

PHILCO SERVICEMAN

• RADIO • MANUFACTURERS • SERVICE • NEWS •

MAY, 1934

ON "PRICE" BUYING

Reprinted from the March issue of SERVICE, courtesy John F. Rider and Bryan Davis Publishing Co., Inc.

EDITOR'S NOTE: Philco heartily agrees with Mr. Rider's views on this subject, and believes that every serviceman should seriously consider these facts when he goes bargain hunting for parts.

ONE of the complaints voiced by servicemen during the past few years was that relating to prices. They stated that many customers have been greatly influenced by the prices quoted them by servicemen—that it was difficult to build up a dependable clientele because of the wide range of charges asked by different servicemen for similar kinds of service operation. Also that customers seem to have developed a special liking for bargaining.

Is the above native only to the customer? . . . Or is it equally rampant among the service trade itself with respect to its suppliers? It is quite true that when the serviceman acts as the intermediary between the supplier and the ultimate consumer, the set owner, he is entitled to a discount, but some servicemen have been prone to select items, be they tubes, parts, speakers, etc., purely upon a discount basis. They buy where the discount is greatest, be this discount variation as low as one per cent. Bargaining is quite prevalent when the man can make a personal call upon the supplier.

The evils voiced as being present in the service industry are also evident among the suppliers. Suppliers, like servicemen, are interested in building a solid foundation for their business, yet they cannot place even the normal amount of reliance upon their customer mailing lists because they have learned that the roster of names as shown upon their mailing list and the names upon the orders is ever changing.

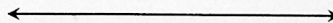
Is it really worth while changing sources of supply because of a difference of perhaps two or three cents on an item, particularly when the original source of supply has been rendering service beyond reproach? It is true that there are exceptional instances, when one establishment has made a "buy" and can offer a unit at a ridiculously low price, at which time it is quite in order to switch from one supplier to the other. But under normal circumstances, such changing is not worth while in the long run. There is much more to the association between a customer and a supplier than purely price considerations. Each and every serviceman knows this to be true with respect to his own customers—and it is equally true when the serviceman is the customer.

Do not for one moment feel that we are advocating the unnecessary expenditure of money. You should at all times be interested in securing your merchandise at the lowest possible price, but, and it is quite an important but, bear in mind that the dollar and cents amount involved in a purchase is only one part of the transaction. The speed of delivery is worth an inestimable amount. Many a serviceman, attracted by price alone, regretted changing his source

of supply, even once, because the material ordered did not arrive on time to complete the service call by the day promised.

It is customary among all suppliers to say that all customers, old or new, are treated with equal promptness and exactitude. Still, you will find that there is a distinct advantage to be gained by being known to the supplier, because of continued patronage. That little something which cannot be interpreted in dollars and cents and is not for sale is given to those men who are known to have traded with the house for a long time—to the steady customer. Maybe it is nothing more than a more detailed answer to a problem, or a closer decision when the supplier is asked to choose between two items which are suitable for a job and the serviceman customer cannot come to a satisfactory conclusion. Whatever this something may be, it is of value to the customer.

Suppliers are as a general rule proud of their customers who cannot be lured away from them just because the competitor offers something slightly cheaper. An organization which can depend upon its customers, which can gauge its repeat business, can actually offer much more in service than one which must depend upon "price bait" to lure its trade. If you have had dealings with established and reputable suppliers, if you like the reputation of these houses, if they have given you satisfaction, do not judge the merits of their products purely upon a price basis. Do not switch your patronage from one to the other, a third or a fourth just because another house is a few cents cheaper than your regular supplier. If you can get what you require from your own supplier and his price is sufficiently low to give you your profit, trade with him. Give him the opportunity to earn his justified profit. Enable him to build upon your good will, just as he is enabling you to build up good will among your own customers by selling you good merchandise at the right price and making deliveries on time.



Don't miss the
RADIO MANUFACTURERS SERVICE
First Anniversary Number
in next month's issue of the
PHILCO SERVICEMAN

Summarizing Radio Manufacturers Service

IN past issues of the PHILCO SERVICEMAN we have pointed out the many advantages which Radio Manufacturers Service has to offer the serviceman. A summary of these various points is given very effectively in the letter which was recently sent to all servicemen in the St. Louis territory. This letter was prepared and mailed by the Artophone Corporation, the PHILCO distributor in the city of St. Louis.

"The R.M.S. (Radio Manufacturers Service), sponsored by Philco, is coming into prominence more and more, and Philco is doing everything possible to bring this live-wire organization of competent servicemen before the eyes of the public.

"In addition to the plug that Boake Carter is giving to R.M.S. on the Philco programs, they are printing on the back of each instruction sheet packed with each and every Philco radio sent out from the factory the complete R.M.S. story, which means that there will be literally hundreds of thousands of radio owners who will have information about the R.M.S. You can readily see that when these sets are in need of service some R.M.S. member has an excellent chance of getting the job.

"There isn't another radio manufacturer who is trying to help the serviceman as much as Philco.

"In addition to these free service helps Philco has provided numerous items that the serviceman can use to identify *himself* as an individual member of this nationwide organization. For example, they have a drum type tire cover which is supplied to R.M.S. members, with the name and address imprinted at the nominal cost of

\$1.25. We have this tire cover on display in our Service Department. The next time you stop in be sure to ask one of the boys at the counter to show it to you.

"Bear in mind that anything you do to associate your name with the R.M.S. is going to help you very materially in getting more service work because R.M.S. members are recognized as competent and efficient servicemen who stand in back of their work and give a guarantee that really means something."

Radio Manufacturers Service has offered the serviceman more than any other organization which has ever existed and the best part of it is that there are no dues, no initiation fees of any kind.

Radio Manufacturers Service offers more profit to every SERVICEMAN member. It offers him more technical and sales information than he was ever before in a position to obtain from a radio manufacturer, and the serviceman's expense in obtaining this information is a minimum. The prestige and the national backing which Radio Manufacturers Service gives to every member is something which a serviceman cannot afford to be without. The tremendous advertising campaign which is going on to promote Radio Manufacturers Service with radio set owners is not costing the serviceman anything. The factory and distributor contacts which are offered to members through Radio Manufacturers Service are worthy of membership in themselves, for they will enable every man to do a better service job at all times, and when he is stuck in any particular job, he knows that there is always a source of information for assistance. Through Radio Manufacturers Service, it has been possible for the independent serviceman to obtain replacement parts easily and to be assured of the highest possible quality of these parts at a low cost.

We repeat again that no serviceman can afford to be without Radio Manufacturers Service.

Use of Philco Condensers as General Replacements

THE PHILCO black bakelite condensers, which are so familiar to every serviceman, are being used by the thousands as general replacement condensers on various makes of radio sets. These condensers cost no more than ordinary paper condensers, and yet the construction is such that they will last indefinitely.

One of the most desirable features of the black bakelite condensers is the fact that the mounting lugs can be used for supporting various other small parts in the radio set. There are a number of different condensers of the same capacity which vary only with respect to the lug arrangement. This is done purposely by the factory to facilitate wiring of the chassis. It is only necessary to drill one hole in the chassis for mounting a condenser of this type, and once the condenser is installed, it can be used as a base for mounting such parts as carbon resistors, tubular condensers and moulded condensers.

The list below indicates the various basic capacities of the

black bakelite condensers used in PHILCO radio sets. Letters which appear after the part numbers designate different lug arrangements, and different combinations of twin condensers or condensers combined with wire-wound resistors. The 3793 condenser, regardless of the letter after the number, can always be identified as a .015 mfd. condenser; a 7625 condenser can always be identified as having a capacity of .006 mfd.

Basic Part Number	Capacity
8035	.0001 mfd.
7296	.002 mfd.
7625	.006 mfd.
3903	.01 mfd.
3793	.015 mfd.
3615	.05 mfd.
4989	.09 mfd.

Third Radio Manufacturers Service Lesson Now Available

RADIO MANUFACTURERS SERVICE LESSON No. 3 is just off the press. This lesson covers, in detail, PHILCO'S wide experience over the course of many years in the theory and construction of receiving antennas.

Complete information is given on the practical theory of antennas, noise reduction and elimination, standard broadcast antennas and short-wave installations. This booklet of 16 pages is written in a clear, understandable manner and is profusely illustrated.

You can obtain your copy now by calling at your PHILCO distributor's service department. Be sure to get this Radio Manufacturers Service booklet at once, while the supply lasts.



Model 16 Service Hints

ON some models of the PHILCO 16 All-wave Receiver difficulty was experienced with failure of the set to oscillate at the low frequency end of the two top bands.

Investigation in one case showed a high resistance between the rotor plates of the tuning condenser and the chassis. Although there are several grounded points for this connection, a small amount of corrosion had set in and introduced a relatively high resistance. By tightening the screws, this condition was entirely eliminated and the set played correctly.

In another case, it was found that corrosion had become imbedded under the bakelite washer on the gang compensating condenser at the front of the chassis (10.8 megacycle adjustment). By removing this washer and cleaning it thoroughly, the trouble was entirely eliminated. It was, of course, necessary to readjust the short-wave compensating condenser.

On one Model 16 it was found that the antenna series condenser ③ in the wiring diagram of Philco Service Bulletin No. 165 was open. Another set had an open coupling condenser in the plate circuit of the oscillator, ④ Service Bulletin

No. 165. A Model 16 which was weak on the low frequency end of all bands was corrected by reducing the value of the resistor in series with the oscillator plate ⑤ from 50,000 ohms to 30,000 ohms.

PROFIT INSURANCE

Before Delivery

1. Check chassis.
 - a. Tubes and tube shields.
 - b. Pilot lamp.
 - c. Performance.
2. Inspect and polish cabinet.

Installation

1. Insist on good aerial and ground.
2. Loosen chassis hold-down bolts.
3. Check shadow tuning.
4. Check performance.
5. Instruct owner by demonstrating correct tuning, automatic volume control and general operation.

Eliminating 60-Cycle Hum on the Model 60

IN some cases it has been found that an excessive 60-cycle hum was being introduced on the Model 60 from the power line.

A single .015 by-pass condenser is connected in this chassis from one side of the line to ground. The hum trouble was corrected by connecting a twin No. 3793 Condenser (.015 Mfd.) across the line with the center point grounded to the chassis. It was only on certain power lines where this condition existed. In the great majority of cases the single .015 Mfd. Condenser is entirely satisfactory.

Color Code of Philco Wiring

PHILCO has adopted the standard R. M. A. color code as employed by various other radio manufacturers. This coloring of wires is held wherever possible, and there are only a very few exceptions where the standard coloring is not used.

The chart below indicates the various colors of wires and the types of circuits in which these wires are used:

Colors	Circuits
Red	Filaments and odd wires
Brown	Cathodes and grounds
White	B+ and screens of output pentodes
White & Black } Black & White }	Plates
Green	Grids and screen grids

Questions and Answers

1. Q. How can power transformer wax be cleaned from parts of a chassis?

A. Some of the earlier production of the Model 58 power transformer had an excessive amount of potting wax inside the transformer, and when the set became extremely hot some of this wax would melt and run out of the casing. The transformer is not defective, and it can still be used with no fear of harming the radio set. The dried wax can be removed with a knife and the remainder then dissolved in benzine.

2. Q. What are the fundamental frequency ranges of the Model 024 Signal Generator?

A. There are two fundamental ranges, controlled by the oscillator switch. The "A" range is from 105 to 250 K.C. and the "B" range is from 220 to 500 K.C. Both of these ranges are fundamental oscillator frequencies. Harmonics of these fundamentals are used to give accurate signals as indicated on the other scales up to 2000 K.C.

3. Q. Does the PHILCO Three Purpose Antenna System eliminate noise with only the transmission lead-in wire connected?

A. No. The PHILCO Three Purpose Antenna does not become a low impedance system until the antenna and ground wires are connected to the antenna transformer.

4. Q. What is the cause of the tuning drive slipping in the Model 16?

A. If the station selector shaft is not pushed all the way in or pulled all the way out when changing from the standard drive to the 60 to 1 ratio, the rubber drive wheels will not mesh correctly, and will soon wear to the extent of slipping. Customers should be carefully instructed on this point. When making a replacement of worn drives, the bracket which supports the drive assembly and which is riveted to the tuning condenser frame should be carefully examined. If this bracket is loose, the rubber drives will not mesh correctly, and will wear in a very short time. New drives will soon wear out in the same manner unless the bracket is tightened.

5. Q. Can the PHILCO Three Purpose Transmission line lead-in wire be obtained in a light color for inside work?

A. Yes. This wire is obtainable in a cream color instead of the black, and can be used inconspicuously in practically any interior. The wire is known as PHILCO Part No. L-1591 and sells at a list price of \$3.50 for a roll of 100 feet.

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