

SETTING STATIONS ON CONE-CENTRIC AUTOMATIC TUNING MODELS . . .

Using the Philco Station Setter Model 077 and Philco Wrench No. 45-2475



Setting up Automatic Tuning Models is a straightforward operation. In order to make sure that the correct procedure is followed, these detailed instructions have been prepared.

This work requires the use of a 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 SPECIAL LOCAL DIAL.

- A. Remove the tuning knobs from the Station Selector arm. The knobs are held in position by a special knob screw which has a screw driver slot in the end. To remove the knobs, separate them and grasp the shaft with a pair of pliers. It is important that the pliers hold the shaft in between the two knobs so as not to damage the spring which disengages the slow-speed tuning knob. The knob screw can be removed while holding the shaft with pliers.
- 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.

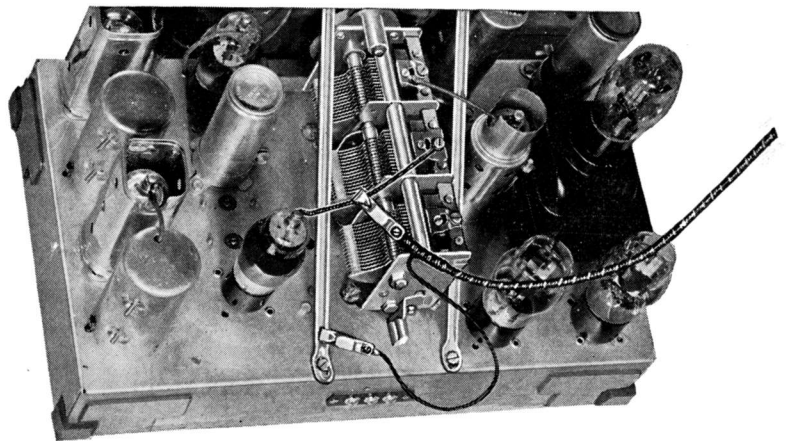


Fig. 1—Connecting Station Setter Output Lead to Wire on Tuning Condenser

- 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 round dial-retaining spring.
- F. Remove the dial furnished with the receiver.
- G. Place the special local 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 bezel.
- J. Replace knobs but not cover plate.

II. ADJUSTING THE MODEL 077 STATION SETTER TO THE RECEIVER

NOTE: The receiver and station setter must be turned on for 5 minutes before performing the following adjustments.

- A. The receiver is turned on and set for operation on the broadcast band. The receiver is tuned to approximately 540 K.C. and the

volume control set about half way on. The tone control should be in the "normal" position.

- B. The Philco Model 077 Station Setter is plugged in and turned on.
- C. The "Band Switch" is turned to Range B, and the modulation control set to "Mod off".



Fig. 2—Tuning Handle and Wrench Engaging stop

- D. The output leads of the Station Setter are plugged into the "ground" and "high" posts, and the "multiplier" and "attenuator" controls set to maximum.
- 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. 1.) 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.
- J. Connect a Philco High Efficiency Aerial to the receiver.

III. SETTING STATION-STOP FOR AUTOMATIC TUNING

- A. As shipped by Philco the stops are closely placed together on the right side of the dial.
- B. The station nearest 1500 desired on the dial scale must be aligned first. The next stop is then used for the next station lower in frequency, and so on for the rest of the stations.
- C. Rotate the tuning handle to the right 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 knob until it engages the stop screw head. (See Fig 2.)
 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.