# PHILCO SERVICEMAN



RADIO • MANUFACTURERS • SERVICE • NEWS

OCTOBER, 1941



# New Philophone Has Two Way Call System With Push Buttons

### EDITORIAL

### How R.M.S. Has Helped the Service Industry

The R.M.S. organization occupies a rather unique position in the service field, in that it provides a common meeting ground for factory engineers—field service representatives—distributors' servicemen—dealers' servicemen—and independent servicemen. Nowhere else to our knowledge does such an organization exist for the mutual benefit of all participants. The four pages of the Philco Serviceman have regularly had valuable contributions from Philco Factory Engineers and Service Engineers, from distributors' Service Managers, and (through the Question and Answer Column) from practising servicemen.

With the announcement last month of the new consulting service, the Philco Serviceman will now be more than ever a central meeting point for everyone interested in Philco Service.

The actual "On the Record" achievements of R.M.S. are briefly:

- 1. Established unified rates for service labour.
- 2. Furnished service advertising and promotional materials to members at low cost.
- 3. Provided free service bulletins on Philco products, keeping members up to date on latest technical data.
- Recommended directly to millions of Philco owners the services of R.M.S. members for qualified radio service.
- 5. Made available various types of signs and other identification for tying in directly with the great national R.M.S. organization.
- 6. Helped servicemen make more money through helpful sales, service and promotional suggestions.
- 7. Offered money-saving bargains from time to time in radio parts and equipment.
- 8. Has given servicemen the many benefits resulting from closer relationship and cooperation with the Philco Distributor and the factory.
- 9. Has established with the radio public a symbol for quality service—the R.M.S. insignia.
- 10. Has proven to members the wisdom of a quality code of guaranteed service and the use of genuine replacement parts and tubes.

### Latest Philco Development Offered at Low Price

The new Philcophone — featuring complete two way private communication and call—has just been announced by Philco. All of the worthwhile features of greater flexibility, more compact construction, and lower price are to be found in this newest and latest Philco product.

The master control is in an attractive bakelite cabinet, while the remote stations are extremely attractive and efficient, in individual styling.

#### Five Stations

An important feature of this new Philophone is five push-buttons to select any one of five remote stations; in addition there is a sixth push-button which is called the "Quiet" position. In normal operation the master control is left on with the volume turned up and this "Quiet" button depressed. With it this way no sound can be heard from any of the remote stations until the person at one of the remote stations pushes his "Talk" button. The user at the master control can then push the button for that particular station and then the operator at the remote station does not have to use a "Talk-Listen" button. This "Quiet" push-button is a feature that has always been requested on a unit of this type.

There is packed with each Philcophone 50 feet of a special three-wire cable, used for connecting the units.

### Free Philco Test Equipment

A new Philco Tube and Equipment Promotion Deal has just been announced through Philco Distributors. Be sure to see your Philco Distributor about this!

This especially attractive plan will enable you to get your requirements of Philco equipment almost for nothing, merely by purchasing Philco tubes regularly from your Philco Distributor.

Do not fail to see your Distributor about this plan, and take advantage of it right away.



New Philcophone Master Station Model 908C and Remote Station Model 909

Also, when the extra stations are purchased, a 50 foot length of this cable is supplied with each one.

### Easily Installed

The installation is so simple that it can easily be done by the customer. The 50 foot three-wire cable, attached to the remote station is color-coded red, white and blue. These wires are connected to the three terminals on the back of the unit correspondingly marked red, white, blue. The bottom row is for No. 1 push-button and the other four rows are for additional remote speakers.

### Sales Opportunities

The new Philcophone offers a grand sales opportunity for dealers and servicemen. Offices want inter-communicating systems to save time. These systems in houses save thousands of steps. The feeling of security which goes along with such an installation in the sickroom or in the baby's bedroom is invaluable. Stores, restaurants, theatres, garages, and hospitals are all prospects for the new Philcophone.

And now—the best news of all about this improved Philcophone is that the list price for one central station, including one remote station with 50 feet of the special three-wire cable, is only \$44.95. The list price of additional remote stations, including 50 feet of the special three-wire cable is \$10.95. Western prices slightly higher.

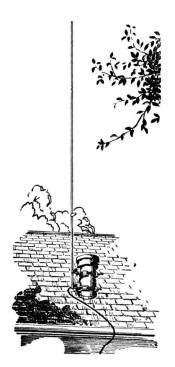
### PHILCO AERIAL EQUIPMENT

### DEALER UNDERSTANDING OF PROPE

Having pioneered the development of the built-in aerial system, eliminating the need for external aerials under average conditions, Philco has not neglected provisions for using outdoor aerials in remote or shielded areas, where the field strength is low. Several types of Philco Outdoor Aerials are available, together with suitable couplers to match them to the low impedance built-in aerial system of all Philco models using a built-in aerial.

### PHILCO SAFETY AERIAL for all makes of Radios

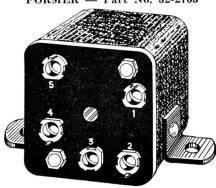
The Philco Safety Aerial, Part 40-6370, can be used with every make and model of home radio. It is a twelve foot vertical rod, in four sections, and comes complete with 40 foot lead-in, ground clamp, lightning arrestor, and fittings to fasten it to a flat surface, or a vent pipe.



PHILCO SAFETY AERIAL Part No. 40-6370

The Philco Safety Aerial connects directly to the Aerial post of all radios intended for use with ordinary aerial and ground connections. No other fitings are required. With Philco and other makes of radios having "transmission line" aerial input connections, it is necessary to use the Philco Universal Set Transformer, Part No. 32-2763, connected between the transmission line terminal posts of the radio and the lead-in of the Safety Aerial.

PHILCO UNIVERSAL SET TRANS-FORMER — Part No. 32-2763



Terminals 1 and 2 of the set transformer connect to the transmission line input terminals of the radio, while terminal 5 connects to the lead-in of the Safety Aerial. Terminal 3 connects to the chassis of the radio, and also to the external earth connection, or cold water pipe.

With Philco 1940 Models having the Built-in Aerial System, extra reception can be obtained by using the Philco 1940 Aerial Coupler, Part 45-2799, in conjunction with the Philco Safety Aerial. This coupler is connected between the lead-in of the Safety Aerial and the loop aerial connections on the back of the 1940 Philco Model.

#### PHILCO 1940 AERIAL COUPLER Part No. 45-2799



Terminals 1, 2, 3 and 4 of the 1940 coupler connect to Terminals 1, 2, 3 and 4 on the chassis, while terminal five (5) of the coupler connects to ground terminal of the chassis.

With 1941 and 1942 Philco models having the Built-in Aerial System, extra reception can be obtained by using the Philco 1941 Aerial Coupler, Part 76-1134. This coupler simply plugs into the 3-prong socket at the back of each such Philco model, and the lead-in from the Safety Aerial is connected to the Terminal post on the 76-1134 Coupler.

PHILCO 1941 AERIAL COUPLER Part No. 76-1134



#### PHILCO AUXILIARY AERIAL

This aerial is similar to the Philco Safety Aerial, but includes the 1941 Aerial Coupler (76-1134) described above. The Philco Auxiliary Aerial, Part 45-2817, is the proper aerial to use with all Philco 1941 and 1942 models having the Built-in Aerial System, when additional signal pick-up is required.

#### PHILCO FARM RADIO AERIAL

The Philco Farm Radio Aerial, part 40-6383, is a completely assembled, ready-soldered aerial intended primarily for use in rural districts, where extra signal strength is required. It is adapted for use with all makes and models of radios having provision for ordinary aerial and ground connections.



PHILCO FARM RADIO AERIAL Part No. 40-6383

When desired, the Philco Farm Radio Aerial can be used with the Universal set transformer (32-2763), the 1940 Aerial Coupler (45-2799) and the 1941 Aerial Coupler (76-1134) in exactly the same manner as described above for the Philco Safety Aerial.

#### PORTABLE RADIO AERIALS

When Philco portable radios are used in shielded locations, or where signal pickup is poor, (such as in steel buildings, railroad cars etc.), a Philco plug-in Aerial is absolutely necessary in order to provide satisfactory reception.

### ASSURES BEST RECEPTION

### R AERIALS IMPORTANT FOR SALES

#### PHILCO PLUG-IN AERIAL



Two types of Philco plug-in aerials are available, each suitable only for the particular Philco models for which it was designed.

For Philco models 407T and 408T use Philco plug-in aerial 45-2808.

For Philco models 405T and 406T, use Philco plug-in aerial 45-2878.

### PHILCO NOISE REDUCING LEAD-IN SYSTEM

The Philco Tuned-input Lead-in system converts any outdoor aerial to the noise-reducing type, and operates up to four radios on one aerial system.



PHILCO TUNED-INPUT LEAD-IN SYSTEM

Part No. 40-6484

The Philco Tuned-input Lead-in system, Part 40-6484, is a low impedance lead-in system that eliminates any pick-up of noise between the aerial and the radio. It comes complete with 50 feet of transmission line lead-in, as well as matching transformers for the radio end and for the aerial end of the system.

In noisy locations, any good aerial, such as the Philco Safety Aerial 40-6370, or the Farm Radio Aerial 40-6383, is erected in a location that is moderately free from man-made static (such as electric power lines etc.) Then instead of running the regular aerial lead-in through the noisy area to the radio receiver, the aerial is connected to the aerial end of the tunedinput lead-in system using the special aerial transformer that comes with the kit. The transmission line lead-in is then run through the noise area until

the radio set is reached. At the radio set, the transmission line is connected to the special set transformer that is part of the lead-in system, and the set transformer is connected to the aerial and ground terminals of the radio. In this way a very great reduction of man-made static is obtained.

### PHILCO AERIAL MATERIALS AERIAL MASTS

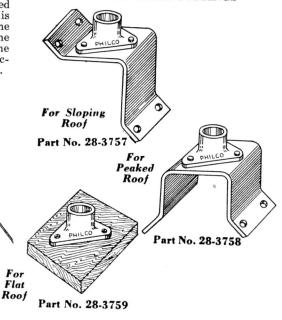
The Philco Aerial Mast Kit, 45-2127, is a complete mast outfit, consisting of an 8 foot, two section tubular mast, guy wires, insulators and top fitting. It is quickly installed, exceptionally neat in appearance, will fit any roof, and is rustproof and permanent. Three types of

and the same

base fittings, which are illustrated below, are obtainable for every type of roof requirement.

PHILCO AERIAL MAST KIT Part No. 45-2127

#### AERIAL MAST BASE FITTINGS



### AERIAL AND LEAD-IN WIRE

Seventy-five foot rolls (L1563) and one hundred foot rolls (L1821) of highest grade 7-strand No. 24 copper aerial wire are available for those wishing to assemble their own aerials. A special short-wave aerial wire (L1640) consisting of 100 feet of 7-strand No. 20 enamelled copper wire is also available. Additional transmission line is also available in Ivory or Black outer braid: L1591—100 foot ivory, L1556—50 foot black, L-2074,—100 foot black. Arrestors, lead-in wire, insulators etc., are listed below.

### PRICE LIST

### PHILCO AERIALS AND AERIAL ACCESSORIES

Part No.	Description	st Price
40-6370	Philco Safety Aerial	
45-2817	Philco Auxiliary Aerial	$\frac{9}{5.50}$
40-6383	Farm Radio Aerial	2.40
45-2808	Phileo Plug-in Aerial	1 75
45-2878	Philco Plug-in Aerial	1.75
40-6484	Noise Reducing Lead-in System	5.95
76-1134	1941 Aerial Coupler	2.50
45-2799	1940 Aerial Coupler	8.75
32-2763	Universal Set Transformers	$\frac{6.75}{2.50}$
45-2127	Aerial Mast Kit	1.00
28-3757	Base Fitting—Sloping Roof	1.00
28-3758	Base Fitting—Peaked Roof	1.00
28-3759	Base Fitting—Flat Roof	.90
L-1563	Aerial Wire—75 Foot Roll	.70
L-1821	Aerial Wire—100 Foot roll	1.65
L-1591	Trans. Line Ivory—100 feet	$\frac{1.65}{4.50}$
L-1556	Trans. Line Black— 50 feet	$\frac{4.30}{1.85}$
L-2074	Trans. Line Black—100 feet	3.70
L-1641	Flex. Rubber Covered Lead-in—50 feet.	1.25
L-1642	Same—White 25 feet	.85
45-2010	6" stand-off insulator	.25
27-7021	4½" porcelain insulator tube	.05
27-7020	Glazed porcelain nail-on knob	
27-7037	3" glazed porcelain aerial insulator	.05
27-9184	Arrestor for Safety Aerial	.05
27-7741	Arrestor for Doublet Aerials	1.00
	Attrebut for Doublet Actials	.75

### PHILCO SERVICE INFORMATION

Philco Service Information and Wiring Diagrams are available for all Philco home and automobile radios. The following list shows the contents and R.M.S. net price of each volume. Years quoted are model years.

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Volume	Contents R.M.S. Net Price					
H. R. Vol. I (PR-329D)—	Domestic Radios up to and \$\)\ \\$1.50 with binder including 1936\ \ \ \ 1.00 less binder					
H. R. Vol. II (PR-329E)—	Domestic Radios, 1937 & 1938 (\$1.50 with binder ) 1.00 less binder					
H. R. Vol. III (PR-329F)—	Domestic Radios, 1939 \$ .50 less binder					
C. R. Vol. 1a—	Standard car radios up to and including 1938, and custom \$\int \\$1.50 with binder					
C. R. Vol. II—	car radios up to and incl. 1937 \ 1.00 less binder Standard car radios, 1939, and					
O. It. VOI. 11—	custom car radios, 1938 and \$1.50 with binder					
1940 Year Book—	1939					
	ard car radios, and all custom car radios issued during \$\)\$1.50 with binder					
1941 Year Book—	the calendar year of 1939 \ 1.00 less binder All domestic radios, all stand-					
1941 Tear Book—	ard car radios, and all cus-					
	tom car radios issued during \$\\$1.50 with binder the calendar year of 1940 \{\}1.00 less binder					
	Gives alignment data on all Philco receivers up to and					
by John F. Rider	including 1937 models. A					
	necessary supplement to H. R. Vol. 1 (PR-329D),					
	because alignment data is not given in H.R. Vol. 1\$1.00					
R.M.S. Course of Lessons-	A 26-Lesson course of Radio					
	Theory and Practice especially written for R.M.S.					
	members interested in brush- ing up their fundamental					
H.C. 1090 Warm Dook	knowledge \$1.00 (PR762) All U.S. Philco Home					
U.S. 1939 Year Book—	Radios, standard car radios					
US. 1940 Year Book—	etc. for model year 1939\$1.50 no binder (PR795) All U.S. Philco Home					
	Radios, standard custom car radios, for model year 1940					
	and custom car radios for the model years 1938 and 1939 \$2.00 no binder					
U.S. 1941 Year Book—	(PR874) All U.S. Philco Home					
	Radios and Auto Radios for Model Year 1941\$2.00 no binder					
R.M.S. 2 Ring Binder—	Same as used for Service Manuals .50					
R.M.S. 3 Ring Binder—	Especially suitable for Philco Parts Catalogue\$1.00					
ALL PHILCO SERVICE INFORMATION AND MATERIALS ARE AVAIL-						

ALL PHILCO SERVICE INFORMATION AND MATERIALS ARE AVAILABLE FROM YOUR PHILCO DISTRIBUTOR

## New Service Book on U.S. Philco 1941 Line

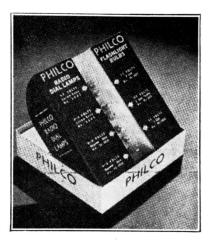
A big new 250 Page Service Manual is now available through Philco Distributors. It is much more than a collection of circuit diagrams for all U.S. Philco 1941 models of home and auto radios—it also includes complete technical data on Philco Tubes, adjustments and service information on Automatic Record Changers as well as many pages of other service data. At the net price of only \$2.00, this

book is a valuable investment for every Philco dealer and serviceman. PR 874–U.S. 1941 Year Book \$2.00 net

#### U.S. 1940 Year Book

A few copies of the U.S. 1940 Year Book are still available. This 190 page Book contains Service bulletins on all U.S. Philco 1940 Home radios and autoradios, also 1939 autoradios. In addition there are several pages on simplified Radio Testing, Automatic Record Changer service information, Car radio control data, alignment procedures, automatic tuning information, etc. PR 795-U.S. 1940 Year Book \$2.00 net

### New Counter Display Sells Pilot Lights and Flashlight Bulbs



Philco has a new radio pilot lamp and flash-light bulb kit for fast-selling counter display. Attractively coloured in Philco Yellow and Blue, the new kit contains all of the popular radio dial lamps and also the most popular flashlight bulbs in use today—

The display box contains eleven of each of the various types of lamps illustrated above. One each of the lamps is inserted in the special recessed display card in such a way that it will coincide with the large arrow running from the description of that particular lamp. In addition, the Philco standard vest pocket pilot lamp and flashlight lamp packages (10 each) are contained in the box below the display card. The following are the dial lamps and flash-light bulbs in the display:

#### Radio Dial Lamps

		Lis	List Price	
Volts	Type Base	Part No.	Each	
$2\frac{1}{2}$	screw	3463	\$ .14	
6-8	screw	6608	.14	
6-8	bayonet	34-2039	.14	
6-8	bayonet	34-2064	.14	

#### Flash-light Bulbs

Volts	No. of Batt. Cells	Type Bulb	Type Base	Part No.	List Price
2.2	2	Penlight	Screw	45-2836	\$.15
2.5	2	Round	Screw	45-2827	.15
3.8	3	Round	Screw	45-2828	.15

The complete Counter Display containing eleven each of the above lamps and bulbs is Philco Part No. 45-2914 and lists at \$10.90

### PHILCO CORPORATION of Canada Limited

PARTS AND SERVICE DIVISION TORONTO

The Philco Serviceman reaches you free of charge with the compliments of your Philco Distributor