

**PHILCO**  
Quality

*Radio Parts*

**NEW 1936 LIST PRICE CATALOG**

The Parts That Made  
**6,000,000.**  
Radios

# PHILCO

1936 LIST PRICE CATALOG

## Quality RADIO PARTS

### INFORMATION ABOUT ORDERING

1. All orders must be sent to the local PHILCO distributor. If you do not know who your distributor is, write us and we will advise promptly.
2. Be sure to specify QUANTITY and PART NUMBER of each item ordered. Much correspondence will be avoided by following the above simple rule.
3. Items which you do not find in the catalog, describe fully and give model number of set on which it is used.
4. Be sure your name and address in full are on your order.
5. Specify how you wish shipment made, otherwise distributors will use their own judgment.

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**A Word About  
PHILCO  
PARTS.**

**The Parts That Made  
6,000,000 Radios**

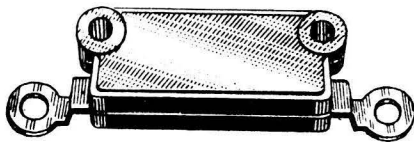
**USE THEM IN ALL  
YOUR SERVICE WORK**

PHILCO, the best-known name in the Radio Industry, has long been called "A Musical Instrument of Quality." The Philco Engineering, Design, Assembly and Inspection Departments are constantly on the alert to maintain Philco's established reputation for building quality radio sets, and to prevent the slightest deviation from this standard.

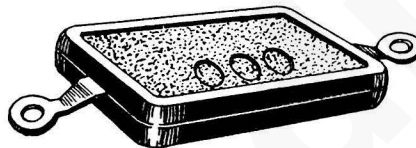
In Philco Parts the same Quality standards are maintained. Philco believes it is just as important to furnish 100% Quality Parts for service work as it is to incorporate 100% Quality Parts in Philco complete receivers. Philco parts are subjected to the most rigid care in manufacture and are given the most thorough inspection and life tests known to science. They carry the same warranty as Philco receivers.

Philco distributors are thoroughly conversant with the terms of this warranty. Every serviceman knows that the biggest asset for his business is satisfied customers—those whose sets have been repaired properly and work "like new." To insure that every service job be 100% "right" and that every customer will be a lifelong "booster" for you, use only genuine Philco Quality Service Parts.

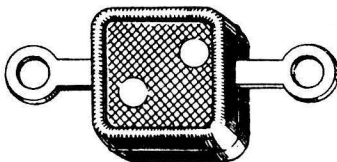
**PHILCO MICA CONDENSERS**



Type 1



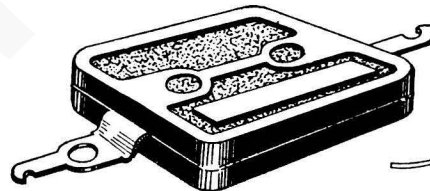
Type 2



Type 3



Type 4



Type 5



Type 6

Philco mica condensers are enclosed in brown moulded bakelite casings and are completely moisture proof. They are available in capacities ranging from 15 Mmf. to .01 Mfd. Each condenser is color coded for capacity and part number identification, or has its capacity stamped directly on the case.

An assortment of these little condensers will be found indispensable by the serviceman or experimenter. A handy kit of some of the most frequently used values is described and pictured on page 12.

Standard types tested to withstand 400 volts.

Part No.	Capacity (Microfarad)	Type	LIST PRICE	Part No.	Capacity (Microfarad)	Type	LIST PRICE	Part No.	Capacity (Microfarad)	Type	LIST PRICE
30-1030	.000015	6	20c Each	30-1033	.00015	6	25c Each	5215	.001	3	30c Each
6897	.000025	3		30-1041**	.00015	6		6773***	.001	2	
30-1008	.00003	3		30-1013	.0002	3		30-1007	.001	4	
30-1039**	.00003	6		30-1047**	.0002	6		5886**	.00125	4	
4990	.000035	2 or 3		30-1037**	.000235	6		7007**	.0014	4	
30-1044	.000035	6		30-1047**	.00025	3		7139**	.0015	4	
30-1048†	.000035	4		3082	.00025	3		5877**	.00165	4	
30-1009	.00004	3		5858	.00025	4		6018	.0018	4	
30-1034	.000045	6		30-1032	.00025	6		6022	.0018	3	
3774	.00005	2 or 3		30-1038**	.00025	6		4059	.002	2	
4587	.00005	3		8311	.0003	3		6853***	.002	2	
30-1029	.00005	6		30-1004**	.000325	4		30-1057	.0022	4	
30-1045**	.000055	6		30-1014	.0004	2		30-1055	.00225	2	
30-1040**	.00006	6		5120	.0004	3		7006**	.0025	4	
30-1010	.00007	3		30-1000**	.00041	4		30-1042**	.002	2	
30-1011	.00008	3		30-1027**	.00041	3		30-1026**	.0025	2	
30-1046**	.00009	6		3910	.0005	2		6009	.003	2	
30-1012	.0001	3		6898	.0006	3		7301**	.003	2	
30-1035	.0001	6		30-1049	.0006	6		30-1028**	.003	4	
4519	.00011	3		4520	.0007	3		30-1016	.004	5	
30-1005*	.00011	3	5863	.0007	4	30-1052	.0047	2			
30-1006	.00011	4	5878	.0008	4	30-1017	.005	5			
30-1031	.00011	6	6021	.0008	3	30-1058	.0052	2			
30-1036**	.00013	6	30-1015	.0009	2	5981	.006	5			
30-1050***	.00013	6				6359	.006	2			
						30-1001	.006	4			
						30-1002***	.006	1			
						30-1043**	.006	2			
						30-1018	.008	5			
						30-1019	.01	5			

NOTES: \* Capacity held to within ±3%. \*\* Capacity held to within ±5%. \*\*\* Condenser tested to withstand 2000 volts. † Condenser tested to withstand 1000 volts.

## TUBULAR PAPER CONDENSERS (PAPER HOUSING)



Capacity and Voltage Rating  
Plainly Marked on Condenser

PHILCO tubular paper condensers are of the highest quality construction throughout. They are made complete in the Philco factories, subject to the most rigid inspections, and thoroughly life-tested, voltage-tested and capacity-tested. Tinned

leads for quick, easy mounting in any chassis.

The voltage ratings listed are **guaranteed continuous working voltages**, and not the "flash" or momentary test voltages by which such condensers are frequently (and misleadingly) listed.

See page 15 for a handy kit of selected values of these condensers, also display packages of six of each type.

### 200 Volts *Guaranteed* WORKING VOLTAGE

Part No.	Capacity	List Price
30-4340	.00011	\$0.25
30-4346	.00125	.25
30-4215	.02	.20
30-4025	.03	.20
30-4020	.05	.20
30-4122	.1	.20
30-4191	.15	.25
30-4146	.25	.25

### 400 Volts *Guaranteed* WORKING VOLTAGE

Part No.	Capacity	List Price
30-4125	.006	\$0.20
30-4112	.008	.20
30-4169	.01	.20
30-4113	.02	.20
30-4119	.04	.20
30-4123	.05	.20
30-4114	.06	.25
30-4115	.08	.25
30-4170	.1	.25
30-4134	.25	.35
30-4117	.5	.60

### 600 Volts *Guaranteed* WORKING VOLTAGE

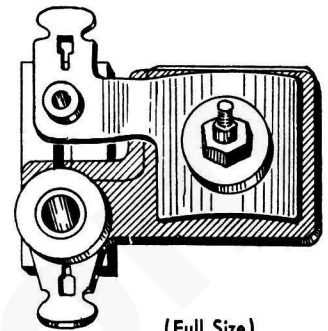
Part No.	Capacity	List Price
30-4201	.001	\$0.20
30-4042	.003	.20
30-4145	.01	.20
30-4012	.05	.25

### 1000 Volts *Guaranteed* WORKING VOLTAGE

Part No.	Capacity	List Price
30-4177	.002	\$0.25
30-4185	.004	.25
30-4024	.006	.25
30-4051	.01	.25

## COMPENSATING CONDENSERS

Carefully built padding condensers. Used in adjusting R. F. and I. F. circuits, oscillator circuits, etc. Built on a rigid base of heavy insulating material, with a heavy steel fixed plate and phosphor bronze movable plates with mica insulation. Adjustable by means of a fibre hex wrench (Philco Part No. 3164—See page 22).



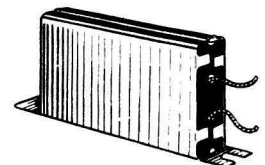
(Full Size)

Part No.	Capacity Range (Mmfd.)	No. Plates	List Price
04000-E	5-30*	2	\$0.15
04000-C	5-30	2	.15
04000-D	5-50*	2	.15
04000-A	5-50	2	.15
‡31-6004	15-70	2 (each section)	.35
04000-X	15-80*	2½	.20
04000-M	15-80	2½	.20
04000-H	30-140*	3	.20
04000-J	30-140	3	.20
04000-F	80-250*	5	.25
04000-B	80-250	5	.25
04000-S	125-450*	7	.35
04000-T	125-450	7	.35
04000-R	200-750	9	.45

\* Grounded. Fixed plate connected to mounting hole eyelet for grounding to chassis.  
‡ 31-6004: twin padder, two padders of same capacity on same base.

## PHILCO BY-PASS CONDENSERS (METAL HOUSING)

Philco vacuum process construction. Condenser unit pitch-sealed within metal housing. Flanges for convenient mounting. Extremely useful for replacement where an efficient and rugged unit is needed.



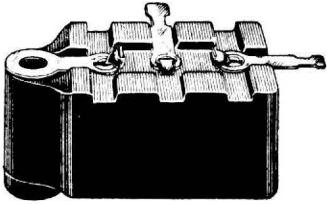
Part No.	Capacity (Mfd.)	Mtg. Hole Size	Guaranteed Working Voltage	List Price
30-4102	.2	27/8"	200	\$0.50
4264	.25	27/8"	400	.60
30-4175	.25*	27/8"	200	.50
3557	.25 Twin	27/8"	200	.70
4864	.25 Twin	27/8"	200	.70
03325	.25 Triple	27/8"	200	1.00
3583	.5	27/8"	200	.60
30-4174	.5*	27/8"	200	.60
05150	.5	27/8"	400	.70
03024	.5 Twin	27/8"	200	1.00
30-4103	.75	27/8"	200	.85
4568†	1.0†	23/8"	200	1.10
30-4173	1.0*	27/8"	200	1.10
4569	1.0	45/8"	400	1.30
30-4104	1.5	27/8"	200	1.35
03298	2.0	27/8"	200	1.65
4418	2.0	21/4"	400	2.25

\* NOT grounded to case.

† Two special low-impedance shielded leads connect to one side of condenser. Other side grounded to case.

# PHILCO PAPER CONDENSERS

(BAKELITE BLOCK TYPE)



These condensers are extremely convenient for replacement purposes in any make or type of radio, or for experimental work in building sets and parts. They are mounted by means of a hole at one end, and tinned lugs are provided for connections.

Hex head drive screw for mounting into threaded hole in chassis.

W-443 ..... per C \$2.40

## SINGLE CONDENSERS

Part No.	Capacity (Mfd.)	Guaranteed Working Voltage	List Price
7762-C	.001	1200	\$0.25
7296-B	.002	800	.25
8320-B	.003	400	.25
7442-B	.005	800	.25
7625-B	.006	800	.25
7625-G	.006*	800	.25
3903-AA	.01*	600	.25
3903-M	.01	600	.25
3793-W	.015*	600	.35
3793-B	.015	600	.35
3903-AJ	.02	600	.35
7653-B	.025	600	.35
8318-B	.03	400	.35
3615-L	.05*	400	.35
3615-E	.05	400	.35
4989-D	.09*	200	.35
4989-J	.09	200	.35
8206-B	.1	200	.35
6287-B	.15	200	.35
4989-H	.18*	200	.35
4989-K	.18	200	.35

## COMBINATION CAPACITIES

In these units, two condensers of different capacities are sealed in the same block. Useful in many circuits, especially where space is at a premium.

Part No.	Capacities (Mfd.)	Guaranteed Working Voltage	List Price
8035-F	.0001 and .015	600	\$0.25
8174-B	.0007* and .05*	600	.25
7762-B	.001* and .005	800	.30
7296-E	.002 Twin* and .003	400	.30
7296-G	.002* and .05*	400	.30
7296-H	.002 and .01	400	.30
7625-F	.006 and .001	800	.30
7625-D	.006* and .015	600	.30
7653-D	.025 and .09	600	.35
6287-M	.15* and .05*	200	.40
6287-G	.15 and .05	200	.40
6287-N	.15 and .09	200	.40
6287-K	.15* and .09*	200	.40

## DOUBLE CONDENSERS

Two condensers of equal capacity sealed in same block. Handy in many circuits.

Part No.	Capacity of Each Section (Mfd.)	Guaranteed Working Volts	List Price
8035-B	.00011*	1200	\$0.25
8317-B	.00025*	800	.25
7296-E	.002	400	.30
8320-C	.003	400	.30
3903-S	.01*	600	.30
3903-AK	.01	600	.30
3793-H	.015*	600	.40
3793-P	.015	600	.40
7653-C	.025*	600	.40
8318-C	.03	400	.40
3615-AJ	.05*	400	.40
3615-AF	.05	400	.40
4989-B	.09*	200	.40
4989-M	.09	200	.40
6287-H	.15*	200	.40
6287-F	.15	200	.40

## REPLACEMENT SECTION CONDENSERS

CARDBOARD CASE



Philco special vacuum process construction. Condenser unit pitch-sealed within paper housing. Used widely for replacement of single sections in filter condenser blocks. Easily mounted by strapping on with tape or metal angle-bracket.

Guaranteed working voltage, 400 volts.

Part No.	Capacity (Mfd.)	Length	Width	Height	List Price
7068	.1	2 1/4"	1 1/4"	1/2"	\$0.30
30-4095	.2	2 1/8"	1 1/4"	3/4"	.35
7067	.25	4 3/8"	1 1/4"	1/2"	.40
30-4096	.4	2 1/8"	1 3/4"	3/4"	.50
7066	.5	4 3/8"	1 1/4"	5/8"	.60
7065	1.0	4 3/8"	2 3/4"	5/8"	.85
7064	2.0	4 3/8"	2 3/4"	1"	1.45

NOTE—Initial at end of part number is a factory designation of the lug arrangement, and does not refer to capacity.

\* Grounded. Connection is made from one side of condenser or from common center point of double condenser to mounting lug for grounding to radio chassis.

# Standard PHILCO Dry Electrolytic Condensers

For years Philco Electrolytic condensers have been the symbol of **QUALITY**. No compromise with the highest standards was permitted in their design, materials and construction. Now you can get these oversize, high-test electrolytics at the lowest prices ever asked for real quality condensers.

- ★ **HIGHEST QUALITY MATERIAL**  
(Philco guaranteed)
- ★ **OVERSIZE CONSTRUCTION**  
(Compare Dimensions)
- ★ **GUARANTEED WORKING VOLTAGE**  
(No "Peak Voltage" Listings)

Don't take a chance with cheap over-rated units in a part so important as the filter condenser. Play safe and protect the set owner. **IT COSTS YOU LESS THAN EVER NOW.**

HERE IS THE COMPLETE ASSORTMENT . . . ALL POPULAR TYPES AND SIZES

## CLAMP MOUNTING TYPE (Aluminum Can)

Designed for inverted mounting with three-legged clamp. Lug provided for soldering connection to positive terminal; negative grounded to case, but insulated from chassis by washer used under the clamp.

An extremely popular type that gives consistent trouble-free performance even under severe operating conditions.

Mounting Clamp—Part No. 6440.....each \$0.05  
Insulating Washers—Part No. 6441.....Per C .55



### 450 WORKING VOLTAGE

Part No.	Mfd.	Sizes	List Price
30-2098	4	3 1/8" x 1 3/8"	\$0.90
8095	6	2 3/8" x 1 3/8"	1.05
30-2014	8	4 3/8" x 1 3/8"	1.25
30-2094	10	4 3/8" x 1 3/8"	1.45
30-2091	12	4 3/8" x 1 3/8"	1.65
*30-2118	16	5 3/8" x 1 3/8"	1.65

\* 350 working volts.

### 250 WORKING VOLTAGE

Part No.	Mfd.	Sizes	List Price
30-2007	4	2 7/8" x 1"	\$0.80
30-2097	6	3 3/8" x 1"	.95
30-2096	8	3 7/8" x 1 3/8"	1.00
30-2095	10	3 7/8" x 1 3/8"	1.20
30-2090	12	3 7/8" x 1 3/8"	1.25

## INVERTED MOUNTING TYPE (Aluminum Can)

This is the popular and extensively used inverted "stud mounting" type. Mounted to chassis by means of large threaded stud; insulated from chassis by washers, or case may be grounded to chassis. May also be mounted upright (stud at top) by using special Philco Clamp around base.

### 450 WORKING VOLTAGE

Part No.	Mfd.	Sizes	List Price
*7441	4	2 3/4" x 1 3/8"	\$0.90
30-2048	6	4 3/8" x 1"	1.05
30-2049	8	4 3/8" x 1 3/8"	1.10
*8022	10	4 3/4" x 1 3/8"	1.40
30-2092	12	4 1/8" x 1 3/8"	1.60

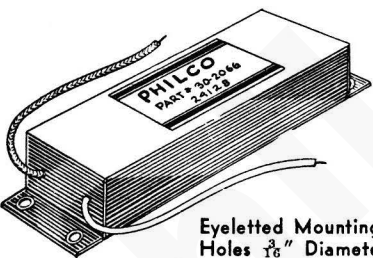
\* Fiber Screw type.

### 250 WORKING VOLTAGE

Part No.	Mfd.	Sizes	List Price
30-2051	4	3 1/4" x 1"	\$0.80
30-2052	6	3 1/4" x 1"	.95
30-2053	8	3 1/4" x 1"	1.00
30-2054	10	4 3/8" x 1"	1.20
30-2093	12	4 3/8" x 1 3/8"	1.30



## BLOCK TYPE . . . CARDBOARD CASE



Philco quality throughout. Guaranteed performance. Most convenient replacement units.

You can make a replacement in a minimum of time with one of these cardboard block units. Just bolt them to chassis through the eyeletted flange holes, and use the convenient leads for connecting.

Eyeletted Mounting Holes 7/8" Diameter

### 250 WORKING VOLTAGE

Part No.	Mfd.	Dimensions	Center to Center of Mtg. Holes	List Price
30-2042	4	2 3/8" x 1 1/8" x 1 1/8"	2 7/8"	\$0.70
30-2043	6	2 3/8" x 1 1/8" x 1 1/8"	2 7/8"	.85
30-2059	8	2 3/8" x 1 1/8" x 1 1/8"	2 7/8"	.90
30-2044	10	2 3/8" x 1 3/8" x 1 1/8"	2 7/8"	1.05

### 450 WORKING VOLTAGE

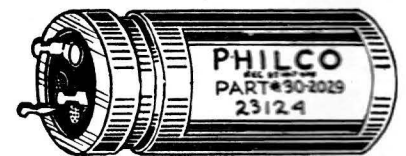
Part No.	Mfd.	Dimensions	Center to Center of Mtg. Holes	List Price
*	2			
30-2064	4	4 1/8" x 1 5/8" x 7/8"	4 1/8"	\$0.80
30-2065	6	4 1/8" x 1 5/8" x 7/8"	4 1/8"	.95
30-2066	8	4 1/8" x 1 5/8" x 7/8"	4 1/8"	1.00
30-2038	10	4 1/8" x 1 5/8" x 1 21/64"	4 1/8"	1.25

\* For best results use 30-2064 (4 mfd.) for replacement.

## COMBINATION SECTIONS (Aluminum Can)

Here is a complete line of the various popular combination capacities, twin and triple-section types in various working voltages. Select the condenser you need for any job from the wide assortment offered here.

These are of the inverted clamp type mounting, but may be mounted in any position desired (such as horizontally under or above chassis), with equally good performance. Each terminal colored for identification. Some have lugs provided also.

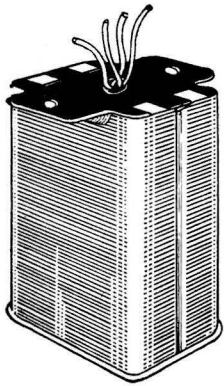


### VARIOUS WORKING VOLTAGES

Part No.	Mfds.	Voltages	Size	List Price
30-2104	1-4	450-450	2 3/4" x 1 3/8"	\$1.45
30-2029	1-1-2	350-350-350	2 3/4" x 1 3/8"	1.85
30-2080	1-1-2	450-450-350	2 3/4" x 1 3/8"	1.85
30-2114	1-2-2	450-300-350	2 3/4" x 1 3/8"	2.25
30-2122	1-2-3	350-250-450	2 3/4" x 1 3/8"	1.85
30-2078	1-1-1-2	450-450-350-350	3 1/4" x 1 3/8"	2.45
30-2121	1-2-3-1	350-300-450-350	3 1/4" x 1 3/8"	2.50
30-2002	3-12	100-100	3 3/8" x 1"	1.30
30-2013	4-8	450-450	4 1/4" x 1 3/8"	1.95
30-2083	6-12	150-150	3 1/4" x 1 3/8"	1.70
30-2028	8-8	450-450	5 1/4" x 1 3/8"	2.15
30-2045	8-10	450-50	4 1/4" x 1 3/8"	1.80
30-2123	8-10	475-300	4 1/4" x 1 3/8"	1.80
30-2125	10-10	25-150	2 3/4" x 1 3/8"	1.20
30-2062	2-8-10	475-475-50	4 3/4" x 1 3/8"	2.60
30-2127	2-4-8	150-150-100	2 3/4" x 1 3/8"	1.50
30-2073	8-8-10	475-475-50	5 3/4" x 1 3/8"	5.75
*30-2077	9-9-18	450-450-450	5" x 3"	3.15

\* Has 3 hex nut posts for connections.

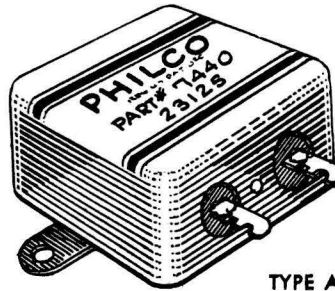
USE PHILCO GUARANTEED QUALITY PARTS ON YOUR NEXT SERVICE CALL



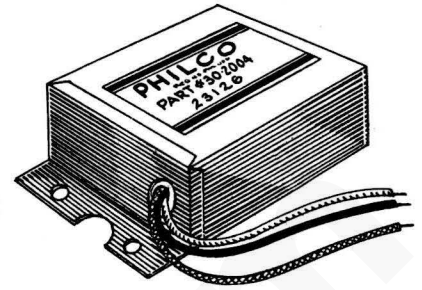
**DRY  
BLOCK TYPES  
Metal Case (With Flange)**

These block type metal case units are extremely compact and rugged. All have flanges with mounting holes. Connection is made for one type to leads of ample length protruding from end; in another type to projecting metal lugs.

TYPE B.  
Mtg. Holes  $\frac{1}{8}$ "



TYPE A.  
Mtg. Holes  $\frac{1}{8}$ "



TYPE C. Mtg. Holes  $\frac{1}{8}$ "

**LOW VOLTAGE TYPES—SINGLE SECTION**

Part No.	Mfd.	Type	Dimensions	Working Voltage	Center to Center of Mtg. Holes	List Price
7440	10	A	$2\frac{3}{4}$ " x $1\frac{1}{4}$ " x $\frac{3}{4}$ "	25	$2\frac{3}{8}$ "	\$0.80
6442	20	*	$2\frac{3}{8}$ " x $\frac{3}{4}$ " x $\frac{1}{8}$ "	15	...	.80
30-2084	25	A	$2\frac{1}{8}$ " x $1\frac{1}{8}$ " x $1\frac{1}{8}$ "	25	$2\frac{1}{2}$ "	1.00

\* Cardboard case; no flanges.

**DUAL SECTION TYPES—HIGH VOLTAGE**

Part No.	Mfd.	Type	Dimensions	Working Voltage	Center to Center of Mtg. Holes	List Price
30-2101	4-4	B	$1\frac{1}{2}$ " x $1\frac{1}{2}$ " x $4\frac{1}{2}$ "	450	2"	\$2.25
30-2004	4-8	C	$2\frac{7}{8}$ " x $1\frac{1}{4}$ " x $2\frac{3}{8}$ "	450	$1\frac{1}{2}$ "	2.00
30-2099	8-8	B	$1\frac{1}{2}$ " x 2" x $4\frac{1}{2}$ "	450	$2\frac{1}{2}$ "	2.80
30-2102	4-4	B	$1\frac{1}{2}$ " x $1\frac{1}{2}$ " x $4\frac{1}{2}$ "	250	2"	2.00
30-2005	4-8	C	$2\frac{1}{8}$ " x $1\frac{1}{8}$ " x $2\frac{7}{8}$ "	250	$2\frac{7}{8}$ "	1.80
30-2100	8-8	B	$1\frac{1}{2}$ " x $1\frac{1}{2}$ " x $4\frac{1}{2}$ "	250	2"	2.50

**PHILCO WET ELECTROLYTIC CONDENSERS . . . For All Makes of Radio**

Philco wet type electrolytic condensers have been known for years by servicemen to give uniformly satisfactory results. They are built up to a standard and must meet our extremely rigid factory tests before being O. K'd. They will ordinarily withstand voltages considerably in excess of the **guaranteed** working voltage listed below.

**ALUMINUM CONTAINER  
Large, Threaded Stud—Pinched Tip**

Part No.	Mfd.	Working Voltage	Length Diameter	List Price
30-2056	4	475	$4\frac{1}{2}$ " x $1\frac{3}{8}$ "	\$1.00
30-2057	6	475	$4\frac{1}{2}$ " x $1\frac{3}{8}$ "	1.15
30-2058	8	475	$4\frac{1}{2}$ " x $1\frac{3}{8}$ "	1.20
30-2060	10	400	$4\frac{1}{2}$ " x $1\frac{3}{8}$ "	1.20
30-2061	14	400	$4\frac{7}{8}$ " x $1\frac{3}{4}$ "	1.40

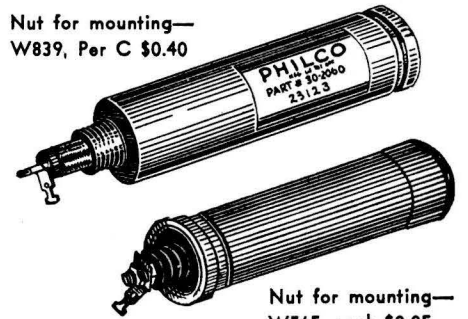
**COPPER CONTAINER  
Large Fiber Stud for Mounting**

Part No.	Mfd.	Working Voltage	Length Diameter	List Price
4916	6	400	$4\frac{1}{2}$ " x $1\frac{1}{2}$ "	\$1.50
6706	8	400	$4\frac{1}{2}$ " x $1\frac{1}{2}$ "	1.55
6893	10	475	5" x $1\frac{1}{2}$ "	1.85
4818	12	400	$4\frac{3}{4}$ " x 2"	1.80
5725	14	400	$5\frac{1}{8}$ " x $1\frac{1}{2}$ "	1.95

**INVERTED MOUNTING—STUD TYPE**

This style is mounted in inverted (vertical) position by means of the threaded stud and nut. Negative terminal grounded to case. This type can also be mounted upright, by means of clamp around base, if desired. Available either in copper or aluminum can, as listed.

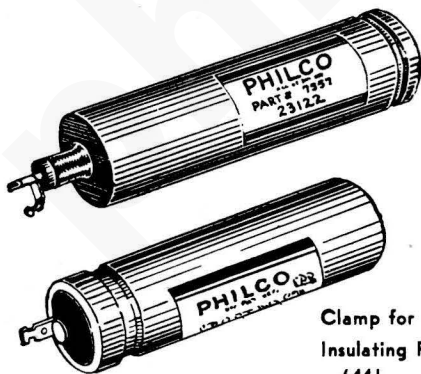
Nut for mounting—  
W839, Per C \$0.40



Nut for mounting—  
W565, each \$0.05

**INVERTED MOUNTING—CLAMP TYPE**

Designed for mounting with clamp only, the clamp and special insulating washer being listed below. These are also available in either aluminum or copper container, so that a replacement identical to the original can be made.



Clamp for use in clamp mounting—Part No. 6440 . . . each \$0.05  
Insulating Paper Washers (for use under clamp)—Part No. 6441 . . . Per C .55

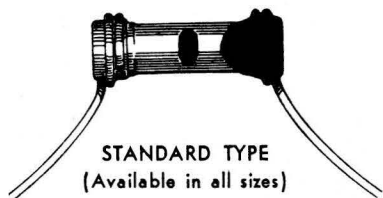
**ALUMINUM CONTAINER  
Stud for Connecting**

Part No.	Mfd.	Working Voltage	Length Diameter	List Price
7467	4	400	$4\frac{1}{2}$ " x $1\frac{3}{8}$ "	\$1.05
7556	6	400	$4\frac{1}{2}$ " x $1\frac{3}{8}$ "	1.20
7557	8	400	$4\frac{1}{2}$ " x $1\frac{3}{8}$ "	1.25

**COPPER CONTAINER  
Nut for Connecting**

Part No.	Mfd.	Working Voltage	Length Diameter	List Price
6453	6	475	$4\frac{1}{2}$ " x $1\frac{1}{2}$ "	\$1.50
6707	8	475	$4\frac{1}{2}$ " x $1\frac{1}{2}$ "	1.55
5142	10	400	$4\frac{7}{8}$ " x $1\frac{1}{2}$ "	1.85

# PHILCO CARTRIDGE-TYPE RESISTORS



STANDARD TYPE  
(Available in all sizes)

## For All Replacement Purposes

Philco now furnishes a complete line of cartridge-type resistors suitable for replacement in any make or type of receiver, as well as for experimental and construction work. These are of the highest standard material and workmanship, and all have the standard R. M. A. color code marking, for quick identification. Note the low prices on these resistors.



METALLIZED TYPE  
(Available in 1/2 Watt or 1 Watt)

### 1/4 WATT LIST PRICE, EACH, \$0.20

Part No.	Ohms
33-1206	20
33-1149	70
33-1028	1,000
33-1029	2,000
33-1100	2,500
33-1131	2,700
33-1030	3,000
33-1132	3,500
33-1031	4,000
33-1133	4,500
33-1001	5,000
33-1032	7,000
33-1114	8,000
33-1033	9,000
33-1000	10,000
33-1194	11,000
8267	13,000
33-1134	15,000
33-1130	20,000
33-1013	25,000
33-1179	30,000
33-1180	40,000
33-1034	50,000
6098	51,000
33-1181	60,000
33-1115	70,000
33-1182	75,000
6099	99,000
33-1035	100,000
33-1183	150,000
33-1191	160,000
33-1116	190,000
33-1184	200,000
33-1097	240,000
33-1185	250,000
33-1186	300,000
33-1200	330,000
33-1187	400,000
6097	490,000
33-1036	500,000
33-1203	750,000
33-1096	1,000,000
33-1188	1,500,000
33-1025	2,000,000
33-1189	3,000,000
33-1002	4,000,000

### 1/2 WATT LIST PRICE, EACH, \$0.20

Part No.	Ohms
5837	1,000
7951	1,500
6984	2,000
7775	2,500
5309	2,900
33-1038	3,000
7238	3,300
33-1039	3,500
33-1040	4,000
5310	5,000
7352	6,000
33-1041	7,000
33-1077	7,500
5838	8,000
33-1042	9,000
4412	10,000
33-1110	12,000
6208	15,000
6650	20,000
4516	25,000
33-1078	30,000
5279	32,000
33-1147	35,000
33-1044	40,000
5256	45,000
33-1045	50,000
4518	51,000
33-1079	60,000
5385	70,000
33-1080	75,000
33-1046	85,000
4411	99,000
33-1047	100,000
33-1128	120,000
5331	160,000
33-1117	190,000
33-1048	200,000
4410	240,000
33-1081	250,000
33-1049	300,000
6046	330,000
33-1050	400,000
4517	490,000
33-1051	500,000
4409	1,000,000
7009	1,500,000
5872	2,000,000
33-1052	2,500,000
33-1053	3,000,000
33-1082	3,500,000
6010	4,000,000
33-1054	5,000,000
33-1055	6,000,000
33-1056	10,000,000

### 1 WATT LIST PRICE, EACH, \$0.20

Part No.	Ohms
4590	1,000
33-1057	1,500
4515	2,000
33-1058	2,500
7831	3,000
33-1059	3,500
7832	4,000
3526	5,000
7833	6,000
7834	7,000
33-1083	7,500
7835	8,000
7501	9,000
3524	10,000
3766	13,000
5278	15,000
6649	20,000
3656	25,000
7836	30,000
3525	32,000
33-1027	39,000
7837	40,000
33-1060	50,000
4237	51,000
33-1084	60,000
3542	70,000
33-1085	75,000
3767	99,000
33-1061	100,000
33-1086	150,000
33-1104	160,000
33-1106	170,000
5023	190,000
33-1107	200,000
3768	240,000
33-1087	250,000
33-1062	300,000
33-1105	340,000
33-1108	350,000
33-1109	400,000
3769	490,000
33-1063	500,000
4414	1,000,000
33-1088	1,500,000
33-1111	1,800,000
33-1112	2,000,000
33-1089	2,500,000
33-1064	3,000,000
33-1090	3,500,000
33-1065	4,000,000
33-1066	5,000,000

### 2 WATT LIST PRICE, EACH, \$0.35

Part No.	Ohms
3655	1,000
33-1067	2,000
33-1068	3,000
33-1069	4,000
33-1070	5,000
33-1071	7,500
33-1024	10,000
5718	15,000
33-1201	16,000
5649	20,000
33-1072	25,000
33-1026	32,000
33-1098	37,000
33-1073	50,000
5868	51,000
33-1074	75,000
33-1075	100,000
33-1076	250,000

### 3 WATT LIST PRICE, EACH, \$0.40

Part No.	Ohms
6450	13,000
7500	16,000
33-1018	30,000

SEE PAGES 12 AND 13  
For  
Philco Resistor Kits

Selected groups of  
commonly used values  
conveniently mounted

SPECIFY WHETHER CARBON OR METALLIZED RESISTORS ARE  
WANTED WHEN ORDERING 1/2 WATT OR 1 WATT SIZES

#### R.M.A. Resistor Color Code

The standard R.M.A. color code is used on all Philco resistors. Each resistor has three color markings: the body color, tip color, and dot in center of body. The list below indicates the colors representing different figures in the value of the resistor. The color of body indicates the first figure of the resistor, the color of tip the second figure, and the color of dot the number of zeros after the first two figures. For example a resistor of 250,000 ohms would be: Body, red; tip, green; dot, yellow.

BLACK	.....0	GREEN	.....5
BROWN	.....1	BLUE	.....6
RED	.....2	VIOLET	.....7
ORANGE	.....3	GRAY	.....8
YELLOW	.....4	WHITE	.....9



# PHILCO WIRE-WOUND RESISTORS

*Ideal for Quick Replacement*

## FLEXIBLE WIRE-WOUND RESISTORS

Philco flexible wire-wound resistors will be found extremely convenient as a replacement item, as they can be very quickly and easily installed. Available in a very complete range of values. Covered with heavy cotton insulation, colored according to the standard R. M. A. color coding. Leads of ample length provided for easy connection.

See page 12 for an attractive, convenient kit of selected values of these resistors.

### 1/3-WATT CAPACITY

Part No.	Resistance (Ohms)	Length of Body (Less Leads)	List Price
33-3186	5	1 1/4"	\$0.20
33-3185	18	1 1/4"	.20
33-3187	100	1 3/8"	.20
33-3140	150	1 1/4"	.20
33-3010	300	2 1/2"	.20
33-3164	400	1 3/8"	.20
33-3165	600	1 3/8"	.20
6443	700	2"	.20
6106	1250	2"	.20
7688	2500	3"	.20

### 1/2-WATT CAPACITY

Part No.	Resistance (Ohms)	Length of Body (Less Leads)	List Price
6511	2.7	1 1/2"	\$0.20
7217	200	1 1/2"	.20
33-3163	275	1 1/2"	.20
33-3016	400	1 1/2"	.20
6977	500	1 1/2"	.20
33-3022	800	1 1/2"	.20
33-3017	1000	1 1/2"	.20

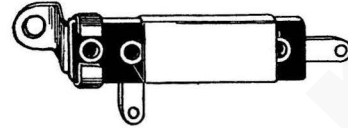
### 1-WATT CAPACITY

Part No.	Resistance (Ohms)	Length of Body (Less Leads)	List Price
33-3040	5	2 1/2"	\$0.25
33-3041	10	2 1/2"	.25
33-3042	15	2 1/4"	.25
33-3043	20	2 5/8"	.25
33-3119	30	2 1/2"	.25
33-3044	50	2 1/2"	.25
33-3027	75	2 1/2"	.25
33-3023	100	2 1/2"	.25
33-3045	150	2 1/2"	.25
33-3120	200	2 1/2"	.25
33-3046	250	2 3/8"	.25
33-3121	300	2 1/2"	.25
33-3122	400	2 1/2"	.25
33-3031	500	2 3/8"	.25
33-3123	600	2 1/2"	.25
33-3124	700	2 1/2"	.25
33-3125	800	2 1/2"	.25
33-3126	1000	2 1/2"	.25
33-3127	1250	2 1/2"	.25
33-3047	1500	2 1/2"	.25
33-3048	2000	2 7/8"	.25

### 2 WATT CAPACITY

Part No.	Resistance (Ohms)	Length of Body (Less Leads)	List Price
5110	7	4"	\$0.30
7155	30	4 5/8"	.30
33-3019	700	2"	.30

## FLAT WIRE-WOUND RESISTORS



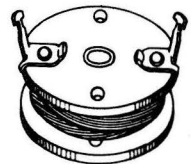
Philco flat type wire-wound resistors are supplied in a representative range of values suitable for replacement use where a small resistor, mounted by means of an eyelet, is required.

Wound on special fiber, thoroughly impregnated and heat-resisting.

Part No.	Total Resistance (Ohms)	Resistance Between Taps (Ohms)	Overall Length	List Price
3628	6		1"	\$0.20
3777	20		1 5/8"	.20
3764	140	70, 70	2 1/8"	.25
4861	210		2 1/2"	.25
6107	225		1 5/8"	.25
4142	250		2 1/2"	.25
4407	311	60, 1, 250	4 3/8"	.50
4961	350		2 5/8"	.25
4408	1050	300, 750	3 7/8"	.40

## RADIO - FREQUENCY CHOKES

Low voltage chokes for use in grid circuits or any low voltage circuit where an impedance is desired, in compact, quickly mounted form.



### GRID CIRCUIT CHOKES (Wound on Fibre Tube)

Part No.	Inductance (Microhenries)	List Price
05190	6.5	\$0.30
03661	90	.40

### PLATE CIRCUIT CHOKES (Wound on 1/2" Wood Spool)

Part No.	Impedance (Microhenries)	List Price
03893	840	\$0.35
32-1281	965	.25
04342	17.310 each (2 windings in shield can)	1.20

# PHILCO GENERAL REPLACEMENT RESISTORS

Wire-Wound Construction—Special Insulation Coating  
25-WATT AND 50-WATT RATING

*Especially recommended for use in audio amplifiers and "P.A." sound systems*



These heavy duty resistors are built to our rigid specifications, and must come up to all load requirements of resistors used in the most expensive Philco receivers. Do not confuse them with cheap resistors, rated far above their real capacity, with which the radio parts market is flooded. For use inside a radio chassis, the 2" type will carry a continuous 5-watt load and the 4" type a continuous 10-watt load without overheating. For use on open power panels of P. A. systems, etc., they will carry loads of 25 and 50 watts respectively. Values marked with a star are also available in vitreous-enamel insulation type at same price. Specify when ordering which type insulation is preferred.

See page 12 for handy kits of popular values in these resistors.

## 25-WATT RATING

All 2" long, $\frac{1}{8}$ " diameter					
Part No.	Ohms	List Price	Part No.	Ohms	List Price
33-3071	5	\$0.50	33-3076	700*	\$0.50
33-3049	10	.50	33-3077	800	.55
33-3072	15	.50	33-3061	1000*	.55
33-3050	20	.50	33-3078	1200	.55
33-3073	25	.50	33-3062	1500*	.55
33-3051	30	.50	33-3063	2000	.55
33-3074	40	.50	33-3064	2500*	.55
33-3052	50*	.50	33-3065	3000	.55
33-3053	75	.50	33-3066	4000	.55
33-3054	100*	.50	33-3067	5000*	.55
33-3055	150	.50	33-3079	6000	.65
33-3075	200*	.50	33-3068	7500	.65
33-3056	250	.50	33-3080	10000	.65
33-3057	300*	.50	33-3081	12000	.65
33-3058	400	.50	33-3082	15000	.65
33-3059	500*	.50	33-3083	20000	.65
33-3060	600	.50	33-3084	25000	.70

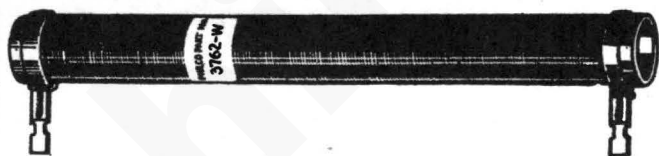
## 50-WATT RATING

All 4" long, $\frac{1}{8}$ " diameter					
Part No.	Ohms	List Price	Part No.	Ohms	List Price
33-3085	5	\$0.75	33-3102	700	\$0.75
33-3086	10	.75	33-3103	800	.75
33-3087	15	.75	33-3104	1000*	.75
33-3088	20	.75	33-3105	1200	.90
33-3089	25	.75	33-3106	1500	.90
33-3090	30	.75	33-3107	2000*	.90
33-3091	40	.75	33-3108	2500	.90
33-3092	50	.75	33-3109	3000*	.90
33-3093	75	.75	33-3110	4000	.90
33-3094	100	.75	33-3111	5000	.90
33-3095	150	.75	33-3112	6000*	.90
33-3096	200	.75	33-3113	7500	1.00
33-3097	250	.75	33-3114	10000*	1.00
33-3098	300	.75	33-3115	12000	1.05
33-3099	400	.75	33-3116	15000*	1.05
33-3100	500	.75	33-3117	20000	1.05
33-3101	600	.75	33-3118	25000	1.05

## PHILCO PORCELAIN TUBE WIRE-WOUND RESISTORS

Various Values and Ratings

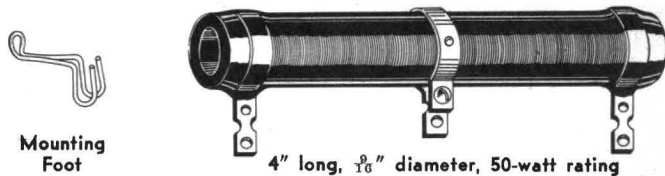
Wound on heavy porcelain tubes  $\frac{1}{8}$ " diameter. Suitable for all kinds of replacement work. Ample safety factor. Thoroughly impregnated winding.



### SINGLE RESISTANCE TYPE

Part No.	Ohms	Watts	Length	List Price
5635	200	1.5	1 $\frac{7}{8}$ "	\$0.35
4859	200	8	3 $\frac{1}{2}$ "	.75
7465	325	1	1"	.15
3763	800	3	1 $\frac{7}{8}$ "	.35
6451	5600	9	5 $\frac{1}{8}$ "	.30
33-3033	6500	7	4 $\frac{1}{8}$ "	.30
33-3020	7750	8	4 $\frac{1}{8}$ "	.35
3762	8300	3	5 $\frac{1}{2}$ "	1.15
4532	10000	2.5	5 $\frac{1}{2}$ "	.50

## ADJUSTABLE WIRE-WOUND RESISTORS (Porcelain Tube Core)



Mounting Foot

4" long,  $\frac{1}{8}$ " diameter, 50-watt rating

These Adjustable Heavy-Duty Vitreous-Enamelled Resistors have been developed particularly to meet the Radio Serviceman's need of a high quality adjustable resistor for use wherever a heavy-duty resistor adjustable to a close degree is required.

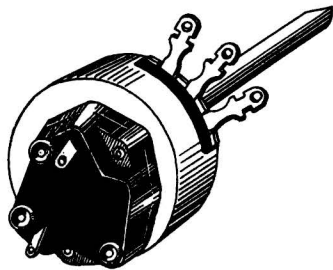
Built to the highest standards; coating of special vitreous enamel is fired on at a high temperature, providing a rugged surface impervious to moisture and of superior appearance. A narrow track along the top of the resistor is left bare for contact with the bottom of the adjusting clamp. The reliable contact device insures positive contact at all times.

For use inside chassis, will handle continuous 10-watt load. For external use in amplifier panels, etc., up to 50 watts can be easily carried. A pair of special mounting feet are furnished with each resistor.

Part No.	Ohms	List Price
33-3190	1,000	\$0.85
33-3191	2,000	.85
33-3192	3,000	.85
33-3193	6,000	1.45
33-3194	10,000	1.60
33-3195	15,000	1.65

# PHILCO GENERAL REPLACEMENT VOLUME CONTROLS

Smooth Tapered Control of Volume; Long Flat Shaft Fits Any Set



Type with Switch

This new line of controls includes values used in all standard radio receivers. Any value may be had either with or without switch. Finest possible material and workmanship. Resistance curves carefully worked out so control of volume is gradual from lowest to highest point. All are furnished with a 1 5/8" long shaft, having flat surface its full length to permit mounting on sets of any make, regardless of the knob used.

Every size and type of knob fits the shaft. All are made with shaft insulated from case. A 3/8" long bushing and 9/16" hex nut for mounting are part of each control.

Part No. with Switch	Part No. without Switch	Resistance	Direction of Rotation	LIST PRICE	
				Price with Switch	Price without Switch
33-5027	33-5041	2 meg.	Clockwise . . . . .	\$1.45	\$1.00
33-5028	33-5042	1 meg.			
33-5029	33-5043	500,000 ohms			
33-5030	33-5044	250,000 ohms			
33-5031	33-5045	100,000 ohms			
33-5077	33-5078	50,000 ohms			
33-5079	33-5080	30,000 ohms			
33-5032	33-5046	20,000 ohms			
33-5034	33-5048	12,000 ohms			
33-5081	33-5082	10,000 ohms			
33-5035	33-5049	8,000 ohms	Counter Clockwise	1.45	1.00
33-5036	33-5050	5,000 ohms			
33-5037	33-5051	50,000 ohms			
33-5038	33-5052	20,000 ohms			
33-5039	33-5053	500,000 ohms			
33-5040	33-5054	Tapped 100,000 ohms at mid point of rotation	Clockwise . . . . .	1.45	1.00
		2,000 ohms Tapped 25 ohms at 1/2 rotation	Clockwise . . . . .	1.45	1.00

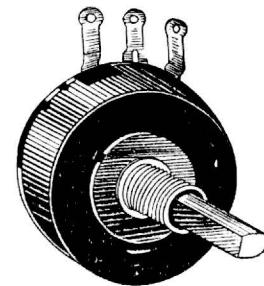
Insulating Washers for use in mounting Controls

Part No. 4092.	Large Washer.	List Price . . . . .	\$0.01
Part No. 4286.	Small Washer.	List Price . . . . .	.01

## PHILCO VOLUME CONTROLS

Part No.	Resistance (Ohms)	Type of Resistance	Length of Threaded Section	Length of Shaft	List Price
5039	{ 210 5,000	Dual	Wire	1/4" 3/8"	\$1.80
5056	{ 210 5,000	Dual*	Wire	3/8" 7/8"	2.25
3879	250	Wire	Wire	3/8" 3/8"	1.00
4094	{ 250 5,000	Dual	Wire	1/4" 7/8"	1.80
4056	1,750	Wire	Wire	3/8" 3/8"	1.00
5232	{ 1,750 5,000	Dual	Wire	1/4" 1 13/64"	1.80
5839	5,000	Wire	Wire	1/4" 1 13/64"	1.00
5317	{ 5,000 5,000	Dual	Wire	1/4" 45/64"	1.80
3076	10,000	Carbon	Carbon	3/8" 7/8"	1.40
33-5005	20,000*	Carbon	Carbon	3/8" 1 13/64"	1.45
33-5017	20,000	Carbon	Carbon	3/8" 7/8"	1.00
4513	50,000	Carbon	Carbon	1" 3/8"	1.00
6109	100,000**	Carbon	Carbon	1" 1 1/8"	1.80
33-5006	350,000*	Carbon	Carbon	3/8" 7/8"	1.45
8054	350,000	Carbon	Carbon	3/8" 3/4"	1.50
5724	500,000	Carbon	Carbon	1/4" 1 1/8"	1.00
33-5106	500,000*	Carbon	Carbon	3/8" 1 1/8"	1.45
6499	1,000,000	Carbon	Carbon	3/8" 3/4"	1.00
33-5022	2,000,000*	Carbon	Carbon	3/8" 5/8"	1.45

\* Equipped with single pole single throw switch. \*\* Equipped with double pole single throw switch.



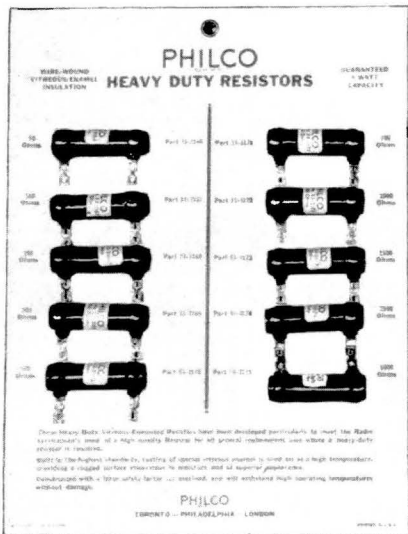
Philco Standard Volume Controls are made in both wire-wound and carbon-resistance types, in a representative range of values to meet any replacement need of the serviceman. Highest quality construction gives quiet operation and gradual control of volume.

Several dual type controls are listed in addition to the regular single types.

An assortment of Volume Controls covering all Philco receivers is described on page 31.

# PHILCO GENERAL REPLACEMENT PARTS KITS

Buy your Parts in the most convenient form. Carefully selected values; attractively mounted.

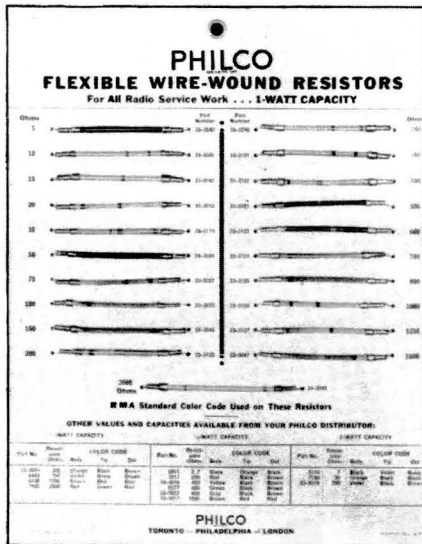


Kit No. 45-1110

### Heavy Duty Resistors Usually Rated 25-Watts Capacity

**KIT No. 45-1110**—Ten heavy porcelain-base wire-wound resistors built with special vitreous enamel coating and guaranteed to stand a continuous heavy load. Useful wherever a heavy-duty resistor is needed in a radio circuit. Range of values from 50 to 5,000 ohms. Each two inches long.

List Price.....\$5.20

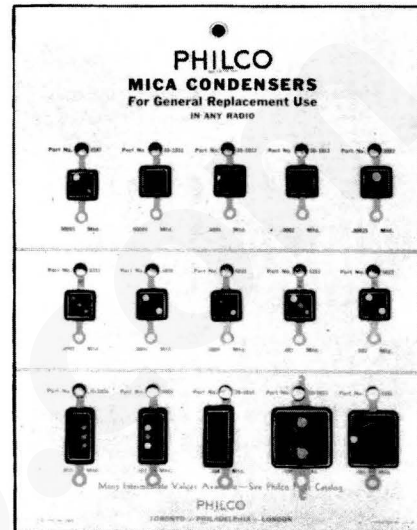


Kit No. 45-1087

### Flexible Wire-Wound Resistors

**KIT No. 45-1087**—A complete assortment of 21 different values in this popular and handy type of resistor. Very easily mounted; **guaranteed** one-watt capacity. Values range from 5 ohms to 2,000 ohms. A most desirable and useful kit.

List Price.....\$5.25

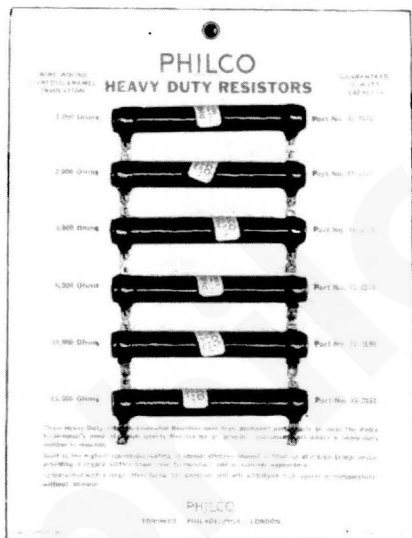


Kit No. 45-1092

### Mica Condensers

**KIT No. 45-1092**—Here is one of the handiest and most desirable assortments ever made up for the radio serviceman. Fifteen values of mica condensers in a complete series ranging from .00005 mfd. to .006 mfd. Every needed capacity included in this kit of compact, quickly installed condensers.

List Price.....\$6.35

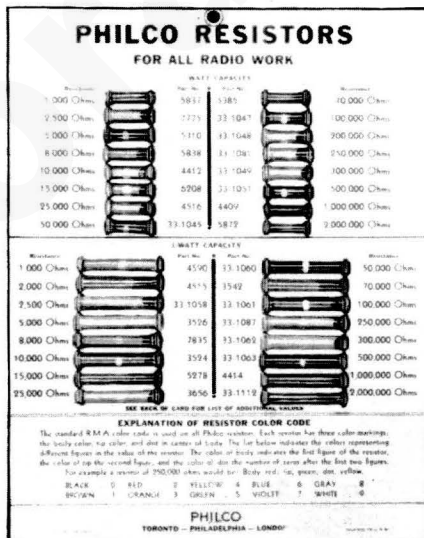


Kit No. 45-1111

### Extra Heavy Duty Resistors Usually Rated 50-Watts Capacity

**KIT No. 45-1111**—A series of six extra heavy duty porcelain base resistors suitable for use in power amplifiers, public address or theatre sound systems or anywhere that a continuous heavy load is to be carried. Wire-wound, vitreous enamel insulation. The kit contains six most wanted values from 1,000 to 15,000 ohms. Each four inches long.

List Price.....\$5.50



Kit No. 45-1093 Kit No. 45-1098

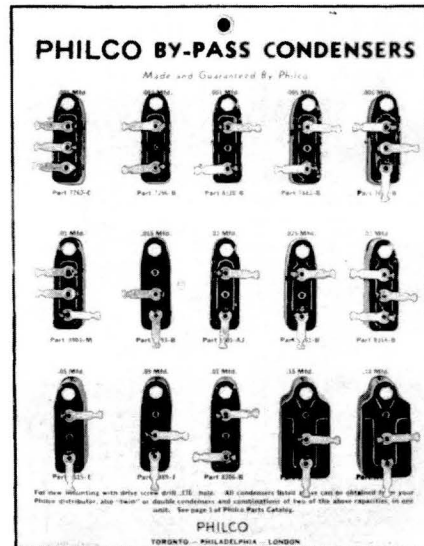
### Carbon Resistors (1/2-Watt & 1-Watt)

**KIT No. 45-1093**—Consists of 16 each, 1/2-watt and 1-watt carbon resistors, in a complete range of the most popular and commonly used values, from 1,000 ohms to 2 megohms. 32 resistors in all. An indispensable kit for any serviceman or dealer.

List Price.....\$6.40

**KIT No. 45-1098**—Same as above, but with metalized resistors.

List Price.....\$6.40



Kit No. 45-1091

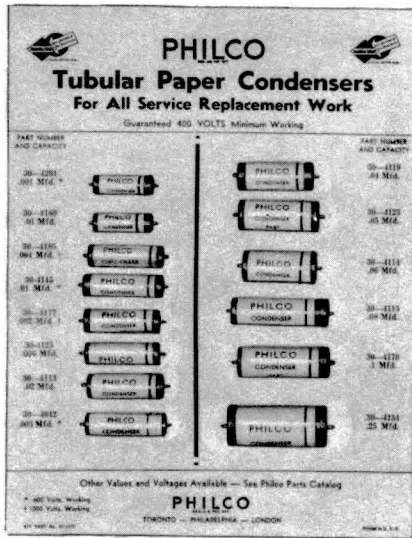
### Bakelite Cased Condensers

**KIT No. 45-1091**—These condensers are one of the most convenient types ever designed for the serviceman or builder and are now available in a complete line of popular values. Mounted on chassis by means of bolt through one end, they are rugged and sturdy, and the lugs on top provide ready connection to other parts in the circuit. 15 values ranging from .001 to .18 mfd. Made and guaranteed by Philco.

List Price.....\$4.65

POPULAR TYPE PARTS FOR REPAIRING ALL MAKES

Each Part Marked with Part No. and Capacity—Ready for Instant Use!



Kit No. 45-1177

Tubular Paper Condensers

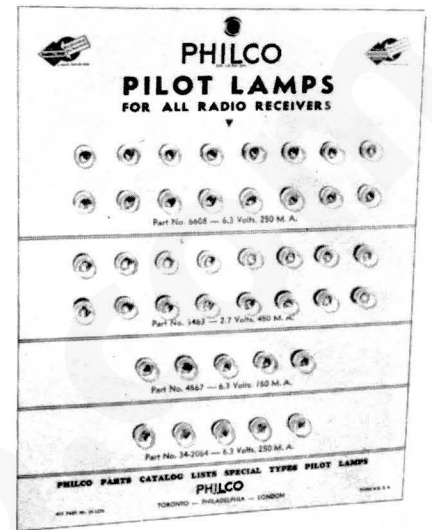
**KIT No. 45-1177**—Tubular paper condensers, because of their compactness and easy insertion in any circuit, are rapidly coming into favor with all radio manufacturers. Here is a complete assortment of these handy little units, in every standard capacity from .001 to .25 mfd. You can't go wrong on this kit. All 400 volts minimum working voltage.  
List Price .....\$3.20



Kit No. 45-1088

Compensating Condensers

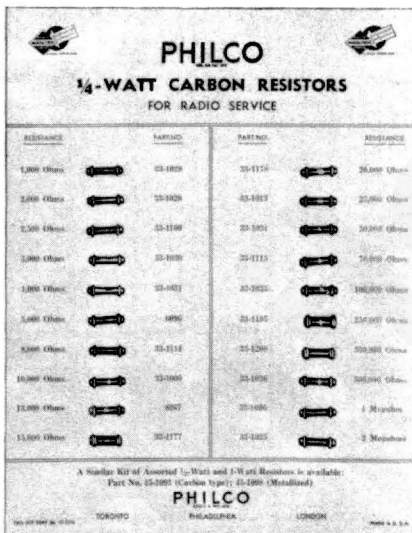
**KIT No. 45-1088**—One dozen high-grade mica compensating condensers made right in the Philco factories and accurately tested. Two each of six different capacity ranges. Ideal padding condensers for R. F. and I. F. circuits, suitable either for replacement in any make or for experimental set building. An attractive and useful kit.  
List Price .....\$2.60



Kit No. 45-1179

Pilot Lamps

**KIT No. 45-1179**—The new Philco Pilot Lamp Card is one of the most convenient and desirable in this whole group. Sixteen 6-volt, sixteen 2½-volt, five 6-volt (D.C. set type), and five 6-volt (bayonet type) pilot lamps comprise the assortment. A fast-moving item which no live dealer can afford to overlook.  
List Price .....\$3.78



Kit No. 45-1178

Carbon Resistors (1/4-Watt)

**KIT No. 45-1178**—A very useful kit of these popular resistors, for use in grid circuits and other low-voltage circuits. Twenty of the most commonly used values.  
List Price .....\$4.00



Tubular Condenser Packages

6 of a kind in each package

Handy packages for the serviceman to take out on service work, and also for the dealer to display on his counter. Contain standard Philco tubular condensers as listed on page 4 of this catalog. Each package contains six of the same value. Display card in each kit.

Kit No.	Condenser	Mfd. Voltage	Capacity	List Price of Kit
45-1146	30-4201	.001	600	\$1.20
45-1149	30-4177	.002	1000	1.50
45-1147	30-4042	.003	600	1.20
45-1150	30-4024	.006	1000	1.50
45-1151	30-4051	.01	1000	1.50
45-1148	30-4145	.01	600	1.20
45-1141	30-4169	.01	400	1.20
45-1142	30-4113	.02	400	1.20
45-1109	30-4215	.02	200	1.20
45-1143	30-4123	.05	400	1.20
45-1140	30-4020	.05	200	1.20
45-1144	30-4170	.1	400	1.50
45-1145	30-4134	.25	400	2.10



Kit No. 45-1156

Portable Pilot Lamp Kit

**KIT No. 45-1156**—Every serviceman should carry one of these kits in his pocket on all service calls. Contains ten No. 6608 6-volt pilot lamps and ten No. 3463 2½-volt lamps.  
List Price .....\$1.80

Block Type Paper Condensers



**KIT No. 45-1164**—Useful where a medium-capacity, medium-voltage condenser is required in a small space. Contains the following, One each:

- Kit No. 45-1164
- 7064..... 2 Mfd.
- 7065..... 1 Mfd.
- 7066..... .5 Mfd.
- 7067..... .25 Mfd.
- 7068..... .1 Mfd.
- 30-4096..... .4 Mfd.

Two each: 30-4095.....  
List Price of Kit.....\$4.80

# PHILCO REPLACEMENT POWER TRANSFORMERS

Give Best Results on Any Make Radio: types for 2½-Volt Tubes or 6-Volt Tubes

COMPLETELY SHIELDED

UNIVERSAL MOUNTING

OVERSIZE

## Superior Quality Construction

Here is a complete line of quality power transformers highly recommended for any replacement needs of the radio serviceman, and for all types of experimental work. Note that a size is available for practically every combination of tubes used in any set.

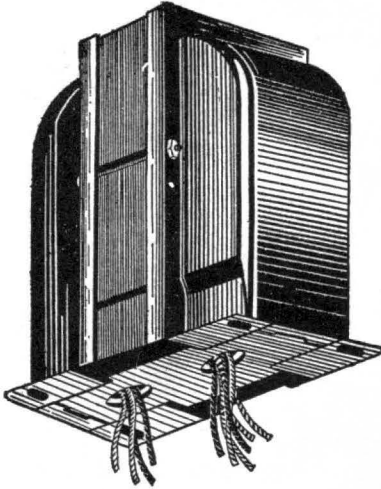
Extremely rugged construction — built to withstand continuous operation; unaffected by climate; rigid construction eliminates hum.

Designed by radio engineers of many years' experience, these transformers can be purchased with the assurance that they will "fill the bill" adequately and satisfactorily.

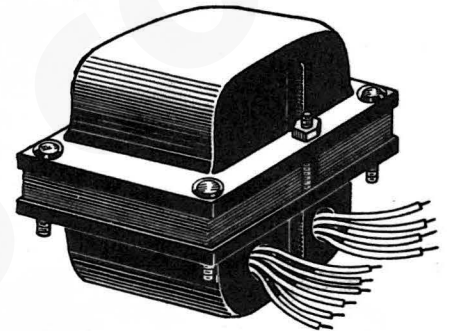
Windings thoroughly impregnated and subjected to exhaustive tests. Laminations carefully packed; heavily enamelled protective housing.

The mounting used is strictly universal. For sets with wiring underneath chassis, the leads are run down through holes in chassis. With each "standard mounting type" transformer, four special mounting sleeves are furnished to facilitate mounting in sets wired on top of the chassis. These sleeves raise the transformer so that the leads can easily be drawn out for connecting. For set builders, the flush mounting type, illustrated at right, is extremely popular.

Transformers listed below are for operation on 100 to 125 volts, 50-60 cycles current. Similar transformers for operation on 25-40 cycles or for 220 volts, 50-60 cycles, are available at slightly higher prices. Each transformer comes packed in a box with instructions and color code explanation.



Standard Mounting Type



Flush Mounting Type

### STANDARD MOUNTING TYPE

	Part No.	Suggested Tube Combinations	Secondary Voltages	Input (Watts)	Center to Center of Mfg. Holes	Mounting Hole Size	List Price
For 3-tube Sets.....	5785	1-24, 1-27, 1-80	340, 2.5, 5.0	30	2 1/8" x 2"	13/64"	\$3.25
For 4-tube Sets.....	7421	2-77, 1-42, 1-80	630, 6.3, 5.0	46	2 1/8" x 2 1/4"	13/64"	3.25
For 5-tube Sets.....	8046	1-6A7, 1-78, 1-75, 1-42, 1-80	680, 6.3, 5.0	60	2 1/8" x 2 1/4"	13/64"	3.50
For 6-tube Sets.....	8046	2-44, 1-36, 1-75, 1-42, 1-80	680, 6.3, 5.0	60	2 1/8" x 2 1/4"	13/64"	3.50
	3516	2-24, 1-27, 2-45, 1-80	750, 2.5, 2.68, 5.0	95	2 7/8" x 2 7/8"	13/64"	7.50
	32-7137	1-6A7, 2-78, 1-75, 1-42, 1-80	680, 6.3, 5.0	65	2 1/8" x 2 1/4"	13/64"	4.00
	32-7234	1-6A7, 2-78, 1-75, 1-42, 1-80	746, 6.3, 5.0	70	2 1/8" x 2 3/4"	13/64"	4.25
For 7-tube Sets.....	3073	4-26, 1-27, 1-71A, 1-80	375, 1.55, 2.47, 4.85, 4.80	50	2 3/4" x 2 1/2"	11/64"	7.50
	4234	3-24, 1-27, 2-71A, 1-80	700, 2.5, 5.0, 5.0	75	2 7/8" x 2 5/8"	11/64"	7.50
	3868	3-24, 1-27, 2-45, 1-80	750, 2.67, 2.68, 5.0	105	2 7/8" x 3 1/8"	11/64"	7.50
	4813	3-24, 1-27, 2-45, 1-80	700, 2.5, 2.5, 5.0	75	2 7/8" x 3 1/8"	11/64"	7.00
	5117	4-24, 1-27, 1-47, 1-80	665, 2.5, 2.5, 5.0	80	2 7/8" x 2 5/8"	13/64"	6.50
	6454	3-44, 1-36, 1-37, 1-42, 1-80	685, 6.3, 5.0	63	2 1/8" x 2 1/2"	13/64"	4.50
	6457	3-44, 1-36, 1-37, 1-42, 1-80	740, 6.3, 5.0	80	3 1/8" x 2 1/2"	13/64"	6.50
32-7462	1-6A7, 2-78, 1-85, 2-42, 1-80	710, 6.3, 5.0	85	3 3/8" x 2 7/8"	13/64"	6.00	
For 8-tube Sets.....	3271	4-26, 1-27, 2-71A, 1-80	575, 1.5, 2.47, 4.8, 5.0	70	2 3/4" x 3 1/8"	11/64"	7.50
	3400	4-26, 1-27, 2-45, 1-80	750, 1.55, 2.5, 2.68, 5.0	95	2 7/8" x 2 7/8"	13/64"	7.50
	7074	2-37, 1-36, 3-44, 1-42, 1-80	685, 6.3, 5.0	65	2 1/8" x 2 1/4"	13/64"	4.50
	32-7111	1-6A7, 2-78, 1-75, 3-42, 1-80	760, 6.3, 5.0	110	3 1/8" x 3 1/8"	13/64"	6.75
For 9-tube Sets.....	4938	4-24, 2-27, 2-45, 1-80	750, 2.5, 2.5, 5.0	95	2 7/8" x 3 3/8"	13/64"	7.50
	3752	3-24, 3-27, 2-45, 1-80	750, 2.67, 2.68, 5.0	115	2 7/8" x 3 3/8"	13/64"	8.00
	5362	3-24, 4-27, 1-47, 1-80	630, 2.5, 2.5, 5.0	95	2 7/8" x 2 1/2"	13/64"	6.25
	6072	2-35, 1-24, 3-27, 2-47, 1-80	660, 2.55, 2.5, 5.0	100	2 7/8" x 3 1/8"	13/64"	6.25
6804	2-44, 1-36, 3-37, 2-42, 1-80	700, 6.3, 5.0	95	2 7/8" x 3 3/8"	13/64"	5.50	
For 10-tube Sets.....	6554	3-44, 1-36, 3-37, 2-42, 1-80	670, 6.3, 5.0	90	2 7/8" x 2 3/4"	13/64"	5.25
	32-7258	1-6A7, 3-78, 1-37, 1-75, 3-42, 1-5Z3	780, 6.3, 5.0	130	2 7/8" x 3 1/2"	13/64"	7.50
For 11-tube Sets.....	4446	4-24, 4-27, 2-45, 1-80	750, 2.67, 2.68, 5.0	105	2 7/8" x 3 3/8"	13/64"	7.00
	5594	4-24, 4-27, 2-47, 1-80	660, 2.67, 2.68, 5.0	105	2 7/8" x 3 1/8"	13/64"	7.00
	6672	4-44, 4-37, 2-42, 1-80	720, 6.3, 5.0	115	3 1/8" x 3 1/8"	13/64"	7.50
	32-7080	1-6A7, 3-78, 2-37, 1-77, 3-42, 1-80	720, 6.3, 5.0	120	2 7/8" x 2 3/4"	13/64"	8.00
	32-7058	1-6A7, 3-78, 2-37, 1-77, 3-42, 1-5Z3	780, 6.3, 5.0	130	3 1/8" x 3 3/8"	13/64"	8.00

### FLUSH MOUNTING TYPE

	Part No.	Suggested Tubes	Secondary Voltages and Currents	Input (Watts)	Mounting Hole Spacing	Mounting Hole Size	List Price
For 4-tube Sets.....	32-7064	2-77, 1-42, 1-80	580, 6.3, 5.0—50MA, 1.5A, 2.0A	46	2 1/8" x 2 1/2"	3/32"	\$3.25
For 5-tube Sets.....	5266	3-24, 1-47, 1-80	750, 2.5, 5.0—65MA, 7.0A, 2.0A	60	3 1/4" x 1 1/8"	1/64"	4.25
	32-7381	1-6A7, 1-78, 1-75, 1-42, 1-80	680, 6.3, 5.0—65MA, 2.2A, 2.0A	54	3 1/8" x 2 1/2"	1/64"	4.00
For 6-tube Sets.....	32-7384	1-6A7, 2-78, 1-75, 1-42, 1-80	746, 6.3, 5.0—78MA, 2.25A, 2.0A	65	3 3/16" x 2 5/16"	1/64"	5.50
For 8-tube Sets.....	32-3402	1-6A7, 2-78, 1-85, 2-42, 1-80	760, 6.3, 5.0—140MA, 3.75A, 2.0A	98	3 3/4" x 2 7/8"	1/64"	4.50
For 10-tube Sets.....	32-7440	3-78, 1-77, 1-76, 1-75, 3-42, 1-80	720, 6.3, 5.0—123MA, 3.75A, 2.0A	90	3 3/4" x 2 7/8"	1/64"	6.00
For 11-tube Sets.....	32-7431	3-78, 2-77, 1-76, 1-37, 1-42, 2-6A3, 1-5Z3	830, 6.3, 6.3, 5.0—170MA, 2.7A, 2.7A, 3.0A	135	3 3/4" x 2 7/8"	1/64"	7.50
For 11-tube Sets.....	32-7291	3-78, 2-77, 1-76, 1-37, 3-42, 1-80	720, 6.3, 5.0—123MA, 5.0A, 2.0A	120	3 3/4" x 3 1/8"	1/64"	7.00

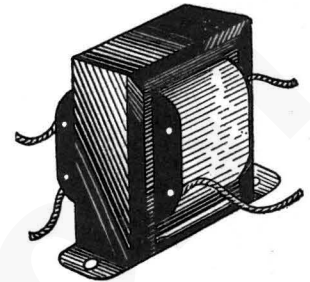
# PHILCO REPLACEMENT AUDIO TRANSFORMERS

For Use in Any Make Radio—For All Service and Experimental Work

"MAINTAIN ORIGINAL RECEPTION"

In the lists below you will find every type of audio transformer—input or output—likely to be required for replacement in any make or model of receiver. The columns headed "Type Output Tube" and "Mounting Hole Sizes" will enable you to promptly select the required type for any set.

Designed by Philco engineers; constructed of the finest materials; every part subjected to rigid inspection. Special vacuum impregnating treatment assures permanent trouble-free operation. The large cores afford highly efficient response to all audio frequencies. Mounted in heavy metal housings, finished in black enamel.



TWO MOUNTING HOLES, 13/64" DIAMETER (FOR No. 8 SCREW)

## AUDIO TRANSFORMERS

Part No.	For Coupling Between Tubes	Overall Turns Ratio	Center to Center of Mtg. Holes	List Price
6064	27 and Single or push-pull 45, 47, 42 or 71-A	1 to 1†	2 3/8"	\$1.75
3872		1 to 2†	2 3/8"	2.50
4952		1 to 3†	2 3/8"	2.25
4232		1 to 4†	2 3/8"	2.00
3242	27 and 26† or 26 and p.p. 45, 71-A, 31, 50	1 to 4	2 3/8"	2.50
5315	30 and 33	1 to 4	2 3/8"	2.25
4862	27 and p.p. 71-A 38 and p.p. 41	1 to 2.2	2 3/8"	2.00
6582		1 to 4	2 7/8"	2.15
32-7211	85 and p.p. 43	1 to 1	2 3/8"	2.25
32-7372	85 and p.p. 42	1 to 4	2 3/8"	2.50

## CLASS "B" AUDIO TRANSFORMER

7233	30 Driver and Single 19 37 and 79	1 to 1.2	2 3/8"	1.75
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## SUPER CLASS "A" AUDIO TRANSFORMERS

32-7114	42 1st A. F. Driver and p.p. 42	1 to 1	2 3/8"	3.00
32-7057	42 Driver and p.p. 42	1 to 1	2 1/8" x 2" (4 holes)	3.50

## HIGH FIDELITY AUDIO TRANSFORMER

32-7447	42 Driver and p.p. 6A3	1 to 1.8	2 1/8" x 2" (4 holes)	3.00
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† Transformer center tap not used.

## OUTPUT TRANSFORMERS

Part No.	For Use With Output Tubes	Turns Ratio	For Voice Coil Impedance in Ohms	Center to Center of Mtg. Holes	List Price
2673	Single 47 or 42	90 to 1	.65	2 3/8"	\$1.50
2660		87 to 1	1.0	2 1/8"	1.00
2580		76 to 1	1.25	2 7/8"	1.00
32-7019		57 to 1	1.0	2 1/2"	.85
2564		53 to 1	2.50	2 7/8"	1.25
2526		27 to 1	10.00	2 3/8"	2.25
2635	Push Pull 47's or 42's	135 to 1	.65	2 3/8"	1.50
2585		100 to 1	1.25	2 7/8"	1.25
2525		38 to 1	10.00	2 3/8"	2.50
32-7078		68 to 1	1.25	2 7/8"	1.25
2550		58 to 1	1.0	2 7/8"	1.75
2706	Single 45 or 71-A	70 to 1	.65	2 3/8"	1.50
2524		20 to 1	10.00	2 3/8"	2.25
2848	Push-Pull 45's, 71-A's or 50's	80 to 1	.65	2 3/8"	1.75
2766		100 to 1	.65	2 3/8"	1.75
2646	Single 33	92 to 1	.65	2 3/8"	1.45
2598	Single 41	93 to 1	1.25	2 7/8"	1.25
32-7020	Single 43	67 to 1	1.00	2 1/8"	.90
32-7000		58 to 1	1.35	2 1/8"	.70

## CLASS "B" OUTPUT TRANSFORMERS

2565	Single 19	160 to 1	.60	2 7/8"	1.50
2515	Single 79	80 to 1	1.25	2 7/8"	1.50

## SUPER CLASS "A" OUTPUT TRANSFORMER

32-7052	Push Pull 47's or 42's	50 to 1	2.25	2 7/8"	2.00
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## HIGH FIDELITY OUTPUT TRANSFORMERS

32-7247	Push-Pull 42's	37 to 1	3.5	2 7/8"	2.00
32-7446	P.p. 6A3	23 to 1	3.9	2 7/8"	1.75

# UNIVERSAL "STEP-DOWN" TRANSFORMERS

Used for reducing the voltage of a 25-60 cycle 220-volt A.C. line to 110 volts so that a 110-volt 25-60 cycle A.C. receiver may be used.

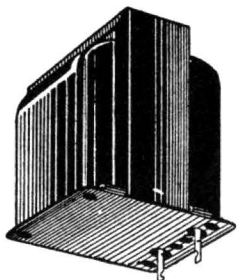
Equipped with 9-foot A.C. cord and plug, and A.C. receptacle, so transformer can be connected in an instant between A.C. outlet and receiver.

Part No. 5563—Step-down Transformer, 25-60 cycles, 230 to 115V, 65-watt—List Price ..... \$8.50

Part No. 5716—Step-down Transformer, 25-60 cycles, 250 to 125V, 150 watt—List Price ..... 11.50

# PHILCO CHOKES AND FIELD COILS

For General Replacement Use



Philco Audio and Filter Chokes are made with the same care and precision as Philco Audio Transformers. All windings are especially impregnated with the finest insulating materials. Corrosion is eliminated, even in the most humid climates.

## PHILCO AUDIO CHOKES

**Part No. 3078**—Audio Choke for use in plate circuit of a 71-A or 45-tube. D.C. resistance 285 ohms. Shielded case.

List Price .....\$3.00

**Part No. 4485**—Audio Choke for use in plate circuit of a 71-A or 45-tube. D.C. resistance 400 ohms.

List Price ..... 1.80

**Part No. 5930**—Audio Choke for use in plate circuit of a 38 or 31-tube. D.C. resistance 2100 ohms.

List Price ..... 1.75

## PHILCO GENERAL REPLACEMENT FIELD COILS

The field coils listed below are suitable for use in any receivers other than Philco, where the requirements of the set call for a coil of characteristics and dimensions as listed.

These coils cannot be used as replacements in Philco sets since practically all Philco field coils are fitted into the complete "pot" assembly at our factory with machinery and tools not available to the serviceman. Note the very complete range of values and sizes.

Part No.	Resist. (Ohms)	Rated Milliamps.	Length	External Diameter	Internal Diameter	List Price
2593	4.2	1250	1 3/8"	2 3/8"	1"	\$1.30
32-9013	6	1000	1 23/64"	2 3/8"	3/4"	1.00
2535	16	750	1 3/8"	2 3/8"	1"	1.30
32-9035	24	500	1 23/64"	2 3/8"	3/4"	1.15
32-9051	44	300	3/2"	2"	3/4"	1.10
32-9038	50	330	1 21/64"	2 3/8"	3/4"	1.20
2527	50	330	2 1/8"	1 3/4"	3/4"	1.00
2546	70	300	1 3/8"	2 3/8"	1"	1.25
2557	435	150	1 3/8"	2 3/8"	1"	1.35
2562	1125	65	1 3/8"	2 3/8"	1"	1.85
32-9008	1140	65	1 1/4"	2 3/8"	3/4"	1.50
32-9019	1140	50	3/2"	2"	3/4"	1.25
32-9046	1140	65	1 1/4"	2 3/8"	1"	1.35
32-9055	1140	70	2 3/8"	3 3/4"	1 1/2"	3.30
32-9024	1450	80	2 3/8"	3 3/4"	1 1/2"	3.20
2545	2200	50	1 3/8"	2 3/8"	1"	1.60
32-9007	2600	40	3/2"	2"	3/4"	1.25
32-9026	6500	40	2 3/8"	3 3/4"	1 1/2"	6.35

## PHILCO FILTER CHOKES

Part No.	Inductance in Henries	@ Milli-amperes	D.C. Resistance in Ohms	List Price
4819	4.0	130	150	\$1.80
5643*	4.0	130	150	1.80
32-7036	4.0	60	185	.90
32-7056	4.75	150	80	2.20
32-7115	5.25	125	170	1.80
3422*	6.5	150	200	3.00
32-7026	7.0	50	150	1.25
4819	7.5	130	285	1.80
Z-224	7.5 Each	100	285 Each	4.25
	of Two Sections			
4231	11.0	80	400	1.80
3269*	12.5	80	400	4.25
32-7213	17.0	60	400	1.60
3472*	25.0	50	1350	4.25
32-7018	70.0	10	2300	1.50
5930	100.0	10	2100	1.75
3518*	150.0	10	4000	3.30
5314	150.0	2	4600	2.10

\* Shielded Case

## PHILCO SPEAKER FIELD COILS

These coils are suitable for replacement either in Philco receivers or any other sets where a field coil of these specifications is required. Vacuum impregnated and moisture proof. External covering for mechanical and electrical protection.

Part No.	D.C. Resist. (Ohms)	Rated Milliamps.	Length	External Diameter	Internal Diameter	List Price
2799	2.7	1750	2 3/8"	2 3/8"	1 17/64"	\$2.70
2707	4.0	1500	2 3/8"	3 1/8"	1 1/4"	4.80
2694	80	330	2 3/8"	2"	1 1/8"	1.20
2674	1180	65	2"	1 3/4"	3/4"	1.20
2768	3100	40	2 3/8"	1 3/8"	1 1/8"	2.00
2850	3200	40	2 7/8"	2 1/8"	1 17/64"	4.50
2588	3275	40	1 3/8"	2 3/8"	1"	2.00

## STANDARD REPLACEMENT FIELD COILS

The field coils listed below can be used in all standard models of Magnavox, Rola, Utah and Jensen speakers, or any other makes of speakers having cores 1" in diameter. From this list you may select a suitable replacement field coil for any of the recent compact receivers. Dimensions: Length 1 1/2", Inside Diameter 1", Outside Diameter (approx.) 2 1/2".

Part No.	Resistance (Ohms)	Rated Milliamps.	List Price
32-9076	6	1250	\$1.85
32-9077	650	110	1.90
32-9078	1000	90	1.95
32-9079	2000	70	2.45
32-9080	2500	65	2.20
32-9081	5000	40	2.70
32-9082	7500	32	3.00

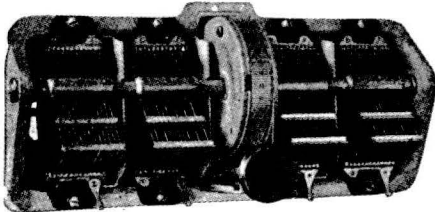


# PHILCO TUNING CONDENSERS

For Replacement Purposes or Experimental Work

Philco tuning condensers are made in several types of drive, and in two-, three- or four-gang style. May be used for replacement in many cases, and are particularly recommended for servicemen, experimenters and set builders. Wide range of choice and exceptional value. Philco standard quality construction throughout.

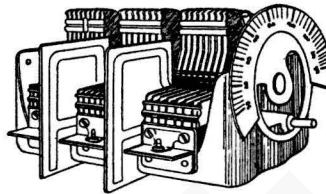
## TYPE A—4-GANG



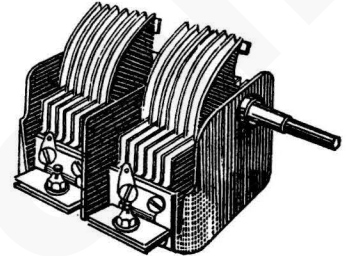
Most of the Philco four-gang tuning condensers are of the type illustrated above. These condensers are built in a steel mounting shell, cadmium plated. The insulating material is the best grade of bakelite. The condensers are counter-balanced and the rotors are driven by a reduction drive cable. The rotor shaft is solid stainless steel set in bronze bearings.

## TYPE B—3-GANG

The three-gang tuning condensers listed below operate on a friction type reduction drive through the dial or through a reduction cable drive as listed below. The split plates are adjusted to maintain perfect balance in each section throughout the whole capacity range. Built-in padding condensers provide a means of balancing each condenser in each circuit.



## TYPE C—2-GANG



Two-gang condensers are similar in construction to the three-gang type, but have smaller sections. Direct drive and reduction drive types are available as specified below. Built-in padding condensers permit balancing of each condenser in each circuit.

Part No.	Max. Cap. (Mfd.)	Drive	List Price
3376E	.00025	Cable	\$12.00
04941	.000335	Cable	6.60
03001	.00035	Friction	7.50
3001B	.0005	Cable	16.20
31-1039	.000335* .00015†	Direct	5.40

Part No.	Max. Cap. (Mfd.)	Drive	List Price
03293	.000335	Friction	\$5.40
06577	.000337	Cable	4.80
03076	.00035	Friction	6.00
31-1040	.00037	Cable	3.00
31-1346	.00046	Direct	4.75

Part No.	Max. Cap. (Mfd.)	Drive	List Price
03692	.000235	Friction	\$3.90
31-1000	.000335	Direct	2.10
05794	.000337	Direct	3.00
31-1034	.00037	Direct	2.10
31-1006	.00037	Friction	2.35
31-1168	.00046	Direct	3.60
31-1122	.00022 .00037	Direct	2.25

\* Inside Sections. † Outside Sections.

# PHILCO TONE CONTROLS

Philco Tone Controls provide an excellent opportunity for added business to the aggressive serviceman. This very desirable feature can be added to any set in a very short time by following the wiring instructions given here:

Drill a 3/8-inch hole for the tone control shaft.

For radio sets with push-pull output tubes, connect tone control to plate of first audio or to plate of power detector if no first audio is used. For sets having a single output tube, connect tone control to plate of same. Ground tone control frame to set chassis.

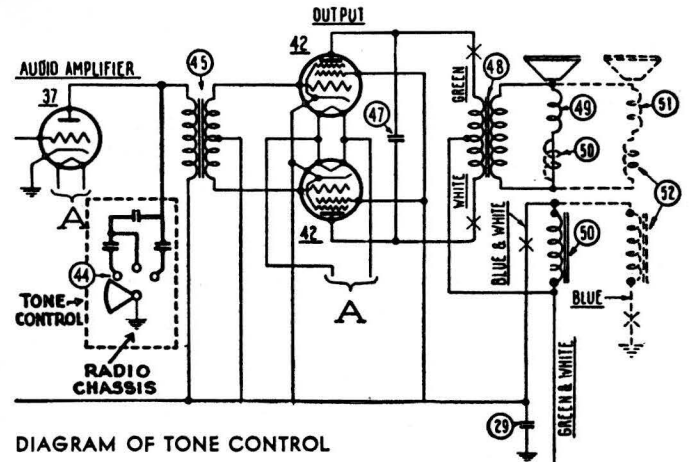
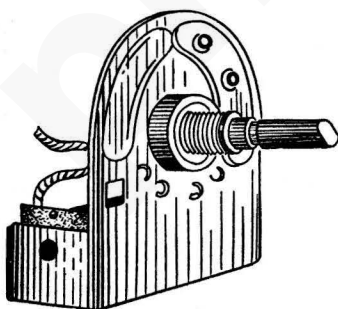


DIAGRAM OF TONE CONTROL

Part No.	No. of Points	Capacity Ranges	List Price
03637	2	Point 1 - 0 Mfd. Point 2 - .01 Mfd.	\$0.50
04757	2	Point 1 - 0 Mfd. Point 2 - .02 Mfd.	.50
05153	2	Point 1 - .01 Mfd. Point 2 - .02 Mfd.	.50
30-4008	2	Point 1 - .01 Mfd. Point 2 - .025 Mfd.	.50

Part No.	No. of Points	Capacity Ranges	List Price
04787	4	Point 1 - 0 Mfd. Point 2 - .015 Mfd. Point 3 - .025 Mfd. Point 4 - .035 Mfd.	.75
30-4204	4	Point 1 - 0 Mfd. Point 2 - .003 Mfd. Point 3 - .006 Mfd. Point 4 - .009 Mfd.	.75



# RADIO MANUFACTURERS SERVICE

Will Identify You As The Official

A few of the many business builders available to R. M. S. members: variety of hand-bills, advertisements, post-cards, letters, etc.

## • R. M. S. Stationery

Carry on your business in a businesslike fashion. People don't like to deal with a slipshod serviceman. Simply get a supply of this office material, use it and you will have a real "big-business" set-up.



### • LETTERHEADS AND ENVELOPES

All material on this page is to be ordered from the Philco Distributor in your territory. Letterheads, imprinted, 250, \$1.75; 500, \$2.60; 1000, \$3.75.

Envelopes, imprinted, 250, \$1.85; 500, \$2.85; 1000, \$4.90.

### • BILLHEADS

Imprinted, 250, \$1.80; 500, \$2.25; 1000, \$2.95.

RADIO MANUFACTURERS SERVICE		
Customer's Name _____		
Address _____		
Type Radio _____	Hand	
Date of Service _____	Trouble _____	Parts Used _____

• SERVICE RECORD CARDS  
Furnished unimprinted only, 250, 55c; 500, \$1.10; 1000, \$2.20.

RADIO MANUFACTURERS SERVICE	
SERVICEMAN'S NAME	
Street Address _____	City, State _____
Sold to _____	DATE _____

### • BUSINESS CARDS



Imprinted  
250, \$1.35  
500, \$1.70  
1000, \$2.60

## • RADIO MANUFACTURERS SERVICE:

A plan developed by Philco to promote the interests of the radio serviceman, and to help increase his business. Originated a little over two years ago, it has already grown to a membership of over 12,000 and is still growing rapidly.

Membership is open to all qualified servicemen possessing complete testing equipment including a signal generator. There are no dues or fees. The application form, which can be obtained from your distributor or from R. M. S. headquarters in Philadelphia (at the Philco plant) must be first signed by the Philco distributor, who then sends it to Headquarters for approval.

Included among the many benefits of membership are: Regular factory mailings of valuable service data, sales promotional material and plans for building your service business, a series of service lessons, etc., etc. If you are not a member, secure an application blank at the earliest date and fill it out. You cannot afford to postpone joining.

Read the article on the lower half of the back cover of this catalog for further information.

## • R. M. S. SERVICE REAL MONEY



Two snappy business-getting handbills for you. NOTE: A number of other equally useful handbills are available in his display book.

## DISPLAY ADVERTISEMENTS LOCAL NEWS

### Let Us "TUNE-UP" Your Radio!

Yes, only \$2.00 for a complete check-up of your radio! Guaranteed repairs on any make, any model, any year! Phone for quick, expert service!

Telephone Number \_\_\_\_\_  
SERVICEMAN'S NAME \_\_\_\_\_  
and Address Here \_\_\_\_\_



2 cols. x 1 1/2 inches

### RADIO REPAIRS!

Call us for expert, guaranteed, service on any radio—any make, any model, any year! Latest testing equipment, rapid service and reasonable rates. We are members of Radio Manufacturers Service!



STANDARD  
TUNE-UP  
Only \$2

Telephone Number \_\_\_\_\_  
SERVICEMAN'S NAME \_\_\_\_\_  
and Address Here \_\_\_\_\_

2 cols. x 2 inches

# SALES PROMOTIONAL MATERIAL



Member In Your Neighborhood

are illustrated below. There are many others including a complete Look them over in the Display Book at your Distributor's.

## FREE HANDBILLS BY-MAKERS



Price, including imprint, \$2.00 per 1000. Handbills are available. See your distributor for

## • R.M.S. Advertising and Promotion Helps

The best business insurance you can have is an advertising and promotion plan. Invest part of your profits in advertising and watch the results. Look over the suggestions below and START NOW!



## • "TUNE-UP" ENVELOPE INSERT

Here is illustrated the new R.M.S. envelope stuffer. This little sheet is a powerful selling talk to the radio owner, on the value of having repairs made by a member of R.M.S. May be used as an envelope insert or handbill. Price \$1.50 per 1000.

## • SERVICE SELLING LETTER WITH TAG

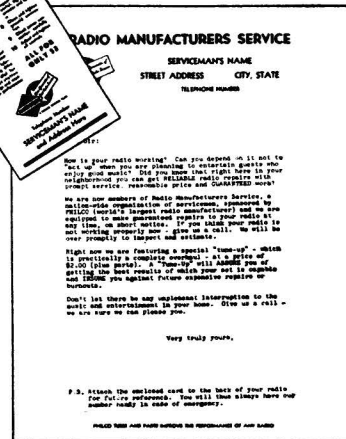
Letter supplied complete as shown below with your imprint at top of page, also in typewriter type at end of letter. 250, \$2.30; 500, \$2.85; 1000, \$4.20.

Tags, printed on both sides, imprinted, 250, \$2.00; 500, \$2.65; 1000, \$3.75.

## • SERVICE POSTCARDS

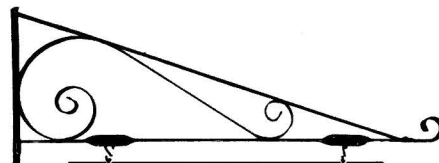


Ready for you to address, stamp and mail Imprinted, 250, \$1.95; 500, \$2.60; 1000, \$3.75.



## • R. M. S. OUTDOOR METAL SIGN

Statistics prove that an outdoor metal sign is one of the best business getters available. To purchase one of these would be the best investment you could make. 20" x 30" complete with metal bracket. Yellow and blue. Net \$2.00.



## MEMBERSHIPS FOR YOUR NEWSPAPERS

Complete mats of these ads and many others are available from your Philco Distributor at 6 cents each net. Look over the assortment in the book on his counter. Take any of these mats to the newspaper office, they will fill in your name, address and telephone number.



**PHILCO ALL-WAVE AERIAL**  
Here's the first aerial to stop interference on both short-wave and standard broadcast bands. Improves reception on ANY \$5.00 radio!

Installation Extra  
QUICKLY INSTALLED  
**MEMBER'S NAME**  
AND ADDRESS HERE

# PHILCO SWITCHES, SOCKETS, KNOBS, PILOT LAMPS

## PHILCO ON-OFF SWITCHES



Rotary

Philco on-off switches are furnished for panel and chassis mounting and are available in both rotary and toggle types. The necessary mounting and lock nuts are provided. Will carry current up to 3 amperes.



Toggle

Part No.	Description	List Price
6498	Single Pole, Single Throw, Rotary	\$0.45
3253	Single Pole, Single Throw, Toggle	.45
3675	Single Pole, Double Throw, Rotary	.60
3116	Single Pole, Double Throw, Toggle	.60
6780	Four Pole, Single Throw, Rotary	1.50
4705	Double Pole, Single Throw, Rotary	1.20
8170	Double Pole, Double Throw, Rotary	1.00
8171*	Double Pole, Double Throw, Rotary	3.00

\* 2-Position and OFF.

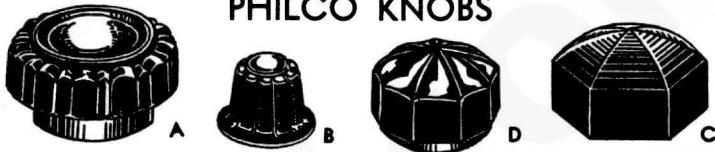


## PHILCO HUM CONTROL POTENTIOMETERS

Wire-wound hum controls for use on A.C. filament circuits. Applicable wherever hum controls or rheostats are needed.

Part No.	Resistance	List Price
3096	6 Ohms	\$0.60
3086	20 Ohms	.70
5650	40 Ohms	.70
33-5511	60 Ohms	.70

## PHILCO KNOBS



Several popular types of knobs are described and listed below. These will cover practically any of the serviceman's requirements. Hole for standard 1/4" shaft. Built-in bronze spring holds knob firmly in place.

Part No.	Description	Type	List Price
03063	Brown bakelite knob, 1 1/8" wide	A	\$0.10
03064	Brown bakelite knob, 1" wide	A	.10
03334	Black bakelite knob, 1" wide	A	.10
03437	Brown bakelite knob, tapered, 3/4" wide at bottom	B	.05
27-4051	Black hex knob, 1" wide	C	.10
27-4052	Black hex knob, 1 1/8" wide	C	.10
06923	Ivory knob, 1" wide	A	.20
27-4032	Ivory knob, 1 1/8" wide	A	.25
27-4140	Black octagonal knob, 1 1/8" wide	D	.10
27-4208	Black knurled, built-in pointer	—	.10
27-4219	Black knurled, built-in gilt-finished pointer	—	.10

Philco Knob Kit—Containing 36 assorted knobs. Packed in an attractive box. Part No. 45-1107. List Price.....\$3.80



A



B



C



D

## PHILCO PILOT LAMPS

Conservative voltage ratings insure long life. These pilot lamps are the same as used in standard Philco receivers.

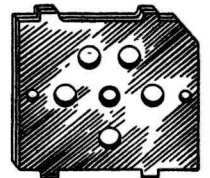
See pages 13 and 31 for handy kits of assorted pilot lamps, attractively mounted.

Part No.	Volts	M. A. Current Rating	Color of Bead	Type	Used in	List Price
6608	6.3	250	Blue	D	A.C. Sets	\$0.09
3463	2.5	450	White	D	A.C.-D.C. and some A.C. Sets	.09
4567	6.3	150	Brown	D	D.C. Sets	.09
5316	2.0	60	Pink	D	Battery Sets	.23
34-2031	6.3	180	White	B	Auto Radio and Models 16 and 144 (code 125)	.12
34-2038	6-8	540	White	C	Ford Car Radio	.13
34-2039	6-8	300**	Blue	C	Auto Radio and 116	.15
34-2040	6-8	.2A**	White	C	Model 201 and Auto Radio	.14
34-2047	3.2	.35	Green	D	Extra Long Life Replacement for 2.5 V.	.16
34-2064	6.3	.25	Blue	A	1936 A.C. Sets	.09
34-2065	2.0	.06	Pink	A	1936 Battery Sets	.35
34-2068	6.3	.15	Brown	A	Models 611, 641 and 642	.16

\*\* At 7.5 V.

## PHILCO TUBE SOCKETS

Wafer type tube sockets made of special tough fibre, with special retaining spring contacts assuring perfect connection at all times. Complete with mounting rivets.



Part No.	Center to Center of Mtg. Holes	Number of Terminals	List Price
4955	1 1/8"	4	\$0.10
4956	1 1/8"	5	.11
6417	1 1/8"	6	.11
27-6005	1 1/8"	7	.11
7828	1 1/8"	4	.10
(Speaker plug socket)		(3 large 1 small)	

## PHILCO DRIVE CABLE FOR TUNING CONDENSERS

- Part No. 3484—Flexible Metal Cable. List Price ..... Per ft. \$0.17
- Part No. 4020—Heavy Black Cord, impregnated. List Price ..... Per ft. .05
- Part No. 27-7755—White Cord, Non-Slip..... Per ft. .05
- Part No. 45-1135—Spool of 25' (White Cord)..... 1.25  
(Includes a supply of metal clips)

# PHILCO LINE-NOISE FILTER

For Use on Farm-Lighting Plants, etc.

Model 0100

PHILCO Model 0100 Line Filter was designed to eliminate the interference to reception on a radio operated from a 32-volt or other farm lighting system. This interference is caused by the operation of the charging generator and the ignition equipment of the gasoline motor which drives the generator.

Model 0100 was designed after extensive field tests under actual users' conditions, and can be depended on to provide noise-free reception. It consists of a system of filters and chokes in a heavy metal case.

Figs. 1 and 2 show two typical types of connections. Fig. 1 is to be used where the charging panel of the system is mounted right on the generator, and Fig. 2 is for use where the charging panel is mounted separate, a short distance away.

Full instructions for connecting are supplied with the 0100.

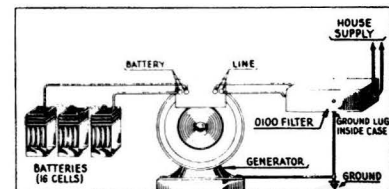


Fig. 1

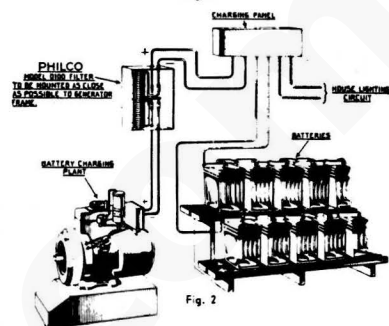


Fig. 2

Model 0100 Line Filter.....List Price \$11.75

## PHILCO FURNITURE TOUCH-UP KIT



At the request of many dealers and servicemen, Philco has prepared a new cabinet touch-up kit containing all of the necessary materials for retouching and refinishing radio cabinets. In the kit are such items as lacquer, sealer, touch-

up wax and the various materials that are required to do a good touch-up job on any radio cabinet. The quantities are sufficient to last the average dealer at least a year, and any items in the kit which require replacement can be readily obtained from your Philco distributor. Every dealer and serviceman who has occasion to do furniture refinishing of any kind should have one of these complete Philco kits. Order from your Philco distributor now.

Part No. 45-1033—Philco Touch-Up Kit.....List Price, \$17.25

## PHILCO LIQUID WAX POLISH



A high-grade liquid wax furniture polish, specified by the Philco chemical laboratory especially for Philco radio cabinets. This polish is far superior to the average furniture polish on the market. It is used extensively for all kinds of fine furniture, automobiles, floors, tile, and linoleum, as well as for radio cabinets.

Part No. 80207—List Price.....\$0.42

Sold only in cases of 6 bottles.

## PHILCO SPECIAL CABINET POLISH

The latest product of the *Philco* chemical laboratories, designed to give a high gloss finish with a minimum of time and effort. **Features:**

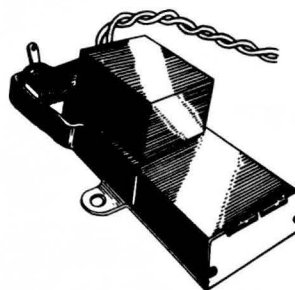
- Very economical to use.
- Ideal for all fine furniture.
- Does not leave a sticky surface.

Part No. (8-oz. bottle) 45-1175.....List Price \$0.55

Part No. (Case of 6 bottles) 45-1176. List Price 3.30



## PHILCO SHADOWTUNER



**THE PHILCO SHADOW-TUNER** can be attached to any receiver having automatic volume control, and gives an accurate visual tuning indicator which enables perfect tuning on all stations. These types are used on the finest Philco receivers. Part No. 6497 is to be

used where the automatic volume control tubes draw 10.5 M.A.; Part No. 45-2028 where they draw 8.0 M.A. Both are equipped with 6.3 volt pilot lamp fitted into a special clip-type receptacle.

Shadowtuner is readily mounted by means of two screws and connected by means of four leads—two for the meter and two for the pilot lamp.

The live serviceman can make a nice profit by installing these on customers' sets which do not have this feature—a novel and eye-catching device which is really useful and helpful in tuning.

Part No. 6497—List Price.....\$2.50

Part No. 45-2028—List Price..... 2.50

# NOW! . . . A PROFESSIONAL TYPE . . . ALL-WAVE SIGNAL GENERATOR . . . at an Amazingly Low Price!

*New . . . . PHILCO "088"*

*All-Wave*  
**SIGNAL GENERATOR**

**Fundamental Frequency**

Designed and Perfected in the Research Laboratories of PHILCO, World's Largest Radio Manufacturer. . . . Guaranteed to produce a precision job of alignment on any type Radio Receiver. . . .

**MODEL 088**  
*All-Wave*  
**SIGNAL GENERATOR**

ONLY  
**\$32<sup>50</sup>**  
(Less Batteries)  
**LIST PRICE**

Full Discount to Servicemen

**SPECIFICATIONS OF MODEL 088**

**Variable Condenser:** Extremely low loss, low capacity rugged condenser designed especially for service use.

**Wave Bands:** Five, giving continuous frequency range from 110 to 20,000 kilocycles. All frequencies appear on the scales on panel in large readable numerals. No charts, graphs or curves to bother with.

**Compensation:** Individual compensating for each wave band, not affecting any of the others. Special XM262 formula moulded compensating condensers. Moisture-proof and unaffected by temperature change.

**Coils:** Specially designed solenoid-type coils used on all high-frequency bands, giving permanent stability of frequency calibration.

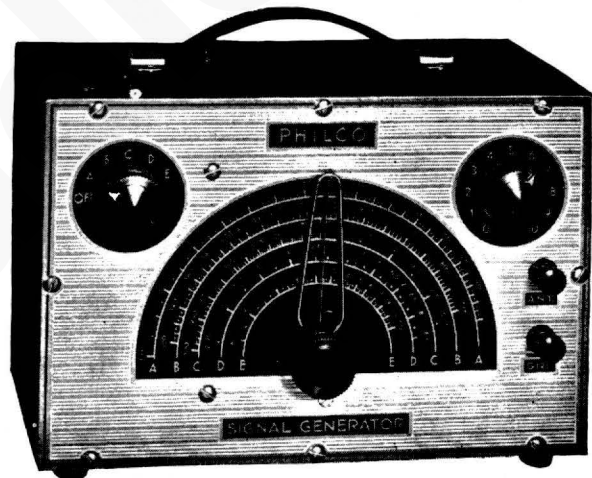
**Waveband Switch:** Combined with on-off switch: first clockwise movement places unit in operation.

**Signal Attenuation:** 20,000 to 1 in broadcast band; more than sufficient range for realigning sets which are completely "out," yet signal can be reduced to minimum for "hairline" adjustment of sensitive circuits.

**Knobs:** New type knurled knobs with built-in pointer. Frequency control knob is special type with hairline indicator.

**Panel:** Satin finish, chromium plated; special design of extremely attractive appearance.

**Case:** All metal, black crackle finish.



**MODEL 088 SIGNAL GENERATOR**

**ALL-WAVE:**  
110 K.C. to 20 M.C.

**All Fundamental**  
**Frequencies**  
No harmonics used

**Ball-bearing Tuning**  
**Smooth and accurate;**  
**5 to 1 reduction ratio**  
**All Standard I.F.'s Appear**  
**on the Scale**  
**Direct Reading Scales**  
**Precision Calibration**

**New PHILCO Tube,**  
**Designed for High**  
**Frequency Use**  
**Self-modulated**  
**Vibration Proof**  
**Super-stability**

**Electron-coupled**  
**Non-drift Padders**  
**400-cycle Modulation**  
**Extremely Economical**  
**All Necessary Clips and**  
**Leads Furnished**

**THE MOST ACCURATE—THE MOST BEAUTIFUL—THE MOST COMPLETE SERVICE AND TEST UNIT Available to Service Men!**

# PHILCO Model 099

*Combination* **ALL-WAVE SIGNAL-GENERATOR and CIRCUIT-TESTER**

*Includes*

**THE NEW PRECISION**

**PHILCO 088**

**All-Wave Signal-Generator**

*(Described On Opposite Page)*

**and the WORLD FAMOUS**

**PHILCO 025  
Circuit Tester**

*(The Universal Radio Set Tester)*



*Finest Precision Complete Radio-Servicing Unit!*

**Model 025 Circuit Tester**  
(Built into Model 099)

PHILCO'S famous complete testing unit for making all tests on a radio receiver: Voltage, Current, Resistance, Capacity and Output.

5 A. C. Voltage Ranges: 0-10 volts; 0-30 volts; 0-100 volts; 0-300 volts; 0-1000 volts.  
5 D. C. Voltage Ranges: Same as A. C. Ranges listed above. 5 Output Meter Voltage Ranges: Same as A. C. Ranges listed above. 3 Milliammeter Ranges: 0-1 mil.; 0-10, mils.; 0-100 mils. Special 10 ampere shunt included for automobile radio current tests. 3 Ohmmeter Ranges: 0-1½ megohms; 0-15000 ohms; 0-150 ohms. Meter adaptable for capacity tests. Rotary Switch controls all meter ranges and connections.

**EVERYTHING THE SERVICEMAN NEEDS**

PHILCO Model 099 provides the serviceman with the highest type complete radio servicing unit. The new "088" All-Wave Signal Generator, plus the now well-known "025" Circuit Tester, covers every possible need of the serviceman, and guarantees him 100% accuracy in all testing and adjusting operations.

The two units are fitted into a beautiful polished walnut case and all necessary connecting leads and adapters required for making the various operations and tests are included. A quality instrument throughout—in both appearance and performance.

**PHILCO Model 099**      *Combination Unit*  
**COMPLETE, IN WALNUT CASE**

**\$100<sup>00</sup>**  
LIST PRICE

**BUILD THAT SHORT-WAVE "SUPER-HET" FROM PHILCO PARTS**

# Famous PHILCO "ALL-PURPOSE" SET TESTER: Model 048A

Latest Improved Design

CIRCUIT TESTER + SIGNAL GENERATOR

All Servicemen know the famous PHILCO 048 All-Purpose Tester. Thousands of them have been sold all over the world and it has established a name of being the ideal complete portable testing unit for the serviceman.

This new improved instrument—Model 048A—incorporates all the desirable features of the 048, but many improvements have been made. It is built along the lines of the now famous Philco 024 Signal Generator and 025 Circuit Tester, having an etched brass panel highly polished, with black lettering. The unit is built into a handsome and strong mahogany finished case with dull finish hardware and brown leather carrying handle to match. An instrument any serviceman will be proud to own.

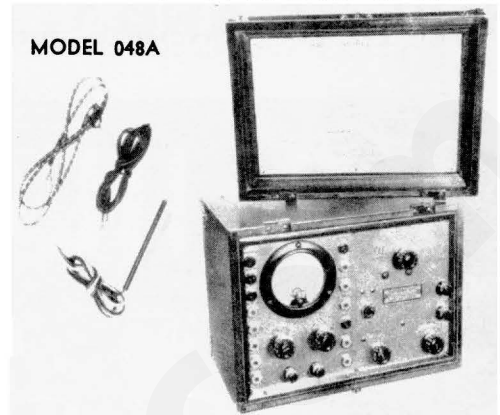
Note that lid is readily removable for convenience while making tests.

Handles every Service Job and meets all Testing Requirements from the Crystal Set up to the latest Super with duo-diode-triode tubes. Will not become obsolete with future radio developments. Weight complete, 15 lbs.

- 5 A.C. Voltage Ranges
- 5 D.C. Voltage Ranges
- 3 D.C. Milliammeter Ranges
- 3 Ohmmeter Ranges
- 5 A.C. Output Meter Ranges

- Capacity Meter
- Special 10-ampere Shunt for Auto Radio Current Tests
- Complete Tube Test
- Variable Frequency I. F. and R. F. Signal Generator from 105 K.C. to 2000 K.C.
- All Test Prods, Leads, Batteries, Tubes, etc., included—

List Price Complete . . . . . \$81.00



MODEL 048A

### Read These Specifications

Twenty-two meter ranges and signal generator at a price made possible by Philco laboratory design and construction. Rugged instrument—easy to read, quick change of scales, no danger of taking false readings. Accurate signal generator, calibrated in K.C. on the instrument panel (no graphs to consult). Finest type precision movement meter. All test leads designed to simplify your service job. Real universal clip for connections of screen grid tubes or antenna post, sturdy test prods designed for long service. New exclusive Philco output circuit adapters, will fit 4-, 5-, 6-, 7- and 8-prong sockets, connect output meter to any type output circuit without removing tubes from chassis. All leads plug into tester panel.

## PHILCO Signal Generator—Model 024

### INTERMEDIATE AND BROADCAST FREQUENCIES

The Model 024 Philco Signal Generator is a complete, self-contained, accurately calibrated instrument, designed to cover all frequencies from 105 K.C. to 2000 K.C. All necessary batteries and tubes are included within the container. No external attachment or current supply required.

Modern Superheterodynes cannot be adjusted properly without a high-grade signal generator, but many servicemen have been unable to pay the high prices previously asked for quality equipment. The Philco Model 024 now makes it

possible for every serviceman to own a high quality Signal Generator at a figure about equivalent to the sum collected on his first six RADIO MANUFACTURERS SERVICE jobs.

### Model 024 Signal Generator

Complete with Batteries, Tube and Test Leads

List Price, \$22.50

A compact, smoothly operating and beautifully finished instrument. Frequency-range scales and designations of controls are etched in black lettering on polished brass panel. Top, sides and back have special "crackle" finish. Brass handle provides easy portability. Ball-bearing tuning condenser provides extremely fine adjustment. Shielded antenna lead with Universal clip included for connection to receiver. The "A" battery is held in place by a special spring cap, removable without tools. Entire instrument mounted on special felt feet. At the price quoted, no serviceman can afford to be without one.



## PHILCO Circuit Tester—Model 025

- A. C. VOLTS . . . D. C. VOLTS . . . MILLIAMPERES
- AMPERES . . . OHMS . . . OUTPUT METER
- CAPACITY METER

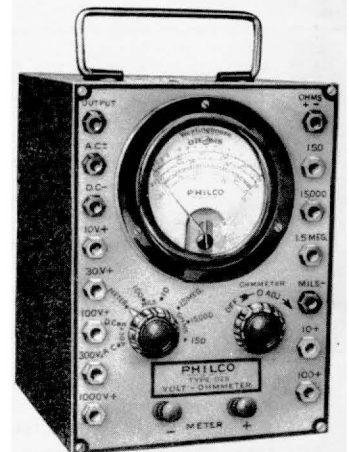
The latest addition to Philco's line of testing equipment—an accurate, compact tester for all types of radio sets. Affords simple and quick tests by means of resistance, voltage and current methods.

Modern radio test methods require a unit of this kind for speed, simplicity and accuracy. The many different applications of the meter and the convenient rotary control switch make this instrument unusually valuable to the serviceman, both for outside and shop service work.

### List Price

\$61.00

5 A.C. Voltage Ranges: 0-10 volts; 0-30 volts; 0-100 volts; 0-300 volts; 0-1000 volts. 5 D.C. Voltage Ranges: Same as A.C. Ranges listed above. 5 Output Meter Voltage Ranges: Same as A.C. Ranges listed above. 3 Milliammeter Ranges: 0-1 mil.; 0-10 mils.; 0-100 mils. Special 10 ampere shunt provided for automobile radio current tests. 3 Ohmmeter ranges: 0-1½ megohms; 0-15000 ohms; 0-150 ohms. Meter adaptable for capacity tests. Rotary Switch controls all meter ranges and connections. All necessary Leads, Adaptors and Batteries furnished complete.



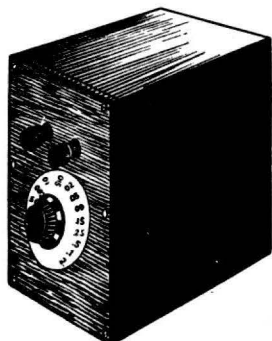
Philco Model 025



# PHILCO TESTING EQUIPMENT AND TOOLS

## PHILCO CONDENSER TEST BOX

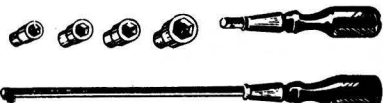
Model 093



A convenient switch box designed for use in testing by-pass condensers in all receivers by substitution method. Contains 15 different fixed condensers, which can quickly be connected through a multi-polar switch to obtain desired capacities from .00025 mfd. to 2 mfd. Two binding posts on the box provide the necessary connections for external test leads. Mahogany box in brown mahogany finish.

List Price, \$14.40

## PHILCO WRENCH KIT

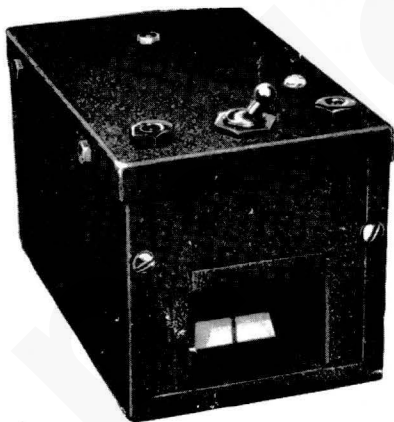


A kit of four sockets and two handles, long and short, for hex head nuts, screws and bolts. Specially hardened steel of the highest grade. Kit contains the following parts: 1 handle (long); 1 handle (short); one socket, 1/4"; one socket, 5/8"; one socket, 3/8"; one socket, 1/8".

- Part No. 7016—Wrench Kit Complete—List Price.....\$2.75
- Part No. 7019—1/4" socket only—List Price..... .20
- Part No. 7020—5/8" socket only—List Price..... .20
- Part No. 7021—3/8" socket only—List Price..... .20
- Part No. 7022—1/8" socket only—List Price..... .20

## PHILCO SHADOW OUTPUT METER Model 012

An Essential Output Indicator for Adjusting Receivers

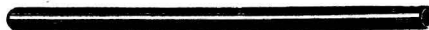


Something new for the serviceman — an inexpensive output meter with the accuracy and convenience of Philco shadow tuning. Connects to the output tube of any radio set. Affords an accurate indication of output volume when adjusting compensating condensers. Maximum shadow width indicates maximum signal — strong signal produces a wide shadow and weak signal a narrow shadow. Width of shadow is directly proportional to signal strength, thus permitting accurate adjustment of radio by means of shadow indication.

Can be connected to plate and cathode prongs of output tube or across two plates of push-pull output, using clips and leads provided. Makes an ideal output meter for use with the Philco 024 or 088 Signal Generator.

List Price .....\$12.50

## PHILCO SPECIAL ADJUSTING TOOLS For Adjusting Padding Condensers



Part No. 3164. Fibre Wrench for hex head adjusting screws, 8" long. List Price.....\$0.20



Part No. 27-7059. Insulated Screw-driver. Fibre shank. 7" long, 1/8" steel blade. List Price.....\$0.60

## NEW PHILCO EYELETTING KIT

An extremely handy and convenient item for the serviceman is the new PHILCO Eyeletting Kit recently announced.

This kit consists of an anvil, a punch and a liberal assortment of eyelets for use in fastening various parts, such as sockets, large condensers, etc., to the radio chassis. The anvil is a heavy iron casting, on the end of which has been placed a specially hardened inset of tool steel. The punch is also built of the same hardened tool steel.

Every serviceman who has attempted to do an eyeletting or riveting job on a radio chassis, using the ordinary tools at his disposal, knows that this kind of work is extremely difficult. With the new eyeletting set, your time in making such repairs will be greatly reduced, and you can do a far better job than ever before.



Furnished Complete with Assortment of Eyelets

Part No. 45-1162, ..... List Price \$2.25

## PHILCO SOLDER — In Handy Spools

Latest development in radio solder. Special rosin core. Assures a neat, clean connection. Saves time and labor. Furnished in handy one-pound spools only.

Philco Solder, 1-lb. Spool—Part No. 45-1123.....List Price \$1.25

## PHILCO TUBE-SHIELDS

Made of heavy gauge metal, highly polished. Same as used in standard Philco receivers. Ample heat-ventilation holes.



Type A



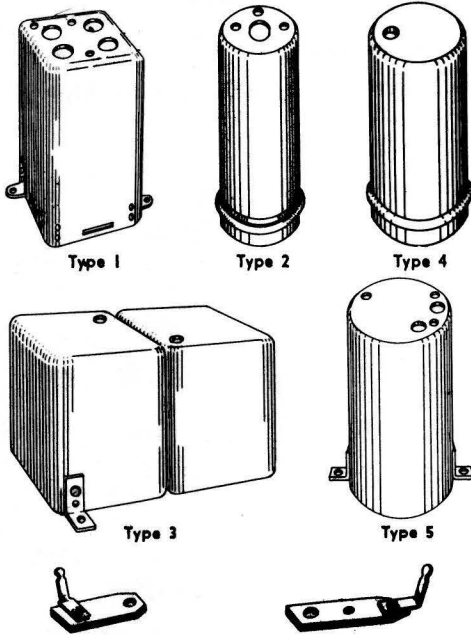
Type B

Part No.	Type	Description	List Price
8005	A	(Round) Large, fits over base....	\$0.10
8004		Base for same.....	.01
28-1107	A	(Round) Small, fits inside base...	.10
28-1108		Base for same.....	.02
28-2224	B	(Square) Open Top.....	.10
28-2225		Base for same.....	.02

AMATEURS! • EXPERIMENTERS! • SET BUILDERS!

Here Is A Complete Line of Quality Parts FOR R. F. AND I. F. CIRCUITS

The parts listed on this page will enable the serviceman to build himself a set to cover almost any desired range.



Terminal Panel 38-5424... List \$0.03. Terminal Panel (Short) Part No. 38-5772... List \$0.03. Terminal Panel (Long) Part No. 38-5400... List \$0.02.

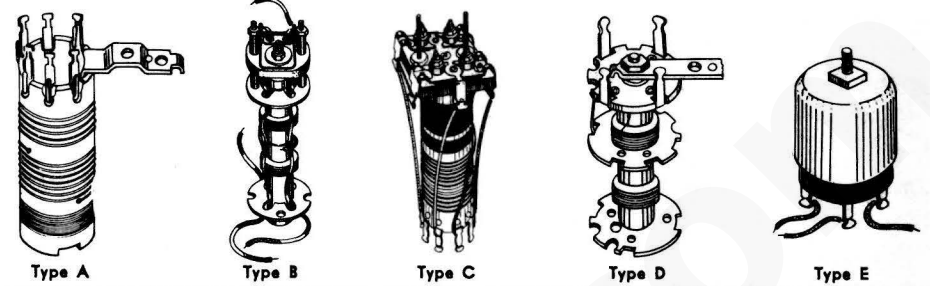


Table I: I. F. TRANSFORMERS. Columns: Part No., Type, KC., List. Rows include parts like 03883, 06352, 06621, 06622, 32-1155, 32-1188, 32-1263, 32-1264, 32-1362, 32-1363, 32-1364, 32-1381, 32-1404, 32-1470, 32-1483, 32-1484, 32-1471, 32-1449.

\* Regenerative Detector Coil. † High-Fidelity (has Tertiary Winding).

Table II: OSCILLATOR COILS. Columns: Part No., Type, \*Freq. Range K.C., List. Rows include parts like 32-1023, 32-1118, 32-1185, 32-1209, 32-1272, 32-1273, 32-1311, 32-1301, 32-1380, 32-1389, 32-1398, 32-1413, 32-1423, 32-1428, 32-1469, 32-1504, 32-1849.

\* Frequency range given for oscillator coil is its fundamental. Subtract I.F. frequency to obtain actual working K.C. range of set.

Table III: R. F. COILS. Columns: Part No., Type, Freq. Range K.C., List. Rows include parts like 03014, 04982, 06349, 06662, 32-1063, 32-1070, 32-1171, 32-1198, 32-1256, 32-1310, 32-1379, 32-1397, 32-1412, 32-1421, 32-1422, 32-1468, 32-1482, 32-1636.

Table IV: ANTENNA COILS. Columns: Part No., Type, Freq. Range K.C., List. Rows include parts like 03360, 04981, 32-1052, 32-1069, 32-1182, 32-1183, 32-1187, 32-1208, 32-1255, 32-1270, 32-1271, 32-1360, 32-1378, 32-1388, 32-1396, 32-1420, 32-1467, 32-1481.

COIL SHIELDS

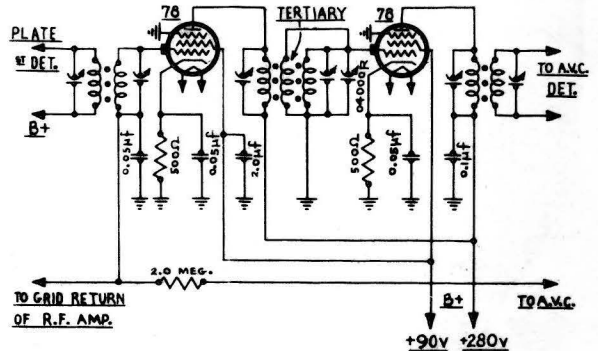
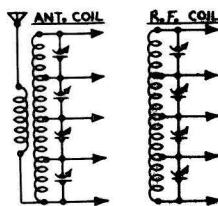
Table V: COIL SHIELDS. Columns: Part No., Type, Dimensions and Style, List. Rows include parts like 28-1105, 28-1451, 28-1660, 38-5060, 38-5081, 38-5101, 38-5175, 38-5176, 38-5177, 38-5178, 38-5803, 38-6044.

INTERMEDIATE FREQUENCY AMPLIFIER KIT

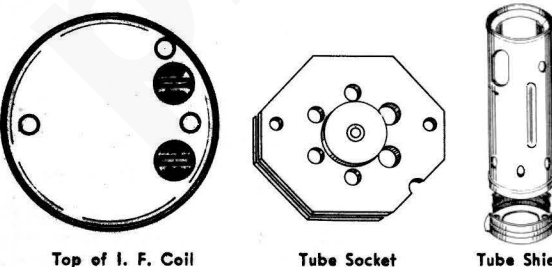
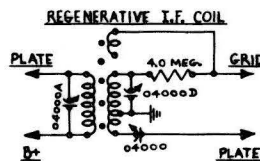
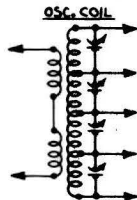
CONTENTS OF KIT

Table VI: CONTENTS OF KIT. Columns: Part No., Description, List Price. Rows include parts like 38-6685, 7547, 28-1107, 28-1108, 04000R, 6977, 3615-AJ, 3615-BS, 5837, 30-4123. Total price: \$7.16.

Coils below are all Type C shown at top of page.



Schematic Diagram of I. F. Amplifier Circuit



# New PHILCO Headphone and Adapter Kit

Ideal for

- SHORT-WAVE FANS
- LATE-HOUR LISTENERS
- PERSONS HARD OF HEARING

To enable short-wave fans to "listen-in" with maximum convenience and comfort at any hour of day or night, without disturbing anyone else in the room, the PHILCO Headphone and Adapter Kit (Part No. 45-1167) fills a long-felt need. Also ideal for the hard-of-hearing member of the family.

Contains a pair of DeLuxe light-weight, highly sensitive headphones with cord and plug, and a special Adapter-box with cord and plug for connecting to radio by inserting under tube. Speaker is automatically disconnected when headphones are in use.

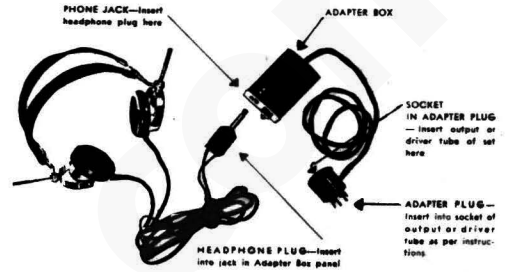
Very easily connected to any type radio, in most cases without changing any connections. Can be left connected permanently without affecting tone of speaker. Comes packed in an attractive cardboard box, with full instructions.

## PHILCO Headphone and Adapter Kit

Complete ..... List Price, \$7.50

DeLuxe Lightweight Headphones only, 2000 ohms—Part No. 8303

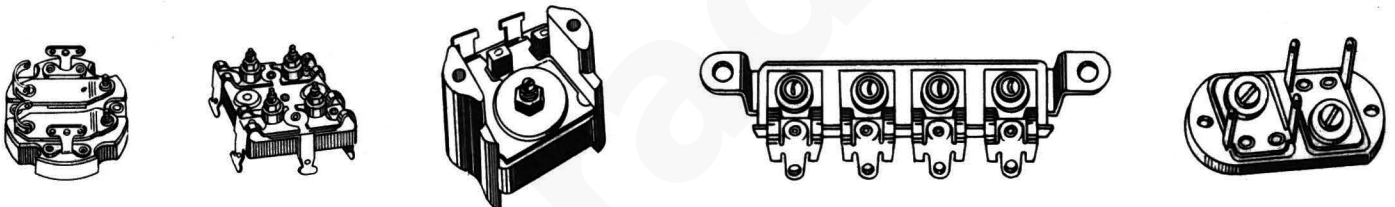
List Price, \$4.25



Philco Headphone and Adapter Kit  
Part No. 45-1167

# COMPENSATING CONDENSERS and WAVE BAND SWITCHES . . .

- for
- SET BUILDERS
  - SHORT-WAVE EXPERIMENTERS
  - GENERAL SERVICE USES



Type A

Type B

Type C

Type D

Type E

## COMPENSATING CONDENSERS

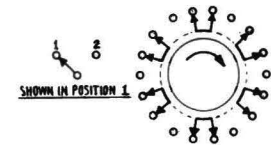
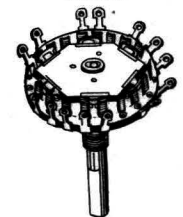
Part No.	Cap. Mmf. 1st Section	Cap. Mmf. 2d Section	Type	List Price
31-6000	350-600	50-125	A	\$0.55
31-6001	100-145	100-145	A	.45
31-6002	145-190	145-190	A	.45
31-6003	20-100	50-125	A	.45
31-6020	200-400	35-85	A	.50
31-6021	200-400	125-250	A	.50
31-6028	400-1100	400-1100	A	.85
31-6029	25-75	10-25	A	.50
31-6030	25-75	25-75	A	.40
31-6035	25-75	25-75	A	.50
31-6026	4 padders	each 3-35	B	.85
31-6007	50-165	50-165	C	.40
31-6008	50-165	20-70	C	.40
31-6012	275-900	.....	C	.45
31-6013	20-70	.....	C	.35
31-6014	50-150	.....	C	.40
31-6015	10-50	.....	C	.30
31-6022	65-90	25-45	C	.40
31-6023	95-120	95-120	C	.45
31-6027	500-1500	200-600	C	.70
31-6033	125-375	85-250	C	.50
31-6034	65-90	95-120	C	.35
31-6035	65-90	20-30	C	.35
31-6036	65-90	65-90	C	.35
31-6040	40-60	40-60	C	.40
31-6044	200-600	85-250	C	.50
31-6049	125-375	125-375	C	.45
31-6030	95-120	15-25	C	.40
31-6034	145-175	40-60	C	.45
31-6060	125-375	200-600	C	.50
31-6047	4 padders	each 7-20	D	.50
31-6004	15-70	15-70	E	.35

## SWITCHES

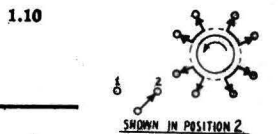
Three popular types of waveband switches are listed here, the circuit for each being illustrated herewith.

Part No.	Circuit	Description	List Price
42-1081	A	Single Throw, Four-Pole ...	\$0.75
42-1092	B	Double Throw, Six-Pole ....	.90
42-1062	C	Four-Pole, Single Throw, plus Single-Pole, Double Throw .....	1.10

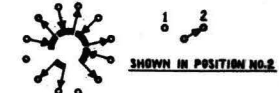
### Wave Band Switch



Circuit A



Circuit B



Circuit C

# SHORT-WAVE Section—Parts for SET-BUILDERS

Selected Items . . . Expressly Recommended for

SET-BUILDERS · AMATEURS · EXPERIMENTERS · SHORT WAVE FANS

PHILCO realizes and appreciates the value to the radio industry, of the experimenter, radio set builder, and short-wave fan or "ham." Many members of this rapidly growing army frequently make valuable contributions to radio, and the manufacturer who helps supply them suitable equipment is doing a good turn to the radio industry and the public, by expanding his market to cover this field.

We are listing on these pages a selection of parts of all types, which our engineers recommend particularly for short wave use. The condensers are all high-test voltage; resistors are guaranteed rating; transformers are selected types, the audio transformers being of the high-fidelity type. All of these parts maintain the usual PHILCO QUALITY standard for performance and long life.

## POWER TRANSFORMERS

Here are a few selected power transformers, mostly of the "flush mounting" type, recommended for set-builders. The full specifications given herewith will enable you to plan accordingly.

### POWER TRANSFORMERS — FLUSH MOUNTING TYPE

No. Tubes	Voltages and Currents	Watts Input	Dimensions			Mtg. Holes	Part No.	List Price
			Length	Width	Height			
5	680 V. (65 M. A.), 6.3 V. (2.2 A.), 5.0 V. (2.0 A.)	55	3 3/8"	3"	3 3/8"	2 1/2" x 3 1/16"	32-7381	\$4.00
8	760 V. (110 M. A.), 6.3 V. (3.75 A.), 5.0 V. (2.0 A.)	95	4 11/16"	3 15/16"	4"	3 3/8" x 3 3/8"	32-7402	4.50
11	720 V. (125 M. A.), 6.3 V. (5.0 A.), 5.0 V. (2.0 A.)	100	4 11/16"	3 15/16"	3 13/16"	3 3/8" x 3 3/8"	32-7291	7.00

### AMPLIFIER POWER TRANSFORMERS — UPRIGHT MOUNTING TYPE

No. Tubes	Voltages and Currents	Watts Input	Dimensions			Mtg. Holes	Part No.	List Price
			Length	Width	Height			
4 Type 50 } 1 83 or 5Z3 }	1000 V. (220 M. A.), 7.5 V. (3.0 A.), 5.0 V. (3.0 A.)	220	5 3/8"	3 13/16"	5 13/32"	3 3/8" x 5 3/8"	32-7067	\$30.00
2 Type 50 } 2 Type 81 }	1200 V. (110 M. A.), 7.5 V. (2.5 A.), 7.5 V. (2.5 A.)	110	4 3/8"	3 13/16"	5 13/32"	3 x 3 3/8"	32-7032	36.00

## CHOKES

Several excellent filter chokes particularly desirable for use in building a "quality" set are listed here. Note that these have low inductance combined with high current capacity.

### FILTER CHOKES

Inductance (Henries)	@ Current (M. A.)	D. C. Resist. (Ohms)	Dimensions			Mtg. Hole Spacing	Part No.	List Price
			L.	W.	H.			
4.0	130	150	2 7/8"	x 1 3/4"	x 2 3/8"	2 3/8"	5463	\$1.80
4.75	150	80	2 11/16"	x 2 7/16"	x 2 3/8"	2 x 2 1/6"	32-7056	2.20
5.0	220	70	3 1/2"	x 3 3/4"	x 4 13/32"	2 3/8" x 2 11/16"	32-7068	9.50
6.5	150	200	2 5/8"	x 2 3/8"	x 3 5/32"	2 11/16" x 2"	3422	3.00
7.5	130	285	2 7/8"	x 1 1/16"	x 2 5/16"	2 3/8"	4819	1.80

## AUDIO AND OUTPUT TRANSFORMERS

Here are two exceptionally high type audio transformers and two similar output transformers giving a remarkably faithful response over the entire audio range. Recommended for anyone building a high grade receiver.

### AUDIO TRANSFORMERS

Type	Receiver Output	Turns Ratio	Dimensions	Mtg. Hole Spacing	Part No.	List Price
Super Class A High Fidelity	42 Driver and Push-Pull 42's as triodes	1 to 1	2 13/16" x 2 3/16" x 2 7/16"	2 3/8"	32-7114	\$3.00
	42 Driver and Push-Pull 42's as triodes	1 to 1	2 11/16" x 2 7/16" x 3 3/8"	2 1/16" x 2" (4 holes)	32-7057	3.50

### OUTPUT TRANSFORMERS

Type	Receiver Output	Turns Ratio	Voice Coil Impedance	Mtg. Hole Spacing	Part No.	List Price
Super Class A High Fidelity	Push-Pull 47's or 42's (triodes)	50-1	2.25	2 3/8"	32-7052	\$2.00
High Fidelity	Push-Pull 42's as triodes	37-1	3.5	2 7/8"	32-7247	2.00
High Fidelity	Push-Pull 6A3's	23-1	9.5	2 7/8"	32-7446	1.75

### POWER AMPLIFIER OUTPUT TRANSFORMERS

Tubes in Output	Current Ea. Half Pri.	Pri. Impedance	Sec. Impedance	Dimensions	Part No.	List Price
P. P. 50's	55 M. A.	8300 ohms	500 ohms	2 11/16" x 2 7/16" x 3 3/8"	32-7034	\$23.00
P. P. 42's	35 M. A.	13000 ohms	1000 ohms	2 11/16" x 2 7/16" x 3 3/8"	32-7055	4.50
Parallel P. P. 50's	110 M. A.	4350 ohms	250 ohms	2 11/16" x 2 7/16" x 3 3/8"	32-7069	8.50

## RESISTORS

Below is a complete selection of popular values of several types of resistors, giving sufficient variety to cover any part of a receiver or amplifier circuit.

### CARTRIDGE RESISTORS

Resistance in Ohms	Plain or Metal End		Plain End
	List \$0.20 Ea. 1/2-Watt	List \$0.20 Ea. 1-Watt	List \$0.35 Ea. 2-Watt
	Part No.	Part No.	Part No.
1000	5837	3590	3655
2000	6984	4515	33-1067
3000	33-1038	7831	33-1068
5000	5310	3526	33-1070
8000	5838	7835	...
10000	4412	3524	33-1024
20000	6650	6639	5649
25000	4516	3656	33-1072
50000	33-1045	33-1060	33-1073
100000	33-1017	33-1081	33-1075
250000	33-1081	33-1087	33-1076
500000	33-1051	33-1066	...
1 Meg.	4409	4414	...
2 Meg.	5872	33-1112	...

### FLEXIBLE RESISTORS

One Watt—2 1/2 Inches Long (Less Leads)—List Each \$0.25

Ohms	Part No.	Ohms	Part No.	Ohms	Part No.
10	33-3011	100	33-3023	800	33-3125
20	33-3013	250	33-3046	1000	33-3126
50	33-3044	500	33-3031	1500	33-3047

### ADJUSTABLE HEAVY DUTY RESISTORS

50-Watt Rating—Positive Slide Contact; Provided With Special Mounting Feet; Porcelain Tube 4" Long

Ohms	Part No.	List Price	Ohms	Part No.	List Price
1000	33-3190	\$0.85	6000	33-3193	\$1.45
2000	33-3191	.85	10000	33-3194	1.60
3000	33-3192	.85	15000	33-3195	1.65

### HEAVY DUTY RESISTORS

Vitreous Enamel Insulation

25-Watt Rating; 2" Long			50-Watt Rating; 4" Long		
Ohms	Part No.	List Price	Ohms	Part No.	List Price
100	33-3167	\$0.50	1000	33-3176	\$0.75
200	33-3168	.50	2000	33-3177	.90
300	33-3169	.50	3000	33-3178	.90
500	33-3170	.50	6000	33-3179	.90
700	33-3171	.50	10000	33-3180	1.00
1000	33-3172	.55	15000	33-3181	1.05
1500	33-3173	.55			
2500	33-3174	.55			
5000	33-3175	.55			

FOR SET DEMONSTRATION USE THE PHILCO MULTIPLE AERIAL SWITCH

# SHORT-WAVE Section—Parts for SET-BUILDERS

Expressly Recommended for

SET-BUILDERS • AMATEURS • EXPERIMENTERS • SHORT WAVE FANS

All of the Parts on This Page Have Been Selected by Our Engineers for Short Wave Use

## CONDENSERS

Here is a selection of the most desirable types and values of fixed condensers for use in building short-wave equipment. All are of the higher working voltage type and many can be used for amplifiers or transmitters. All are PHILCO quality.

### MICA (SQUARE TYPE)

Mfd.	Part No.	List Price
.0001	30-1012	\$0.20
0.0025	3082	.25
.0005	3010	.25
.0008	5878	.25
.001	*6773	.30
.002	*6853	.40
.003	30-1028	.45
.005	30-1017	.55

\* Tested for 2000 volts.

### TUBULAR PAPER

CARDBOARD HOUSING  
Guaranteed 1000 VOLTS Working

Mfd.	Part No.	List Price
.001	30-4310	\$0.25
.002	30-4177	.25
.004	30-4185	.25
.006	30-4024	.25
.01	30-4051	.25

## DRY ELECTROLYTICS

450 Volts Guaranteed Working Voltage  
(Dimensions on Page 6)

### TUBULAR METAL CAN

Mfd.	Part No.	List Price
4	30-2098	\$0.90
6	8095	1.05
8	30-2014	1.25
10	30-2094	1.45
12	30-2091	1.65
16	30-2118	1.65

\* 350 volts working.

### CARDBOARD BLOCK

Mfd.	Part No.	List Price
4	30-2064	\$0.80
6	30-2065	.95
8	30-2066	1.00
10	30-2038	1.25

### PAPER CONDENSERS SQUARE METAL CASE

Mfd.	D. C. Working Voltage	Part No.	List Price
2	600	30-4022	\$2.75
4	600	30-4021	3.25
2	1200	30-4376	3.75

## PHILCO HARDWARE KIT

Useful Item for the Set Builder



The PHILCO hardware kit is a complete assortment of nuts, bolts, washers and screws, such as would be most useful to a set builder or experimenter. The various items are in separate glass jars for quick identification. The quantity is sufficient to last for a considerable time. A splendid investment which will save many trips to the local hardware store. Part No. 45-1009.....List Price, \$24.00

## ON-OFF SWITCHES

ROTARY TYPE  
(Standard 1/4-Inch Shaft)

Type	Part No.	List Price
S. P. S. T.	6498	\$0.45
S. P. D. T.	3675	.60
D. P. S. T.	4705	1.20
D. P. D. T.	8170	1.00

## KNOB S

For Standard 1/4-Inch Shaft

Type	Part No.	List Price
1-inch Black Knurled Built-In Pointer	27-4208	\$0.10
1-inch Black Knurled Gilt Pointer	27-4219	.10
1-inch Black Hex	24-4051	.10
1-inch Ivory Rosette	06923	.20

## VOLUME CONTROLS

With Switch—Carbon Type, 1/4-Inch Shaft  
1 1/2 Inches Long, Flatted Full Length

Ohms	Part No.	List Price
20,000	33-5032	\$1.45
50,000	33-5077	1.45
100,000	33-5031	1.45
250,000	33-5030	1.45
500,000	33-5029	1.45
1,000,000	33-5028	1.45

## POTENTIOMETERS

For Hum Control

Ohms	Part No.	List Price
6	3096	\$0.60
20	3086	.70
40	5650	.70
60	33-5111	.70

## SPEAKERS

Select the speaker for that set you are building from this list of standard PHILCO speakers—the same quality speakers as used in five million PHILCO receivers. All sizes are listed and a choice of field coil and voice coil impedance is given in some sizes. These speakers are complete with output transformer already to be mounted in cabinet or on a baffle board.

Type	Output Tube	Diam. Mounting Rim	Field Coil Resistance	Field Current	Voice Coil Impedance	Part No.	List Price
B-2	42 Pentode	5 11/16	1140 Ohms	50 M. A.	1.0 Ohm	36-1016	\$5.75
P-8	42 Pentode	5 11/32	1140 "	65 M. A.	1.0 "	36-1012	5.00
K-17	P. P. 42 as Triodes	8 1/8	1125 "	65 M. A.	1.25 "	36-1025	7.25
K-21	42 Pentode	8 3/8	1125 "	65 M. A.	1.25 "	36-1055	7.25
H-13	P. P. 42 as Triodes	10 11/32	1125 "	65 M. A.	1.25 "	36-1036	8.25
H-16	42 Pentode	10 11/32	660 "	80 M. A.	1.25 "	36-1059	8.25
U-2	P. P. 42 as Triodes	10 11/32	1450 "	80 M. A.	2.28 "	36-1019	15.00
U-7	P. P. 42 as Triodes	10 11/32	1450 "	80 M. A.	3.90 "	36-1108	15.00

## PUSH-BACK HOOK-UP WIRE • BUS WIRE • ENAMELED WIRE

Supplied in Handy 100-Foot Spools—Ready for Use!

Type	Size	Insulation	Color	Part No.	List Price 100'
Hook-up	7-30 Tinned	Cotton and Rubber	Red	912000	\$1.25
Hook-up	7-30 Tinned	Cotton and Rubber	Green	911000	1.25
Hook-up	No. 22 Tinned	Cotton and Rubber	Brown	900000	.95
Hook-up	No. 22 Tinned	Cotton and Rubber	White	903000	.95
Bus	No. 16 Tinned	.....	.....	960000	.72
Copper Braid	1/8-Inch Width	.....	.....	969000	1.30
Enameled	No. 24	Enamel	Black	L-1051	.31
Enameled	No. 28	Enamel	Black	L-944	.23

## ANTENNA WIRE

Part No. L-1640—7-20 Enamel. Recommended for Short Wave use. Minimum Resistance. Per 100-foot coil.....List Price, \$2.50

Part No. L-1641 — 26-30 Tinned, Black Rubber Covered. Recommended for Lead-in. Per 100-foot coil.....List Price, 1.70

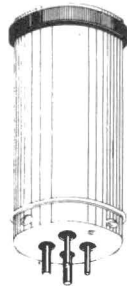
SEE THE NEW PHILCO ALL-WAVE AERIAL AT YOUR DISTRIBUTOR'S

# PHILCO AUTO-RADIO ACCESSORIES

## VIBRATORS

### STANDARD REPLACEMENT UNIT

This unit is the identical high quality vibrator unit as used in all Philco standard automobile radios. Constructed of the finest parts and built to give long service. The correct unit for replacement use on Philco auto radios. Size, 2 3/8" x 4 5/8". Plugs into standard 4-prong socket.



Part No. 38-5036—List Price.....\$5.00

### "MAJESTIC" AUTO RADIO REPLACEMENT VIBRATOR

MAJESTIC

PHILCO

Replacement Unit Part No. 38-6057

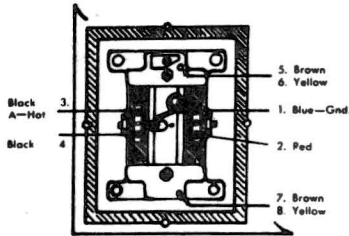


Fig 1

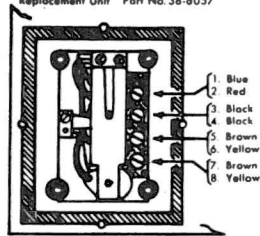


Fig 2

Here is a high-grade vibrator unit, designed especially for replacement in Majestic automobile radio receivers. Identical with the Philco replacement unit described above, except that it is constructed especially for use in Majestic models 66 and 116 auto radios. Replacement can be made easily, by simply rearranging vibrator leads as shown in cut.

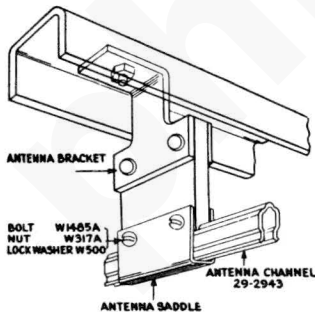
Part No. 38-6057—List Price.....\$6.00

### VIBRATOR AND POWER UNIT COMBINED

A complete replacement unit to eliminate B batteries, and furnish complete B and C power to earlier type auto radios or any 6-volt battery set. Contains all necessary parts, including rectifier, transformer, chokes, vibrator and relay, operated by the on-off "A" battery switch of the set.

Part No. 41-2002—List Price.....\$17.50

### PHILCO UNDER-CAR AERIAL



Showing Method of Mounting

Philco Under-Car Aerial, Complete—Part No. 45-1128—List Price..\$5.00

This new under-car aerial was developed by Philco after extensive tests. It is completely assembled and is ready for installation on any car on which an antenna of this type is required.

The installation can be made easily and in a very short time, without the use of any special equipment. It is only necessary to remove four nuts from each running board, locate the antenna brackets and replace the nuts. All connections are made to the various sections of the antenna at the factory.

The antenna proper is extremely rugged and is made from a special stock designed to withstand the rigors of under-car service.

## LOCKS

**PHILCO AUTO-RADIO LOCK**

*Protect Your Auto Radio from Sneak Thieves!*

**Cheapest Kind of Insurance!**

**PROTECT YOUR CAR FROM DAMAGE BY THESE MARAUDERS WHO WOULD MUTILATE IT WHILE ATTEMPTING TO STEAL THE RADIO!**

**STEAL RADIO FROM PARKED CAR**

**AUTO-RADIO NUMBER JAILOED**

**LEAVE THIS STOP THIEF!**

**STOP THIEF!**

**STOP THIEF!**

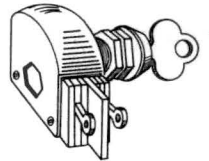
**\$1.00 INSTALLED**  
(COMPLETE WITH TWO KEYS)

Thousands of these locks have been sold during the past year. Pays for itself many times over. Mounted in a few seconds by slipping over one of the radio set mounting bolts. Illustration shows lock mounted on special display card.

Part No. 28-8272—List Price, Complete.....\$1.00

### Switch Type ("A" Battery) Lock

To prevent operation of an auto radio by other than the owner, this switch type lock was designed. Special toggle type switch for installation in the A battery circuit. Supplied with key which locks switch in "off" position. Switch may be mounted concealed under dash.



Part No. 42-1076—List Price.....\$1.00

## INTERFERENCE SUPPRESSION PARTS

### RESISTORS

For Spark Plugs				
Part No.	Type	Ohms	List	
A	4531	D	25000	\$0.40
	33-1015	E	10000	.40
	33-1016*	E	20000	.40
B	33-1017*	C	20000	.40
	33-1101†	E	5000	.40
	33-1102†	B	5000	.40
C	33-1195	E	10000	.40
	33-1192	D	5000	.40
D				

\*Special for Packard. †Special for Nash.

### For Distributor

Part No.	Type	Ohms	List
E	4546	A	25000
	4851	C	25000
	33-1103†	C	5000
	33-1113	B	10000
	33-1196	C	10000

### CONDENSERS

Part No.	Mfd.	List
4522	1	\$0.75
30-4007	1/2	.50
30-4176*	1/2	.50
30-4181*	1/2	.50

\* Special for Ford cars.

## FUSES

Standard Cartridge Glass Fuse (For Mounting in Clips)

Part No.	Capacity	List Price
4540	1 ampere	\$0.05
45-2046	3 amperes	.05
7331	8 amperes	.05
5676	10 amperes	.05
7227	15 amperes	.05

**Complete REPLACEMENT PARTS ASSORTMENT for ALL PHILCOS**

1928 TO 1935 INCLUSIVE

**Provide a Comprehensive Stock at a Minimum Outlay!**



ALL PARTS IDENTICAL TO THOSE USED IN THE ORIGINAL PHILCO MODEL

**NEW IDEA IN PARTS STOCK!**

**A Complete Assortment in Compact Form**

With an Accurate MODEL-and-PART NO. Chart

Here is the easiest and most convenient way to be sure you will have in stock the correct service part for any PHILCO Model, 1928-1935.

The parts assortments illustrated herewith were prepared by the Philco Parts and Service Division with the idea of enabling the serviceman-owner to quickly select the exactly correct replacement for any Philco he is called on to service. The handy and easily read "Replacement Chart for All Models" in the lid of each box saves many times the price of the kit in avoiding delay and inconvenience to the customer.

All parts in these kits are exact duplicates of the original—or an improved type if there is one. Use these assortments and you will eliminate guesswork—save time—protect your customer.

**VOLUME CONTROL KIT**—Contains 42 different controls, mostly with on-off switch. Covers all Philco models.

Part No. 45-1154.....List Price \$57.90

**ELECTROLYTIC CONDENSER KIT**—Contains 12 multiple section condensers, every type used in a Philco set.

Part No. 45-1137.....List Price \$25.15

**PILOT LAMP KIT**—Contains 20 each Part Nos. 3463 and 6608, and ten each of all other kinds—covers all Philcos, both home and auto-radios

Part No. 45-1166.....List Price \$13.80

**B. C. RESISTOR KIT**—Contains 33 wirewound porcelain resistors, for all Philcos.

Part No. 45-1157.....List Price \$20.85

**KNOB KIT**—Contains 132 assorted knobs covering all types used in every Philco home radio (including 1936 models) and an assortment of the most popular Philco auto radio knobs.

Part No. 45-1180.....List Price, \$16.53

**INPUT TRANSFORMER KIT**—Contains 16 input (audio) transformers, every type used in Philco home radios.

Part No. 45-1158.....List Price \$42.05

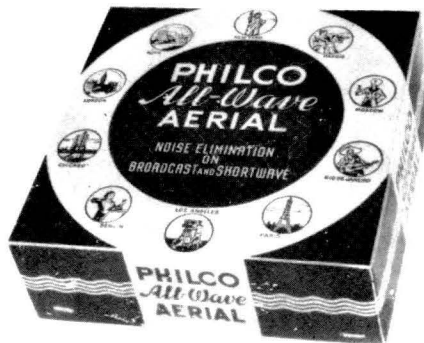


# HERE IT IS . . . FAMOUS PHILCO ALL-WAVE AERIAL

First Aerial Ready-Soldered-and-Assembled at the Factory  
First Aerial to Reduce Noise on Both Standard Broadcast and Short Wave

## LOOK AT THESE FEATURES!

- Cuts out noises (due to street cars, electric appliances, etc.) on both standard and short-wave stations.
- All connections in aerial soldered at the factory—no loose connections or corroded joints can develop to cause noise and weak signals.
- No unsightly "cage" or "spreaders" to disfigure the house.
- Kit contains ALL necessary parts (including lightning arrester).
- Ample length (75 feet) of flexible weather-proof lead-in furnished.
- Length of lead-in can be altered to suit installation without affecting results.
- Aerial need not be arranged at any special angle.
- Operates with any make radio.
- Maximum efficiency on all frequencies—from 540 to 23,000 kilocycles.
- Improves reception on any set.



Introduced less than a year ago, the Philco ALL-WAVE AERIAL immediately became the fastest selling aerial of its kind on the market. Its noise-reducing qualities, ease of installation, and fine performance on all wave bands make it a most desirable item for every radio set owner; and nation-wide advertising over the air and in national publications, etc., has made its qualities well known to the listening public.

The kit contains all necessary parts and all connections are already soldered, so that installation can be made in a minimum of time.

For receivers other than 1936 Philcos, it will be necessary to use the "matching" transformer or "set transformer" (Part No. 42-1095) listed below to complete the installation. (The 1936 Philco sets contain this transformer already built into the chassis, integral with the chassis assembly and wave-band switch.)

NEVER BEFORE SUCH EASE OF INSTALLATION!

New Philco All-Wave Aerial—Part No. 40-5656 . . . . . List Price, \$5.00  
"Set Transformer," for use with Receivers other than 1936 Philcos—Part No. 42-1095 . . . . . List Price, \$1.75

## PHILCO THREE-PURPOSE BROADCAST AERIAL

Noise Reduction—Greater Distance—Multiple Set Operation  
Complete Antenna System—Not Merely a Lead-in

A complete antenna system with low impedance antenna transmission line for reduction of man-made static, increasing distance range, and for multiple receiver operation. The ideal installation for elimination of noise pick-up by the lead-in wire, for highest efficiency even from a long lead-in, or for operation of two to four radio sets from a single antenna.



Includes 75 feet 7-strand antenna wire, lightning arrester, 2 antenna insulators; special matched antenna transformer completely weatherproof; special matched set transformer; 50 feet weatherproof double transmission line; 25 feet rubber-covered ground wire; two nail-on knob insulators; porcelain tube insulator; window lead-in strip, ground clamp; and special switch which adapts this system to reception of police, aircraft and other broadcasts up to 4 megacycles.

The lead-in transmission line can be extended if desired without any change in receiving efficiency. The transformers supplied in the standard kit are suitable for matching any length of Philco transmission line up to 400 feet.

- Part No. 40-5000-A—KIT COMPLETE—List Price . . . . . \$6.00  
Part No. L-1551—Philco Transmission Line (Black) 100-foot rolls—List Price . . . . . 3.00  
Part No. L-1591—Philco Transmission Line (White), 100-foot rolls—List Price . . . . . 3.00  
Part No. 32-1004—Set Transformer, used when connecting additional radio sets to transmission line—List Price . . . . . .75

## PHILCO SHORT-WAVE AERIAL

(High-Test Insulation)

This Philco special short-wave antenna kit has been designed to enable the owner of a short-wave receiver to obtain fine performance from his set. Every part used is of the highest grade material, and particular attention has been given to the insulation, to prevent any possibility of leakage of the delicate currents from the signals of foreign short-wave stations.

Among the important elements of the kit are: 100 feet of stranded enamelled copper antenna wire, weatherproof and providing maximum path for high frequency radio currents; two heavy glass insulators; four special "stand-off" insulators to keep the lead-in well away from the building; thirty feet of heavy flexible WHITE rubber-covered wire for indoor use as antenna lead to receiver.

All other necessary parts are included for a complete and efficient short-wave antenna.

ESPECIALLY RECOMMENDED FOR SUBURBAN LOCATIONS

Philco Short-Wave Antenna Kit, packed in a box with diagram and complete instructions.

Part No. 40-508J—List Price, \$4.00



## PHILCO STANDARD AERIAL

A complete antenna kit consisting of the following items:

- 75 feet 7-24 Stranded Bare Copper Antenna Wire
- 35 feet No. 18 Rubber Covered Lead-In Wire
- 1 Glazed Porcelain Weather-Proof Lightning Arrester
- 2 Glazed Porcelain Insulators
- 2 Glazed Porcelain Nail-On Knobs
- 1 Lead-In Strip
- 1 Ground Clamp

The Philco Standard Antenna Kit is packed in a box, on the inside of which is a complete diagram of suggested installation.

Part No. 8043—List Price, \$1.60

A PHILCO REPLACEMENT SPEAKER WILL IMPROVE THAT OLD RADIO



*Radio's Newest Convenience*

**NOW...  
YOU CAN USE ONE AERIAL  
for  
SEVERAL SETS**

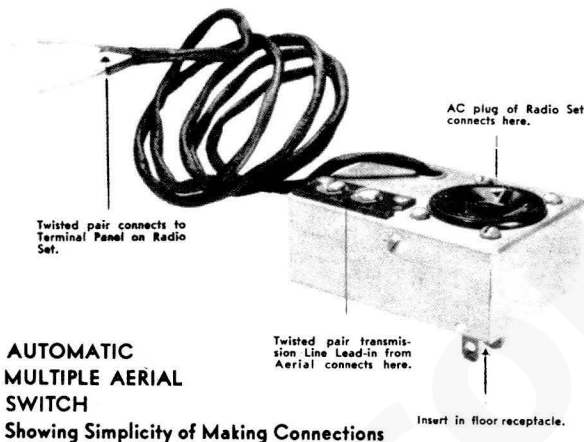
*Without Changing Any Wires or Connections*

★

*New*  
**PHILCO**  
**MULTIPLE**  
**AERIAL**  
**SWITCH**

★

**AUTOMATICALLY CONNECTS YOUR  
AERIAL . . . ANY MAKE OR TYPE . . .  
ONLY TO THE SET YOU TURN ON!**



This Automatic Switch instantly connects the aerial to the one set desired — as soon as that set is turned "on."

By a remarkable new development exclusive with PHILCO, the aerial (which is disconnected when not used) is automatically connected to the ONE SET you wish to operate — and that set ONLY — the moment you turn the switch of that set "on."

*For Dealers:*  
**IDEAL FOR DEMONSTRATION USE!**

No fussing around behind a set to connect the aerial before starting operation. NO DELAY! Simply turn "on" the set you want, and go ahead! The Unit you have always wanted! Any number of receivers can be equipped each with a multiple aerial switch and operated (one at a time) from one master aerial.

- **MAKES ONE AERIAL DO, INSTEAD OF MANY**
- **INSURES FULL POWER TO EVERY SET USED**
- **PROVIDES PROTECTION BY KEEPING AERIAL DISCONNECTED WHEN NOT IN USE**
- **WORKS ON ANY TYPE AERIAL**

Part No. 45-2120

**\$4.85**  
LIST  
PRICE  
*Complete*

★

**PHILCO MULTIPLE AERIAL SWITCH**



# PHILCO WIRE . . . HOOK-UP WIRE . . . AERIAL WIRE . . . BUS WIRE

**Supplied in Handy 100' Spools**

PHILCO has now made available to the serviceman all the types of wire used in the manufacture of Philco Radios and also the wire used in Philco Aerial Kits, as well as bus wire, two and four-conductor cable, copper braid, shielded wire, etc. EVERY TYPE IS FURNISHED IN CONVENIENT 100' SPOOLS OR ROLLS, making it easy for the serviceman to handle. The many types of hook-up wire listed here are all the result of exhaustive tests on the part of PHILCO engineers and will positively not develop corrosion even in humid localities. Hook-up wire is "push-back" type—insulation quickly and easily removable.



## SPECIAL Dealer Assortment

To meet the needs of the dealer for a representative assortment of hook-up and bus wire for general service use, PHILCO has prepared this special handy kit of 12 spools. Each type wire in this kit is a popular usable type. The spool form of mounting makes the wire most accessible for service purposes. Contents: one each 100' rolls of the following:

Part No.	Description	Part No.	Description
901-000	#22 Tinned Copper (green)	920-000	#16 Tinned Copper (black)
903-000	#22 Tinned Copper (white)	947-000	16-Strand #30 Tinned Copper (black)
905-000	#22 Tinned Copper (white-green tr.)	902-000	#22 Tinned Copper (red)
904-000	#22 Tinned Copper (white-blue tr.)	914-000	7-Strand #30 (white-black tr.)
912-000	7-Strand #30 Tinned Copper (red)	916-000	7-Strand #30 (blue)
917-000	7-Strand #30 Tinned Copper (orange)	960-000	#16 Bus Wire

Kit Part No. 45-1159 . . . . . List Price, \$13.62

## ORDER YOUR REQUIREMENTS FROM THIS COMPLETE LIST

### AERIAL WIRE

Part No.	Classification or Color	Description	Insulation	List Price Spool 100'
L-1563	Standard	7 strands No. 24	.....	\$0.75
L-1640	Special Short-wave	7 strands No. 20	Enamel	2.50
L-1534	Indoor Antenna (Brown)	20 strands No. 36	Rubber; cotton braid	1.20
L-1383	Shielded Antenna	26 strands No. 34 tinned	Impreg. braid; braided metal outer shield	10.00

### LEAD-IN AND TRANSMISSION LINE

L-1642	Lead-in	26 strands No. 30 tinned	White rubber	\$1.70
L-1641	Lead-in	26 strands No. 30 tinned	Black rubber	1.70
L-1556	Transmission Line (black)	2-Conductor Twisted Each 7 strands No. 30	Cotton; rubber; black outer braid	3.00
L-1591	Transmission Line (Ivory color)	2-Conductor Twisted Each 7 strands No. 30	Cotton; rubber; ivory outer braid	3.00

### BUS WIRE—BARE TINNED COPPER

960-000	.....	No. 16	.....	\$0.72
961-000	.....	No. 18	.....	.55
962-000	.....	No. 20	.....	.42
963-000	.....	No. 22	.....	.35

### STRANDED AND BRAIDED BARE COPPER WIRE

L-1726	Stranded	7 strands No. 22 tinned	.....	\$1.25
968-000	Flat braid	3/4" width	.....	2.50
969-000	Flat braid	1/2" width	.....	1.30

### ENAMELED COPPER WIRE

L-1571	.....	No. 14	Black enamel	\$1.05
L-1051	.....	No. 24	Black enamel	.31
L-1084	.....	No. 26	Black enamel	.28
L-944	.....	No. 28	Black enamel	.23

### HOOK-UP WIRE—STRANDED OR BRAIDED

Part No.	Classification of Color	Description	Insulation	List Price Spool 100'
941-000	Braided; white	16 strands No. 36 tinned	Cotton braid	\$1.55
943-000	Braided; maroon	16 strands No. 36 tinned	Cotton braid	1.55
949-000	Black; white tracer	41 strands No. 30 tinned	Cotton; rubber; cotton lacq'd	3.00
950-000	Black	26 strands No. 30 tinned	Impreg. paper; rubber; cotton lacquered	2.35
951-000	Red	26 strands No. 30 tinned	Impreg. paper; rubber; cotton lacquered	2.35
956-000	Black	16 strands No. 30 tinned	Impreg. paper; rubber; cotton	1.75
945-000	Black	10 strands No. 30 tinned	Yarn; rubber; cotton lacq'd	1.55
900-000	Brown	7 strands No. 30 tinned	Impreg. paper; rubber; cotton	1.25
911-000	Green	7 strands No. 30 tinned	Impreg. paper; rubber; cotton	1.25
912-000	Red	7 strands No. 30 tinned	Impreg. paper; rubber; cotton	1.25
913-000	White	7 strands No. 30 tinned	Impreg. paper; rubber; cotton	1.25
914-000	White; black tracer	7 strands No. 30 tinned	Impreg. paper; rubber; cotton	1.25
915-000	Green; yellow tracer	7 strands No. 30 tinned	Impreg. paper; rubber; cotton	1.25
916-000	Blue	7 strands No. 30 tinned	Impreg. paper; rubber; cotton	1.25
917-000	Orange	7 strands No. 30 tinned	Impreg. paper; rubber; cotton	1.25

### HOOK-UP WIRE—SINGLE CONDUCTOR

924-000	Black rubber	No. 26 tinned	Cotton; rubber	\$0.65
900-000	Brown	No. 22 tinned	Cotton; rubber; cotton	.95
901-000	Green	No. 22 tinned	Cotton; rubber; cotton	.95
902-000	Red	No. 22 tinned	Cotton; rubber; cotton	.95
903-000	White	No. 22 tinned	Cotton; rubber; cotton	.95
904-000	White, black tracer	No. 22 tinned	Cotton; rubber; cotton	.95
905-000	White and green	No. 22 tinned	Cotton; rubber; cotton	.95
906-000	Red and yellow	No. 22 tinned	Cotton impregnated; cotton	1.05
907-000	Red	No. 22 tinned	Cotton impreg.; rubber; cotton	1.50
908-000	Brown	No. 22 tinned	Cotton impreg.; rubber; cotton	1.50
922-000	Brown	No. 20 tinned	Paper impregnated; rubber	1.05
920-000	Black	No. 16 tinned	Cotton impregnated; cotton	1.50

### 2 AND 4-CONDUCTOR CABLE; SHIELDED CABLE

Part No.	Description	Insulation	Per Foot
L-943	2-conductor brown	Each 16 strands No. 30 Rubber; cotton; outer cotton braid	\$0.05
L-1055	4-conductor brown	Each 10 strands No. 30 Rubber; cotton; outer cotton braid	.15
L-1496	Shielded cable	7 strands No. 30 Impreg. cotton; metal shield; rubber outer covering	.12

When ordering, be sure to specify 100-ft. Spools. Aerial Wire and Transmission Line only are furnished in coils rather than spools.

★  
*Have you seen the . . .*

SEE PAGE 30  
FOR DETAILS

*New*  
**PHILCO**  
**UNDER-CAR**  
**AERIAL**

**FITS ALL CARS . . . ESPECIALLY SUITABLE FOR STEEL-TOP AND OPEN CARS**

**8**  
**OUTSTANDING**  
**FEATURES**

- 1 Neat Appearance**
- 2 Easily Installed**
- 3 Reduces Noise**
- 4 Rugged Construction**
- 5 Completely Assembled at the Factory**
- 6 Maximum Signal Pick-up**
- 7 No Movable Parts**
- 8 Insulated Against Road Shocks and Weather Conditions**

**PHILCO Under-Car Aerial**

PART NO.  
45-1128

List Price **\$5<sup>00</sup>**

## **YOUR BUSINESS** **and**

## **RADIO MANUFACTURERS SERVICE**



**R**ADIO Manufacturers Service was originated by PHILCO as a means of promoting to the general public the thought of having radios kept in perfect condition at all times, so as to get the greatest benefit from the radio programs on the air.

A program of this kind could not have been carried out on a national scale by attempting to advertise individual men all over the country. The only way it could be carried out successfully was through an organization made up of picked men doing business under their own name, but tied in with the national plan.

After enough members were enrolled, the advertising and publicity campaign to provide more service work for R. M. S. members got under way. This campaign has been the largest and the most consistent service campaign that we know of in any American industry.

Over two million owners of PHILCO radios have been told individually in

writing by PHILCO to call a member of Radio Manufacturers Service when service is needed.

Chain broadcasting over the Columbia System several times a week for the past eighteen months has told many millions of the public the same story.

Spot broadcast announcements of forty-five seconds' duration are being used on many stations reaching still more radio listeners.

Chicago, New York, Philadelphia, San Francisco and many other cities, both large and small, have started a consistent newspaper advertising campaign to get service work for R. M. S. members.

Newspaper publicity stories sent out by PHILCO Department of Public Information have appeared in many of the leading newspapers as news items, giving the details of the R. M. S. organization.

*All of the above advertising is being paid for by PHILCO distributors and the PHILCO Company. None of this costs the R. M. S. member anything.*

To tie in with this, a complete assortment of outdoor signs, newspaper ads, handbills, postcards, letters and other sales literature is available at small cost for the individual members to use over their own name. This type of advertising over the member's name is worth far more because of the national R. M. S. publicity.

Local advertising done by individual members tying in with R. M. S. will eventually identify that member to the radio public in his community. Until the member does become known, the R. M. S.-Western Union service call plan provides the public with an easy means of getting acquainted with the dependable service done by R. M. S. members.

PHILCO distributors, through the R. M. S.-Western Union plan, will help you get service business in your community until such time as you become known to your entire community as the R. M. S. representative.