL 623 (Battery Operated)



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

MODEL 650

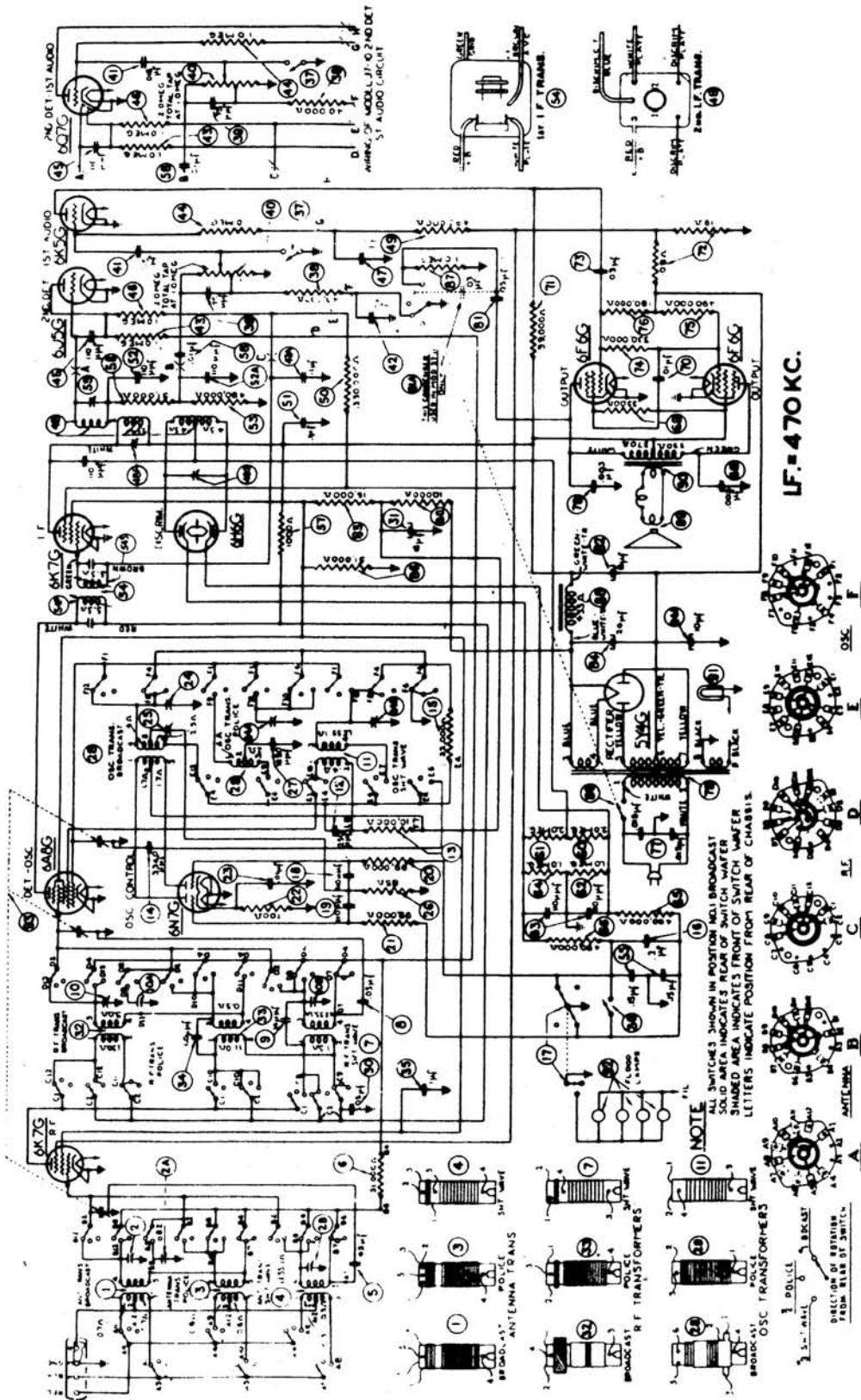


I.F. = 460 KC.

NUMBERS INDICATE RELATIVE POSITIONS OF SWITCH SECTIONS FROM FRONT OF CHASSIS

Philco Radio

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

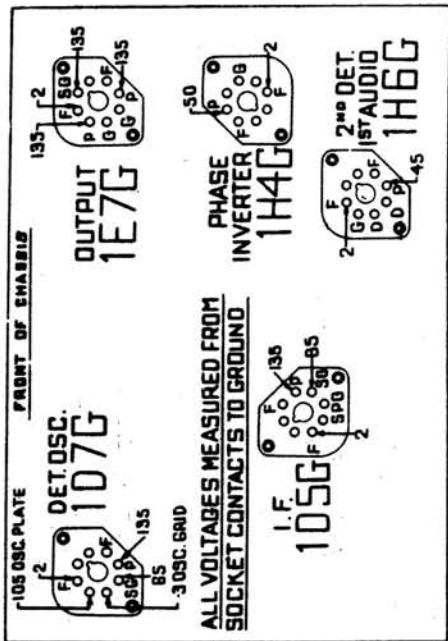
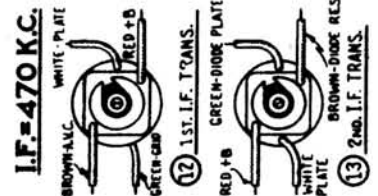
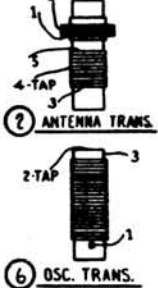
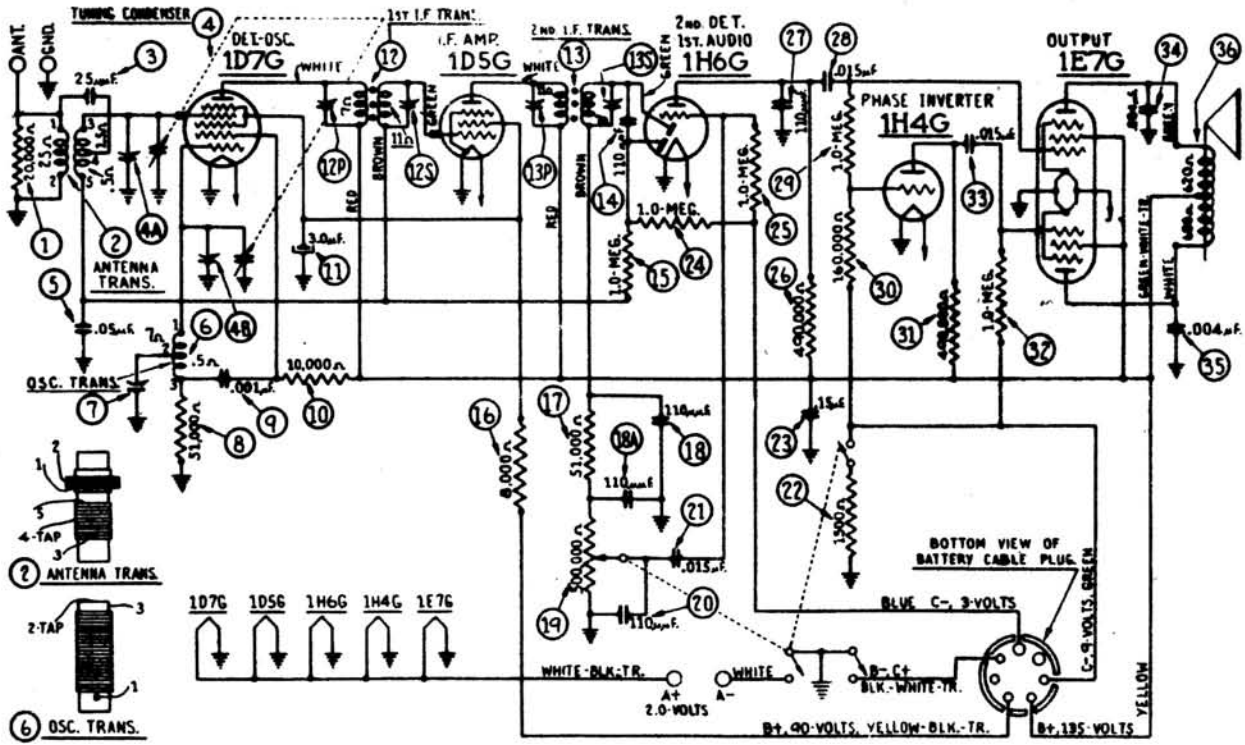


Philco Radio

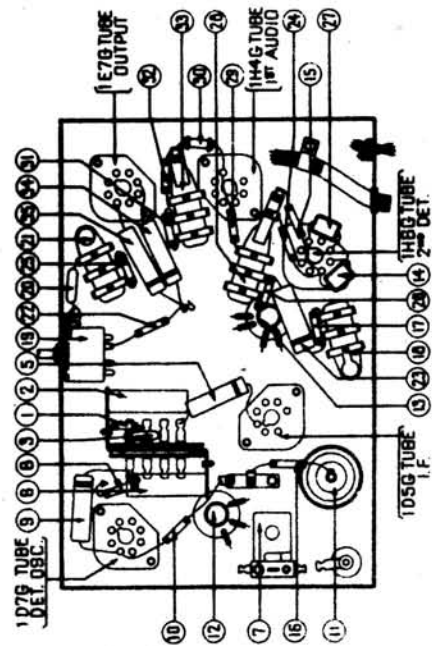
Models 37-10, 37-11

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

PHILCO Model 37-33

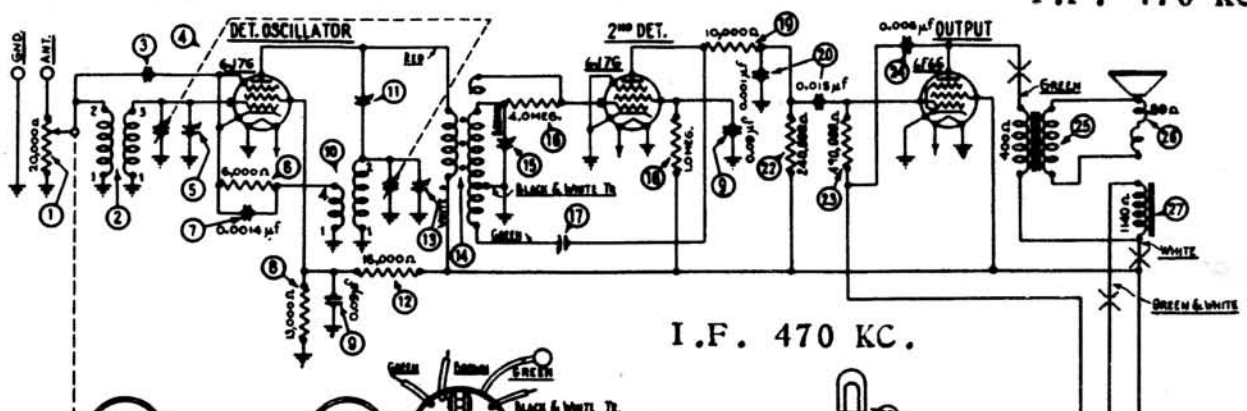
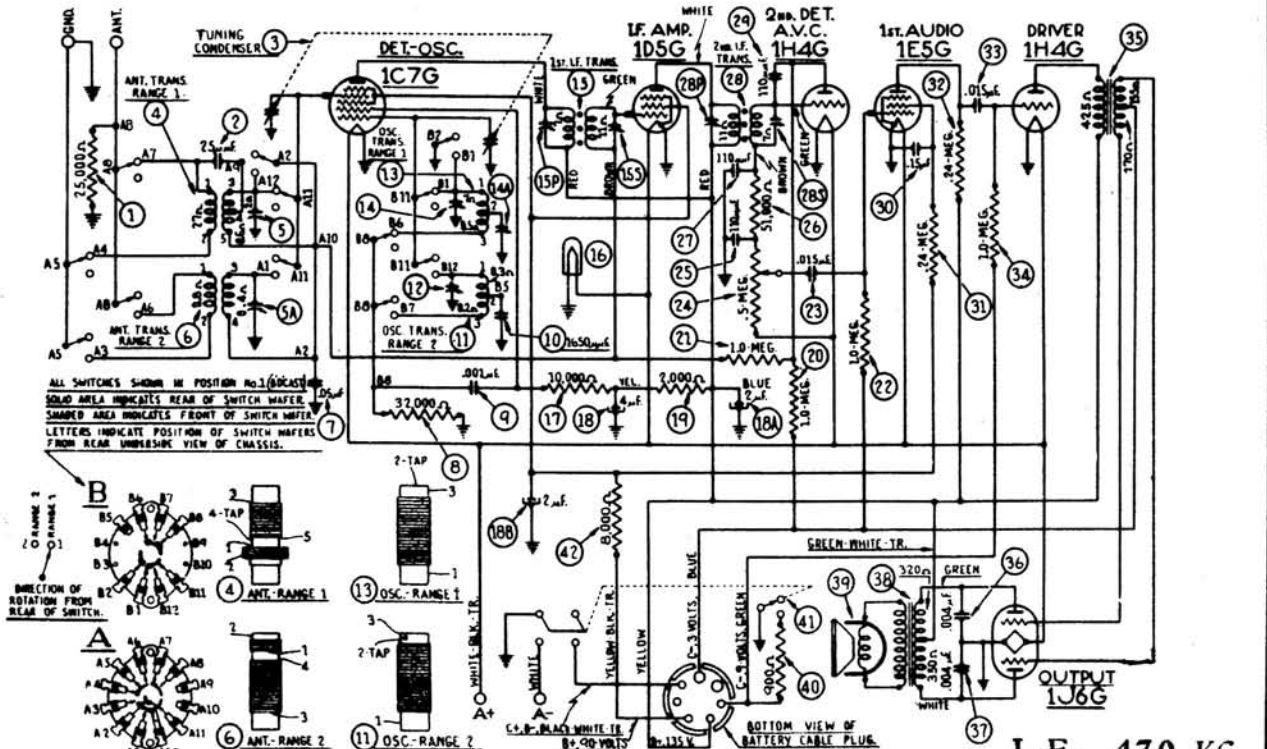


View of Sockets from Underside Channels
 The voltages indicated by arrows were measured with a Philco 25 Circuit Tester which contains a voltmeter having a resistance of 1000 ohms per volt. Volume Control at minimum.



PHILCO

Model 37-38



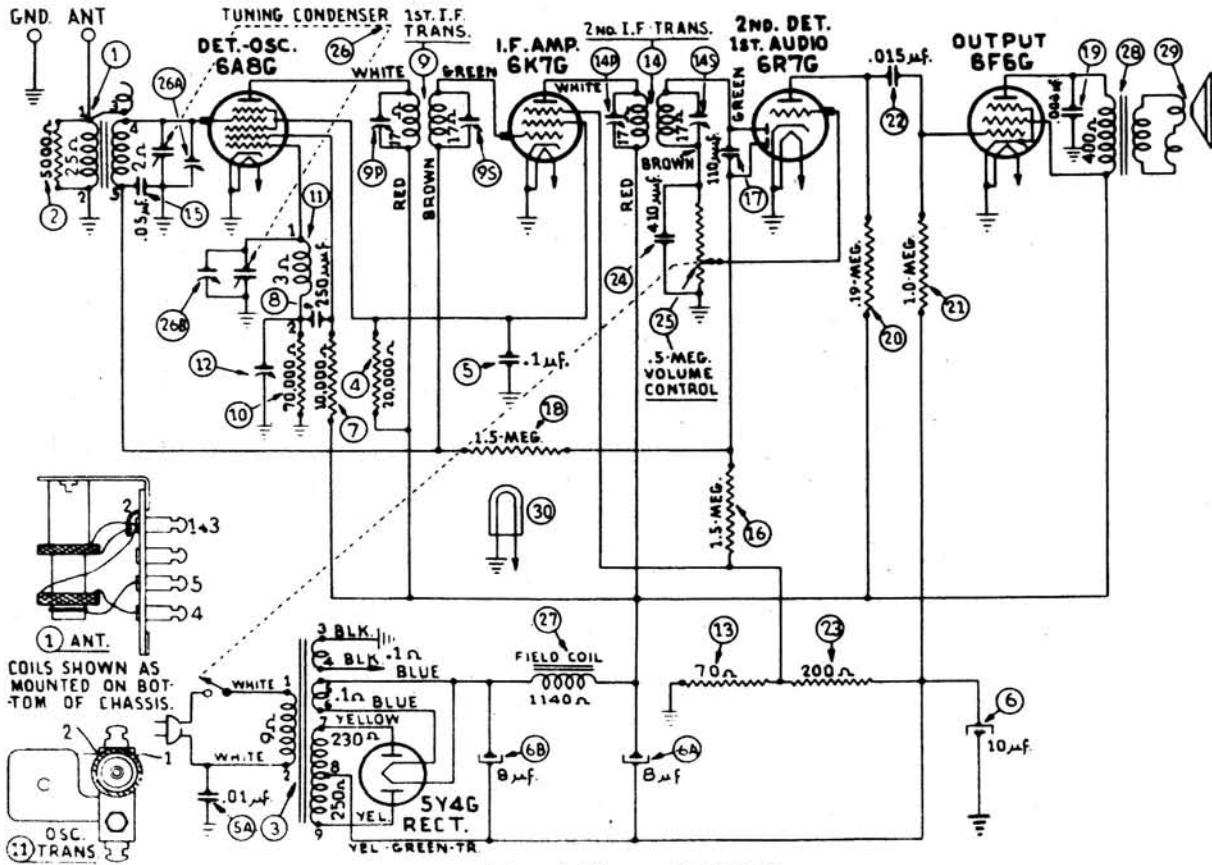
POWER TRANSFORMER DATA

TERMINALS	VOLTS	CURRENT	CIRCUIT	COLOR
1-2	120		PRIMARY	WHITE
3-4	6.3	1.5 A.	FLAMING	BLACK
5-6	8.0	2.0 A.	FIL. RECT.	BLUE
7-9	6.30	55 MA.	SECONDARY	YELLOW
8			CENTER TAP 7-9	YELLOW/GREEN TRANSFER

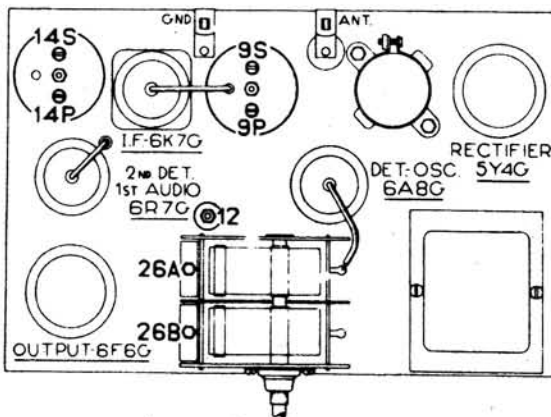
Model 37-84, Code-122

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

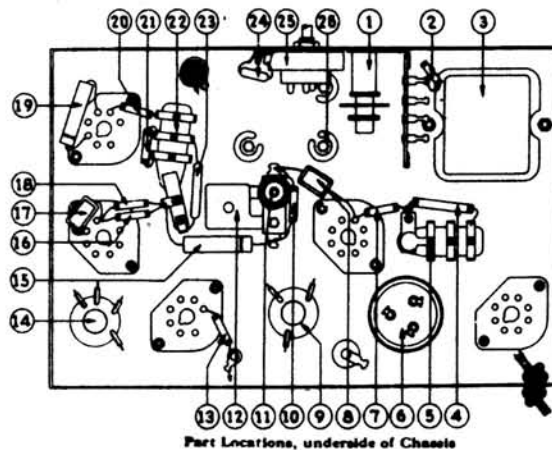
Philco Model 37-93



Schematic Diagram, Model 37-93



Locations of R. F. and I. F. Compensators

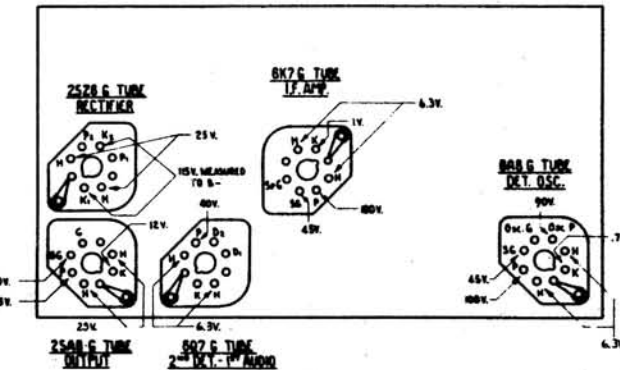
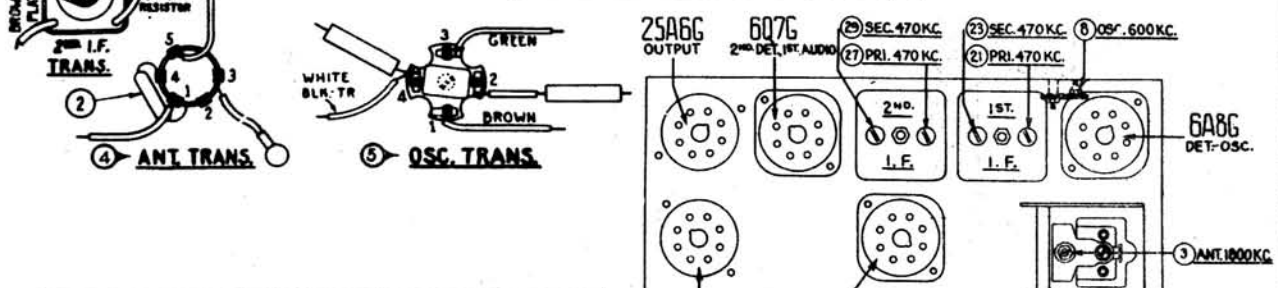
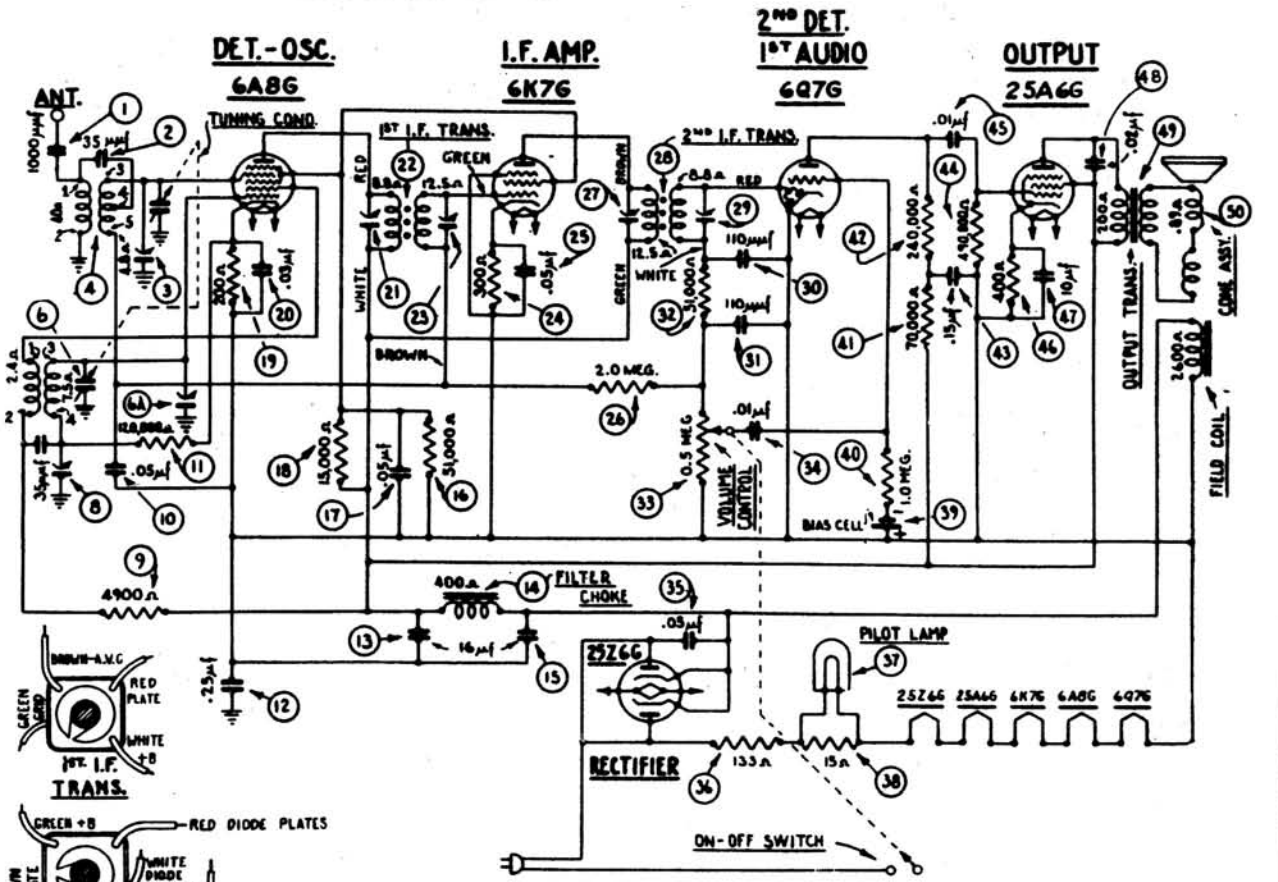


Part Locations, underside of Chassis

I.F. 470 KC.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

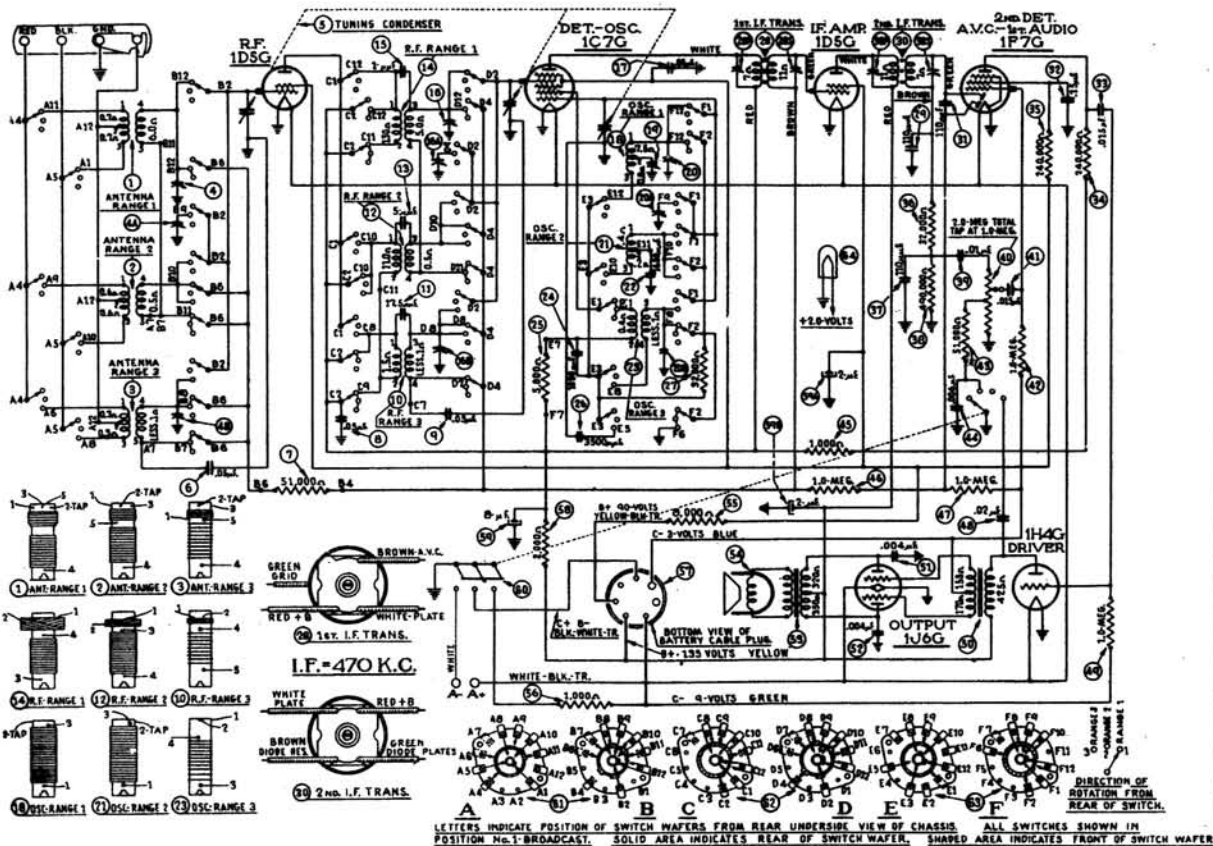
PHILCO Model 37-602



Tube Sockets as viewed from underside of chassis. (Voltages measured from socket contacts to B—)

TYPE CIRCUIT: Superheterodyne with pentode output.
POWER SUPPLY: 115 V., 25 or 60 cycle, A. C.; D. C.
TUBES USED: 1 type 6A8G, Osc. Det., 1 type 6K7G I.F. Amplifier, 1 type 6Q7G, 2nd Det. 1st audio, 1 type 25A6G output, 1 type 25Z6G rectifier.
FREQUENCY RANGE: 530-1800 K.C.
INTERMEDIATE FREQUENCY: 470 K.C.
CURRENT CONSUMPTION: 55 watts.
SPEAKER: B-4.
POWER OUTPUT: ¼ watt.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



Philco Radio

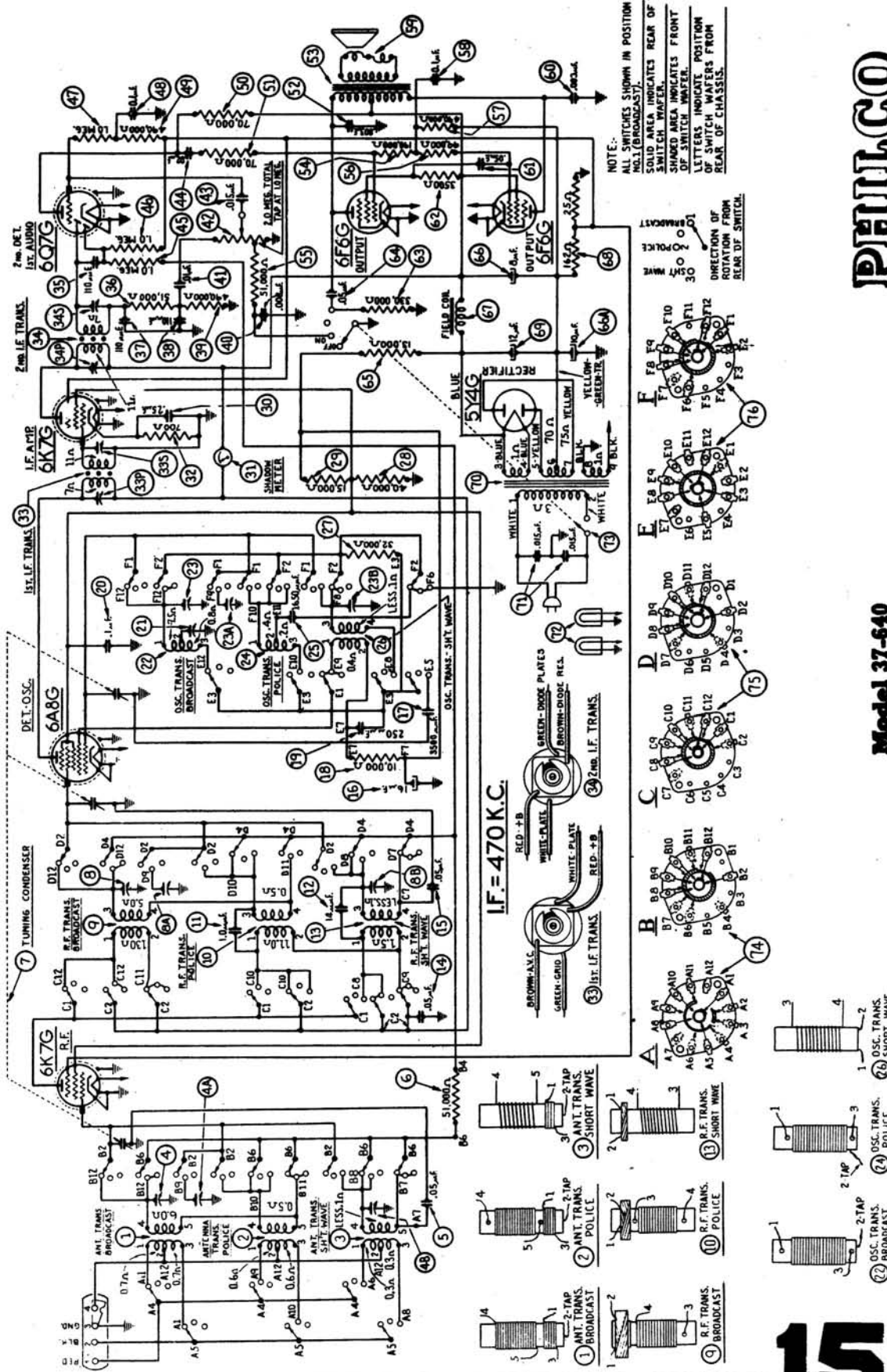
Replacement Parts — Model 37-623

Schem. No.	Description	Part No.	Schem. No.	Description	Part No.	Schem. No.	Description	Part No.
1	Antenna Transformer (530-1720 K.C.)	32-2108	45	Resistor (1,000 ohms, 1/2 watt)	33-210339	28	Spring (Vol. Shaft)	28-4117
2	Antenna Transformer (2.3 to 7.4 M.C.)	32-2119	46	Resistor (1 megohm, 1/2 watt)	33-510339	29	Socket (8 prong)	27-8058
3	Antenna Transformer (7.35 to 22 M.C.)	32-2109	47	Resistor (1 megohm, 1/2 watt)	33-510339	30	Socket (7 prong)	27-0067
4	Compensator (Three Sections)	31-8092	48	Condenser (.02 mfd. Tubular)	30-4113	31	Shield Tube	28-2726
5	Tuning Condenser	31-1818	49	Resistor (1 megohm, 1/2 watt)	33-510339	32	Base Tube Shield	28-3898
6	Condenser (.05 mfd. Tubular)	30-4020	50	Audio Input Transformer	32-7637	33	Grommet Mtg. R. F. Unit	27-4317
7	Resistor (51,000 ohms, 1/2 watt)	33-351339	51	Condenser (.004 mfd. Tubular)	30-4456	34	Sleeve Mtg. R. F. Unit	28-2257
8	Condenser (.05 mfd. Tubular)	30-4020	52	Condenser (.004 mfd. Tubular)	30-4456	35	Screw Mtg. R. F. Unit	W-739
9	Condenser (.05 mfd. Tubular)	30-4020	53	Output Transformer	32-7638	36	Washer Mtg. R. F. Unit	28-3927
10	R. F. Transformer (7.35 to 22 M.C.)	32-2126	54	Cone and Voice Coil Assembly KR-17	36-3540	37	Washer Mtg. R. F. Unit	27-8339
11	Condenser (17.5 mmfd. Mica)	30-1079	55	Resistor (8,000 ohms, 1/2 watt)	33-280339	38	Rubber Mtg. Tuning Condenser	27-4326
12	R. F. Transformer (2.3 to 7.4 M.C.)	32-2106	56	Resistor (1,000 ohms, 1/2 watt)	33-210339	39	Mtg. Plate (Trans.)	28-3806
13	Condenser (5 mmfd. Mica)	30-1080	57	Cable Battery	41-3198	40	Mtg. Snacor (Trans.)	27-8228
14	R. F. Transformer (530-1720 K.C.)	32-2105	58	Resistor (2,000 ohms, 1/2 watt)	33-220339	41	Mtg. Screw (Trans.)	38-7703
15	Condenser (Twist wire and lug)	38-7878	59	Electrolytic Condenser (2, 2, 8 mfd.)	30-2161	42	Terminal Panel I. F. Unit	41-3207
16	Compensator (Three section)	31-1821	60	Power and Tone Control Switch	42-1207	43	Mtg. Bolt (Chassis)	W-1495
17	Condenser (.05 mfd. Tubular)	30-4020	61	Range Switch (A.N.T.)	42-1200	44	Mtg. Rubbers	5189
18	Oscillator Transformer (530-1720 K.C.)	32-2120	62	Range Switch (R.F.)	42-1245	45	Mtg. Bushing	27-4360
19	Compensator (590 K.C.)	31-8056	63	Range Switch (Osc.)	42-1246	46	Knob	27-4330
20	Compensator (Three section)	31-8092		Pilot Lamp Assembly	38-7875	47	Knob	27-4331
21	Oscillator Transformer (2.3 to 7.4 M.C.)	32-2121		Pilot Lamp	34-2160	48	Knob	27-4326
22	Condenser (1650 mmfd.)	31-8096		Vernier Drive Assembly	31-1871	49	"B" Battery	41-8007
23	Oscillator Transformer (7.35 to 22 M.C.)	32-2110		Dial	27-6214	50	"A" Battery (Wet)	172R
24	Condenser (1,000 mmfd. Mica)	30-4453		Dial Hub	28-7187	51	"A" Battery (Dry)	41-9011
25	Resistor (5,000 ohms, 1/2 watt)	33-250393		Dial Clamp	28-2837	52	Ballast Lamp	1FT
26	Condenser (3,500 mmfd. Semifixed)	31-6097		Dial Guard	27-8324	53	Base Plate and Frame	40-5939
27	Resistor (32,000 ohms, 1/2 watt)	33-332339		Set Screw	W-1641	54	Gasket	27-8311
28	First I. F. Transformer	32-2100		Gear (Dial)	28-7185	55	Glass	27-8298
29	Condenser (110 mmfd. Mica)	30-1031		Thrust Spring	28-8611	56	Ring	28-3967
30	Second I. F. Transformer	32-2102		Thrust Washer	28-3976	57	Screws	W-1644
31	Condenser (110 mmfd. Mica)	30-1041		C Washer	28-3904			
32	Condenser (.15 mfd. Bakelite)	62878G		Gear (Drive)	31-1854			
33	Condenser (.015 mfd. Tubular)	30-4226		Mask	27-8198			
34	Resistor (240,000 ohms, 1/2 watt)	33-424339		Mask Arm and Assembly	31-1940			
35	Resistor (240,000 ohms, 1/2 watt)	33-424339		Shaft Coupling (Mask)	31-1941			
36	Resistor (32,000 ohms, 1/2 watt)	33-332339		Felt Washers	27-8399			
37	Condenser (110 mmfd. Mica)	30-1031		Washer	27-8318			
38	Resistor (490,000 ohms, 1/2 watt)	33-449339		Snap Fastener	28-4379			
39	Condenser (.01 mfd. Tubular)	30-4124		Indicator Bracket and Lens Assembly	38-7912			
40	Volume Control	33-5158		Mask Guide and Lamp Support	38-7844			
41	Condenser (.015 mfd. Tubular)	30-4358		Shaft and Index Plate (Range Switch)	42-1173			
42	Resistor (1 megohm, 1/2 watt)	33-510339		Shaft (Volume Control)	38-8069			
43	Resistor (51,000 ohms, 1/2 watt)	33-351339		Retaining Clip (Vol. Shaft)	38-4394			
44	Condenser (.006 mfd. Tubular)	30-4125						

152

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

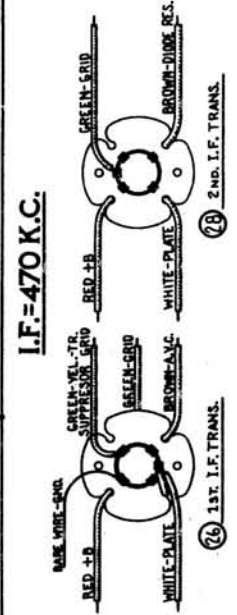
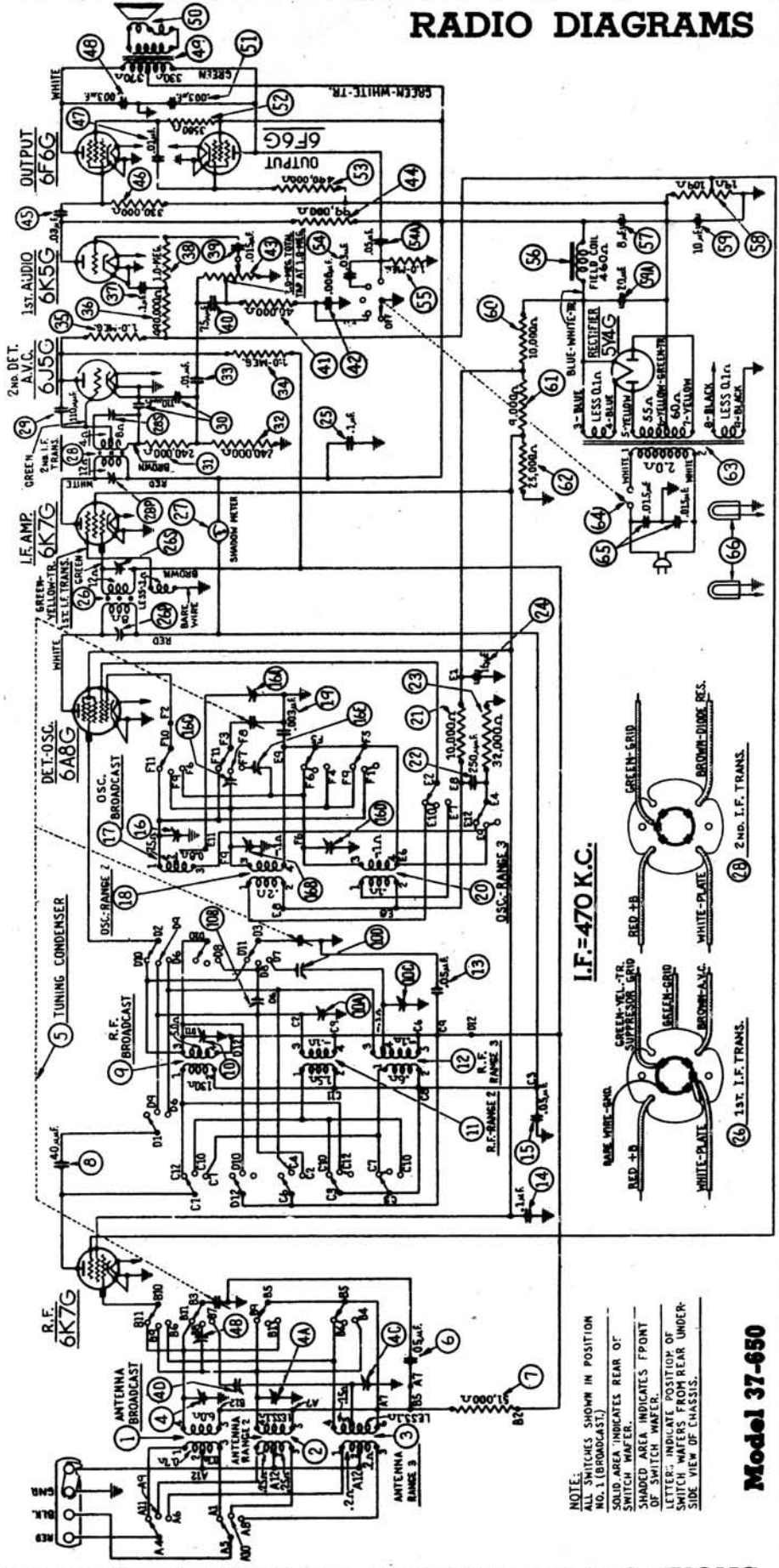
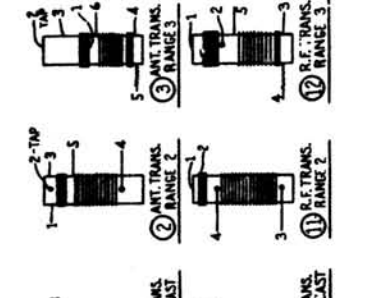
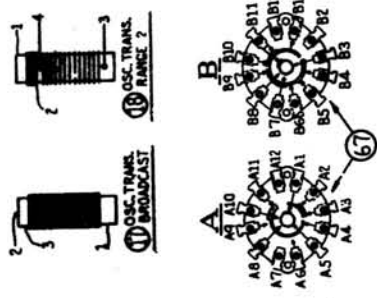
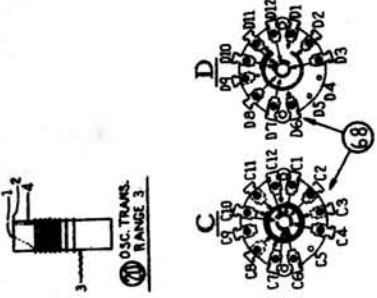
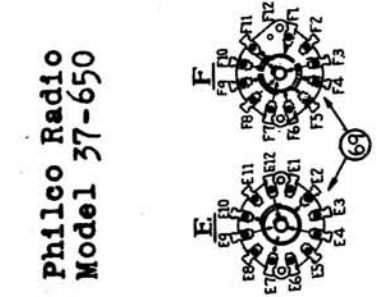
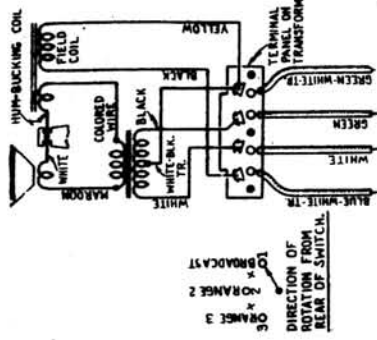
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



PHILCO

Model 37-640

Philco Radio
Model 37-650

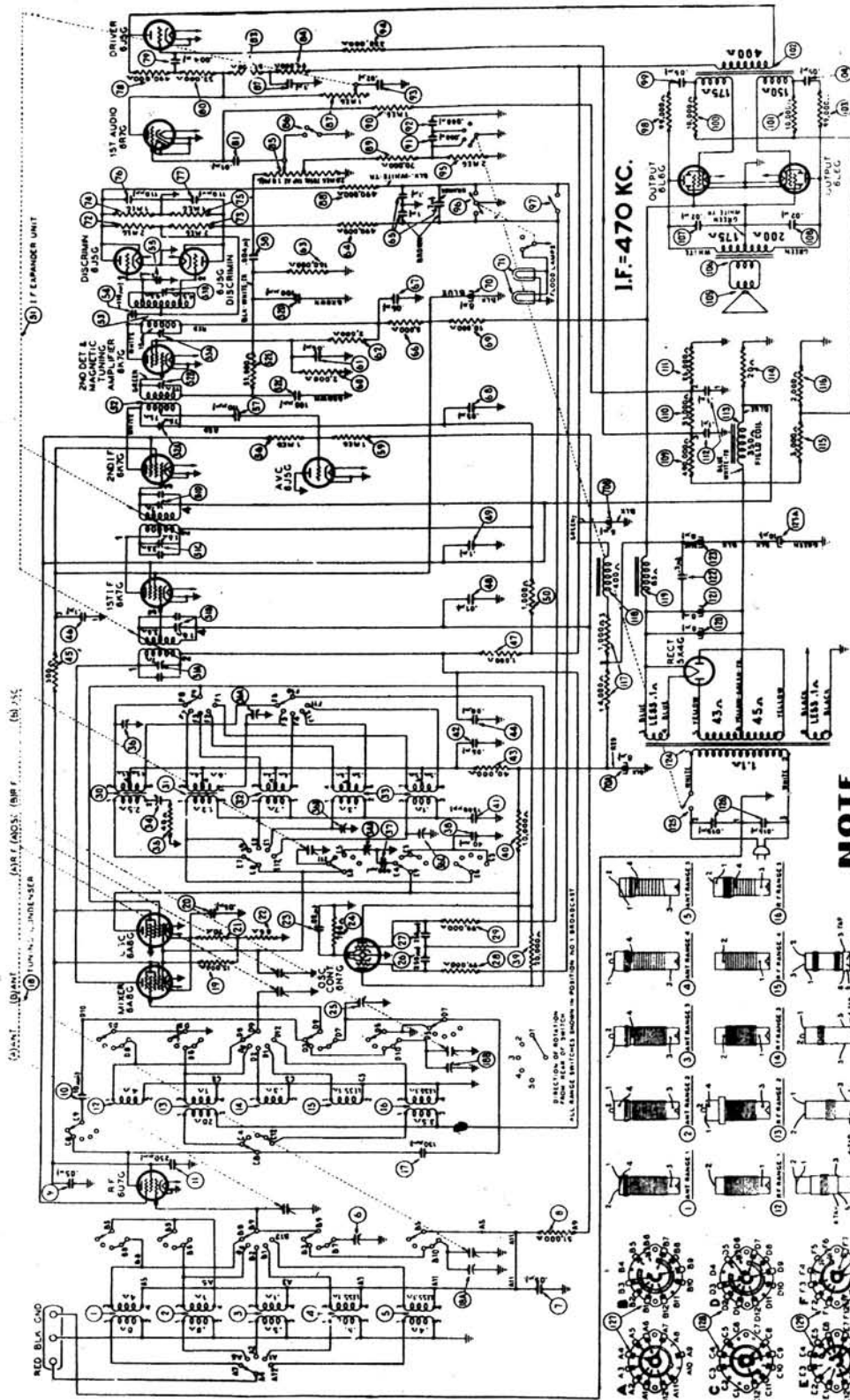


NOTE:
ALL SWITCHES SHOWN IN POSITION NO. 1 (BROADCAST).
SOLID AREA INDICATES REAR OF SWITCH WAFER.
SHADED AREA INDICATES FRONT OF SWITCH WAFER.
LETTERS INDICATE POSITION OF SWITCH WAFER UNDER SIDE VIEW OF CHASSIS.

Model 37-650

PHILCO

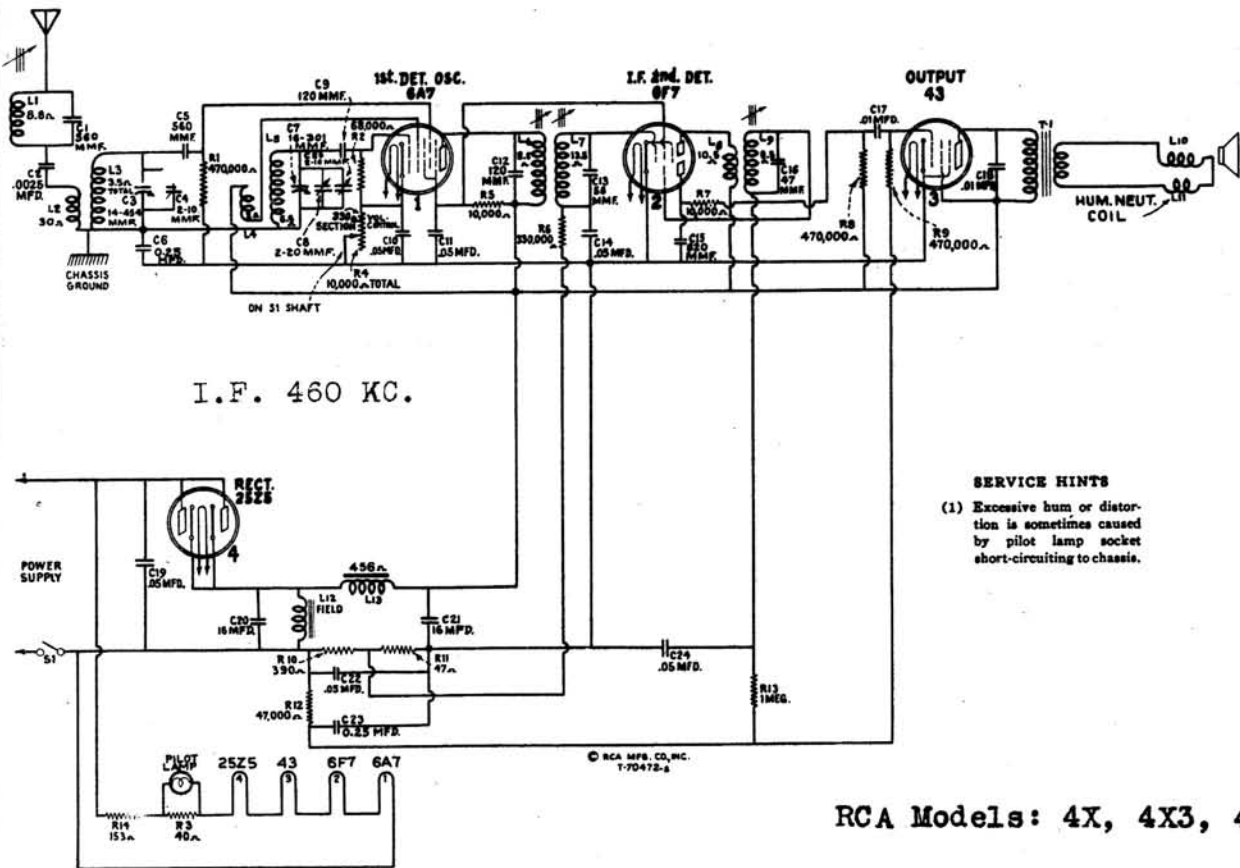
Model 38-116, Code 121



NOTE

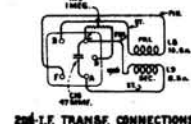
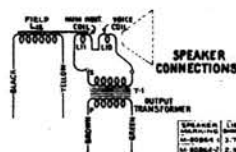
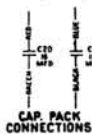
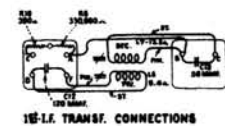
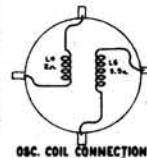
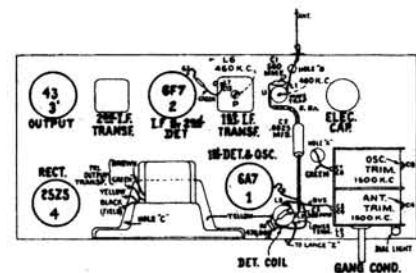
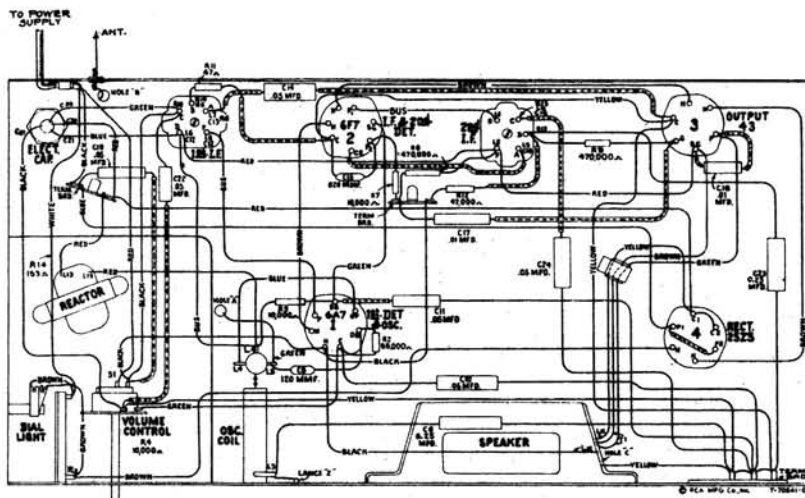
SOLID AREA INDICATES RING AT REAR OF SWITCH WAFER
 SHADED AREA INDICATES RING AT FRONT OF SWITCH WAFER
 LETTERS INDICATE POSITION OF SWITCH WAFERS FROM REAR OF CHASSIS. (BOTTOM VIEW)

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



RCA Models: 4X, 4X3, 4X4

Schematic Circuit Diagram



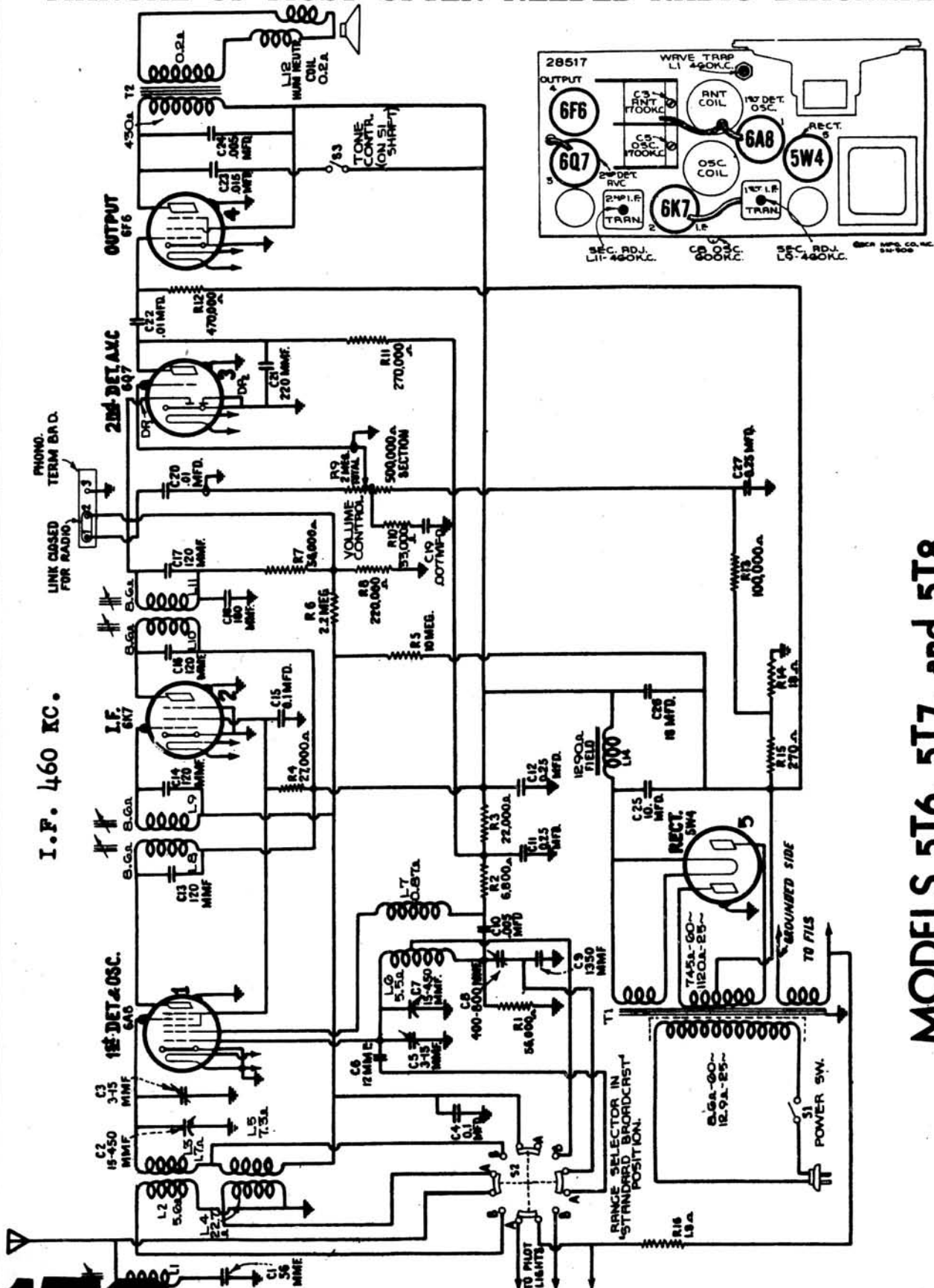
156

Chassis Wiring Diagram, Radiotron, Coil, and Trimmer Locations

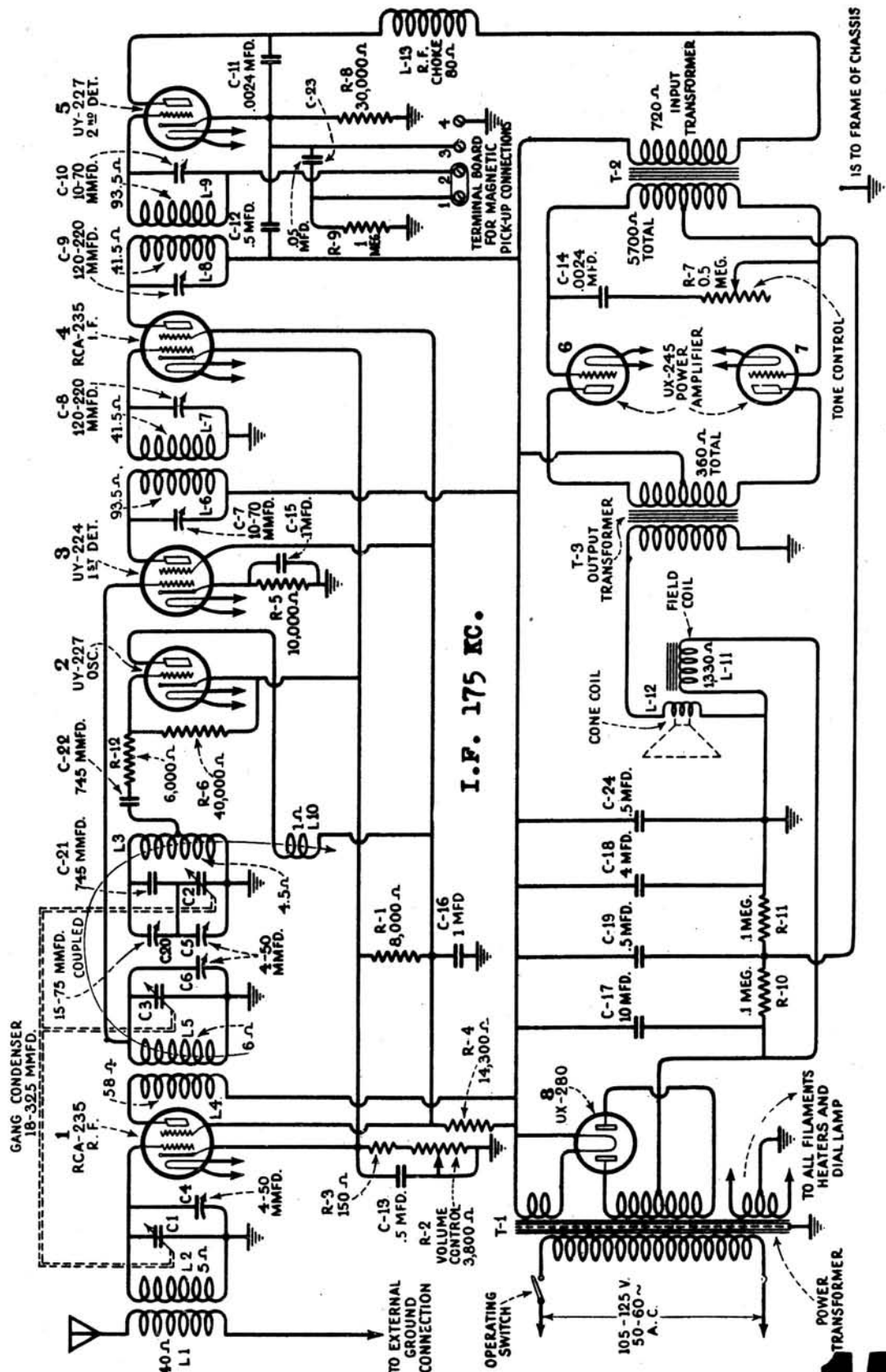
COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

I.F. 460 KC.



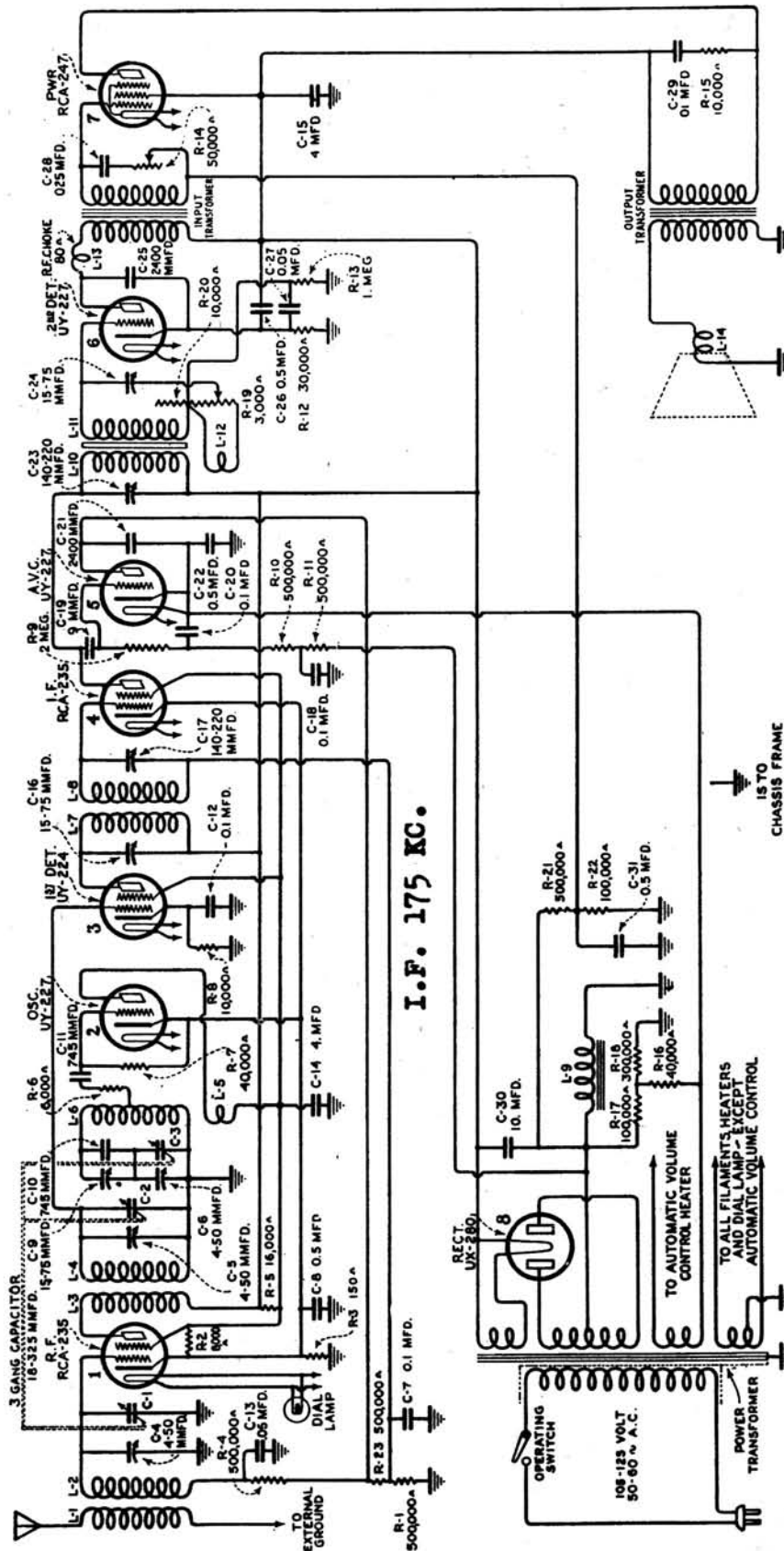
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



R.C.A. R-7, R-9

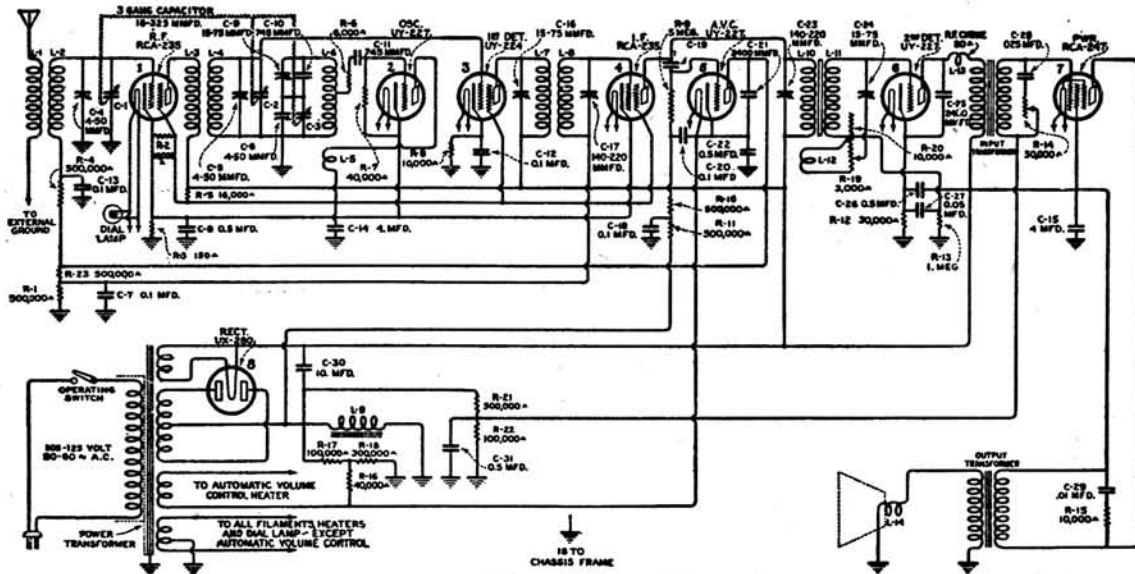
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

RCA Models R-8, R-12 AC



Radiotron No.	Cathode to Heater Volts, D. C.	Cathode or Filament to Control Grid Volts, D. C.	Cathode or Filament to Screen Grid Volts, D. C.	Cathode or Filament to Plate Volts, D. C.	Plate Current M. A.	Screen Current M. A.	Heater or Filament Volts, A. C.
1. R. F.	4.0	0.5	70	260	4.0	0.5	2.66
2. Osc.	4.0	0	—	65	6.0	—	2.66
3. 1st Det.	7.0	6.0	70	260	0.75	0.1	2.66
4. I. F.	4.0	4.0	70	260	4.0	0.5	2.66
5. 2nd Det.	28.0	10.0	—	250	1.0	—	2.66
6. A. V. C.	0	0	—	25	0	—	2.66
7. Power	—	10.0	290	280	35.0	—	2.66

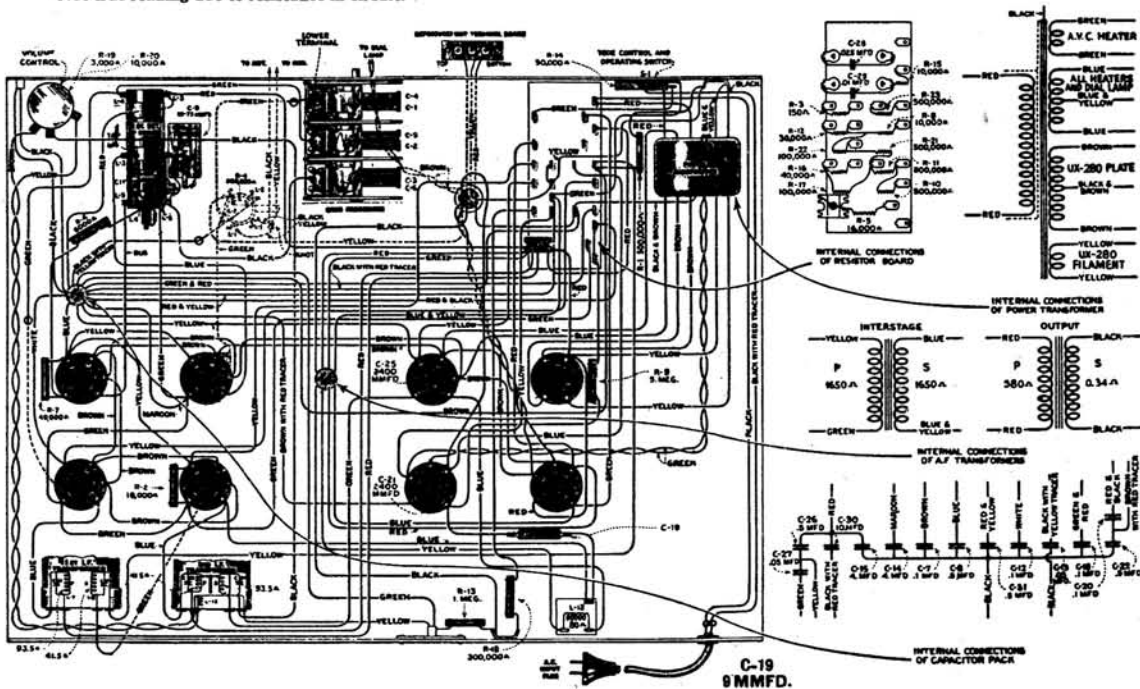
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



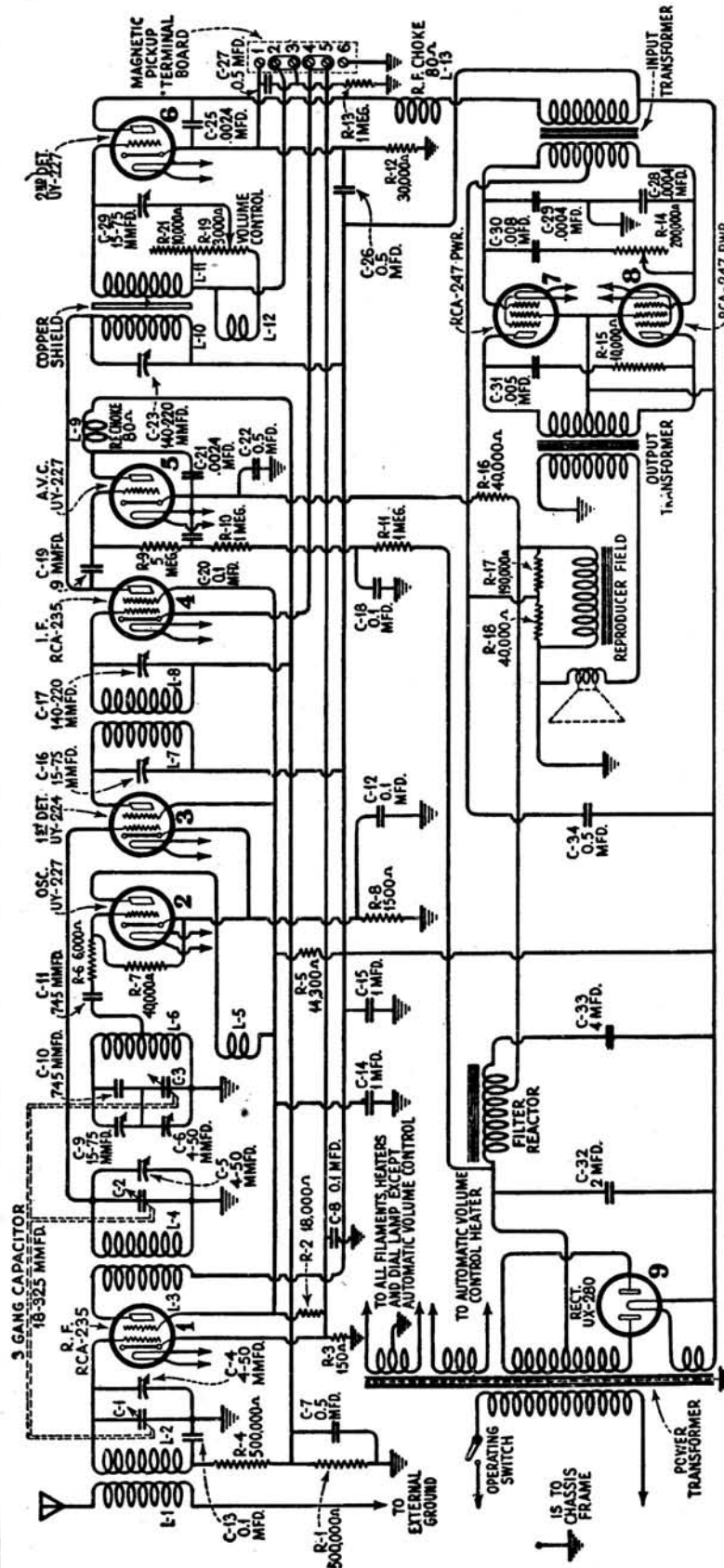
RCA Victor Schematic Wiring Diagram R-10 **I.F. 175 KC.**

Radiotron No.	Cathode to Heater Volts, D. C.	Cathode or Filament to Control Grid Volts, D. C.	Cathode or Filament to Screen Grid Volts, D. C.	Cathode or Filament to Plate Volts, D. C.	Plate Current M. A.	Screen Current M. A.	Heater or Filament Volts, A. C.
1	2	*0.1	75	210	5.0	0.5	2.2
2	8	0	—	60	5.0	—	2.2
3	7	7.0	70	205	0.5	0.1	2.2
4	2	*0.1	75	210	5.0	0.5	2.2
5	0	0	—	30	0	—	2.2
6	20	*8.0	—	185	0.5	—	2.2
7	—	10	210	210	25	—	2.2

*Not true reading due to resistance in circuit.



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



I.F. 175 KC.

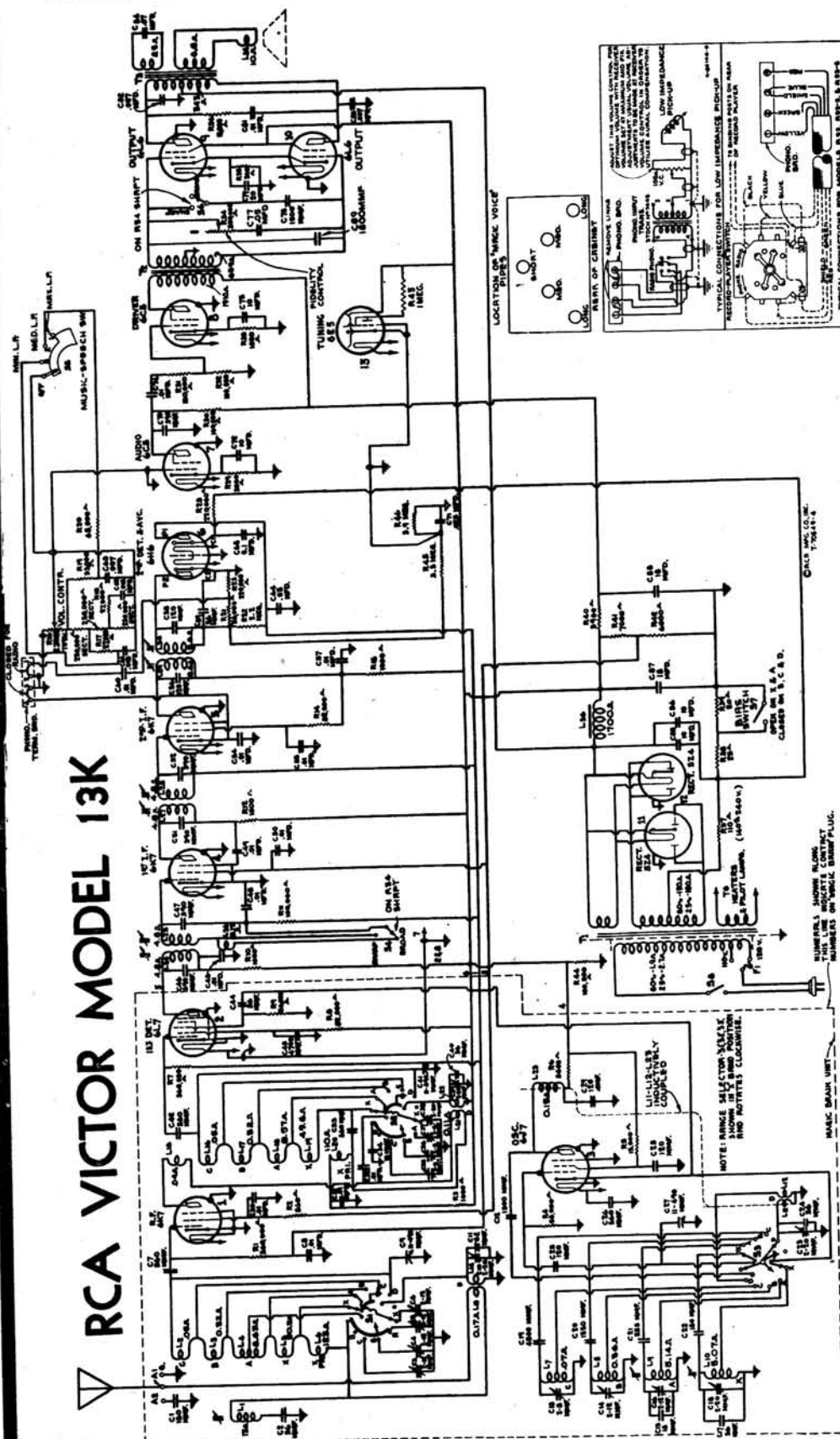
R.C.A. Schematic Circuit Diagram of Model R-11

Radio-tube No.	Cathode to Heater Volts D. C.	Cathode or Filament to Control Grid Volts, D. C.	Cathode or Filament to Screen Grid Volts, D. C.	Cathode or Filament to Plate Volts, D. C.	Plate Current M. A.	Screen Current M. A.	Heater or Filament Volts, A. C.
1	2	*0.1	75	205	5.0	0.5	2.2
2	8	0	—	60	5.0	—	2.2
3	7	7.0	70	200	0.5	0.1	2.2
4	2	*0.1	75	205	5.0	0.5	2.2
5	0	0	—	25	0	—	2.2
6	20	*8.0	—	180	0.5	—	2.2
7	—	10	210	205	25	—	2.2
8	—	10	210	205	25	—	2.2

* Not true reading due to resistance in circuit.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

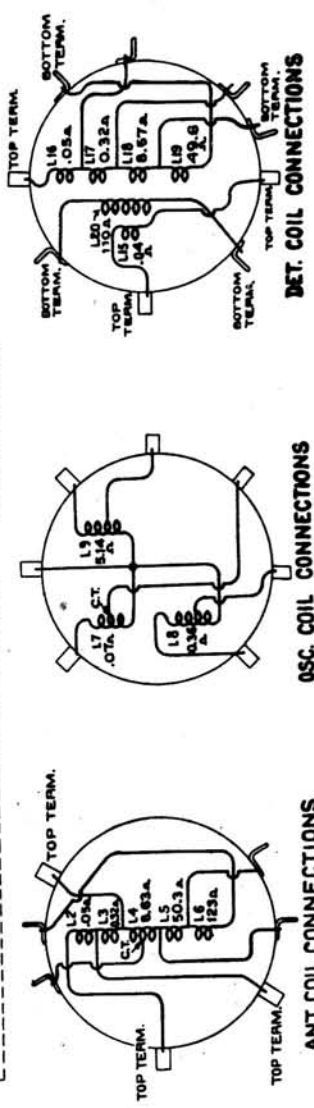
RCA VICTOR MODEL 13K



I.F. 460 KC.

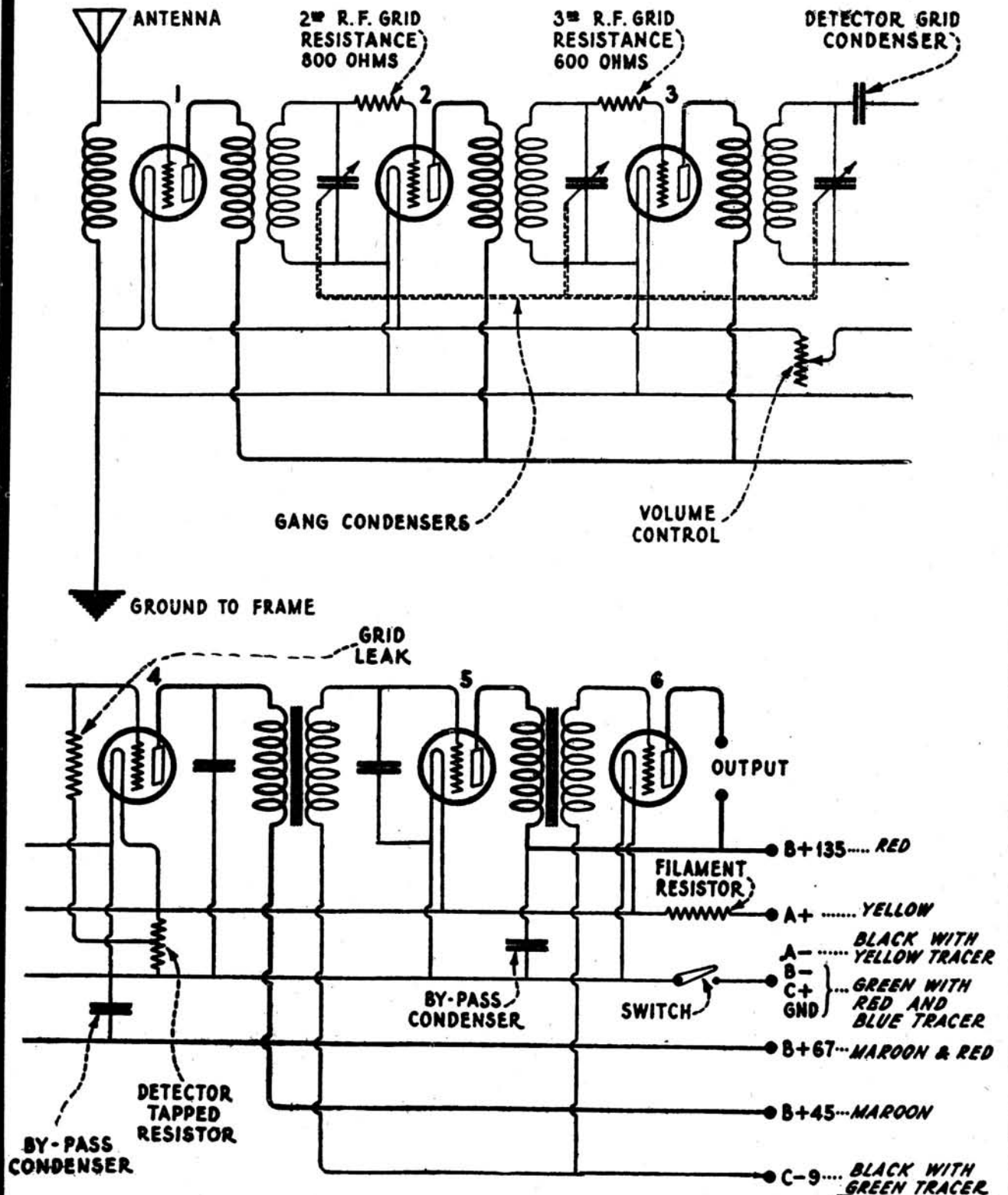
SERVICE HINTS

- (1) Excessive heating of the 6E5 tube may be due to high cathode current — in excess of 7 ma. The tube should be replaced and the condition of the 5Z4 rectifier checked.
- (2) Low sensitivity or intermittent operation may be caused by C-43 or C-33 developing low-resistance leakage. Check both capacitors and replace if found defective.
- (3) Low sensitivity around 15—16 megacycles may be caused by dirty or poor contact of grounding contact finger on S-3.
- (4) Motorboating may be due to intermittent capacitor Stock No. 18025.



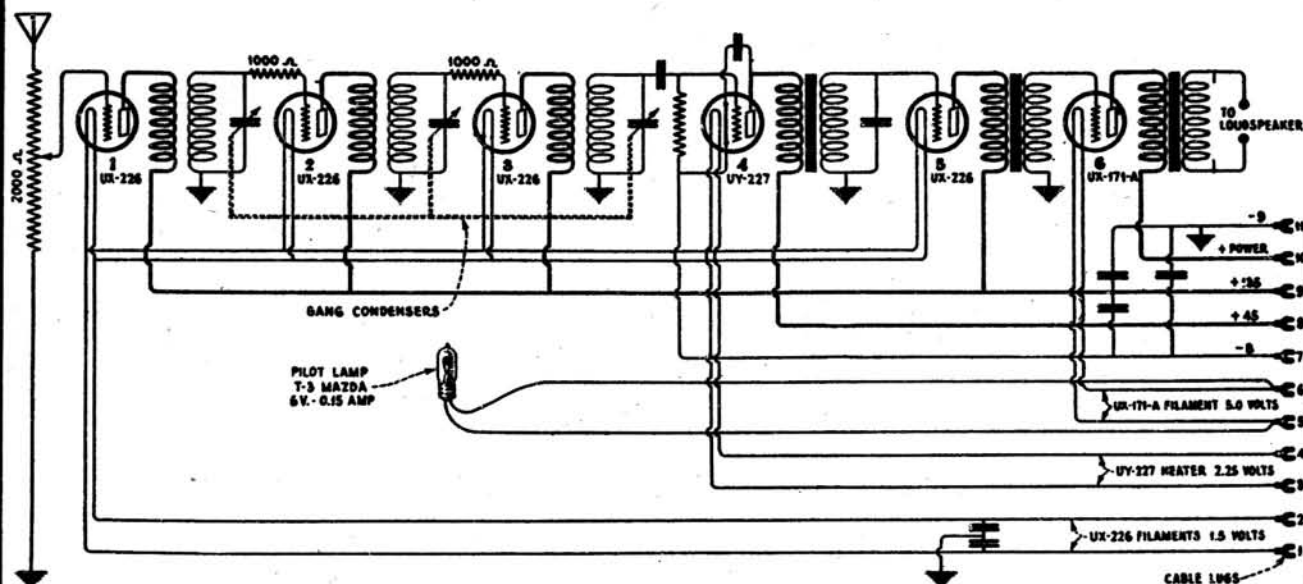
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

RCA RADIOLA 16



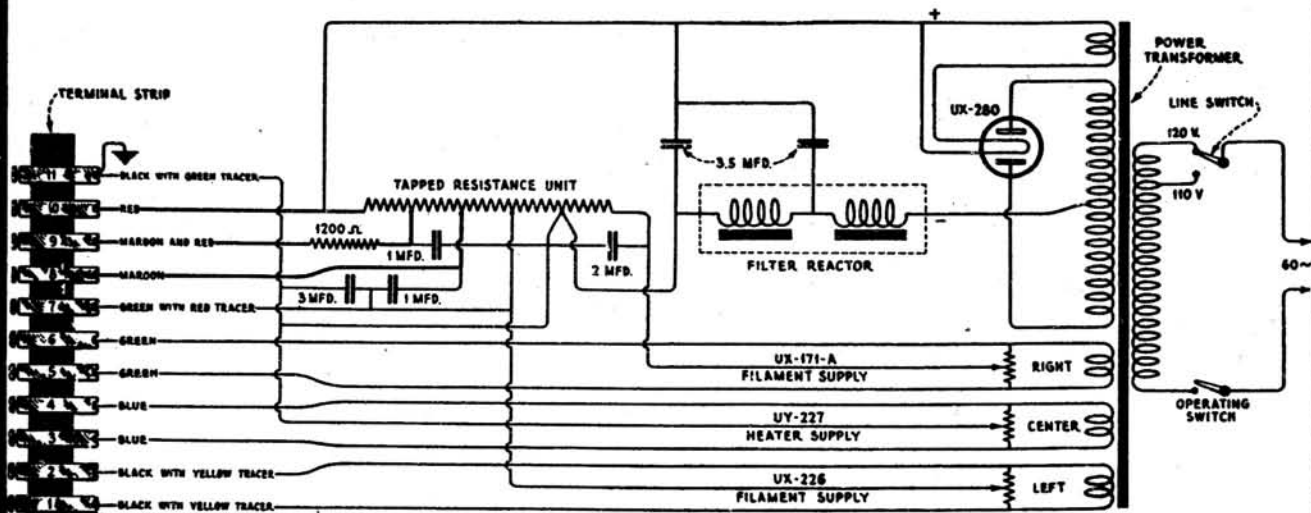
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

RCA RADIOLA 17



Schematic circuit diagram of receiver assembly.

Indication	Cause	Remedy
No signals	Defective operating switch Loose volume control arm Defective power cable Defective R.F. transformer Defective A.F. transformer Defective By-pass condenser Defective socket power unit	Repair or replace switch Tighten volume control arm Replace power cable Replace R.F. transformer assembly Replace A.F. transformer assembly Replace By-pass condenser Check socket power unit by means of continuity test and make any repairs or replacements necessary



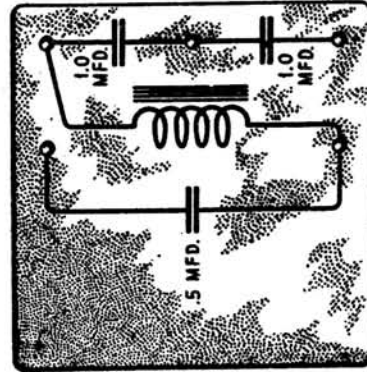
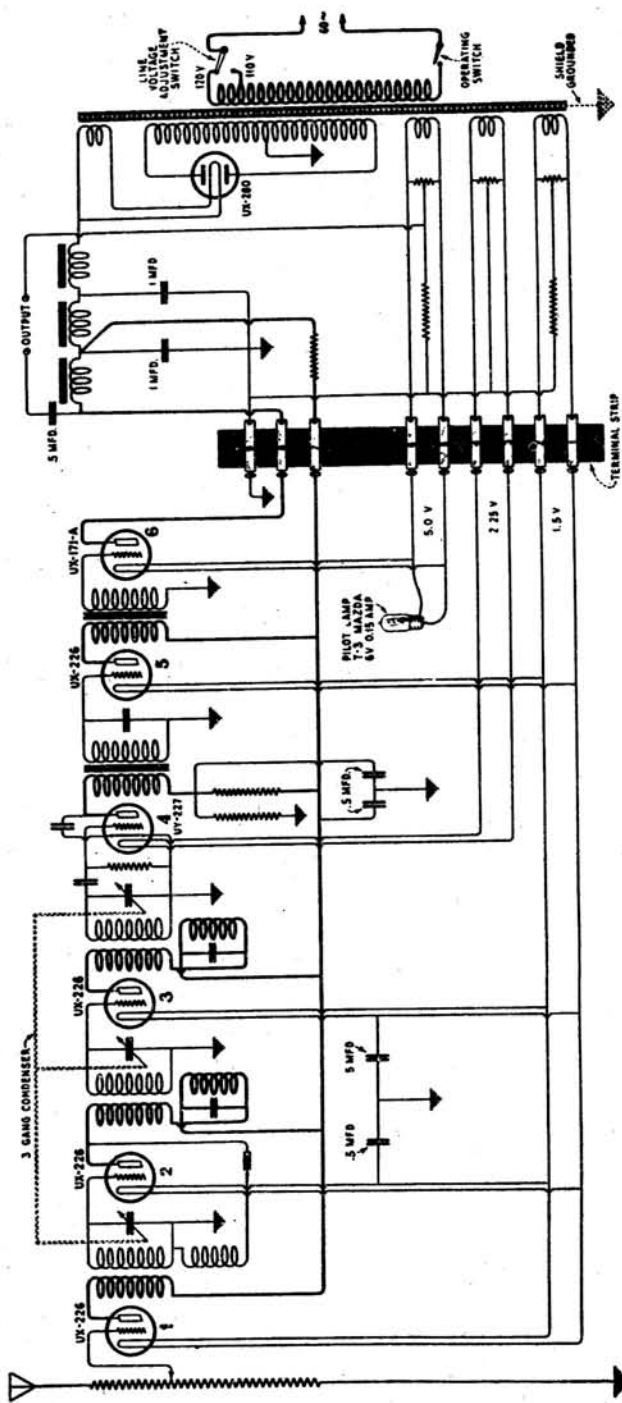
166

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

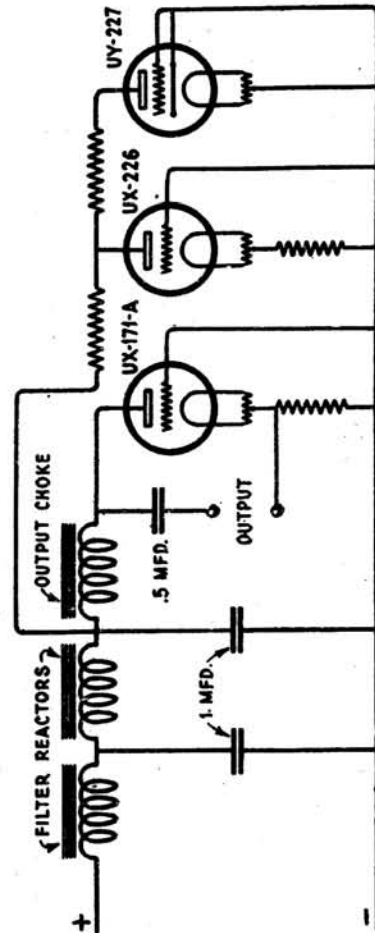
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

RCA RADIOLA 18

(105-125 Volts, 50-60 Cycle A.C.)



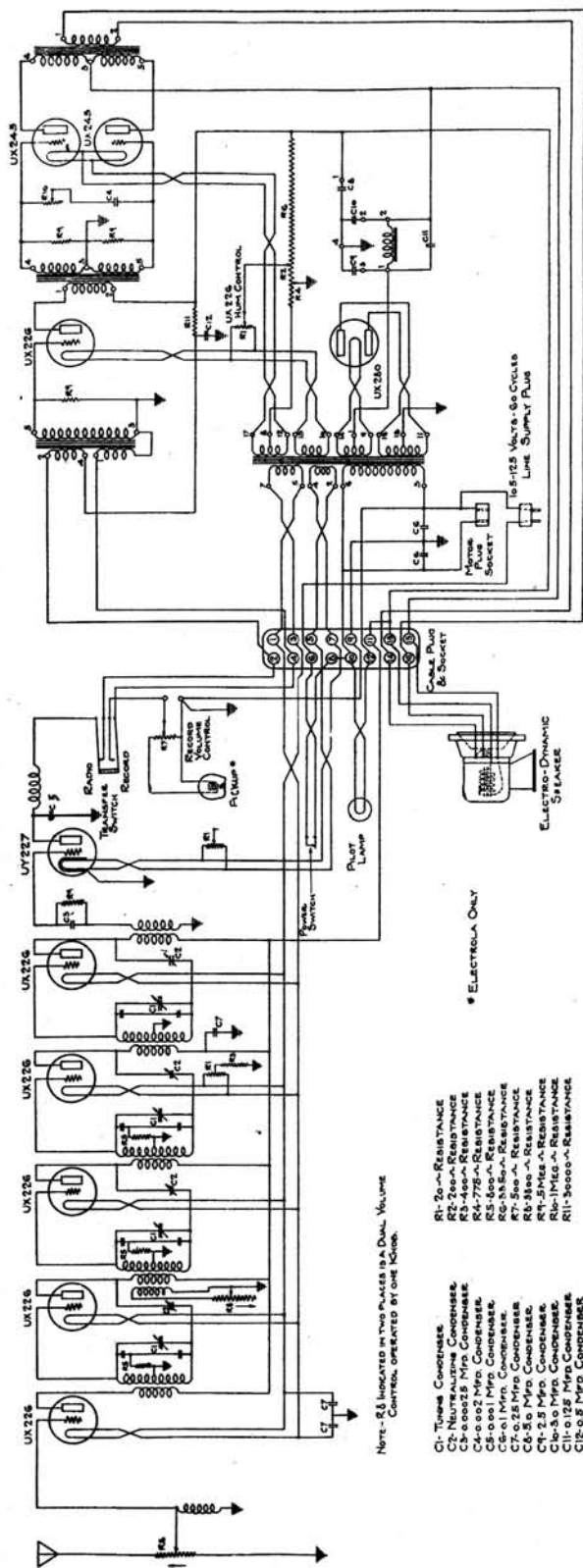
Internal connections of condensers.



Schematic circuit illustrating method of obtaining grid and plate voltages.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

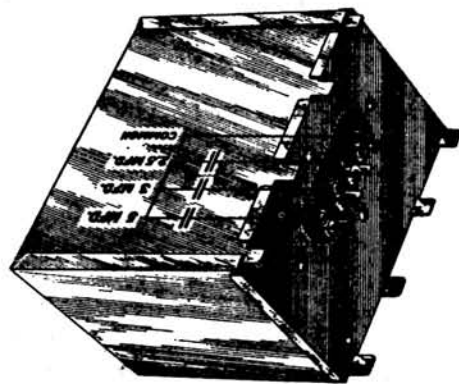
R-32, R-52, RE-45 and RE-75



Schematic Wiring Diagram Victor Radio and Victor Radio with Electroils
Model R-32, R-52, RE-45, RE-75

GENERAL TESTS

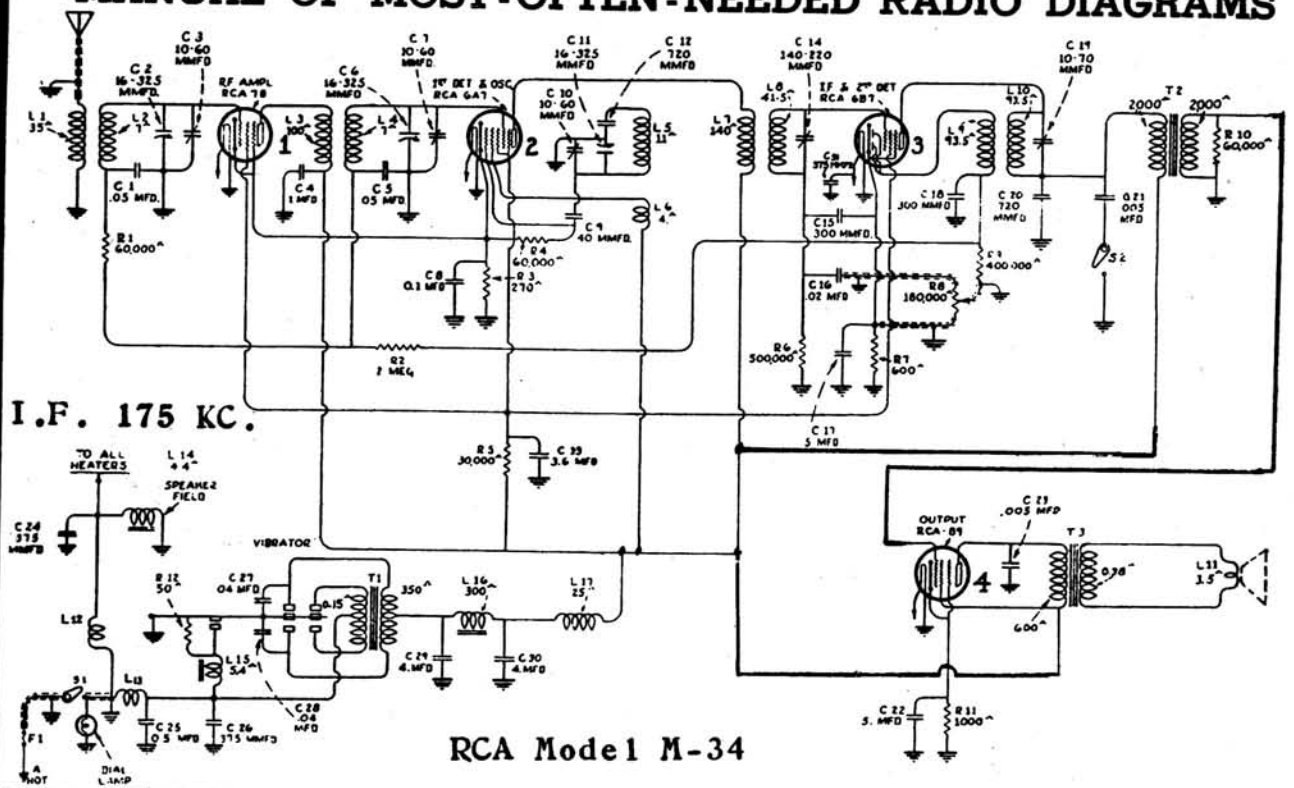
- EXCESSIVE HUM**—This condition can be caused by:
 - Improperly adjusted or faulty hum controls. See subject 4, under Installation.
 - Defective UX-280 or UY-277.
 - Wire or terminal grounded to the frame, or open circuit in any of the various ground connections.
 - Shorted condenser, 10, Fig. 1, across UX-226 filament supply.
 - Open or shorted center tap resistor, 43, Fig. 1, across UX-226 filament supply.
 - Shorted condenser, 64, Fig. 3, across power line in power-amplifier unit.
 - Shorted condenser in condenser bank, 56, Fig. 2, of power-amplifier unit.
- HOWL**—Microphonic howl can be traced to:
 - Defective Radiotron, particularly in the detector or audio stages.
 - Improper neutralization. See subject 1 under Special Adjustments below.
 - Speaker not felt insulated from baffle. Remove speaker and arrange felt properly.
 - Open condenser, 15, Fig. 1.
 - Loose metal parts such as shielding, screws, etc., or improperly centered cone may set up a howl or microphonic ratio. See subject 7 under Special Adjustments for method of centering cone.
- DISTORTED REPRODUCTION**—Distortion may be caused by any of the following:
 - Low emission Radiotron, particularly in the detector or in the power supply unit. For best reproduction the plate currents of the two UX-245 should balance within 2 milliamperes.



Internal Connections of Filter Condenser Bank

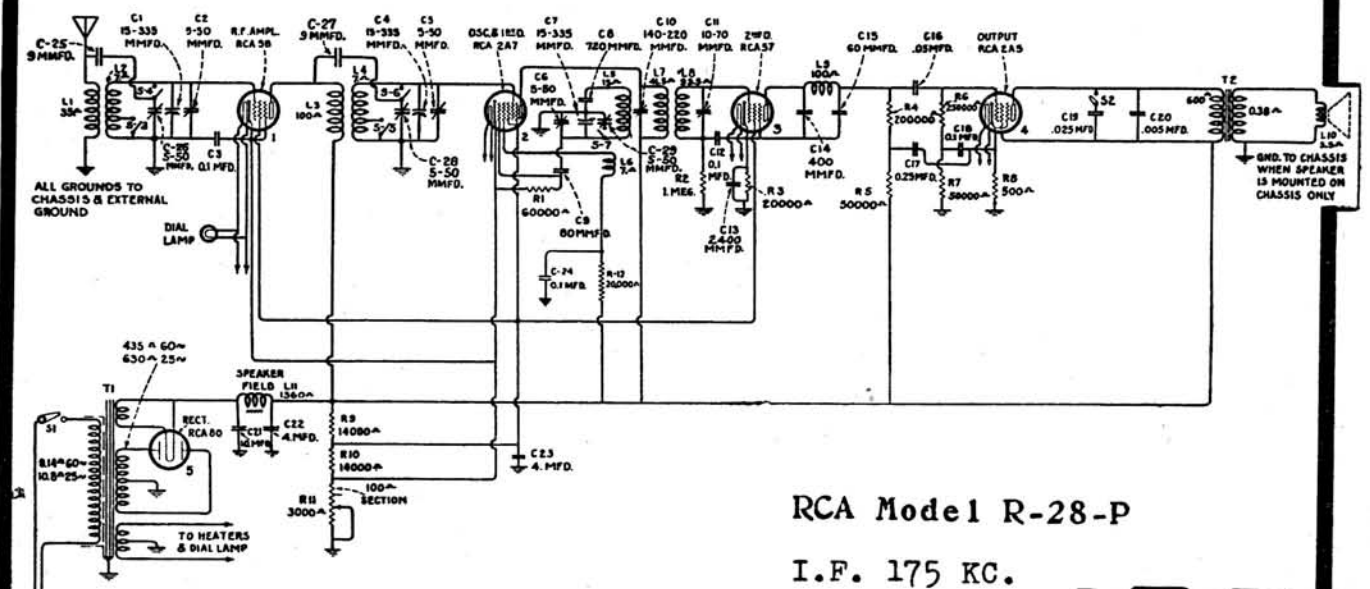
- Operation with volume control advanced too far on powerful local stations, causing overloading of the detector.
 - Incorrect setting of the tone control in the base of the power-amplifier. See subject 5, under Installation.
 - Improper neutralization. See subject 1, under Special Adjustments.
 - Cone in speaker unit improperly centered. See subject 7 under Special Adjustments.
- 4. NOISY REPRODUCTION**—Station carrier noise, static, and power line disturbances should not be confused with noise which is set up within the receiver. This latter condition may be caused by any one of the following:
- Volume Control.** Dirt or corrosion on the resistance wire or contact arms of the volume control will produce noise when the control is operated. This condition can usually be corrected by rubbing the parts lightly with very fine sandpaper and then cleaning with gasoline.
 - Shorted Tuning Condensers.** If the plates of one or more of the tuning condensers are shorted, noise will be produced when the tuning lever is operated. If such a condition is found, the faulty condenser should be replaced.
 - Intermittent short or open circuit** in any of the various soldered connections or in power switch.
 - High resistance grid leak.** Any of the grid leaks which have developed an excessive high resistance will produce a "frying noise."
 - Faulty power or audio transformer** will also produce this same type noise.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



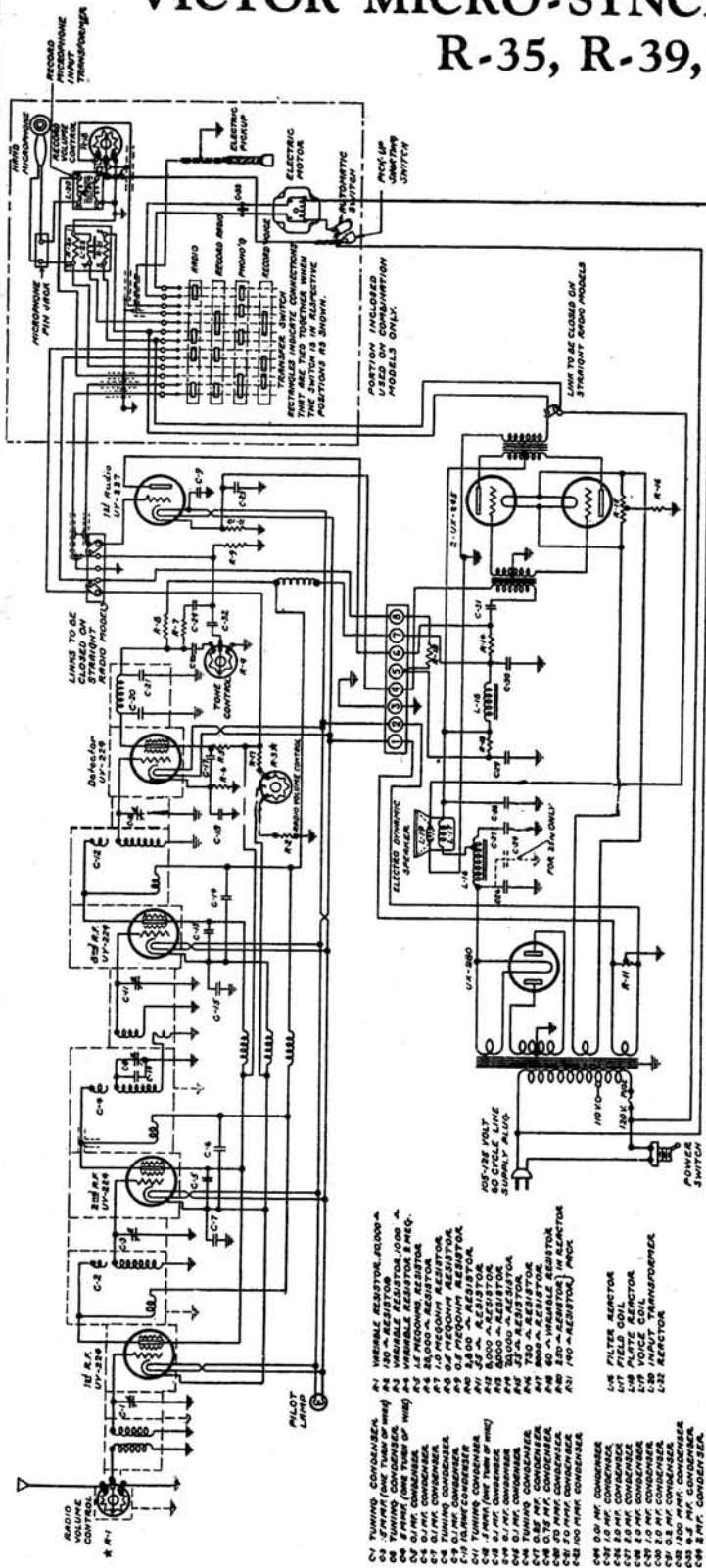
MAXIMUM VOLUME CONTROL SETTING—NO SIGNAL

Radiotron No.	Cathode to Control Grid, Volts	Cathode to Screen Grid, Volts	Cathode to Plate, Volts	Plate Current, M. A.	Heater Volts
1. RCA-58 R. F. Amplifier	3.0	95	250	5.0	2.33
2. RCA-2A7 First Detector Oscillator	3.0	95	250	3.0	2.33
3. RCA-57 Second Detector	6.0	89	170	0.3	2.33
4. RCA-2A5 Power Amplifier	18.0	235	220	32.0	2.33
5. RCA-80 Rectifier					2.33
275 Volts PLATE TO PLATE—60 M. A. TOTAL					4.82
TOTAL CATHODE CURRENT—11 M. A.					



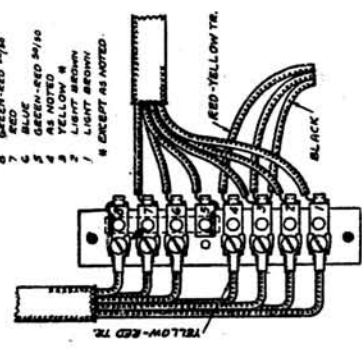
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

VICTOR MICRO-SYNCHRONOUS RADIO R-35, R-39, RE-57



Schematic Wiring Diagram Victor Micro-Synchronous Radio, Models R-35, R-39, and RE-57.

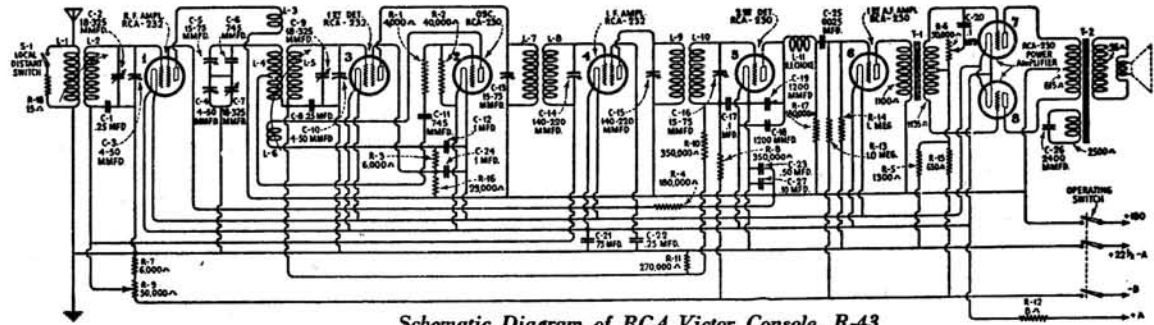
- TEST COLOR-LEAD
 6 GREEN-LED P/W
 7 RED
 8 BLUE
 9 BLUE-LED M/16
 10 AS NOTED
 11 YELLOW W
 12 LIGHT BROWN
 13 LIGHT BROWN
 14 EXCEPT AS NOTED



Top View of Amplifier Terminal Strip.

TEST BETWEEN TERMINALS	PART	APPROXIMATE VOLTAGE (10 V SCALE)	APPROXIMATE RESISTANCE (OHMMETER)
F and 7 of Terminal Board	Tapped Choke	8.4 Volts	300 Ohms
4 and 6 of Terminal Board	Speaker Field	7.2 Volts	1,500 Ohms
Brown-Grey Resistor	8000 Ohm Resistor	3.4 Volts	8,000 Ohms
Brown-Red Resistor	8000 Ohm Resistor	3.4 Volts	8,000 Ohms
7 and 8 of Condenser Bank	70,000 Ohm Resistor	.5 Volts	70,000 Ohms
2 of Condenser Bank and 4 of Terminal Strip	Plate Choke	4.0 Volts	6,000 Ohms
UX-245 Grids	Primary Interstage Transformer	6.4 Volts	2,000 Ohms
UX-245 Grids to Chassis	Secondary Interstage Transformer	2.4 Volts	14,000 Ohms
UX-245 Plates	One-half Secondary Interstage Transformer	3.4 Volts	5,500 Ohms
UX-245 Plates and No. 3 of Condenser Bank	Primary Output Transformer	3.6 Volts	7,500 Ohms
Voice Coil	One-half Primary Output Transformer	8.8 Volts	165 Ohms
P and P	Speaker Voice Coil	9.0 Volts	0 Ohms
F and F	Primary Power Transformer	9.0 Volts	0 Ohms
	High Voltage Secondary Output Transformer	8.4 Volts	340 Ohms
	UX-289 Filament Secondary Output Transformer	9.0 Volts	0 Ohms

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



Schematic Diagram of RCA Victor Console, R-43

VOLUME CONTROL AT MINIMUM

Tube No.	Filament to Control Grid Volts	Filament to Screen Grid Volts	Filament to Plate Volts	Plate Current M. A.	Filament Volts
1	22	55	155	0	2.0
2	—	—	50	3.0	2.0
3	0.5	65	150	0.5	2.0
4	22	55	155	0	2.0
5	5.0	—	90	0	2.0
6	2.0	—	150	2.5	2.0
7	15.0	—	150	0.5	2.0
8	15.0	—	150	0.5	2.0

VOLUME CONTROL AT MAXIMUM

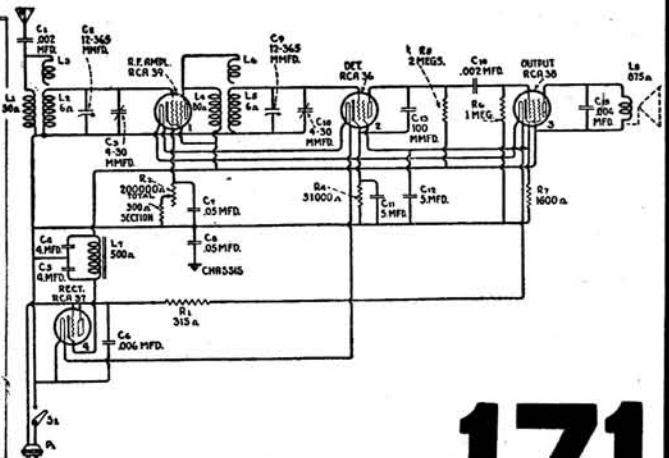
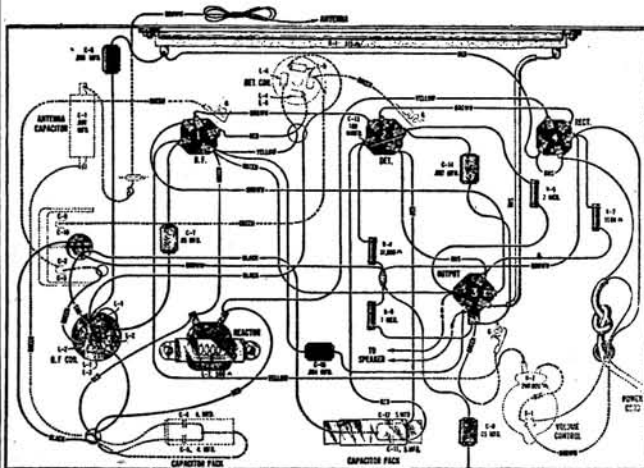
1	1.5	45	150	2.5	2.0
2	—	—	50	3.0	2.0
3	0.5	60	150	0.5	2.0
4	1.5	45	150	2.5	2.0
5	5.0	—	90	0	2.0
6	2.0	—	150	2.5	2.0
7	15.0	—	150	0.5	2.0
8	15.0	—	150	0.5	2.0

RCA Victor R-17-M

Radlotron No.	Cathode or Filament to Control Grid Volts	Cathode or Filament to Screen Grid Volts	Cathode or Filament to Plate Volts	Plate Current M. A.	Filament or Heater Volts
1. RCA-39 R. F.	3.0	105.0	105	7.0	6.0
2. RCA-36 Detector	*0.75	11.0	*60	0.025	6.0
3. RCA-38 Output	11.0	100.0	95	5.0	6.0
4. RCA-37 Rectifier	—	—	115	15.0	6.0

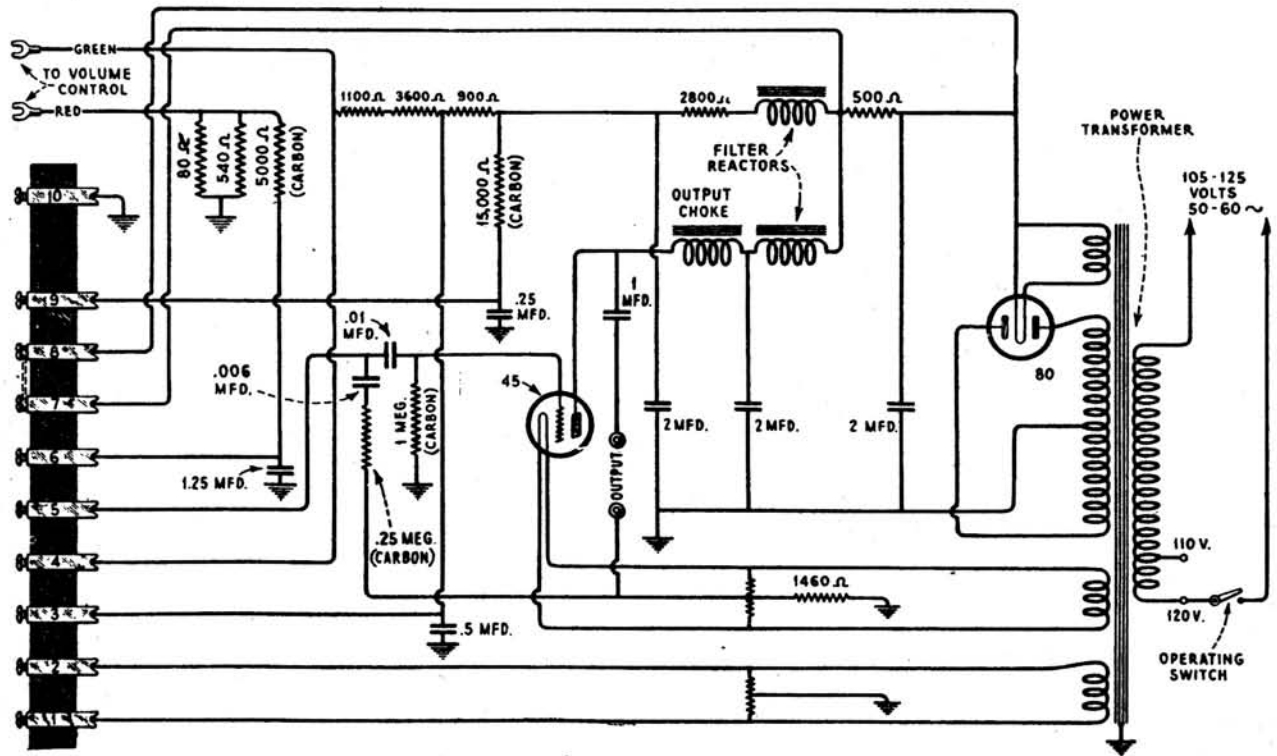
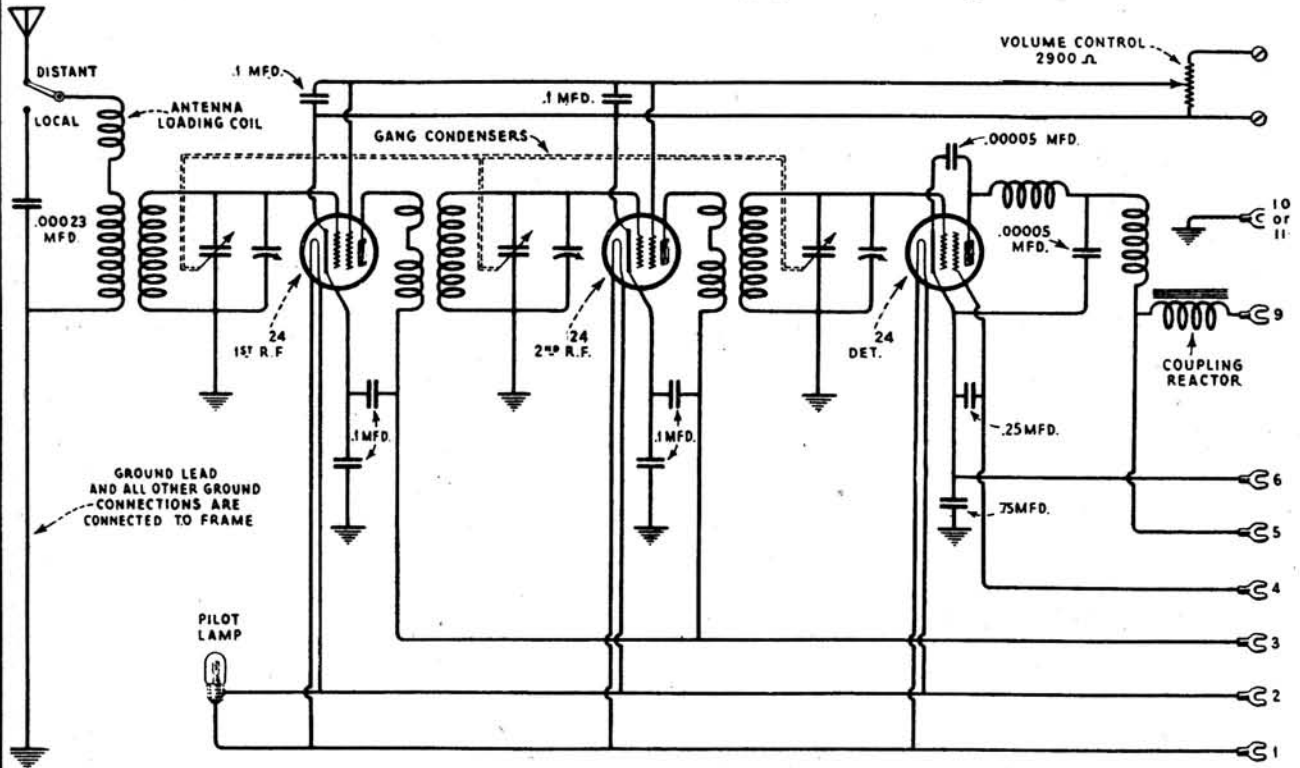
*Impossible to measure on ordinary voltmeter.

All Voltages on D. C. will be slightly lower

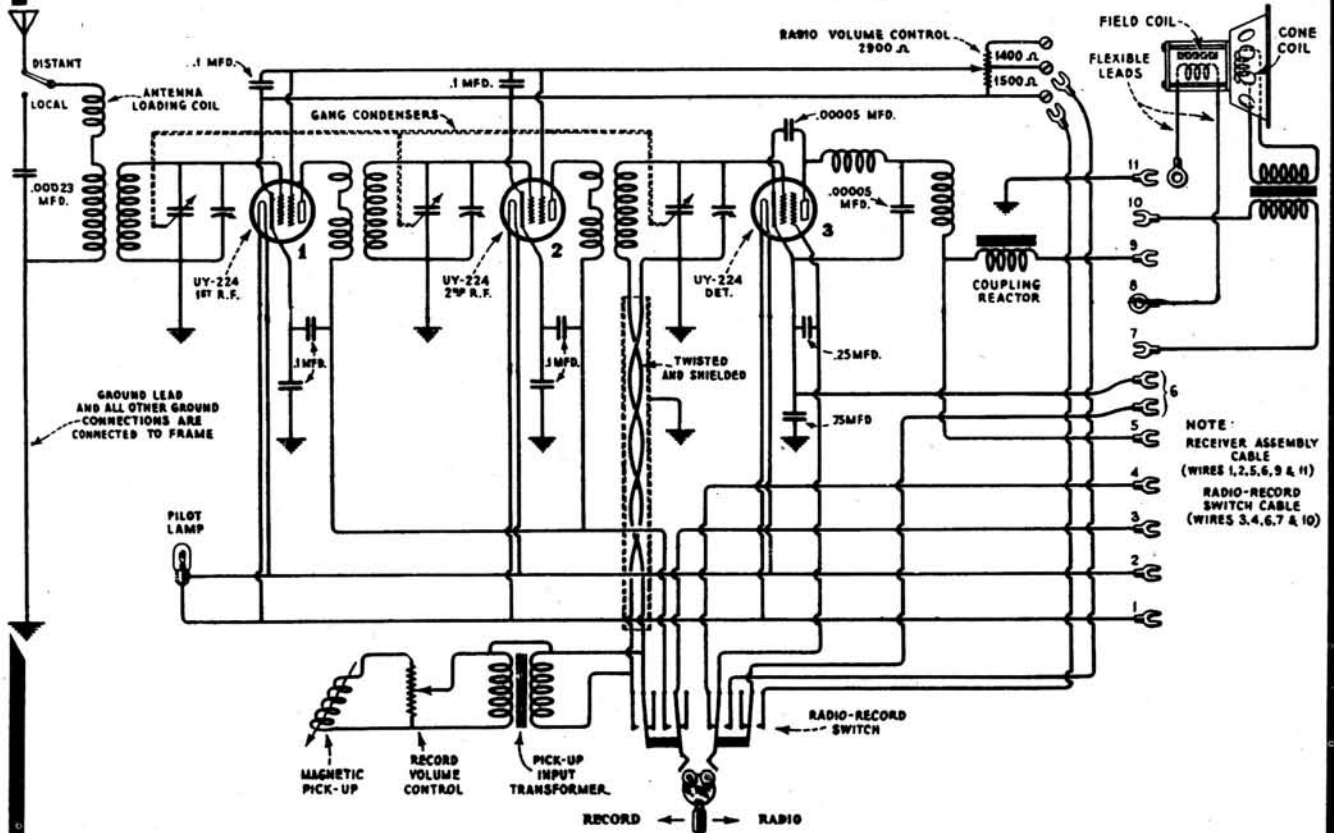


MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

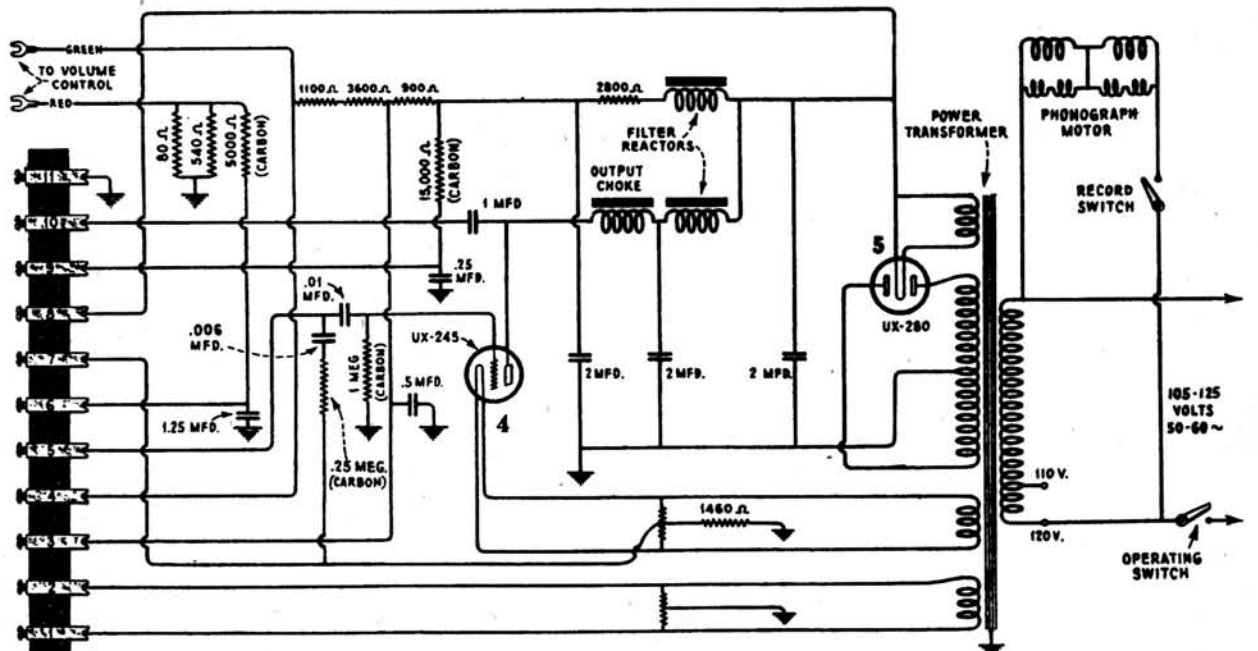
RCA RADIOLAS 44 and 46



Radiola 47



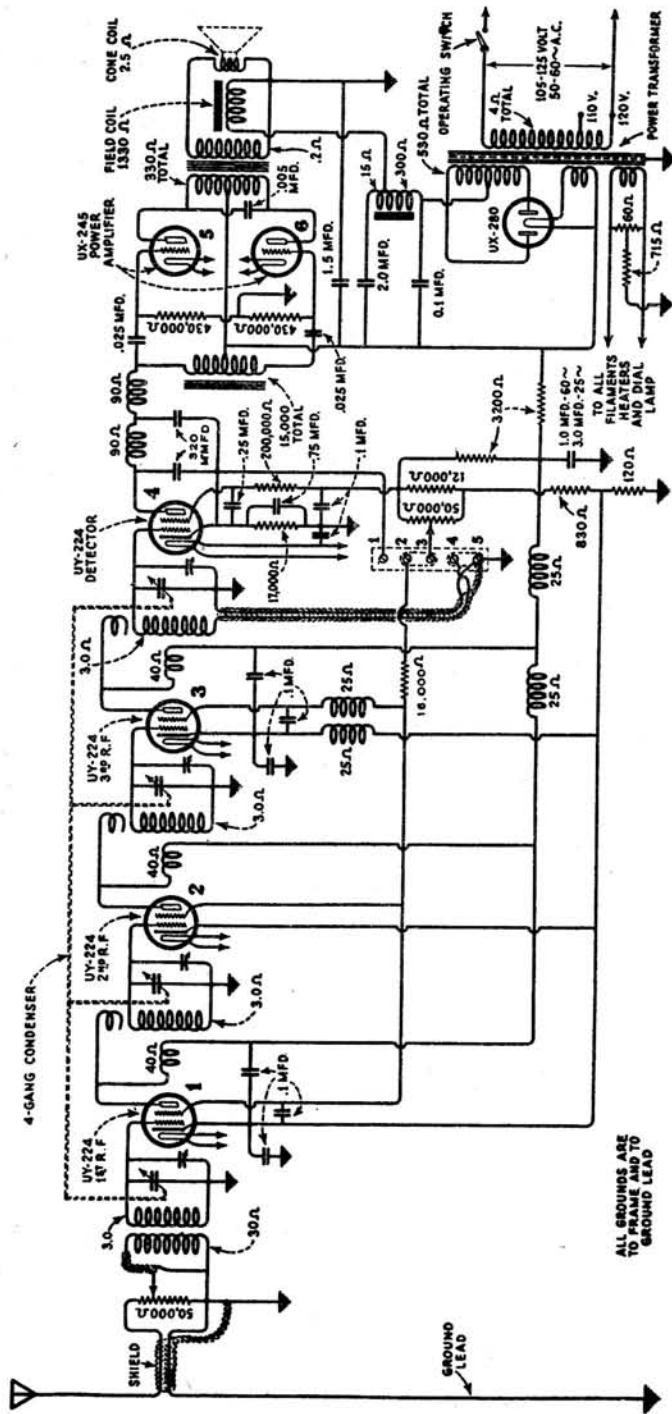
Schematic circuit diagram of receiver, phonograph pick-up and reproducer



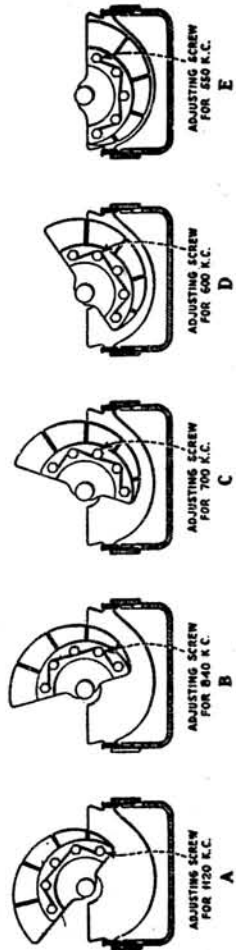
Schematic circuit diagram of socket power unit

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

RCA RADIOLA 48

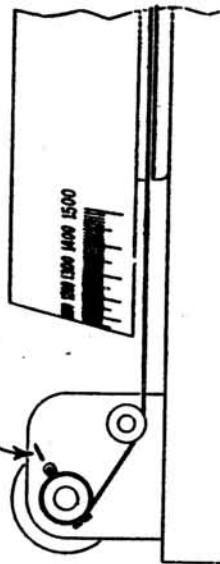


ALL GROUNDS ARE TO FRAME AND TO GROUND LEAD



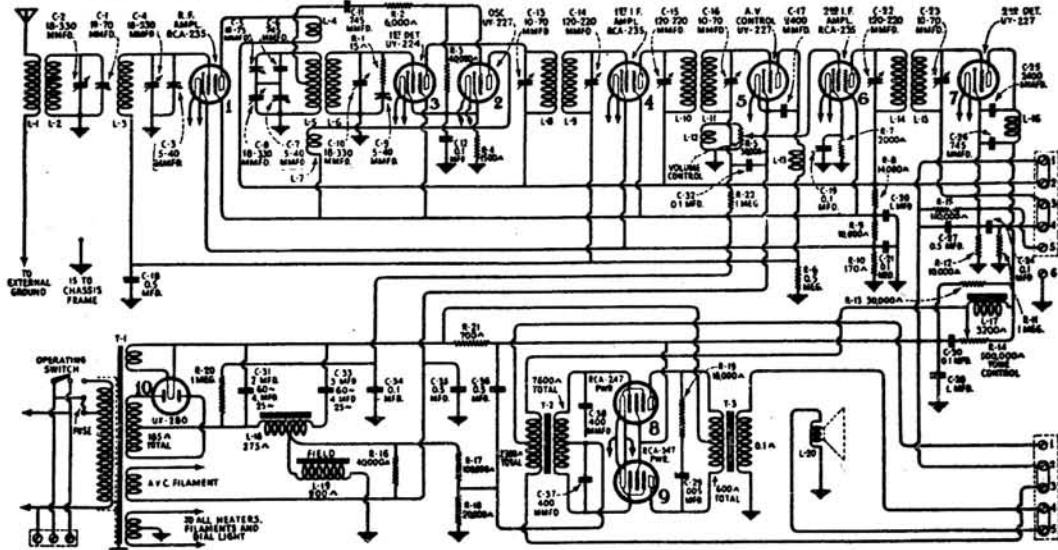
Gang condenser adjustment positions.

PENCIL MARK ON FRAME



View showing method of checking position of dial.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



RCA Models R-50, R-55

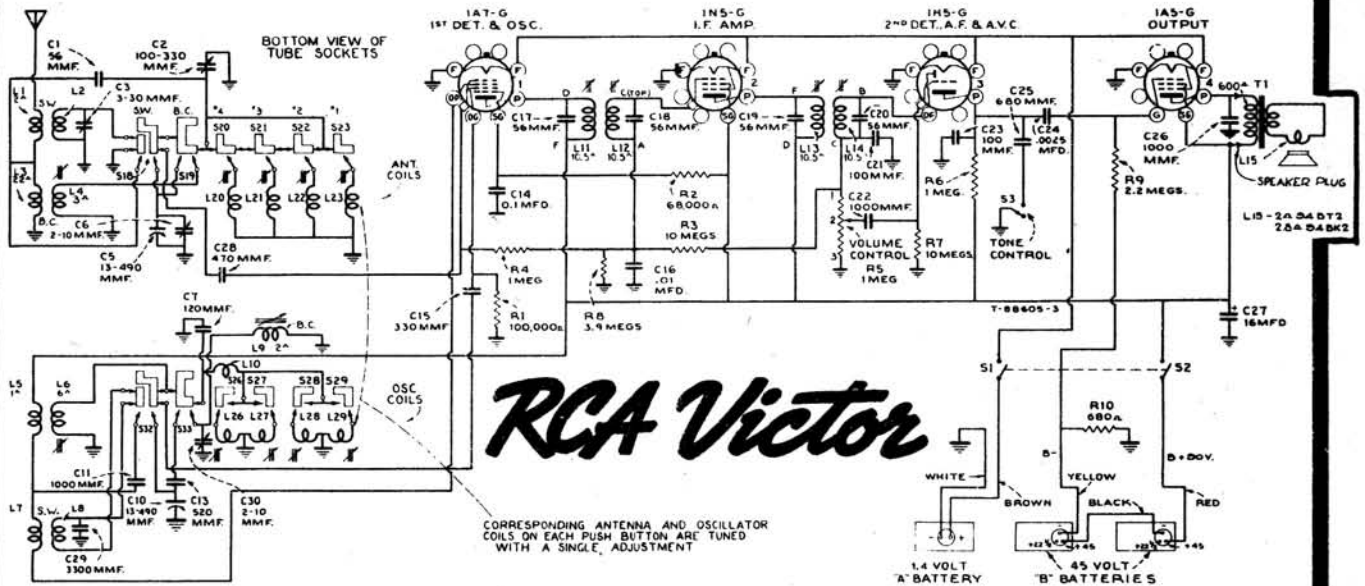
I.F. 175 KC.

MODELS 94BK2 and 94BT2

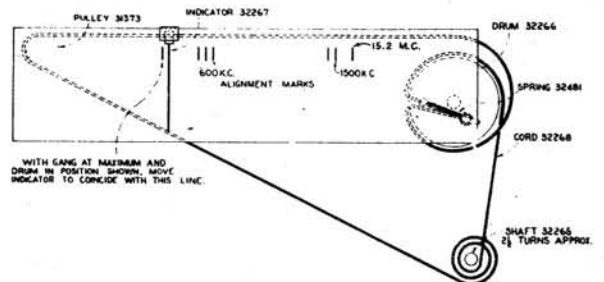
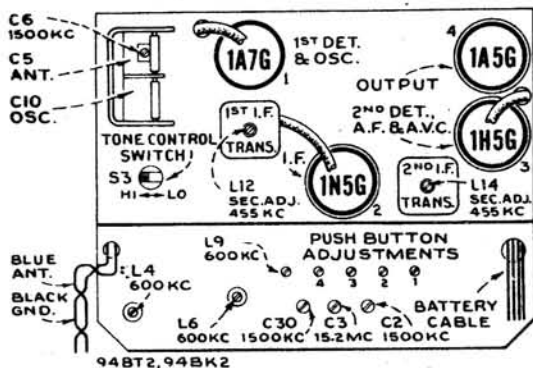
Chassis No. RC-390

RC-390

RC-390



RCA Victor



Dial Drive Hookup and Alignment Marks

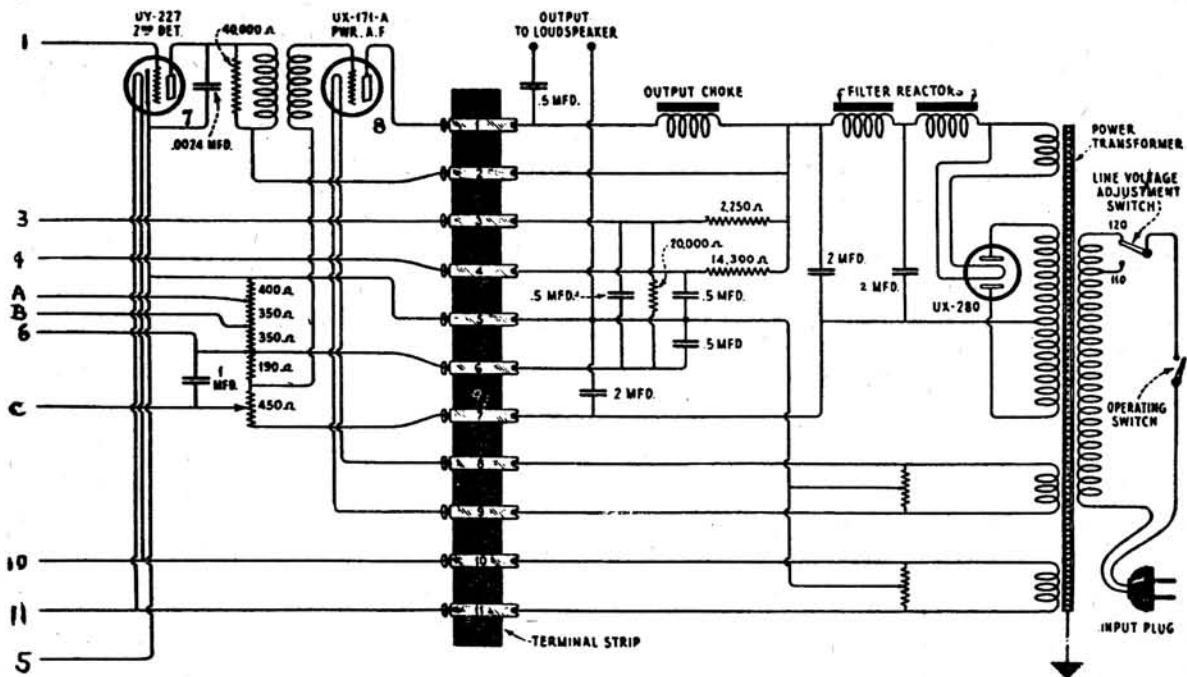
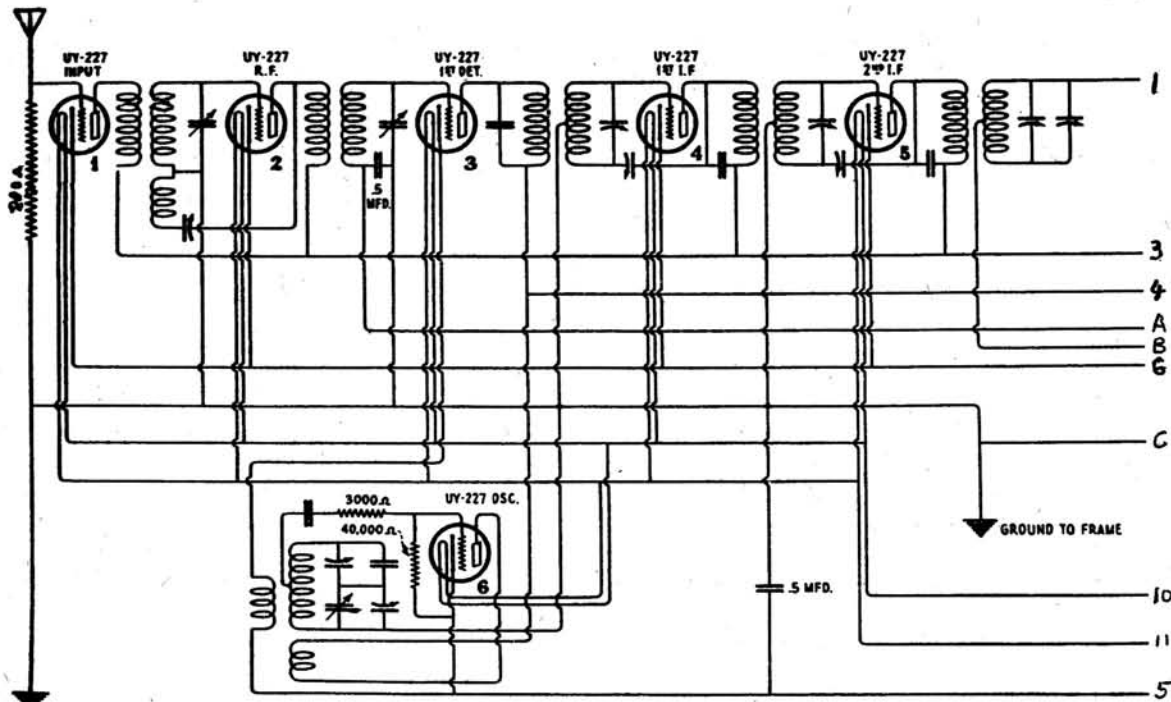
Tube and Trimmer Locations
 COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

175

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

RCA RADIOLA 60

(105-125 Volts. 50-60 Cycle A. C.)



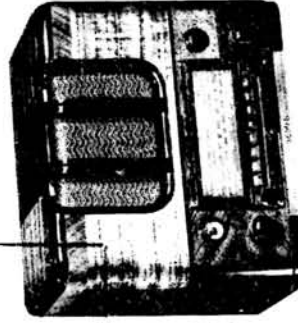
I.F. 180 KC.

176

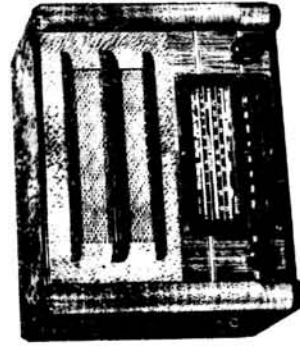
COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

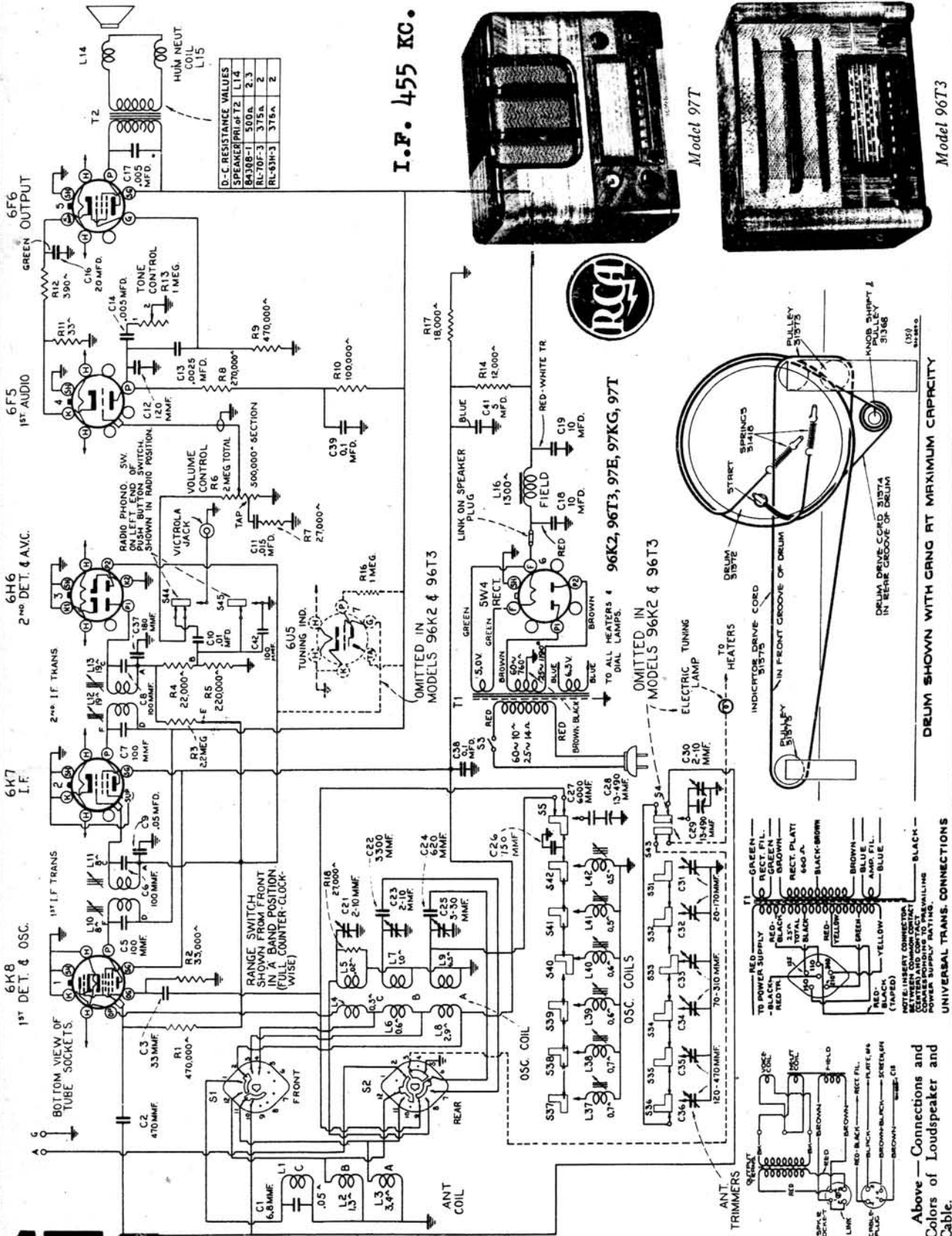
I.F. 455 KC.



Model 97T

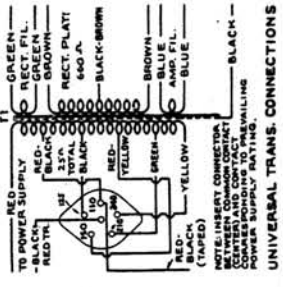
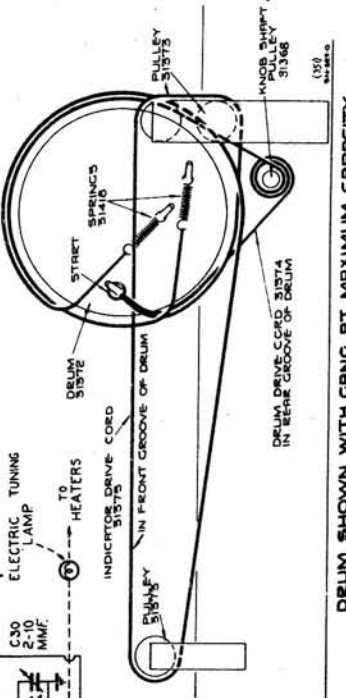


Model 96T3



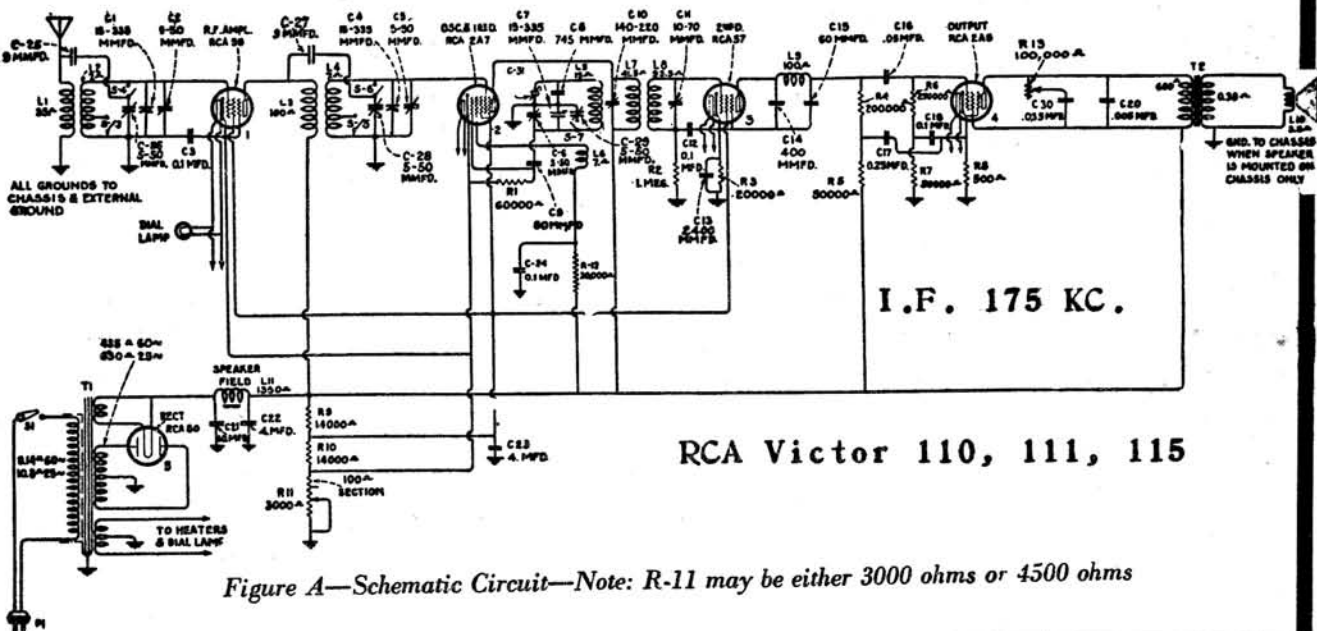
OMITTED IN MODELS 96K2 & 96T3

OMITTED IN MODELS 96K2 & 96T3

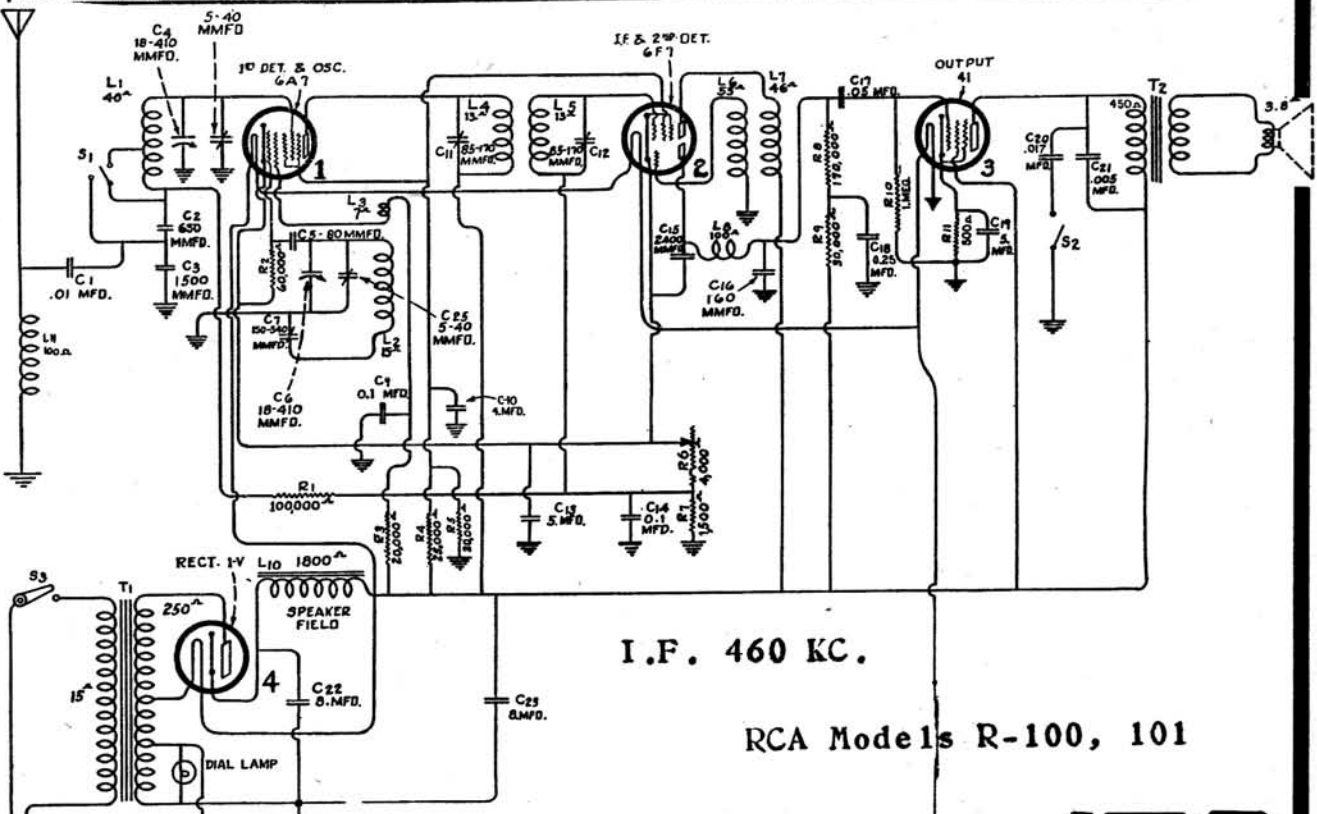


Above—Connections and Colors of Loudspeaker and Cable.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

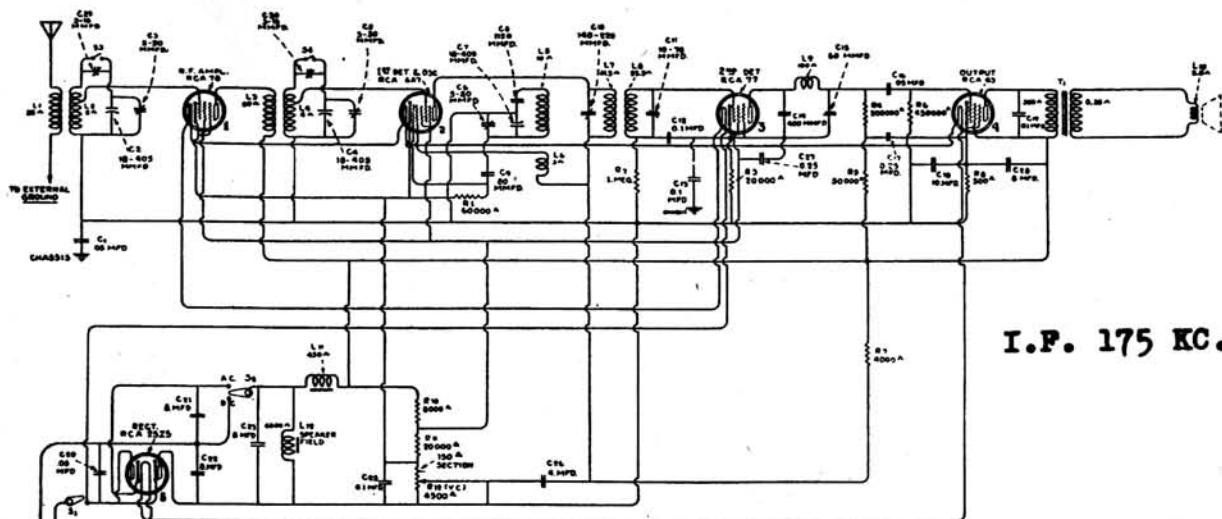


Radioron No.	Cathode to Control Grid, Volts D. C.	Cathode to Screen Grid, Volts, D. C.	Cathode to Plate, Volts D. C.	Plate Current, M. A.	Heater or Filament, Volts
RCA-6A7	First Detector	1.25	70	2.5	6.3
	Oscillator	—	—	180	3.5
RCA-6F7	I. F.	1.25	70	2.5	6.3
	Second Detector	19	—	145*	0.4
RCA-41 Output	17	240	230	26.5	6.3
RCA-1-V Rectifier	—	—	335 RMS	50	6.3

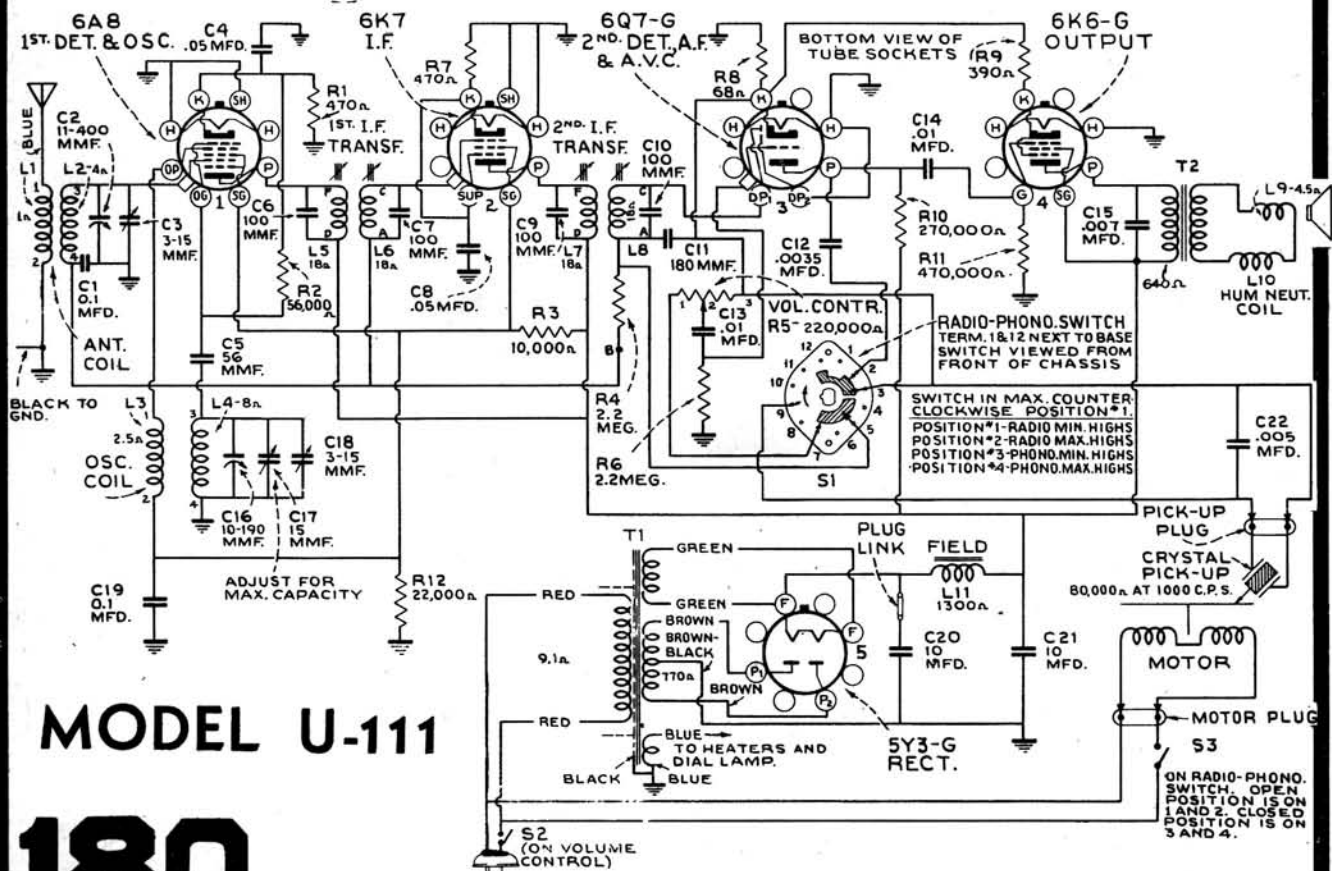
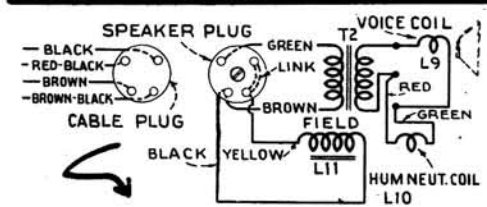
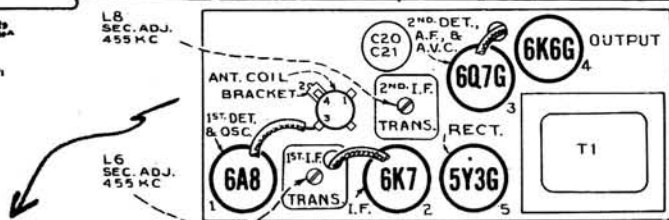


MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

RCA Victor 114



I.P. 175 KC.



MODEL U-111

180

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

RCA Victor 120

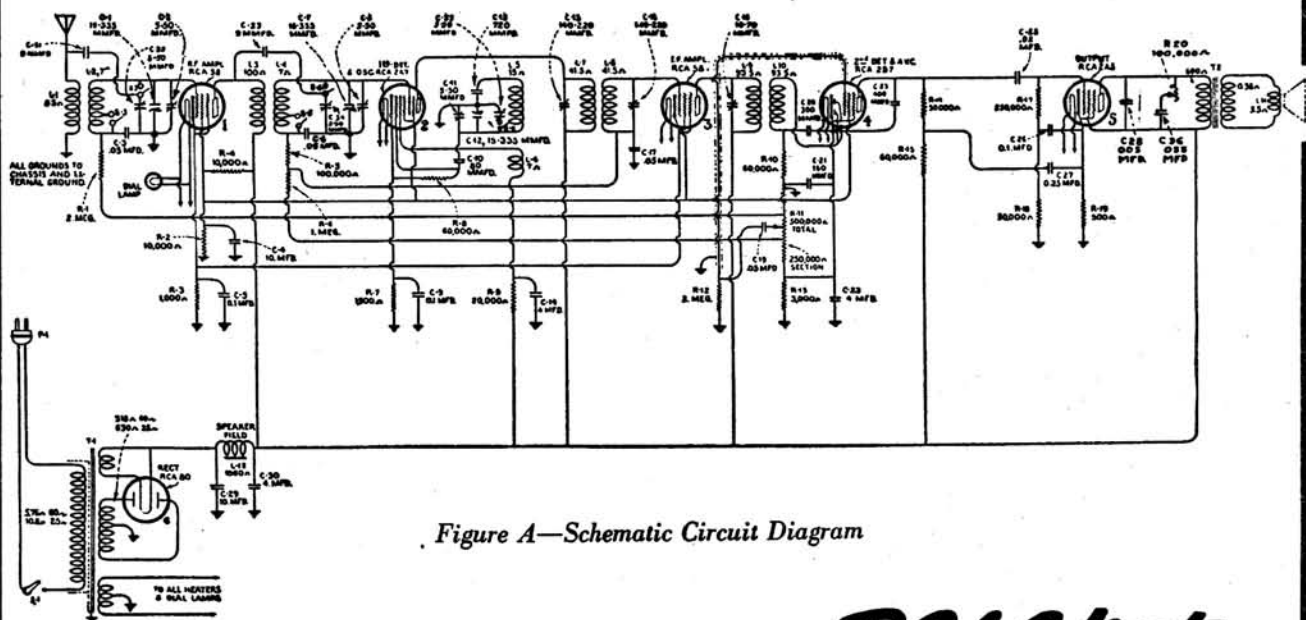


Figure A—Schematic Circuit Diagram

I.F. 175 KC.

RCA Victor

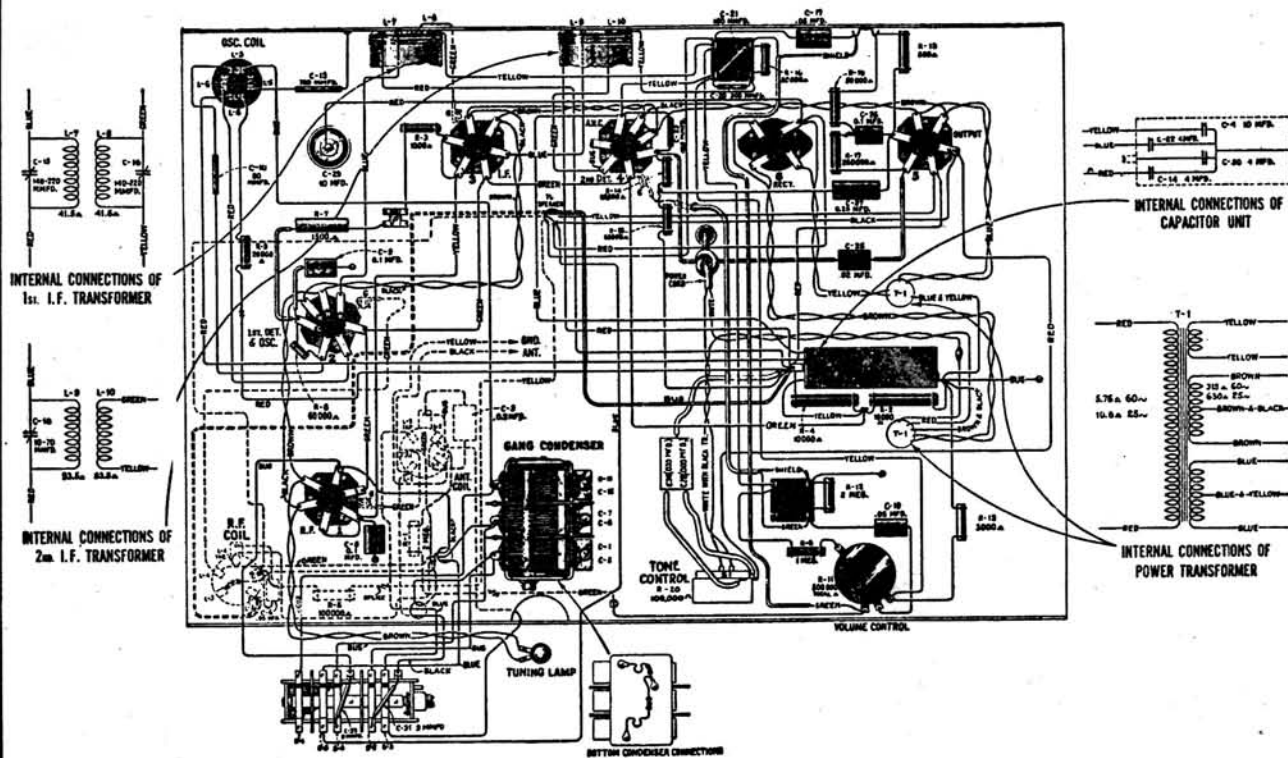
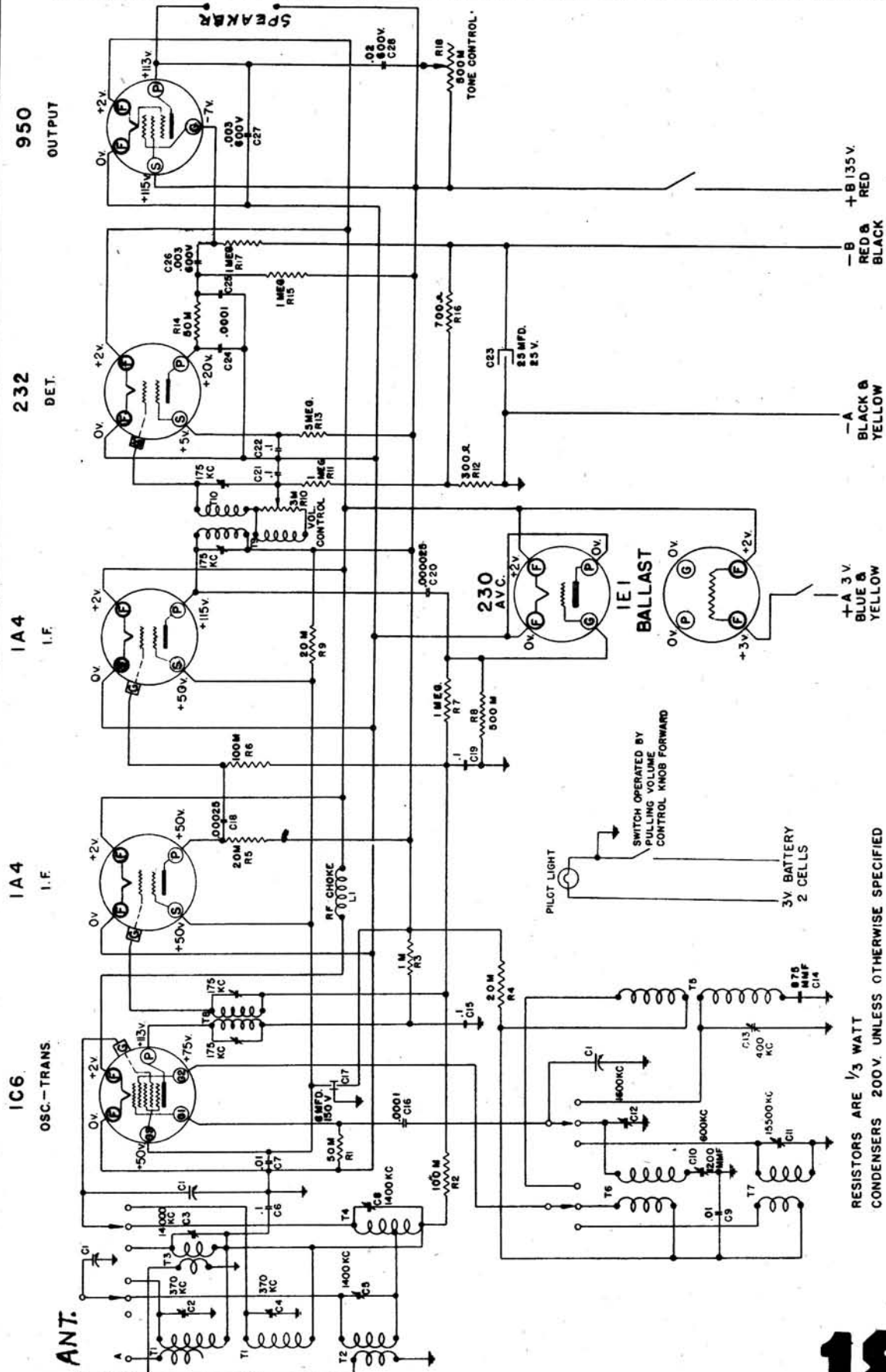


Figure B—Wiring Diagram

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

181

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



SCHEMATIC - MODELS 1923-1933-1983-1993

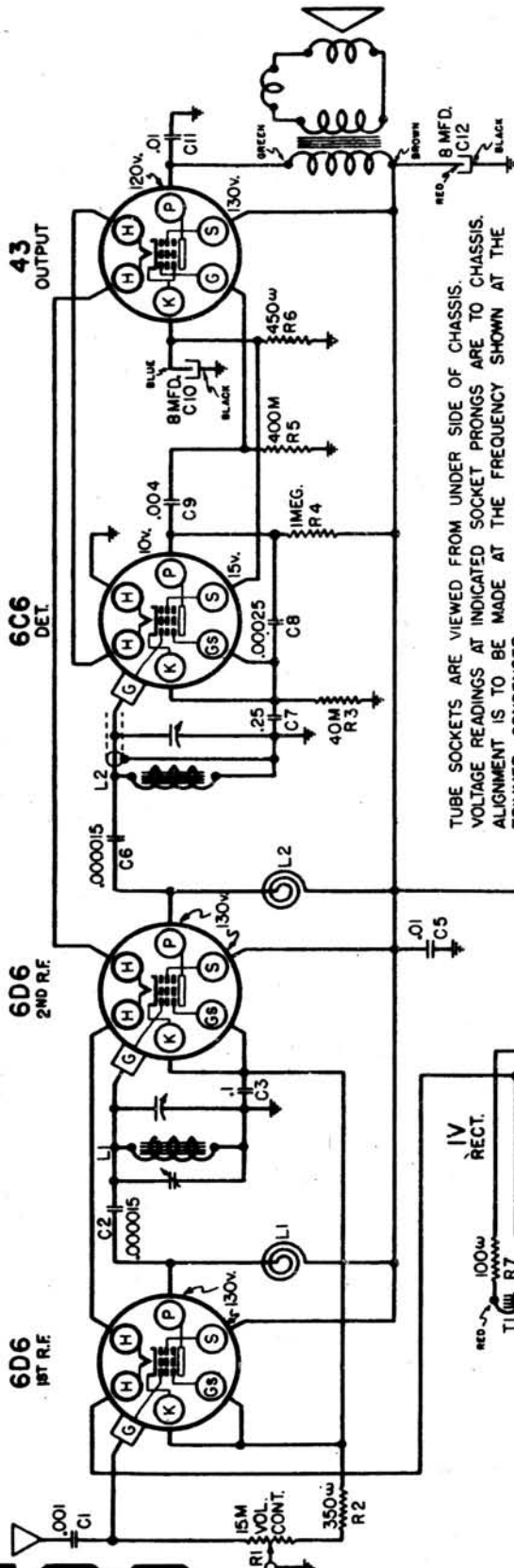
Sears, Roebuck & Co.

RESISTORS ARE 1/3 WATT
 CONDENSERS 200V UNLESS OTHERWISE SPECIFIED
 VOLTAGE READINGS ARE TAKEN FROM CHASSIS TO
 INDICATED PRONG OF EACH SOCKET. ALIGNMENT
 IS TO BE MADE AT FREQUENCIES SHOWN AT
 EACH TRIMMER
 WHERE NO VALUE IS SHOWN, READING IS VERY LOW
 BECAUSE OF HIGH SERIES RESISTANCE IN CIRCUIT.
 TUNER SOCKETS ARE VIEWED FROM UNDER SIDE OF CHASSIS.

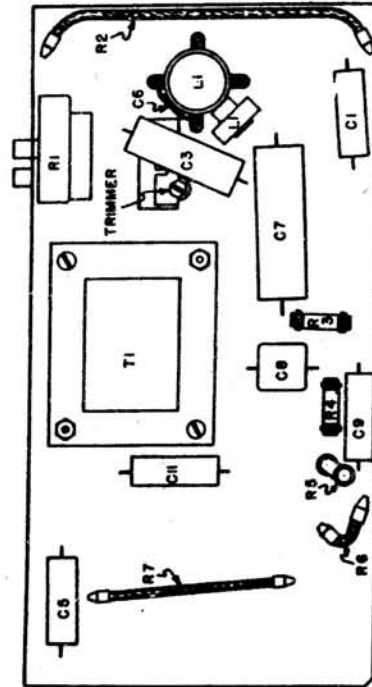
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Sears Roebuck & Co.

Models: 4414, 4415,
4500, 4505, 4506,
4510, 4511

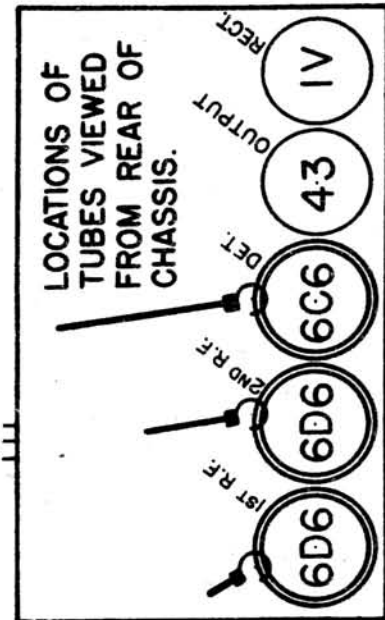


TUBE SOCKETS ARE VIEWED FROM UNDER SIDE OF CHASSIS. VOLTAGE READINGS AT INDICATED SOCKET PRONGS ARE TO CHASSIS. ALIGNMENT IS TO BE MADE AT THE FREQUENCY SHOWN AT THE TRIMMER CONDENSER. WHERE NO VOLTAGE READING IS SHOWN AT SOCKET PRONG, IT INDICATES A VERY LOW READING. VOLUME CONTROL TO BE ON FULL.



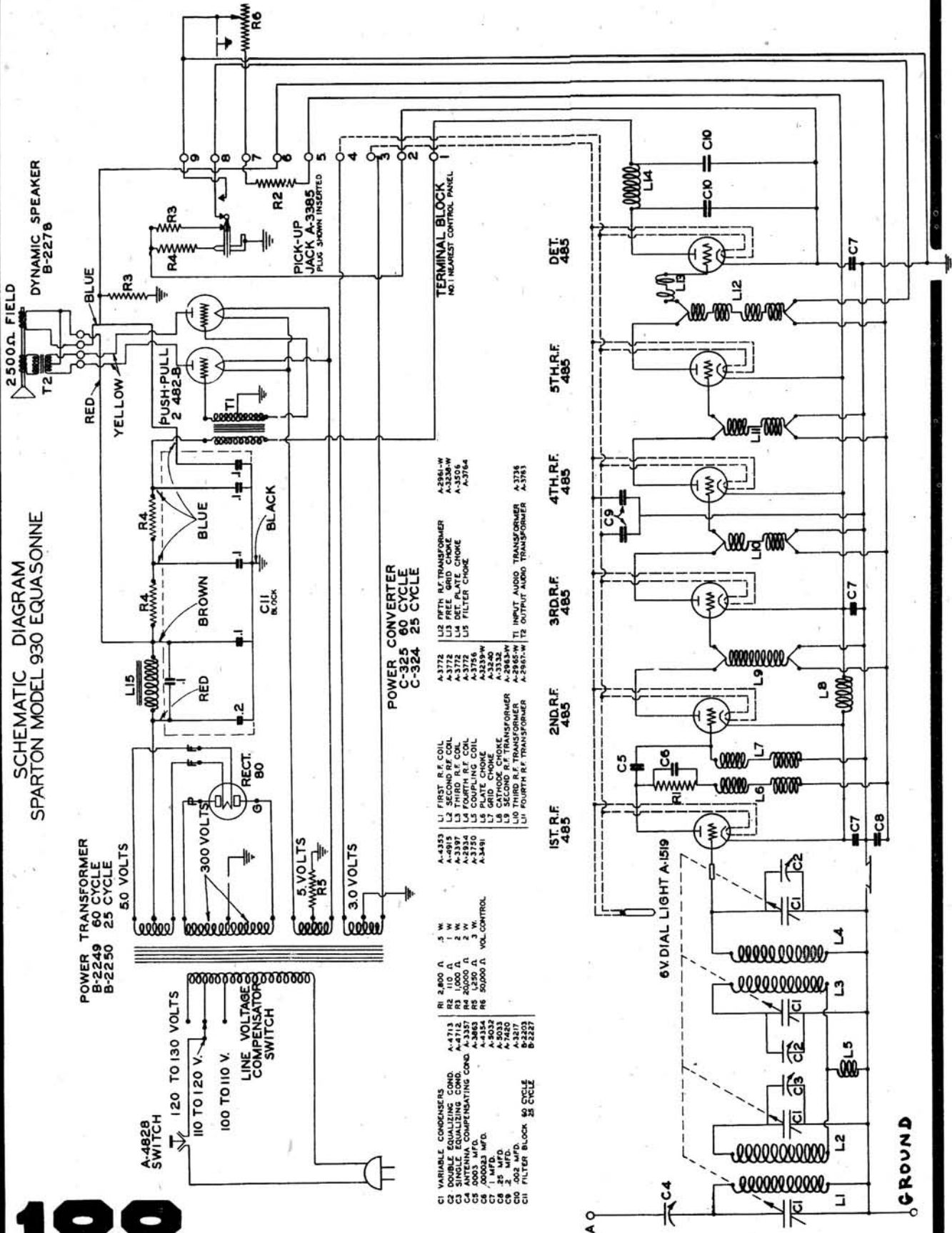
C4, C10, C12, & L1 ARE MOUNTED ON TOP OF CHASSIS.

LOCATIONS OF PARTS UNDER CHASSIS



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

SCHEMATIC DIAGRAM SPARTON MODEL 930 EQUASONNE



POWER TRANSFORMER
B-2249 60 CYCLE
B-2250 25 CYCLE

A-4828 SWITCH
120 TO 130 VOLTS
110 TO 120 V.
100 TO 110 V.
LINE VOLTAGE COMPENSATOR SWITCH

RECT. 80
300 VOLTS

5 VOLTS
R5

3.0 VOLTS

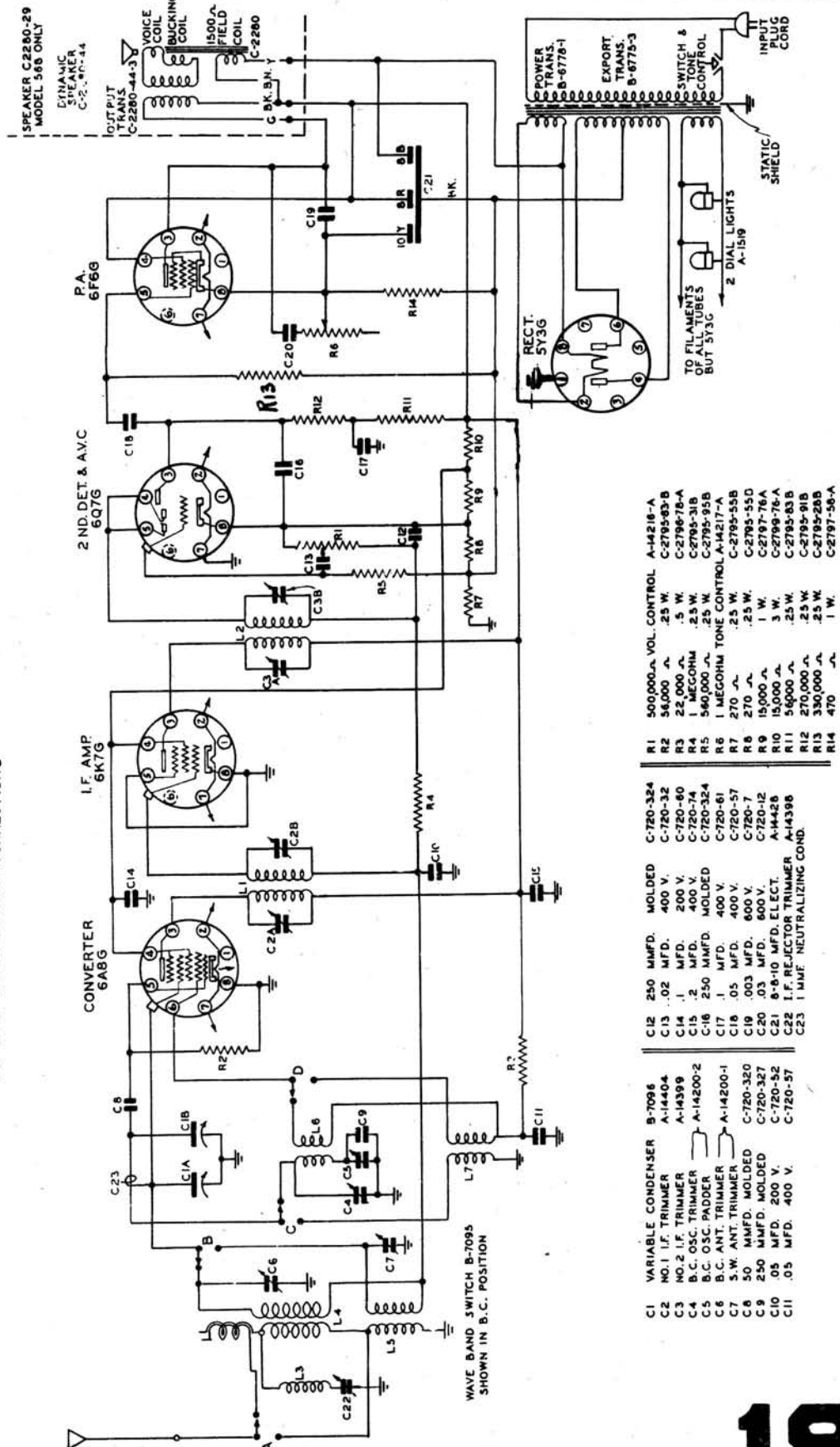
POWER CONVERTER
C-325 60 CYCLE
C-324 25 CYCLE

- RI 2,800 Ω
- R2 110 Ω
- R3 1,000 Ω
- R4 500 Ω
- R5 1,500 Ω
- R6 50,000 Ω VOL. CONTROL
- A-4713 DOUBLE EQUALIZING COND.
- A-4712 SINGLE EQUALIZING COND.
- A-3387 ANTENNA COMPENSATING COND.
- A-3354 .000033 MFD.
- A-8032 1 MFD.
- A-820 2 MFD.
- A-3217 .002 MFD.
- B-2252 50 CYCLE
- B-2253 25 CYCLE
- C1 VARIABLE CONDENSERS
- C2 DOUBLE EQUALIZING COND.
- C3 SINGLE EQUALIZING COND.
- C4 ANTENNA COMPENSATING COND.
- C5 .000033 MFD.
- C6 1 MFD.
- C7 2 MFD.
- C8 .002 MFD.
- C9 50 CYCLE
- C10 25 CYCLE
- C11 FILTER BLOCK
- A-4353 5 W.
- A-4915 1 W.
- A-3387 2 W.
- A-3354 3 W.
- A-3481 VOL. CONTROL
- L1 FIRST R.F. COIL
- L2 SECOND R.F. COIL
- L3 THIRD R.F. COIL
- L4 COUPLING COIL
- L5 PLATE CHoke
- L6 GRID CHoke
- L7 SECOND R.F. TRANSFORMER
- L8 THIRD R.F. TRANSFORMER
- L9 FOURTH R.F. TRANSFORMER
- L10 FIFTH R.F. TRANSFORMER
- L11 FREE GRID CHoke
- L12 DET. PLATE CHoke
- L13 FILTER CHoke
- A-2961-W
- A-3238-W
- A-3505
- A-3764
- A-3772
- A-3774
- A-3776
- A-3239-W
- A-3240
- A-2963-W
- A-2965-W
- A-2967-W
- T1 INPUT AUDIO TRANSFORMER A-3238
- T2 OUTPUT AUDIO TRANSFORMER A-3764

1ST R.F. 485
2ND R.F. 485
3RD R.F. 485
4TH R.F. 485
5TH R.F. 485
DET. 485

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

SCHEMATIC DIAGRAM SPARTAN SUPERHETERODYNE MODEL 518, 518X, 558 & 558X 568 INTERMEDIATE FREQUENCY 456 K.C. TOP VIEW OF ALL SOCKET CONNECTIONS

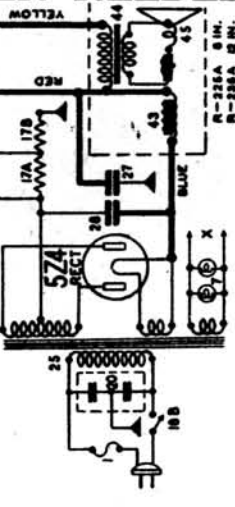
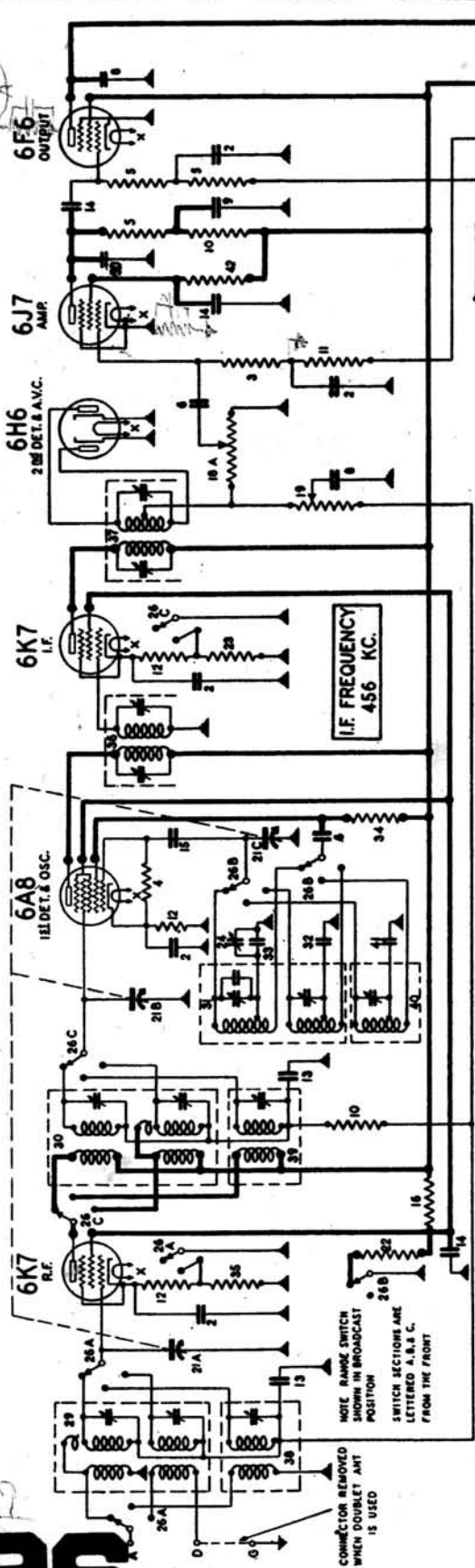


C1	VARIABLE CONDENSER	B-7095
C2	NO.1 I.F. TRIMMER	A-14404
C3	NO.2 I.F. TRIMMER	A-14399
C4	B.C. OSC. TRIMMER	A-14200-2
C5	B.C. OSC. PADDER	
C6	B.C. ANT. TRIMMER	A-14200-1
C7	S.W. ANT. TRIMMER	
C8	50 MMFD. MOLDED	C-720-320
C9	250 MMFD. MOLDED	C-720-327
C10	.05 MFD. 200 V.	C-720-52
C11	.05 MFD. 400 V.	C-720-57
C12	250 MMFD.	MOLDED
C13	.02 MFD.	400 V.
C14	.1 MFD.	200 V.
C15	.2 MFD.	400 V.
C16	250 MMFD.	MOLDED
C17	.1 MFD.	400 V.
C18	.05 MFD.	400 V.
C19	.003 MFD.	600 V.
C20	.03 MFD.	600 V.
C21	6-8-10 MFD. ELECT.	A-14426
C22	I.F. REJECTOR TRIMMER	A-14398
C23	1 MMF NEUTRALIZING COND.	
R1	500,000- Ω VOL. CONTROL	A-14218-A
R2	50,000 Ω	.25 W. C-2785-83-B
R3	1 MEGOHM	.5 W. C-2786-78-A
R4	1 MEGOHM	.25 W. C-2785-31B
R5	500,000 Ω	.25 W. C-2785-95B
R6	1 MEGOHM TONE CONTROL	A-14217-A
R7	270 Ω	.25 W. C-2785-55B
R8	270 Ω	.25 W. C-2785-55D
R9	15,000 Ω	1 W. C-2787-76A
R10	15,000 Ω	3 W. C-2789-76-A
R11	5,600 Ω	.25 W. C-2785-83 B
R12	270,000 Ω	.25 W. C-2785-91B
R13	330,000 Ω	.25 W. C-2785-28B
R14	470 Ω	1 W. C-2787-58-A

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

STEWART-WARNER MODEL R-136 CHASSIS (RECEIVER MODELS 1361 to 1369)

196

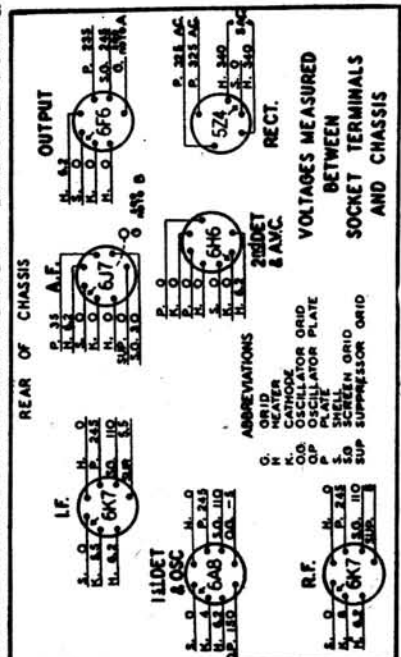


R-136 PARTS LIST

Diagram No.	Part No.	Description
1	38241	Fuse, 1 amp.
2	81630	.1 mfd. 175 volt paper condenser
3	85072	510,000 ohm 1/2 watt carbon resistor
4	85080	51,000 ohm 1/2 watt carbon resistor
5	85082	260,000 ohm 1/2 watt carbon resistor
6	83219	.01 mfd. 600 volt paper condenser
7	83278	Dial lamp 6.3 volt
8	83706	.006 mfd. 600 volt paper condenser
9	83974	.1 mfd. 300 volt paper condenser
10	84198	110,000 ohm 1/2 watt carbon resistor
11	84238	1.1 megohm 1/2 watt carbon resistor
12	84238	Output transformer (R-225-A 8" spkr.)
13	84504	Diaphragm and shell assembly (R-225-A 8 inch speaker)
14	84505	Field coil assembly (R-225-A 8" spkr.)
15	84588	300 ohm 1/2 watt wire wound resistor
16	85053	.05 mfd. 160 volt paper condenser
17	85059	.05 mfd. 300 volt paper condenser
18	85061	.000051 mfd. mica condenser
19	85063	15,000 ohm 2 watt carbon resistor
20	85067	375 ohm wire wound bias resistor (one unit)
21	85073	[250,000 ohm volume control] one unit
22	85074	Line switch
23	85075	Dual .01 mfd. 750 V.A.C. paper cond.
24	85084	3 Gang variable condenser
25	85116	25,000 ohm 1/2 watt carbon resistor
26	85117	1,000 ohm 1/2 watt carbon resistor
27	85285	Peddling trimmer
28	85428	Power trans. 115 V 60 cycle (136-A only)
29	85429	Three deck range switch
30	85430	16 mfd. 300 volt electrolytic condenser
31	85431	16 mfd. 400 volt electrolytic condenser
32	85432	Antenna coil and shield assembly (B & C, 3 S.W.)
33	85433	R. F. coil and shield assembly (B & C, 3 S.W.)
34	85434	Oscillator coil and shield assembly (B & C, 3 S.W.)
35	85440	.00351 mfd. mica condenser
36	85441	.00043 mfd. mica condenser
37	85442	21,000 ohm 1/2 watt carbon resistor
38	85443	2,000 ohm 1/2 watt carbon resistor
39	85445	1st I.F. transformer
40	85448	2nd I.F. transformer
41	85455	Antenna coil assembly (No. 2 S.W.)
42	85456	R.F. coil assembly (No. 2 S.W.)
43	85457	Oscillator coil assembly (No. 2 S.W.)
44	85472	1.6 megohm 1/2 watt carbon resistor
45	85473	Field coil assembly (R-225-A 8" spkr.)
46	85482	Output transformer (R-225-A 8" spkr.)
47	85483	Diaphragm and shell assembly (R-225-A 8" spkr.)
48	85484	Field coil assembly (R-225-A 8" spkr.)
49	85485	300 ohm 1/2 watt wire wound resistor
50	85486	.05 mfd. 160 volt paper condenser

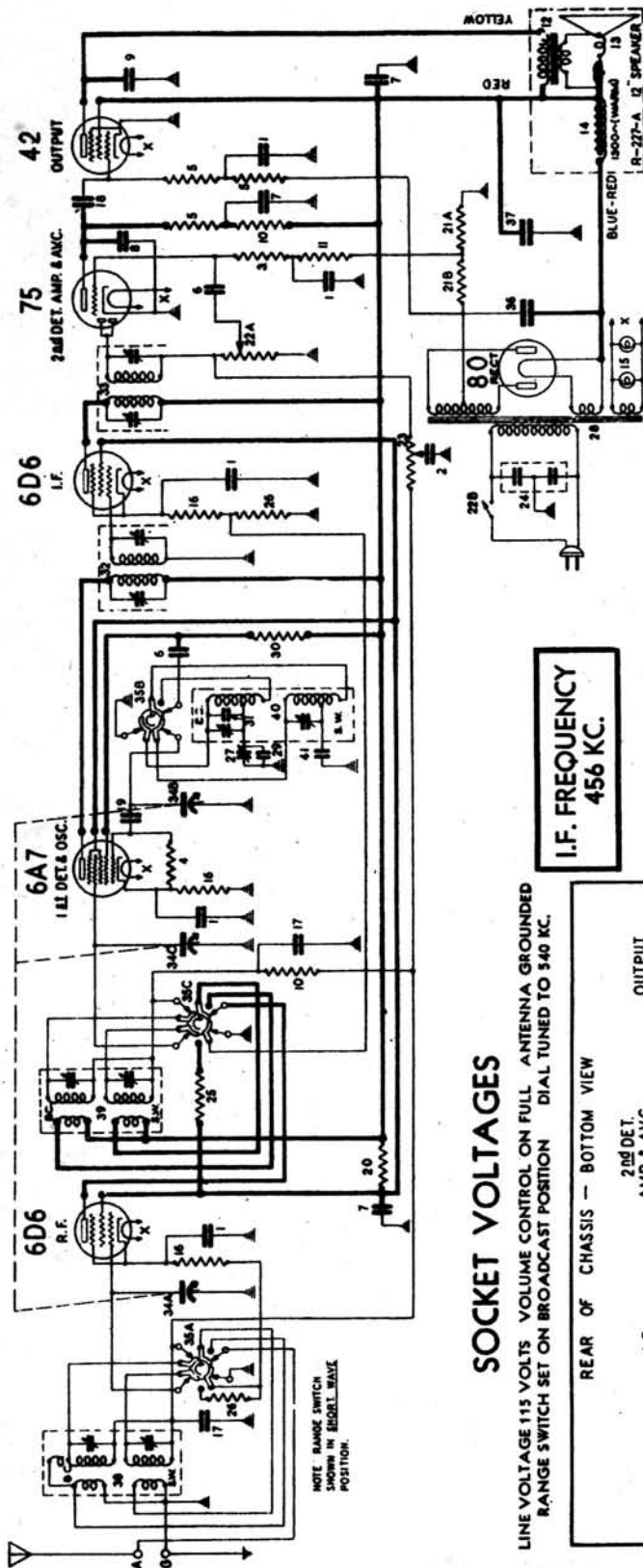
SOCKET VOLTAGES

LINE VOLTAGE 115 VOLTS. Volume Control on Full ANTENNA GROUNDED RANGE SWITCH SET ON BROADCAST POSITION. DIAL TUNED TO 540 KC.



IMPORTANT: Use a high resistance meter of 1000 ohms per volt.
 NOTE A: The grid bias on the 6F6 output tube is -16.5 volts, measured across the resistors 17A and 17B.
 NOTE B: The grid bias on the 6J7 amplifier tube is -1.7 volts measured across resistor 17B.
 Speaker field resistance is 1800 ohms with coil warm.

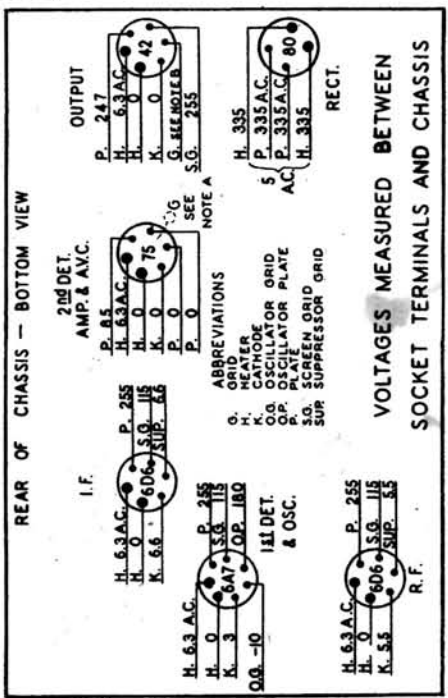
STEWART-WARNER MODEL R-134 CHASSIS (RECEIVER MODELS 1341 to 1349)



I.F. FREQUENCY
456 KC.

SOCKET VOLTAGES

LINE VOLTAGE 115 VOLTS VOLUME CONTROL ON FULL ANTENNA GROUNDED RANGE SWITCH SET ON BROADCAST POSITION DIAL TUNED TO 540 KC.



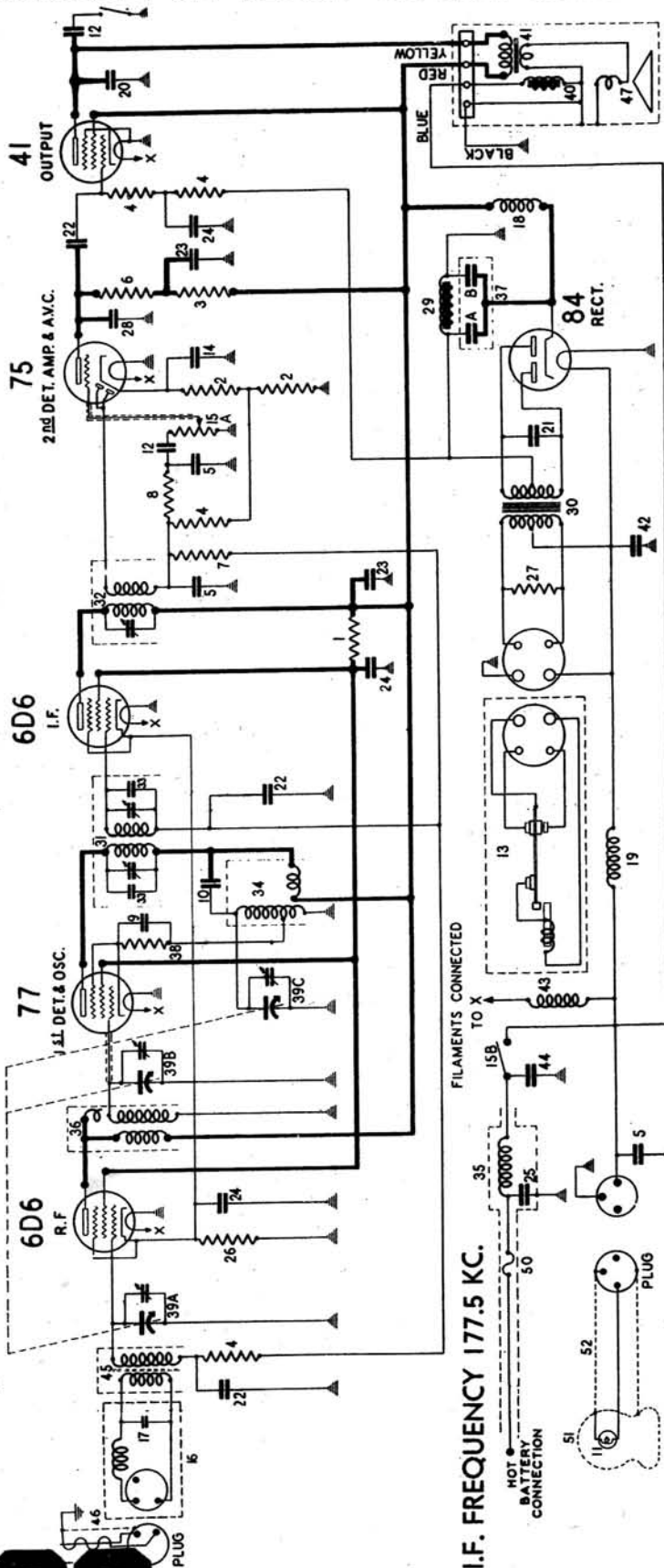
IMPORTANT: Use a high resistance meter of 1000 ohms per volt.
NOTE A: The grid bias for the 75 triode section is —1.2 volts measured across resistor 21A.
NOTE B: The grid bias on the 42 output tube is —16 volts, measured across the resistors 21A and 21B.

MODEL R-134 PARTS LIST

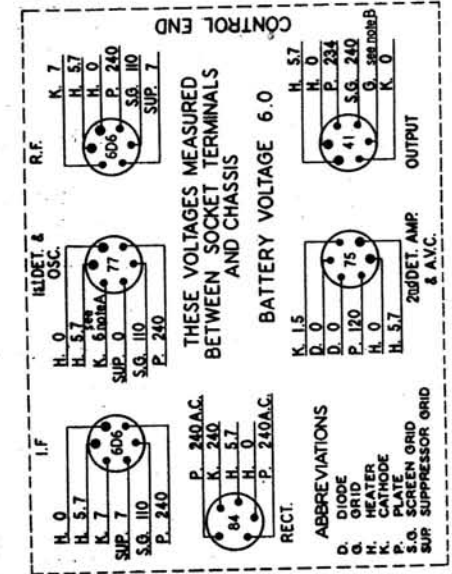
Diag. No.	Part No.	DESCRIPTION
1	81680	.1 mfd. 175 volt paper condenser
2	83011	.004 mfd. 600 volt paper condenser
3	83072	510,000 ohm 1/4 watt carbon resistor
4	83080	51,000 ohm 1/4 watt carbon resistor
5	83082	260,000 ohm 1/4 watt carbon resistor
6	83119	.1 mfd. 600 volt paper condenser
7	83440	.1 mfd. 400 volt paper condenser
8	83559	260 mfd. mica condenser
9	83706	.006 mfd. 600 volt paper condenser
10	84198	110,000 ohm 1/4 watt carbon resistor
11	84285	1.1 megohm 1/4 watt carbon resistor
12	84312	Output transformer (on R-227-A Spkr.)
13	84506	Diode and shell assembly for (R-227-A Spkr.)
14	84507	Field coil and housing for (R-227-A Spkr.)
15	84759	Pilot lamp, 6-8 volt
16	84888	300 ohm 1/4 watt W.W. resistor
17	85053	.05 mfd. 100 volt paper condenser
18	85059	.05 mfd. 300 volt paper condenser
19	85061	.51 mfd. mica condenser
20	85065	15,000 ohm 2 watt carbon resistor
21A	85067	220 ohm bias resistor (wire wound)
21B		
22A		
22B		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35 A to C		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

STEWART-WARNER MODEL R-160 AUTO RADIO CHASSIS (RECEIVER MODELS 1601 to 1609)



I.F. FREQUENCY 177.5 KC.



THESE VOLTAGES MEASURED BETWEEN SOCKET TERMINALS AND CHASSIS

BATTERY VOLTAGE 6.0

REC.T. 6.0

ABBREVIATIONS

D. DIODE

GRID

H. HEATER

K. CATHODE

P. PLATE

S.O. SCREEN GRID

SUP. SUPPRESSOR GRID

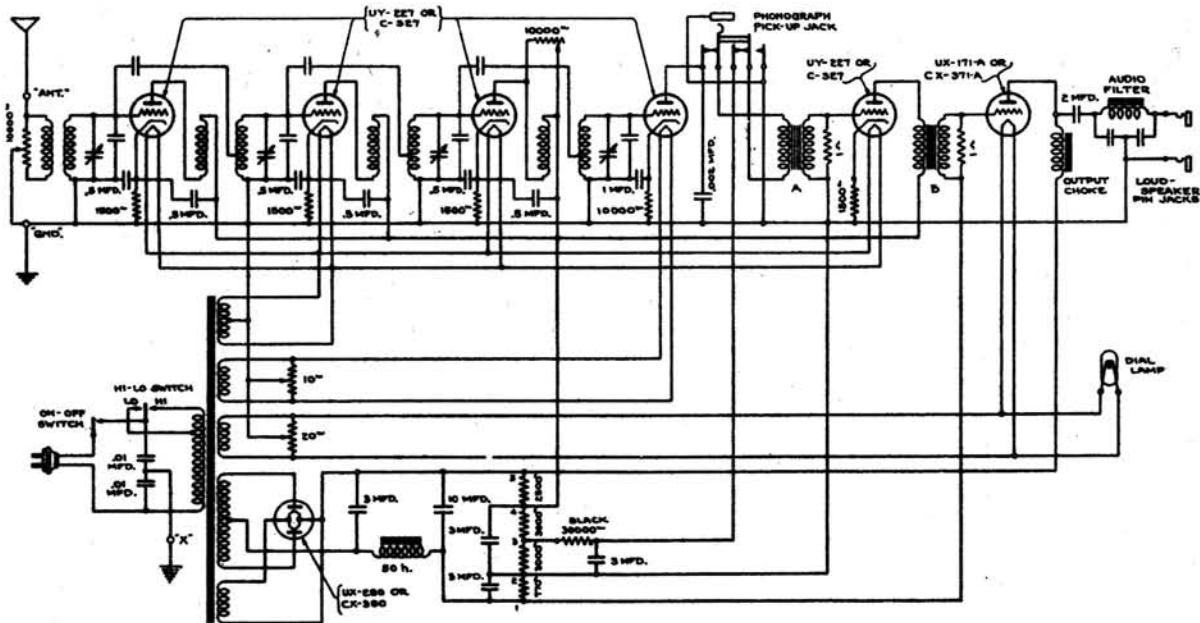
2ND DET. AMP. & A.V.C.

OUTPUT

66023	60,000 ohm 1 watt carbon resistor	1
67301	2,000 ohm 1/4 watt carbon resistor	2
83080	51,000 ohm 1/4 watt carbon resistor	3
83082	260,000 ohm 1/4 watt carbon resistor	4
83539	260 mmfd. mica condenser	5
83777	Battery cable and fuse housing	48
84198	110,000 ohm 1/4 watt carbon resistor	7
84235	1.1 megohm 1/4 watt carbon resistor	6
84238	11,000 ohm 1/4 watt carbon resistor	8
84282	.001 mfd. mica condenser	9
84833	70 mmfd. mica condenser	10
85896	Pilot lamp 6-8 volt (bayonet base)	11
88026	.02 mfd. 400 volt paper condenser	12
88054	Tone control switch	49
88156	Vibrator	13
88170	10 mfd. 25 volt electrolytic condenser	14
88171	{ Volume control 500,000 ohm } { Line switch } { Antenna filter } { 50 mmfd. mica condenser } { R. F. choke coil } { R. F. choke coil (to vibrator) } { .006 mfd. 600 volt paper condenser } { .01 mfd. 1500 volt paper condenser } { .05 mfd. 200 volt paper condenser } { 1 mfd. 300 volt paper condenser } { .25 mfd. 150 volt paper condenser } { .5 mfd. 150 volt paper condenser } { 600 ohm 1/4 watt carbon resistor } 	15A}
88172	Antenna coil	16
88173	50 mmfd. mica condenser	17
88181	R. F. choke coil	18
88183	R. F. choke coil (to vibrator)	19
88185	.006 mfd. 600 volt paper condenser	20
88187	.01 mfd. 1500 volt paper condenser	21
88189	.05 mfd. 200 volt paper condenser	22
88191	1 mfd. 300 volt paper condenser	23
88193	.25 mfd. 150 volt paper condenser	24
88195	.5 mfd. 150 volt paper condenser	25
88203	600 ohm 1/4 watt carbon resistor	26
88204	210 ohm 1/2 watt carbon resistor	4
88205	.0021 mfd. mica condenser	4
88210	Filter choke	28
88213	Power transformer	29
88222	1st I.F. transformer	30
88223	2nd I.F. transformer	31
88233	110 mmfd. mica condenser	32
88234	Oscillator coil and shield assembly	33
88239	"A" filter	34
88250	R.F. coil and shield assembly	35
88256	{ Electrolytic condenser 4 mfd. 350 volt } { Electrolytic condenser 8 mfd. 350 volt } { 9,500 ohm 1/4 watt carbon resistor } { Three 500 ohm 1/2 watt carbon resistor } { Field coil and housing (for R-245-A spkr.) } { Output transformer } { 1.25 mfd. 150 volt paper condenser } { R.F. choke (to filaments) } { .25 mfd. 150 volt paper condenser (low reactance) } 	37A}
88257	Electrolytic condenser 4 mfd. 350 volt	37B}
88258	Electrolytic condenser 8 mfd. 350 volt	37C}
88274	Three 500 ohm 1/2 watt carbon resistor	39A to C
88276	Field coil and housing (for R-245-A spkr.)	40
88285	Output transformer	41
88289	1.25 mfd. 150 volt paper condenser	42
88298	R.F. choke (to filaments)	43
88312	.25 mfd. 150 volt paper condenser (low reactance)	44
88313	Antenna coil and shield assembly (iron core)	45
88327	Antenna cable and plug	46
88328	Diaphragm and shell assembly (R-245-A spkr.)	47
88377	Battery cable and fuse housing	48
88054	Tone control switch	49
88054	Fuse, 10 amperes	50
88730	Control head less shafts	51
88738	Pilot light cable with plug, 31"	52

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

SCHEMATIC DIAGRAM



STROMBERG-CARLSON NOS. 635 AND 636 RECEIVERS

The following table shows how the filament, plate and grid voltages vary with different line voltages, in the No. 635 receiver. The plate voltages are measured between tube plates and Tap No. 2 of the voltage divider. The grid voltages of the heater type tubes are measured across the cathode resistors; and that of the audio output tube is measured between Taps No. 1 and No. 2 of the voltage divider.

Line Voltage "HI-LO" Switch	105 "LO"	110 "LO"	115 "LO"	115 "HI"	120 "HI"	125 "HI"
<i>UX-280</i>						
Filament Voltage (RMS)	4.5	4.75	5.0	4.5	4.7	4.93
Voltage per anode (RMS)	236.0	248.0	259.0	236.0	248.0	258.0
<i>Amplifiers</i>						
Heater Voltage (RMS)	2.17	2.27	2.38	2.16	2.26	2.35
Plate Voltage	106.0	110.0	115.0	106.0	110.0	115.0
Grid Voltage	- 5.0	- 5.5	- 5.75	- 4.7	- 5.2	- 5.6
<i>Detector</i>						
Heater Voltage (RMS)	2.11	2.22	2.32	2.1	2.2	2.3
Plate Voltage	39.0	40.0	42.0	38.0	40.0	41.0
Grid Voltage	- 3.25	- 3.5	- 3.75	- 3.25	- 3.5	- 3.75
<i>Audio Output Tube</i>						
Filament Voltage (RMS)	4.5	4.75	5.0	4.53	4.72	4.94
Plate Voltage	167.0	175.0	184.0	165.0	174.0	182.0
Grid Voltage	-37.0	-40.0	-41.0	-36.0	-40.0	-41.0

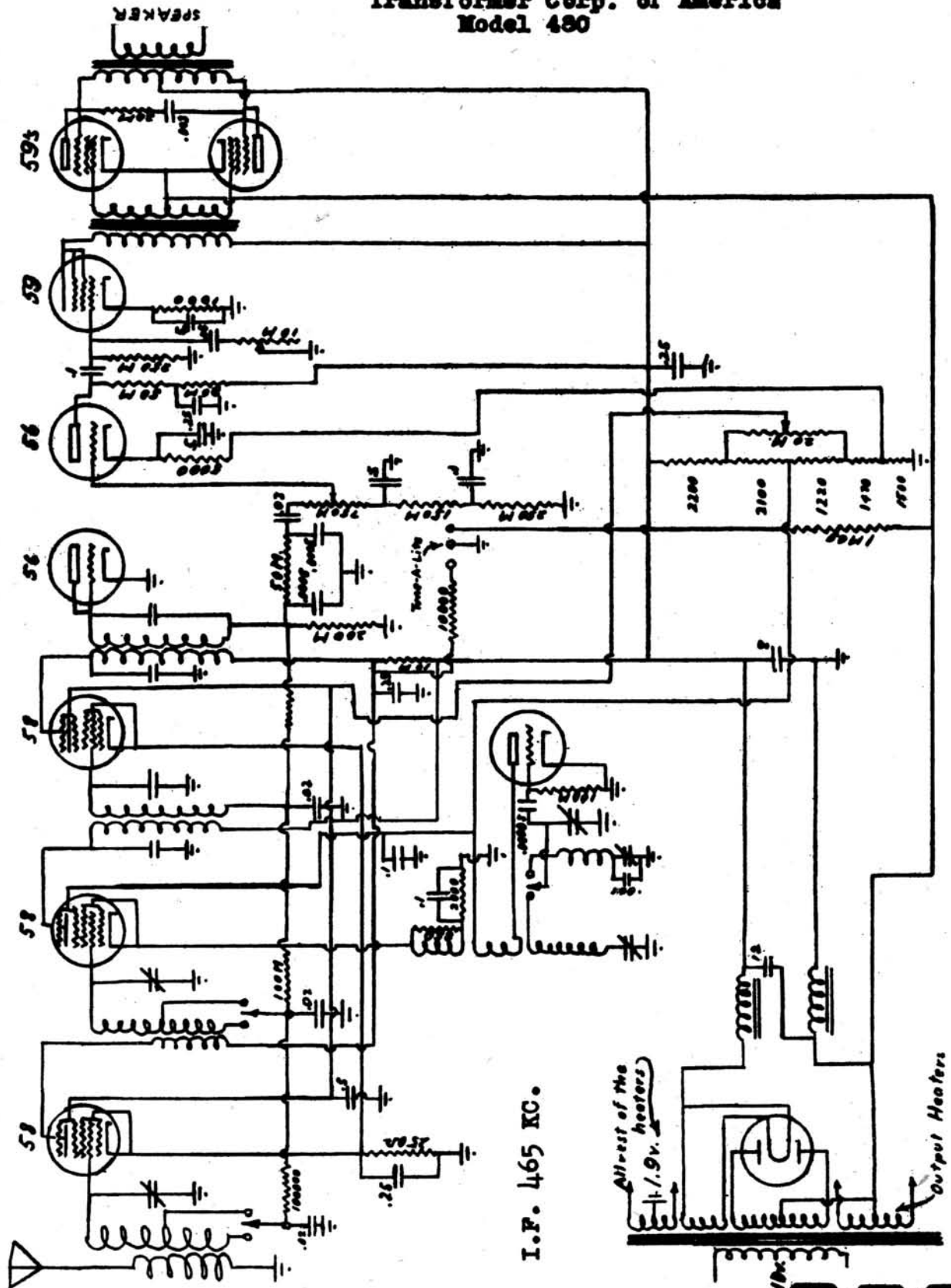
NOTE—The grid voltage on the 1st audio tube will be slightly lower than that on the R. F. amplifier tubes, due to the drop in the secondary of the 1st audio transformer.

200

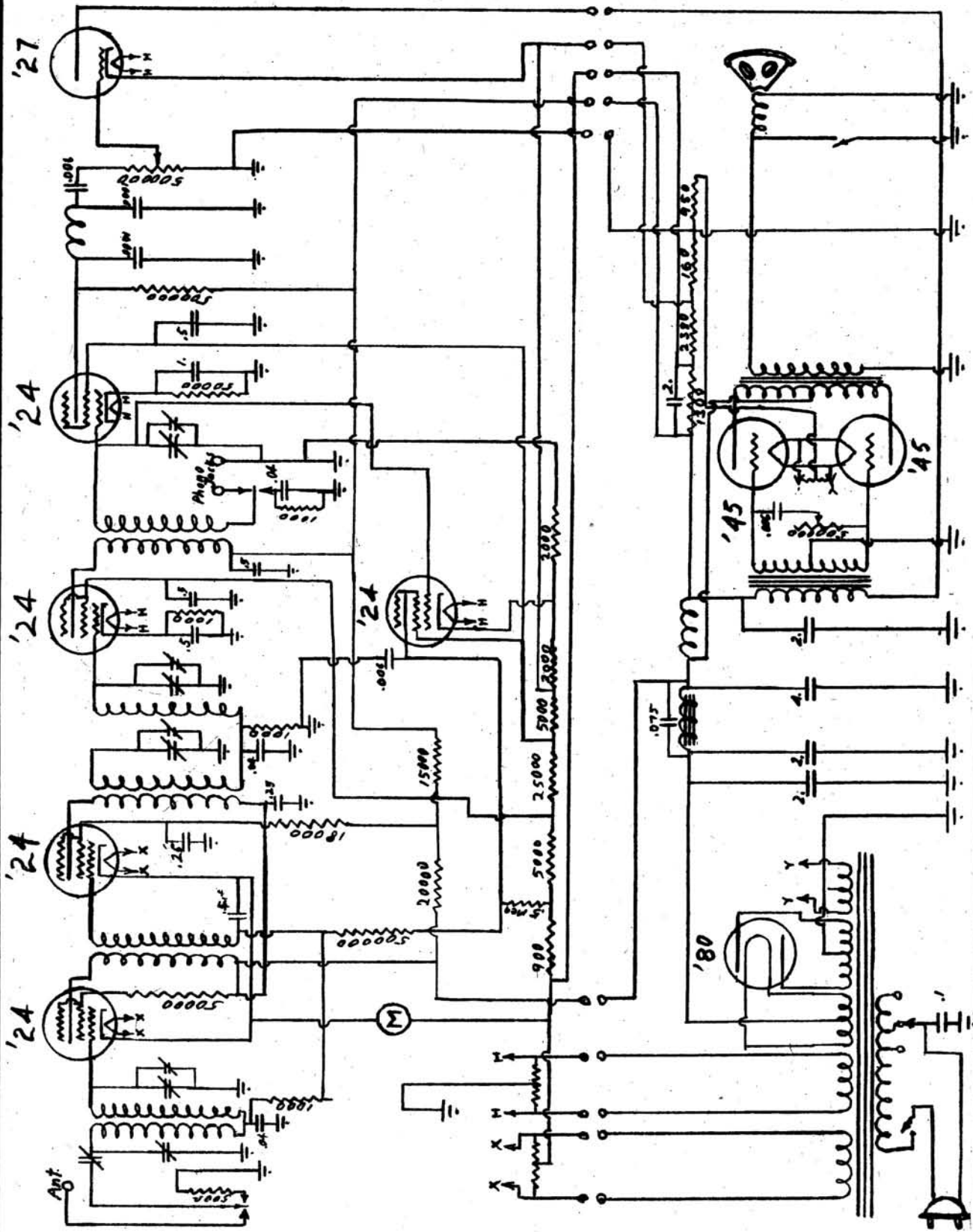
COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Transformer Corp. of America
Model 480



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

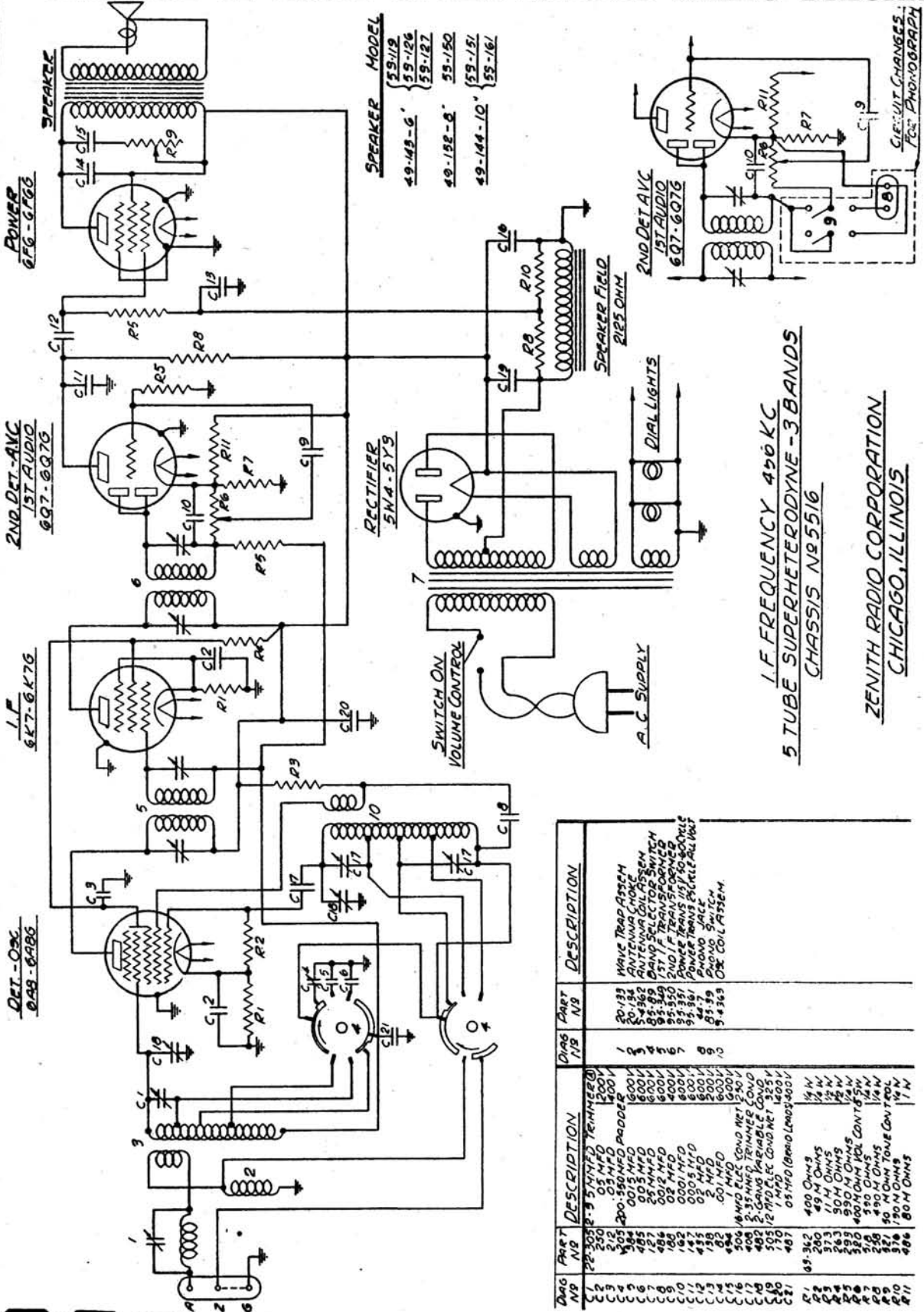


United American Boscov Corp.
Models: 60, 60D, 60E, 61

204

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



SPEAKER MODEL

29-119	49-148-G	55-150	55-151	55-161
49-148-G	49-158-B	49-144-10		

I.F. FREQUENCY 450KC
5 TUBE SUPERHETERODYNE-3 BANDS
CHASSIS NR5516

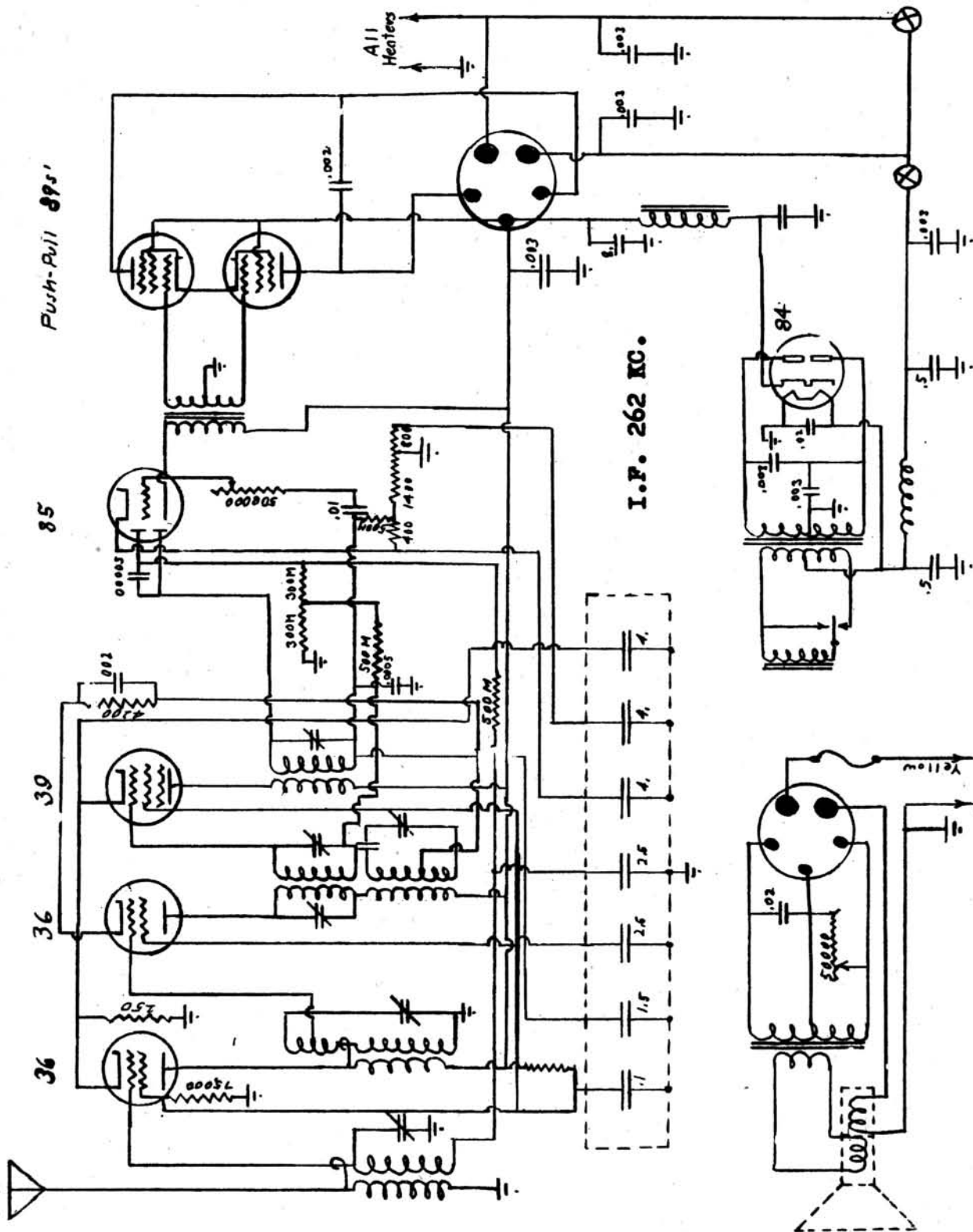
ZENITH RADIO CORPORATION
CHICAGO, ILLINOIS

Models 5-S-119, 5-S-126, 5-S-127, 5-S-150, 5-S-151, 5-S-161. (Chassis No. 5516)

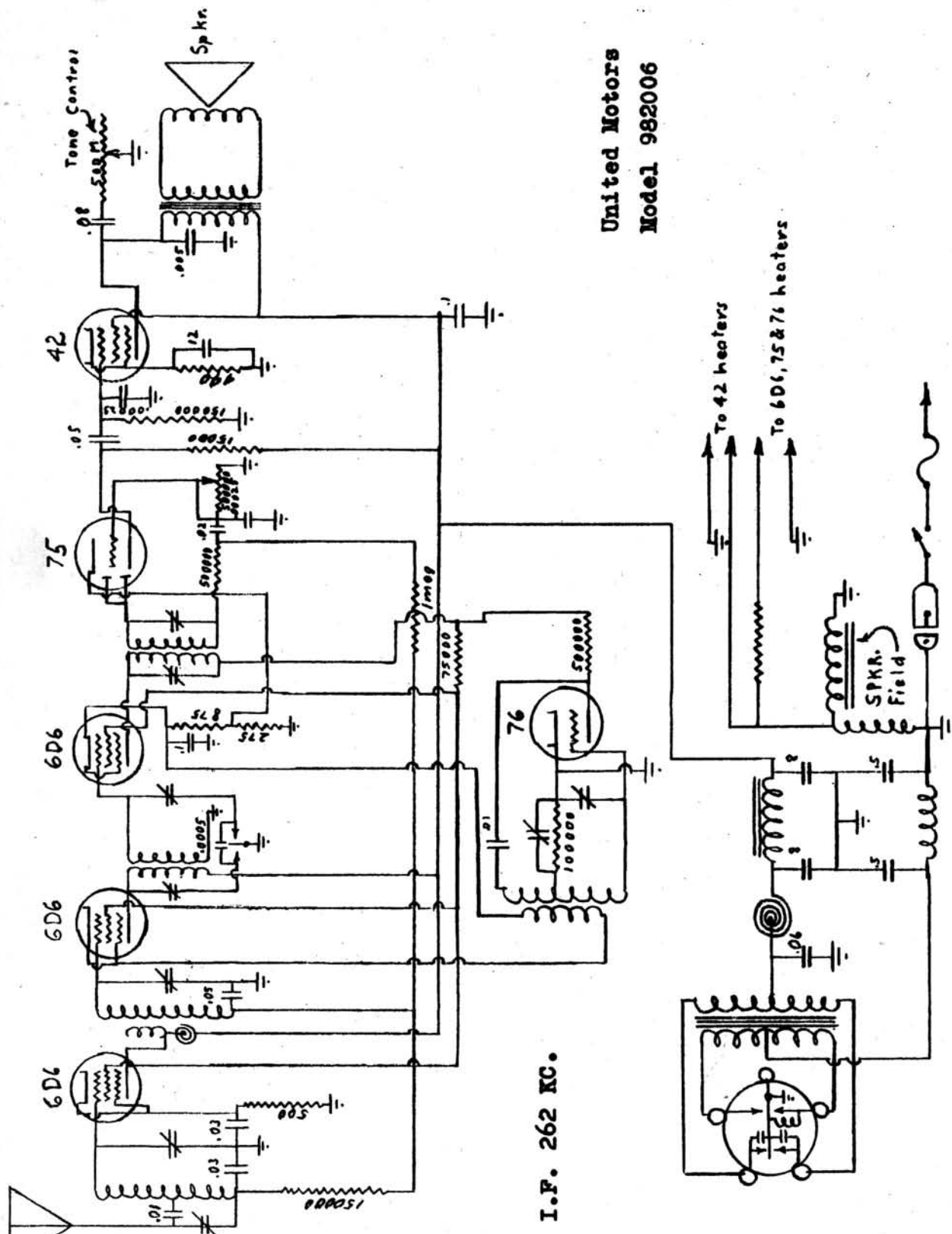
DIAG. NO.	PART NO.	DESCRIPTION
1	20-133	WAVE TRAP ASSEM.
2	20-143	ANTENNA COIL ASSEM.
3	5-4362	ANTENNA COIL ASSEM.
4	85-349	BAND SELECTOR SWITCH
5	95-350	2ND I.F. TRANSFORMER
6	95-351	1ST I.F. TRANSFORMER
7	95-381	POWER TRANS. FOR TUBE SOCKETS
8	44-7	PHONO JACK
9	85-39	PHONO SWITCH
10	5-4363	OSC. COIL ASSEM.
11	122-305	5-5MMFD TRIMMER
12	200	0.5 MFD 200V
13	130	0.05 MFD 100V
14	127	0.005 MFD 600V
15	127	0.005 MFD 600V
16	127	0.005 MFD 600V
17	127	0.005 MFD 600V
18	127	0.005 MFD 600V
19	127	0.005 MFD 600V
20	127	0.005 MFD 600V
21	127	0.005 MFD 600V
22	127	0.005 MFD 600V
23	127	0.005 MFD 600V
24	127	0.005 MFD 600V
25	127	0.005 MFD 600V
26	127	0.005 MFD 600V
27	127	0.005 MFD 600V
28	127	0.005 MFD 600V
29	127	0.005 MFD 600V
30	127	0.005 MFD 600V
31	127	0.005 MFD 600V
32	127	0.005 MFD 600V
33	127	0.005 MFD 600V
34	127	0.005 MFD 600V
35	127	0.005 MFD 600V
36	127	0.005 MFD 600V
37	127	0.005 MFD 600V
38	127	0.005 MFD 600V
39	127	0.005 MFD 600V
40	127	0.005 MFD 600V
41	127	0.005 MFD 600V
42	127	0.005 MFD 600V
43	127	0.005 MFD 600V
44	127	0.005 MFD 600V
45	127	0.005 MFD 600V
46	127	0.005 MFD 600V
47	127	0.005 MFD 600V
48	127	0.005 MFD 600V
49	127	0.005 MFD 600V
50	127	0.005 MFD 600V
51	127	0.005 MFD 600V
52	127	0.005 MFD 600V
53	127	0.005 MFD 600V
54	127	0.005 MFD 600V
55	127	0.005 MFD 600V
56	127	0.005 MFD 600V
57	127	0.005 MFD 600V
58	127	0.005 MFD 600V
59	127	0.005 MFD 600V
60	127	0.005 MFD 600V
61	127	0.005 MFD 600V
62	127	0.005 MFD 600V
63	127	0.005 MFD 600V
64	127	0.005 MFD 600V
65	127	0.005 MFD 600V
66	127	0.005 MFD 600V
67	127	0.005 MFD 600V
68	127	0.005 MFD 600V
69	127	0.005 MFD 600V
70	127	0.005 MFD 600V
71	127	0.005 MFD 600V
72	127	0.005 MFD 600V
73	127	0.005 MFD 600V
74	127	0.005 MFD 600V
75	127	0.005 MFD 600V
76	127	0.005 MFD 600V
77	127	0.005 MFD 600V
78	127	0.005 MFD 600V
79	127	0.005 MFD 600V
80	127	0.005 MFD 600V
81	127	0.005 MFD 600V
82	127	0.005 MFD 600V
83	127	0.005 MFD 600V
84	127	0.005 MFD 600V
85	127	0.005 MFD 600V
86	127	0.005 MFD 600V
87	127	0.005 MFD 600V
88	127	0.005 MFD 600V
89	127	0.005 MFD 600V
90	127	0.005 MFD 600V
91	127	0.005 MFD 600V
92	127	0.005 MFD 600V
93	127	0.005 MFD 600V
94	127	0.005 MFD 600V
95	127	0.005 MFD 600V
96	127	0.005 MFD 600V
97	127	0.005 MFD 600V
98	127	0.005 MFD 600V
99	127	0.005 MFD 600V
100	127	0.005 MFD 600V

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

United Motors Model 364441



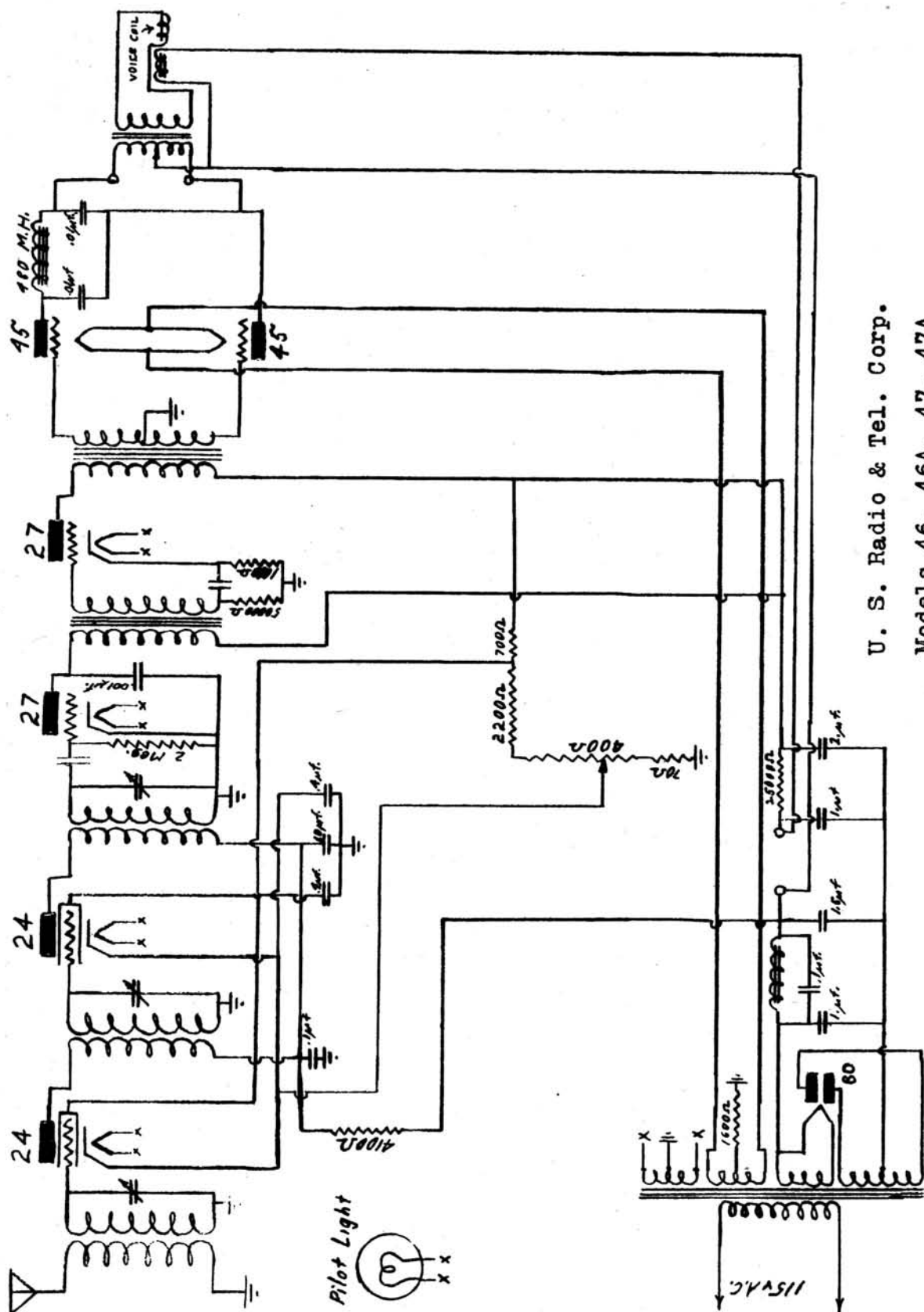
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



United Motors
Model 962006

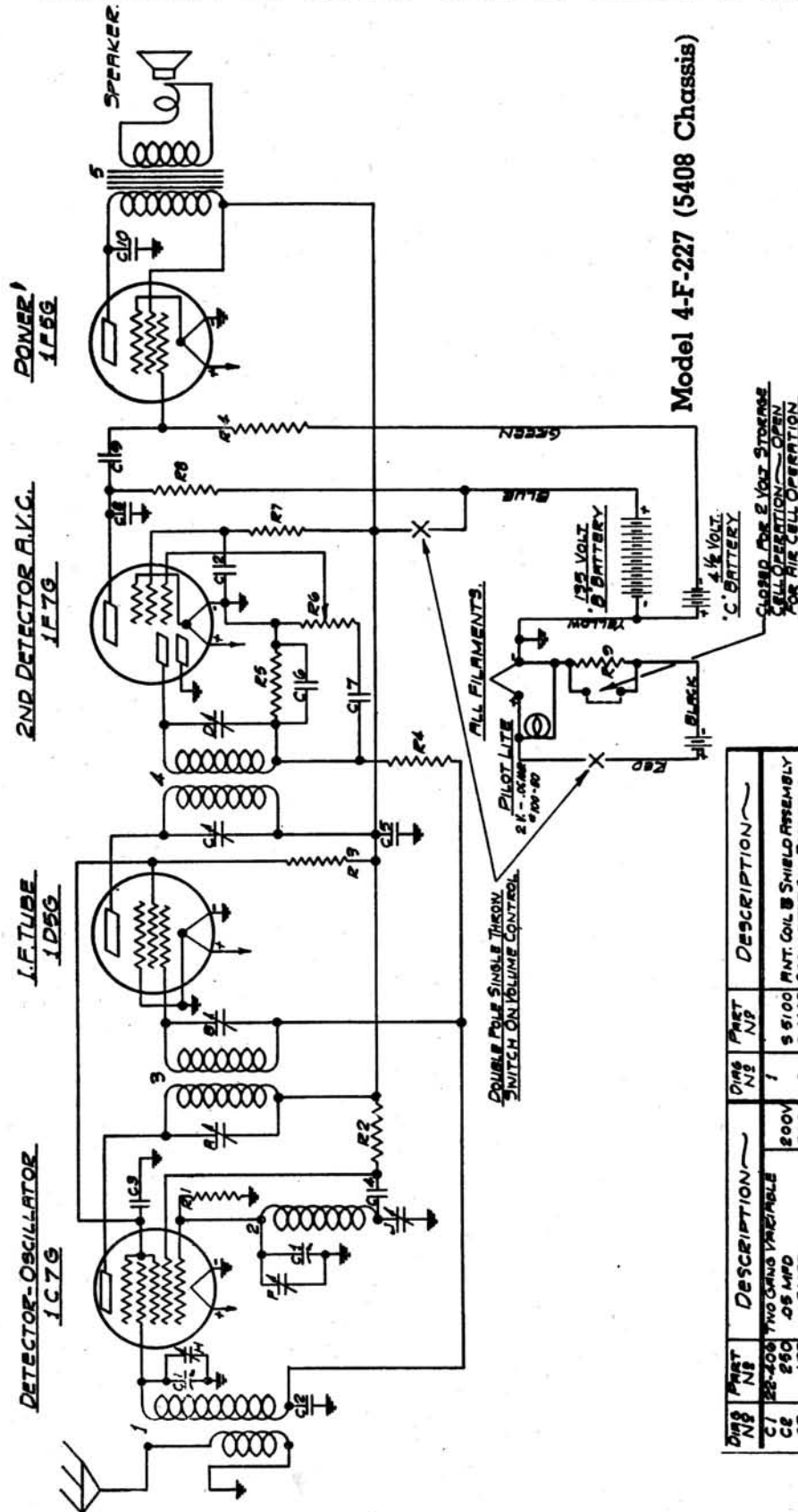
I.F. 262 KC.

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



U. S. Radio & Tel. Corp.
 Models 46, 46A, 47, 47A
 Apex

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



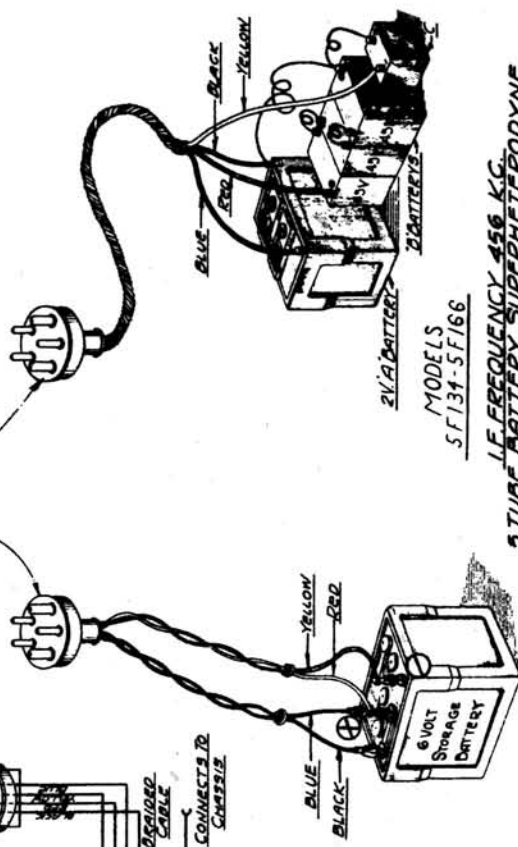
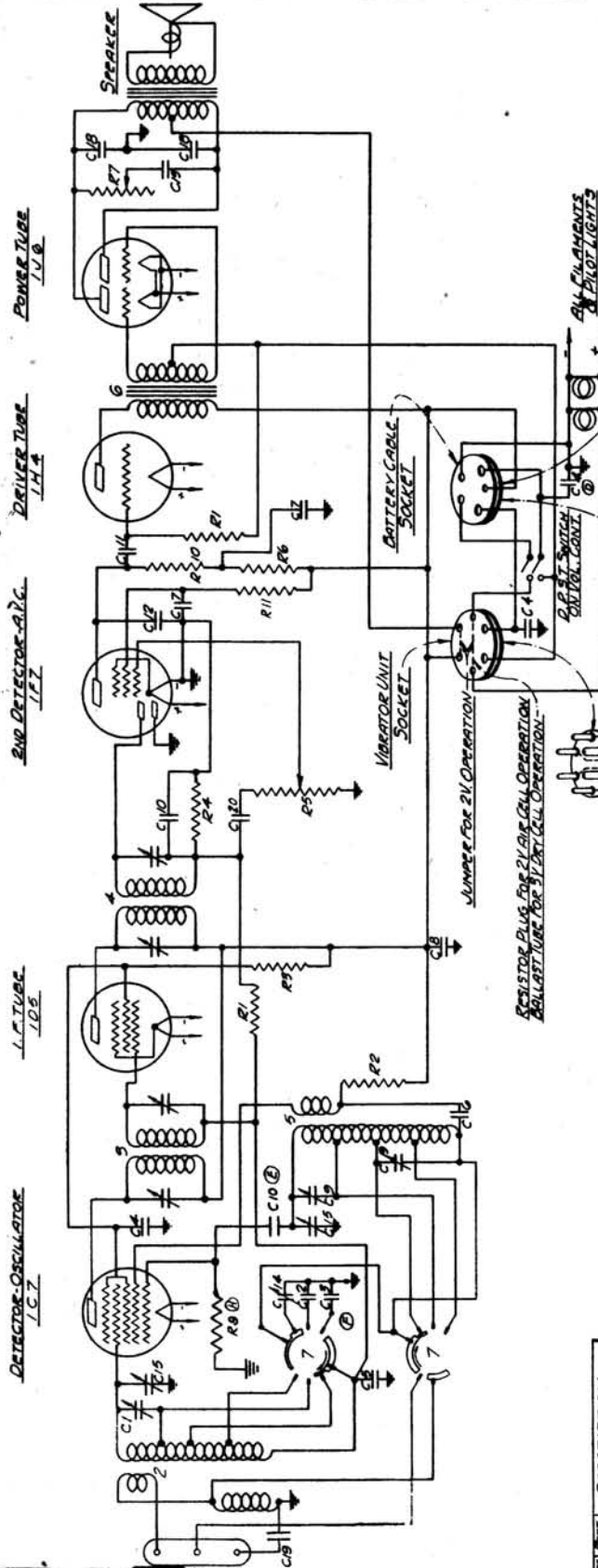
Model 4-F-227 (5408 Chassis)

I.F. FREQUENCY 456 K.C.
 4-TUBE BATTERY SUPERHETERODYNE
 CHASSIS No 5408
 ZENITH RADIO CORPORATION

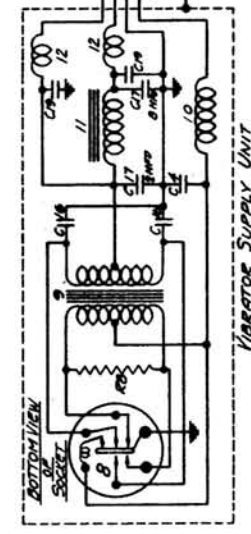
CLOSED FOR 2 VOLT STORAGE CELL OPERATION—OPEN FOR AIR CELL OPERATION

Part No.	Description	Part No.	Description
C1	22-200 TWO GANG VARIABLE	1	\$ 5100 ANT. COIL & SHIELD ASSEMBLY
C2	250 .05 MFD	2	S 4482 OSCILLATOR COIL ASSEMBLY
C3	199 .5 MFD	3	95-419 1ST. I.F. TRANSFORMER
C4	958 .002 MFD	4	95-420 2ND. I.F. TRANSFORMER
C5	212 .05 MFD	5	SPENCER TUNING (ON SPEAKER)
C6	162 .0001 MFD		VARIABLE TUNING TRIMMERS—
C7	957 .005 MFD	A	1ST. I.F. TRANSFORMER PRIMARY
C8	147 .005 MFD	B	1ST. I.F. TRANSFORMER SECONDARY
C9	188 .02 MFD	C	2ND. I.F. TRANSFORMER PRIMARY
C10	492 .008 MFD	D	2ND. I.F. TRANSFORMER SECONDARY
		E	500 CYCLES OSCILLATOR (ON GANS)
R1	68-599 47 M OHM	F	ANTENNA BRIDGE CAST (ON GANS)
R2	656 5600 OHM	G	#22-519 OSCILLATOR PAPER.
R3	627 59 M OHM		
R4	271 1 MEG OHM		
R5	658 900 M OHM		
R6	549 1 MEG OHM VOLUME CONTROL		
R7	441 1 MEG OHM		
R8	637 950 M OHM		
R9	684 .68 OHM (NIEEROUND)		
			MODEL SPEAKER
			49-209-G

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



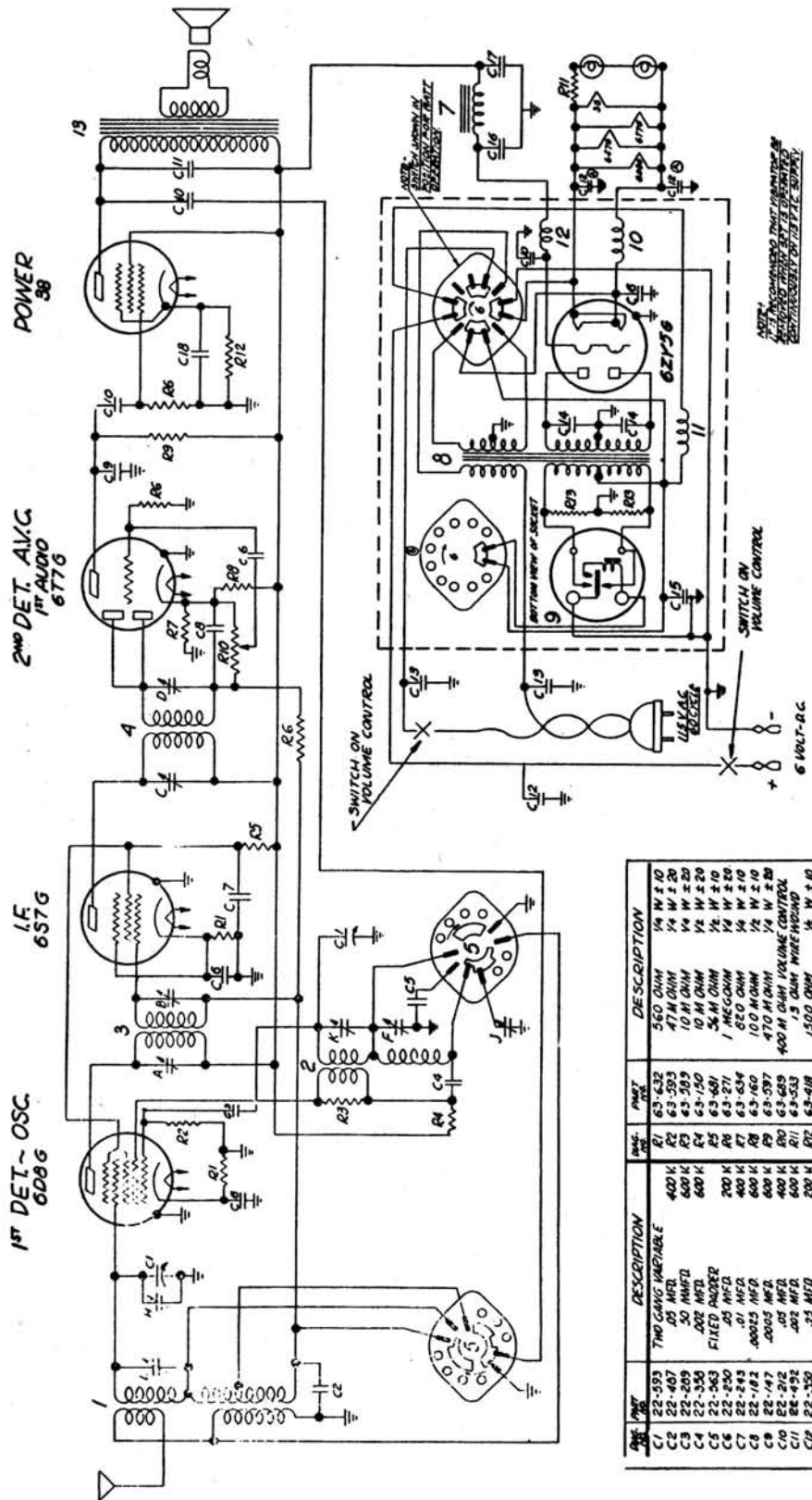
2V BATTERY
MODELS
SF134-SF166
LE FREQUENCY 456 KC.
2 TUBE BATTERY SUPERHETERODYNE
CHASSIS NO 5518
ZENITH RADIO CORPORATION



VIBRATOR SUPPLY UNIT
CONNECTS TO CHASSIS
SPEAKER MODEL
49-162-07M, 5F-184
49-164-07M, 5F-186

PT.	DESCRIPTION	VAL.	DESCRIPTION	
1	5T 2V 200 MFD	100V	1	5T135 6V 700 MA COL. ARMOR
2	5T 2V 200 MFD	100V	2	5T135 6V 700 MA COL. ARMOR
3	5T 2V 200 MFD	100V	3	5T135 6V 700 MA COL. ARMOR
4	5T 2V 200 MFD	100V	4	5T135 6V 700 MA COL. ARMOR
5	5T 2V 200 MFD	100V	5	5T135 6V 700 MA COL. ARMOR
6	5T 2V 200 MFD	100V	6	5T135 6V 700 MA COL. ARMOR
7	5T 2V 200 MFD	100V	7	5T135 6V 700 MA COL. ARMOR
8	5T 2V 200 MFD	100V	8	5T135 6V 700 MA COL. ARMOR
9	5T 2V 200 MFD	100V	9	5T135 6V 700 MA COL. ARMOR
10	5T 2V 200 MFD	100V	10	5T135 6V 700 MA COL. ARMOR
11	5T 2V 200 MFD	100V	11	5T135 6V 700 MA COL. ARMOR
12	5T 2V 200 MFD	100V	12	5T135 6V 700 MA COL. ARMOR
13	5T 2V 200 MFD	100V	13	5T135 6V 700 MA COL. ARMOR
14	5T 2V 200 MFD	100V	14	5T135 6V 700 MA COL. ARMOR
15	5T 2V 200 MFD	100V	15	5T135 6V 700 MA COL. ARMOR
16	5T 2V 200 MFD	100V	16	5T135 6V 700 MA COL. ARMOR
17	5T 2V 200 MFD	100V	17	5T135 6V 700 MA COL. ARMOR
18	5T 2V 200 MFD	100V	18	5T135 6V 700 MA COL. ARMOR
19	5T 2V 200 MFD	100V	19	5T135 6V 700 MA COL. ARMOR
20	5T 2V 200 MFD	100V	20	5T135 6V 700 MA COL. ARMOR
21	5T 2V 200 MFD	100V	21	5T135 6V 700 MA COL. ARMOR
22	5T 2V 200 MFD	100V	22	5T135 6V 700 MA COL. ARMOR
23	5T 2V 200 MFD	100V	23	5T135 6V 700 MA COL. ARMOR
24	5T 2V 200 MFD	100V	24	5T135 6V 700 MA COL. ARMOR
25	5T 2V 200 MFD	100V	25	5T135 6V 700 MA COL. ARMOR
26	5T 2V 200 MFD	100V	26	5T135 6V 700 MA COL. ARMOR
27	5T 2V 200 MFD	100V	27	5T135 6V 700 MA COL. ARMOR
28	5T 2V 200 MFD	100V	28	5T135 6V 700 MA COL. ARMOR
29	5T 2V 200 MFD	100V	29	5T135 6V 700 MA COL. ARMOR
30	5T 2V 200 MFD	100V	30	5T135 6V 700 MA COL. ARMOR
31	5T 2V 200 MFD	100V	31	5T135 6V 700 MA COL. ARMOR
32	5T 2V 200 MFD	100V	32	5T135 6V 700 MA COL. ARMOR
33	5T 2V 200 MFD	100V	33	5T135 6V 700 MA COL. ARMOR
34	5T 2V 200 MFD	100V	34	5T135 6V 700 MA COL. ARMOR
35	5T 2V 200 MFD	100V	35	5T135 6V 700 MA COL. ARMOR
36	5T 2V 200 MFD	100V	36	5T135 6V 700 MA COL. ARMOR
37	5T 2V 200 MFD	100V	37	5T135 6V 700 MA COL. ARMOR
38	5T 2V 200 MFD	100V	38	5T135 6V 700 MA COL. ARMOR
39	5T 2V 200 MFD	100V	39	5T135 6V 700 MA COL. ARMOR
40	5T 2V 200 MFD	100V	40	5T135 6V 700 MA COL. ARMOR
41	5T 2V 200 MFD	100V	41	5T135 6V 700 MA COL. ARMOR
42	5T 2V 200 MFD	100V	42	5T135 6V 700 MA COL. ARMOR
43	5T 2V 200 MFD	100V	43	5T135 6V 700 MA COL. ARMOR
44	5T 2V 200 MFD	100V	44	5T135 6V 700 MA COL. ARMOR
45	5T 2V 200 MFD	100V	45	5T135 6V 700 MA COL. ARMOR
46	5T 2V 200 MFD	100V	46	5T135 6V 700 MA COL. ARMOR
47	5T 2V 200 MFD	100V	47	5T135 6V 700 MA COL. ARMOR
48	5T 2V 200 MFD	100V	48	5T135 6V 700 MA COL. ARMOR
49	5T 2V 200 MFD	100V	49	5T135 6V 700 MA COL. ARMOR
50	5T 2V 200 MFD	100V	50	5T135 6V 700 MA COL. ARMOR
51	5T 2V 200 MFD	100V	51	5T135 6V 700 MA COL. ARMOR
52	5T 2V 200 MFD	100V	52	5T135 6V 700 MA COL. ARMOR
53	5T 2V 200 MFD	100V	53	5T135 6V 700 MA COL. ARMOR
54	5T 2V 200 MFD	100V	54	5T135 6V 700 MA COL. ARMOR
55	5T 2V 200 MFD	100V	55	5T135 6V 700 MA COL. ARMOR
56	5T 2V 200 MFD	100V	56	5T135 6V 700 MA COL. ARMOR
57	5T 2V 200 MFD	100V	57	5T135 6V 700 MA COL. ARMOR
58	5T 2V 200 MFD	100V	58	5T135 6V 700 MA COL. ARMOR
59	5T 2V 200 MFD	100V	59	5T135 6V 700 MA COL. ARMOR
60	5T 2V 200 MFD	100V	60	5T135 6V 700 MA COL. ARMOR
61	5T 2V 200 MFD	100V	61	5T135 6V 700 MA COL. ARMOR
62	5T 2V 200 MFD	100V	62	5T135 6V 700 MA COL. ARMOR
63	5T 2V 200 MFD	100V	63	5T135 6V 700 MA COL. ARMOR
64	5T 2V 200 MFD	100V	64	5T135 6V 700 MA COL. ARMOR
65	5T 2V 200 MFD	100V	65	5T135 6V 700 MA COL. ARMOR
66	5T 2V 200 MFD	100V	66	5T135 6V 700 MA COL. ARMOR
67	5T 2V 200 MFD	100V	67	5T135 6V 700 MA COL. ARMOR
68	5T 2V 200 MFD	100V	68	5T135 6V 700 MA COL. ARMOR
69	5T 2V 200 MFD	100V	69	5T135 6V 700 MA COL. ARMOR
70	5T 2V 200 MFD	100V	70	5T135 6V 700 MA COL. ARMOR
71	5T 2V 200 MFD	100V	71	5T135 6V 700 MA COL. ARMOR
72	5T 2V 200 MFD	100V	72	5T135 6V 700 MA COL. ARMOR
73	5T 2V 200 MFD	100V	73	5T135 6V 700 MA COL. ARMOR
74	5T 2V 200 MFD	100V	74	5T135 6V 700 MA COL. ARMOR
75	5T 2V 200 MFD	100V	75	5T135 6V 700 MA COL. ARMOR
76	5T 2V 200 MFD	100V	76	5T135 6V 700 MA COL. ARMOR
77	5T 2V 200 MFD	100V	77	5T135 6V 700 MA COL. ARMOR
78	5T 2V 200 MFD	100V	78	5T135 6V 700 MA COL. ARMOR
79	5T 2V 200 MFD	100V	79	5T135 6V 700 MA COL. ARMOR
80	5T 2V 200 MFD	100V	80	5T135 6V 700 MA COL. ARMOR
81	5T 2V 200 MFD	100V	81	5T135 6V 700 MA COL. ARMOR
82	5T 2V 200 MFD	100V	82	5T135 6V 700 MA COL. ARMOR
83	5T 2V 200 MFD	100V	83	5T135 6V 700 MA COL. ARMOR
84	5T 2V 200 MFD	100V	84	5T135 6V 700 MA COL. ARMOR
85	5T 2V 200 MFD	100V	85	5T135 6V 700 MA COL. ARMOR
86	5T 2V 200 MFD	100V	86	5T135 6V 700 MA COL. ARMOR
87	5T 2V 200 MFD	100V	87	5T135 6V 700 MA COL. ARMOR
88	5T 2V 200 MFD	100V	88	5T135 6V 700 MA COL. ARMOR
89	5T 2V 200 MFD	100V	89	5T135 6V 700 MA COL. ARMOR
90	5T 2V 200 MFD	100V	90	5T135 6V 700 MA COL. ARMOR
91	5T 2V 200 MFD	100V	91	5T135 6V 700 MA COL. ARMOR
92	5T 2V 200 MFD	100V	92	5T135 6V 700 MA COL. ARMOR
93	5T 2V 200 MFD	100V	93	5T135 6V 700 MA COL. ARMOR
94	5T 2V 200 MFD	100V	94	5T135 6V 700 MA COL. ARMOR
95	5T 2V 200 MFD	100V	95	5T135 6V 700 MA COL. ARMOR
96	5T 2V 200 MFD	100V	96	5T135 6V 700 MA COL. ARMOR
97	5T 2V 200 MFD	100V	97	5T135 6V 700 MA COL. ARMOR
98	5T 2V 200 MFD	100V	98	5T135 6V 700 MA COL. ARMOR
99	5T 2V 200 MFD	100V	99	5T135 6V 700 MA COL. ARMOR
100	5T 2V 200 MFD	100V	100	5T135 6V 700 MA COL. ARMOR

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

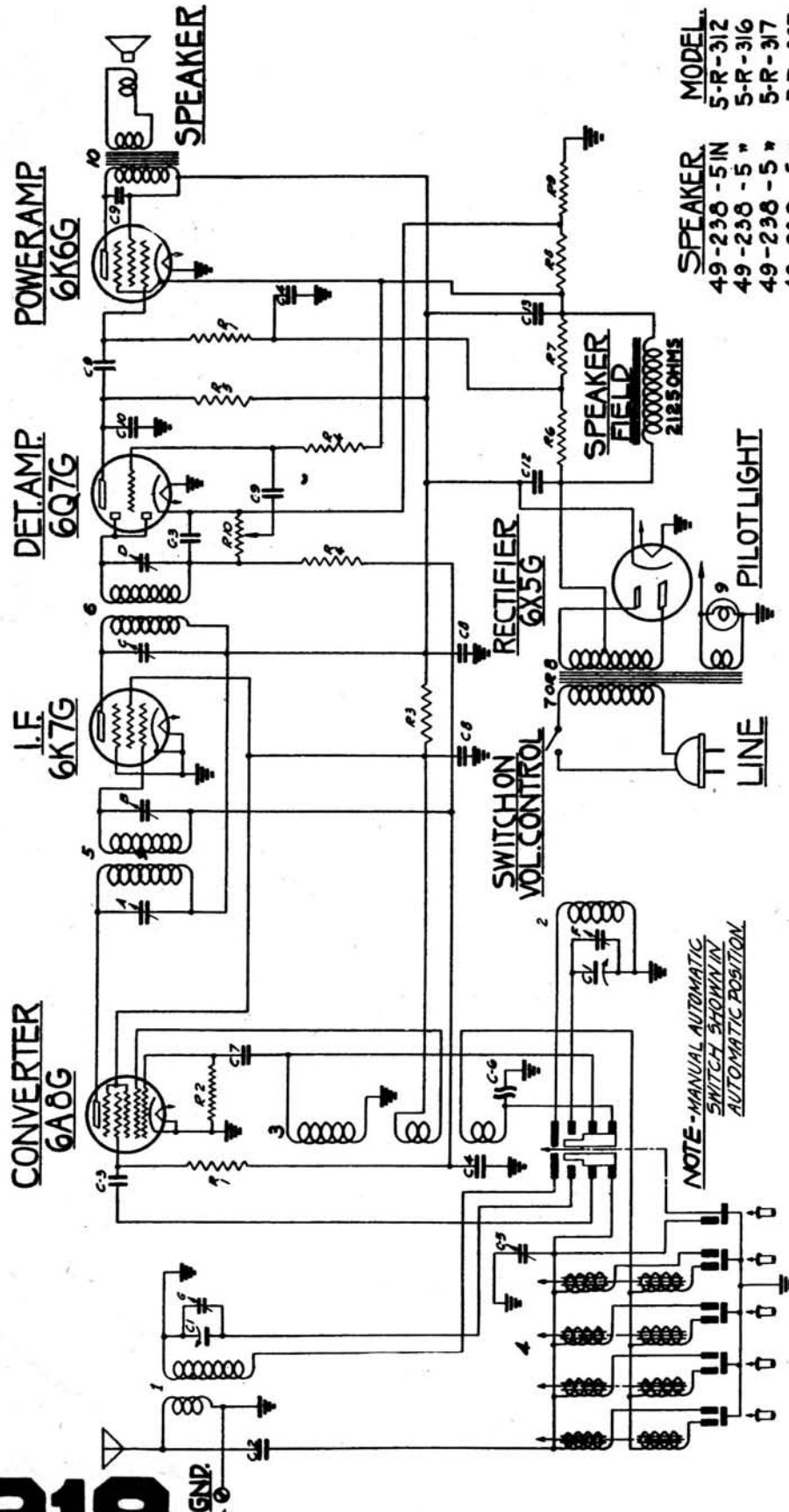


I.F. FREQUENCY 456 K.C.
 5 TUBE BATTERY SUPERHETERODYNE
 6VOLT D.C. #115 VOLT A.C.
 CHASSIS NO 5524
ZENITH RADIO CORP.

Models 5-J-217, 5-J-247, 5-J-255 (5524 Chassis)

REF. NO.	PART NO.	DESCRIPTION	QTY.	DESCRIPTION
C1	22-393	TWO GANG VARIABLE	1	560 OHM
C2	22-461	400 K	2	470 OHM
C3	22-354	50 MFD	2	10 M OHM
C4	22-354	400 MFD	1	56 M OHM
C5	22-353	200 MFD	1	1 MEG OHM
C6	22-290	FILED BINDER	1	820 OHM
C7	22-290	.01 MFD	1	100 M OHM
C8	22-182	.00025 MFD	1	470 M OHM
C9	22-147	.005 MFD	1	400 M OHM VOLUME CONTROL
C10	22-212	.05 MFD	1	1500 OHM
C11	22-492	.02 MFD	1	100 OHM
C12	22-350	.25 MFD	1	
C13	22-435	.02 MFD	1	
C14	22-374	.02 MFD	1	
C15	22-199	.5 MFD ELECTROLYTIC	1	
C16	22-571	250 K	1	
C17		25 K	1	
C18			1	
C19			1	
R1	63-632	560 OHM	1	ANT. COIL & SHIELD ASSEMBLY
R2	63-633	470 OHM	1	OSCILLATOR COIL ASSEMBLY
R3	63-150	10 M OHM	1	1" I.F. TRANSFORMER
R4	63-150	56 M OHM	1	2" I.F. TRANSFORMER
R5	63-681	1 MEG OHM	1	5" I.F. TRANSFORMER
R6	63-271	820 OHM	1	2ND I.F. TRANSFORMER
R7	63-634	100 M OHM	1	2ND I.F. TRANSFORMER
R8	63-160	470 M OHM	1	2ND I.F. TRANSFORMER
R9	63-597	400 M OHM VOLUME CONTROL	1	2ND I.F. TRANSFORMER
R10	63-689	1500 OHM	1	2ND I.F. TRANSFORMER
R11	63-533	.5 OHM WIREWOUND	1	2ND I.F. TRANSFORMER
R12	63-918	100 OHM	1	2ND I.F. TRANSFORMER
R13	63-571	100 OHM	1	2ND I.F. TRANSFORMER
1	5-5303	ANT. COIL & SHIELD ASSEMBLY	1	ANT. COIL & SHIELD ASSEMBLY
2	5-4909	OSCILLATOR COIL ASSEMBLY	1	OSCILLATOR COIL ASSEMBLY
3	95-463	1" I.F. TRANSFORMER	1	1" I.F. TRANSFORMER
4	95-444	2" I.F. TRANSFORMER	1	2" I.F. TRANSFORMER
5	85-104	5" I.F. TRANSFORMER	1	5" I.F. TRANSFORMER
6	85-425	2ND I.F. TRANSFORMER	1	2ND I.F. TRANSFORMER
7	95-298	POWER SUPPLY SWITCH	1	POWER SUPPLY SWITCH
8	95-485	POWER CHOKER	1	POWER CHOKER
9	190-11	VIBRATOR	1	VIBRATOR
10	5-2178	R.F. CHOKE ASSEMBLY	1	R.F. CHOKE ASSEMBLY
11	5-5046	R.F. CHOKE ASSEMBLY	1	R.F. CHOKE ASSEMBLY
12	20-68	SPK. ASSEMBLY	1	SPK. ASSEMBLY
13		SPK. TRANSFORMER	1	SPK. TRANSFORMER

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



SPEAKER	MODEL
49-238-5IN	5-R-312
49-238-5*	5-R-316
49-238-5*	5-R-317
49-238-5*	5-R-337
49-238-5*	5-R-303

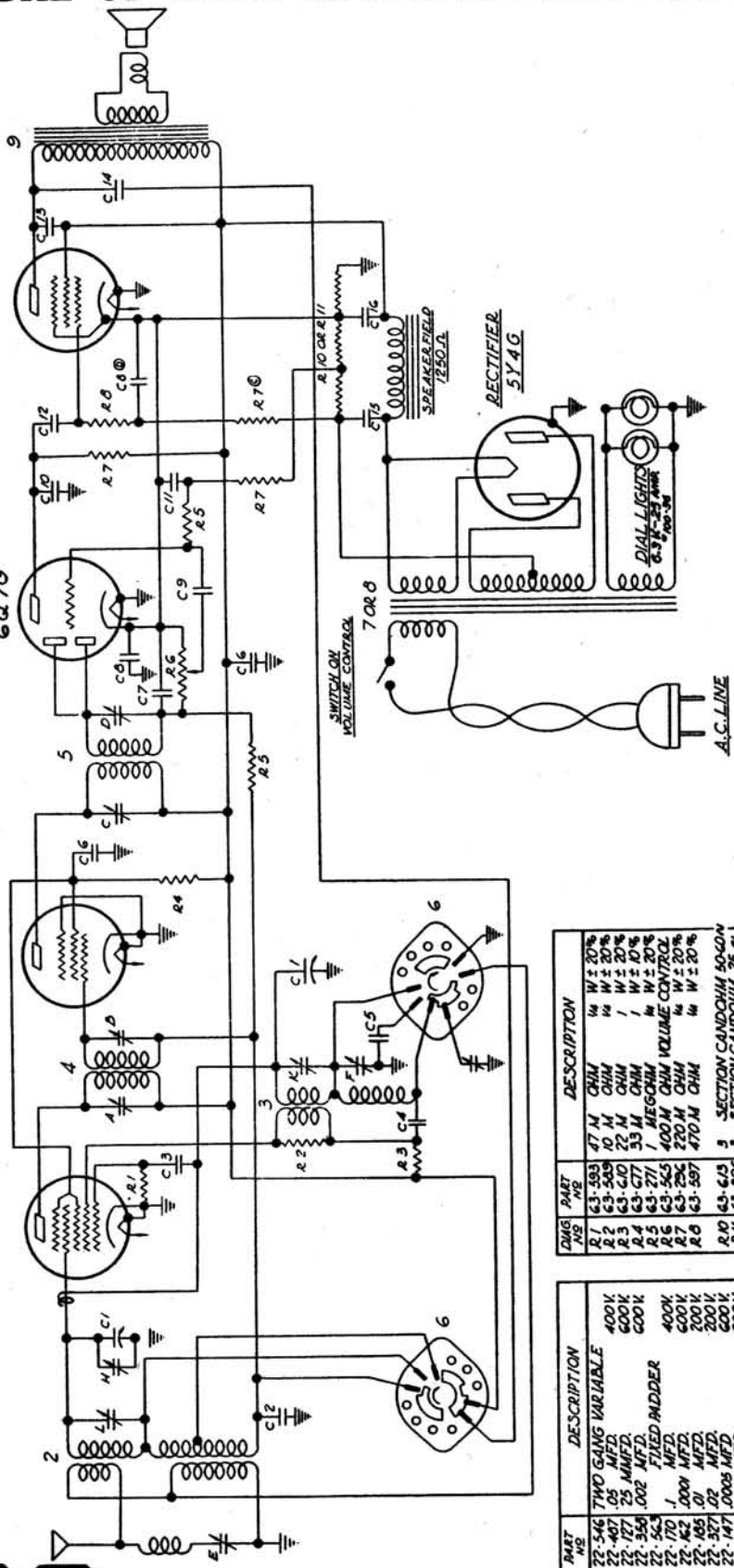
I.F. FREQUENCY 455 K.C.
5 TUBE SUPERHETERODYNE
CHASSIS NO. 5528 A.C.
ZENITH RADIO CORPORATION

FIG. NO.	PART NO.	DESCRIPTION	VOLTS	PART NO.	DESCRIPTION	FIG. NO.	PART NO.	DESCRIPTION	
C-1	22-685	7ND 6AN5 IAR COND.		R-1	63-597	470 M OHM	4	98-915	1ST I.F. TRANS.
C-2	22-229	50 M MFD	60V	R-2	63-593	47 M OHM	5	95-520	2ND I.F. TRANS.
C-3	22-152	.0001 MFD	60V	R-3	63-208	12 M OHM	6	95-521	POWER TRANS. (107.5K-60~)
C-4	22-250	.05 MFD	200V	R-4	63-271	1 MEG OHM	7	95-522	POWER TRANS. (107.5K-60~)
C-5	22-319	TRIMMER COND.		R-5	63-296	220 M OHM	8	100-36	PILOT LIGHT .25A 6.3V
C-6	22-729	COMPENSATING COND.	600V	R-6	63-650	380 M OHM	9	97AIRE-P	TRANS.
C-7	22-182	.00025 MFD	600V	R-7	63-280	100 M OHM	10	1ST I.F. TRANS. PRT.	
C-8	22-172	.01 MFD	600V	R-8	63-573	80 OHM WIRE WOUND	A	2ND I.F. TRANS. SEC.	
C-9	22-196	.01 MFD	600V	R-9	63-686	150 OHM WIRE WOUND	B	3RD I.F. TRANS. SEC.	
C-10	22-147	.0005 MFD	600V	R-10	63-925	220 M OHM IRL. CNT.	C	4TH I.F. TRANS. SEC.	
C-12	22-691	8 MFD ELECTROLYTIC 450V					D	5TH I.F. TRANS. SEC.	
C-13	22-698	8 MFD ELECTROLYTIC 350V					E	ANTENNA .ARD. CRT. (4V 6AN5)	
							F	ANTENNA .ARD. CRT. (4V 6AN5)	
							G	ANTENNA .ARD. CRT. (4V 6AN5)	

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Models 5-S-201, 5-S-218, 5-S-220, 5-S-228, 5-S-237, 5-S-250, 5-S-252
(5521 Chassis)

1ST DET. OSC. 6A8G I.F. 6K7G 2ND DET.-A.V.C. 6Q7G POWER 6F6G



I.F.-FREQUENCY 456K.C.
5-TUBE SUPERHETERODYNE
2 BAND
CHASSIS NO 5521
ZENITH RADIO CORP.

MODEL	SPEAKER
5-S-210	49-170 5"
5-S-220	49-170 5"
5-S-228	49-170 5"
5-S-237	49-160 6"
5-S-250	49-175 6"
5-S-252	49-208 10"

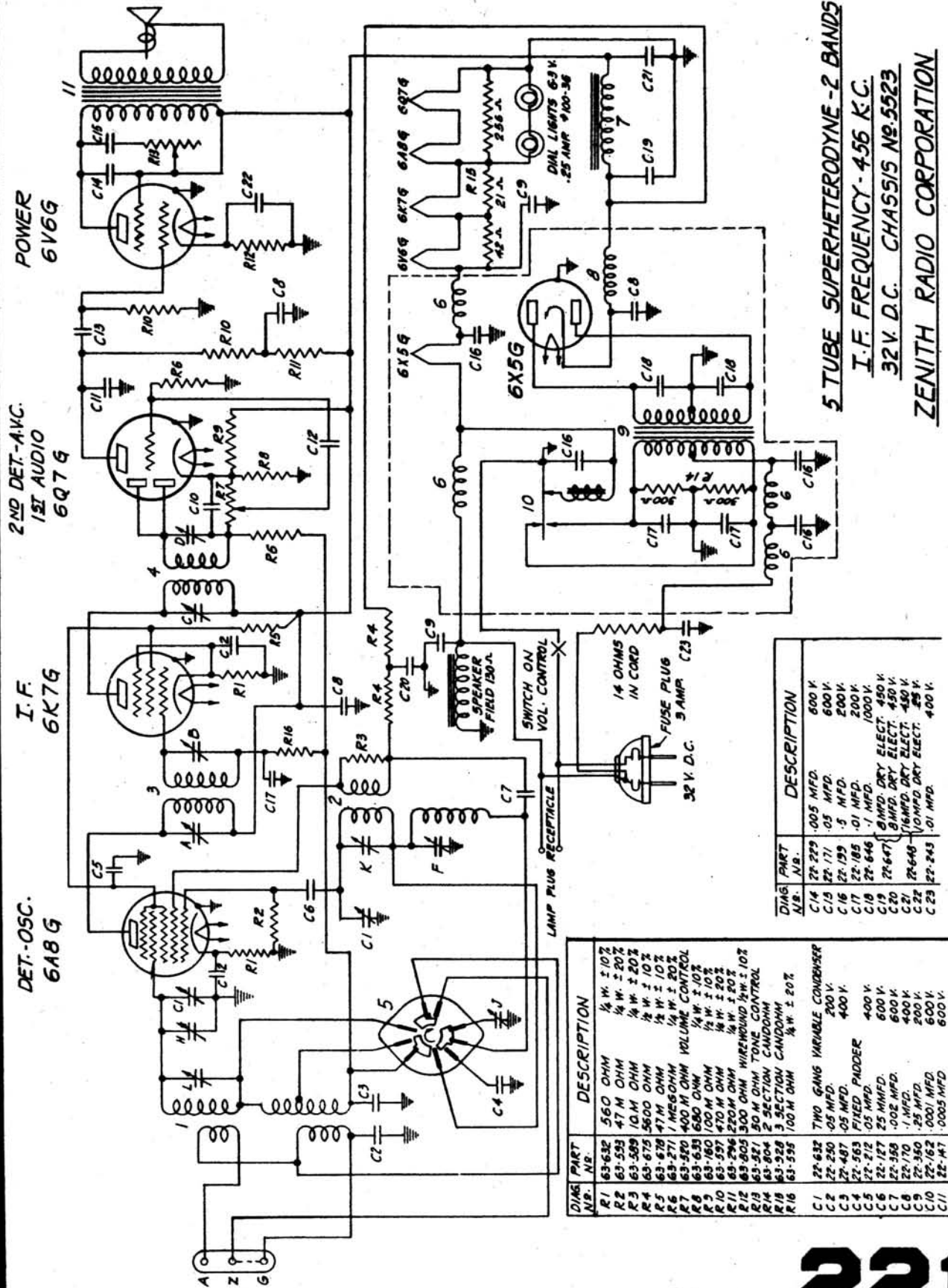
DIAG. NO.	PART NO.	DESCRIPTION
R1	47 M OHM	1/4 W ± 20%
R2	63-909	10 M OHM 1/4 W ± 20%
R3	63-410	52 M OHM 1/4 W ± 20%
R4	63-677	33 M OHM 1/4 W ± 20%
R5	63-271	100 M OHM 1/4 W ± 20%
R6	63-563	100 M OHM VOLUME CONTROL
R7	63-284	270 M OHM 1/4 W ± 20%
R8	63-587	470 M OHM 1/4 W ± 20%
R10	63-613	3 SECTION CANDOHM 50-60W
R11	63-806	3 SECTION CANDOHM 25 W
1		WAVE TRAP COIL MOUNTED ON ANTENNA COIL ASSEMBLY
2	3-4934	OSCILLATOR & SHIELD ASSEMBLY
3	95-407	1ST I.F. TRANSFORMER
4	95-408	2ND I.F. TRANSFORMER
5	65-104	BAND SELECTOR SWITCH
6	95-406	POWER TRANSFORMER
7		117 VOLT 50-CYCLE POWER TRANSFORMER
8	95-452	ALL VOLTAGE 25 CYCLE SPEAKER TRANSFORMER
9		

DIAG. NO.	PART NO.	DESCRIPTION
C1	22-546	TWO GANG VARIABLE 400V
C2	22-407	.05 MFD. 600V
C3	22-127	25 MFD. 600V
C4	22-350	.002 MFD.
C5	22-543	FIXED Padder
C6	22-170	.1 MFD. 400V
C7	22-162	.001 MFD. 600V
C8	22-165	.01 MFD. 200V
C9	22-371	.02 MFD. 200V
C10	22-147	.0005 MFD. 300V
C11	22-150	.1 MFD. 600V
C12	22-451	.02 MFD. 600V
C13	22-171	.05 MFD. 600V
C14	22-452	.002 MFD. 600V
C15	22-596	8 MFD 60V ELECTROLYTE 450V
C16		14 MFD 60V ELECTROLYTE 450V
VARIABLE TRIMMERS		
A	187 I.F. TRANS. PRIMARY	
B	187 I.F. TRANS. SECONDARY	
C	2ND I.F. TRANS. PRIMARY	
D	2ND I.F. TRANS. SECONDARY	
E	* 22-570 WAVE TRAP	
F	BROADCAST OSCILLATOR (SEE NOTE)	
G	ANTENNA BROADCAST (ON GANG)	
H	* 22-519 BROADCAST Padder	
J	SHORT WAVE OSCILLATOR (SEE NOTE)	
K	SHORT WAVE DETECTOR	
L	* 22-808	
TRIMMERS F & K MOUNTED ON DAKELITE STRIP #22-468		

220

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



POWER
6V6G

2ND DET.-AVC.
1ST AUDIO
6Q7G

I.F.
6K7G

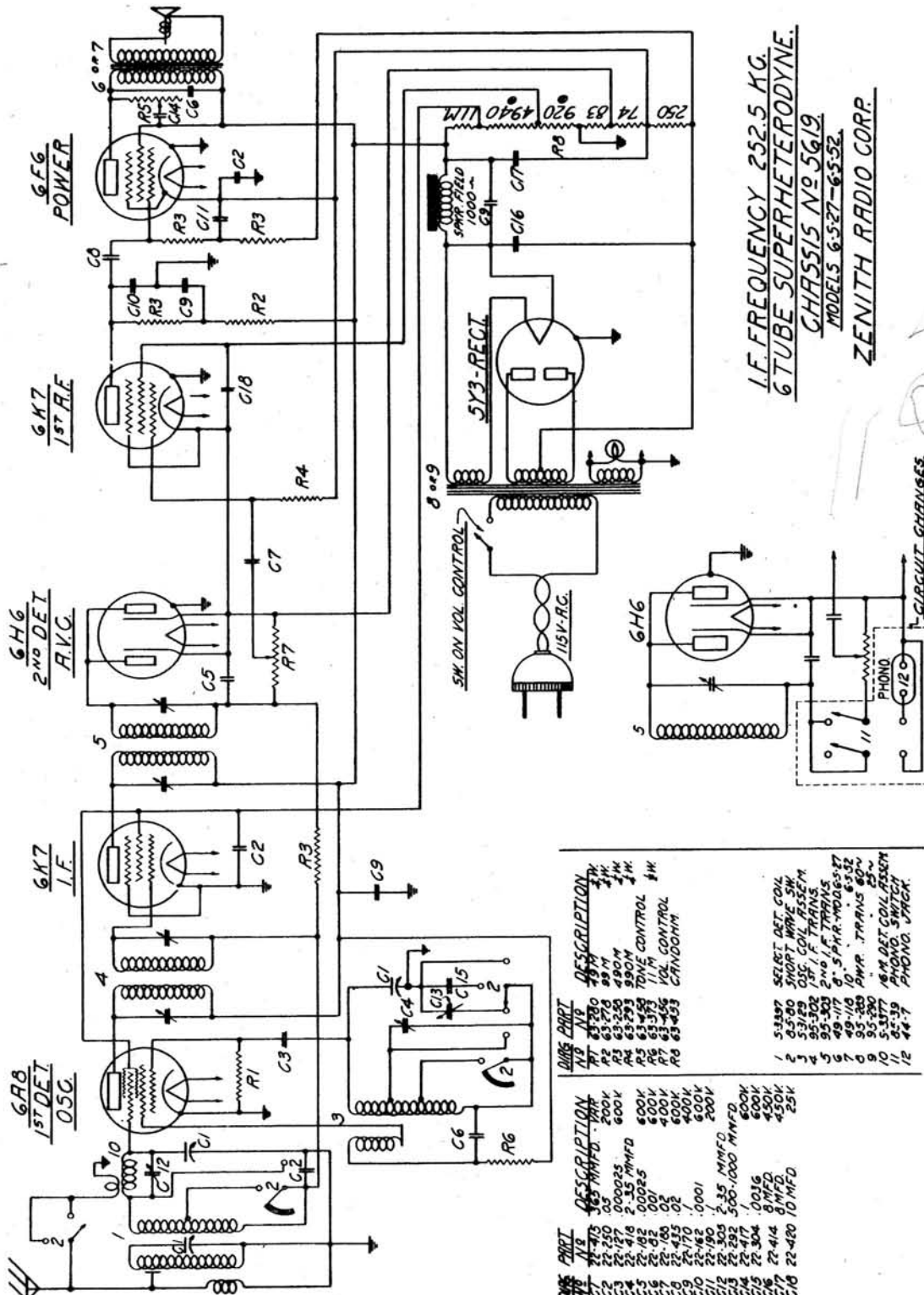
DET.-OSC.
6A8G

5 TUBE SUPERHETERODYNE - 2 BANDS
I.F. FREQUENCY - 456 K.C.
32V. D.C. CHASSIS NO. 5523
ZENITH RADIO CORPORATION

DIAG. PART NO.	DESCRIPTION	DIAG. PART NO.	DESCRIPTION
R1 63-632	560 OHM 1/4 W. ± 10%	C14 22-229	.005 MFD. 600 V.
R2 63-553	47 M OHM 1/4 W. ± 20%	C15 22-171	.05 MFD. 600 V.
R3 63-589	10 M OHM 1/4 W. ± 20%	C16 22-159	.5 MFD. 200 V.
R4 63-675	5600 OHM 1/4 W. ± 10%	C17 22-185	.01 MFD. 1000 V.
R5 63-678	47 M OHM 1/4 W. ± 10%	C18 22-646	.1 MFD. 1000 V.
R6 63-271	1 MFD. 500 M OHM VOLUME CONTROL 1/4 W. ± 20%	C19 22-647	5 MFD. DRY ELECT. 450 V.
R7 63-570	400 M OHM VOLUME CONTROL 1/4 W. ± 10%	C20 22-647	5 MFD. DRY ELECT. 450 V.
R8 63-553	560 OHM 1/4 W. ± 10%	C21 22-648	10 MFD. DRY ELECT. 25 V.
R9 63-953	100 M OHM 1/2 W. ± 10%	C22 22-243	.01 MFD. 400 V.
R10 63-197	470 M OHM 1/2 W. ± 10%	C23 22-243	.01 MFD. 400 V.
R11 63-296	220 M OHM 1/2 W. ± 10%		
R12 63-805	300 OHM WIREWOUND 1/4 W. ± 10%		
R13 63-821	50 M OHM TONE CONTROL 1/2 W. ± 20%		
R14 63-904	3 SECTION CANDOMM		
R15 63-928	5 SECTION CANDOMM		
R16 63-335	100 M OHM 1/4 W. ± 20%		
C1 22-632	TWO GANG VARIABLE CONDENSER		
C2 22-250	.05 MFD. 200 V.		
C3 22-487	.05 MFD. 400 V.		
C4 22-563	FIXED PADDER		
C5 22-127	.05 MFD. 400 V.		
C6 22-358	25 MFD. 600 V.		
C7 22-358	.002 MFD. 600 V.		
C8 22-170	.1 MFD. 400 V.		
C9 22-350	.25 MFD. 200 V.		
C10 22-162	.0001 MFD. 600 V.		
C11 22-147	.0005 MFD. 200 V.		
C12 22-357	.02 MFD. 600 V.		
C13 22-435	.02 MFD. 600 V.		

COMPILED BY M. N. BEITMAN, SUPREME PUBLICATIONS

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



I.F. FREQUENCY 252.5 KC.
 6TUBE SUPERHETERODYNE.
 CHASSIS No 5619
 MODELS 6-5-27-6-5-52.
 ZENITH RADIO CORP.

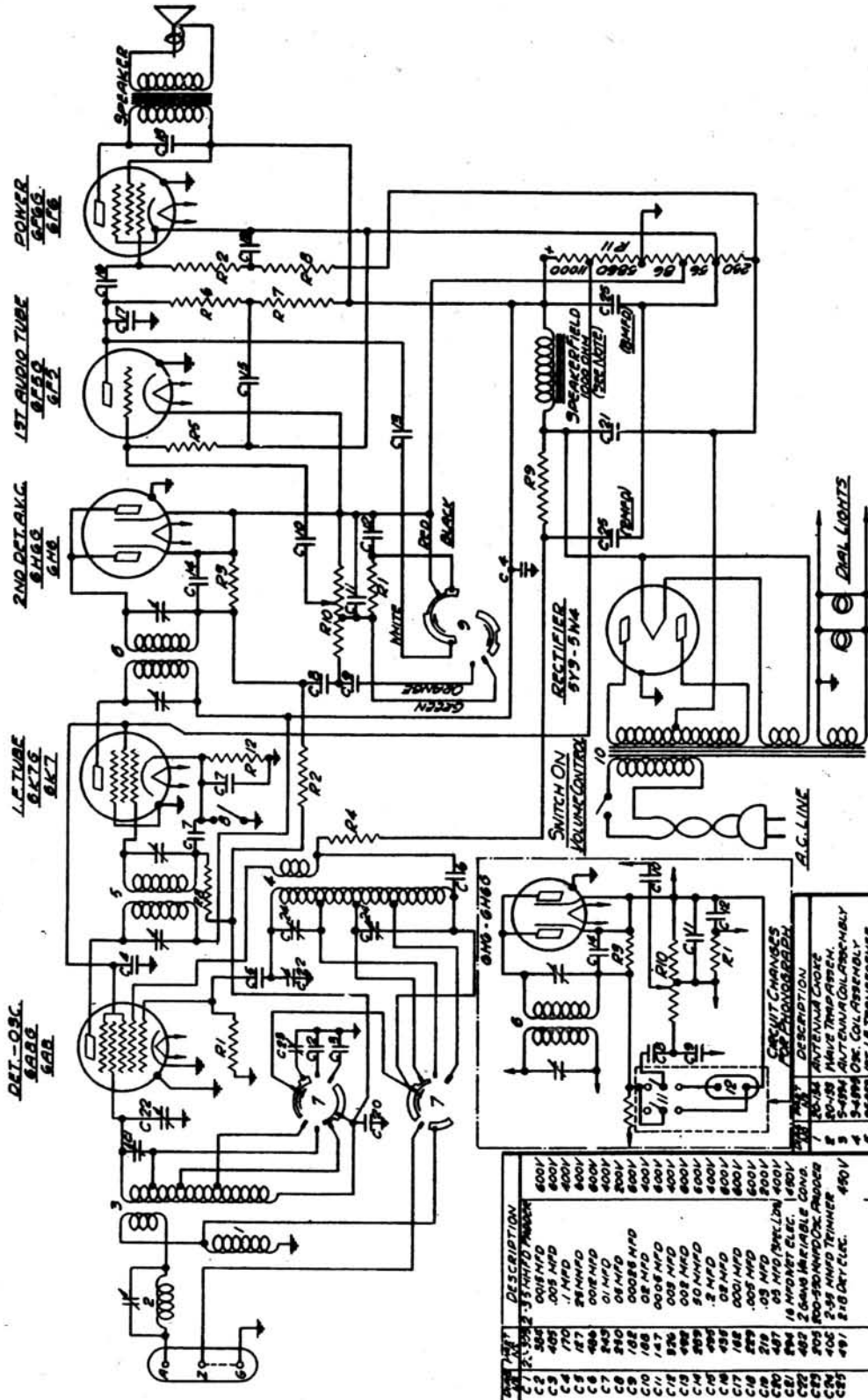
Handwritten initials: RD

Handwritten text: CIRCUIT CHANGES FOR PHONO INPUT

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
1	5-3397	10	5-3377
2	05-00	11	PHONO SWITCH
3	53129	12	44-1
4	95-302		
5	95-303		
6	95-304		
7	49-110		
8	95-290		
9	95-291		
10	5-3377		
11	PHONO SWITCH		
12	44-1		

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Models 6-S-128, 6-S-137, 6-S-147, 6-S-152, 6-S-157. (Chassis No. 5634)



DET.-OSC.
6X4
5A

1ST TUBE
6K7
6K7

2ND DET. A.K.A.
6H6
6H6

1ST AUDIO TUBE
6F7
6F7

POWER
6F7
6F7

PART	DESCRIPTION
C1	33 MFD 50V
C2	0.01 MFD
C3	0.05 MFD
C4	1 MFD
C5	25 MFD
C6	0.01 MFD
C7	0.01 MFD
C8	0.005 MFD
C9	0.01 MFD
C10	0.01 MFD
C11	0.01 MFD
C12	0.01 MFD
R1	500K
R2	500K
R3	500K
R4	500K
R5	500K
R6	500K
R7	500K
R8	500K
R9	500K
R10	500K
R11	500K
R12	500K

NO.	DESCRIPTION
1	ANTENNA COIL
2	500 OHM TAP
3	500 OHM TAP
4	500 OHM TAP
5	500 OHM TAP
6	500 OHM TAP
7	500 OHM TAP
8	500 OHM TAP
9	500 OHM TAP
10	500 OHM TAP
11	500 OHM TAP
12	500 OHM TAP

NO.	DESCRIPTION	RES.
13	500 OHM	100K
14	500 OHM	100K
15	500 OHM	100K
16	500 OHM	100K
17	500 OHM	100K
18	500 OHM	100K
19	500 OHM	100K
20	500 OHM	100K
21	500 OHM	100K
22	500 OHM	100K
23	500 OHM	100K
24	500 OHM	100K
25	500 OHM	100K
26	500 OHM	100K
27	500 OHM	100K
28	500 OHM	100K
29	500 OHM	100K
30	500 OHM	100K
31	500 OHM	100K
32	500 OHM	100K
33	500 OHM	100K
34	500 OHM	100K
35	500 OHM	100K
36	500 OHM	100K
37	500 OHM	100K
38	500 OHM	100K
39	500 OHM	100K
40	500 OHM	100K
41	500 OHM	100K
42	500 OHM	100K
43	500 OHM	100K
44	500 OHM	100K
45	500 OHM	100K
46	500 OHM	100K
47	500 OHM	100K
48	500 OHM	100K
49	500 OHM	100K
50	500 OHM	100K
51	500 OHM	100K
52	500 OHM	100K
53	500 OHM	100K
54	500 OHM	100K
55	500 OHM	100K
56	500 OHM	100K
57	500 OHM	100K
58	500 OHM	100K
59	500 OHM	100K
60	500 OHM	100K
61	500 OHM	100K
62	500 OHM	100K
63	500 OHM	100K
64	500 OHM	100K
65	500 OHM	100K
66	500 OHM	100K
67	500 OHM	100K
68	500 OHM	100K
69	500 OHM	100K
70	500 OHM	100K
71	500 OHM	100K
72	500 OHM	100K
73	500 OHM	100K
74	500 OHM	100K
75	500 OHM	100K
76	500 OHM	100K
77	500 OHM	100K
78	500 OHM	100K
79	500 OHM	100K
80	500 OHM	100K
81	500 OHM	100K
82	500 OHM	100K
83	500 OHM	100K
84	500 OHM	100K
85	500 OHM	100K
86	500 OHM	100K
87	500 OHM	100K
88	500 OHM	100K
89	500 OHM	100K
90	500 OHM	100K
91	500 OHM	100K
92	500 OHM	100K
93	500 OHM	100K
94	500 OHM	100K
95	500 OHM	100K
96	500 OHM	100K
97	500 OHM	100K
98	500 OHM	100K
99	500 OHM	100K
100	500 OHM	100K

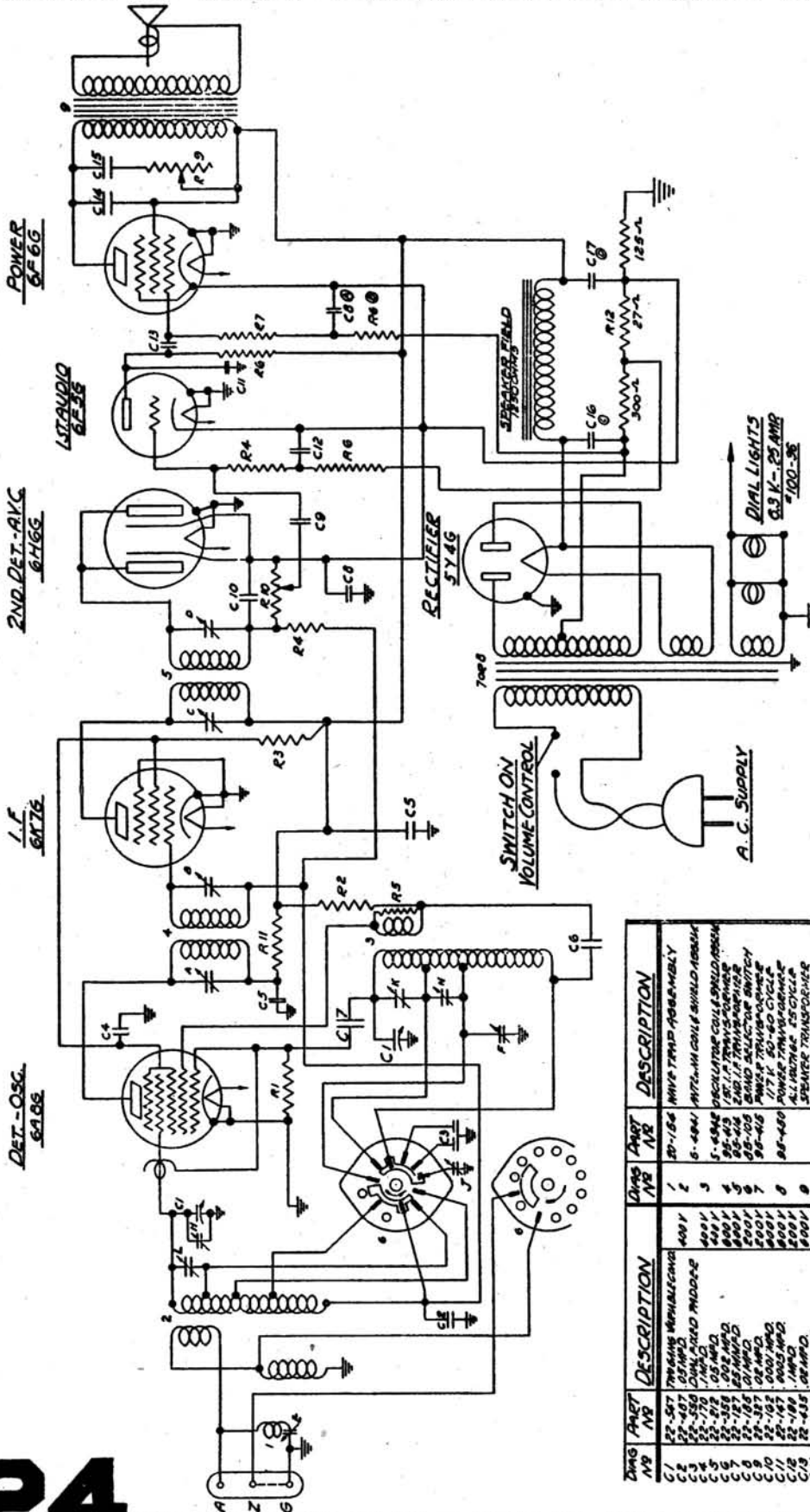
I.F. FREQUENCY 456 K.C.
6 TUBE SUPERHETERODYNE - 3 BAND
CHASSIS NO 5634

SPEAKERS	MODELS
49-117-8'	65-128
49-118-10'	65-137
	65-147
	65-152
	65-157

ZENITH RADIO CORPORATION
CHICAGO, ILLINOIS

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Models 6-S-203, 6-S-222, 6-S-223, 6-S-229, 6-S-241 (5638 Chassis)



Part No	Description	Part No	Description
C1	50-507 500 OHMS METAL CLAP	20-184	5Y4G RECTIFIER
C2	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C3	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C4	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C5	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C6	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C7	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C8	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C9	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C10	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C11	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C12	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C13	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C14	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C15	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C16	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
C17	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
R1	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
R2	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
R3	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
R4	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
R5	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
R6	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
R7	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
R8	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
R9	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
R10	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
R11	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE
R12	50-507 500 OHMS METAL CLAP	6-484	6X4 DIODE

I.F. FREQUENCY 450 K.C.
6 TUBE SUPERHETERODYNE - 3 BANDS
CHASSIS NR 5638

ZENITH RADIO CORPORATION

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

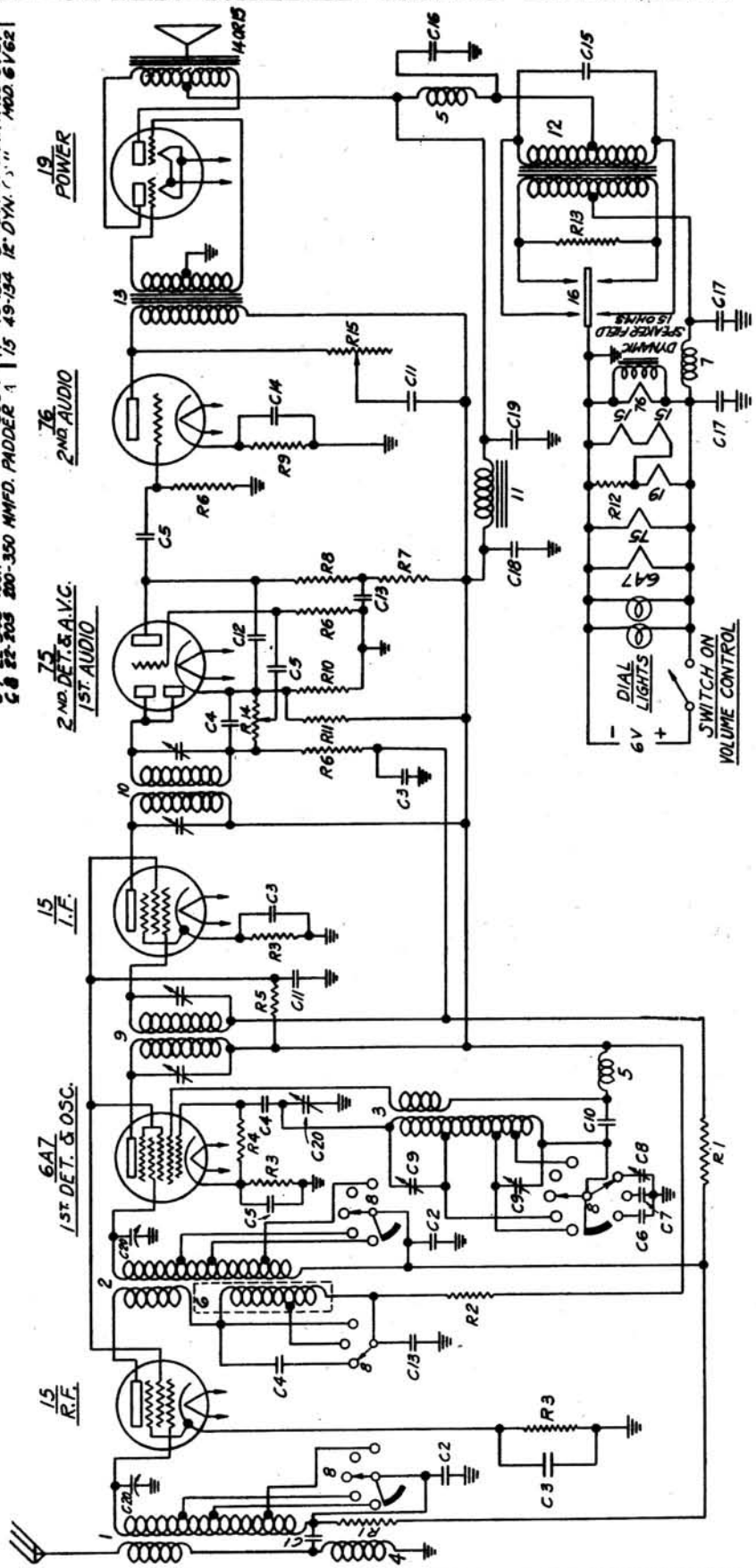
DIAS. PART NUMBER	DESCRIPTION	DIAS. PART NUMBER	DESCRIPTION
R1	63-278 93 M	C9	22-408 2.35 MMFD. PADDER
R2	63-361 5 M	C10	22-82 .001 MFD.
R3	63-362 400 M	C11	22-272 .05
R4	63-280 49 M	C12	22-182 .00025
R5	63-353 19 M	C13	22-224 .1
R6	63-293 950 M	C14	22-225 .01
R7	63-290 200 M	C15	22-437 .01
R8	63-258 490 M	C16	22-228 .5
R9	63-272 1 M	C17	22-251 .5
R10	63-238 1 M	C18	22-432 8
R11	63-238 100 M	C19	22-409 456 MMF. VAR. COND.
R12	63-477 100 M	L	5-3697 ANT. COIL ASSEM.
R13	63-394 200 M	3	5-3698 DEF. COIL ASSEM.
R14	63-456 200 M	4	5-3699 OSC. COIL ASSEM.
R15	63-458 50 M	5	20-82 ANT. CHOKE
		6	20-85 K.F. CHOKE
		7	20-719 K.F. SLATE CHOKE
		8	22-78 K.F. CHOKE
		9	22-78 K.F. CHOKE
		10	22-78 K.F. CHOKE
		11	22-78 K.F. CHOKE
		12	22-78 K.F. CHOKE
		13	22-78 K.F. CHOKE
		14	22-78 K.F. CHOKE
		15	22-78 K.F. CHOKE
		16	22-78 K.F. CHOKE
		17	22-78 K.F. CHOKE
		18	22-78 K.F. CHOKE
		19	22-78 K.F. CHOKE
		20	22-409 456 MMF. VAR. COND.
		21	5-3697 ANT. COIL ASSEM.
		22	5-3698 DEF. COIL ASSEM.
		23	5-3699 OSC. COIL ASSEM.
		24	20-82 ANT. CHOKE
		25	20-85 K.F. CHOKE
		26	20-719 K.F. CHOKE
		27	22-78 K.F. CHOKE
		28	22-78 K.F. CHOKE
		29	22-78 K.F. CHOKE
		30	22-78 K.F. CHOKE
		31	22-78 K.F. CHOKE
		32	22-78 K.F. CHOKE
		33	22-78 K.F. CHOKE
		34	22-78 K.F. CHOKE
		35	22-78 K.F. CHOKE
		36	22-78 K.F. CHOKE
		37	22-78 K.F. CHOKE
		38	22-78 K.F. CHOKE
		39	22-78 K.F. CHOKE
		40	22-78 K.F. CHOKE
		41	22-78 K.F. CHOKE
		42	22-78 K.F. CHOKE
		43	22-78 K.F. CHOKE
		44	22-78 K.F. CHOKE
		45	22-78 K.F. CHOKE
		46	22-78 K.F. CHOKE
		47	22-78 K.F. CHOKE
		48	22-78 K.F. CHOKE
		49	22-78 K.F. CHOKE
		50	22-78 K.F. CHOKE
		51	22-78 K.F. CHOKE
		52	22-78 K.F. CHOKE
		53	22-78 K.F. CHOKE
		54	22-78 K.F. CHOKE
		55	22-78 K.F. CHOKE
		56	22-78 K.F. CHOKE
		57	22-78 K.F. CHOKE
		58	22-78 K.F. CHOKE
		59	22-78 K.F. CHOKE
		60	22-78 K.F. CHOKE
		61	22-78 K.F. CHOKE
		62	22-78 K.F. CHOKE
		63	22-78 K.F. CHOKE
		64	22-78 K.F. CHOKE
		65	22-78 K.F. CHOKE
		66	22-78 K.F. CHOKE
		67	22-78 K.F. CHOKE
		68	22-78 K.F. CHOKE
		69	22-78 K.F. CHOKE
		70	22-78 K.F. CHOKE
		71	22-78 K.F. CHOKE
		72	22-78 K.F. CHOKE
		73	22-78 K.F. CHOKE
		74	22-78 K.F. CHOKE
		75	22-78 K.F. CHOKE
		76	22-78 K.F. CHOKE
		77	22-78 K.F. CHOKE
		78	22-78 K.F. CHOKE
		79	22-78 K.F. CHOKE
		80	22-78 K.F. CHOKE
		81	22-78 K.F. CHOKE
		82	22-78 K.F. CHOKE
		83	22-78 K.F. CHOKE
		84	22-78 K.F. CHOKE
		85	22-78 K.F. CHOKE
		86	22-78 K.F. CHOKE
		87	22-78 K.F. CHOKE
		88	22-78 K.F. CHOKE
		89	22-78 K.F. CHOKE
		90	22-78 K.F. CHOKE
		91	22-78 K.F. CHOKE
		92	22-78 K.F. CHOKE
		93	22-78 K.F. CHOKE
		94	22-78 K.F. CHOKE
		95	22-78 K.F. CHOKE
		96	22-78 K.F. CHOKE
		97	22-78 K.F. CHOKE
		98	22-78 K.F. CHOKE
		99	22-78 K.F. CHOKE
		100	22-78 K.F. CHOKE



550 KC. - 1780 KC.
2100 KC. - 6800 KC.
3 BAND { 7000 KC. - 23000 KC.
I.F. FREQUENCY 456 KC.
6 TUBE BATTERY SUPERHETERODYNE
CHASSIS NO. 5621

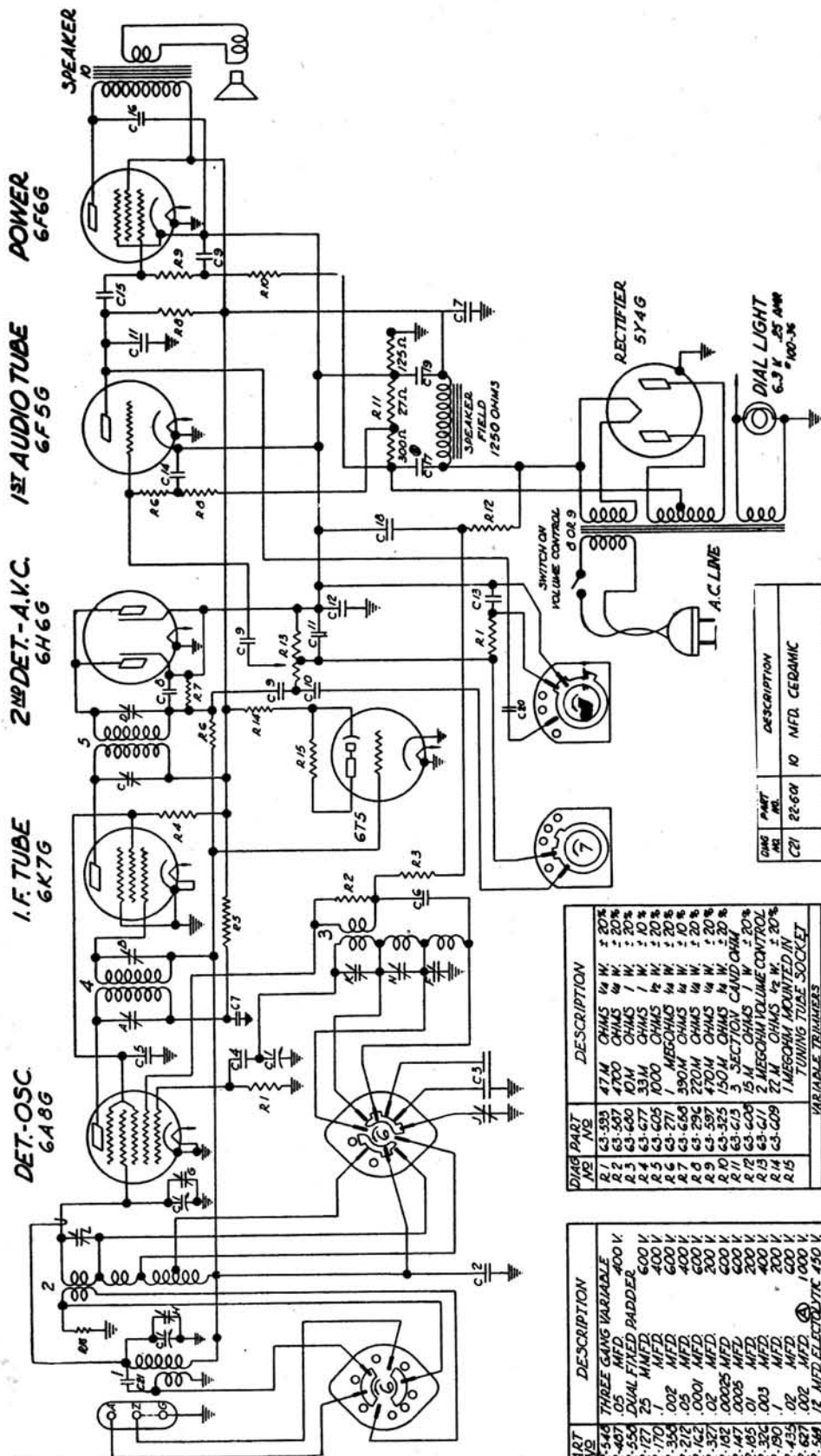
ZENITH RADIO CORP.

MODELS - 6V27, 6V62



MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Models 7-S-204, 7-S-232, 7-S-240, 7-S-242, 7-S-258, 7-S-260, 7-S-261 (5709 Chassis)



I.F. FREQUENCY 456 K.C.
7 TUBE SUPERHETERODYNE
3 BAND
CHASSIS NO 5709
ZENITH RADIO CORP.

DIAG PART NO.	DESCRIPTION	MODELS
C27	22-609 10 MFD. CERAMIC	7-3 - 232
R16	63-585 1000 OHMS 1/4 W ± 20%	7-3 - 240
		7-3 - 242
		7-3 - 258
		7-3 - 260
		7-3 - 261

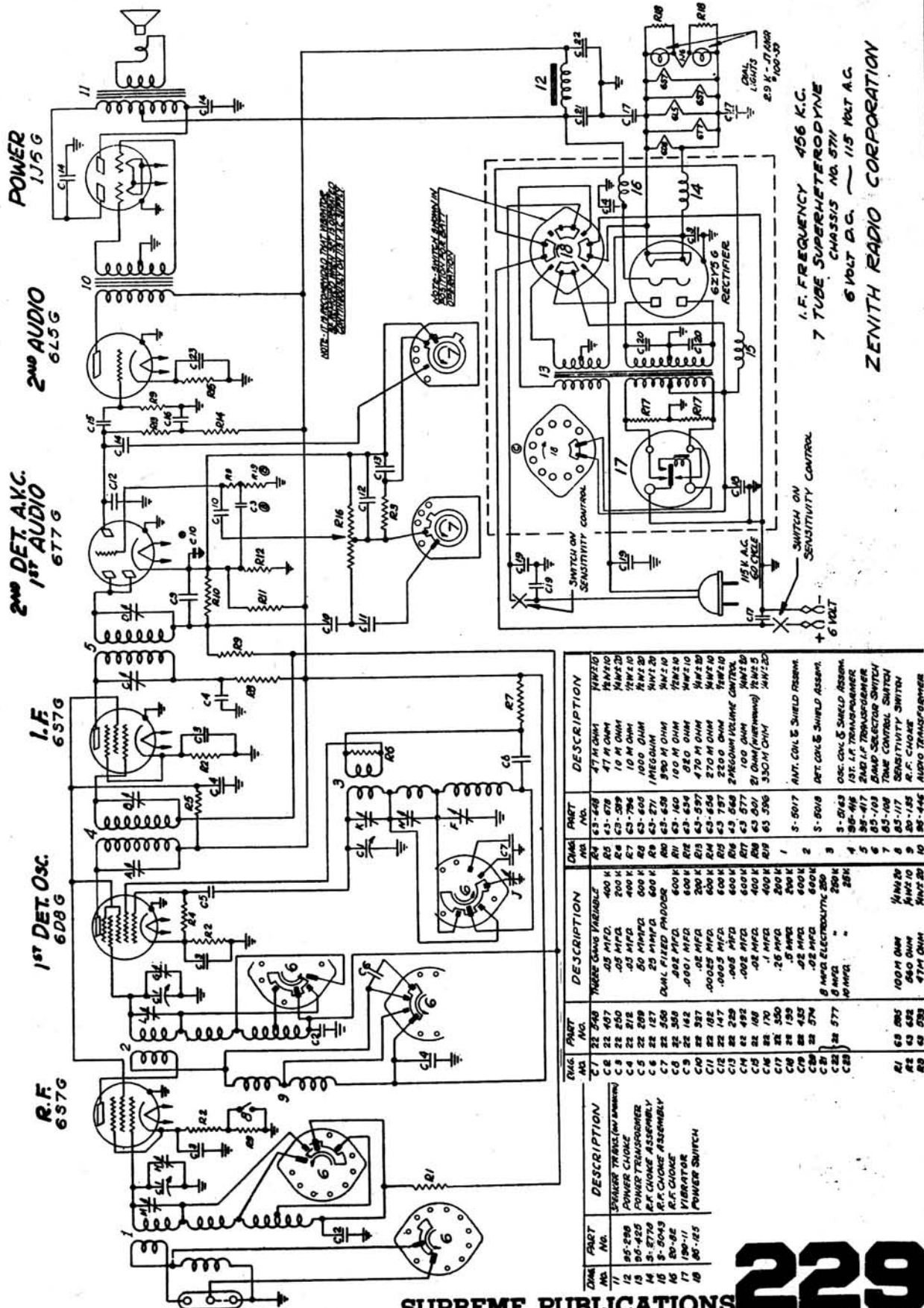
DIAG PART NO.	DESCRIPTION
R 1	63-593 47M OHMS 1/4 W ± 20%
R 2	63-597 4700 OHMS 1/4 W ± 20%
R 3	63-640 10M OHMS 1/4 W ± 20%
R 4	63-677 33M OHMS 1/4 W ± 20%
R 5	63-605 1000 OHMS 1/4 W ± 20%
R 6	63-271 1 MEGOHMS 1/4 W ± 20%
R 7	63-654 590M OHMS 1/4 W ± 20%
R 8	63-294 220M OHMS 1/4 W ± 20%
R 9	63-597 470M OHMS 1/4 W ± 20%
R 10	63-325 150M OHMS 1/4 W ± 20%
R 11	63-673 5 SEC. COILS 1/4 W ± 20%
R 12	63-605 1 MEGOHM VOLUME CONTROL
R 13	63-605 1 MEGOHM VOLUME CONTROL
R 14	63-609 27M OHMS 1/4 W ± 20%
R 15	TRIMMERS MOUNTED IN TUNING TUBE SOCKET

DIAG PART NO.	DESCRIPTION
C 1	22-548 THREE GANG VARIABLE
C 2	22-497 .05 MFD
C 3	22-554 DUAL FIXED BIPOLAR
C 4	22-171 25 M MFD
C 5	22-170 .1 MFD
C 6	22-354 .002 MFD
C 7	22-212 .05 MFD
C 8	22-162 .0001 MFD
C 9	22-327 .02 MFD
C 10	22-162 .00025 MFD
C 11	22-147 .0005 MFD
C 12	22-185 .01 MFD
C 13	22-364 .003 MFD
C 14	22-150 .02 MFD
C 15	22-453 .02 MFD
C 16	22-584 100M OHM ELECTROLYTIC
C 17	22-521 .5 MFD
C 18	22-448 .02 MFD
C 19	22-448 .02 MFD
C 20	22-448 .02 MFD
1	5-4064 DETECTOR COIL & SHIELD ASSEM
2	5-4969 OSCILLATOR COIL & SHIELD ASSEM
3	95-416 1ST I.F. TRANS.
4	95-417 2ND I.F. TRANS.
5	65-110 BAND SELECTOR SWITCH
6	65-108 TONE CONTROL SWITCH
7	95-418 POWER TRANS - 117/50 SOCKET
8	95-451 3 PRONG TRANSFORMER

NOTE: TRIMMERS F, K, L, & N MOUNTED ON BAKELITE STRIP # 22-545

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

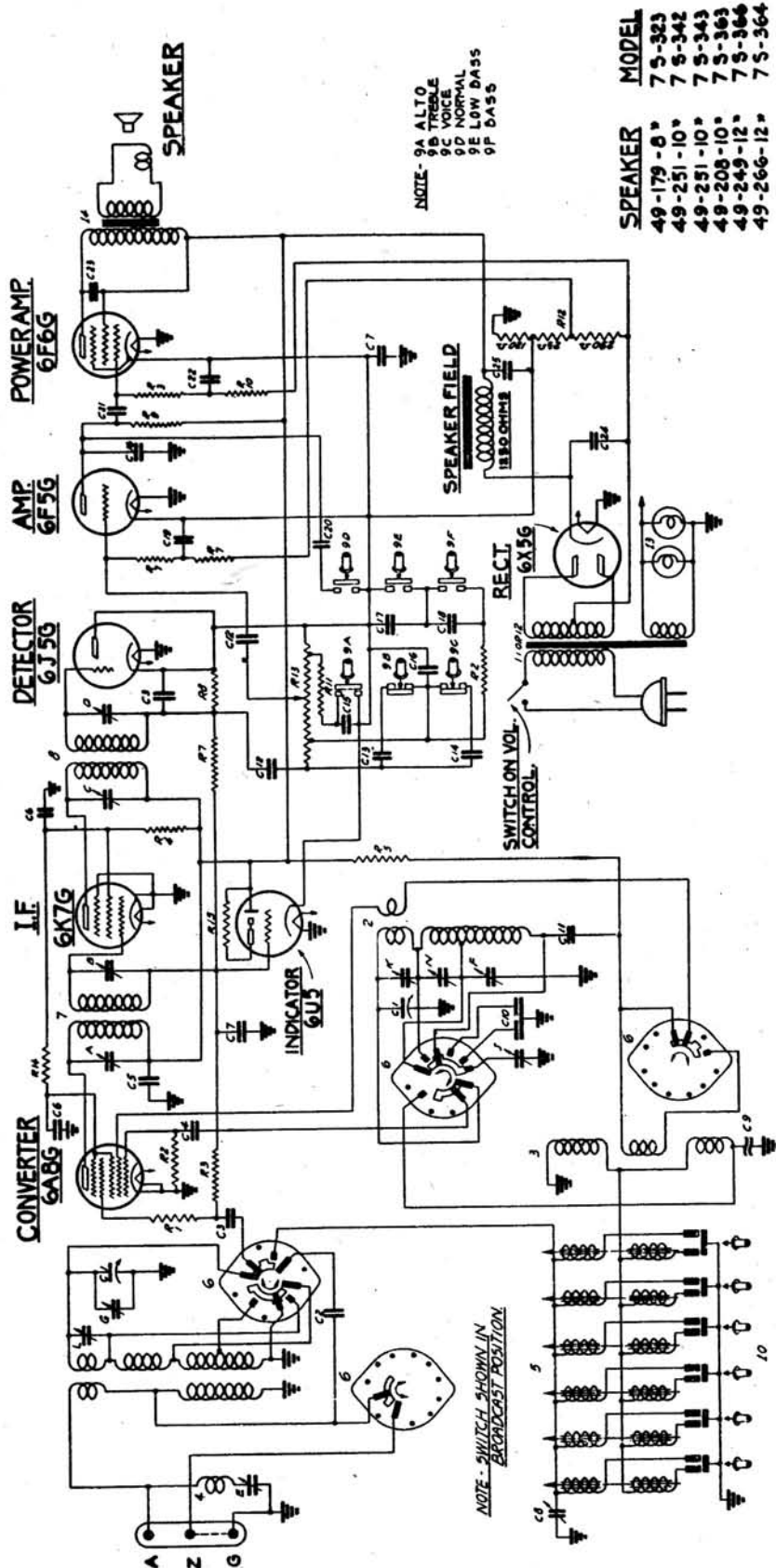
Models 7-J-232, 7-J-259 (5711 Chassis)



I.F. FREQUENCY 456 K.C.
 7 TUBE SUPERHETERODYNE
 CHASSIS NO. 5711
 6 VOLT D.C. — 115 VOLT A.C.
ZENITH RADIO CORPORATION

CHASSIS NO.	PART NO.	DESCRIPTION	QTY.	UNIT	DESCRIPTION	QTY.	UNIT
11	65-296	SPARK TRANS. (W/ SHIELD)	1	ANT. COIL & SHIELD ASSEMBLY	1	ANT. COIL & SHIELD ASSEMBLY	1
12	66-425	POWER TRANSFORMER	1	DET. COIL & SHIELD ASSEMBLY	1	DET. COIL & SHIELD ASSEMBLY	1
13	65-277	POWER TRANSFORMER	1	OSC. COIL & SHIELD ASSEMBLY	1	OSC. COIL & SHIELD ASSEMBLY	1
14	65-278	POWER TRANSFORMER	1	1st I.F. TRANSFORMER	1	1st I.F. TRANSFORMER	1
15	65-279	POWER TRANSFORMER	1	2nd I.F. TRANSFORMER	1	2nd I.F. TRANSFORMER	1
16	65-280	POWER TRANSFORMER	1	3rd I.F. TRANSFORMER	1	3rd I.F. TRANSFORMER	1
17	65-281	POWER TRANSFORMER	1	TONE CONTROL SWITCH	1	TONE CONTROL SWITCH	1
18	65-282	POWER TRANSFORMER	1	SENSITIVITY SWITCH	1	SENSITIVITY SWITCH	1
19	65-283	POWER TRANSFORMER	1	R.F. CHASSIS	1	R.F. CHASSIS	1
20	65-284	POWER TRANSFORMER	1	AUDIO TRANSFORMER	1	AUDIO TRANSFORMER	1

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



SPEAKER	MODEL
49-179-0*	7 S-323
49-251-10*	7 S-342
49-251-10*	7 S-343
49-208-10*	7 S-363
49-249-12*	7 S-364
49-266-12*	7 S-364

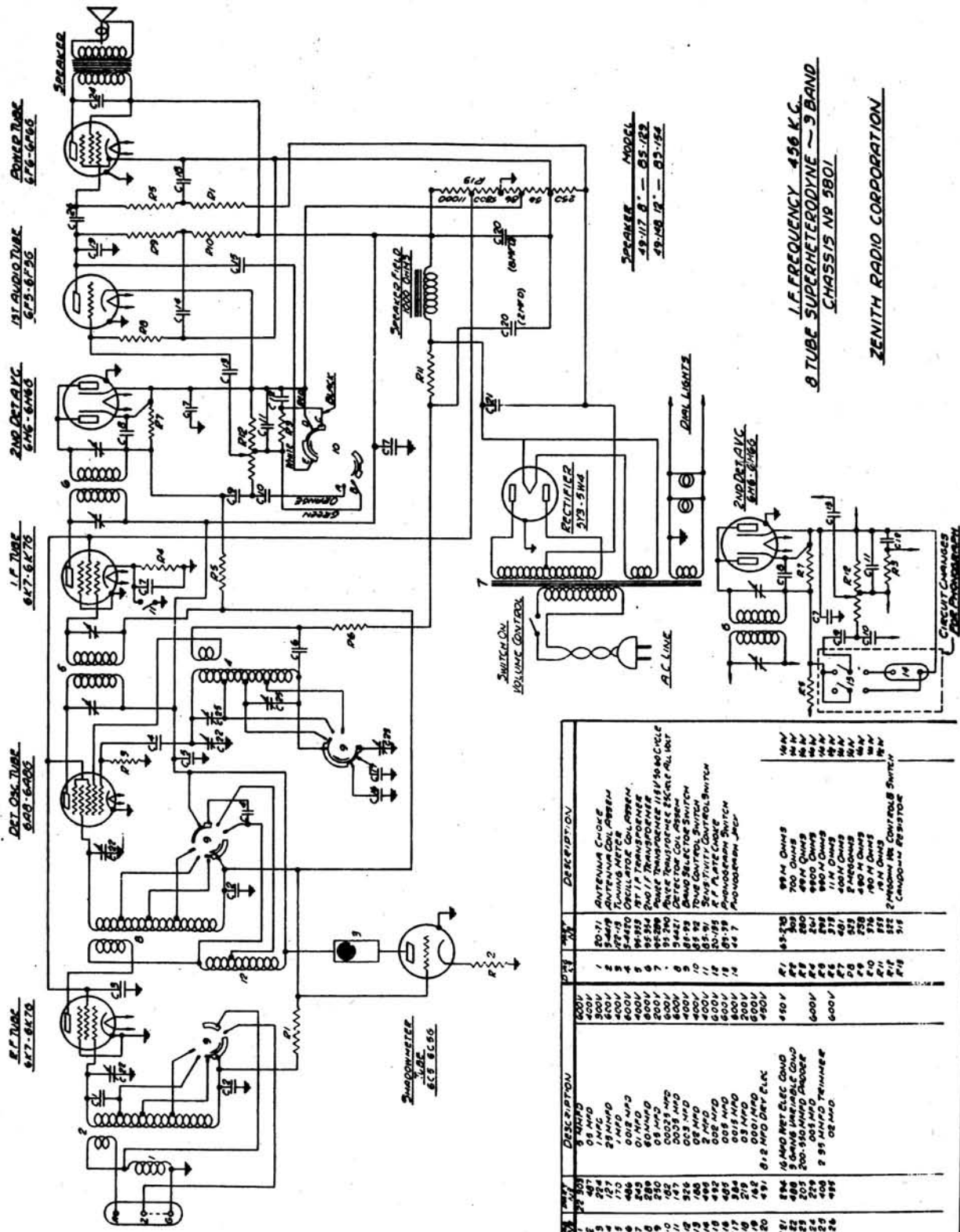
Chassis No. 5714

I.F. FREQUENCY 455 K.C.
7 TUBE SUPERHETERODYNE
CHASSIS NO. 5714-AC. 3-BAND
ZENITH RADIO CORPORATION

PART NO.	DESCRIPTION	QTY.	REMARKS
1	11T. 1A TRIODE AMP.	1	
2	11T. 1A TRIODE SEC.	1	
3	2ND 1A TRIODE SEC.	1	
4	6X5G RECT.	1	
5	6K7G I.F. AMP.	1	
6	6J5G DETECTOR	1	
7	6AG5 CONVERTER	1	
8	6F5G AMP.	1	
9	6F6G POWER AMP.	1	
10	6U5 INDICATOR	1	
11	11T. 1A TRIODE AMP.	1	
12	11T. 1A TRIODE SEC.	1	
13	2ND 1A TRIODE SEC.	1	
14	6X5G RECT.	1	
15	6K7G I.F. AMP.	1	
16	6J5G DETECTOR	1	
17	6AG5 CONVERTER	1	
18	6F5G AMP.	1	
19	6F6G POWER AMP.	1	
20	6U5 INDICATOR	1	
21	11T. 1A TRIODE AMP.	1	
22	11T. 1A TRIODE SEC.	1	
23	2ND 1A TRIODE SEC.	1	
24	6X5G RECT.	1	
25	6K7G I.F. AMP.	1	
26	6J5G DETECTOR	1	
27	6AG5 CONVERTER	1	
28	6F5G AMP.	1	
29	6F6G POWER AMP.	1	
30	6U5 INDICATOR	1	
31	11T. 1A TRIODE AMP.	1	
32	11T. 1A TRIODE SEC.	1	
33	2ND 1A TRIODE SEC.	1	
34	6X5G RECT.	1	
35	6K7G I.F. AMP.	1	
36	6J5G DETECTOR	1	
37	6AG5 CONVERTER	1	
38	6F5G AMP.	1	
39	6F6G POWER AMP.	1	
40	6U5 INDICATOR	1	
41	11T. 1A TRIODE AMP.	1	
42	11T. 1A TRIODE SEC.	1	
43	2ND 1A TRIODE SEC.	1	
44	6X5G RECT.	1	
45	6K7G I.F. AMP.	1	
46	6J5G DETECTOR	1	
47	6AG5 CONVERTER	1	
48	6F5G AMP.	1	
49	6F6G POWER AMP.	1	
50	6U5 INDICATOR	1	
51	11T. 1A TRIODE AMP.	1	
52	11T. 1A TRIODE SEC.	1	
53	2ND 1A TRIODE SEC.	1	
54	6X5G RECT.	1	
55	6K7G I.F. AMP.	1	
56	6J5G DETECTOR	1	
57	6AG5 CONVERTER	1	
58	6F5G AMP.	1	
59	6F6G POWER AMP.	1	
60	6U5 INDICATOR	1	
61	11T. 1A TRIODE AMP.	1	
62	11T. 1A TRIODE SEC.	1	
63	2ND 1A TRIODE SEC.	1	
64	6X5G RECT.	1	
65	6K7G I.F. AMP.	1	
66	6J5G DETECTOR	1	
67	6AG5 CONVERTER	1	
68	6F5G AMP.	1	
69	6F6G POWER AMP.	1	
70	6U5 INDICATOR	1	
71	11T. 1A TRIODE AMP.	1	
72	11T. 1A TRIODE SEC.	1	
73	2ND 1A TRIODE SEC.	1	
74	6X5G RECT.	1	
75	6K7G I.F. AMP.	1	
76	6J5G DETECTOR	1	
77	6AG5 CONVERTER	1	
78	6F5G AMP.	1	
79	6F6G POWER AMP.	1	
80	6U5 INDICATOR	1	
81	11T. 1A TRIODE AMP.	1	
82	11T. 1A TRIODE SEC.	1	
83	2ND 1A TRIODE SEC.	1	
84	6X5G RECT.	1	
85	6K7G I.F. AMP.	1	
86	6J5G DETECTOR	1	
87	6AG5 CONVERTER	1	
88	6F5G AMP.	1	
89	6F6G POWER AMP.	1	
90	6U5 INDICATOR	1	
91	11T. 1A TRIODE AMP.	1	
92	11T. 1A TRIODE SEC.	1	
93	2ND 1A TRIODE SEC.	1	
94	6X5G RECT.	1	
95	6K7G I.F. AMP.	1	
96	6J5G DETECTOR	1	
97	6AG5 CONVERTER	1	
98	6F5G AMP.	1	
99	6F6G POWER AMP.	1	
100	6U5 INDICATOR	1	
101	11T. 1A TRIODE AMP.	1	
102	11T. 1A TRIODE SEC.	1	
103	2ND 1A TRIODE SEC.	1	
104	6X5G RECT.	1	
105	6K7G I.F. AMP.	1	
106	6J5G DETECTOR	1	
107	6AG5 CONVERTER	1	
108	6F5G AMP.	1	
109	6F6G POWER AMP.	1	
110	6U5 INDICATOR	1	
111	11T. 1A TRIODE AMP.	1	
112	11T. 1A TRIODE SEC.	1	
113	2ND 1A TRIODE SEC.	1	
114	6X5G RECT.	1	
115	6K7G I.F. AMP.	1	
116	6J5G DETECTOR	1	
117	6AG5 CONVERTER	1	
118	6F5G AMP.	1	
119	6F6G POWER AMP.	1	
120	6U5 INDICATOR	1	
121	11T. 1A TRIODE AMP.	1	
122	11T. 1A TRIODE SEC.	1	
123	2ND 1A TRIODE SEC.	1	
124	6X5G RECT.	1	
125	6K7G I.F. AMP.	1	
126	6J5G DETECTOR	1	
127	6AG5 CONVERTER	1	
128	6F5G AMP.	1	
129	6F6G POWER AMP.	1	
130	6U5 INDICATOR	1	
131	11T. 1A TRIODE AMP.	1	
132	11T. 1A TRIODE SEC.	1	
133	2ND 1A TRIODE SEC.	1	
134	6X5G RECT.	1	
135	6K7G I.F. AMP.	1	
136	6J5G DETECTOR	1	
137	6AG5 CONVERTER	1	
138	6F5G AMP.	1	
139	6F6G POWER AMP.	1	
140	6U5 INDICATOR	1	
141	11T. 1A TRIODE AMP.	1	
142	11T. 1A TRIODE SEC.	1	
143	2ND 1A TRIODE SEC.	1	
144	6X5G RECT.	1	
145	6K7G I.F. AMP.	1	
146	6J5G DETECTOR	1	
147	6AG5 CONVERTER	1	
148	6F5G AMP.	1	
149	6F6G POWER AMP.	1	
150	6U5 INDICATOR	1	
151	11T. 1A TRIODE AMP.	1	
152	11T. 1A TRIODE SEC.	1	
153	2ND 1A TRIODE SEC.	1	
154	6X5G RECT.	1	
155	6K7G I.F. AMP.	1	
156	6J5G DETECTOR	1	
157	6AG5 CONVERTER	1	
158	6F5G AMP.	1	
159	6F6G POWER AMP.	1	
160	6U5 INDICATOR	1	
161	11T. 1A TRIODE AMP.	1	
162	11T. 1A TRIODE SEC.	1	
163	2ND 1A TRIODE SEC.	1	
164	6X5G RECT.	1	
165	6K7G I.F. AMP.	1	
166	6J5G DETECTOR	1	
167	6AG5 CONVERTER	1	
168	6F5G AMP.	1	
169	6F6G POWER AMP.	1	
170	6U5 INDICATOR	1	
171	11T. 1A TRIODE AMP.	1	
172	11T. 1A TRIODE SEC.	1	
173	2ND 1A TRIODE SEC.	1	
174	6X5G RECT.	1	
175	6K7G I.F. AMP.	1	
176	6J5G DETECTOR	1	
177	6AG5 CONVERTER	1	
178	6F5G AMP.	1	
179	6F6G POWER AMP.	1	
180	6U5 INDICATOR	1	
181	11T. 1A TRIODE AMP.	1	
182	11T. 1A TRIODE SEC.	1	
183	2ND 1A TRIODE SEC.	1	
184	6X5G RECT.	1	
185	6K7G I.F. AMP.	1	
186	6J5G DETECTOR	1	
187	6AG5 CONVERTER	1	
188	6F5G AMP.	1	
189	6F6G POWER AMP.	1	
190	6U5 INDICATOR	1	
191	11T. 1A TRIODE AMP.	1	
192	11T. 1A TRIODE SEC.	1	
193	2ND 1A TRIODE SEC.	1	
194	6X5G RECT.	1	
195	6K7G I.F. AMP.	1	
196	6J5G DETECTOR	1	
197	6AG5 CONVERTER	1	
198	6F5G AMP.	1	
199	6F6G POWER AMP.	1	
200	6U5 INDICATOR	1	

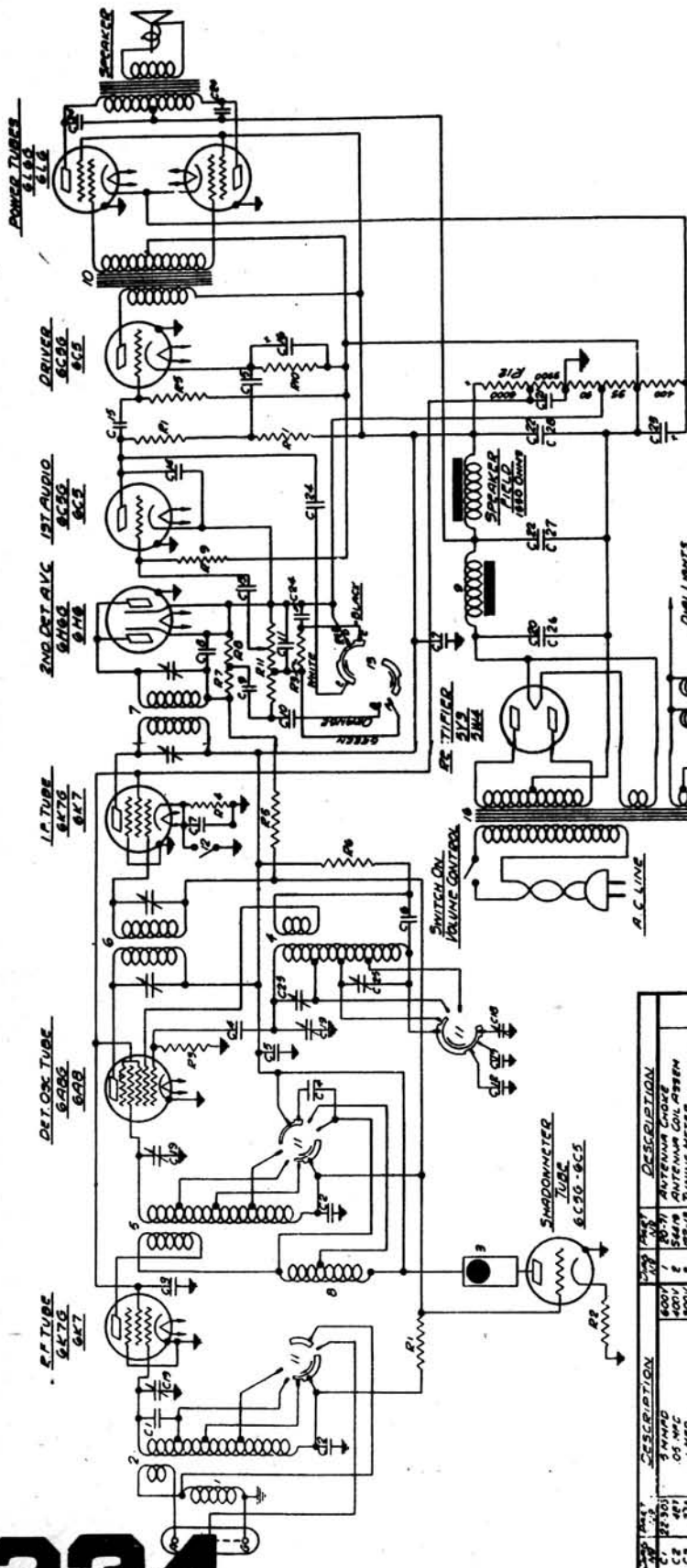
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Models 8-S-129, 8-S-154. (Chassis No. 5801)



NO.	TYPE	DESCRIPTION	VAL.	NO.	DESCRIPTION	VAL.
1	6X4	ANTENNA COIL ASSEMBLY	500V	20-71	ANTENNA COIL ASSEMBLY	500V
2	6X5	OSCILLATOR COIL ASSEMBLY	500V	20-72	OSCILLATOR COIL ASSEMBLY	500V
3	6X6	1ST I.F. TRANSFORMER	500V	20-73	1ST I.F. TRANSFORMER	500V
4	6X7	2ND I.F. TRANSFORMER	500V	20-74	2ND I.F. TRANSFORMER	500V
5	6X8	DETECTOR COIL ASSEMBLY	500V	20-75	DETECTOR COIL ASSEMBLY	500V
6	6X9	1ST AUDIO TRANSFORMER	500V	20-76	1ST AUDIO TRANSFORMER	500V
7	6X10	2ND AUDIO TRANSFORMER	500V	20-77	2ND AUDIO TRANSFORMER	500V
8	6X11	POWER TRANSFORMER	500V	20-78	POWER TRANSFORMER	500V
9	6X12	1ST AUDIO TUBE	500V	20-79	1ST AUDIO TUBE	500V
10	6X13	2ND AUDIO TUBE	500V	20-80	2ND AUDIO TUBE	500V
11	6X14	3RD AUDIO TUBE	500V	20-81	3RD AUDIO TUBE	500V
12	6X15	4TH AUDIO TUBE	500V	20-82	4TH AUDIO TUBE	500V
13	6X16	5TH AUDIO TUBE	500V	20-83	5TH AUDIO TUBE	500V
14	6X17	6TH AUDIO TUBE	500V	20-84	6TH AUDIO TUBE	500V
15	6X18	7TH AUDIO TUBE	500V	20-85	7TH AUDIO TUBE	500V
16	6X19	8TH AUDIO TUBE	500V	20-86	8TH AUDIO TUBE	500V
17	6X20	9TH AUDIO TUBE	500V	20-87	9TH AUDIO TUBE	500V
18	6X21	10TH AUDIO TUBE	500V	20-88	10TH AUDIO TUBE	500V
19	6X22	11TH AUDIO TUBE	500V	20-89	11TH AUDIO TUBE	500V
20	6X23	12TH AUDIO TUBE	500V	20-90	12TH AUDIO TUBE	500V
21	6X24	13TH AUDIO TUBE	500V	20-91	13TH AUDIO TUBE	500V
22	6X25	14TH AUDIO TUBE	500V	20-92	14TH AUDIO TUBE	500V
23	6X26	15TH AUDIO TUBE	500V	20-93	15TH AUDIO TUBE	500V
24	6X27	16TH AUDIO TUBE	500V	20-94	16TH AUDIO TUBE	500V
25	6X28	17TH AUDIO TUBE	500V	20-95	17TH AUDIO TUBE	500V
26	6X29	18TH AUDIO TUBE	500V	20-96	18TH AUDIO TUBE	500V
27	6X30	19TH AUDIO TUBE	500V	20-97	19TH AUDIO TUBE	500V
28	6X31	20TH AUDIO TUBE	500V	20-98	20TH AUDIO TUBE	500V
29	6X32	21ST AUDIO TUBE	500V	20-99	21ST AUDIO TUBE	500V
30	6X33	22ND AUDIO TUBE	500V	20-100	22ND AUDIO TUBE	500V
31	6X34	23RD AUDIO TUBE	500V	20-101	23RD AUDIO TUBE	500V
32	6X35	24TH AUDIO TUBE	500V	20-102	24TH AUDIO TUBE	500V
33	6X36	25TH AUDIO TUBE	500V	20-103	25TH AUDIO TUBE	500V
34	6X37	26TH AUDIO TUBE	500V	20-104	26TH AUDIO TUBE	500V
35	6X38	27TH AUDIO TUBE	500V	20-105	27TH AUDIO TUBE	500V
36	6X39	28TH AUDIO TUBE	500V	20-106	28TH AUDIO TUBE	500V
37	6X40	29TH AUDIO TUBE	500V	20-107	29TH AUDIO TUBE	500V
38	6X41	30TH AUDIO TUBE	500V	20-108	30TH AUDIO TUBE	500V
39	6X42	31ST AUDIO TUBE	500V	20-109	31ST AUDIO TUBE	500V
40	6X43	32ND AUDIO TUBE	500V	20-110	32ND AUDIO TUBE	500V
41	6X44	33RD AUDIO TUBE	500V	20-111	33RD AUDIO TUBE	500V
42	6X45	34TH AUDIO TUBE	500V	20-112	34TH AUDIO TUBE	500V
43	6X46	35TH AUDIO TUBE	500V	20-113	35TH AUDIO TUBE	500V
44	6X47	36TH AUDIO TUBE	500V	20-114	36TH AUDIO TUBE	500V
45	6X48	37TH AUDIO TUBE	500V	20-115	37TH AUDIO TUBE	500V
46	6X49	38TH AUDIO TUBE	500V	20-116	38TH AUDIO TUBE	500V
47	6X50	39TH AUDIO TUBE	500V	20-117	39TH AUDIO TUBE	500V
48	6X51	40TH AUDIO TUBE	500V	20-118	40TH AUDIO TUBE	500V
49	6X52	41ST AUDIO TUBE	500V	20-119	41ST AUDIO TUBE	500V
50	6X53	42ND AUDIO TUBE	500V	20-120	42ND AUDIO TUBE	500V
51	6X54	43RD AUDIO TUBE	500V	20-121	43RD AUDIO TUBE	500V
52	6X55	44TH AUDIO TUBE	500V	20-122	44TH AUDIO TUBE	500V
53	6X56	45TH AUDIO TUBE	500V	20-123	45TH AUDIO TUBE	500V
54	6X57	46TH AUDIO TUBE	500V	20-124	46TH AUDIO TUBE	500V
55	6X58	47TH AUDIO TUBE	500V	20-125	47TH AUDIO TUBE	500V
56	6X59	48TH AUDIO TUBE	500V	20-126	48TH AUDIO TUBE	500V
57	6X60	49TH AUDIO TUBE	500V	20-127	49TH AUDIO TUBE	500V
58	6X61	50TH AUDIO TUBE	500V	20-128	50TH AUDIO TUBE	500V
59	6X62	51ST AUDIO TUBE	500V	20-129	51ST AUDIO TUBE	500V
60	6X63	52ND AUDIO TUBE	500V	20-130	52ND AUDIO TUBE	500V
61	6X64	53RD AUDIO TUBE	500V	20-131	53RD AUDIO TUBE	500V
62	6X65	54TH AUDIO TUBE	500V	20-132	54TH AUDIO TUBE	500V
63	6X66	55TH AUDIO TUBE	500V	20-133	55TH AUDIO TUBE	500V
64	6X67	56TH AUDIO TUBE	500V	20-134	56TH AUDIO TUBE	500V
65	6X68	57TH AUDIO TUBE	500V	20-135	57TH AUDIO TUBE	500V
66	6X69	58TH AUDIO TUBE	500V	20-136	58TH AUDIO TUBE	500V
67	6X70	59TH AUDIO TUBE	500V	20-137	59TH AUDIO TUBE	500V
68	6X71	60TH AUDIO TUBE	500V	20-138	60TH AUDIO TUBE	500V
69	6X72	61ST AUDIO TUBE	500V	20-139	61ST AUDIO TUBE	500V
70	6X73	62ND AUDIO TUBE	500V	20-140	62ND AUDIO TUBE	500V
71	6X74	63RD AUDIO TUBE	500V	20-141	63RD AUDIO TUBE	500V
72	6X75	64TH AUDIO TUBE	500V	20-142	64TH AUDIO TUBE	500V
73	6X76	65TH AUDIO TUBE	500V	20-143	65TH AUDIO TUBE	500V
74	6X77	66TH AUDIO TUBE	500V	20-144	66TH AUDIO TUBE	500V
75	6X78	67TH AUDIO TUBE	500V	20-145	67TH AUDIO TUBE	500V
76	6X79	68TH AUDIO TUBE	500V	20-146	68TH AUDIO TUBE	500V
77	6X80	69TH AUDIO TUBE	500V	20-147	69TH AUDIO TUBE	500V
78	6X81	70TH AUDIO TUBE	500V	20-148	70TH AUDIO TUBE	500V
79	6X82	71ST AUDIO TUBE	500V	20-149	71ST AUDIO TUBE	500V
80	6X83	72ND AUDIO TUBE	500V	20-150	72ND AUDIO TUBE	500V
81	6X84	73RD AUDIO TUBE	500V	20-151	73RD AUDIO TUBE	500V
82	6X85	74TH AUDIO TUBE	500V	20-152	74TH AUDIO TUBE	500V
83	6X86	75TH AUDIO TUBE	500V	20-153	75TH AUDIO TUBE	500V
84	6X87	76TH AUDIO TUBE	500V	20-154	76TH AUDIO TUBE	500V
85	6X88	77TH AUDIO TUBE	500V	20-155	77TH AUDIO TUBE	500V
86	6X89	78TH AUDIO TUBE	500V	20-156	78TH AUDIO TUBE	500V
87	6X90	79TH AUDIO TUBE	500V	20-157	79TH AUDIO TUBE	500V
88	6X91	80TH AUDIO TUBE	500V	20-158	80TH AUDIO TUBE	500V
89	6X92	81ST AUDIO TUBE	500V	20-159	81ST AUDIO TUBE	500V
90	6X93	82ND AUDIO TUBE	500V	20-160	82ND AUDIO TUBE	500V
91	6X94	83RD AUDIO TUBE	500V	20-161	83RD AUDIO TUBE	500V
92	6X95	84TH AUDIO TUBE	500V	20-162	84TH AUDIO TUBE	500V
93	6X96	85TH AUDIO TUBE	500V	20-163	85TH AUDIO TUBE	500V
94	6X97	86TH AUDIO TUBE	500V	20-164	86TH AUDIO TUBE	500V
95	6X98	87TH AUDIO TUBE	500V	20-165	87TH AUDIO TUBE	500V
96	6X99	88TH AUDIO TUBE	500V	20-166	88TH AUDIO TUBE	500V
97	6X100	89TH AUDIO TUBE	500V	20-167	89TH AUDIO TUBE	500V
98	6X101	90TH AUDIO TUBE	500V	20-168	90TH AUDIO TUBE	500V
99	6X102	91ST AUDIO TUBE	500V	20-169	91ST AUDIO TUBE	500V
100	6X103	92ND AUDIO TUBE	500V	20-170	92ND AUDIO TUBE	500V
101	6X104	93RD AUDIO TUBE	500V	20-171	93RD AUDIO TUBE	500V
102	6X105	94TH AUDIO TUBE	500V	20-172	94TH AUDIO TUBE	500V
103	6X106	95TH AUDIO TUBE	500V	20-173	95TH AUDIO TUBE	500V
104	6X107	96TH AUDIO TUBE	500V	20-174	96TH AUDIO TUBE	500V
105	6X108	97TH AUDIO TUBE	500V	20-175	97TH AUDIO TUBE	500V
106	6X109	98TH AUDIO TUBE	500V	20-176	98TH AUDIO TUBE	500V
107	6X110	99TH AUDIO TUBE	500V	20-177	99TH AUDIO TUBE	500V
108	6X111	100TH AUDIO TUBE	500V	20-178	100TH AUDIO TUBE	500V
109	6X112	101ST AUDIO TUBE	500V	20-179	101ST AUDIO TUBE	500V
110	6X113	102ND AUDIO TUBE	500V	20-180	102ND AUDIO TUBE	500V
111	6X114	103RD AUDIO TUBE	500V	20-181	103RD AUDIO TUBE	500V
112	6X115	104TH AUDIO TUBE	500V	20-182	104TH AUDIO TUBE	500V
113	6X116	105TH AUDIO TUBE	500V	20-183	105TH AUDIO TUBE	500V
114	6X117	106TH AUDIO TUBE	500V	20-184	106TH AUDIO TUBE	500V
115	6X118	107TH AUDIO TUBE	500V	20-185	107TH AUDIO TUBE	500V
116	6X119	108TH AUDIO TUBE	500V	20-186	108TH AUDIO TUBE	500V
117	6X120	109TH AUDIO TUBE	500V	20-187	109TH AUDIO TUBE	500V
118	6X121	110TH AUDIO TUBE	500V	20-188	110TH AUDIO TUBE	500V
119	6X122	111ST AUDIO TUBE	500V	20-189	111ST AUDIO TUBE	500V
120	6X123	112ND AUDIO TUBE	500V	20-190	112ND AUDIO TUBE	500V
121	6X124	113RD AUDIO TUBE	500V	20-191	113RD AUDIO TUBE	500V
122	6X125	114TH AUDIO TUBE	500V	20-192	114TH AUDIO TUBE	500V
123	6X126	115TH AUDIO TUBE	500V	20-193	115TH AUDIO TUBE	500V
124	6X127	116TH AUDIO TUBE	500V	20-194	116TH AUDIO TUBE	500V
125	6X128	117TH AUDIO TUBE	500V	20-195	117TH AUDIO TUBE	500V
126	6X129	118TH AUDIO TUBE	500V	20-196	118TH AUDIO TUBE	500V
127	6X130	119TH AUDIO TUBE	500V	20-197	119TH AUDIO TUBE	500V
128	6X131	120TH AUDIO TUBE	500V	20-198	120TH AUDIO TUBE	500V
129	6X132	121ST AUDIO TUBE	500V	20-199	121ST AUDIO TUBE	500V
130	6X133	122ND AUDIO TUBE	500V	20-200	122ND AUDIO TUBE	500V
131	6X134	123RD AUDIO TUBE	500V	20-201	123RD AUDIO TUBE	500V
132	6X135	124TH AUDIO TUBE	500V	20-202	124TH AUDIO TUBE	500V
133	6X136	125TH AUDIO TUBE	500V	20-203	125TH AUDIO TUBE	500V
134	6X137	126TH AUDIO TUBE	500V	20-204	126TH AUDIO TUBE	500V
135	6X138	127TH AUDIO TUBE	500V	20-205	127TH AUDIO TUBE	500V
136	6X139	128TH AUDIO TUBE	500V	20-206	128TH AUDIO TUBE	500V
137	6X140	129TH AUDIO TUBE	500V	20-207	129TH AUDIO TUBE	500V
138	6X141	130TH AUDIO TUBE	500V	20-208	130TH AUDIO TUBE	500V
139	6X142	131ST AUDIO TUBE	500V	20-209	131ST AUDIO TUBE	500V
140	6X143	132ND AUDIO TUBE	500V	20-210	132ND AUDIO TUBE	500V
141	6X144					

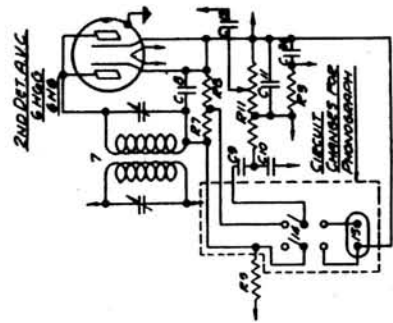
MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



SPEAKER	MODEL
48-217	48-217
48-217	48-217
48-217	48-217

(Chassis No. 1004)

I.F. FREQUENCY 456 KC.
10 TUBE SUPERHETERODYNE - 5 BAND
CHASSIS NO. 1004

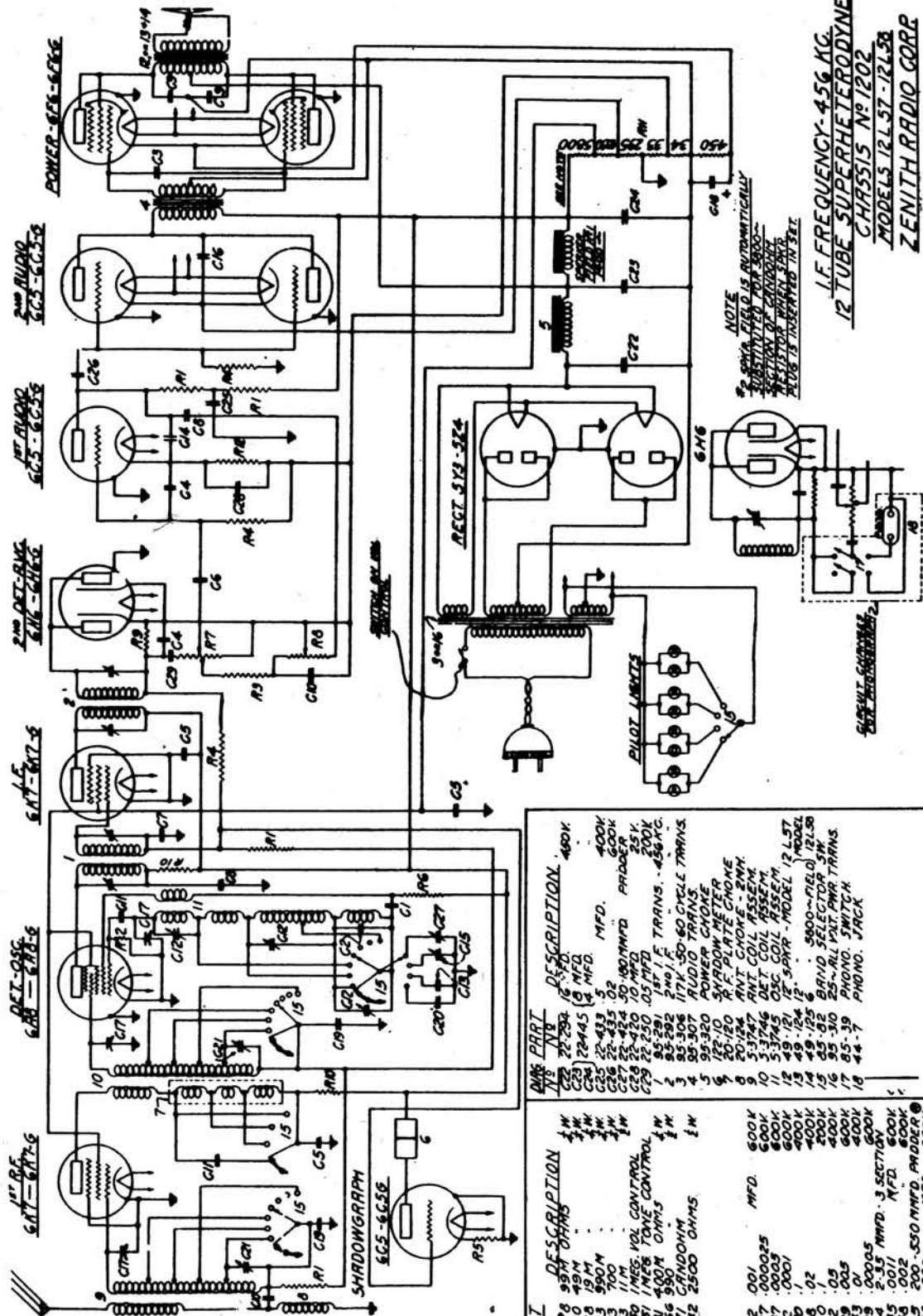


ZENITH RADIO CORPORATION

Models 10-S-30, 10-S-155, 10-S-156, 10-S-160, 10-S-147, 10-S-153, 10-S-157.

REF. NO.	DESCRIPTION	VAL.	DESCRIPTION
C1	5 MFD	20-1	ANTENNA COIL ASSEMBLY
C2	50 MFD	20-2	ANTENNA COIL ASSEMBLY
C3	10 MFD	20-3	ANTENNA COIL ASSEMBLY
C4	10 MFD	20-4	ANTENNA COIL ASSEMBLY
C5	10 MFD	20-5	ANTENNA COIL ASSEMBLY
C6	10 MFD	20-6	ANTENNA COIL ASSEMBLY
C7	10 MFD	20-7	ANTENNA COIL ASSEMBLY
C8	10 MFD	20-8	ANTENNA COIL ASSEMBLY
C9	10 MFD	20-9	ANTENNA COIL ASSEMBLY
C10	10 MFD	20-10	ANTENNA COIL ASSEMBLY
C11	10 MFD	20-11	ANTENNA COIL ASSEMBLY
C12	10 MFD	20-12	ANTENNA COIL ASSEMBLY
C13	10 MFD	20-13	ANTENNA COIL ASSEMBLY
C14	10 MFD	20-14	ANTENNA COIL ASSEMBLY
C15	10 MFD	20-15	ANTENNA COIL ASSEMBLY
C16	10 MFD	20-16	ANTENNA COIL ASSEMBLY
C17	10 MFD	20-17	ANTENNA COIL ASSEMBLY
C18	10 MFD	20-18	ANTENNA COIL ASSEMBLY
C19	10 MFD	20-19	ANTENNA COIL ASSEMBLY
C20	10 MFD	20-20	ANTENNA COIL ASSEMBLY
C21	10 MFD	20-21	ANTENNA COIL ASSEMBLY
C22	10 MFD	20-22	ANTENNA COIL ASSEMBLY
C23	10 MFD	20-23	ANTENNA COIL ASSEMBLY
C24	10 MFD	20-24	ANTENNA COIL ASSEMBLY
C25	10 MFD	20-25	ANTENNA COIL ASSEMBLY
R1	100 OHMS	10-1	5A7
R2	100 OHMS	10-2	6X7
R3	100 OHMS	10-3	6C5
R4	100 OHMS	10-4	6C5
R5	100 OHMS	10-5	6A4
R6	100 OHMS	10-6	6A4
R7	100 OHMS	10-7	6A4
R8	100 OHMS	10-8	6A4
R9	100 OHMS	10-9	6A4
R10	100 OHMS	10-10	6A4
R11	100 OHMS	10-11	6A4
R12	100 OHMS	10-12	6A4
R13	100 OHMS	10-13	6A4
R14	100 OHMS	10-14	6A4
R15	100 OHMS	10-15	6A4
R16	100 OHMS	10-16	6A4
R17	100 OHMS	10-17	6A4
R18	100 OHMS	10-18	6A4
R19	100 OHMS	10-19	6A4
R20	100 OHMS	10-20	6A4
R21	100 OHMS	10-21	6A4
R22	100 OHMS	10-22	6A4
R23	100 OHMS	10-23	6A4
R24	100 OHMS	10-24	6A4
R25	100 OHMS	10-25	6A4
R26	100 OHMS	10-26	6A4
R27	100 OHMS	10-27	6A4
R28	100 OHMS	10-28	6A4
R29	100 OHMS	10-29	6A4
R30	100 OHMS	10-30	6A4
R31	100 OHMS	10-31	6A4
R32	100 OHMS	10-32	6A4
R33	100 OHMS	10-33	6A4
R34	100 OHMS	10-34	6A4
R35	100 OHMS	10-35	6A4
R36	100 OHMS	10-36	6A4
R37	100 OHMS	10-37	6A4
R38	100 OHMS	10-38	6A4
R39	100 OHMS	10-39	6A4
R40	100 OHMS	10-40	6A4
R41	100 OHMS	10-41	6A4
R42	100 OHMS	10-42	6A4
R43	100 OHMS	10-43	6A4
R44	100 OHMS	10-44	6A4
R45	100 OHMS	10-45	6A4
R46	100 OHMS	10-46	6A4
R47	100 OHMS	10-47	6A4
R48	100 OHMS	10-48	6A4
R49	100 OHMS	10-49	6A4
R50	100 OHMS	10-50	6A4
R51	100 OHMS	10-51	6A4
R52	100 OHMS	10-52	6A4
R53	100 OHMS	10-53	6A4
R54	100 OHMS	10-54	6A4
R55	100 OHMS	10-55	6A4
R56	100 OHMS	10-56	6A4
R57	100 OHMS	10-57	6A4
R58	100 OHMS	10-58	6A4
R59	100 OHMS	10-59	6A4
R60	100 OHMS	10-60	6A4
R61	100 OHMS	10-61	6A4
R62	100 OHMS	10-62	6A4
R63	100 OHMS	10-63	6A4
R64	100 OHMS	10-64	6A4
R65	100 OHMS	10-65	6A4
R66	100 OHMS	10-66	6A4
R67	100 OHMS	10-67	6A4
R68	100 OHMS	10-68	6A4
R69	100 OHMS	10-69	6A4
R70	100 OHMS	10-70	6A4
R71	100 OHMS	10-71	6A4
R72	100 OHMS	10-72	6A4
R73	100 OHMS	10-73	6A4
R74	100 OHMS	10-74	6A4
R75	100 OHMS	10-75	6A4
R76	100 OHMS	10-76	6A4
R77	100 OHMS	10-77	6A4
R78	100 OHMS	10-78	6A4
R79	100 OHMS	10-79	6A4
R80	100 OHMS	10-80	6A4
R81	100 OHMS	10-81	6A4
R82	100 OHMS	10-82	6A4
R83	100 OHMS	10-83	6A4
R84	100 OHMS	10-84	6A4
R85	100 OHMS	10-85	6A4
R86	100 OHMS	10-86	6A4
R87	100 OHMS	10-87	6A4
R88	100 OHMS	10-88	6A4
R89	100 OHMS	10-89	6A4
R90	100 OHMS	10-90	6A4
R91	100 OHMS	10-91	6A4
R92	100 OHMS	10-92	6A4
R93	100 OHMS	10-93	6A4
R94	100 OHMS	10-94	6A4
R95	100 OHMS	10-95	6A4
R96	100 OHMS	10-96	6A4
R97	100 OHMS	10-97	6A4
R98	100 OHMS	10-98	6A4
R99	100 OHMS	10-99	6A4
R100	100 OHMS	10-100	6A4

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

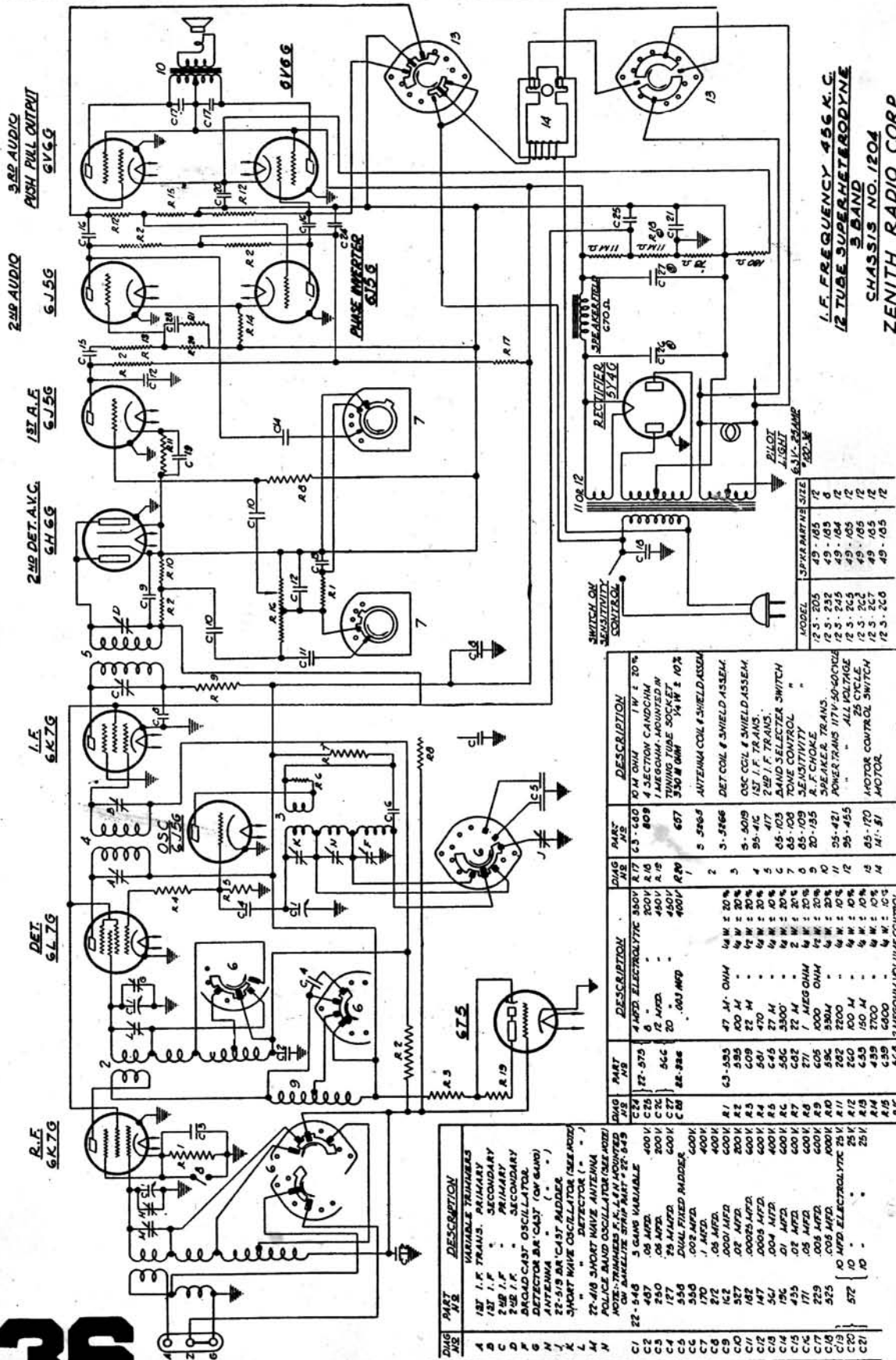


IF FREQUENCY 456 KC.
12 TUBE SUPERHETERODYNE
CHASSIS NO 1202
MODELS 12L57-12L58
ZENITH RADIO CORP

QWG PART NO	DESCRIPTION	QWG PART NO	DESCRIPTION
A1	6X6	11	100M OHMS
A2	6A7	12	100M OHMS
A3	6C5	13	100M OHMS
A4	6C6	14	100M OHMS
A5	6A7	15	100M OHMS
A6	6C5	16	100M OHMS
A7	6C5	17	100M OHMS
A8	6C5	18	100M OHMS
A9	6C5	19	100M OHMS
A10	6C5	20	100M OHMS
A11	6C5	21	100M OHMS
A12	6C5	22	100M OHMS
C1	22-22	1	001 MFD.
C2	22-27	2	000025 MFD.
C3	22-15	3	0001 MFD.
C4	22-170	4	02 MFD.
C5	22-190	5	05 MFD.
C6	22-212	6	003 MFD.
C7	22-229	7	005 MFD.
C8	22-243	8	0005 MFD.
C9	22-259	9	0005 MFD.
C10	22-315	10	001 MFD.
C11	22-345	11	001 MFD.
C12	22-355	12	002 MFD.
C13	22-205	13	200 .550 MFD. PADDER
C14	22-365	14	003 MFD.
C15	22-405	15	3 GRAMS VARIABLE
C16	22-405	16	10 MFD.
C17	22-410	17	003 MFD.
C18	22-410	18	003 MFD.
C19	22-416	19	2.33 MFD.
R1	100M OHMS	1	100M OHMS
R2	100M OHMS	2	100M OHMS
R3	100M OHMS	3	100M OHMS
R4	100M OHMS	4	100M OHMS
R5	100M OHMS	5	100M OHMS
R6	100M OHMS	6	100M OHMS
R7	100M OHMS	7	100M OHMS
R8	100M OHMS	8	100M OHMS
R9	100M OHMS	9	100M OHMS
R10	100M OHMS	10	100M OHMS
R11	100M OHMS	11	100M OHMS
R12	100M OHMS	12	100M OHMS
T1	22-234	1	16 MFD.
T2	22-234	2	16 MFD.
T3	22-415	3	5 MFD.
T4	22-433	4	5 MFD.
T5	22-435	5	5 MFD.
T6	22-424	6	50-100 MFD. PADDER
T7	22-420	7	10 MFD.
T8	22-250	8	05 MFD.
T9	85-291	9	140 I.F. TRANS.
T10	85-302	10	140 I.F. TRANS.
T11	94-307	11	170 I.F. TRANS.
T12	94-320	12	170 I.F. TRANS.
T13	122-10	13	50-60 CYCLE TRANS.
T14	20-120	14	POWER CHOKE
T15	20-124	15	SHADOW METER
T16	5-3747	16	R.F. PLATE CHOKE
T17	5-3746	17	ANT. CHOKE - 2MH.
T18	3-1719	18	DET. COIL ASSEM.
T19	48-124	19	DET. COIL - MODEL 12 LST
T20	48-124	20	DET. COIL - MODEL 12 LST
T21	48-124	21	DET. COIL - MODEL 12 LST
T22	48-124	22	DET. COIL - MODEL 12 LST
T23	48-124	23	DET. COIL - MODEL 12 LST
T24	48-124	24	DET. COIL - MODEL 12 LST
T25	48-124	25	DET. COIL - MODEL 12 LST
T26	48-124	26	DET. COIL - MODEL 12 LST
T27	48-124	27	DET. COIL - MODEL 12 LST
T28	48-124	28	DET. COIL - MODEL 12 LST
T29	48-124	29	DET. COIL - MODEL 12 LST
T30	48-124	30	DET. COIL - MODEL 12 LST
T31	48-124	31	DET. COIL - MODEL 12 LST
T32	48-124	32	DET. COIL - MODEL 12 LST
T33	48-124	33	DET. COIL - MODEL 12 LST
T34	48-124	34	DET. COIL - MODEL 12 LST
T35	48-124	35	DET. COIL - MODEL 12 LST
T36	48-124	36	DET. COIL - MODEL 12 LST
T37	48-124	37	DET. COIL - MODEL 12 LST
T38	48-124	38	DET. COIL - MODEL 12 LST
T39	48-124	39	DET. COIL - MODEL 12 LST
T40	48-124	40	DET. COIL - MODEL 12 LST
T41	48-124	41	DET. COIL - MODEL 12 LST
T42	48-124	42	DET. COIL - MODEL 12 LST
T43	48-124	43	DET. COIL - MODEL 12 LST
T44	48-124	44	DET. COIL - MODEL 12 LST
T45	48-124	45	DET. COIL - MODEL 12 LST
T46	48-124	46	DET. COIL - MODEL 12 LST
T47	48-124	47	DET. COIL - MODEL 12 LST
T48	48-124	48	DET. COIL - MODEL 12 LST
T49	48-124	49	DET. COIL - MODEL 12 LST
T50	48-124	50	DET. COIL - MODEL 12 LST
T51	48-124	51	DET. COIL - MODEL 12 LST
T52	48-124	52	DET. COIL - MODEL 12 LST
T53	48-124	53	DET. COIL - MODEL 12 LST
T54	48-124	54	DET. COIL - MODEL 12 LST
T55	48-124	55	DET. COIL - MODEL 12 LST
T56	48-124	56	DET. COIL - MODEL 12 LST
T57	48-124	57	DET. COIL - MODEL 12 LST
T58	48-124	58	DET. COIL - MODEL 12 LST
T59	48-124	59	DET. COIL - MODEL 12 LST
T60	48-124	60	DET. COIL - MODEL 12 LST
T61	48-124	61	DET. COIL - MODEL 12 LST
T62	48-124	62	DET. COIL - MODEL 12 LST
T63	48-124	63	DET. COIL - MODEL 12 LST
T64	48-124	64	DET. COIL - MODEL 12 LST
T65	48-124	65	DET. COIL - MODEL 12 LST
T66	48-124	66	DET. COIL - MODEL 12 LST
T67	48-124	67	DET. COIL - MODEL 12 LST
T68	48-124	68	DET. COIL - MODEL 12 LST
T69	48-124	69	DET. COIL - MODEL 12 LST
T70	48-124	70	DET. COIL - MODEL 12 LST
T71	48-124	71	DET. COIL - MODEL 12 LST
T72	48-124	72	DET. COIL - MODEL 12 LST
T73	48-124	73	DET. COIL - MODEL 12 LST
T74	48-124	74	DET. COIL - MODEL 12 LST
T75	48-124	75	DET. COIL - MODEL 12 LST
T76	48-124	76	DET. COIL - MODEL 12 LST
T77	48-124	77	DET. COIL - MODEL 12 LST
T78	48-124	78	DET. COIL - MODEL 12 LST
T79	48-124	79	DET. COIL - MODEL 12 LST
T80	48-124	80	DET. COIL - MODEL 12 LST
T81	48-124	81	DET. COIL - MODEL 12 LST
T82	48-124	82	DET. COIL - MODEL 12 LST
T83	48-124	83	DET. COIL - MODEL 12 LST
T84	48-124	84	DET. COIL - MODEL 12 LST
T85	48-124	85	DET. COIL - MODEL 12 LST
T86	48-124	86	DET. COIL - MODEL 12 LST
T87	48-124	87	DET. COIL - MODEL 12 LST
T88	48-124	88	DET. COIL - MODEL 12 LST
T89	48-124	89	DET. COIL - MODEL 12 LST
T90	48-124	90	DET. COIL - MODEL 12 LST
T91	48-124	91	DET. COIL - MODEL 12 LST
T92	48-124	92	DET. COIL - MODEL 12 LST
T93	48-124	93	DET. COIL - MODEL 12 LST
T94	48-124	94	DET. COIL - MODEL 12 LST
T95	48-124	95	DET. COIL - MODEL 12 LST
T96	48-124	96	DET. COIL - MODEL 12 LST
T97	48-124	97	DET. COIL - MODEL 12 LST
T98	48-124	98	DET. COIL - MODEL 12 LST
T99	48-124	99	DET. COIL - MODEL 12 LST
T100	48-124	100	DET. COIL - MODEL 12 LST

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS

Models 12-S-205, 12-S-232, 12-S-245, 12-S-265, 12-S-267, 12-S-268, 12-S-266, 12-S-268 (1204 Chassis)



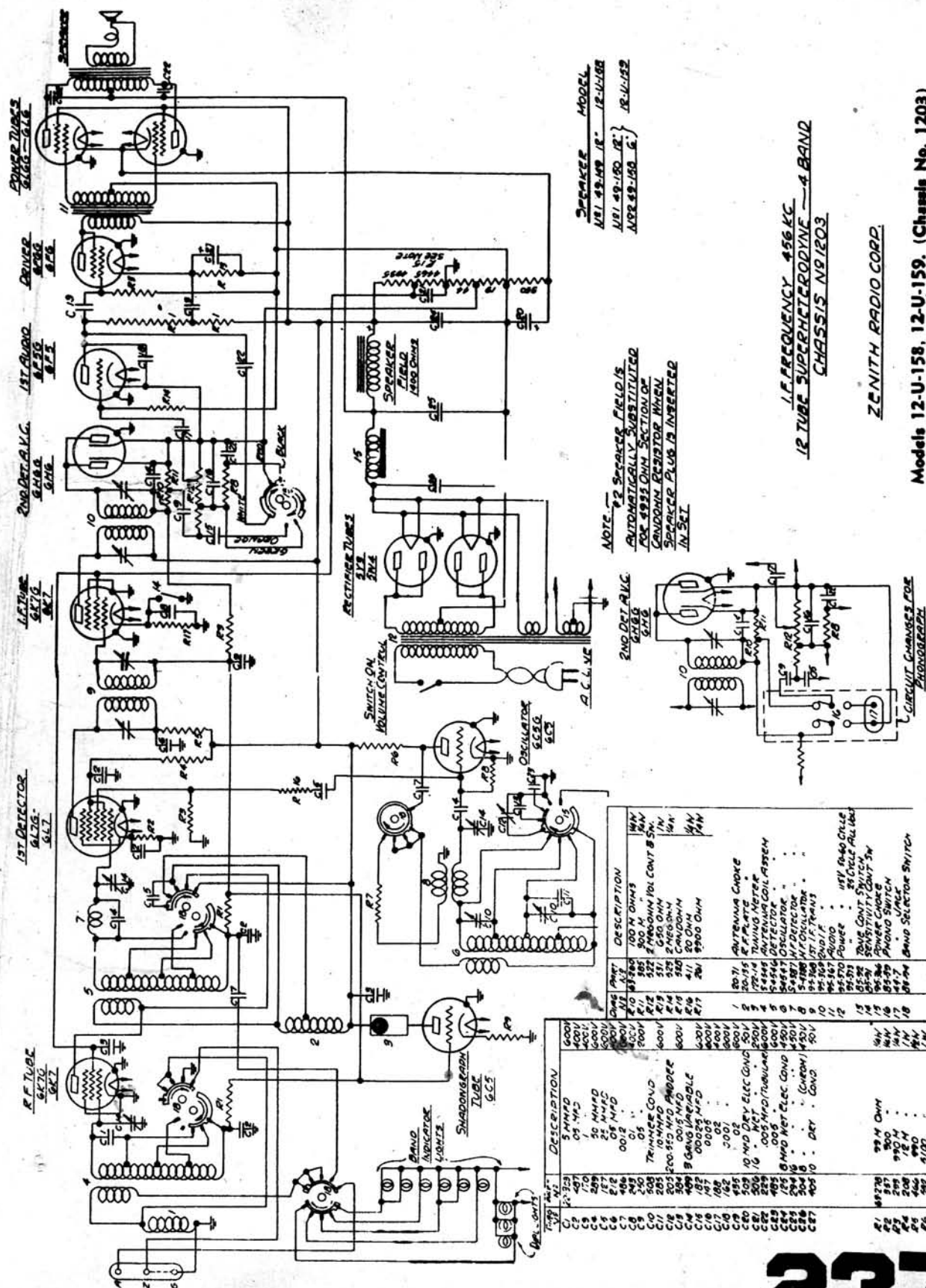
L.F. FREQUENCY 456 K.C.
 12 TUBE SUPERHETERODYNE
 9 BAND
 CHASSIS NO. 1204
 ZENITH RADIO CORP.

MODEL	SPRING RATE SIZE
12-S-205	49-105
12-S-232	49-105
12-S-245	49-105
12-S-265	49-105
12-S-267	49-105
12-S-266	49-105
12-S-268	49-105

DWG. NO.	PART NO.	DESCRIPTION	QTY.	DESCRIPTION	QTY.	DESCRIPTION
C1	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL	1	1W ± 20%
C2	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C3	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C4	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C5	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C6	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C7	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C8	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C9	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C10	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C11	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C12	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C13	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C14	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C15	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C16	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C17	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C18	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C19	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C20	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%
C21	27-575	4 MFD. ELECTROLYTIC 350V	1	OSC. COIL & SHIELD ASSEMBLY	1	1W ± 20%

DWG. NO.	PART NO.	DESCRIPTION
A	18T	I.F. TRANSFORMER PRIMARY
B	18T	I.F. TRANSFORMER SECONDARY
C	18T	I.F. TRANSFORMER TAPPING POINT
D	18T	I.F. TRANSFORMER SHIELD
E	18T	I.F. TRANSFORMER CORE
F	18T	I.F. TRANSFORMER WINDING
G	18T	I.F. TRANSFORMER BRACKET
H	18T	I.F. TRANSFORMER SCREW
I	18T	I.F. TRANSFORMER NUT
J	18T	I.F. TRANSFORMER WASHER
K	18T	I.F. TRANSFORMER GASKET
L	18T	I.F. TRANSFORMER SPRING
M	18T	I.F. TRANSFORMER PLATE
N	18T	I.F. TRANSFORMER HOUSING
O	18T	I.F. TRANSFORMER COVER
P	18T	I.F. TRANSFORMER GROUND
Q	18T	I.F. TRANSFORMER ISOLATION
R	18T	I.F. TRANSFORMER SUPPORT
S	18T	I.F. TRANSFORMER ALIGNMENT
T	18T	I.F. TRANSFORMER TUNING
U	18T	I.F. TRANSFORMER RANGE
V	18T	I.F. TRANSFORMER BAND
W	18T	I.F. TRANSFORMER FILTER
X	18T	I.F. TRANSFORMER ATTENUATION
Y	18T	I.F. TRANSFORMER EQUALIZATION
Z	18T	I.F. TRANSFORMER DEINTERMODULATION
AA	18T	I.F. TRANSFORMER INTERMODULATION
AB	18T	I.F. TRANSFORMER SPURIOUS
AC	18T	I.F. TRANSFORMER HARMONICS
AD	18T	I.F. TRANSFORMER ALIASING
AE	18T	I.F. TRANSFORMER JITTER
AF	18T	I.F. TRANSFORMER CLOCK
AG	18T	I.F. TRANSFORMER SYNC
AH	18T	I.F. TRANSFORMER VSYNC
AI	18T	I.F. TRANSFORMER HSYNC
AJ	18T	I.F. TRANSFORMER HBLANK
AK	18T	I.F. TRANSFORMER HLINE
AL	18T	I.F. TRANSFORMER HSYNC
AM	18T	I.F. TRANSFORMER HBLANK
AN	18T	I.F. TRANSFORMER HLINE
AO	18T	I.F. TRANSFORMER HSYNC
AP	18T	I.F. TRANSFORMER HBLANK
AQ	18T	I.F. TRANSFORMER HLINE
AR	18T	I.F. TRANSFORMER HSYNC
AS	18T	I.F. TRANSFORMER HBLANK
AT	18T	I.F. TRANSFORMER HLINE
AU	18T	I.F. TRANSFORMER HSYNC
AV	18T	I.F. TRANSFORMER HBLANK
AW	18T	I.F. TRANSFORMER HLINE
AX	18T	I.F. TRANSFORMER HSYNC
AY	18T	I.F. TRANSFORMER HBLANK
AZ	18T	I.F. TRANSFORMER HLINE
BA	18T	I.F. TRANSFORMER HSYNC
BB	18T	I.F. TRANSFORMER HBLANK
BC	18T	I.F. TRANSFORMER HLINE
BD	18T	I.F. TRANSFORMER HSYNC
BE	18T	I.F. TRANSFORMER HBLANK
BF	18T	I.F. TRANSFORMER HLINE
BG	18T	I.F. TRANSFORMER HSYNC
BH	18T	I.F. TRANSFORMER HBLANK
BI	18T	I.F. TRANSFORMER HLINE
BJ	18T	I.F. TRANSFORMER HSYNC
BK	18T	I.F. TRANSFORMER HBLANK
BL	18T	I.F. TRANSFORMER HLINE
BM	18T	I.F. TRANSFORMER HSYNC
BN	18T	I.F. TRANSFORMER HBLANK
BO	18T	I.F. TRANSFORMER HLINE
BP	18T	I.F. TRANSFORMER HSYNC
BQ	18T	I.F. TRANSFORMER HBLANK
BR	18T	I.F. TRANSFORMER HLINE
BS	18T	I.F. TRANSFORMER HSYNC
BT	18T	I.F. TRANSFORMER HBLANK
BU	18T	I.F. TRANSFORMER HLINE
BV	18T	I.F. TRANSFORMER HSYNC
BW	18T	I.F. TRANSFORMER HBLANK
BX	18T	I.F. TRANSFORMER HLINE
BY	18T	I.F. TRANSFORMER HSYNC
BZ	18T	I.F. TRANSFORMER HBLANK
CA	18T	I.F. TRANSFORMER HLINE
CB	18T	I.F. TRANSFORMER HSYNC
CC	18T	I.F. TRANSFORMER HBLANK
CD	18T	I.F. TRANSFORMER HLINE
CE	18T	I.F. TRANSFORMER HSYNC
CF	18T	I.F. TRANSFORMER HBLANK
CG	18T	I.F. TRANSFORMER HLINE
CH	18T	I.F. TRANSFORMER HSYNC
CI	18T	I.F. TRANSFORMER HBLANK

MANUAL OF MOST-OFTEN-NEEDED RADIO DIAGRAMS



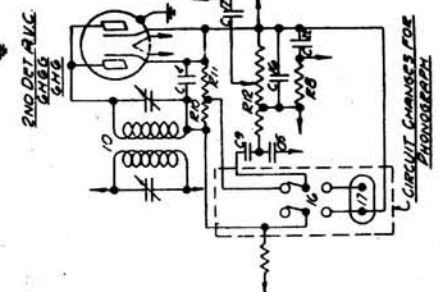
SPEAKER MODEL
 181 49-189 18" 12-U-158
 181 49-180 18" 12-U-152
 182 49-183 6" 12-U-152

NOTE: #2 SPEAKER FIELD IS AUTOMATICALLY SUBSTITUTED FOR 4955 OHM SECTION OF CATHOD RESISTOR WHEN SPEAKER PLUS IS INSERTED IN SET.

**I.F. FREQUENCY 456 KC
 12 TUBE SUPERHETERODYNE 4-BAND
 CHASSIS NO. 1203**

ZENITH RADIO CORP.

Models 12-U-158, 12-U-159. (Chassis No. 1203)



TYPE	VAL.	DESCRIPTION	TYPE	VAL.	DESCRIPTION
C1	100	100 M OHMS	8	50	50 MFD
C2	100	100 M OHMS	9	50	50 MFD
C3	100	100 M OHMS	10	50	50 MFD
C4	100	100 M OHMS	11	50	50 MFD
C5	100	100 M OHMS	12	50	50 MFD
C6	100	100 M OHMS	13	50	50 MFD
C7	100	100 M OHMS	14	50	50 MFD
C8	100	100 M OHMS	15	50	50 MFD
C9	100	100 M OHMS	16	50	50 MFD
C10	100	100 M OHMS	17	50	50 MFD
C11	100	100 M OHMS	18	50	50 MFD
C12	100	100 M OHMS	19	50	50 MFD
C13	100	100 M OHMS	20	50	50 MFD
C14	100	100 M OHMS	21	50	50 MFD
C15	100	100 M OHMS	22	50	50 MFD
C16	100	100 M OHMS	23	50	50 MFD
C17	100	100 M OHMS	24	50	50 MFD
C18	100	100 M OHMS	25	50	50 MFD
C19	100	100 M OHMS	26	50	50 MFD
C20	100	100 M OHMS	27	50	50 MFD
C21	100	100 M OHMS	28	50	50 MFD
C22	100	100 M OHMS	29	50	50 MFD
C23	100	100 M OHMS	30	50	50 MFD
C24	100	100 M OHMS	31	50	50 MFD
C25	100	100 M OHMS	32	50	50 MFD
C26	100	100 M OHMS	33	50	50 MFD
C27	100	100 M OHMS	34	50	50 MFD
C28	100	100 M OHMS	35	50	50 MFD
C29	100	100 M OHMS	36	50	50 MFD
C30	100	100 M OHMS	37	50	50 MFD
C31	100	100 M OHMS	38	50	50 MFD
C32	100	100 M OHMS	39	50	50 MFD
C33	100	100 M OHMS	40	50	50 MFD
C34	100	100 M OHMS	41	50	50 MFD
C35	100	100 M OHMS	42	50	50 MFD
C36	100	100 M OHMS	43	50	50 MFD
C37	100	100 M OHMS	44	50	50 MFD
C38	100	100 M OHMS	45	50	50 MFD
C39	100	100 M OHMS	46	50	50 MFD
C40	100	100 M OHMS	47	50	50 MFD
C41	100	100 M OHMS	48	50	50 MFD
C42	100	100 M OHMS	49	50	50 MFD
C43	100	100 M OHMS	50	50	50 MFD
C44	100	100 M OHMS	51	50	50 MFD
C45	100	100 M OHMS	52	50	50 MFD
C46	100	100 M OHMS	53	50	50 MFD
C47	100	100 M OHMS	54	50	50 MFD
C48	100	100 M OHMS	55	50	50 MFD
C49	100	100 M OHMS	56	50	50 MFD
C50	100	100 M OHMS	57	50	50 MFD
C51	100	100 M OHMS	58	50	50 MFD
C52	100	100 M OHMS	59	50	50 MFD
C53	100	100 M OHMS	60	50	50 MFD
C54	100	100 M OHMS	61	50	50 MFD
C55	100	100 M OHMS	62	50	50 MFD
C56	100	100 M OHMS	63	50	50 MFD
C57	100	100 M OHMS	64	50	50 MFD
C58	100	100 M OHMS	65	50	50 MFD
C59	100	100 M OHMS	66	50	50 MFD
C60	100	100 M OHMS	67	50	50 MFD
C61	100	100 M OHMS	68	50	50 MFD
C62	100	100 M OHMS	69	50	50 MFD
C63	100	100 M OHMS	70	50	50 MFD
C64	100	100 M OHMS	71	50	50 MFD
C65	100	100 M OHMS	72	50	50 MFD
C66	100	100 M OHMS	73	50	50 MFD
C67	100	100 M OHMS	74	50	50 MFD
C68	100	100 M OHMS	75	50	50 MFD
C69	100	100 M OHMS	76	50	50 MFD
C70	100	100 M OHMS	77	50	50 MFD
C71	100	100 M OHMS	78	50	50 MFD
C72	100	100 M OHMS	79	50	50 MFD
C73	100	100 M OHMS	80	50	50 MFD
C74	100	100 M OHMS	81	50	50 MFD
C75	100	100 M OHMS	82	50	50 MFD
C76	100	100 M OHMS	83	50	50 MFD
C77	100	100 M OHMS	84	50	50 MFD
C78	100	100 M OHMS	85	50	50 MFD
C79	100	100 M OHMS	86	50	50 MFD
C80	100	100 M OHMS	87	50	50 MFD
C81	100	100 M OHMS	88	50	50 MFD
C82	100	100 M OHMS	89	50	50 MFD
C83	100	100 M OHMS	90	50	50 MFD
C84	100	100 M OHMS	91	50	50 MFD
C85	100	100 M OHMS	92	50	50 MFD
C86	100	100 M OHMS	93	50	50 MFD
C87	100	100 M OHMS	94	50	50 MFD
C88	100	100 M OHMS	95	50	50 MFD
C89	100	100 M OHMS	96	50	50 MFD
C90	100	100 M OHMS	97	50	50 MFD
C91	100	100 M OHMS	98	50	50 MFD
C92	100	100 M OHMS	99	50	50 MFD
C93	100	100 M OHMS	100	50	50 MFD

