

Philco Radio & Television Corp.

	Model: 112	Chassis:	Year: Pre October 1937
	Power:	Circuit:	IF:
	Tubes:		
	Bands:		

Resources

[Riders Volume 2 - PHILCO 2-6](#)

[Radio College Of Canada - PHILCO 9](#)

[Riders Volume 8 - PHILCO 8-10](#)

[Radio College Of Canada - PHILCO 23](#)

[Riders Volume 1 - PHILCO 1-25](#)

[Riders Volume 1 - PHILCO 1-26](#)

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Numbering of Philco Coils

For the purpose of identification, Philco coils are being code numbered. These numbers are stamped upon the mounting bracket before the part leaves the National Service Station. The following is a list of these coils (Dated Jan. 1932)

KEY NO. IN SERVICE BULLETIN DIAGRAM

CODE NO.	PART NO.	USED IN MODELS	KEY NO. IN SERVICE BULLETIN DIAGRAM
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1	3075A	511, 86, 87	○○○
2	3075B	511, 86, 87	○○○
3	3506B	65	○
4	3506A	65	○
5	3744A	95, 96	○○
6	3744B	95, 96	○○
7	3744C	95, 96	○○
8	3744D	95, 96	○○
9	3834A	90 (Pentode Output)	○
10	3834B	76, 77, 40, 41	○○○○
11	3834C	76, 77, 40, 41	○○○○
12	3834D	20, 21	○○○○
13	3834E	20, 21	○○○○
14	3834F	111, 112	○○○○
15	3834G	111, 112	○○○○
16	3834H	111, 112	○○○○
17	3834I	111, 112	○○○○
18	3834J	111, 112	○○○○
19	3834K	46, 46E	○○○○
20	3834L	46, 46E	○○○○
21	4182A	30	○
22	4182B	30	○
23	03014	90 (all Models)	○○
24	03015	90 (all Models)	○○
25	03016	90 (all Models)	○○
26	03052	70, 35	○○
27	03053	70, 35	○○
28	03253	50	○
29	03254	50	○
30	03320	35	○
31	03321	35	○
32	03360	90 (Pentode Output)	○
33	03013	90 (45's Output)	○
34	03009	90 (all Models), 35	○
35	03038	111, 112	○○
36	03039	111, 112	○○
37	03040	111, 112	○○
38	03091	70, 35	○○
39	03092	70, 35	○○
40	03143	90 (45's Output)	○
41	03784	45, 470, 480	○
42	03850	51	○
43	03881	51	○
44	03882	51	○
45	03887	51	○
46	03887	51	○
47	03886	51	○

Coil Numbering Standard Compensating Condensers

PHILCO RADIO & TELEVISION CORP.

Standard Compensating Condensers

The various compensating condensers used in the models 35, 70, 270, 370, 90, 112, and 212 have been changed so as to include a bakelite mounting board on which the code letter of the condenser appears. In the case of the I. F. compensating condensers, which have been used in conjunction with a parallel fixed condenser, the new compensating condensers have been increased in capacity so that the fixed condensers are no longer required. For replacement purposes, if desired, the new compensating condensers can be substituted on earlier sets for the earlier combination of a fixed and an adjustable condenser.

The low frequency compensating condensers have been changed with respect to the bakelite mounting, but their capacity remains unchanged, thereby requiring the parallel fixed condenser as in the past.

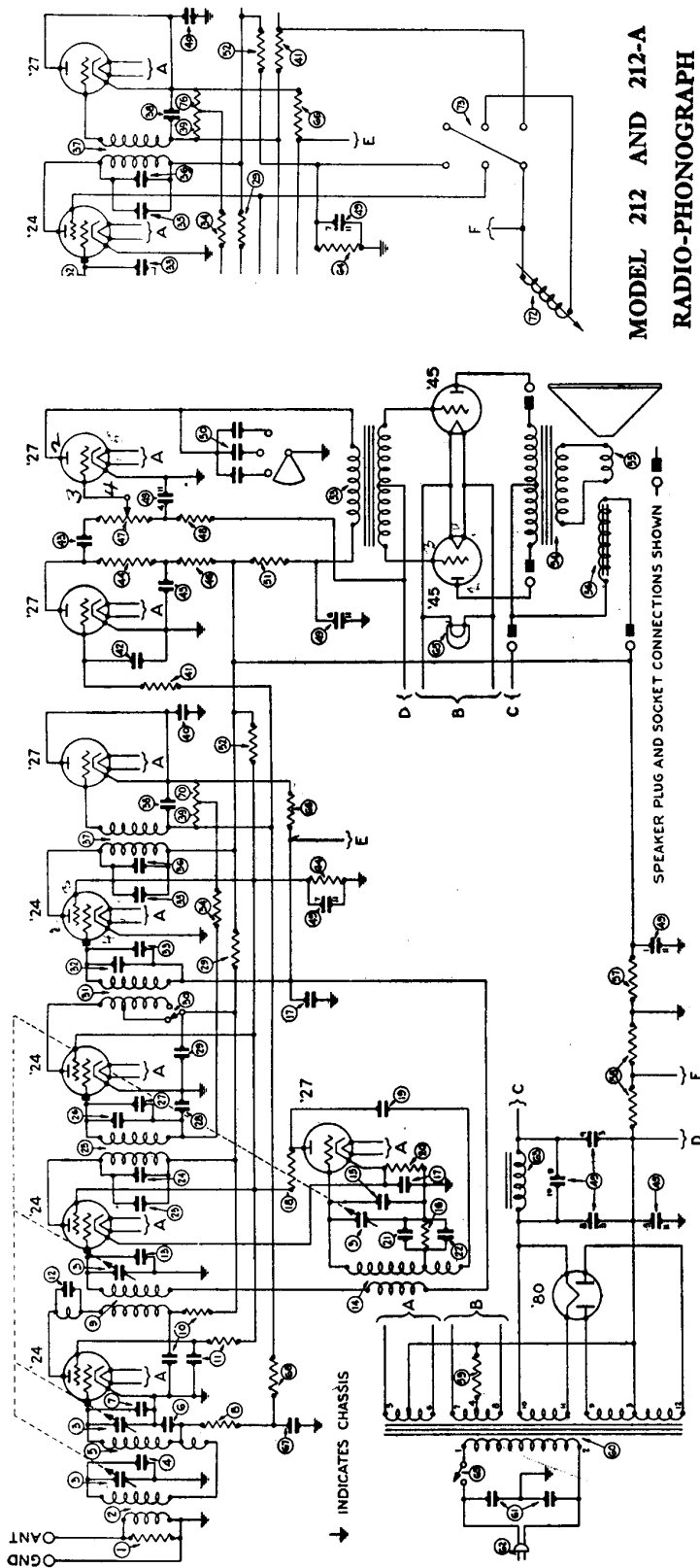
All of these new condensers can be identified by the letter which is stamped on the bakelite mounting board. For example part 04000-E has the letter E stamped over the surface of the mounting board; part 04000-F has the letter F stamped on the board.

The following table lists the part numbers of the various new condensers, their identification code letter, capacity range, where used, the superseded part number, and the part number of the parallel fixed condenser when one is still used.

(#98 - Dated Sept. 1931)

Part Number	Identification Code Letter	Capacity Range Mmf.	Used on Models	Supersedes	Used with Fixed Condenser
04000-B	B	40-250	90 (Early and Late)	03050	4520 (700 mmf.)
04000-D	D	6-50	112, 212	3772-A	—
04000-E	E	5-30	112, 212	3968-A	—
04000-F	F	40-250	112, 212 370 70, 270	3772-B 03120	4520 (700 mmf.) 5120 (410 mmf.)
04000-H	H	40-180	35 (70*, 270*, 370* 90* early)	03249 03051	5120 (410 mmf.) —
04000-J	J	40-180	(70* 270*, 370*, 212* 112*, 90* early)	3772-C	—
04000-K	K	30-140	70*, 370*	03061	—
04000-L	L	30-140	270*	03262	—
04000-M	M	15-130	112*	3772-D	—
			35*	03411	—

*FIXED PARALLEL CONDENSER NOT REQUIRED



Printed in Canada

DATA SHEET

MODEL 212 AND 212-A RADIO-PHONOGRAPH

Model 112 Condenser Block Part No. 3754

.05
.05 and 250 Ohm Resistor
.25 (two sections)
.00011
.0007
.05
.05 and 250 Ohm Resistor
.00005
.5
.00025
.015
.05
.015 (two sections)
.05

Models 112 and 112-A Receivers

1931-32 IF 175 Kc

FRONT OF CHASSIS

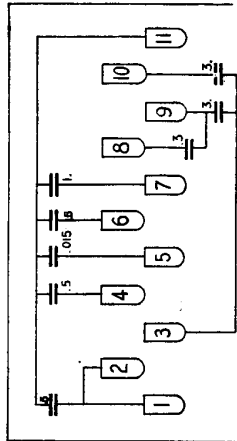
RECT ● RF ● OK ● 1DET 1HF ● 2IF ● DET-AMP ● 1AF ●

Tube	Circuit	Plate Volts	Screen Grid Volts*	Control Grid Volts	Cathode Volts	Plate Milli-Amperes	Screen-Grid Milli-Amperes †
1st R. F.	1st R. F.	190	60	2	5	1.7	1.75
Osc.	Osc.	145	62	7	7	1.6	1.6
1st Det.	1st Det.	180	65	4.6	8	1.5†	1.5
2nd I. F.	2nd I. F.	185	82	2.2	5	1.5	1.7
1st A. F.	1st A. F.	35	4	4	5	20†	1.85
Det. Amp.	Det. Amp.	95	1.2	50	5	32.5	32.5
2nd A. F.	2nd A. F.	255	50	50	5	50/Plate	50/Plate
Rect.	Rect.	255	50	50	5	50/Plate	50/Plate

*Read with C 100 Scale.
†Read with 20 Mil. Scale.
‡Read with 2 Mil. Scale.

Note—Volume Control Off; Station Selector turned to Low Frequency End; Range Switch set in "Normal" Position.

Model 112-A Condenser Block Part No. 3755



—Courtesy Philco Products Ltd. of Canada

MODELS 15, 111, 112 (Above
Ser. #174001), 211
212, 211A, 212A
MODELS 22, 22L, 71, 270, 370

PHILCO RADIO & TELEV. CORP.

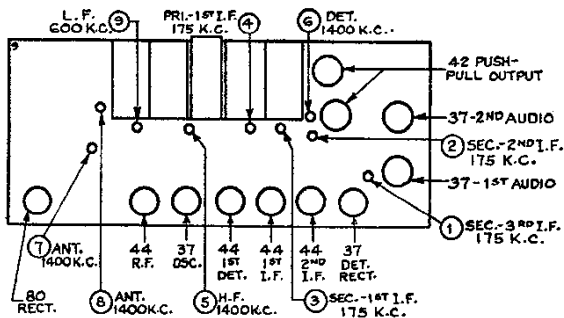
MODELS 35, 35B, 36, 37
Alignment, Trimmers

MODEL NOS. 15, 111, 112, 211, 212

Signal Generator Connection	Signal Generator Frequency	Dial Position	Wave Band Switch Position	Trimmer Number	Output Signal
Remove grid clip from 1st det.					
1st det.	175 k.c.	55	...	1	Max.
"	"	"	...	2	Max.
"	"	"	...	3	Max.
"	"	"	...	4	Max.
Connect grid clip to 1st det.					
Ant.**	1400 k.c.	140	...	5	Max.
"	"	"	...	6	Max.
"	"	"	...	7	Max.
"	"	"	...	8	Max.
"	600 k.c.	60	...	9	Max.**
"	1400 k.c.	140	...	5	Max.

* While rocking.

** Connect 200-mmf. condenser between signal generator and antenna post, at the antenna post.



MODEL NOS. 35, 36

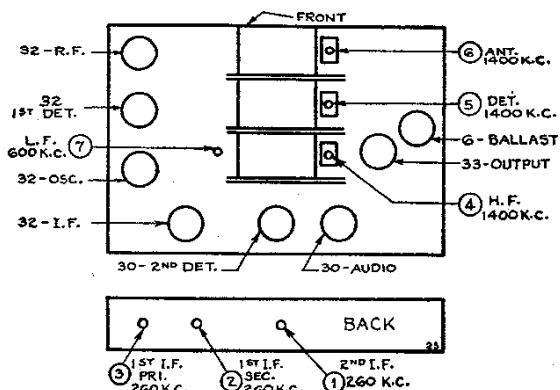
Signal Generator Connection	Signal Generator Frequency	Dial Position	Trimmer Number	Output Signal
Remove grid clip from 1st det.				
Control grid of 1st det.	260 k.c.	55	1	Max.
"	"	"	2	Max.
"	"	"	3	Max.
Connect grid clip to 1st det.				
Ant.*	1400 k.c.	140	4	Max.
"	"	"	5	Max.
"	"	"	6	Max.
"	600 k.c.	60	7	Max.**
"	1400 k.c.	140	4	Max.

Note 1.—(1), (2), and (3) are accessible at rear of chassis.

Note 2.—(7) is accessible through hole from top of chassis.

* Connect a 200-mmf. condenser between signal generator and antenna post of set, at the antenna post.

** While rocking.

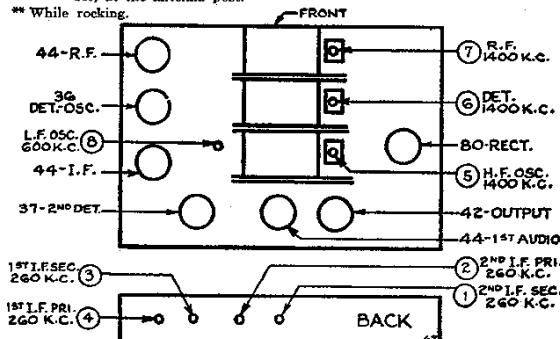


MODEL NOS. 71, 270, 370, 22, 22L

Signal Generator Connection	Signal Generator Frequency	Dial Position	Wave Band Switch Position	Trimmer Number	Output Signal
Remove grid clip from det.-osc.					
Control grid of det.-osc.	260 k.c.	55	...	1	Max.
"	"	"	...	2	Max.
"	"	"	...	3	Max.
"	"	"	...	4	Max.
Connect grid clip to det.-osc.					
Ant.	1400 k.c.	140	...	5	Max.
"	"	"	...	6	Max.
"	"	"	...	7	Max.
"	600 k.c.	60	...	8	Max.**
"	1400 k.c.	140	...	5	Max.

* Connect a 200-mmf. condenser between signal generator and antenna post of set, at the antenna post.

** While rocking.

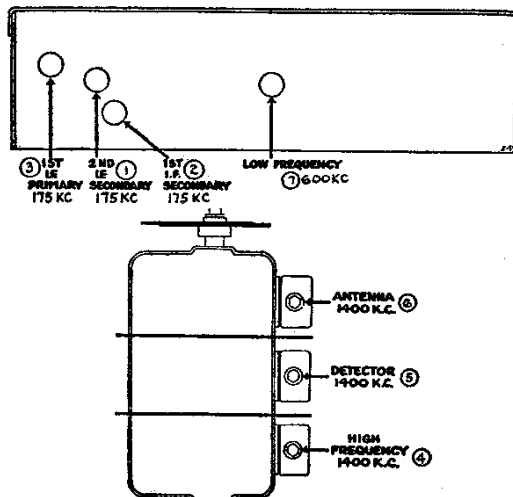


MODEL NO. 37

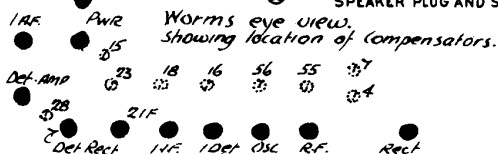
Signal Generator Connection	Signal Generator Frequency	Dial Position	Trimmer Number	Output Signal
Remove grid clip from 1st det.				
Control grid of 1st det.	175 k.c.	55	1	Max.
"	"	"	2	Max.
"	"	"	3	Max.
Connect grid clip to 1st det.				
Ant.*	1400 k.c.	140	4	Max.
"	"	"	5	Max.
"	"	"	6	Max.
"	600 k.c.	60	7	Max.**
"	1400 k.c.	140	4	Max.

* Connect a 200-mmf. condenser between the signal generator and the antenna post of the set, at the antenna post.

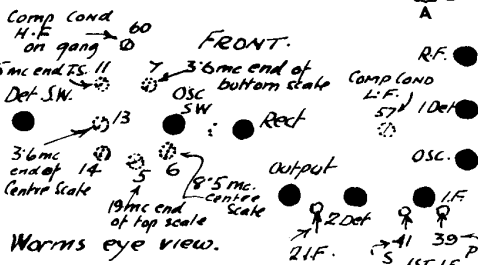
** While rocking.



above serial 174001



Models 470-470a 1932 I.F. 260 Kc.



DATA SHEET

COURTESY

PHILCO-23
PRODUCTS LTD.

PHILCO RADIO & TELEVISION CORP.

MODEL 112, 112-A
Below 174,001
Voltage
Electrical Values

Models 112 and 112-A Receivers

Model 112 Receivers are for operation on 100-130 volt, 50-60 cycle AC lines
 Model 112-A Receivers are for operation on 100-130 volt, 25-60 cycle AC lines

Table 1—Tube Socket Readings Taken with AC Set Tester AC Line—115 volts

Tube		Filament Volts	Plate Volts	Screen Grid Volts*	Control Grid Volts	Cathode Volts	Plate Milli- Amperes	Screen-Grid Milli- Amperes †
Type	Circuit							
24	1st R. F.	2.1	190	60	.2	5	1.7	1.75
27	Osc.	2.1	45	..	.7	7	1.6	
24	1st Det.	2.1	180	62	4.6	8	.5†	.15
24	1st I. F.	2.1	185	65	...	5	1.5	1.7
24	2nd I. F.	2.1	190	82	2.2	5	3	1.85
27	Det. Rect.	2.2	...	..	.4	.5		
27	Det. Amp.	2.2	35	..	.4	5	.20†	
27	1st A. F.	2.1	95	..	1.2	5	4.	
45	2nd A. F.	2.2	255	..	50	...	32.5	
45	2nd A. F.	2.2	255	..	50	...	32.5	
80	Rect.	4.9	...	..	...	...	50/Plate	

*Read with C 100 Scale.

†Read with 20 Mil. Scale.

‡Read with 2 Mil. Scale.

Note—Volume Control Off; Station Selector turned to Low Frequency End; Range Switch set in "Normal" Position.

Table 2—Power Transformer Voltages

Terminals	A.C. Volts	
1—2		Primary
3		Center Tap 80 Tube
4		Center Tap 45 Tubes
5—6	2.67	Heaters for 24 and 27 Tubes
7—8	2.68	Filaments for 45 Tubes
9—12	750.	Plates 80 Tube
10—11	5.0	Filament 80 Tube
Rubber Covered Lead		Center Tap for 24 and 27 Tubes

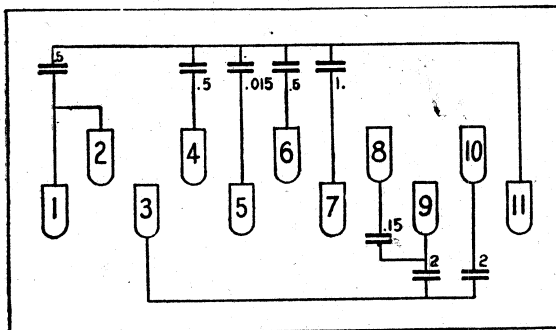
Table 3—Condenser Data
 (Other Than Filter Condenser)

No. on Figs.	CAPACITY	COLOR
6	.05	Bakelite Container
10 11	.05 and 250 Ohm Resistor	Bakelite Container
17	.25 (two sections)	Metal Container
19 23 27 33 38	.00011	Blue, Golden Yellow
21	.0007	White, Golden Yellow
28	.05	Bakelite Container
29	.05 and 250 Ohm Resistor	Bakelite Container
35	.00005	Light Blue, White
40	.5	Metal Container
42	.00025	Yellow
43	.015	Bakelite Container
45	.05	Bakelite Container
61	.015 (two sections)	Bakelite Container
67	.05	Bakelite Container

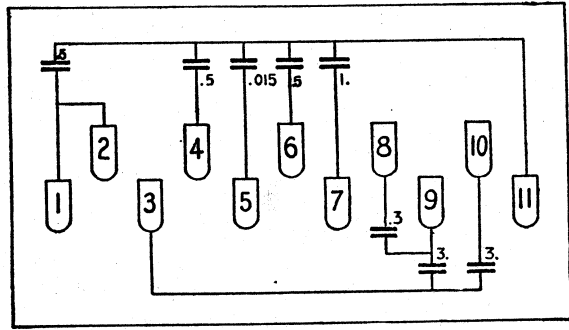
Table 4—Resistor Data

No. on Figs.	Power (Watts)	Resist- ance	Body	COLOR Tip	Dot
20	1.	1,000	Brown	—Black	—Red
1	.5	10,000	Brown	—Black	—Orange
18	1.	13,000	Brown	—Orange	—Orange
51 52	1.	25,000	Red	—Green	—Orange
15 29 70	.5	50,000	Green	—Brown	—Orange
48 64	1.	70,000	Violet	—Black	—Orange
8 41 66 68	.5	100,000	White	—White	—White
46	1.	250,000	Red	—Yellow	—Yellow
34	.5	500,000	Yellow	—White	—Yellow
44	1.	500,000	Yellow	—White	—Yellow
58		70	Flat Wire Wound (two sections)		
59		800	Short Tubular		
57		10,000	Long Tubular		

Model 112 Condenser Block Part No. 3754

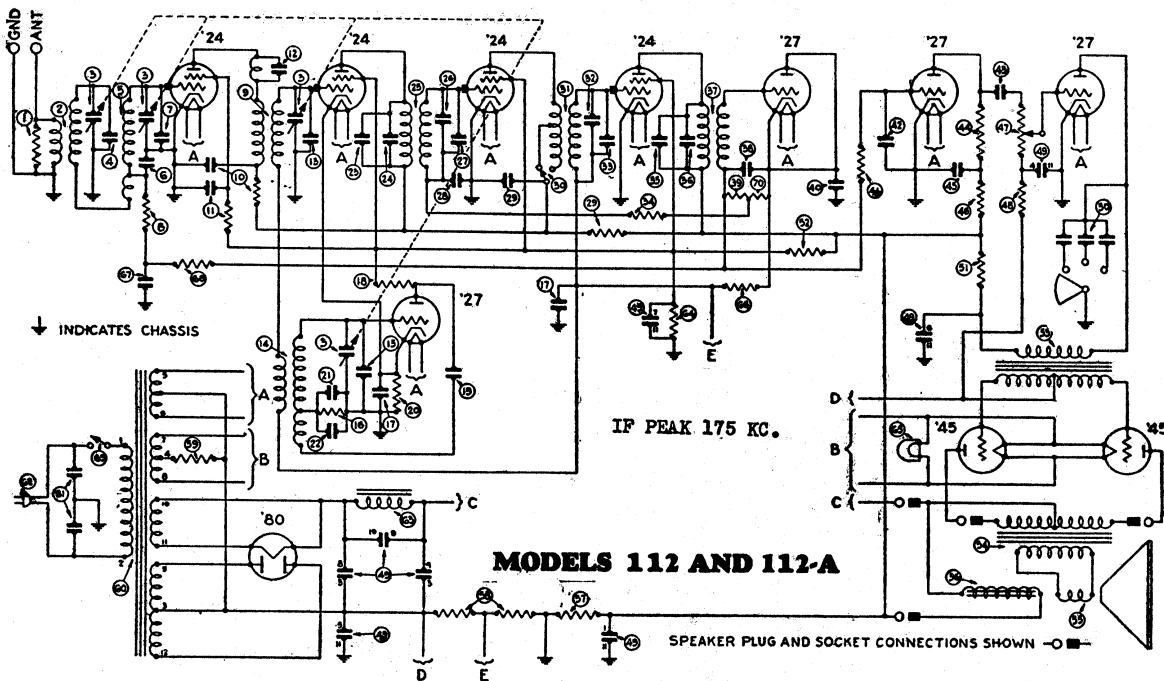


Model 112-A Condenser Block Part No. 3755



PHILCO RADIO & TELEVISION CORP.

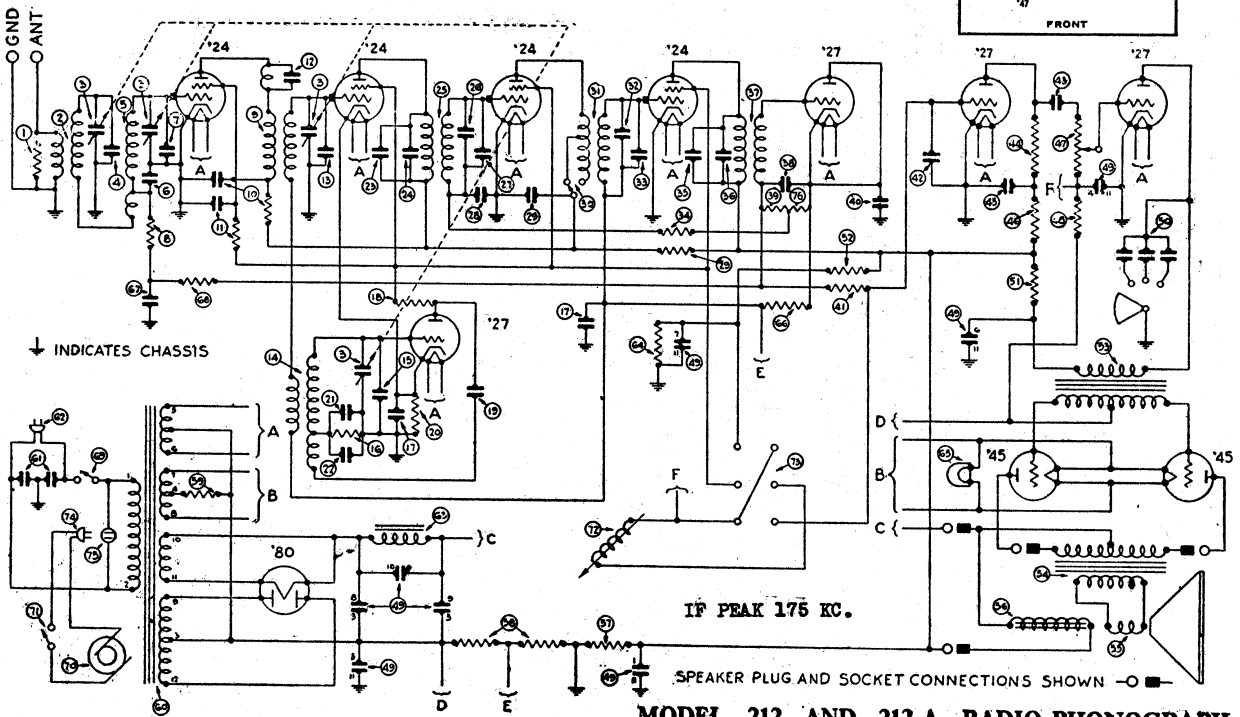
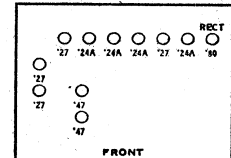
MODEL 112, 112-A
Below #174,001
MODEL 212, 212-A
Schematics

**SPECIAL NOTE**

Resistor (70) in models 112, 112-A is (76) in models 212, 212-A

For voltage data and other values applying to models 212, 212-A, see data for models 112, 112-A

Models 112, 112A, 112E, 212, 212E



PHILCO RADIO & TELEVISION CORP.

MODEL 112, 112-A
Below # 174,001
Parts List

MODELS 112 AND 112-A

This parts list for models 112, 112-A is applicable to the phonograph combination models 212, 212-A. However, the following changes and additions must be recorded.

Resistor (70) in models 112, 112-A is changed to resistor (76) in models 212, 212-A. In addition the following are also added to the list in connection with models 212, 212-A

Ⓐ	Motor (50 cycles).....	5333	Ⓔ	Radio-Phono Switch.....	4514
	Motor (60 cycles).....	4784	Ⓕ	Cord Connector Plug.....	4091
	Motor (25 cycles).....	4785	Ⓖ	Cord Connector Socket...	4124
Ⓒ	Phonograph On-Off Switch	4748		Turn Table.....	4735
Ⓓ	Pick-up Head.....	4853			

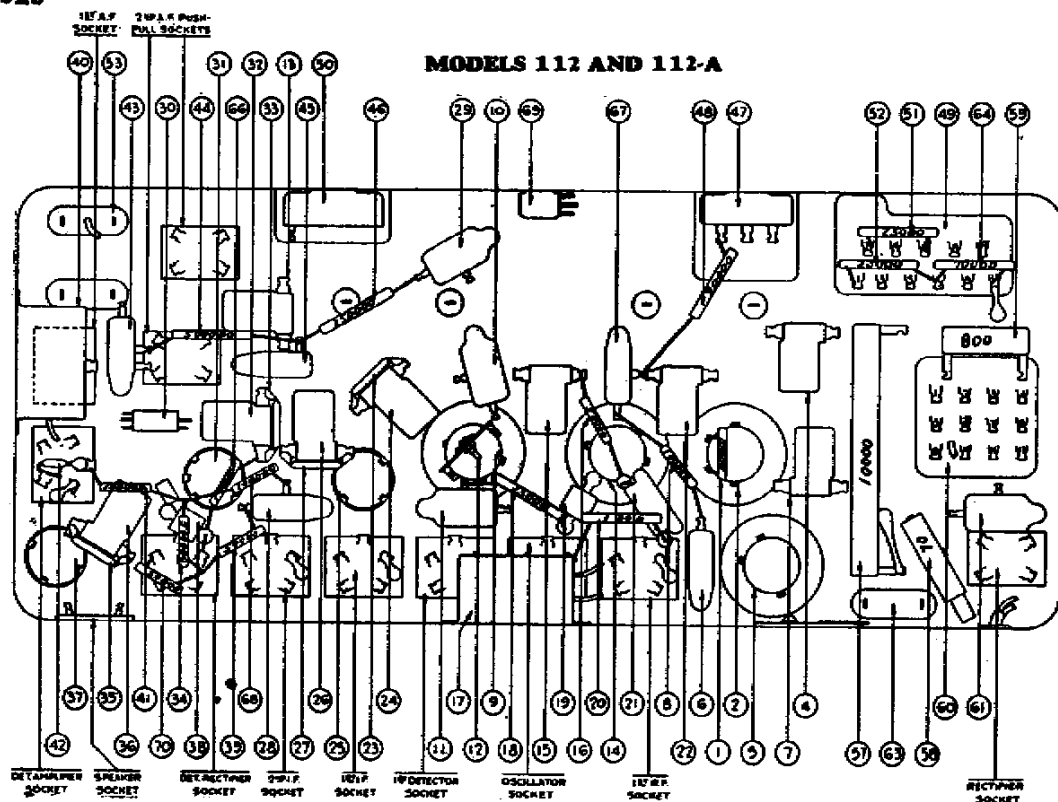
RANGE SWITCH

The Range Switch, No. Ⓔ in Fig. 3, is placed in the NORMAL position when the Receiver is shipped. This gives great distance range and is the setting which will be found most satisfactory in practically all locations. In places far from broadcasting stations, however, the Range Switch may be changed to the MAXIMUM position. This will make the Receiver super-sensitive and will give extreme distance range. Do not use the Range Switch in the MAXIMUM position if there are one or more powerful broadcasting stations near you. In any location there will be less noise between stations with the Range Switch in the NORMAL position.

REPLACEMENT PARTS

No. on Figs. 3 and 4	Description	Part No.	No. on Figs. 3 and 4	Description	Part No.
①	Resistor—10,000 Ohms	4412	Ⓐ	Condenser—.5	3583
②	1st R. F. Coil	3884-J	Ⓐ	Resistor—100,000 Ohms	4411
③	Tuning Condenser	4000-D	Ⓐ	Condenser—.00025	3082
④	Compensating Condenser	3772-A	Ⓐ	Condenser—.015	3793-B
⑤	2nd R. F. Coil	3884-T	Ⓐ	Resistor—500,000 Ohms	3769
⑥	Condenser—.05	3615-L	Ⓐ	Condenser—.05	3615-S
⑦	Compensating Condenser	3968-A	Ⓐ	Resistor—250,000 Ohms	3768
⑧	Resistor—100,000 Ohms	4411	Ⓐ	Volume Control	4093
⑨	1st Detector Coil	3884-V	Ⓐ	Resistor—70,000 Ohms	3542
⑩	Condenser—.05 and 250 Ohms	3615-C	Ⓐ	B Filter Condenser Block—60 cycles	3754
⑪	Condenser—.05 and 250 Ohms	3615-C	Ⓐ	B Filter Condenser Block—25 cycles	3755
⑫	Coupling Condenser	3892-A	Ⓐ	Tone Control	4037-A
⑬	Compensating Condenser	3968-A	Ⓐ	Resistor—25,000 Ohms	3658
⑭	Oscillator Coil	3884-U	Ⓐ	Resistor—25,000 Ohms	3658
⑮	Compensating Condenser	3968-A	Ⓐ	Push-pull Input Transformer	3537
⑯	Resistor—50,000 Ohms	4518	Ⓐ	Push-pull Output Transformer	2848
⑰	Condenser—.25 double	3557	Ⓐ	Voice Coil and Cone Assembly	2794-B
⑱	Resistor—13,000 Ohms	3786	Ⓐ	Field Coil	2850
⑲	Condenser—.00011	4519	Ⓐ	B Resistor—10,000 Ohms	4532
⑳	Resistor—1,000 Ohms	4590	Ⓐ	C Resistor	3764
㉑	Condenser—.0007	4520	Ⓐ	C Resistor—800 Ohms	3763
㉒	Compensating Condenser	3772-B	Ⓐ	Power Transformer—60 cycles	4446
㉓	Condenser—.00011	4519	Ⓐ	Power Transformer—25 cycles	4447
㉔	Compensating Condenser	3772-C	Ⓐ	Condenser—.015 double	3793-E
㉕	1st I. F. Coil	4501-B	Ⓐ	A C Cord and Plug	L-943-A
㉖	Compensating Condenser	3772-C	Ⓐ	Filter Choke	3422
㉗	Condenser—.0001	4519	Ⓐ	Resistor—70,000 Ohms	3542
㉘	Condenser—.05	3615-J	Ⓐ	Pilot Lamp	3483
㉙	Condenser—.05 and 250 Ohms	3615-B	Ⓐ	Resistor—100,000 Ohms	4411
㉚	Range Switch	3116	Ⓐ	Condenser—.05	3615-D
㉛	2nd I. F. Coil	4501-C	Ⓐ	Resistor—100,000 Ohms	4411
㉜	Compensating Condenser	3772-C	Ⓐ	On-Off Switch	4095
㉝	Condenser—.00011	4519	Ⓐ	Resistor 50,000 Ohms	4518
㉞	Resistor—500,000 Ohms	4517	Ⓐ	Insulator for Part Nos. 3557-3583	4105
㉟	Condenser—.00005	4587	Ⓐ	Pilot Bracket Assembly	4027-A
㊱	Compensating Condenser	3772-D	Ⓐ	Bolt for Pilot Bracket Assembly	W-439
㊲	3rd I. F. Coil	4501-D	Ⓐ	Tone Control Nut	W-434
㊳	Condenser—.00011	4519	Ⓐ	By-pass Condenser Mounting Bolt	W-443
㊴	Resistor—50,000 Ohms	4518	Ⓐ	Bottom Shield Bolt	W-453
			Ⓐ	Chassis Mounting Bolt	W-468

MODELS 112 AND 112-A

[illegible]

Courtesy Nostalgia Air

If the Receiver is so far out of adjustment that the eighth harmonic of 175 K. C. is not audible, it will be necessary to set the oscillator for broadcast frequencies. Set the tuning control of the oscillator at approximately 1400 K. C. (as indicated in the data furnished with the instrument), then adjust the high frequency condenser for maximum signal in the output meter. Set the first and second antenna condensers for maximum signal in the output meter reducing the attenuator setting on the signal increases to prevent damage to the meter mechanism. Turn the center control of the oscillator to intermediate frequency and reset the tuning control of the oscillator to the 175 K. C. position and proceed as outlined above. Final adjustment must be made when the oscillator is set at exactly 175 K. C. in the intermediate position.

ANTENNA CONDENSERS - With the oscillator set at the original 175 K. C. position adjust the first and then the second antenna condenser for maximum reading in the output meter.

LOW FREQUENCY CONDENSER - Set the oscillator on broadcast position and tune to exactly 600 K. C. The oscillator signal should be received at 600 on the Receiver scale. Adjust the low frequency condenser until the maximum reading is obtained in the output meter with the Receiver set.

Using a Philco fibre wrench, part No. 3184, adjust the third I. F. condenser until the maximum reading is obtained in the output meter. Next, adjust the second I. F. condenser and then the secondary and primary condensers of the first I. F. stage for maximum reading on the meter. During these adjustments it may be necessary to reduce the signal strength by turning down the volume control of the receiver so that the needle will not be deflected beyond the end of the scale.

HIGH FREQUENCY CONDENSER - Remove the "A" terminal lead from the control grid of the first detector tube and replace the grid clip. Replace the tube shield. Connect the "A" terminal of the oscillator to the antenna post of the Receiver and the "G" terminal of the oscillator to the ground terminal of the chassis. Do not change the oscillator setting. Turn up the attenuator of the oscillator until it is all the way on. Set the Philco scale to approximately 140 (400 K. C.); set the **NORMAL - MAXIMUM** switch in the Maximum Position provided the Receiver is not too far out of adjustment the eighth harmonic of the 175 note will be heard at or near the 140 position of the scale. Set the station selector knob at exactly 148 and tune the high frequency condenser until the oscillator note is peaked at exactly 140 on the Receiver scale. Next adjust the detector condenser for maximum reading on the output meter.

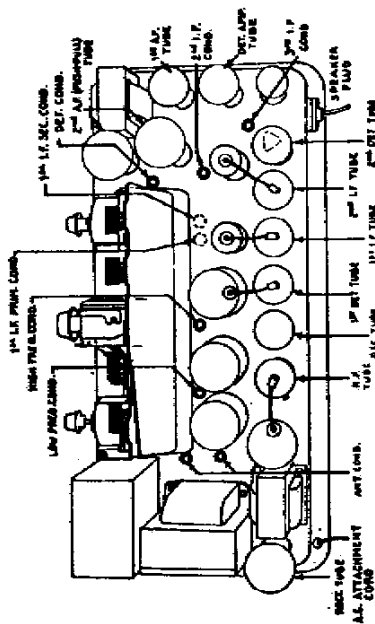
If the Receiver is so far out of adjustment that the eighth harmonic of 175 K. C. is not audible, it will be necessary to set the oscillator for broadcast frequencies. Set the tuning control of the oscillator at approximately 1400 K. C. (as indicated in the data furnished with the instrument), then adjust the high frequency condenser for maximum signal in the output meter. Set the first and second antenna condensers for maximum signal in the output meter reducing the attenuator setting as the signal increases to prevent damage to the meter mechanism. Turn the center control of the oscillator to intermediate frequency and reset the tuning control of the oscillator to the 175 K. C. position and proceed as outlined above. Final adjustment must be made when the oscillator is set at exactly 175 K. C. in the intermediate position.

ANTENNA CONDENSERS - With the oscillator set at the original 175 K. C. position adjust the first and then the second antenna condenser for maximum reading in the output meter.

LOW FREQUENCY CONDENSER - Set the oscillator on broadcast position and tune to exactly 600 K. C. The oscillator signal should be received at 100 on the Receiver scale. Adjust the low frequency condenser until the maximum reading is obtained in the output meter with the Receiver set, at 60.

Where it is necessary to replace the tuning scale on the Model 112 Super-heterodyne, put a mark opposite 55 on the tuning condenser drum. Remove the old scale and place the new one in position so that 55 is exactly opposite the above mark.

**ADJUSTING THE MODEL 112 SUPREMETRODYNE PLUS USING A
JEWELL 560 OSCILLATOR**



Set up the Receiver for operation using standard tubes, which you know are in good condition. Set the Normal - Maximum switch in the Normal position for the intermediate frequency adjustment. Connect the Jewell pattern 560 oscillator to the Receiver.

INTERMEDIATE FREQUENCY OR I. F. STAGES - Remove the tube shield, replace the control grid clip of the detector tube with the lead from the "A" terminal of the oscillator. The "G" terminal of the oscillator must be reconnected to the Receiver Chassis. Replace the tube shield on the chassis.

Turn on the filament control of the oscillator about one-half the total movement. The "A" Battery of the oscillator must be replaced when it is necessary to turn this control all the way on in order to obtain a signal. Turn the center switch to the intermediate position. The tuning control of the oscillator must be set so that the oscillator signal is exactly 175 K. C. This setting can be determined from calibration data furnished with the instrument.

turn the volume control of the receiver on full. Set the attenuator control so that an audible signal is received in the speaker. Connect the π and low terminals of the output meter to the voice coils of the speaker. Adjust the attenuator control so that not more than one-half full scale reading is obtained on the meter.

MODEL 112, 112-A
Above # 174,001
Electrical Values
Voltage

PHILCO RADIO & TELEVISION CORP.

Models 112 and 112-A Receivers

(Above Serial No. 174,001)

Model 112 Receivers are for operation on 115 volt, 50-60 cycle AC lines

Model 112-A Receivers are for operation on 115 volt, 25-60 cycle AC lines

Table 1—Tube Socket Readings taken with A.C. Set Tester A.C. Line—115 volts

Tube	Filament Volts	Plate Volts	Screen Grid Volts	Control Grid Volts	Cathode Volts	Plate Milli-amperes	Screen-Grid Milli-amperes
Type	Circuit						
25	1st R. F.	2.25	180	75	.2	5.0	4.0
27	2nd R. F.	2.25	180	75	.2	5.0	4.0
24	1st Det.	2.25	180	75	2.5	8.0	1.8
24	1st I. F.	2.25	180	75	2.5	8.0	1.8
24	2nd I. F.	2.25	180	75	2.5	8.0	1.8
27	Det. Rect.	2.25	180	75	2.5	8.0	1.8
27	Det. Amp.	2.25	180	75	2.5	8.0	1.8
47	1st A. F.	2.30	150	...	...	4.0	...
47	2nd A. F.	2.30	245	255	16.5	3.0	...
47	3rd A. F.	2.30	245	255	16.5	31**	...
80	h. q.	5.0	...	...	...	54/54	...

*80 Volt scale

**Special adapter must be used for this test.

Note—Volume control off; station selector turned to low frequency end; range switch set in "Normal" position.

Table 2—Power Transformer Voltages

Terminals	A.C. Volts	
1-2	115.	Primary
3-4	2.67	Heater for 24 and 27 Tubes
6		Not used
6-7	2.68	Filaments for 47 Tubes
10-12	750.	Plates 80 Tube
11		Center Tap 80 Tube
8-9	5.0	Filament 80 Tube
Center Tap		Center Tap for 24 and 27 Tubes

Rubber Covered Lead

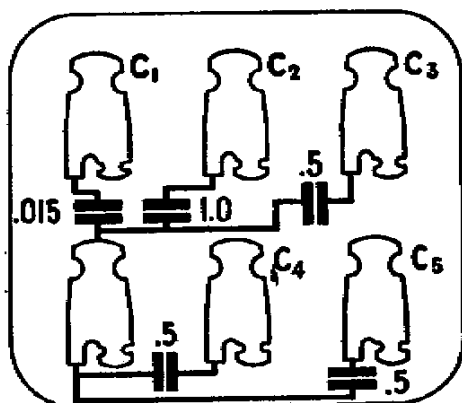
Table 3—Condenser Data

No. on Figs.	CAPACITY	COLOR
(6) (9) (10) (21)	.05	Bakelite Container
(23) (24) (25)	.0 and 250 Ohms	Bakelite Container
(26)	.25	Metal Container
(27) (28)	.00011	Blue, Golden Yellow
(29)	.00025	Yellow
(30)	.0.5	Bakelite Container
(31) (32)	.0047	White, Golden Yellow
(33)	.015 Double	Bakelite Container
(34) (35)	6 Mfd.	Electrolytic

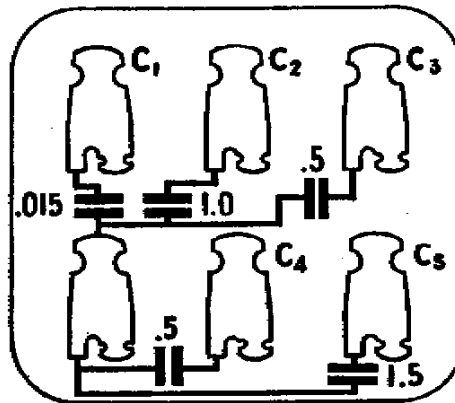
Table 4—Resistor Data

No. on Figs.	Resistance (Ohms)	Power (Watts)	COLOR		
			Body	Tip	Dot
(36)	2 Sections		Flat	Wire Wound	
	70 ohms ea.				
(37)	205			Tubular	
(38)	1,000	1	Brown	Black	Red
(39)	10,000	1/2	Brown	Black	Orange
(40) (27)	13,000	1	Brown	Orange	Orange
(41)	15,000	2	Red	Orange	Black
(42)	25,000	1	Red	Green	Orange
(43)	25,000	1/2	Red	Green	Orange
(44) (23) (24)	51,000	1/2	Green	Brown	Orange
(45)	70,000	1/2	Violet	Black	Orange
(46)	70,000	1	Violet	Black	Orange
(47) (25) (26)	99,000	1/2	White	White	Orange
(48)	99,000	1	White	White	Orange
(49)	490,000	1/2	Yellow	White	Yellow
(50)	490,000	1	Yellow	White	Yellow

Model 112 Condenser Block Part No. 3754



Model 112-A Condenser Block Part No. 3755

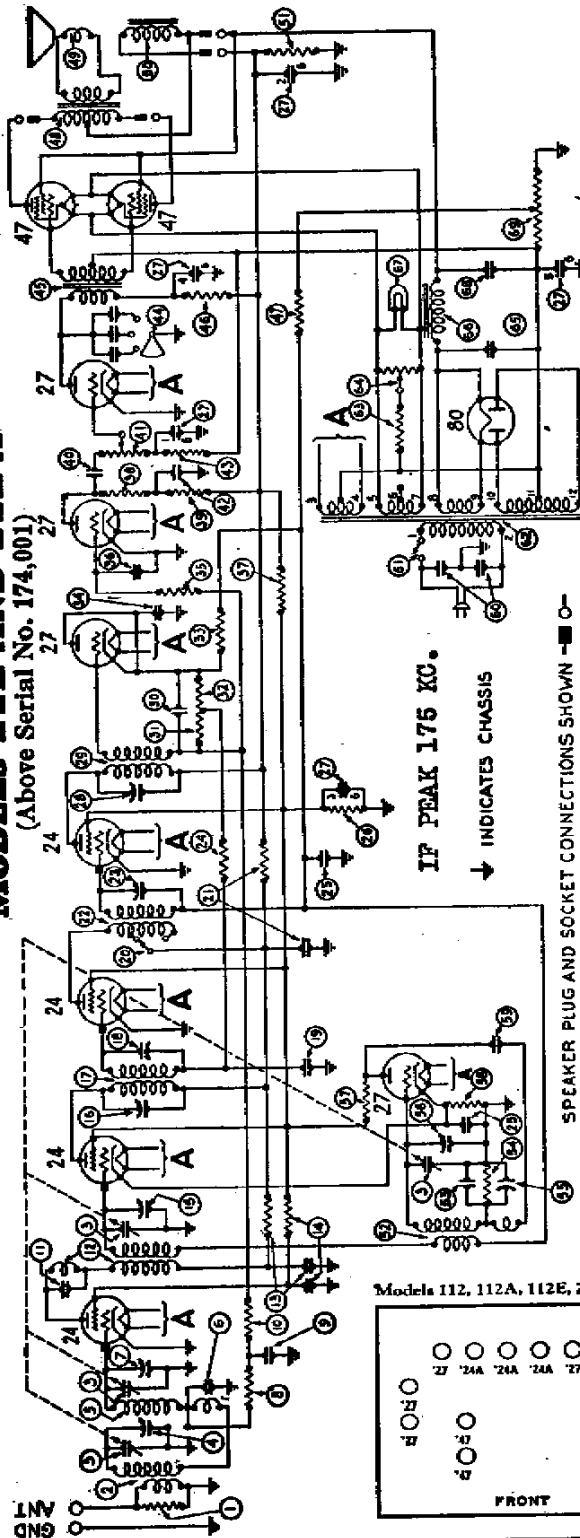


MODEL 112, 112-A
Above #174,001
Parts List
Schematic

PHILCO RADIO & TELEVISION CORP.

MODELS 112 AND 112-A

(Above Serial No. 174,001)



REPLACEMENT PARTS—MODELS 112, 112-A AND 112-E

(Above Serial No. 174,001)

4412	Resistor (10,000 ohms)	3766	Resistor (13,000 ohms)
3884-S	First R. F. Coil	2635	Push-pull Output Transformer
4000-D	Tuning Condenser	02997	Voice Coil and Cone Assembly
04000-E	Compensating Condenser		Speaker Field (assembled with pot and frame)
3884-T	Second R. F. Coil	02892	Resistor (15,000 ohms)
3615-J	By-pass Condenser (.05 mfd.)	5718	Oscillator Coil
04000-D	Compensating Condenser	3884-U	Condenser (700 mmf.)
4411	Resistor (99,000 ohms)	4520	Resistor (50,000 ohms)
3615-D	By-pass Condenser (.05 mfd.)	4518	Compensating Condenser
4411	Resistor (99,000 ohms)	04000-F	Compensating Condenser
3882-A	Condenser	3766	Resistor (13,000 ohms)
3884-V	First Detector Coil	4590	Resistor (1,000 ohms)
3615-Z	By-pass Condenser & Resistor (.05 mfd. and 250 ohms)	4519	Condenser (110 mmf.)
3615-B	By-pass Condenser & Resistor (.05 mfd. and 250 ohms)	3792-E	By-pass Condenser (.015 mfd. double)
04000-E	Compensating Condenser	4095	On-Off Switch
04000-J	Compensating Condenser	5594	Power Transformer (115 volts 50-60 cycles)
03038	First I. F. Transformer	5595	Power Transformer (115 volts 25-40 cycles)
04000-J	Compensating Condenser	5596	Power Transformer (230 volts 50-60 cycles)
3615-J	By-pass Condenser (.05 mfd.)	03613	Resistor (2 ohms)
3116	Range Switch	5650	1" Control Pot. w/ometer
3615-B	By-pass Condenser & Resistor (.05 mfd. and 250 ohms)	4916	Electrolytic Condenser (10 mfd.)
03039	Second I. F. Transformer	5643	Filter Choke
04000-J	Compensating Condenser	3463	Pilot Light
		4916	Electrolytic Condenser (10 mfd.)
		3764	Resistor (2 sections 70 ohms each)