

PHILCO SERVICEMAN

PHILCO
Factory-Supervised
Service

Service News For Philco Servicemen

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50 Cycle—60 Cycle Phonograph Operation

The motors used in Philco Phonographs are of two types: domestic changers for use in this country, are supplied with 60 cycle motors; export models and other sets made for use outside the United States are equipped with 50/60 cycle motors. These motors are of the shaded pole, induction type and are identical except for heavier winding and thicker stator assembly in the 50/60 cycle units. Since the motors are induction type, the rotor speed is mostly dependent upon the supply frequency, thus, when the 50/60 cycle motor is operated from a 50 cycle supply, the lowered rotor speed must be compensated for by the addition of spring sleeves over the drive surfaces which increases the effective diameter of the shafts.

By the use of the proper spring sleeves the export changer will operate at the proper speeds on a 60 cycle supply. However, a straight 60 cycle motor will overheat when operated on 50 cycles due to increased coil and core losses.

The 50 cycle kit, which includes the necessary springs, brass motor mounting studs, and complete instructions, is available for the models M-20, M-22, and M-24 under part number 40-8680. This kit is for use with the 50/60 cycle motor for part number 35-1442. Procedure is as follows:

1. Remove the turntable retainer spring and washer located at the top-center of the turntable.
2. Remove turntable by lifting up over spindle.
3. Remove the spring from the rotor shaft by inserting the jaws of a small pair of diagonal cutters under the lower end of the spring and prying it upward, using the motor mounting screw as a fulcrum. (See illustration.)

CAUTION: Make sure that the diagonal cutters do not cut or otherwise roughen the shaft surface.

COMMERCIAL UHF A REALITY!

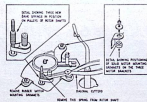
At 12:01 A.M. Thursday, September 18, Station KPTV, UHF Channel 27, Portland, Oregon, went on the air with the first commercial UHF television station. Philco personnel were in Portland en masse to greet KPTV's first test pattern. Members of the Engineering, Product Performance, Service and Sales Departments visited with the appliance industry in Portland to impart their knowledge of UHF to dealers and the service organizations. To supplement the 80-hour training course, which had been conducted by the Philco distributor (Appliance Wholesalers of Oregon), service and sales meetings were conducted in order that the very latest information pertaining to UHF could be passed on to these people.

We at Philco were not surprised to learn that the performance of Philco television receivers on UHF was a very great success, using the Philco all-channel continuous tuning UHF tuner on the high fidelity TV-90 receiver.

Our experience with the experimental Bridgeport transmitter over the past year-and-a-half helped give us the experience we needed to make our first commercial UHF showing a success.

We have prepared a series of studies for you on UHF, which will include descriptions on antennas, transmission lines, Philco continuous all-channel UHF tuner, Philco continuous all-channel UHF converter, and many other incidentals of interest. You will receive the first of these articles in the December issue of the **PHILCO SERVICE SUPERVISOR**. Also, your Philco distributor will have available in his Service Clinic, the complete story told through Visual Training Forum. We are sure that both the Supervisor articles and the Visual Training Forums will be of great interest and of much benefit to you.

4. Remove the three rubber motor mounting grommets by first removing the mounting screws. Replace the rubber mountings with



the solid mounting supplied. Care should be taken to install the undercut end of the mounts in the large hole of the motor mounting bracket. (See illustration.)

5. Install the three drive springs supplied in the kit, on the three

pulley shafts; the shafts are of different diameters, indicating where each spring should be used. The springs can be installed by pushing them over the end of the pulley shafts, and twisting in a clockwise direction while holding the shaft to prevent rotation.

CAUTION: Do not slip the spring far enough onto the shaft to permit the end to contact the rubber tire of the idler wheel.

6. Replace the turntable gently, making sure that the idler wheel is retracted under the turntable before seating completely.

7. Replace the washer and retainer spring on the bearing at the top-center of the turntable.

8. Correct the labels attached to the cabinet and chassis to indicate the new frequency, 50 cycles.

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SERVICEMAN PRAISES FACTORY INFORMATION

Every so often a pat on the back or a "well done" can make you feel wonderful—like pitching right in and doing a bigger and better job. That's the way we feel at Headquarters, thanks to Edgar Conant of Peoria, Illinois.

Mr. Conant applied for three Philco Factory-Supervised Service Memberships—Television, Home Radio and Auto Radio. With his application, he sent us a letter explaining why he was joining Philco Factory-Supervised Service. This letter made us feel proud to be part of such an organization and we are going to quote a few lines from it:

"... There is, of course, no substitute for factory information, and from what I have seen of it, Philco has no comparison.

At the present time I try to service anything that comes along. I have schematics from various other companies, and their layout, quality of printing and complete information just don't compare with Philco. The way your circuits are blocked out, with information on test points and what to look for, to me shows real cooperation and brains. I have seen a couple of your home study courses, and they are full of real practical information; the kind I want and have never seen elsewhere. I like your yearbooks. You give a sketch of parts locations, which is a big help. You have a sensible way of numbering parts so they are easy to find. . . .

Thanks, Mr. Conant, and we know that Philco Factory-Supervised Service will prove as successful for you as it has for so many others!

We like to receive letters from members. They are not all as flattering as Mr. Conant's, but they express the opinions of the men we work for—the members of Philco Factory-Supervised Service. When we know what you want, then we are better able to provide it for you. Let us hear your ideas and criticisms so that we can make Philco Factory-Supervised Service work even better for you.

With this kind of cooperation and encouragement in back of us, Philco Factory-Supervised Service will continue to grow and help the servicemen all over the country give better service, repair difficult "fixes", and build up the reputation of "quality service" on quality products.

CRADLE INVENTION WINS \$10.00

No, this is not a lullaby story—the cradle in this case being the type used as an aid for work on refrigerator doors!

Therefore, to Girvin Herr, Refrigerator Service Technician for Eshelman Supply Co., Lancaster, Pa., goes the Philco \$10.00 Idea Award for November. And this makes Mr. Herr a two-time winner since in July 1950 his development of a replacement for shelf studs in Philco Refrigerators was good enough to take the award.

The current practical development by Girvin Herr is illustrated here. It is actually a door cradle by which refrigerator doors can be securely held in any position for paint refinishing or dingeing.



The foot pedal attached to the cradle brace (see illustration with Mr. Herr) is an automatic device which locks the door in any position desired to facilitate any type of work being done on the door. Any refrigeration technician who has had to wrestle a refrigerator door around to get at a particular difficult area, will appreciate full well the advantages of this cradle.

Thanks, Girvin Herr, for a useful suggestion which we hope will be adapted by many Philco Factory-Supervised Servicemen as a time-saver, as well as an aid to more efficient refrigerator repairs.

Next month's award is wide open—it may be your turn to come up with an easy \$10.00—how about it?



Are You Willing to Learn More?

We have just about completed one of the greatest seasons in the sale of Room Air Conditioners known to the industry. With the increase in sales, we, the largest independent service organization in America, have accomplished an almost impossible task. There have been problems due to the sudden increase in the volume of Philco Air Conditioners purchased by the American public. These problems have been handled rapidly and efficiently by members of Philco Factory-Supervised Service throughout the country. You, as an Air Condi-

tioner member, have gained the respect of every Philco Air Conditioner owner. This has been accomplished by your will to learn. Philco Service Headquarters has appreciated this, and we have endeavored to supply you with the latest possible technical information. We will continue to do everything necessary to improve your training. (Already the plans are being laid to outline the best possible type of training for next season.) The room air conditioning business has surpassed expecta-

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AN AUTO RADIO SUCCESS STORY

The old adage that "Big oaks from little acorns grow" was never more true than in the case of Dempsey and Denman, Inc., of Arlington, Mass.

In 1949 they had their humble beginning as a servicing organization, operating from a cellar. Today they own their own building, a fleet of service cars, and a lively business.



As is usually the case with a successful business, it doesn't happen by accident. The history of their success is interwoven with common sense policies and decisions, and over all sales integrity, personal service, and fair prices.

Very interesting indeed is their expansion program. It is a typical example of what can be done by alert servicemen to get out of the rut and increase business. Recently we presented in this publication a discussion on the advantages of including auto radio service as a business "getter". Sometime ago Dempsey and Denman also decided to add auto radio to their service, and now no small part of their income is from this source. Note the fine space provided for this service.

Of course, no business can operate successfully without a good set of records, and as might be expected, their records help to put the figures in the profit column. Shown is a part of their records, which they call a visual control board. It

shows the status of each and every job handled, whether a service call, set in the shop or what have you. By knowing exactly what is going on at all times it is possible to schedule work out to the various departments in an efficient and orderly manner.

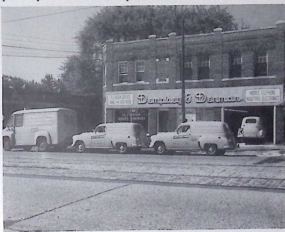
The cards shown are part of a master job sheet. When a call or a job is received and typed on this job sheet (consisting of four copies) the top copy is removed and placed under the proper heading. The other three copies go with the job until completed. During the various stages, the cards are moved from one heading to another depending on what is happening to the job it represents. When the job is completed it becomes the Master alphabetical customer file. All other information, such as, work done, price, etc., is on the other three sheets. Number 2 is the accounting copy and ends up in the Master numerical file. Number 3 is the customer's copy, and Number 4 is the stock control copy.

Even the little things play an important part. Take for example,



the delivery and service vehicles; they are kept spotlessly clean. It doesn't take much imagination to get the customer's viewpoint on that item. Who wouldn't have more confidence in, and give their business to, a firm who they can see is careful and thorough even on their own equipment.

We are proud to have this fine organization represent Philco Factory-Supervised Service and Philco Auto Radio Warranty Service in their area.



ARE YOU WILLING TO LEARN MORE?

(Continued from page 2)

tions, requiring more service calls and better trained servicemen everywhere. The greatest number of these men will be found and trained through Philco Factory-Supervised Service.

There is always more to be learned about new servicing techniques, new Philco developments, more about the theory of air conditioning. Your Distributor Service Manager, through his personally conducted service meetings, is equipped and ready to give you service hints, news about latest changes, and improved methods for quick, efficient servicing. More

knowledge means greater profits and more customers. Outline your individual problems, and you'll be given an answer at once, in most cases, or be assured that an answer is forthcoming in the very near future.

Improve your ability, increase your knowledge, and you will have broadened your opportunities for a greater share of service dollars!

MASS SERVICE AWARDS GIVEN IN PITTSBURGH



It took a special banquet at the Roosevelt Hotel, Pittsburgh, to present Philco Service Achievement Awards to twenty-seven Western Pennsylvania technicians for outstanding achievement in television and appliance servicing.

Sponsored locally by J. E. Miller Co., Inc., the Philco Distributor in Pittsburgh, the presentation honored another group of Philco

Factory-Supervised Servicemen who have consistently maintained the high standards set up as prerequisite for the award.

From the number of awards presented thus far, and considering those still to be given out before the year is up, it is clear that Philco Factory-Supervised Service is not lacking in the professional type of serviceman!

The tremendous value of the Service Achievement Award is too powerful to be ignored, and evidently is not by the customer. The psychological advantage of displaying an award of this type cannot be measured since we know the customer always insists on the best when he can get it! And this organization is trying to give him the best by calling attention to its ace technicians in all parts of the country.

In keeping with our policy of naming the winners, the men honored in Pittsburgh were (all from Pennsylvania): Leo E. Baer, Myersdale; Nick Fanelli, Pittsburgh; Wayne E. Bolland, Midland; Joseph Sheppard, Pittsburgh; Frank C. Humphrey, Reynoldsville; Arthur E. Lewis, Indiana; Stephen Nyalka, Pittsburgh; John Burisin, McKees Rocks; William T. Zafaras, Turtle Creek; William E. Strineman, Pittsburgh; Michael Tisler, New Kensington; Michael Silinsky, Pittsburgh; Mathew J. Ruascher, Jr., Arnold; William J. Edsall, Derry; Leo J. Hoffman, Windber; Wendell D. Coffin, Uniontown; Joseph Vargo, Uniontown; James W. Mills, Beaver; Peter Stampo, Pittsburgh; Joseph J. Grindel, Jr., Pittsburgh; Clarence Henderson, Washington; Samuel Ross, New Eagle; Michael Fiorilli, Pittsburgh; Vernon M. Edmonds, Tarentum; Fred Feicht, Karns City; Edward Giebel, Meridian; George Shelly, Pittsburgh.

50 CYCLE-60 CYCLE PHONOGRAPH OPERATION

(Continued from page 1)

The solid brass motor mountings supplied with the above kit are for the purpose of lessening rumble caused by motor vibration. It has been found that rubber shock mounting provides best results with a motor operating from a 60 cycle supply. However, the conditions are so changed when operating from a 50 cycle supply, that optimum rumble attenuation is provided by mechanically coupling the mass of the changer to the motor itself.

To convert a 50 cycle motor to operate correctly on 60 cycles, follow the above instructions with the exception that the three 50 cycle

springs are removed and one spring, part number 56-7055-7, is placed on the large diameter of the motor shaft. The top of this spring should be flush with the step in the motor shaft but should not be far enough to permit contact with the drive belt.

This 60 cycle drive spring, part number 56-7055-7, can be used as

either a replacement on 60 cycle motors, or as a 50 to 60 cycle conversion on 50 cycle motors used in models M-8, M-9, M-9C, M-12C, M-20, M-22, and M-24.

The following list gives both 50 and 60 cycle motors and 50 cycle conversion kits for the above models.

Model	60 cycle only	50/60 cycle	50 cycle conversion kit
M-8	35-1332	35-1332-2	56-3630
M-9	35-1332	35-1332-2	56-3630
M-9C	35-1371	35-1413	40-7702
M-12C	35-1371	35-1413	40-7702
M-20	35-1430	35-1442	40-8680
M-22	35-1430	35-1442	40-8680
M-24	35-1430	35-1442	40-8680