



the PHILCO SERVICEMAN

VOL. 22 NO. 7

JULY, 1954

**PROFITS INCREASE FOR
PARTICIPATING
DEALERS WITH...**



1-CALL 1-HOUR SERVICE

IT'S AN absolute fact Philco Dealers! If you can give your customers the kind of refrigeration service they want and expect (but have never gotten)—they will welcome you with open arms to the exclusion of anyone else.

Until recently no dealer in the country could give *that* kind of refrigeration service. But that was before One Call—One Hour Service. Today, *every* Philco Dealer can give the type of refrigeration service they could only dream about before. And those already participating are checking off advantages to themselves and their customers never heard of in refrigeration servicing.

If your service technicians are now field servicing through One Call—One Hour Service, you have already seen these advantages reflected in your sales and profit picture. If they are still practicing the new One Call—One Hour techniques at the free Philco Distributor Training Center, you can look forward to these benefits . . . soon!

And if, as a dealer, you have not signed up your personnel for One Call—One Hour training, just look at the record of what this revolutionary approach to refrigeration

servicing can do for your operation . . .

- ✓ Increase sales!
- ✓ Increase profits!
- ✓ Create greater customer satisfaction!
- ✓ Give quicker service at a better price!
- ✓ Lower your servicing costs!

All this and, in addition, savings in space and inventories, more productive scheduling of technicians, greater all around efficiency.

Servicing dealers everywhere are calling One Call—One Hour Service "the greatest sales weapon ever handed to a dealer in such a hotly competitive market". They all like the speed and ease of repair it offers—the overwhelming superiority it affords over competition—and the exciting appeal it is having for that tremendous army of refrigerator owners demanding better service.

Your own refrigeration technicians can help you to reap all of the benefits out of this service we have listed. If you are in refrigeration servicing to stay, your course is clear. No dealer who looks upon service as a permanent arm of his business can afford to stay out of this program . . . not if he expects

to continue servicing refrigerators!

Philco and its Distributors have created a comprehensive program that is geared to make your dealership's participation in One Call—One Hour Service *simple, convenient and inexpensive.*

Free Distributor Training Centers are operating to teach your technicians the fast, efficient methods embodied in this program. They will learn One Call—One Hour Service from the ground up—from men who have been actively engaged in it from the ground up. Using a fact-packed 73-page procedure manual they will spend 60 information-filled hours of slide film instruction and actual motor compressor servicing until they are familiar with every aspect of in-field servicing.

Over and above the training of your personnel, a small investment for the tools they need and your surprisingly low inventory of motor compressor replacement units, are all that is needed to put you in the One Call—One Hour Service business. Hundreds of your customers have been needing this type of personal, efficient service. See to it you are the one they get it from!

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The Secret of
Successful
1 CALL—1 HOUR SERVICE
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PHILCO . . . 1-CALL—1-HOUR SERVICE

ONE CALL — ONE HOUR SERVICE

... A NATURAL LEAD FOR FASTER TRADE-INS



A

Photos "A" and "E" were taken at the Training Center of the Philco Distributor in Baltimore, Md., the Joseph M. Zamoiski Co.

Photos "B", "C" and "D" at T. A. O'Loughlin Co., Newark, N. J.



B



D



C



E

yond the warranty period. She thinks maybe this is the beginning of the end. Point two . . . the dealer's serviceman is in the most strategic position to start a sales pitch on the advantages of a new Philco. Quite often this is enough to clinch the sale. If not, at least it's a foot in the door for a follow-up call by a salesman.

Assuming the sale is made in either case, the talk gets around to

THE inclusion of One Call—One Hour Service into a dealer's operation opens still another phase of increased business and profits too good to be overlooked.

First of all . . . the dealer's new-found ability to give customer satisfaction on the first call will further cement his relationships and assure him all the benefits that come from continuing customer contact. Every dealer featuring One Call—One Hour Service will find his refrigeration service

in top priority demand by refrigerator owners everywhere. Therefore, he will find opportunities for entry into more homes than ever before.

Now, what is the situation in the home his service personnel enters? Mrs. Customer's refrigerator has stopped functioning. Point one . . . fast efficient One Call—One Hour Service is indicated here. Chalk up a profit for the dealer on this alone. However, Mrs. Customer may be wondering if her appliance is "starting to go"; particularly if it is be-

trade-in value. Who is still on top? The dealer, of course, for he knows that his One Call—One Hour service techniques can help to inexpensively transform that trade-in into an attractive unit for a quick resale! So he is in a position to make a longer trade than his competition down the street.

Here it is in black and white. One Call—One Hour Service gives the Philco Dealer an invaluable

competitive advantage . . . it provides the customer with prompt, accurate service at a saving, but with still plenty of profit margin for the dealer . . . it paves the way for service salesmen at the psychologically *right* time for a serviceman to be selling . . . it greatly simplifies reconditioning trade-ins which permits a more rapid turnover, lowers the cost of overhaul

(Continued on page 5)

PHILCO ... 1-CALL — 1-HOUR SERVICE

PRACTICE MEANS PROFICIENCY IN ONE CALL — ONE HOUR SERVICE

RECENT service technician graduates of Philco's One Call—One Hour Service Training Centers and their dealer-employers may wonder why motor compressor unit servicing in the home often exceeds the one-hour limit.

A number of factors contribute to such a situation during the early periods of any new and radical servicing approach. However, when One Call—One Hour Service was first created, great care was taken by Philco's Service Division to be sure that the one hour phase or time limit was a completely realistic figure.



BUHL & SONS, DETROIT, MICH.

Field testing of the program was carried out to an exhausting degree. In every part of the country refrigerators were serviced with these new techniques under every possibly known climatic condition—the self-same conditions the average service technician would find in customer homes from Portland, Maine, to Portland, Oregon.

The results everywhere confirmed that a service call on this type of motor compressor trouble was capable of being completed adequately in one hour, or slightly over.

Of course, these conclusive results were performed by technicians under certain conditions that were ideal—that is, trained men using the most complete equipment available.

Undoubtedly, that is one of the



WALTHER BROS. CO., INC., NEW ORLEANS, LA.

secrets of successful One Call—One Hour Service. If your personnel are not yet completing these calls in one hour, do not be discouraged. Only until a number of such calls have been completed will the average man get the real "feel" of the techniques—only through constant practice can he attain proficiency.

Another vital factor that could hinder his optimum performance is a lack of the basic and proper equipment for the job. Every separate vocation requires its special equipment and One Call—One Hour Service is no exception.

The specially designed Restriction Tester, a simple but ingenious device that determines whether a restriction exists in the refrigerating system, is the key tool in this

entire program. With it, a Wattmeter, a multi-purpose Appliance Tester and other units already a part of your servicing equipment, the technician is geared for efficiency in refrigeration servicing.

The Training Center course includes instruction in the use of all needed equipment. Along with this, the course is designed to completely equip each graduate with the know-how to successfully complete One Call—One Hour Service.

Only the passage of time (and it depends upon the individual) with frequent application of the Training course instruction and material is needed to transform the average technician into a "One Hour man" for satisfactory "One Call Service."



MOMSEN, DUNNEGAN & RYAN, EL PASO, TEXAS

PHILCO ... 1-CALL — 1-HOUR SERVICE

"TAR HEEL" ACHIEVEMENT AWARDS

Blackwelder
Furniture Co.
Jonesville,
North Carolina



Bryant Radio and
Appliance Co.
Boonville,
North Carolina



L. E. Evans
Toast, North Carolina



Hendricks & Merrell
Furn. Co.
Mocksville,
North Carolina



King Furniture Co.
King,
North Carolina



Parrish & Ingram, Inc.
Kernersville,
North Carolina



Neal Hardware
Company
Walnut Cove,
North Carolina



Ed Snyder's
Elkin,
North Carolina



Radio & Sound
Service
Winston-Salem,
North Carolina



B & O Furniture
Company
Mt. Airy,
North Carolina



All awards were presented by Philco Distributor
C. R. Williams and Son, Winston-Salem, North Carolina

PROFITS INCREASE for PARTICIPATING DEALERS WITH ... 1 CALL—1 HOUR SERVICE

(Continued from page 1)

Make your plans now. There is an attractive display sign (illustrated Page 1) to hang in your store when you start to participate. Behind this sign stands the combined resources of Philco and its Distributors; thousands of man-hours in planning and training; additional thousands of dollars in designing new equipment, new units, field testing ... the works!

Nothing has been left to chance. One Call—One Hour Service is a Philco program absolutely and exclusively for the benefit of Philco Dealers and their servicemen. It is not an ordinary series of techniques but a modern aggressive approach to a service that has remained too long without advancement. So great is the customer need for this service that it is actually in the category of a *public service*, far removed from the present outmoded concept of refrigeration servicing ... and years ahead of all your competition!

Dial your Distributor's number right now. Find out how many of your technician-personnel will be able to attend the next Training Center session of Philco One Call—One Hour Service.

You have no idea how well it will profit you!

...A NATURAL LEAD FOR FASTER TRADE-INS

(Continued from page 2)

and gives the dealer even more profit on the trade-in sale.

With Philco One Call—One Hour Service to spearhead refrigerator trade-in operations, there is no longer any need for dealers hesitating to enter this highly lucrative activity. Remember, a second refrigerator in the home is no longer a fantastic idea. It has its place in making modern day living mighty convenient. A big chunk of the trade-in market will be cornered by the dealer with foresight, ability and ONE CALL—ONE HOUR SERVICE!



NEWS—VIEWS—COMMENTS FROM PFSS MEMBERS IN THE FIELD

Since you have made it so easy to drop a line, here are some of my thoughts. It seems to me that you are doing a very, very fine job of providing us with information on the Philco products. Of course, I am a TV and Radio Serviceman, and I especially like the SERVICE SUPERVISOR TV section.

I have just lately graduated from a Philco TV School, my instructor was Mr. Claude Hinkle of Mardick in Joplin, Mo. Jack Mattingly came in just at graduation in time to sign my diploma, so I didn't have to wait for the mail services to get it back.

Fellows, I would like to say again that you are doing a fine job. I sure like the way you have divided the SERVICE SUPERVISOR up into sections.



I would like to see more information on the scope, and the setups you fellows use in your TV and radio servicing.

ROBERT W. STUBBLEFIELD
Joplin, Mo.

Since there is a great deal of information available on the use of the oscilloscope for TV and Radio servicing, we will give you a list of published material that can be obtained from your Distributor.

TV—Home Study Book on Oscilloscopes in 1952 PR-2168

—Film/Record "Servicing with an Oscilloscope" issued in 1953

PR-2216G

HR—"Construction of a Scope Pre-Amp"

January, 1954 SUPERVISOR

—Home Study Book on Oscilloscopes in 1952 PR-2206

AR—"Servicing Auto Radio with Oscilloscope" in 1953

PR-2403

—December, 1952, January, 1953, and July, 1953 articles in SERVICE SUPERVISOR



I have hundreds of Philco service sheets and service data in a very disorderly fashion. In fact, I find it quicker to trace out circuit than to look for and find the sheets pertaining to that model. If Philco published complete filing instructions on all data in our possession and a yearly index or review, it would make that data available and easy to locate when we need it.

ALBERT TATRAULT
Radio Service
Northport, N. Y.

* * *

We believe you supply the most complete type of information on all the products you make. As I do not understand your filing system and see no way of indexing it, I would appreciate it if you would explain the proper method to file and index your bulletins. As it is, we lose much time in locating information.

LEON NOEL
Noel, Inc.
North Adams, Mass.

* * *

I am a new member to PFSS and without a doubt breaking into the middle of things. Please advise me as to the best method of setting up files on the material that is received. It looks like I am in for some good material but would like to know just what is the best method of keeping it at my fingertips.

JOSEPH C. RHODES, JR.
Alana Electronics
Los Angeles, Calif.

* * *

We cannot figure out the precise method of filing TV data as received from the Philco factory.

SHOP TALK CORNER (Cont'd)

Should we file as to your PR numbers, or how?

We would like some method for a quick reference for any model, RF chassis or deflection chassis.

J. W. BUNN
North Branch, N. Y.

Philco has realized the need for a proper filing system for service data. Consequently, the service manuals pertaining to the "B" line television models have been assigned file reference numbers in addition to the publication part number. Thus the manuals can be placed in a binder in file number sequence with all the information pertaining to a particular chassis type, and grouped for the service technician's easy reference. The February, 1954 issue of the SERVICE SUPERVISOR gives a detailed description of the Service Manual filing system. A Mid-Year Directory of Technical Information can be found in the July, 1953 issue of the PHILCO SERVICEMAN.



I have been a Philco member since 1930 and I would like to see more ideas on servicing radios and television sets in your publication. If some of the servicemen have any of these ideas let them be exchanged through the future issues because they are of no value to the individual if he keeps it to himself.

Keep up the good work, and good luck.

STEPHEN M. SKOVAN
Pittsburgh, Pa.



I would like to offer a little criticism regarding the method you have been using in editing the Philco SERVICE SUPERVISOR. I would like to see this publication printed so that the Television, Home Radio and Auto Radio sections are not in the same publication with factory advertising and service data for other products in the Philco line. Let's keep that for the fellows in those other lines. Being a serviceman and a dealer, I am very busy and don't like to file all that extra data which does not concern TV or radio. With Sam's, Riders and Philco Service data, I sure have plenty.



Also, would like to see more field experience of good servicemen encountered while servicing Philco TV. Think Philco should spend a little and encourage servicemen to submit some of their experiences and cures, by offering a cash gift or a credit good at the local Philco Distributor. Then at the end of each year, compile this data and send it along to each "paid up" member of PFSS.

RAY BRAMLEY
Ray's Radio Shop
Bainbridge, N. Y.

The \$10.00 Idea Award, which is a monthly feature of the SERVICE-MAN, was designed for the express purpose of "encouraging servicemen to submit some of their experiences and cures," as well as tools, practices and shop set-ups, they use to do a better job. A booklet composed of all the \$10.00 Award winners over the years is being considered as a part of the 1955 PFSS package.

* * *

I have found the PFSS mailings very useful in my service business. The only thing wrong with them is this: I receive service folders that cover all products and since I have no use for the air conditioning and refrigeration items I throw the whole thing away. My files are crowded now and I can't save the useful items about radio and TV that I would like to save.

I am sure that Philco would save money by printing separate volumes for each respective service branch member. Then each member could have separate and complete files on the respective lines that he services.

C. D. SLUSSER
Chuck's TV Service
Muldraugh, Ky.

Take another look fellows. In answer to the requests from other service technicians, the SERVICE SUPERVISOR has been redesigned so that the serviceman can tear out and save only the information he needs

in his service work. The pages are punched so that they can be kept neatly in a binder and will always be close at hand for easy reference. This eliminates the necessity of filing information that does not pertain to your service work.



Please publish brief, simple explanations of how circuits work, how to connect scope for quick checks and how to improve circuits for fringe area; a few pictures or diagrams of the basic operation of sync circuits; pictures and/or diagrams on alignment and quick checks for general troubles.

Publish general information on erasing retrace lines on TV sets and other improvements we can make to pickup extra money from customers who want their sets improved.

ROBERT LEE HESTER
L & H Radio Sales & Service
Cuthbert, Ga.

All of the above information will be found in past PHILCO SERVICE SUPERVISOR articles. The Film/Record Visual Training Forums at your local Distributor will also help you with these problems.



There is one big problem that I am experiencing on both the 1953 and 1954 TV sets which is causing a lot of customer complaint.

This is fold-over because of the 12B4 tube. I have replaced the resistor R709 in the cathode circuit with a 2-watt 470-ohms resistor but it still causes trouble.

I have checked this on the bench with a scope and a V.O.M. and find, that when normal, the voltage drop across R709 is approximately +15 volts, but when fold-over starts, the voltage increases to +22 and clips the vertical wave. It will increase up to +45 volts, which puts an overload on C707. On a 4110 Ser #83683 the fold-over broke this condenser down besides burning out R709 resistor and breaking



SHOP TALK CORNER (Cont'd)

down R819 and condenser section C815B.

Is it possible to change the 12B4 tube with a dual triode and parallel the two sections to reduce the drive a single triode has to develop? We had no trouble with the 12BH7 tubes.

I've also noticed a weave in the raster on the left-hand side of the picture tube. This was very bad in one set. I checked the damper circuit which checked OK. I also tried different values of condensers in the horizontal output yoke for ringing, which didn't help.

TED R. PARKS
Lee's Electric
Salem, Oregon

The problem which you have encountered is traceable to the excessive amount of current drain through the cathode circuit of the vertical output stage, in the event of failure of the 12B4 tube. If this tube fails the technician should check the cathode resistor for damage that may have occurred due to current drain beyond its rated limit.

We do not recommend substituting this tube with the 12BH7 as you suggest. The 12B4 tube has been greatly improved, however, so that this problem should diminish shortly. We suggest that you contact your Distributor Service Manager in reference to information concerning a decoupling network that can be added to the HF-200 chassis to reduce the plate power dissipation of the vertical output stage.

It is possible that the weave in the raster on the left-hand side of the screen may be due to heater to cathode leakage in one of the tubes. An oscilloscope check of the sync circuits should isolate this problem.

I have in my shop for repair a Philco UT20B UHF tuner. As far as your manuals are concerned, they usually state that, outside of changing the tube, the tuner should be returned to the factory for repair or adjustment.

I really believe that it is a shame that so many items are returned to the factory for adjustment or repair when a serviceman could have repaired it, thereby saving the customer a lot of time in getting their



units back into their homes and in use.

The customer complains that the sound and picture does not come in at the same dial setting. For one setting the picture comes in good, and by shifting the dial setting just a little the sound comes in good, but trying to get both the sound and picture on this tuner is hard. You can get both of them at the same time but they are very poor.

All this tuner probably needs is a little adjustment but I was not about to turn adjustment screws until I knew the proper procedure.

If you can help me out with this tuner it will be appreciated. If not, you will probably get it back for repair or exchange. This tuner is still under guarantee, but the customer is willing to pay to get it repaired rather than do without it for any length of time.

I especially like your refrigerator motor compressor deal that you just published. I have been in the refrigeration business for the past 16 years in connection with my radio and TV repair and I have changed a lot of units that only needed a leak repaired and a charge of refrigerant put in. Usually they leaked at the motor wiring terminals, but rather than kill the guarantee on the refrigerator a new unit was installed with the old one going back to you for repair, which caused a lot of people, including yourselves, a lot of trouble.

SAM FIORINO
Sam's Radio and TV
DuQuoin, Illinois

Philco's policy regarding the repair of UHF units was initiated due to the fact that adequate UHF test equipment was not available in the field. Without this equipment the proper service and alignment of UHF units cannot be expected.

At the present time Philco, as well as other manufacturers, are placing UHF test equipment on the market and this policy regarding UHF tuner repair may be expected to change. A service technician

with adequate UHF test equipment and training can make repairs to UHF units just the same as VHF receivers.

Your local Philco Distributor will be able to give you full information concerning the new UHF test equipment available, and their schedule of UHF training programs.



It's about time that Philco got on the ball and did something about the antenna terminals on the back of their TV sets. Simply attaching these terminals on a piece of fibre and attaching the fibre to the cabinet itself would simplify matters a great deal. The poor serviceman has enough worries in trying to get the back off of these sets without having to pull loose four antenna wires.

Also, why doesn't Philco get wise and eliminate that flexible cable focus adjustment and use a screw-driver adjustment instead? That focus control cable is a big pain in the neck. It attracts the customer's attention back there and, in nine cases out of ten, the customer doesn't know how to adjust it. So let's get it back in the cabinet where it belongs.

Another thing, I'd like to get my hands on that guy that put that long bracket on the interlock; and whose brainstorm was it to put that piece of cardboard around the height and linearity adjustments? I never could figure that out.

So let's get on the ball and "re-design" the back end of the set as well as making the front so "purty"!

Congratulations on the swell service information and best of luck.

MELVIN H. STRICKER
Arco TV
St. Louis, Mo.

Antenna leads are fed through slots in receiver back and it is a simple matter to pull the leads back through if the back must be removed.

The flexible focus cable is purposely employed for ease of focus



adjustment. The instruction booklet accompanying each receiver specifically advises the customer what controls he should adjust and those he should not touch.

The cardboard frame around the height and linearity adjustments is in compliance with the Underwriter's specifications, so that no one will touch those particular controls with the hand but must use a screwdriver for adjustment purposes.

The purpose of the interlock bracket is two fold and again in compliance with the Underwriter's specifications, wherein removal of the back automatically opens the power line to prevent the customer from tinkering with a "hot" receiver. The secondary purpose is to keep the power plug firmly seated in the socket and prevent the possibility of poor A.C. power connection.



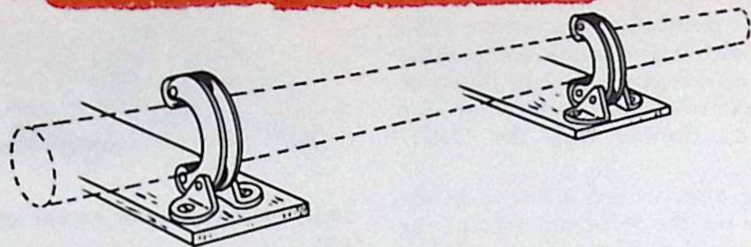
I have an F2 chassis that develops severe horizontal pulling after about fifteen minutes. This can be varied somewhat with the hold control. Somehow an A.C. signal is modulating the horizontal oscillator. I've checked with a scope for leaks from the tuner on back but to no avail. Where is this A.C. signal that modulates the horizontal oscillator coming from? It's there because it shows up on the cathode and plate, too. Is this caused by filter failure? If so, which one or ones? This set is normal until this pulling begins. With the hold control in the right position a black bar comes in on the upper left-hand corner and curves in at the center and out on the lower left-hand corner.

Thank you for a fine job of information well done.

LEE O. DUNCAN
Duncan Radio & TV Service
Chipley, Florida

Although it is possible for such an effect to be caused by filter trouble, we note that you do not mention whether any change in "B" plus voltage exists. Trouble of this nature can be due to heater to cathode leakage or shorts. A scope check at the 2nd detector output for indications of AC modulation of the signal will tell whether the

10 DOLLAR AWARD!



Here's the solution for those of you who complain about tying masts to your trucks and all the time you lose in doing it. This month's \$10.00 Idea Award has the answer!

It comes from N. B. Graf, Television Service Company, Statesville, North Carolina. He writes:

"Perhaps this idea for carrying 10-foot antenna masts atop the TV service truck may help.

"Where a 'carrier' is used for the ladder, mount two screendoor closers on the carrier bars beside the ladder. These closers are just right in size for most 1 1/4-inch masts. The mast can be slipped in and out very easily due to the strong spring action of the closer. Their rubber rollers also protect the mast from 'juggling' or scratches. This idea will save time and stop the unnecessary bother of tying masts with rope or wire."

CLASSIFIED ADS

FOR SALE:

Sam's Facts.
Heath V.T.V.M., like new, all probes included. Hi-V and Crystal Diode. Actually in use, accurate and OK. \$29.00.

ROBERTS RADIO SERVICE
Wheeler, Michigan

* * *

FOR SALE:

Heathkit Oscilloscope. Operates

problem exists in the IF stages or in the circuitry following the 2nd detector. Heater to cathode leakage or shorts in the horizontal oscillator tube itself should, of course, not be overlooked, this would produce AC on the cathode and plate.



Just finished reading Vol. 22, No. 3 PHILCO SERVICEMAN and was very pleased to learn that PFSS is preparing another 80-hour, 2-week course in color television. Being a lone operator, like so many today, two weeks' time off creates quite a hardship. Couldn't classes be held in the AM or PM or evening giv-

perfectly—Model 0-5. \$22.50 express collect.

PAUL LATHAM
Latham Radio Shop
Cuba City, Wisconsin

* * *

We'll be glad to print your classified ads when you have equipment, etc., to sell or swap, at no charge.

However, Philco Corporation accepts no responsibility for the contents of the classified advertisements or the goods mentioned therein.

No correspondence relative to these advertisements or goods should be directed to the Philco Corporation.

ing us some time to carry on our work? Then to, having them during the summer months when business is slow would be a help.

I know PFSS was originated for the serviceman, so here's one way they could help doubly.

It's great to be a member of PFSS.

A. J. ZUGEL
Radio Service & Repairs
Washington, D. C.

Any number of Philco Distributors have arranged for more convenient hours of training where enough service technicians can be assembled for a class. Check with your Distributor and find out times of his next scheduled classes.