

# PHILCO SERVICEMAN

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RADIO • MANUFACTURERS • SERVICE • NEWS

JUNE, 1938



## EDITORIAL

### SUMMER STUDY

IT IS usually a difficult matter to attempt concentrated study during the summer months. There are so many distractions for the average person that studying requires the greatest possible amount of application at this time of the year.

It must be remembered that during the summer the serviceman is not usually so busy as he is during the fall and winter months. A man might justifiably be prevented from undertaking a definite study course during the active season if the time spent on such a course would keep him away from his regular business when there was a chance to make some extra money for overtime work. As a general thing, this is not the case during the summer months, and therefore it becomes a financial investment for the serviceman to apply his time to study now rather than later in the season when he does not have the time.

The National Radio Institute was a bit concerned about the manner in which the hundreds of R. M. S. members who have enrolled and are still enrolling for the special R. M. S.-N. R. I. course would apply themselves to their studies during the summer months. We assured the National Radio Institute that in our opinion the servicemen would continue studying during the summer because these men realized the importance of the training and the value of their time when the service business becomes more active later in the season. Keep up the hard work now, so that you will profit more when the busy service season arrives.

## A WELL-PLANNED SERVICE SELLING CAMPAIGN

### Designed for Results Plus Economy

MOST servicemen today—and dealers who make service a branch of their business—have come to realize that advertising, publicity and “selling” themselves is necessary to maintain and increase their business. But, unfortunately, few of them sit down with themselves and plan a definite, systematic campaign to accomplish this end.

#### Planned Campaign

Advertising, to be resultful, must be regular and continuous. At the beginning of each year or season a definite campaign should be planned and mapped out, the cost to be a definite per cent. of the gross annual business. For example, if the average annual gross service business is \$3000, the serviceman or dealer may decide to put, say, 5 per cent. into advertising and promotion, or \$150.

#### Regular Intervals

A typical advertising appropriation of \$150 should include a number of different forms of mailings, publicity material and advertisements, judiciously spread out over the year's time. In addition to these standard forms of advertising, the serviceman or dealer should develop frequent original “stunts” or ideas of his own to supplement these—such as window trims for special occasions, prize contests, etc.

The vital thing to remember in carrying out such a campaign is that the different “ads,” mailing pieces and en-

velope enclosures should be used at regular intervals—preferably *not less than two weeks apart*.

The budget suggested here calls for twenty-five insertions (one every other week) in the local newspaper of the serviceman's home town. On weeks when a newspaper ad is not being run, a handbill, blotter, mailing card or a special letter (with or without an enclosure) should be sent out to the serviceman's mailing list.

#### HERE IS THE BUDGET

Quan.	Item	Cost
500	R. M. S. Blotters	\$5.50
500 Each	R. M. S. Handbills (5 types)	11.50
500 Each	R. M. S. Mailing Cards (5 types)	14.00
500 Each	R. M. S. Envelope Enclosures (3 types)	6.00
500	Program Reminder Cards	3.10
2000	Book Matches	9.00
500	Special Business Cards	2.05
500	Letterheads	3.10
500	Envelopes	3.85
500	Billheads	2.65
3000	Tube Stickers	3.75
500	Chassis Stickers	1.60
1	Large Metal Sign	2.00
1	Electric Sign	2.00
1	R. M. S. Cloth Banner	.40
1	R. M. S. Decalomania	.25
1	Rubber Stamp	.50
1" ad for 25 weeks in local paper @ \$3 per insertion		75.00
		<b>\$146.25</b>

(Continued on Page 2)

**LOW PRICES ON VOLUME CONTROLS**

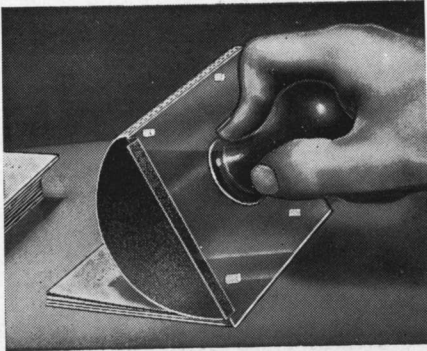
**LOW PRICES ON AUTO RADIO VIBRATORS**

*Highest Philco-Engineered Quality at prices under non-genuine replacements*

**STANDARDIZE ON PHILCO REPLACEMENTS**

## New Hand-Operated Printing Device for Postcards and Imprints

*Solves Problem of Low Cost Mailing Pieces*



PHILCO has made available, through distributors, a novel advertising device which will help bring the serviceman and dealers extra summer business. This is a hand-operated duplicator for printing postcards or for imprinting various pieces of advertising matter. The duplicator is similar in principle to the mimeograph, using a stencil applied over a self-contained ink pad.

The stencil is "cut" on a typewriter simply by typing without the ribbon, or if hand lettering and drawings are preferred, this can be accomplished with the stylus pen. The outfit is supplied complete with extra stencils, stylus, ink, ink brush, etc.

The device will be in great demand by servicemen and dealers because it solves their problem of getting out announcements of specials at the lowest possible printing cost and at a moment's notice. Be sure to see the special R. M. S. duplicator at your PHILCO distributor's parts department. You can own one at little or no extra cost to you.

## A Well-Planned Service Selling Campaign

*(Continued from Page 1)*

The Program Reminder Cards should be left at the homes of customers and prospects personally; the special business cards are effective when placed under doors of prospective customers' houses.

Book matches get best results when given to your local drug store, cigar store or delicatessen store, to be given out with purchases of cigarettes, etc.

And remember—be sure to send out the mailing material in the above list at REGULAR INTERVALS, to get the cumulative effect of the continuous advertising.

Try it this year—you'll be surprised at the results you'll get.

## Special Wax Impregnation Increases Philco Condenser Life

MUCH has been said about the quality of PHILCO condensers, and in all cases this quality has been reflected in long life and consistent performance.

One of the little-known features of construction of PHILCO condensers is the special wax impregnation which is used. All paper condensers employ impregnating wax to keep out the moisture and thus make the condenser retain its proper capacity and eliminate current leakage. The ordinary condenser employs wax which melts at a fairly low temperature. PHILCO condensers use high-melting-point wax because the amount of moisture absorption, even at ordinary room temperatures, is less in the high-melting-point wax than it is in the low-melting-point wax.

This means, when PHILCO condensers are employed, that there will be less drift in PHILCO circuits, less distortion due to current leakage, fewer failures of operation due to condenser breakdown.

## Attractive Cases Available for Test Equipment



CARRYING cases are available for the PHILCO Model 077 Signal Generator and also for the Model 090 Tester, which is a combination of the 077 Signal Generator and the Model 025 Circuit Tester units. The case for the 077, illustrated above, can also be used for the Model 044 Audio Signal Generator, as it has the same outside dimensions as the 077. The cases are finished in an attractive black leatherette covering with leather handles. The appearance of the standard PHILCO test units is greatly improved through the use of the carrying case.

The Model 077 case is known as Part No. 10311 and sells at a list price of \$7.50. The larger case, which accommodates the 077 and the 025 (or 026 tester), is known as Part No. 10312 and sells at a list price of \$12.50, subject to regular parts discount.



Parts Department, Eshelman Supply Company, PHILCO Distributors in Lancaster, Pa.

# RADIO MANUFACTURERS SERVICE



CENTRAL HEADQUARTERS

TIOGA & C STREETS

PHILADELPHIA, PA.

October, 1938.

TO ALL R.M.S. MEMBERS

P H I L C O ' S

M Y S T E R Y C O N T R O L

Wiring Diagrams ----- Service Bulletins

The Complete Story

R.M.S. MEMBERS ARE ALWAYS AHEAD OF OTHER SERVICEMEN BECAUSE THEY GET THE NEW, IMPORTANT, SERVICE INFORMATION FIRST - AND AT NO COST.

RADIO MANUFACTURERS SERVICE, BY SUPPLYING YOU WITH THE NECESSARY DATA, BELIEVES THAT YOU WILL BE IN A BETTER POSITION TO GET MORE SERVICE JOBS AND MAKE MORE MONEY.

In this mailing are the new service bulletins on Philco Mystery Control Models 39-55 and 39-116. These bulletins contain complete descriptive information on the alignment and circuit arrangement of these receivers. We are certain you will be interested in these, because Philco Mystery Control is one of the outstanding developments in the radio art in the past ten years.

Now that vacation time is over and the Fall and Winter months are approaching, folks are returning home to their normal routine in life. Therefore, their foremost source of entertainment will be the radio. Naturally, they will want their receivers in the best of condition.

As you members know, there are thousands of sets that need going over for new tubes, readjustment, and which need new aerial systems in order to place them in perfect operating condition. This is the time to remind people of these conditions in their radio receivers, and one of the best means of doing this is to use the R.M.S. mailing pieces.

A complete list of R.M.S. mailing pieces is shown in the folder sent you in the July, 1938, R.M.S. Mailing. If you will use these mailing piece reminders, we are certain that you will increase your service business considerably.

We are enclosing with this mailing a descriptive sheet showing Philco aerials for any type of installation.

The Philco Safety Aerial described on the folder is one of the easiest and quickest aeri-als to install. This aerial is a highly efficient system that will operate well with any radio receiver and will save you much time on new set installations, giving you greater profits from each job.

The Noise Reducing Antennas are the finest that can be had today, and in conjunction with the Philco Set Transformer will lick interference in the most extreme cases.

Also, listed on the sheet is the Philco Utility Aerial for use in cases where a regular roof antenna cannot be erected - such as in apartment houses, hotels and where an antenna is already used in the home.

Here is a complete line of reasonably priced aeri-als that will certainly help you to increase your profits.

For your repair jobs where you need dependable electrolytic condensers that will prevent unnecessary call backs due to failure, use Philco Electrolytics. A folder is inserted with this mailing which lists Electrolytic Condensers of the wet and dry types, metal or cardboard cases with leads or lugs, and the new Philco Midget Electrolytic Condensers. These Condensers are reasonably priced and are guaranteed. All electrolytic condensers look similar on the outside of the can, but there is probably a greater variation in quality among different makes of electrolytics than any other radio part. Using "cut price" condensers that will cause you trouble later on is not going to help build your business or your profits.

The complicated circuit arrangement of the many new developments in radio receiver circuits today requires the serviceman to have accurate, reliable and sufficient test equipment in order to service these receivers.

There is no better way for the serviceman to increase his efficiency in locating trouble in receivers and building up his earnings than by having good test equipment. The complete line of Philco test equipment, which has been designed from specifications of laboratory instruments, is the finest service equipment on the market today.

We are enclosing a descriptive folder on Philco Test Equipment and suggest that you see these fine instruments at your distributor.

Very truly yours,

RADIO MANUFACTURERS SERVICE HEADQUARTERS

# NOISE FILTERS IMPROVE SUMMER RECEPTION

A PROFITABLE SUMMER ACTIVITY FOR SERVICEMEN



PHILCO has a complete line of various types of filters for elimination of radio noise and man-made static. These filters range from the small, plug-in-type unit, shown at the extreme left in the illustration above, to the large, heavy-duty filter unit shown at the right.

### Summer Interference Problem

During the warm weather, interference from man-made static becomes a serious problem because of changed reception conditions. Natural static during warm weather is stronger and, in

general, station signal levels are lower. This means that the ratio of signal to noise is decreased during the summer, and as a result reception is not as clear and clean-cut. The installation of filter units, to take out noise of motors, flashing signs and various other sources of radio noise interference, will go a long way toward improving summer radio reception in general.

### Correct Installation

In all cases the installation of a filter should be made with the idea of getting the filter unit just as close to

the source of interference as possible. This means that more interference will be eliminated if the unit is mounted on the frame of the motor or flashing sign and the leads from the filter connected directly at the point where the power enters the equipment. All of the PHILCO interference units illustrated above, with the exception of the plug-in-type unit shown at the left, are designed for this kind of installation. Best results and maximum noise elimination will be obtained if these installation instructions are followed.

### Handy Plug-in Filter

In many of the smaller interference-producing devices, such as found in the ordinary household, the plug-in-type filter, PHILCO Part No. 45-2600, will be found entirely satisfactory. The big advantage of a filter of this type is its ability to eliminate interference from smaller devices and its ease of installation. It is only necessary to remove the electric plug from the outlet, insert the filter and then reinsert the plug in the socket. This type filter, which is only 85 cents list, is furnished in an attractive display carton for over-the-counter sales to customers. Elimination of noise from electric razors and many other types of household appliances is thus easily accomplished without the necessity of a service wiring installation.

### Filter Kit for Service

The complete filter kit, shown in the background of the illustration above, contains all of the necessary filter units to do practically every type of interference job. Many servicemen and dealers carry this kit in stock at all times, so that they are always in a position to select the proper filter for any type of noise-eliminating job that might come along.



PHILCO Parts Salesmen of PHILCO Radio and Television Corporation of New York, PHILCO Distributors in the Metropolitan Territory.

## PHILCO EXPORT SERVICE REPRESENTATIVE RETURNS FROM ROUND-THE-WORLD TRIP

### Reports Tropics Give Sets Acid Test

FRED G. REIFENBERG, export parts and service representative for PHILCO, recently returned from a business trip which took him around the world to twenty-five different countries. Many interesting sidelights of his trip were related by Reifenberg upon his return to PHILCO headquarters in Philadelphia.

In certain sections of India the humidity is so high and the dampness is so great that the people have specially heated drying rooms in which clothing is kept during the night. The humidity remains high during the day, and the temperature often becomes almost unbearable. PHILCO radios in these territories, according to Reifenberg, give surprisingly little trouble and continue to operate under these most trying conditions of high humidity and high temperature.

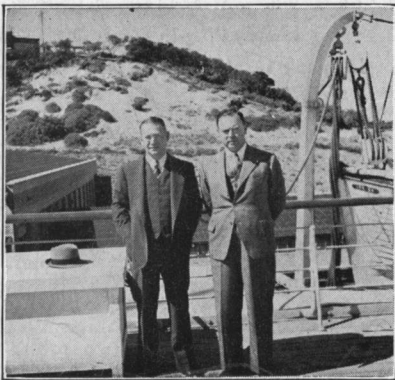
Special impregnation of coils, condensers and transformers, the use of moisture-proof wire throughout and the heavy, protective plating of all metal parts are responsible for such continued performance.

One interesting observation is the fact that in practically every country visited the distributor's service manager spoke good English. Reifenberg's first stop was in Lisbon, Portugal. From this point he continued through the



Reifenberg With Distributor, Mohamed Ebrimah, at Madras, India

Mediterranean countries as far as Palestine—then back to Northern Africa. He followed the west coast of Africa down to the Belgian Congo and thence to South Africa, back up to India, Malaya, French Indo-China, Hongkong, the Philippines, Shanghai and then back to the United States. Commenting with regard to the speaking of English, Reifenberg pointed out that about the only available radio service training books or study courses were printed in English. In the majority of cases, therefore, an understanding of English was a requisite to the study of radio service.



Reifenberg and Ed Fitz, of Evans, Barnes and Fitz, Distributors of Philco in South Africa.



Service Department Staff at Radio Supply Stores, Calcutta, India. Mr. Sen, Service Manager, on Extreme Left, Front Row.

## Questions and Answers

1. Q. What design advantages does PHILCO realize through the use of a three-gang tuning condenser and an intermediate frequency of 260 K.C. in the Models 920, 926, 927 and 928K?

A. The new PHILCO Transitone receivers employ three-gang condenser tuning, a dual-tuned preselector and four-tuned intermediate frequency (tuned grid and tuned plate) circuits. The use of the dual-tuned preselector raises the obtainable image frequency ratio to a sufficiently high point so that 260 K.C. I.F. may be used. The use of 260 K.C. yields at least three distinct advantages over the use of 460 K.C. as an intermediate frequency, which is a requirement when a single-tuned preselector is used. First, a much higher image frequency ratio is obtainable; secondly, the rejection ability of the antenna circuits to signals in the intermediate frequency band is much improved. Another advantage resulting from the use of 260 K.C. over 460 K.C. is the fact that there are relatively few stations assigned in the 260 K.C. band, while there are many operating in or near the 460 K.C. band, so that the latter frequency has present many more potential interference possibilities. And last, although far from least, is the fact that, for an equivalent number of tuned intermediate frequency circuits, a superior selectivity characteristic can be obtained from a 260 K.C. I.F. transformer than can be obtained from a 460 K.C. I.F. transformer. Using 260 K.C. as a value of intermediate frequency makes it possible to produce higher gain while maintaining the same degree of stability obtainable with low gains at 460 K.C.

2. Q. With regard to overall receiver performance, why do PHILCO antennas, when installed with the new sets, offer greater signal pick-up?

A. The antenna circuits of the new sets are of the high-gain type, designed particularly to give an exact match to any of the PHILCO car antennas. The antenna transformer has been designed to operate on 120 mmf. total capacity. The compensating condenser between the antenna lead and ground has a specified range of from 11 mmf. to 65 mmf. This means that the receiver can be adjusted only for antenna, plus lead-in capacitances of from 55 mmf. to 109 mmf. Either of the new antennas, the "Hi-way" or roof antenna, the under-carriage antenna, two types of cowl antennas or the latest, the PHILCO door-hinge antenna, may be used with the 1938 models, assuring maximum radio reception and unrivaled performance at all car speeds.

ROSKIN DISTRIBUTORS, Inc.

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Boston, Mass.