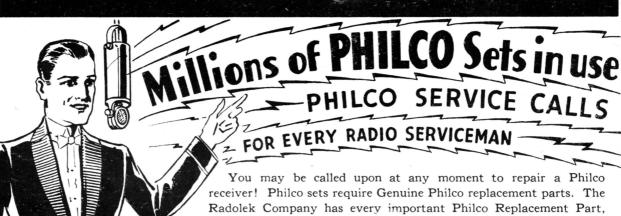
# RADIO REPLACEMENT



receiver! Philco sets require Genuine Philco replacement parts. The Radolek Company has every important Philco Replacement Part, Tube and Test Instrument ready for over-night shipment to you at the lowest wholesale prices. . . . Order by Philco Part Number.

Write, wire or phone, Monroe 5434, Chicago We have the largest stock of Philco Replacement Parts available

- 1. PHILCO Parts fit ALL MAKES of Radio. Use them in ALL your service work.
- 2. The name PHILCO stands for DEPENDABILITY.

OFFICIAL DISTRIBUTOR FOR ALL PHILCO RADIO REPLACEMENT PARTS AND TUBES 601-603 W.RANDOLPH ST. CHICAGO, ILL

# Mr. Serviceman:— Are YOU

Interested in Building Up Your Profits?

If So

You Should Learn About

## "Radio Manufacturers Service"

A Philco Service Plan

# Secures Immediate Business for the Serviceman-Member

See Your Philco Distributor at Once and Get an Application Blank

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All parts listed on the following pages are genuine Philco quality, guaranteed against defects in material and workmanship, in accordance with the standard Philco warranty.

Parts should always be ordered from your local distributor. Check your stock regularly and re-order in advance of your actual needs so that you will always be prepared to give prompt service to your customer.

Over 10,000 different Philco parts in stock at all times

# Philco Radio and Television Corporation Philadelphia

## **PHILCO**

## General Replacement Radio Condensers

For Use in Any Make Radio Receiver

Philco offers a complete line of quality condensers of all types. Every Philco condenser is built of the finest available materials, and is constructed in accordance with the rigid specifications set forth by the Philco Research Laboratories.

It will be noted on the printed ratings for the various condensers that the operating and test

voltages are conservative.

Philco condensers which are designed for 400-volt operation have been placed on life test at double the operating voltages and have, in all cases, withstood the test for hundreds of hours. Philco paper condensers are all built in a specially constructed room in which the humidity is maintained at a constant value every hour of the day and every day of the year, thus assuring complete moisture elimina-

tion during the impregnating process.

Philco electrolytic condensers are built to withstand the higher surge voltages which may be encountered in ordinary operation. The only way that such performance can be guaranteed is through the use of highest quality materials. Whenever Philco condensers are used for replacement purposes, whether the replacement be on a Philco set or on some other make of receiver, the serviceman can be assured of permanent trouble-free operation.

Replacements should always be made with a condenser of the same type or construction. For example, use a wet electrolytic condenser to replace a wet electrolytic, and a paper condenser to replace a paper one, etc. Make your replacement with the

same type as the original.

## 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.



Test voltage 800.

#### Single Condensers

Part No.	Capacity (Mfd.)	NET DEALER PRICE
7762-C	.001	\$0.15
$7296 ext{-B}$	.002	.15
8320-B	.003	.15
7442-B	.005	.15
$7625 ext{-B}$	.006	.15
7625- $G$	.006*	.15
3903 - AA	.01*	.15
$3903$ - $\mathbf{M}$	.01	.15
3793-W	.015*	.21
3793 - B	.015	.21
3903 - AJ	.02	.21
7653-B	.025	.21
8318-B	.03	.21
3615-L	.05*	.21
3615-E	.05	.21
4989-D	.09*	.21
4989-J	.09	.21
$8206 ext{-B}$	.1	.21
$6287 ext{-} ext{B}$	.15	.21
$4989 ext{-H}$	.18*	.21
4989-K	.18	.21

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.

r D

#### **Double Condensers**

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

Part No.	Capacity (Mfd.)	NET DEALER PRICE
8035-B	.00011*	\$0.15
831 <b>7-</b> B	.00025*	.15
3903-S	.01*	.18
3903-AK	.01	.18
3793-H	.015*	.24
3793-P	.015	.24
7653-C	.025*	.24
8318-C	.03	.24
3615-AJ	.05*	.24
3615-AF	.05	.24
4989-B	.09*	.24
4989-M	.09	.24
6287-H	.15*	.24
6287-F	.15	.24

#### **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.)	NET DEALER PRICE
8035-F	.0001 and .015	\$0.15
8174-B	.0007* and .05*	.15
7762-B	.001* and .005	.18
$7296\text{-}\mathrm{E}$	.002 Twin* and .003	.18
7296-G	.002* and .05*	.18
$7625 ext{-} ext{F}$	.006 and .001	.18
$7625\text{-}\mathrm{D}$	.006* and .015	.18
$6287 ext{-} ext{M}$	$.15^*$ and $.05^*$	.24
6287 - G	.15 and .05	.24
$6287\text{-}\mathrm{N}$	.15 and .09	.24
628 <b>7-</b> K	.15* and .09*	.24

## Philco Condensers

# PHILCO CONDENSER Cap. design Provides 1046

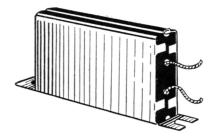
Philco special vacuum process construction. Condenser unit pitch sealed within paper housing. Used widely for replacement of single sections in filter condenser blocks. Test voltage 2000V.

## Philco Replacement Section Condensers

Part No.	Capacity (Mfd.)	Length	Width	Height	NET DEALER PRICE
7068 30-4095 7067 30-4096 7066 7065 7064	.1 .2 .25 .4 .5 1.0 2.0	2½" 2½" 43%" 2½" 43%" 43%" 43%"	$1\frac{1}{4}''$ $1\frac{1}{4}''$ $1\frac{1}{4}''$ $1\frac{1}{4}''$ $1\frac{3}{4}''$ $1\frac{1}{4}''$ $2\frac{3}{4}''$ $2\frac{3}{4}''$	12" 34" 1/2" 34" 58" 58" 1"	\$0.18 .21 .24 .30 .36 .51

## Philco By-Pass Condensers (Metal Housing)

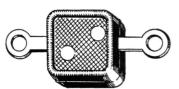
Part No.	Capacity (Mfd.)	Test Voltage	NET DEALER PRICE
30-4102	.2	800	\$0.30
4264	.25	2000	.36
30-4175	.25*	800	.30
3557	$.25  \mathrm{Twin}$	800	.42
4864	$.25  \mathrm{Twin}$	800	.42
03325	.25 Triple	800	.60
3583	.5	800	.36
30-4174	.5*	800	.36
05150	.5	2000	.42
03024	$.5  \mathrm{Twin}$	800	.60
30-4103	.75	800	.51
4568†	$1.0^{\dagger}$	400	.66
30-4173	1.0*	800	.66
4569	1.0	2000	.78
30-4104	1.5	800	.81
03298	2.0	800	.99
4418	2.0	2000	1.35



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.

## Philco Mica Condensers

Philco mica condensers are enclosed in brown moulded bakelite casings and are completely moisture proof. They are available in capacities ranging from 25 Mmf. to .01 Mfd. Each condenser is color coded for capacity



Type A

and part number indentification, or has its capacity stamped directly on the case.

An assortment of these little condensers will be found indispensable by the serviceman or experimenter.



Type B

Part No.	Capacity (Mfd.)	Туре	NET DEALER PRICE
6897	.000025	A	\$0.21
30–1008	.00003	A	.21
4990	.000035	A	.21
30-1009	.00004	A	.21
4587	.00005	A	.21
30-1010	.00007	A	.21
30-1011	.00008	A	.21
30-1012	.0001	A	.21
30-1005	.00011	A	.21
30-1013	.0002	A	.21
3082	.00025	A	.21
8311	.0003	A	.21
30-1014	.0004	B	.21
5120	.00041	A	.21
3910	.0005	B	.21



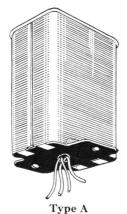
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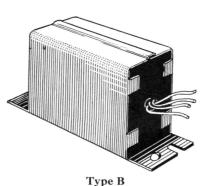
	-31-		
Part No.	Capacity (Mfd.)	Туре	NET DEALER PRICE
6898 4520 6021 5215 7139 6022 4059 7006 6009	.0006 .0007 .0008 .001 .0015 .0018 .002 .0025	C A A C A B C B	\$0.21 .21 .21 .21 .21 .24 .24 .24 .36
30–1016 30–1017 5981 30–1018 30–1019	.004 .005 .006 .008 .01	D D D D	.36 .36 .36 .54 .69

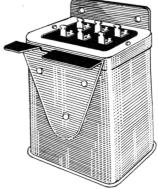
Two special low-impedance shielded leads connect to one side of condenser. Other side grounded to case.

## Philco Filter Condenser Banks

## Designed for Replacement Use in Any Make Radio







Type C

These Philco filter condenser banks incorporate the highest standard of both material and workmanship. They are designed and built to meet the most exacting requirements. Furnished in the following combinations of capacities and voltage operating requirements. Standard Philco vacuum impregnation; pitch sealed. Each one packed in individual carton with wiring instructions and color code explanation.

Part No.	Capacity of Sections (Mfd.)	Test Voltages	Туре	NET DEALER PRICE
05386	8.0*25*	400-1200	A	\$1.35
05724	$8.0^*5^*$	400 - 1200	A	.90
05691	$8.0^*85^*$	500 - 1200	A	1.08
04559	.7525	2000-1200	В	.72
05213	.755*	1200-2000	В	.60
06713	$.5^*09^*$	400 - 400	В	.33
04959	.525	2000-1200	A	.54
05109	.2525	1200-1200	В	.30
06091	$.15^*05$	2000-2000	A	.27
04354	20.0525	15 - 2000 - 1200	A	.78
03624	1.02525	1200 - 2000 - 1200	В	.72
03327	1.0251	1200 - 2000 - 2000	В	.72
05239	.5525	1200 - 2000 - 2000	A	.72
4817	$.5515^*$	2000 - 1200 - 2000	В	1.26
03029	.52525	2000 - 1200 - 1200	В	.72
30 – 4027	$.5^*2525$	1200 - 1200 - 1200	В	.48
05622	$.52525^*$	2000 - 1200 - 2000	A	.72
05433	.52505	1200 - 2000 - 2000	В	.48
30-4044	.250905	800 - 400 - 800	В	.45
04731	.250505	2000 - 2000 - 2000	В	.30
30 - 4017	20.052525	15 - 2000 - 1200 - 1200	В	1.08
04407	.552525	1200 - 1200 - 1200 - 1200	В	.72
4860	$3.5^* -1.0^*13^* -1.0^*$	800 - 800 - 1200 - 800	C	3.06
05324	.5250505	1200 - 2000 - 2000 - 2000	В	.72
30-4013	.0509095	2000 - 1200 - 1200 - 2000	В	.48
30 - 4078	.25252525	1200 - 1200 - 2000 - 2000	В	.45
30-4000	$.75^*25^*2^*09^*05$	1200 - 1200 - 1200 - 1200 - 2000	В	.72
03945	.5525152	1200 - 1200 - 1200 - 2000 - 1200	В	.78
03459	.5525151	1200 - 1200 - 1200 - 2000 - 2000	В	.90
03489	$.015^* - 1.0^*5^*5^*5^*$	1200 - 400 - 400 - 400 - 800	С	1.26
05569	$.5^*5^*25^*15^*1^*$	1200 - 1200 - 1200 - 2000 - 2000	В	.72
03915	.5251515	400 - 400 - 800 - 800 - 400	В	.78
06624	.2509090505	2000 - 1200 - 1200 - 2000 - 2000	В	.54
30-4151	.255050505	400 - 400 - 800 - 800 - 800	В	.60
30-4063	.05090952	2000 - 1200 - 1200 - 2000 - 1200	В	.51
30-4026	1.0  -2.0  -2.0 5 5	1200 - 2000 - 2000 - 2000 - 2000	C	2.16
30-4023	$.5^*$ - $.25^*$ - $.2^*$ - $.09^*$ - $.09^*$ - $.05^*$	1200 - 1200 - 1200 - 1200 - 1200 - 2000	В	.72
30-4077	252525050505	400 - 400 - 400 - 800 - 800 - 800	В	.60

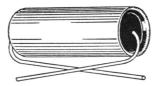
\*Not grounded to case.

## Philco Paper Condensers

For General Replacement in Any Make Radio

#### **Tubular Condensers**

(Paper Housing)



These small condensers are extremely handy for quick replacements. The higher values are useful for interference elimination in small appliances. Note the complete range of values. Note that both the test voltage and actual working voltage are

listed. This is done so that the serviceman will know exactly what each condenser will stand, instead of being misled by the usual highly overrated voltages which apply to a momentary test only.

Part No.	Capacity (Mfd.)	Working Voltage	Test Voltage	NET DEALER PRICE
30-4042	.003	800	1600	\$0.15
30-4125	.006	400	800	.15
30-4024	.006	1000	2000	.24
30-4112	.008	400	800	.15
30-4169	.01	400	800	.18
30-4145	.01	600	1200	.15
30-4051	.01	1000	2000	.24
30-4113	.02	400	800	.18
30-4025	.03	200	400	.18
30-4119	.04	400	800	.18
30-4020	.05	200	400	.21
<b>30–412</b> 3	.05	400	800	.21
30-4012	.05	600	1200	.24
30–4114	.06	400	800	.21
30-4115	.08	400	800	.21
30-4122	.1	200	400	.21
30-4170	.1	400	800	.21
30-4134	.25	400	800	.27
30-4146	.25	200	400	.24
30-4117	.5	300	600	.36

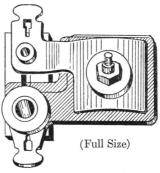
## Tubular Condensers (Metal Housing)

These rugged condensers are used chiefly for elimination of ignition interference on auto-radio installations, and also for suppressing interference caused by electric motors and other electrical appliances. Furnished in several types of mounting.



Part No.	Capac- ity (Mfd.)	Operat- ing Voltage	Length	Diameter	Mounting Bracket	NET DEALER PRICE
30–4018 30–4011 30–4015 30–4007	.5 .5 .5 .5	200 400 400 200	$1\frac{3}{4}''$ $1\frac{13}{16}''$ $1\frac{13}{16}''$ $1\frac{3}{4}''$	43// 64/ 21// 32// 31// 32// 21//	End mounting Left-hand side Right-hand side Right-hand side	\$0.30 .30 .30
4522	1.0	400	21/4"	11/4"	(slotted) Side (adjust- able)	.30

## 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).

Part No.	Capacity Range (Mmfd.)	No. Plates	NET DEALER PRICE
04000-E 04000-C 04000-D 04000-A 04000-X 04000-M 04000-H 04000-J 04000-F 04000-B	5-30* 5-50* 5-50 15-80* 15-80 30-140* 30-140 80-250* 80-250	2 2 2 2 2 2 2 <sup>1</sup> / <sub>2</sub> 3 3 5	\$0.09 .09 .09 .12 .12 .12 .15 .15
04000-S 04000-T 04000-U	125–450* 125–450 300–1300	7 7 11	.21 .21 .36

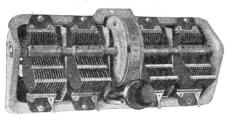
\*Grounded. Fixed plate connected to mounting hole eyelet for grounding to chassis.

## 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

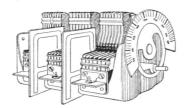


Most of the Philco four-gang tuning condensers are of the type illustrated above. These condensers are built in a steel mounting shell, cadmium plated. The insulating material is the best grade of bakelite. The condensers are counter-balanced and the rotors are driven by a reduction drive cable. The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

Part No.	Max. Cap. (Mfd.)	Drive	NET DEALER PRICE
3376E	$\begin{array}{c} .00025 \\ .000335 \\ .00035 \\ .0005 \\ .000335^* \\ .00015 \\ \dagger \end{array}$	Cable	\$7.20
04941		Cable	3.96
03001		Friction	4.50
3001B		Cable	9.72
31–1039		Direct	3.24

\*Inside Sections †Outside Sections

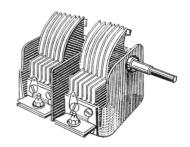
Type B-3-gang



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.

Part No.	Max. Cap. (Mfd.)	Drive	NET DEALER PRICE
04308	.000325	Worm	\$3.78
03293	.000335	Friction	3.24
06577	.000337	Cable	2.88
03076	.00035	Friction	3.60
31–1040	.00037	Cable	1.80

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.

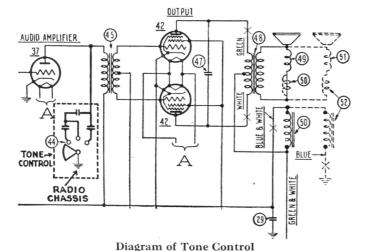
Part No.	Max. Cap. (Mfd.)	Drive	NET DEALER PRICE
03692 31-1000 05794 31-1034 31-1006	.000335 .000337 .00037	Friction Direct Direct Direct Friction	\$2.34 1.26 1.80 1.26 1.41

## 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 \( \frac{3}{8}\)-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.



Part No.	No. of Points	Capacity Ranges	NET DEALER PRICE
03637	2	$ \begin{cases} Point 1-0 & Mfd. \\ Point 201 & Mfd. \end{cases} $	\$0.30
04757	2	$\begin{array}{cccc} \text{Point } 1-0 & \text{Mfd.} \\ \text{Point } 202 & \text{Mfd.} \end{array}$	.30
05153	2	Point 101 Mfd.\ Point 202 Mfd.\	.30
30-4008	2	Point 101 Mfd. Point 2025 Mfd.	.30
04787	4	Point 1-0 Mfd. Point 2015 Mfd. Point 3025 Mfd. Point 4035 Mfd.	.45

PHILCO REPLACEMENT PARTS FIT ANY AUTO-RADIO

## Philco Electrolytic Condensers

## For Replacement in Every Make Receiver

All Voltages Listed Are Guaranteed Continuous Working Voltages— Not "Peak" or "Surge" Voltage

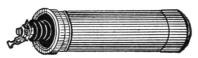
Philco Electrolytic Condensers are furnished in all standard values and types and are designed for replacement use in all makes of radio.

"Stud type" condensers are fitted with a large threaded bolt or "stud" at one end, as illustrated. They are mounted vertically on the receiver chassis by means of this stud and secured by a suitable nut and washer. This type may also be used for clamp mounting by inverting (stud at top) and securing clamp around bottom, just above chassis (clamp is bolted to chassis).

"Clamp type" condensers are mounted by a clamp around the bottom as just described above.

**Note:** Always use a replacement of the same general type, that is, replace a wet type condenser with a wet one, etc. It is always satisfactory to replace with a condenser of higher voltage rating than the original. In other words, a condenser rated at 450 volts makes an excellent replacement for one rated at 250.

## Wet Electrolytics—(Stud Mounting)



#### ALUMINUM CONTAINER

Part No.	Mfd.	Volts	Length Diameter	NET DEALER PRICE
30-2056	4	475	4 \frac{13''}{32''} \times 1 \frac{1}{3}8'' \\ 4 \frac{13}{32''} \times 1 \frac{1}{3}8'' \\ 4 \frac{13}{32''} \times 1 \frac{1}{3}8'' \\ 4 \frac{13}{8}'' \times 1 \frac{1}{3}8'' \\ 4 \frac{1}{8}'' \times 1 \frac{1}{3}8'' \\ 4 \frac{1}{8}'' \times 1 \frac{1}{3}4'' \end{array}	\$0.60
30-2057	6	475		.69
30-2058	8	475		.72
30-2060*	10	400		.72
30-2061	14	400		.84

\*Used for replacement in R.C.A.-Victor 1930-31 models.

#### COPPER CONTAINER

Part No.	Mfd.	Volts	Length Diameter	NET DEALER PRICE
4916 6706	6 8	400 400	$\begin{array}{c} 4\frac{5}{32}'' \times 1\frac{13}{32}'' \\ 4\frac{7}{8}'' \times 1\frac{13}{32}'' \\ 7'' \end{array}$	\$0.90 .93 1.11
6893 4818 5725†	10 12 14	$\begin{vmatrix} 475 \\ 400 \\ 400 \end{vmatrix}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1.11 1.08 1.17

†Used for replacement in Philco 25-cycle sets.

## Wet Electrolytics—(Clamp Mounting)



#### ALUMINUM CONTAINER

ALUMINUM CONTAINER					
Part No.	Mfd.	Volts	Length Diameter	NET DEALER PRICE	
7467 7556 7557	4 6 8	400 400 400	4½" x 1¾" 4½" x 1¾" 4½" x 1¾"	\$0.63 .72 .75	

#### COPPER CONTAINER

Part No.	Mfd.	Volts	Length Diameter	NET DEALER PRICE
6453	6	475	$\begin{array}{c} 4\frac{5}{32}'' \times 1\frac{13}{32}'' \\ 4\frac{7}{8}'' \times 1\frac{13}{32}'' \\ 4\frac{7}{8}'' \times 1\frac{13}{16}'' \end{array}$	\$0.90
6707	8	475		.93
5142	10	400		1.11

PRICE

Part No. 6440. Clamp for use in clamp mounting . . . . each Part No. 6441. Insulating Paper Washers (for use under clamp) . . . per hundred 0.33

## Philco Dry Electrolytic Condensers

For General Replacement in Any Make Radio

## Dry Electrolytics (Stud Mounting)

-	(50)	1120		
Part No.	Capacity (Mfd.)	Wkg. Volt.	Length Diameter	NET DEALER PRICE
7441	4	450	$2\frac{5}{8}'' \times 1\frac{3}{8}''$	\$0.69
30-2048	6	450	43'8" x 1"	.81
30-2049	8	450	$4\frac{3}{8}$ " x $1\frac{3}{8}$ "	.84
8022	10	450	$4\frac{5}{32}$ " x $1\frac{3}{8}$ "	1.02
30-2051	4	250	3½" x 1"	.60
30-2052	6	250	3¼" x 1"	.72
30-2053	8	250	3½" x 1"	.75
30-2054	10	250	43/8" x 1"	.84
30-2012	10	50	15/8" x 1"	.57
30-2003*	10	50	$1\frac{27}{32}$ " x 1"	.57



## **Dry Electrolytics**

(Clamp Mounting)



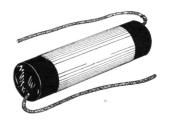
Part No.	Capacity (Mfd.)	Working Voltage	NET DEALER PRICE
30-2007	4	250	\$0.54
$(2\frac{5}{8}'' \times 1'')$ 8095	6	450	.78
$(2\frac{25}{32}'' \times 1\frac{3}{8}'')$ 30-2014	8	475	.90
$(4\frac{5}{32}'' \times 1\frac{3}{8}'')$ 30-2001	12	150	.75
$(3\frac{3}{16}'' \times 1'')$			l

#### Multiple Sections-Clamp Type Mounting Only

Part No.	Capacities (Mfd.)	Working Voltage	Lgth. Diam.	NET DEALER PRICE
30-2028	8 and 8 (2 sec.)	450	5½" x 1¾"	\$1.29
30-2013	8 and 4 (2 sec.)	450	$4\frac{5}{8}$ " x $1\frac{3}{8}$ "	1.17
30 - 2002	12 and 3 (2 sec.)	100	$3\frac{23}{32}'' \times 1''$	.78
30 - 2029	1, 1 and 2 (3 sec.)	300	$3\frac{1}{32}'' \times 1\frac{3}{8}''$	1.11
30 - 2045	8 and 10 (2 sec.)	450-50	$4\frac{5}{32}'' \times 1\frac{3}{8}''$	1.08
30 - 2062	8, 2 and 10 (3 sec.)	475-475-50	$4\frac{9}{16}'' \times 1\frac{3}{8}''$	1.56
30 - 2077	9,9 and 18 (3 sec.)	450	5 x 3	3.45

## Dry Electrolytics

(Cardboard Case)



Part No.	Capacity (Mfd.)	Wkg. Volt.	Length Diameter	NET DEALER PRICE
30-2041	4	50	$\begin{array}{c} 2\frac{3}{8}'' \times \frac{9}{16}'' \\ 2\frac{1}{2}'' \times \frac{11}{16}'' \end{array}$	\$0.42
30-2055	10	50		.51

6-inch insulated lead projects from each end

## **Block Type Dry Electrolytics**

These cardboard case dry electrolytic condensers are of the finest quality. Designed to be ideal replacement units for condensers of this type. Quickly and easily mounted by screws through the eyeletted holes in flanges.

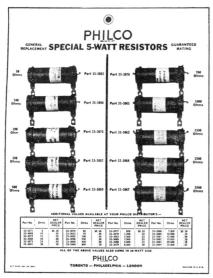


Part No.	Capacity (Mfd.)	Working Voltage	Length Width Height	NET DEALER PRICE
*	1	500		
*	2	500		
*	3	500		
30-2064	4	500	$4\frac{1}{8}'' \times 1\frac{5}{16}'' \times \frac{5}{8}''$	<b>\$0.63</b>
30-2065	6	500	$4\frac{1}{8}'' \times 1\frac{5}{16}'' \times \frac{7}{8}''$	.75
30-2066	8	500	$4\frac{1}{8}'' \times 1\frac{5}{16}'' \times \frac{7}{8}''$	.78
30-2038	10	500	$4\frac{1}{8}'' \times 1\frac{9}{16}'' \times 1\frac{21}{64}''$	.93
30-2042	4	250	$2\frac{3}{8}$ " x $1\frac{1}{16}$ " x $1\frac{1}{16}$ "	.54
30-2043	. 6	250	$2\frac{3}{8}$ " x $1\frac{1}{16}$ " x $1\frac{1}{16}$ "	.66
30-2059	8	250	$2\frac{3}{8}$ " x $1\frac{1}{16}$ " x $1\frac{1}{16}$ "	.69
30-2044	10	250	$2\frac{3}{8}$ " x $1\frac{3}{8}$ " x $1\frac{1}{8}$ "	.78
7440	10 (Metal case)	25	$2\sqrt[3]{4}'' \times \sqrt[3]{4}'' \times 1\sqrt[1]{4}''$	.48
6442	20 (No Flanges)	15	$2\frac{3}{16}'' \times \frac{3}{4}'' \times \frac{15}{16}''$	.48
30-2004	4 and 8 (2 sections)	450	$2\frac{5}{16}'' \times 1\frac{1}{4}'' \times 2\frac{21}{32}''$	1.20
30-2005	4 and 8 (2 sections)	250	$2\frac{15}{32}'' \times 1\frac{5}{32}'' \times 2\frac{5}{16}''$	1.08

<sup>\*</sup>For best results use No. 30-2064 unit (4 Mfd.) for replacement of this value.

<sup>\*</sup>Threaded bolt projects from base.

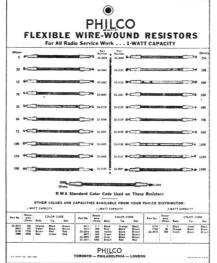
## Philco General Replacement Parts Kits



Kit No. 45-1094

#### Special 5-Watt Resistors

KIT No. 45-1094—Ten heavy porcelainbase wire-wound resistors built with a special insulation coating and guaranteed to stand a continuous 5-watt load. Useful wherever a heavy-duty resistor is needed in a radio circuit. Range of values from 50 to 5000 ohms. Each two inches long. Net Dealer Price \$3.12

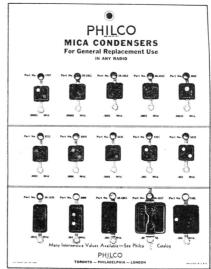


Kit No. 45-1087

#### Flexible Wire-Wound Resistors

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

Net Dealer Price . . . . \$3.15



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.

Net Dealer Price .

. . . \$3.81

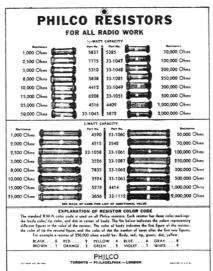


Kit No. 45-1095

#### Special 10-Watt Resistors

KIT No. 45-1095—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 load up to ten watts is to be carried. Wire-wound, special insulation. The kit contains six most wanted values from 1,000 to 15,000 ohms. Each four inches long.

Net Dealer Price . . . . \$3.30



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

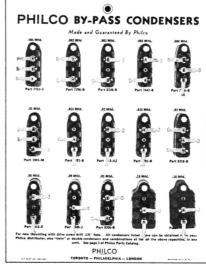
#### Resistors

KIT No. 45-1093—Consists of 16 each, ½-watt and 1-watt carbon resistors, in a complete range of the most popular and commonly used values, from 1000 ohms to 2 megohms. 32 resistors in all An independent of the state of the sta

Net Dealer Price . . . . . \$4.80 KIT No. 45-1098

Same as above but with metallized resistors.

Net Dealer Price . . . . \$4.80

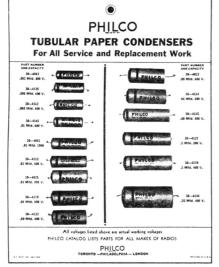


Kit No. 45-1091

#### **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. Test voltage 800. Made and guaranteed by Philco. Net Dealer Price . \$2.79

## Popular Type Parts for Repairing All Makes



Kit No. 45-1089

#### **Tubular Paper Condensers**

KIT No. 45-1089—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 .003 to .25 mfd. You can't go wrong on this kit.

Net Dealer Price . . . . \$2.94

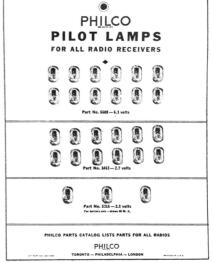


Kit No. 45-1088

#### **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.

Net Dealer Price . . . \$1.



Kit No. 45-1090

#### Pilot Lamps

KIT No. 45-1090—The new Philco Pilot Lamp Card is one of the most convenient and desirable in this whole group. Twelve 6-volt, twelve 2½-volt and three 2-volt (battery type) pilot lamps comprise the assortment. A fast-moving item which no live dealer can afford to overlook.

Net Dealer Price . . . . . \$2.21



Kit No. 45-1096

#### **Volume Control**

KIT No. 45-1096—These are the new Philco General Replacement Volume Controls with the long flatted shaft, suitable for use in any receiver. Six of the most often-called-for values, so that any service requirement can be promptly handled. Attractively mounted but quickly detached for installation.

Net Dealer Price \$3.60

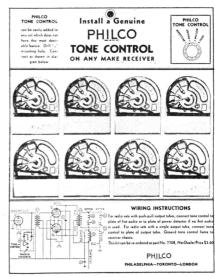


Kit No. 45-1097

#### Volume Control with Switch

KIT No. 45-1097—The same identical kit as No. 45-1096, but each control has a standard SPST switch mounted on the back so that the switch operates with the first clockwise movement of the control, as is the practice on most modern receivers. Including six popular values, this kit is bound to bring quick returns on your investment.

Net Dealer Price . . . . \$5.



Kit No. 7708

#### Tone Controls

KIT No. 7708—One of the most useful and profitable of all the Philco Kits. Eight standard Philco four-point tone controls. A wiring diagram, showing how to install one on a set having no tone control, is printed directly on the mounting card. Any live serviceman or dealer can make a nice profit installing these controls on old model sets.

Net Dealer Price \$\frac{1}{2}\$. \$3.60

## Philco General Replacement Resistors

Wire-Wound Construction—Special Insulation Coating
GUARANTEED 5-WATT OR 10-WATT RATING—UNDERWRITER APPROVED

These high-grade resistors are built to our rigid specifications, and must come up to all load requirements of resistors used in the most expensive Philco receivers. They must not be confused with the cheap resistors, rated far above their real capacity,

with which the radio parts market is flooded. Every one of these Philco resistors will handle a continuous load indefinitely, at the specified power rating, without overheating.



## 5-Watt Resistors All 2" long, \( \frac{9}{16} \)" diameter

## 10-Watt Resistors All 4" long, 9/16" diameter

Part No.	Ohms	NET DEALER PRICE	Part No.	Ohms	NET DEALER PRICE	Part No.	Ohms	NET DEALER PRICE	Part No.	Ohms	NET DEALER PRICE
33 - 3071	5	\$0.30	33-3076	700	\$0.30	33-3085	5	\$0.45	33-3102	700	\$0.45
33 - 3049	10	.30	33-3077	800	.33	33-3086	10	.45	33-3103	800	.45
33 - 3072	15	.30	33-3061	1000	.33	33-3087	15	.45	33-3104	1000	.45
33-3050	20	.30	33 - 3078	1200	.33	33-3088	20	.45	33-3105	1200	.54
33-3073	25	.30	33 - 3062	1500	.33	33-3089	25	.45	33-3106	1500	.54
33 - 3051	30	.30	33-3063	2000	.33	33-3090	30	.45	33-3107	2000	.54
33 - 3074	40	.30	33-3064	2500	.33	33-3091	40	.45	33-3108	2500	.54
33 - 3052	50	.30	33 - 3065	3000	.33	33 - 3092	50	.45	33-3109	3000	.54
33-3053	75	.30	33-3066	4000	.33	33-3093	75	.45	33-3110	4000	.54
33 - 3054	100	.30	33-3067	5000	.33	33-3094	100	.45	33-3111	5000	.54
33 - 3055	150	.30	33-3079	6000	.39	33 - 3095	150	.45	33-3112	6000	.54
33 - 3075	200	.30	33-3068	7500	.39	33-3096	200	.45	33-3113	7500	.60
33 - 3056	250	.30	33-3080	10000	.39	33 - 3097	250	.45	33-3114	10000	.60
33 - 3057	300	.30	33-3081	12000	.39	33-3098	300	.45	33-3115	12000	.63
33 - 3058	400	.30	33-3082	15000	.39	33-3099	400	.45	33-3116	15000	.63
33-3059	500	.30	33-3083	20000	.39	33-3100	500	.45	33-3117	20000	.63
33-3060	600	.30	33-3084	25000	.42	33-3101	600	.45	33-3118	25000	.63

## Philco Wire-Wound Resistors





## Tapped Type (Shown directly above)

## Porcelain Tube Wire-Wound Resistors

Wound on heavy porcelain tubes "6" diameter. Suitable for all kinds of replacement work. Furnished in various values, with single or tapped windings.

## Single Resistance Type

Part No.	Ohms	Watts	Length	NET DEALER PRICE
5635	200	1.5	17/8"	\$0.21
4859	200	8	31/2"	.45
7465	325	1	1"	.09
3763	800	3	17/8"	.21
6451	5600	9	$5\frac{9}{16}''$	.18
33-3033	6500	7	$4\frac{9}{16}''$	.18
3762	8300	3	51/2"	.69
4532	10000	2.5	51/2"	.30

Part No.	Total Resistance (Ohms)	Resistance Between Taps (Ohms)	Length	NET DEALER PRICE
4057	6	2, 4	$4\frac{9}{16}''$ $5\frac{9}{16}''$	\$0.57
4858	53	14, 10, 29	$5\frac{19}{16}''$	.54
6716	86	16, 70	$1\frac{7}{8}''$	.12
33 - 3034	206	84, 112, 10	3''	.12
33 - 3021	250	20, 100, 130	3''	.12
7998	267	32, 235	$1\frac{7}{8}''$	.12
33 - 3012	271	196, 17, 58		.18
33 - 3069	284	21, 263	$4\frac{9}{16}''$ $1\frac{7}{8}''$	.15
6808	290	85, 205	17/8"	.15
6700	305	50, 50, 205	$1\frac{7}{8}''$	.15
7250	350	50, 300	17/8"	.15
6807	425	135, 85, 205	$1\frac{7}{8}''$ $4\frac{9}{16}''$	.24
6452	430	185, 245	$1\frac{7}{8}''$	.12
3864	1050	250, 800	$1 \frac{7}{2}$	.45
4962	1526.5	16, 10.5, 1500	$5\frac{9}{16}''$	.54
3512	2700	700, 2000	$5\frac{1}{2}''$	.90
6702	2900	900, 2700, 95, 205	$4\frac{9}{16}''$	.30
6008	3605	55, 850, 1400, 1300	$4\frac{\frac{9}{16}}{16}''$	.30
5125	3670	240, 70, 2300, 1060	$4\frac{\frac{9}{16}}{16}''$	.45
5667	3740	180, 60, 3500	$4\frac{\frac{9}{9}}{16}''$	.30
6071	3900	205, 95, 2400, 1200	$4\frac{9}{16}''$	.30
3399	4582	640, 157, 3785	51/2"	.90
4824	4738	800, 263, 75, 370, 1800, 1430	$5\frac{1}{2}''$ $5\frac{9}{16}''$	.51
3865	4900	1400, 1500, 2000	$4\frac{9}{16}''$	.72
3232	4942	1000, 157, 1545, 2240	5 1/2"	1.17
4230	5102	975, 2470, 75, 182, 1400	$5\frac{9}{16}''$	.60
5783	9500	4750, 4750	$5\frac{9}{16}''$	.36

## Philco Wire-Wound Resistors

For Use in Any Make Radio

#### 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.

#### 1-Watt Capacity

Part No.	Resist- ance (Ohms)	Body	OLOR COI	DE Dot	NET DEALER PRICE
33-3040	5	Black	Green	Black	\$0.15
33-3041	10	Brown	Black	Black	.15
33-3042	15	Brown	Green	Black	.15
33-3043	20	$\operatorname{Red}$	Black	Black	.15
33-3119	30	Orange	Black	Black	.15
33-3044	50	Green	Black	Black	.15
33 - 3027	75	Violet	Green	Black	.15
33-3023	100	Brown	Black	Brown	.15
33 - 3045	150	Brown	Green	Brown	.15
33 - 3120	200	$\operatorname{Red}$	Black	Brown	:15
33 - 3046	250	$\operatorname{Red}$	Green	Brown	.15
33 - 3121	300	Orange	Black	Brown	.15
33 - 3122	400	Yellow	Black	Brown	.15
33 - 3031	500	Green	Black	Brown	.15
33 - 3123	600	Blue	Black	Brown	.15
33 - 3124	700	Violet	Black	$\operatorname{Brown}$	.15
33 - 3125	800	Gray	Black	Brown	.15
33 - 3126	1000	Brown	Black	$\operatorname{Red}$	.15
33 - 3127	1250	Brown	Red	Red	.15
33 - 3047	1500	Brown	Green	Red	.15
33 - 3048	2000	Red	Black	Red	.15

#### 1/3-Watt Capacity

Part No.	Resist- ance (Ohms)	C	OLOR COI	DE Dot	NET DEALER PRICE
33–3010	300	Orange	Black	Brown	\$0.12
6443	700	Violet	Black	$\operatorname{Brown}$	.12
6106	1250	Brown	Red	$\operatorname{Red}$	.12
7688	2500	Red	Green	Red	.12

#### 1/2-Watt Capacity

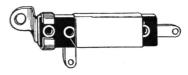
Part No.	Resist- ance (Ohms)	Body	OLOR COD	E Dot	NET DEALER PRICE
6511 7217 33–3016 6977 33–3022 33–3017	2.7 200 400 500 800 1000	Black Red Yellow Green Gray Brown	Orange Black Black Black Black Red	Black Brown Brown Brown Brown Red	\$0.12 .12 .12 .12 .12

#### 2-Watt Capacity

Part No.	Resist- ance (Ohms)	COLOR CODE Body Tip Dot			NET DEALER PRICE
5110 7155 33–3019	7 30 700	Black Orange Violet	Violet Black Black	Black Black Brown	\$0.18 .18 .18

## Flat Wire-Wound Resistors

Part No.	Total Resistance (Ohms)	Resistance Between Taps (Ohms)	Overall Length	NET DEALER PRICE
3628	6		1''	\$0.12
3777	20		$1\frac{5}{8}''$	.12
3764	140	70, 70	$2\frac{11}{16}''$	.15
4861	210		$2\frac{1}{2}''$	.15
6107	225		$15\sqrt{8}''$	.15
4142	250		$2\frac{1}{2}''$	.15
4407	311	60, 1, 250	$43\frac{7}{8}''$	.30
4961	350	'	25/8''	.15
4408	1050	300, 750	37%"	.24



Philo 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.

## Philco Cartridge-Type Resistors

#### 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.



1/6	Watt
73	watt

1/2 Watt

1 Watt

Part No.

33 - 1108

33 - 1109

Ohms

9,000

10,000

Ohms

350,000

400,000

Part No.

7501

3524

Part No.	Ohms
33-1028 33-1029 33-1030 33-1031 33-1001 33-1032 33-1033 33-1000 8267 33-1013 33-1034 6098 6099 33-1035 6097 33-1036 33-1096	1,000 2,000 3,000 4,000 5,000 7,000 9,000 10,000 13,000 50,000 51,000 99,000 100,000 490,000 500,000 1,000,000
33–1025 33–1002	2,000,000 4,000,000

Dealer Net
Price each
\$0.15

12	• •		١
	1		

Part No.	Ohms	Part No.	Ohms
7837 7951 6984 7775 5309 33–1038 7238 33–1040 5310 7352 33–1041 33–1077 5838 33–1042 4412 33–1110 6208 6650 4516 33–1078	1,000 1,500 2,000 2,500 2,900 3,000 3,300 3,500 4,000 5,000 6,000 7,500 8,000 9,000 10,000 12,000 20,000 25,000	33-1079 5385 33-1080 33-1046 4411 33-1047 5331 33-1081 33-1081 33-1050 4517 33-1051 4409 7009 5872 33-1053	60,000 70,000 75,000 85,000 99,000 100,000 200,000 240,000 300,000 400,000 490,000 1,000,000 1,500,000 2,500,000 3,000,000
	30,000 32,000	33–1082 6010	3,500,000 4,000,000
33–1110 6208 6650	12,000 15,000 20,000	7009 5872 33–1052	1,500,000 2,000,000 2,500,000
$33-1078 \\ 5279$	30,000	33-1082	3,500,000
4518	51,000	00 1000	20,000,000

Dealer Net Price each, \$0.15

4590	1,000	33-1085	75,000
33 - 1057	1,500	3767	99,000
4515	2,000	33-1061	100,000
33 - 1058	2,500	33-1086	150,000
7831	3,000	33-1104	160,000
33-1059	3,500	33-1106	170,000
7832	4,000	5023	190,000
3526	5,000	33-1107	200,000
7833	6,000	3768	240,000
7834	7,000	33-1087	250,000
33-1083	7,500	33-1062	300,000
7835	8,000	33-1105	340,000

13,000 490,000 3766 3769 15,000 5278 33 - 1063500,000 6649 20,000 4414 1.000,000 33-1088 3656 25,000 1,500,000 7836 30,000 33-1111 1,800,000 3525 32,000 33-1112 2,000,000 33-1089 33 - 102739,000 2,500,000 40,000 33-1064 3,000,000 7837 50,000 33 - 106033 - 10903,500,000 33 - 10654237 51,000 4,000,000 -108460,000 33-1066 5,000,000 70,000

Dealer Net Price each, \$0.15

2 Watt

3 Watt

Part No.	Ohms	NET DEALER PRICE	Part No.	Ohms	NET DEALER PRICE	Part No.	Ohms	NET DEALER PRICE
3655 33–1067 33–1068 33–1069 33–1070 33–1071	1,000 2,000 3,000 4,000 5,000 7,500	\$0.21 .21 .21 .21 .21 .21	33–1024 5718 5649 33–1072 33–1026	10,000 15,000 20,000 25,000 32,000	\$0.21 .21 .21 .21 .21	33–1073 5868 33–1074 33–1075 33–1076	50,000 51,000 75,000 100,000 250,000	\$0.21 .21 .21 .21 .21

Part No. Ohms | NET DEALER PRICE | 13,000 | 50.24 | 33-1018 | 30,000 | .24 |

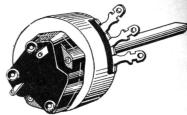
Specify whether Carbon or Metallized Resistors are wanted—both types are available

## Philco General Replacement Volume Controls

The First Line of Volume Controls with Long Flatted Shaft Suitable for Replacement in any Set

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 15% 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.

Insulating Washers for use with Controls having Insulated Shaft:



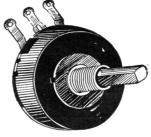
Type with Switch

Part No.	Part No.		4	NET DEAL	LER PRICE
with Switch	without Switch	Resistance	Description	Price with Switch	Price without Switch
33–5027 33–5028 33–5029 33–5030 33–5031 33–5032	33–5041 33–5042 33–5043 33–5044 33–5045 33–5046	2 meg. 1 meg. 500,000 ohms 250,000 ohms 100,000 ohms 20,000 ohms	Brass shaft 15%" long, not grounded. Bushing 3%". 99" hex nut	<b>\$0</b> .87	\$0.60
33–5033 33–5034 33–5035 33–5036	33–5047 33–5048 33–5049 33–5050	20,000 ohms 12,000 ohms 8,000 ohms 5,000 ohms	Clockwise rotation. Brass shaft $1\frac{5}{8}$ " long, grounded. Bushing $\frac{3}{8}$ " long. $\frac{9}{16}$ " hex nut	.87	.60
33–5037 33–5038	33–5051 33–5052	$50,000 \; \mathrm{ohms} \\ 20,000 \; \mathrm{ohms}$	Same type as above except these two are counter-clockwise rotation	.87	.60
33–5039 33–5040	33–5053 33–5054	500,000 ohms 2,000 ohms	Tapped 100,000 ohms at mid point of rotation. Brass shaft 15%" long, not grounded. Bushing 3%" long. 96" hex nut. Clockwise rotation. Clockwise rotation. Tapped 25 ohms at 1/3 rotation. Brass shaft 15%" long, not grounded. Bushing 3%"	.87	.60
***************************************			long. $\frac{9}{16}$ " hex nut	.87	.60

## Philco Volume Controls

Philco Standard Volume Controls are made in both the 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. For information as to proper type for a certain Philco model, see tables on pages 16 and 17.



Part No.	Resistance (Ohms)	Type of Resistance	Threaded Spindle	Shaft	NET DEALER PRICE
5039	$\left\{ egin{array}{c} 210 \ 5,000 \end{array}  ight\}$ Dual	Wire	1/4" Length	$\frac{21}{32}$ " Length	\$1.08
5056	$\left\{\begin{array}{c} 210 \\ 5,000 \end{array}\right\}$ Dual*	Wire	$\frac{21}{32}$ " Length	7'' Length	1.35
3879	250	Wire	$\frac{9}{32}$ " Length	$\frac{17}{32}$ " Length	.60
4094	$\left\{ \begin{array}{c} 250 \\ 5,000 \end{array} \right\}$ Dual	Wire	½" Length	<sup>9</sup> / <sub>16</sub> " Length	1.08
4056	1,750	Wire	$\frac{9}{32}$ " Length	$\frac{17}{32}$ " Length	.60
5232	$\left\{ egin{array}{l} 1,750 \ 5,000 \end{array}  ight\}$ Dual	Wire	½" Length	$1\frac{11}{64}$ " Length	1.08
5839	5,000	Wire	½" Length	1 11 1 Length	.60
5317	$\left\{ egin{array}{l} 5,000 \ 5,000 \end{array}  ight\}$ Dual	Wire	½" Length	45'' Length	1.08
3076 33-5005 33-5017 4513 6109 33-5006 8054 5724 6499 33-5022	10,000 20,000* 20,000 50,000 100,000** 350,000 500,000 1,000,000 2,000,000*	Carbon	\$\frac{\frac{2}{3}}{3}\text{" Length}\$ \$\frac{3}{8}\text{" Length}\$ 1\text{" Length}\$ 1\text{" Length}\$ \$\frac{3}{8}\text{" Length}\$ \$\frac{3}{8}\text{" Length}\$ \$\frac{3}{8}\text{" Length}\$ \$\frac{3}{2}\text{" Length}\$ \$\frac{3}{2}\text{" Length}\$ \$\frac{3}{2}\text{" Length}\$ \$\frac{3}{2}\text{" Length}\$ \$\frac{3}{2}\text{" Length}\$	16" Length 164" Length 78" Length 38" Length 16" Length 16" Length 34" Length 34" Length 16" Length	.84 .87 .60 .60 1.08 .87 .90 .60

## Replacement Parts Used in All Philco Models

														odels		put	D:	lter
MODELS		ume trols	To Con		R. Transf		I. Transf	F. ormers	Os Transf		Pov Transfe		Transf	ormers	Transf			okes
MODELS ↓	Philco Part No.	NET DEALER	Philco Part No.	NET DEALER	Philco Part No.	NET DEALER	Philco Part No.	NET DEALER	Philco Part No.	NET DEALER PRICE	Philco Part No.	NET DEALER PRICE	Phileo Part No.	NET DEALER PRICE	Philco Part No.	NET DEALER PRICE	Philco Part No.	NET DEALE PRICE
3 (Trans.)	4463	\$1.08		PRICE	1st 4401A 2d 4401B	\$0.60 30.45		PRICE				TRICE			2706	\$1.20		
3 (Trans.)	4405	\$1.08			3d 4401B 4th 3775B	.45 .45											4010	21.0
4					Det. 03734 Ant.	1.20	1st 32-1086	\$0.39			5785	\$2.10			32-7005	.84	4819 32-7026	\$1.08
5 (Trans.)	38-5082	1.02			32-1152 Ant. 05903	.30 .38 .36	2d 32-1087 1st 05970	.39	32-1085	\$0.27 .48	32-7030	1.35			2598	.84	32-1020	
6 (Trans.) 7 (Trans.)	7525 6109	1.08			Det. 05902 Ant. 04348	.36 .54 .36	2d 05901 1st 04352	.54 .81 .81	05975 04508	.72					2598	.84		
8 (Trans.)	7322	1.08	05366	\$0.45	Det. 04509 Ant. 04348 Det. 04509	.36 .54 .36	2d 04353 1st 04352 2d 04353	.81 .81	04508	.72			6582	\$1.29	2565	1.08		
9 (Trans.)	7525	1.08	05366	.45	Ant. 06574 05902	.36	1st 05970 2d 05901	.60	05975	.48			7652	1.08	327039	1.05		
10 (Trans.)	38-5280	1.02	30-4056	.45	Ant. 32-1220	.30	1st 32-1236 2d 32-1237	.84 .84	32-1222	.27	32-7098	1.44			327102	.90	32-7038	.6
12 (Trans.)	7525	1.08	05366	.45	32-1221 Ant. 04348	.39 .54 .36	1st 04352	.81 .81	04508	.72			6582	1.29	2565	1.08		
14	8054	.90	06698	.45	Det. 04509 32-1069 Det.	.45	2d 04353 1st 04319	.54 .54	05983	.30	6804	3.30	6064	1.35	2585	.93	4819	1.0
	8054	.90	-	<del> </del>	32-1070 1st 04981	.30	2d 04320 1st 03038											
15	7050	.60	04787	.45	2d 04982 Det. 3884V	.24	2d 04979 3d 03345	.54 .33 .54	04983	.30	6672	3.51	5662	1.95	2565	1.08	3422	1.8
	00 #000	07	20 4000	4.5	Ant. H. F.	.30	1st 32-1186	.39	H. F. 32-1185 B. C. Pol.	.36	Code (122) 32-7058	3.75	32-7057	1.65	32-7052	1.20	32-7056	1.3
16	33-5022	.87	30-4069	.45	32-1183 B. CPol. 32-1182	.33	2d 32-1186 3d 32-1188	.39	B. C. Pol. 32-1184	.21	(Code 121) 32-7080	3.24	32-1031	1.65	32-1002	1.20	32-7000	1.0
		-	<del>                                     </del>	<del>                                     </del>	Ant.	.51	-				(Code 122)	3.75						
17	33-5023	.87	30-4070	.45	32-1170 Det.	.51	1st 32-1173 2d 32-1174	.54 .45	32-1172	.54	32-7058 (Code 121) 32-7080	3.24	32-7057	1.65	32-7052	1.20	32-7056	1.3
					32-1171	ı					32-7080	ſ						-
18	33-5024	.87	30-4073	.45	32-1255 32-1256	33	32-1288 32-1258	33	32-1257	.36	32-7111	3.45	32-7114	1.20	32-7078	.84	32-7115	1.0
19	33-5000	.87	30-4003	.45	Ant. 06619 Int. 06662	.33 .33	1st 06621 2d 06622	.36 .72	06620	.54	8046	2.07			2580	.75		
20	4094	1.08			1st 3884N 2d 3884P	.54 .63 .63					4234	4.65	4232	1.35	2766	1.20	4231	1.
					3d 3884P 1st 3884N	.54							1020	-	2766	1.20	4819	1.
21	4094	1.08			2d 3884P 3d 3884P Ant. 4182A	} .63 .63					4813	4.80	4232	1.35	2700	1.20	4013	1.
30	4093	.84	04787	.45	2d 4182B 3d 4182B	.45 .72 .72 .72 .72							3242	1.65			3518	1.5
35 (Batt.)	5317	1.08	04757	.30	4th 4182B Ant. 03320	.72 .54 .39	1st 03009	.63	03321	.36			5315	1.35	2646	.96	5314	1.:
37 (Batt.)	7239	1.08	04/5/	.30	Det. 03083 Ant. 05726 Det. 05727	.39	2d 03092 1st 05697 2d 05698	.60 .72 .54	05728	.48			7233	1.08	2646	.96		
38 (Batt.)	33-5017	.60			Ant. 32-1208	.30	1st32-1251 2d 32-1252	1 .63	32-1209	.45			7233	1.08	2565	1.08		
10 (D.C.)			0.4505		3884A 3884B	.54	EG 02 1202						3872	1.80	2766	1.20	3422	1.
<b>40</b> (D.C.)	4056	.60	04787	.45	3884C 3884C 1st 3884A	.60							3012	1.80	2100	1.20	0122	1.
<b>41</b> (D.C.)	4094	1.08	04787	.45	2d 3884B 3d 3884C 4th 3884C	.54 .39 .60 .60							3872	1.80	2766	1.20	3422	1.
12 (D.C.)	4094	1.08	04787	.45	2d 3884B 3d 3884C 4th 3884C	.54 .39 .60 .60							3872	1.80	2766	1.20	3422	1.
13	6892	.87	05174	.30	Ant. Coup. 05189 Ant. 06404	.36	1st 05185 2d 05185 3d 05185	.39 .39 .39	05184	.87	7074	2.70			2580 2564§	.75	5930	1.
44	33-5025	.87	30-4080	.30	Ant. H.F. 32-1270 32-1271 Ant. Batt.	.33 .42	1st32-1274 2d 32-1306	.33 .54	H. F. 32-1273 Batt. 32-1272	.21	32-7137	2.31			2580	.75	5930	1.
<b>46</b> (D.C.)	4141	1.08			1st 3884X 2d 3884Y 3d 3884Y	39	٠						4862	1.50	2766	1.20		
47 (D.C.)	6499	.60	04757	.30	04339 Det. 05093	.39 .54 .27	1st 05094 2d 05095	.36	04186	.72			6064	1.35	2550 25448	1.05 1.05	6712 5314	1.
48 (D.C.)	5839	.60			Ant. 05848 Det. 05849	.39	1st 04887 2d 03887	.84 .90	06665	.51					2660	.75	4819	1.
50	5232	1.08			1st 03283 2d 03284	.54 } .54 } .54					5266	2.55			2660	.75		
51	5839	.60			3d 03284 Ant. 03880 1st 03881	.54	1st 03887 2d 03886	.90 .72	03882	.63	5266	2.55			2660	.75	1	1
52	5839	.60			Ant. 03880 1st 03881	.54	1st 03887 2d 03886	.90 .72	03882	.63	,5266	2.55			2660-	.75		
53	33-5001	.87			Ant. 32-1000	.30	32-1002	.48	32-1001	.48					32-7000	.48	32-7001	L.
54	33-5010	.87			Ant. 32-1117	.90	1st 32-1115 2d 32-1195	.48	32-1118	.72					32-7020	.48	32-7036	
57	33-5011	.87			Ant. 32-1153	36	32-1155	.72	32-1023	.63	32-7064	1.89			32-7041	.57		
20	33-5006	.87	30-4008	.30	Ant. 32-1047	.39	1st 32-1049	.36	32-1048	.45	8046	2.07	1		32-7019	.75		1
60 65	3528	.72	30-4008		Ant. 3506B	.66	2d 32-1050				3516	5.40	3537	2.49	2766	1.20	3422	1.
70	5039	1.08	04757	.30	3506A 03082 Det. 03083	.45	1st 03091 2d 03092	.54	03084	.36	5117	3.90			2673	1.20	4819	1.
70 (A.V.C.)	6015	.60	03637	.30	Ant. 04339 Det. 04185	.54	1st 04190 2d 03038	.30 .54	04186	.72	5117	3.90			2673	1.20	4819	1.
71	6499	.60	05153	.30	Ant. 04339 Det. 04185		1st 04190 2d 04319	.30 .54	04186	.72	6454	2.25			2580 2564§	.75 .90		
					1st 3884 A	.54 .39 \ .60							1				_	$\top$
76	3879	.60			2d 3884B 3d 3884C 4th 3884C	.60		,			3868	5.40	3872	1.80	2766	1.20	3422	1.
77	4094	1.08	04787	.45	1st 3884A 2d 3884B 3d 3884C	.54 .39 \ 60					3868	5.40	3872	1.80	2766	1.20	3422	1
					4th 3884C	.60		-				-	-	-	2660	.75		+-
30 31	33-5005 33-5002	.60			Ant. 05831	.36	06100 06100	.90	05832 32-1031	.48	7421 7421	1.80			2660	.75		1
36	3076	.84			32-1030 Ant. 3075B 3075A	72					3271	4.80	3242	1.65	2766	1.20	3269	2
87	3076	.84			Ant. 3075B 3075A	72					3400	4.80	3242	1.65	2766	1.20	3422 3472	1 2
89	8003	.87	06764	.30	Ant. 06619 Int. 06662	.33	1st 06621 2d 06622	.36 .72	06620	.54	8046	2.07			2580	.75		
<b>90</b> (2-45's)	5039	1.08	04787	.45	1st 03013 2d 03014	.45 .30 .36	1st 03009 2d 03143	.63 .72	03016	.36	4938	4.80	4952	1.65	2766	1.20	4819	1
90 (1-47)	5724	.60	04787		Det. 03015 1st 03360 2d 03014	.39	1st 03009	.63	03016	.36	5362	3.75	<del>                                     </del>	1	2673	1.20	4819	1
	-	-	-	.45	2d 03014 Det. 03015 Ant. 04317	.36	2d 03345 1st 04319	.54				-	6064	1.25	2635	1.20	4819	+
90 (2-47's)	8054	.60	04787 06698•	.45	Det. 04408 32-1069 Det.	.45	2d 04320 1st 04319	.54 .54	04409	.48	6072	3.51	6064	1.35	2585	.93	_	1
91	8054 7049	.90 .60	04787	.45 .45	32-1070	.90	2d 04320	.54 .54	05983	.30	6554	3.12	6064	1.35	25658	1.08	4819	1
95	3790	.93			1st 3744A 2d 3744B 3d 3744C 4th 3744C	.90 .72 1.08 1.08					3752	5.40	3537	2.49	2766	1.20	3422	.1
96	4093	.84	04787	.45	1st 3744A 2d 3744B 3d 3744C 4th 3744C	.90 .70 1.08 1.08					3752	5.40	3537	2.49	2766	1.20	3422	1
	4093	.84	04787	.45	5th 3775B 1st 3884S 2d 3884T	.51 .48 .33 .60	03038 03039	.54	3884U	.45	4446	5.40	3537	2.49	2766	1.20	3422	1
111	-	-	-	_	Det. 3884V	.60	03040	.54	-			-	-	-	-	+	+	+
111		.84	04787	.45	2d 3884T Det. 3884V	.48 .33 .60	03039 03040	.54	3884U	.45	4446	5.40	3537	2.49	2766	1.20	3422	1
	4093					. 48	1st 03038	1 .54	1	1	1	1	1	1	1	1 100	1 5042	1
<b>112</b> (2-45's)	4093	.84	04787	.45	2d 3884T	.48	2d 03039	.54 .60 .54			5594	4.20	5662	1.95	2635	1.20	5643	
111 112 (2-45's) 112 (2-47's) 470		.84	04787 04757	.45	2d 3884T Det. 3884V 1st 03082 Det. 03083	.60 .45 3 .39	2d 03039 3d 03040	.54	03084	.36	5594 5117	3.90	5662	1.95	2635	1.20	4819	1.
112 (2-45's) 112 (2-47's)	4093			+	2d 3884T Det. 3884V 1st 03082	3 .39 .39 .30	2d 03039	.54 .54 .60				-		-	-	_	+	+

## Replacement Parts Used in All Philco Models

	Fi	eld	On- Swit			lot		aker nes	Tun Conde	ing	Fil Conde		Electr	olytic		C. stors	Di	
MODELS	Philco	NET	Philco	NET	Philco	NET	Philco	NET DEALER PRICE	Philco	NET DEALER		NET	Philco	NET DEALER	Philco	NET	Philco	NET
<u> </u>	Part No.	DEALER PRICE	Part No.	DEALER PRICE	Part No.	DEALER PRICE	Part No.		Part No.	PRICE	Part No.	DEALER	Part No.	PRICE	Part No.	DEALER	Part No.	PRICE
3 (Trans.)	02915	\$5.40	6498	\$0.27	6608	\$0.066	02996	\$0.54	4372A	\$3.96							6043+	\$0.1
4			5796 Combin	.90	3463	.066			03692	2.34			4916		5783	\$0.36	03890	.36
<b>5</b> (Trans.) <b>6</b> (Trans.)	36-3046 02794	1.20 2.88	Volume Combin Volume	Control	6608	.066	36-3027 36-3159	.30	31-1019 04308	2.16 3.78	30-4017 04354	\$1.08	30-4010	1.32			27-5006 6043+	.18
7 (Trans.)	02794	2.88	Combin	ed With Control	6608	.066	36-3159	.30	04308	3.78							6043*	.1
8 (Trans.)	02794	2.88	Combin Volume	ed With Control	6608	.066	36-3159	.30	04308	3.78							6043+	.13
9 (Trans.)	02795	1.62	Volume	ed With Control	6608	.066	36-3159	.30	04308	3.78	04959	.54					6043+	.1
10 (Trans.)	36-3130	1.62	Volume	ed With Control	6608	.066	36-3159	.30	31-1083	2.70	30-2015	1.08	(30-2015 filter	used in circuit)			27-5022	.1
12 (Trans.)	02794	2.88	Combin Volume	ed With Control	6608	.066	36-3159	.30	04308	3.78	04959	.54					6043+	.1
14	02803	1.62	6498	.27	6608	.066	36-3159★ 02625♥	.30 .48	04790	3.06	04830	.54	7464	.90	6808	.15	7997+	.1
15	02803	1.62	6438	.90	6608	.066	36-3159★ 02625♥	.30 .48	04941	3.96	03489	1.26	4916	1.08	6700	.15	4276+	.1
													(Code 122) 30-2011 30-2011	1.02				
16	36-3088	4.80	Volume	ed With Control	6608	066	36-3061	.54	31-1039	3.24	30-4026	2.16	(Code 121) 6706	1)	33-3021	.12	31-1058	
	+	<b>†</b>	<del> </del>	-	-		-	-	-		-	-	7464 (Code 122	1.14		-	-	_
17	36-3088	4.80	Combin Volume	ed With Control	6608	.066	36-3061	.54	31-1041	2.70	30-4026	2.16	30-2011 30-2011 (Code 121	1.02	33-3021	.12	31-1066	
	00000		Volume	Control									6706 7465	1.14				_
18	36-3104	1.62	Combin Volume	ed With Control	6608	.066	36-3020	.36	31-1110	2.70	30-2029	.72	30-2025 30-2003	1.14 1.20 57	33-3033	.18	31-1066	
19	02761	1.62	Combin Volume	ed With Control	6608	.066	36-3159	.30	06577	2.88	06624	.54	30-2020 8166	.84 .78	7998	.12	06697	_
20	2768	1.20	6498	.27	3463	.066	02996	.54	4200A	3.42	4235	2.70			4230	.60	4209B	
21	2768	1.20	6498	.27	3463	.066	02996	.54	4200A	3.42			4818	1.50	4824	.51	4209B	
	1				<b></b>			1					1				00001	$\top$
30			6498	.27	5316	.21	2764A	.30	4000G	7.20					3864	.45	03031	1
35 (Batt.)	<del> </del>		5318	.72	5316	.21	02887	.48	03076	3.60						+	03031	
37 (Batt.) 38 (Batt.)	<del> </del>		7283 42-1040	.90	5316	.21	02887 36-3014	.48	05740 31-1076	3.06	03915	.78					05811 31-1084	
													1	1				T
<b>40</b> (D.C.)	2799	1.62	6498	.27	3463	.066	36-3170	.42	4069E	7.20	4067	3.96	1		4057	.57	3794+	_
<b>41</b> (D.C.)	2799	1.62	3517	.42	3463	.066	36-3170	.42	4069E	7.20	4067	3.96			4057	.57	3794+	
<b>42</b> (D.C.)	2799	1.62	3517	.42	3463	.066	36-3170	.42	4069E	7.20	4067	3.96			4057	.57	3794+	
43	02761 02767	1.62 1.62	Combin Volume	ed With Control	6608	.066	36-3159	.30	05154	2.88	05239	.72	4916	1.08	6451 6452	.18 .12	05418	
44	02767	1.62	Combin Volume		6608	.066	02625	.48	31-1106	3.18	30-2028	1.44	30-2020	.84	33-3037	.12	31-1107	
46 (D.C.)	2694	.72	6498	.27	3463	.066	02996	.54	4200D	3.60	4860	3.06	1	1	4858A	.54	4209B	T
47 (D.C.)	02745 02744	2.55 1.62	Combin	ed With	6608	.066	36-3159	.30	05098	3.06	05003	2.52			6716	.12	05992	+
48 (D.C.)	02671	1.35	Combin	ed With Control	6608	.066	02861	.45	05885	2.88	05569	.72			7852	.15	05811	
50	02942	1.35	5382	.27	3463	.066	02861★ 02887♥	.45 .48	03293	3.24	03459	.90	4916	1.08			03322	
51	02942	1.35	5382	.27	3463	.066	02861★ 02887♥	.45 .48	03809	3.24	03915	.78	4916	1.08			04031	
52	02942	1.35	5382	27	3463	.066	02861	.45	03809	3.24	03915	.78	4916	1.08			05811	_
53			Volume Combin	Control ed With			36-3000	+	31-1000	1.26	30-4000		30-2000 30-2001 30-2002	.63 .81	00.001		28-1021	-
54	36-3040	1.20	Volume	Control	6608	.066	36-3029	.45	31-1027	1.26	30-4023	+	(30-2001	.84 .81	33-3012	.18		+
57	36-3081	1.05	Volume	ed With Control			36-3029	.45	31-1049	1.26	30-2004	1.32	used in fil	1.32				
60	36-3037	1.08	Combin Volume	ed With Control	6608	.066	36-3014	.36	31-1006	1.41	30-4013	.48	7558	.96	7998	.12	31-1090	)
65	2850	2.70	6498	.27	3463	.066			3480B	6.48	3515	6.21			3512	.90	3398+	-
70	02987	1.62	6498	.27	3463	.066	02996	.54	03076	3.60	04559 3615L		4916	1.08	5125	.45	03031	+
70 (A.V.C.)	02987	1.62	6498	.27	3463	.066	02996	.54	04164	3.60		.72	4916 6453 4916▲	1.08 1.11 1.08	6008 6451 6452	.30 , .18 , .12	03031	+
71	02761 02767	1.62	6498	.27	6608	.066	36-3159	.30	04733	3.06	05324	.72	6706▲	1.08	6452	.12	05992	+
76	2850	2.70	6498	.27	3463	.066	36-3170	.42	3376E	7.20	3870	4.50			3865	.72	3794+	_
77	2850	2.70	6498	.27	3463	.066	36-3170	.42	4000B	7.20	3870	4.50			3865	.72	4118+	
ВО	02667	1.41	Volume Combin	ed With Control	6608	.066	02861	.45	05794	1.80			6707 7467 6707	1.14 .72	7465	.09	05828	+
81	02667	2.70		ed With Control	6608	.066	02861 2898A	1.80	31-1006 3001B	9.72	3246	10.20	6707 7467	1.14	7465 3232	1.17	05828 3047 <b>+</b>	+
86 87	2850 2850	2.70	3253 3501	.27	6608 3463	.066	36-3170		3001B	9.72	3401	8.40	1		3399	.90	3398+	+
89	02761	1.62	Combin	ed With Control	6608	.066	36-3159		06577	2.88	06624	.54	30-2020 8166	.84 .78	7998	.12	7882+	
<b>90</b> (2-45's)	02987A 02988®	1.62 3.60	6498	.27	3463	.066	36-3170 <b>₹</b> 02996★	.42 .54	03001	4.50			4916	1.08	4953	.42	03031	
90 (1-47)	02987A 02988B	1.62 3.60	6498	.27	3463	.066	36-3170♥ 02996★	.42 .54	03001	4.50	1	1	4916	1.08	5365	.30	03031	T
90 (2-47's)	02988® 02988® 02988®	1.62	6498	.27	3463	.066	36-3170♥ 02996★	.42	04309	3.60	04407	.72	4916	1.08	6702	.30	03031	+
91	02988® 02803	3.60 1.62	6498	.27	6608	.066	36-3159★ 02625♥		04790	3.06	04830	.54	4916 6706▲ 6707▲	1.08 1.14 1.14	6702 6808	.30	05992	$\top$
95	2850	2.70	6498	.27	3463	.066	36-3170	1	3376D	7.20	3754	4.50	6707▲	1.14	3762	.69	3794+	+
	<del>                                     </del>		<u> </u>			-	$\vdash$	+	$\vdash$	5.40	3754	4.50	1	+	3762	+	4118+	+
96	2850	2.70	6498	.27	3463	.066	36-3170		4000D				ļ		-	.69	-	+
11	2850	2.70	6498	.27	3463	.066	36-3170	-	4000D	5.40	3754	4.50	ļ	1	4532	.30	4276+	+
<b>12</b> (2-45's)	02988	3.60	6498	.27	3463	.066	36-3170	.42	4000D	5.40	3754	4.50		1	4532 3763	.30	4276+	+
<b>12</b> (2-47's)	02988	3.60	6498	.27	3463	.066	36-3170	.42	4000D	5.40	03489	1.26	4916.	1.08	3764	.15	4276+	_
70	02987	1.62	6498	.27	3463	.066	02996	.54	03076	3.60			4916	1.08	5125	.45	03890	
90	02987	1.62	6498	.27	3463	.066	02996	.54	03001	4.50	03327	.72	4916	1.08	5365	.30	03031 03890	
511			3117	.45	6608	.066	2936A	.54	3001B	9.72	Z406	6.00			3088W	1.20	3047*	

\*Small Speaker Cone.

NOTE: Prices on Electrolytic Condensers, Speaker Cones and Pilot Lamps have been revised.

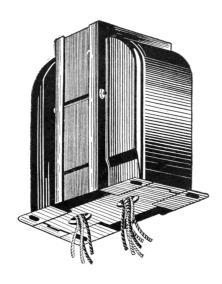
\*Large Speaker Cone.

▲Used in Twin Speaker Models.

+Dial Scales Only.

## Philco Power Transformers

## Universal Mounting -for General Replacement in Any Make Receiver



Philco offers a very complete line of power transformers to meet any replacement need of the serviceman, and for all types of experimental work. Note that a transformer is available for every combination of tubes used in any set.

These transformers are of extremely rugged construction. Built to withstand continuous operation. Unaffected by climate; rigid construction eliminates hum.

The mounting used is strictly universal. For sets with wiring underneath chassis, the leads are run down through holes in chassis. With each transformer, four special mounting sleeves are furnished to facilitate mounting in sets wired on top of the chassis. These sleeves raise the transformer so the leads can easily be drawn out for connecting.

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.

Part No.	No. of Tubes in Set	Suggested Types of Tubes	Secondary Voltages	NET DEALER PRICE
5785	3	1-24, 1-27, 1-80	340, 2.5, 5.0	\$2.10
32-7064	4	2-77, 1-42, 1-80	580, 6.3, 5.0	1.89
7421	4	2-77, 1-42, 1-80	630, 6.3, 5.0	1.80
5266	5	3-24, 1-47, 1-80	750, 2.5, 5.0	2.55
8046	5	1-6Å7, 1-78, 1-75, 1-42, 1-80	680, 6.3, 5.0	2.07
8046		2-44, 1-36, 1-75, 1-42, 1-80	680, 6.3, 5.0	2.07
3516	6	2-24, 1-27, 2-45, 1-80	750, 2.5, 2.68, 5.0	5.40
32–7137		1-6A7, $2-78$ , $1-75$ , $1-42$ , $1-80$	680, 6.3, 5.0	2.31
3073		4-26, 1-27, 1-71A, 1-80	375, 1.55, 2.47, 4.85, 4.80	4.65
4234		3-24, 1-27, 2-71A, 1-80	700, 2.5, 5.0, 5.0	4.65
3868		3-24, 1-27, 2-45, 1-80	750, 2.67, 2.68, 5.0	5.40
$\frac{3752}{4813}$	7	4-24, 1-27, 1-45, 1-80	750, 2.67, 2.68, 5.0	5.40
5117		3-24, 1-27, 2-45, 1-80 4-24, 1-27, 1-47, 1-80	700, 2.5, 2.5, 5.0	4.80
6454		3-44, 1-36, 1-37, 1-42, 1-80	665, 2.5, 2.5, 5.0	3.90
6457		3-44, 1-36, 1-37, 1-42, 1-80	685, 6.3, 5.0 740, 6.3, 5.0	2.25 3.00
3271		4-26, 1-27, 2-71A, 1-80	575, 1.5, 2.47, 5.0, 4.8	
3400	8	4-26, 1-27, 2-45, 1-80	750, 1.55, 2.5, 2.68, 5.0	$4.80 \\ 4.80$
7074	0	2-37, 1-36, 3-44, 1-42, 1-80	685, 6.3, 5.0	2.70
32-7111		1-6A7, $2-78$ , $1-75$ , $3-42$ , $1-80$	760, 6.3, 5.0	3.45
4938		4-24, 2-27, 2-45, 1-80	750, 2.5, 2.5, 5.0	4.80
5362	9	3-24, 4-27, 1-47, 1-80	630, 2.5, 2.5, 5.0	3.75
6072		2-35, $1-24$ , $3-27$ , $2-47$ , $1-80$	660, 2.55, 2.5, 5.0	3.51
6804		2-44, 1-36, 3-37, 2-42, 1-80	700, 6.3, 5.0	3.30
6554	10	3-44, $1-36$ , $3-37$ , $2-42$ , $1-80$	670, 6.3, 5.0	3.12
4446		4-24, 4-27, 2-45, 1-80	750, 2.67, 2.68, 5.0	5.40
5594		4-24, 4-27, 2-47, 1-80	660, 2.67, 2.68, 5.0	4.20
6672	11	4-44, 4-37, 2-42, 1-80	720, 6.3, 5.0	3.51
32–7080		1-6A7, 3-78, 2-37, 1-77, 3-42, 1-80	720, 6.3, 5.0	3.24
32–7058		1-6A7, 3-78, 2-37, 1-77, 3-42, 1-80	800, 6.3, 5.0	3.75
<b>32–7</b> 030		Special for Auto-Radio (Vibrator) Sets	180	1.35

NET DEALER PRICE

\$1.20

.75

.75

.90

1.50

\$1.08

\$1.20

.93

1.68

\$1.20

1.50

\$1.20

\$1.05

\$0.96

\$0.84

\$0.48

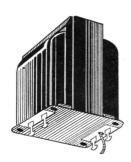
\$1.20

.48

1.20

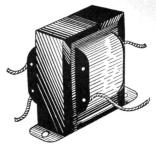
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## Philco Audio Transformers



## For Replacement Use in Any Make Radio For All Service and Experimental Work

Philco Audio Transformers are suitable for all makes of radio and for general service and experimental work. They are constructed of the finest materials, and are all listed at very low prices. Special vacuum impregnating treatment assures permanent trouble-free operation. The large cores afford highly efficient response at all audio frequencies. Many of the transformers listed below are shielded in heavy metal housings, finished in black enamel.



#### **Input Transformers**

#### **Output Transformers**

	input Iran	8101111e18			Output	112115101	111618	
Part No.	For Coupling Between Tubes	Overall Turns Ratio	NET DEALER PRICE	Part No.	For Use With Output Tubes	Turns Ratio	For Voice Coil Im- pedance	]
6064 5662* 3872 4952 4232 3537*	27 and 45, 47, 42 or 71-A	1 to 1† 1 to 1† 1 to 2† 1 to 3† 1 to 4† 1 to 4†	\$1.35 1.95 1.80 1.65 1.35 2.49	2673 2660 2580 2564 2526	Single 47 or 42	90 to 1 87 to 1 76 to 1 53 to 1 27 to 1	.65 1.0 1.25 2.50 10.00	-
6064 5662*	27 and p.p.	1 to 1 1 to 1	\$1.35 1.95	2565‡	Single 19	160 to 1	.60	
3872 4952 4232 3537*	45, 47, 42 or 71-A	1 to 2 1 to 3 1 to 4 1 to 4	1.80 1.65 1.35 2.49	$\begin{array}{c} 2635 \\ 2585 \\ 2525 \\ 32-7078 \end{array}$	Push-Pull 47's or 42's	135 to 1 100 to 1 38 to 1 68 to 1	$\begin{array}{c} .65 \\ 1.25 \\ 10.00 \\ 1.25 \end{array}$	
3242	27 and 26† or 26 and p.p. 45, 71-A, 31, 50	1 to 4	\$1.65	$   \begin{array}{r}     32-7078 \\     \hline     2706 \\     2524   \end{array} $	Single 45 or 71-A	70 to 1 20 to 1	.65	
5315	30 and 33	1 to 4	\$1.35	2848	Push-Pull	80 to 1	.65	
4862	27 and p.p. 71-A	1 to 2.2	\$1.50	2766	45's, 71-A's or 50's	100 to 1	.65	
6582	38 and p.p. 41	1 to 4	\$1.29	2515‡	Single 79	80 to 1	1.25	_
	Class "B" Input	Transforme	rs	2646	Single 33	92 to 1	.65	
7652	37 Driver & 79	1 to 1.2	\$1.08	2598	Single 41	93 to 1	1.25	
7233	30 Driver and Single 19	1 to 1.2	\$1.08	32–7020 32–7000	Single 43	67 to 1 58 to 1	1.00 1.35	
Sup	er Class "A" Inp	out Transfor	mers			1		<u> </u>
32-7114	42 1st A. F. Driver and p.p. 42	1 to 1	\$1.20	$\frac{s}{32-7052}$	Push-Pull 47's or 42's	50 to 1	2.25	<u>r</u>
32-7057	42 Driver and p.p. 42	1 to 1	\$1.65	‡Class "B"	output transforme	ers.		<u> </u>
*Extra large	core. †Transfe	ormer center ta	p not used.					

†Transformer center tap not used.

## Philco "Step-Down" Transformers

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

					_	PRICE
Part No. 5563	Step-down Transformer, 25 cycles, 230 to 115V, 65-watt					\$5.10
Part No. 5716	Step down Transformer, 25 cycles, 250 to 125V, 150-watt					6.90
			•	•	•	00,0



## 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 Filter Chokes**

Part No.	Inductance in Henries	@ Milliamperes	D. C. Resistance in Ohms	NET DEALER PRICE
4819 5643*	4.0	130	150	\$1.08
32-7036	4.0	130	150	1.08
32-7056	4.75	60 150	185 80	.54
32-7115	5.25	125	170	1.32 1.08
3422*	6.5	150	200	1.80
32-7026	7.0	50	150	.75
4819 Z-224	7.5	130	285	1.08
21-224	7.5 Each of Two Sections	100	285 Each	2.55
4231	11.0	80	400	1.08
3269*	12.5	80	400	2.55
32-7213	17.0	60	400	.96
3472* 5930	25.0 100.0	50	1350	2.55
3518*	150.0	10 10	2100	1.05
5314	150.0	$\frac{10}{2}$ .	4000 4600	1.98 1.26
	200.0	2 .	4000	1.20

\*Shielded Case

#### Philco Audio Chokes

## 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)	Length	External Diameter	Internal Diameter	NET DEALER PRICE
2593 32-9013 2535 32-9035 32-9051 32-9038	4.2 6 16 24 44 50	$\begin{array}{c} 1\frac{25}{32}''\\ 1\frac{21}{64}''\\ 1\frac{25}{32}''\\ 1\frac{25}{32}''\\ 1\frac{21}{64}''\\ \frac{23}{12}''\\ 1\frac{21}{64}''\\ \end{array}$	$ \begin{array}{c} 2\frac{3}{16}''\\ 2\frac{3}{16}''\\ 2\frac{3}{16}''\\ 2\frac{3}{16}''\\ 2\frac{3}{16}''\\ 2\frac{3}{16}'' \end{array} $	1" 3/4" 1" 3/4" 3/4" 3/4" 3/4"	\$0.78 .60 .78 .69 .66
$\begin{array}{c} 2527 \\ 2546 \\ 2557 \end{array}$	50 70 435	$\begin{array}{c} 2\frac{1}{8}'' \\ 1\frac{25}{32}'' \\ 1\frac{25}{32}'' \end{array}$	$\begin{array}{c} 1\frac{3}{4}'' \\ 2\frac{3}{16}'' \\ 2\frac{5}{16}'' \end{array}$	1'' 1''	.60 .75 .81

Part No.	Resist. (Ohms)	Length	External Diameter	Internal Diameter	NET DEALER PRICE
2562 $32-9008$	1125	$1\frac{25}{32}''$	$2\frac{3}{16}''$	1''	\$1.11
32-9019	$1140 \\ 1140$	$\frac{1}{\frac{25}{32}}$ "	$2^{\frac{3}{16}''}_{2''}$	3/4"	.90 .75
32-9046 $32-9055$	$\begin{vmatrix} 1140 \\ 1140 \end{vmatrix}$	$\frac{1\frac{1}{4}''}{2\frac{3}{16}''}$	$\frac{2\frac{3}{16}''}{3\frac{3}{4}''}$	1'''	.81 1.98
32-9024 $2545$	$\frac{1450}{2200}$	$2\frac{3}{16}''$	$3\frac{3}{4}''$ $2\frac{3}{16}''$	11/2"	1.86
32-9007	2600	$\frac{1\overline{32}}{25}$	2"	3/4"	.96 .75
32 - 9026	6500	$2\frac{3}{16}''$	33/4"	11/2"	3.81

Philco Speaker Field Coils

receivers or any other sets where a field coil of these specifica-

tions is required. Vacuum impregnated and moisture proof.

External covering for mechanical and electrical protection.

Length

 $2^{16}_{16}$ "  $2^{"}$ 

 $2\frac{3}{16}''$ 

 $\frac{2\sqrt{8}}{1\frac{23}{32}}$ 

D. C. Re-

sistance (Ohms)

2.7

4.0

80

1180

3100

3200

3275

Part No.

2799

2707

2694

2674

2768

2850

2588

These coils are suitable for replacement either in Philco

External

Diameter

 $3\frac{3}{16}$ 2''

13/4"

 $1\frac{74}{32}$   $2\frac{15}{16}$ 

Internal

Diameter

1½" 1½" 1½" 1½" 1½" NET DEALER PRICE

\$1.62

2.88

.72

.72

1.20

2.70

1.20

#### 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  $1\frac{1}{2}$ ", Inside Diameter 1", Outside Diameter (approx.)  $2\frac{1}{2}$ ".

Part No.	Resistance (Ohms)	NET DEALER PRICE
32–9076	6	\$1.11
32–9077	650	1.14
32–9078	1000	1.17

Part No.	Resistance (Ohms)	NET DEALER PRICE
32–9079	2000	\$1.47
32–9080	2500	1.32
32–9081	5000	1.62
32–9082	7500	1.80

## Philco Switches, Sockets, Knobs, Pilot Lamps

#### Philco On-Off Switches



Rotary

amperes.

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



Toggle

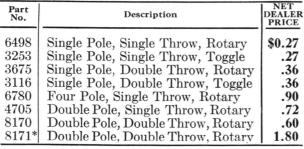


#### Philco Pilot Lamps

Conservative voltage ratings insure long life. These pilot lamps are all furnished with standard miniature bases.

Part No.	Voltage Rating	NET DEALER PRICE
6608	6.0-6.3 Volts	\$0.054
3463	2.7 Volts	.054
5316*	2.0 Volts	.14

\*Special for battery sets-draws only 60 M. A. filament current.







#### 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	NET DEALER PRICE
3096	6 Ohms	\$0.36
3086	20 Ohms	.42
5650	40 Ohms	.42



#### Philco Tube Sockets

Tube sockets with special retaining spring contacts; perfect connection at all times. Complete with mounting rivets.

Part No.	Number of Terminals	NET DEALER PRICE
$4955 \\ 4956 \\ 6417 \\ 27-6005$	4 5 6 7	\$0.06 .07 .07 .07

#### Philco Knobs

Four popular types of knobs are described and listed below. These will cover practically any of the serviceman's requirements. Hole for standard  $\frac{3}{16}$ " shaft. Built-in bronze spring holds knob firmly in place.

			DEALER PRICE
Part No. 03063	Brown bakelite knob, $1\frac{5}{16}$ " wide		\$0.06
Part No. 03334			.06
Part No. 03064	Brown bakelite knob, 1" wide.		.06
Part No. 03437	Brown bakelite knob, tapered,	3/4"	
wide at bottom	1		.03
Part No. 27–4051	Black modernistic knob, large.		.06
	Black modernistic knob, small.		
	Ivory knob, small		
Part No. 27–4032	Ivory knob, large		.15

## Philco Drive Cable for Tuning Condensers

Part No. 3484.—Flexible Metal Cable
Net Dealer Price . . \$0.10 per ft.
Part No. 4020.—Heavy Black Cord,
impregnated.
Net Dealer Price . . \$0.03 per ft.



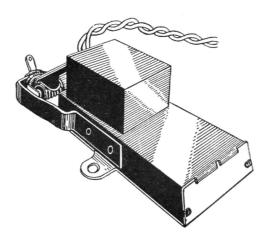
Condenser

Resistor

## Philco Auto Radio Interference Suppression Parts

Part No. Description NET DEALER PRICE 4531 Spark Plug Resistor \$0.24 4546 Distributor Head Resistor .24 4851 Special Screw-Type Resistor (for Buicks, etc.) .24 30 - 4015Interference Condenser (0.5 Mfd.) .30 4522 Interference Condenser (1.0 Mfd.) .45 L-1383 Shielded Antenna Lead-In. **.06** per ft. L-1387 High-Tension Shield (18-inch Length)

## Philco Shadowmeters



The Philco Shadowmeter can be attached to almost any receiver 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 MA.; Part No. 45-2028 where they draw 8.0 MA. Both are equipped with 6.3-volt pilot lamp fitted into a special clip-type receptacle.

Shadowmeter 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.

								1	NET DEALER PRICE
Part No. 6497 (for replacement on most Philco sets)									\$1.50
Part No. 45-2028 (for Philco Models 16 and 17)					,				1.50

## Philco Transitone (Auto-Radio) Replacement Parts Assortments

These "kits" or parts assortments consist of units which experience has proved are most likely to be useful for service and replacement work. They are ideal assortments for the installation station or auto-radio serviceman, and will save him many hours time in ordering or sending out for parts. To have these kits will mean quicker service and more satisfied customers.

The first kit is a general kit, covering all Philco models; the other kits are prepared each for a definite Philco model.

	PRICE
Part No. 45-1066, Philco Transitone General Parts Kit	\$167.03
Part No. 45-1060, Philco Transitone Model 3 Parts Kit	20.82
Part No. 45-1061, Philco Transitone Model 5 Parts Kit	
Part No. 45-1062, Philco Transitone Model 6 Parts Kit	37.30
Part No. 45-1065, Philco Transitone Models 7, 8, 12 Parts Kit	39.71
Part No. 45-1063, Philco Transitone Model 9 Parts Kit	39.90
Part No. 45-1064, Philco Transitone Model 10 Parts Kit	33.81

#### Philco Replacement Vibrator for Auto-Radio

Can be used universally as a replacement unit for "B" batteries, motor-generator or other "B" battery eliminators.

Model EG. Equipped with Relay. Net Dealer Price . . . \$10.50

## Philco Circuit Tester

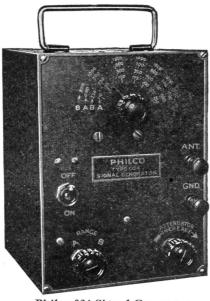
Model 025

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.

Serviceman's Net Price . . . . \$36.60



Philco 024 Signal Generator

A compact, smoothly operating and beautifully finished instrument. Frequency-range scales and designations of controls are etched in brass lettering on black panel. Top, sides and back have special black "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 Model 025

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 Millimeter Ranges: 0-1 Mil.; 0-10 mils.; 0-100 mils. Special 10 ampere shunt available 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 Signal Generator

Model 024

## Intermediate and Broadcast Frequencies

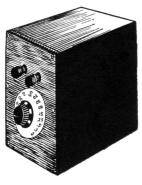
The Model 024 Philco Signal Generator is a complete, self-contained, accurately calibrated instrument, designed to cover all frequencies from 105 K.C. to 2000 K.C. All necessary batteries and tubes are included within the container. No external connections of any kind required.

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 Philoo 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.

## 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. binding posts on the box

provide the necessary connections for external test leads. Mahogany box in brown mahogany finish.

#### Philco Wrench Kit



A kit of four sockets and two handles, long and short, for hex head nuts, screws and

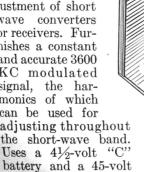
bolts. Specially hardened steel of the highest grade. Kit contains the following parts: 1 handle (long); 1 handle (short); one socket, ½"; one socket, ½"; one socket, ½";

Part No. 7016 - Wrench Kit Complete - Net Dealer	Pr	ice	. \$	1.65
Part No. 7019 – 1/4" socket only – Net Dealer Price				.12
Part No. 7020 - 516 socket only - Net Dealer Price				.12
Part No. 7021 – $\frac{3}{8}$ " socket only – Net Dealer Price				.12
Part No. 7022-70" socket only-Net Dealer Price				.12

## Philco Short-Wave Signal Generator

#### Model 091

A crystal controlled signal generator for the adjustment of short wave converters or receivers. Furnishes a constant and accurate 3600 KC modulated signal, the harmonics of which can be used for adjusting throughout the short-wave band.



battery and a 45-volt "B" battery, both contained in the case.

## Philco Special Adjusting Tools

For Adjusting Padding Condensers

Part No. 3164. Fibre Wrench for hex head adjusting screws. \$0.12

#### Philco Tube Shields

Same as used in all Philco sets. Keep a stock on hand to replace lost shields.

Part No. 8005. Fits over base . . \$0.06 Part No. 28-1107. Fits inside base. .04

#### Philco Standard Fuses

Regular tubular glass fuses for clip mounting, as used in Philco Transitone sets, also 32-volt models and some 220-volt models; or for any general use where a standard fuse is needed.

Part No.	Capacity	NET DEALER PRICE
4540	1 ampere	\$0.03
45 - 2046	3 amperes	.036
7331	8 "	.024
5676	10 "	.03
7227	17 "	.07

## 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 other signal generator.

## THE PHILCO MODEL 059 UNIVERSAL TEST CABINET

BUILT-IN POWER SPEAKER WITH EXCITER ELIMINATES BRINGING IN THE CUSTOMER'S SPEAKER ABSOLUTELY UNIVERSAL—TESTS ANY RADIO

Designed especially for members of Radio Manufacturers Service, this De Luxe Complete Testing Cabinet presents an unusually rich appearance, commanding immediate interest and respect by the customer and public. In addition to being in the most convenient and economical form for highspeed testing, its appearance alone will add prestige to your place of business. Precision-built, and housed in an artistic cabinet, it is bound to return ample dividends on your investment.



#### SPECIFICATIONS OF MODEL 059

SPECIFICATIONS OF MODEL 059
Auditorium speaker capable of handling up
to 15 watts, or the full output from the most
powerful modern receivers. Speaker may be
operated from sets having either single or
push-pull output tubes. Field exciter, including type 80 tube, built into the tester.
Four dummy fields built in for connecting in
place of speaker on set being tested. Output
meter on panel can be immediately connected
to set by turning the switch at the top of
the cabinet.

Complete facilities for every necessary test
to a receiver are provided in the "All-Purpose" tester, which is built into the Universal
Test Cabinet.

Dimensions: Height, 27¾ in.; width, 18 in.;
depth, 9 in. Weight (with batteries), 62 lbs.

## Everything a Well-Equipped Service Department Needs:

Built-in 15-watt Speaker, for radio chassis test. Universal Speaker Plug and Socket, with neces-

sary Cables.

Signal Generator, variable 105 to 2000 K. C.

Visual and Audible Output Indicators.

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.

Tube Tester.

Necessary Tubes and Batteries included.

All Necessary Connecting Leads, Test Prods and Adapters included.

No longer necessary to have many types of extra speakers available to test chassis. The built-in speaker in the Model 059 automatically eliminates this expense and bother. Strictly Universal Speaker Plug and Socket.

Cuts your trouble in half. Now you can remove only the chassis on service calls.

TESTS A. C. SETS, BATTERY SETS, AUTO SETS

COMPLETE ... CONVENIENT ATTRACTIVE ... EFFICIENT SERVICEMAN'S Net Price Complete

## Philco Headphones, Radio Outlets, Plugs and Jacks

## Philco Headphone Kit

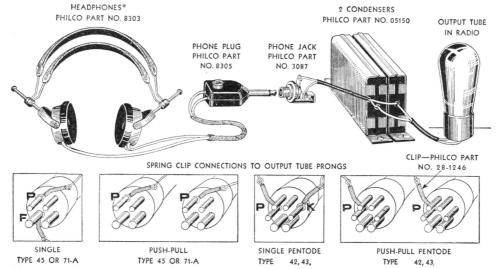
In response to considerable demand for a complete outfit to provide use of headphones, or an extra speaker in addition to, or independently of, the regular speaker in set, Philco has prepared a special "Headphone Kit." This includes a pair of special DeLuxe lightweight headphones, plug and jack, and two fixed condensers, to be connected as shown in cut below. If it is desired to use a speaker

 instead of headphones, the kit may be purchased without the phones.

The Philco headphone kit fills a long-felt need—for invalids, hospital use, deaf persons or individuals desiring "DX" reception or radio enjoyment without disturbing others. A wonderful sales item for the aggressive serviceman.

#### Put a headphone kit on display and cash in!

Part No. 8303 – DeLuxe Lightweight Headphones only, 2000 ohms. Complete with cord. Net Dealer Price . . . . \$2.55



\*An extra speaker can be substituted for the headphones if desired.

NOTE:—In filament type 5-prong output tubes such as 47 and 33, connect to plate and filament.

## Philco Radio Outlets, Jacks and Plugs

This radio outlet provides aerial, ground and power connections from a one-gang outlet. Fits all standard depth wall boxes.

Aerial, ground and power connections are plainly marked on receptacle. The aerial and ground plug has blades set at an angle which prevents insertion in the power slots of receptacle. Standard plug furnished on radio fits the power slots only. Firm, positive contacts replace the loose fit of ordinary radio plug connections. A divider plate keeps Aerial, Ground, and Power circuits separated in wall box.

Power and Aerial, Ground receptacle complete with composition plate, Part No. 8307.

Net Dealer Price \$1.92

Jack plug receptacle for baseboard or wall outlet of speaker or headphones.

Fits all standard depth wall boxes.
Single Receptacle complete with
composition plate, Part No. 8304.

Net Dealer Price. \$0.48
Plug and cable assembly, as used on standard model 115-volt sets. Part No. L-943A





#### Philco 3-Way Socket and Cord

Standard 3-way electric outlet receptacle, fitted with cord having male plug at other end.
3-way socket complete, Part No. L-1279.

## 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.

Net Dealer Price, \$0.25

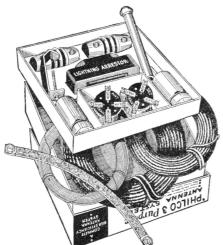
Sold in cases of 6 bottles. Counter display card furnished with each case.



## Philco Three-Purpose Antenna System

Noise Elimination - Greater Distance - Multiple Set Operation

Complete Antenna System — Not Merely a Lead-In
LATEST PHILCO RESEARCH DEVELOPMENT



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 reducing noise picked up on 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; and 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. L-1551, Philco Transmission Line (Black) 100-foot rolls	
Net Dealer Price	\$2.40
Part No. L-1591, Philco Transmission Line (White) 100-foot rolls	
Net Dealer Price	2.10
Part No. 32-1004, Set Transformer, used when connecting addi-	
tional radio sets to transmission line. Net Dealer Price	0.45
Part No. 40-5000-A, KIT COMPLETE, Net Dealer Price	3.60

## Philco Short-Wave Antenna Kit

(High-Test Insulation)

This Philco special short-wave antenna kit has been designed to enable the owner of a short-wave receiver to obtain the very maximum 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.  $\,$ 

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

Part No. 40-5081. Net Dealer Price, \$2.40





## Philco Standard Antenna Kit

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
- 3 Glazed Porcelain Nail-On Knobs
- 1 Lead-In Strip
- 1 Ground Clamp

The Philco Standard Antenna Kit is packed in a box, on the cover of which is a complete diagram of suggested installation. Part No. 8043.

# Philco Microphones—for Broadcasting or Public Address or for Experimental Uses



## No. 1. Hand or Portable Type

The highest possible quality in a portable two-button microphone. Extremely rugged and compact. Efficiency such that it can be used for any professional work requiring this type instrument. Excellent results guaranteed. Furnished complete with cord and plug.

## No. 2. Standard Type

A high quality two-button microphone suitable for broadcasting, amateur use, or any purpose where an efficient, satisfactory microphone is required, at a moderate price. Microphone shown at right.

Part No. 35-4011 - Net Dealer Price . . . \$11.70 Desk Stand for same. Nickel plated finish.

Part No. 35-4012—Net Dealer Price . . . 9.30





## No. 3. DeLuxe Type

A specially designed two-button microphone developed to give unsurpassed performance. Rugged and dependable, it delivers perfect fidelity of tone and is unaffected by severe use or changing conditions. Recommended where an instrument of the very highest quality is required. Results obtained with this microphone are superior to those of many broadcasting stations. For every purpose—music or speech; for audiences large or small, indoors or outdoors. May be used with any of the three types of stand described below.

Part No. 35-4002 - Net Dealer Price . . . \$21.00

#### Microphone Stands

The three types of stands described below are all suitable for the DeLuxe microphone described above.

Desk type—illustrated above.

Banquet type — higher stand, such as used for broadcasting banquet speeches, etc.

Part No. 35-4003 – Net Dealer Price

Floor type—full length stand as used in studios when performer is erect or moving about.

Part No. 8302-Net Dealer Price

#### Microphone Transformer

This transformer, together with a 1½-volt dry cell, is required to complete a microphone installation. A standard dry cell with this transformer furnishes correct button current for both buttons on any of the three microphones listed.

Part No. 32-7010-Microphone Transformer-Net Dealer Price, \$3.45

#### Microphone Cable

Special 3-conductor flexible shielded cable, covered with outer braid. Standard cable for this purpose.

Part No. L-1572. Net Dealer Price . . . . . . . \$0.12 per foot

## Philco All-Purpose Set Tester Model 048

#### Complete Radio Testing Equipment in One Small Portable Case

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.

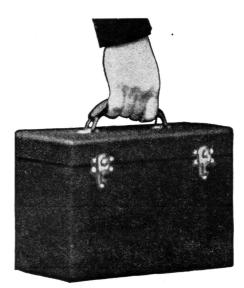
The original and only compact portable "All-Purpose" Set Tester, meeting all the serviceman's testing requirements in one unit at an extremely moderate price. The instant welcome accorded this unit at its first introduction was an indication that it was just what the serviceman had been wanting for years. Ever since then its popularity has increased by leaps and bounds, and today thousands of servicemen all over the country are finding it indispensable in their work. Every day new owners are learning its value.



A True "All-in-One" Unit!

#### **Read These Specifications**

Twenty-two meter ranges and a 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 Accurate signal generator, califalse readings. brated 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.



Conveniently Portable

$A_{LL}$	THESE	$\mathbf{ARE}$	IN	Model	048:
5 A.	C. Vol	ltage	$R_{8}$	anges	

5 D. C. Voltage Ranges		Replacement Parts	
3 D. C. Milliammeter Ranges 3 Ohmmeter Ranges	Part No.	Replacement 1 arts	NET DEALER PRICE
5 A. C. Output Meter Ranges		Antenna and Ground Lead, shielded assembly	
Capacity Meter		complete	
Complete Tube Test		Test Prod (36" lead) – black	
Signal Generator Variable 105-		Test Prod (36" lead) – red	
2000 K. C. Complete Test Prods, Leads and		Binding Post	•
Batteries.		Universal Clip (used on Antenna Lead)	

#### Philco Hardware Kit

The Philco Hardware Kit is designed for convenient use in the service shop where it is necessary to have available at all times the most commonly used screws, nuts, washers, etc., for mounting various radio parts. The kit consists of

twenty glass bottles, each containing a quantity of small hardware parts. The bottles are supplied in a heavy metal rack of two shelves so designed that the shelves can be fastened on the wall with five wood screws.

Part No. 45-1009 - Philco Hardware Kit with rack, bottles and parts listed below. Net Dealer Price

\$14.40

#### **Description of Individual Groups**

Part No. of Assembly	Quan- tity	Description	NET DEALER PRICE
45-1040	50	Washers (1/4")	\$0.15
45–1041	200	Washers (No. 8 Shakeproof)	.48
45–1042 45–1043	$\frac{100}{100}$	Washers $(\frac{1}{4})$	.54
45-1044	100	Nuts $(\frac{3}{8}'' - 24 \text{ Hex})$	.90
45-1045	100	Nuts (3/8"-32 Hex)	.75
45 - 1046	100	Screws (No. 8 x 3/8" Parker	
45-1047	100	Kalon Hex)	1.08
45 1040	100	Kalon Oval)	1.08
45–1048	100	Screws (No. 8 x $\frac{9}{16}$ " Parker Kalon Round)	1.08
45–1049	50	Screws (No. 8 x 13/8" Parker	.72
45-1050	25	Kalon Hex)	
		Kalon Hex)	.54

Part No. of Assembly	Quan- tity	Description	NET DEALER PRICE
45–1051	25	Screws (No. 14 x 7/8" Parker Kalon Hex)	\$0.41
45–1052	25	Screws (No. 20 x 13/8" Parker Kalon Hex—End Slot)	.29
45–1053	50	Screws (No. 12 x 5/8" Parker Kalon Round)	.75
45-1054 $45-1055$	25	Screws (8-32 x 3/4" Decorative)	.15
	100	Screws (No. 8 x ½" Parker Kalon Hex)	.90
45–1056	50	Screws (No. 14 x ½" Drive – Round Head)	.56
45–1057 45–1 <b>0</b> 58	$\frac{200}{200}$	Brads $(\frac{3}{8})$ Eyelets $(\frac{7}{32})$ x $\frac{1}{8}$	.15 .42
45–1059	. 100	Eyelets $(\frac{1}{2}'' \times \frac{1}{8}'')$	.30



## Philco Radio Hook-Up Wire

The same wire as used in wiring the chassis of Philco Radio is available in the various different types and colors in 100-foot coils. All the cotton-covered wire listed below is the special Philco flame-proof wire as used in all Philco receivers.

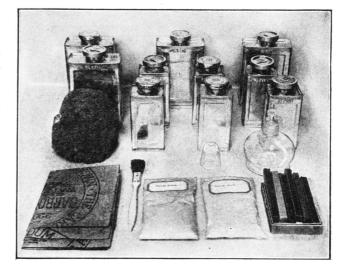
Part No.	Wire Specifications	Insulation Specifications	NET DEALER PRICE
L-947 L-1481 L-1042 L-1098 L-1096 L-1090 L-1433 L-1508	No. 22 Solid Tinned Buss No. 22 Solid Tinned Buss No. 22 Solid Tinned Buss No. 20 Solid Tinned Buss No. 20 Solid Tinned Buss 7 Strands No. 30 Tinned 16 Strands No. 30 Tinned No. 18 Bare Tinned Buss 7 Strands No. 30 Tinned	Black Cotton Single Braid Red-Yellow Tracer Double Cotton Red Rubber and Cotton Red Rubber and Cotton Green Cotton Single Braid Black Cotton Single Braid Exclusive Philos Indoor and Portable Aerial Wire; neutral shade, rubber covered. Extremely flexible.	\$0.75 per 100' .78 per 100' .81 per 100' 1.08 per 100' .81 per 100' 1.11 per 100' .36 per 100' .63 per 100'
L-1496 L-1055 L-943	7 Strands No. 30 Tinned 4-Wire Speaker Cable 2-Wire Speaker Cable	Shielded Wire and Speaker Cable Cotton Braid Impregnated, Shielded, rubber covered over shielding Color Coded, rubber and cotton Color Coded, rubber and cotton	\$.054 per ft. (min. 50 ft.) .12 per ft. .036 per ft.

## 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

Net Dealer Price \$10.35



9.60

## Philco Radio Speakers

#### For Replacement - For Auxiliary Use

The Philco line of radio speakers listed on this page contains practically every type which might be required for replacement in any make of radio. If the field coil resistance requirements of the replacement speaker needed are known, you can simply refer to this list and select the one best suited to fill your needs.

#### Sales Opportunities-Replacements

The sale of Philco Electro-Dynamic Speakers to replace magnetic types or inferior or defective dynamic models provides a rich field for profits to the serviceman. Many owners of old sets, who cannot yet afford a new set or do not for some reason wish to part with their old receiver, can be sold, by a quick demonstration, the tremendous improvement a Philco dynamic speaker gives.

The Philco Type "U" Auditorium Speaker, due to its tremendous superiority in tone and power, is highly recommended as the finest possible replacement speaker. Its performance will satisfy the most critical listener.

#### Sales Opportunities-Extra Speakers

This is another unlimited field in which the radio serviceman will find many possible sales opportunities. Many radio owners would like to have reception in other rooms than that in which the set is installed, and while not a prospect for another smaller set, they can frequently be sold an extra speaker for the purpose. In such cases our model "KR" permanent magnet dynamic speaker is ideal, since it has excellent tone, is inexpensive and easily connected (requiring no equipment other than plug and jack), and consumes so little current that several may be used without affecting reception on the regular speaker in the set.

Frequently several of these type KR speakers can be sold to one owner for use in sun parlor, kitchen, nursery, den, servants' quarters, etc.

#### Specifications and Types

Philco electro-dynamic speakers are all equipped with an output transformer, so that they can be connected directly to the output of the receiver. The type tubes used in the output of receiver will of course largely determine the type speaker to be used.

#### For Sets Providing Field Supply

If the receiver is designed to provide field current excitation from its power pack, no further equipment will be needed to take care of the field supply, providing the current supplied by the set is within twenty per cent of that required to excite the speaker. Just connect the field coil terminals of the speaker to the proper terminals in the power pack of the receiver.

#### For Sets Without Field Supply

If the receiver used makes no provision for speaker field current it will be necessary to use an "exciter" or external source of field current. For this purpose we have designed three types of Exciter Units:

Part No. 37-1152. Exciter for use with Philco Type "U" auditorium speaker only, complete with tubes. Net Dealer Price. . \$10.20

Part No. 37–1027. Exciter for use with a single Philco speaker with field resistance approximately 3200 ohms, such as some of the Type "H" and Type "K." Complete. **Net Dealer Price** 

Part No. 37–1032. Exciter for supplying field current to four Type "H" or "K" speakers. Net Dealer Price . . . . . . 27.

To use these exciters it is only necessary to connect exciter to a 110-volt A.C. line, and attach its output to the field coil terminals of speaker. Detailed instructions are provided with the exciter.

## Philco Radio Speakers

## For Use as Extra Speakers or Replacement Units

Model	Туре	*Mounting Diameter	Field Coil Resistance	Type of Output Tubes	NET DEALER PRICE
†B †B-2 †H-9 H-12 H-13 H-17 K-6 †K-7 K-24 U-2 U-3 KR	Electro-dynamic	Compact set type Compact set type 101/42'' 101/42'' 101/42'' 101/42'' 81/6'' 81/6'' 81/6'' 101/42'' 101/42'' 81/6''	2600 1140 1125 3275 1125 3200 3275 1125 3100 1450 1140	Single 43 Single 42 Single 42 p.p. 42's p.p. 42's p.p. 45's or 47's p.p. 42's Single 42 p.p. 71A's p.p. 42's p.p. 42's	\$2.91 2.91 4.50 4.50 4.50 3.90 3.90 3.90 8.10 6.60 6.00

\*Center to center of opposite mounting-screw holes.

thas bucking coil. This must be opened when speaker is used with set other than original Philco model.



# **PHILCO**

REG. U. S. PAT. OFF.

3-Purpose

## **AERIAL SYSTEM**

ELIMINATES NOISE
INCREASES DISTANCE
ACCOMMODATES 2 TO 4 RADIOS

(See Page 27)

SERVICEMAN'S NET PRICE . . . .

\$3.60

QUICKLY INSTALLED

REAL PROFITS