# PHILCO SERVICEMAN



RADIO · MANUFACTURERS · SERVICE · NEWS

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## PHILCO GUARANTEE PLAN ANNOUNCED

# Benefits Everyone Connected With Business of Selling and Servicing Radios — Assures Customer of Best Performance

M ORE money for the dealer, more business for the serviceman, sales that stay sold are but a few of the many advantages of the PHILCO GUARANTEE PLAN, the biggest thing in the radio service industry since the formation of Radio Manufacturers Service.

Many PHILCO dealers have already been told about the new PHILCO GUARANTEE PLAN. Those who have not as yet heard about it will be contacted by the PHILCO distributor within a short time. The benefits to the dealer, the serviceman and the customer are almost boundless. Every live PHILCO dealer will want to know all he can about the plan and will certainly want to go along with it without delay.

#### Organized Performance Insurance

The PHILCO GUARANTEE PLAN is essentially an organized program for assuring the customer the best possible performance from his radio and at the same time paying the dealer for work which, at the present time, he is doing without any return. The plan costs the customer \$7.50 and automatically gives him the following:

- 1. A radio that he knows has been thoroughly inspected, tuned up and adjusted for local conditions by experts using equipment designed especially for the purpose.
- 2. A technically correct installation of his high-efficiency aerial.
- 3. A radio installation arranged for maximum satisfaction.
- 4. Detailed operating instructions with demonstrations.
- 5. A check-up in five days . . . to answer all questions and test performance.
- 6. A complete tune-up and tube test in thirty days to make sure that best results are being obtained and that the radio is properly adjusted to give many years of satisfactory performance.
- 7. A one-year service (labor) guarantee.

The benefits to the customer are obvious both to him and to the dealer. Every radio dealer knows that if the above operations are carried out, the customer will have far more enjoyment from his radio than if a haphazard installation is made. Without worry or complaining, he will get the maximum performance which was built into his radio. The cost of properly installing the aerial, plus a few service calls, would exceed that which he pays for the PLAN.

#### **Dealer Benefits**

The dealer benefits by getting a return in cash which he is not receiving at the present time. All those dealers who have kept accurate records of installation and follow-up expense in connection with the sale of modern radios will be quick to appreciate the saving in dollars this plan means to them, as well as the immeasurable advantage of having every new owner completely satisfied with both his radio and his radio dealer.

The dealer signs the PHILCO GUAR-ANTEE PLAN Franchise with his distributor and agrees to carry out the regulations completely on every PLAN sale of \$7.50 that he makes. For those dealers registered under the PLAN is optional whether they sell the plan with the sale of the radio or not. However, a comparison of selling with and with-out the PLAN shows that the advantages are so great when the PLAN is used that undoubtedly practically all sales will include it. A quick comparison can be made by listing what happens in two typical cases, one of a radio sold "over the counter" and one sold under the PHILCO GUARANTEE PLAN:

#### OVER THE COUNTER

In Store:

Dealer must check radio and set stations for automatic tuning. (Part of sales expense.)

Aerial Installation:

Dealer installs aerial at home. Cost, \$2.50—collects \$2.50.

Radio Installation:

Dealer installs set and shows customer how to operate.

Cost, \$1.00-collects \$0.00

First Service Call:

Usually the customer has numerous questions regarding the operation within one week and phones for a serviceman.

Cost, \$1.00-collects \$0.00.

Second Service Call:

After about one month customer has become familiar with the radio and also quite critical regarding performance and phones again for a serviceman.

Cost, \$1.50—collects \$0.00.



Customer's Coupon Book, PHILCO Guarantee Plan.

#### PHILCO GUARANTEE PLAN

In Store:

Dealer must check radio and set stations for automatic tuning. (Part of sales expense.)

Aerial Installation:

Aerial installation paid for under the PLAN.

Radio Installation:

Installation completed and operating; instructions paid for by the PLAN.

First Service Call:

The five-day service call included in the PLAN takes care of this,

Second Service Call:

The thirty-day service call under the PLAN handles this, and if the operations are properly carried out which are scheduled for this thirty-day call, further service calls will not be necessary.

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# SETTING STATIONS ON NEW 1938 CONE-CENTRIC AUTOMATIC TUNING MODELS...

### Using the Philco Station Setter Model 077 and Philco Wrench Part 45-2475

 $I^{\rm T}$  is necessary to set the cone-centric automatic tuning stops to the various stations marked on the dial at the time the radio is being set up for operation.

Setting up automatic tuning models of the new 1938 line is a comparatively simple operation. In order to make sure that the correct procedure is followed, these detailed instructions have been prepared with a view of giving every PHILCO dealer and serviceman a clear and concise picture of the correct procedure.

This work requires the use of the new PHILCO Model 077 Station Setter and a Part No. 45-2475 Station-Stop Wrench.

There are three steps required in setting up cone-centric automatic tuning models.

- I. Installing the special local dial.
- II. Adjusting the Model 077 Station Setter to the receiver.
- III. Setting the station-stop for each station on the dial.

#### I. Installing the Dial

- A. Remove the tuning knobs from the station selector arm.
- B. Remove the small screws on either side of the station selector knobs and take off station-stop cover.
- C. Press in the knurled bezel, turn counter-clockwise and remove.
- D. Remove the station finder hand by drawing it straight out and away from the radio chassis. This hand is keyed in its correct position and is pressed on to the end of its shaft. Be sure to draw it straight away from the set. Do not turn the hand as you take it off.
- E. Remove dial retaining round spring.
- F. Remove the dial furnished with the receiver.
- G. Place the dial in position, which is fixed automatically by an index.
- H. Place the round retaining spring over the dial edge.
- I. Replace the finder hand and the



Model 077 Station Setter.

#### II. Adjusting the Model 077 Station Setter to the Receiver

- A. The receiver is turned on and set for operation on the broadcast band. The receiver is tuned to 540 K.C. and the volume control set about halfway on. The tone control should be in the "normal" position, and a PHILCO High-Efficiency Aerial should be connected to the receiver.
- B. The PHILCO Model 077 Station Setter is plugged in and turned on.
- C. The range switch is turned to Range B and the modulation control set to unmodulated.
- D. The output leads of the station setter are plugged into the "ground" and "medium" posts.
- E. The clip lead from the Model 077 Station Setter is then clipped to the insulation on the wire that is soldered to the middle section of the tuning condenser gang of Model 4 (see Fig. 2). In the Model 7 the lead is clipped to the insulation on the wire that is soldered to the rear section (nearest the back of the radio) of the tuning condenser.
- F. The other station setter lead is connected to the radio chassis.

- G. The station setter is tuned to 470 K.C.
- H. As the tuning indicator of the station setter approaches 470 K.C. a hiss will be heard in the radio set. As the tuning indicator passes 470 K.C. there will be two pronounced loud peaks of hiss with a minimum position in between.
- I. The Model 077 Station Setter must be adjusted to the point of minimum hiss in between the two peaks.

## III. Setting Station-Stops for Automatic Tuning

- A. As shipped by PHILCO, the stops are closely placed together on the left side of the dial.
- B. The station nearest 550 desired on the dial scale must be aligned first. The next stop is then used for the next station higher in frequency, and so on for the rest of the stations.
- C. Rotate the tuning handle to the left until it is directly over the first stop.
  - 1. Press knob in to engage stop.
- 2. Holding knob in this position. insert the PHILCO Wrench, Part No. 45-2475, in the hole of the tuning



# MODEL 077 STATION SETTER AND STATION SETTING WRENCH ESSENTIAL EQUIPMENT



Fig. 2. Connecting station setter output lead wire on tuning condenser.

knob until it engages the stop screw head (see Fig. 3).

- 3. Turn wrench counter-clockwise to loosen screw.
- 4. When screw is loose, rotate tuning handle until station finder hand is at the station to be received. Be careful to keep tuning handle and wrench engaged with the station stop, so that the stop is moved along its track to the position it is to occupy for automatically tuning the station.

- D. As the station finder hand approaches the desired station a whistle will be heard—first very shrill and then gradually getting lower in frequency as the station is tuned in.
- 1. When the whistle is first heard, tune with slow-speed station selector knob.
- 2. At the exact point at which the station is perfectly tuned, this low-frequency whistle will no longer be heard. This is the exact point at which the station-indexing stop must be locked.
- 3. When this point is reached turn the wrench clockwise and lock the stop in position, being careful when tightening screw that the station is not detuned, which would cause whistle to reappear.
- 4. If the whistle reappears after tightening screw, repeat the above procedure (III D).
- E. The procedure given in paragraphs III C and III D is followed in setting the remaining stations.



Fig. 3. Tuning handle and wrench engaging stop.

## IMPORTANT NOTICE

PHILCO distributors are holding group service meetings this month to explain the details of the various new Philco models. Demonstrations are being given on the correct method of setting up the new automatic tuning models. Don't fail to attend this important meeting . . . Ask your distributor for the date.

## PHILCO GUARANTEE PLAN

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One-Year Service:

Most dealers are forced (or perhaps wish) to give free service until the time payments are completed. With improper installation and adjustment of the radio, it is possible that several calls will be necessary in this time. If only one such call is necessary, it costs money.

Cost, \$1.50-collects \$0.00.

TOTAL COST, \$7.50—COLLECT \$2.50.

One-Year Service:

PHILCO engineering skill has practically eliminated parts failures. Therefore, if the various operations listed in the PLAN are correctly carried out, service calls between the scheduled thirty-day call and the end of the one-year period will seldom be made.

TOTAL COST, \$7.50—COLLECT \$7.50

The customer gets all of these things in the PHILCO GUARANTEE PLAN plus a one-year service guarantee:

#### Work Done in Store

The following operations are done in the dealer's shop before delivery of set:

A thorough inspection, test and adjustment of the radio to be performed in the store immediately after unpacking.

Because of the intricate and precision mechanisms employed in modern radios, it is highly desirable that the operation be thoroughly checked in the store before delivery to the customer.

PHILCO does not advise dealers to unpack a new receiver in the customer's home and make immediate installation.

#### Work Done in Home

The following work is done in the owner's home at time of installation.

- 1. Correct installation of the PHILCO High-Efficiency Aerial on the roof of the house.
- 2. Installation of lightning arrestor; making ground connection to receiver; also external ground on antenna transformer to improve noise reduction.
- 3. Installing the set in the location desired in the house and connecting to aerial, ground and power supply.
- 4. Setting up the dial, checking location of favorite stations on the dial.
- \* All electrical adjustments are made by PHILCO-trained members of Radio Manufacturers Service, using precision test instruments designed and approved by PHILCO for use in checking PHILCO radios.

5. Full and detailed instructions to purchaser on tuning the receiver both on American and foreign stations, and the adjusting of all controls so as to get maximum performance on all types of broadcasts.

The following is done approximately five days after installation of radio.

Call-back on purchaser from three to six days after installation (at a time pre-arranged for convenience) to give any further instructions necessary on tuning, answer any questions and clear up any points on which owner may be doubtful.

#### 30 Day Check-Up

The operations listed below are performed after the radio has been in use for thirty days.

Complete check-up, inspection and final adjustment of receiver approximately thirty days after date of installation. This includes the following operations:\*

- 1. Individual test of each tube in set and replacement of any unbalanced ones.
- 2. Check operation of all controls to make sure of free movement without binding or excessive looseness.
- 3. Check alignment of all antenna circuit compensators.
- 4. Check alignment of all R.F. circuit compensators.
- \* All operations are done by PHILCOtrained members of Radio Manufacturers Service; electrical adjustments with precision test instruments designed and approved by PHILCO.

- 5. Check alignment of all oscillator circuit compensators.
- Check alignment of all I.F. circuit compensators.
- 7. Check alignment of all discriminator circuit compensators.
- 8. Test operation of dial and check location of stations.
- 9. Make any changes in or additions to stations located on dial as desired by customer.
- 10. Check operation of automatic control circuits on both standard broadcast (varies on different models) and short-wave stations.
- 11. Tune in one or more programs on each band (section) of all tuning ranges and observe if performance is satisfactory.
- 12. Note tone of speaker on various types of musical and vocal programs. Adjust if necessary.
- 13. Check installation of aerial, lightning arrestor, grounds and power plug.
  - 14. Clean and polish cabinet.

#### One Year's Service

In addition to all of the above checks and inspections, a one year's service guarantee applies to this radio. This one year's guarantee covers any necessary work between the thirty-day tuneup and the end of the year, but does not cover material used after the standard radio warranty of ninety days. Free replacement of any defective parts or tubes within ninety days is covered by the standard radio warranty.

Every PHILCO dealer will want to use the PHILCO GUARANTEE PLAN. He will make more money in two ways: First, by collecting \$7.50 from the customer for work which is done at present for about \$2.50. Second, his sales will stay sold, and thus he avoids the tremendous losses of reverts. He will benefit through customer satisfaction. which is one of the most important factors in the radio industry. The franchised PHILCO GUARANTEE PLAN dealer will get more new business through his satisfied customers. Be sure to find out from your PHILCO distributor now the requirements for the PHILCO GUARANTEE PLAN Franchise so that you can get started without