

PHILCO RADIO-PHONOGRAPH MODEL 46-1203

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# INSTRUCTIONS <br> for <br> PHILCO RADIO-PHONOGRAPH MODEL 46-1203 

This Philco radio-phonograph combination is designed to operate from a power source of 115 volts, alternating current (A.C.). Make sure that the power-line frequency (cycles) in your locality is the same as that specified on the tube label attached to the cabinet. The radio receiver is a six-tube superheterodyne with a tuning range from 540 to 1600 kilocycles (kc.), covering the broadcast band; the tuning scale is calibrated in kilocycles. The phonograph employs a fully automatic record changer, which is designed to handle either 10 -inch or 12 -inch records.

## INSTALLATION

Note: During all installation or inspection procedures, be sure the power-line cord is disconnected from the power outlet.


1. After unpacking the radio-phonograph, remove all cardboard, packing material, tags, etc., from the chassis and cabinet. Follow carefully any supplementary instructions which may be printed on the tags. Make sure that all tubes are pushed down firmly in their correct sockets. The proper location of each tube is indicated on the tube label attached to the cabinet.
2. A loop-type aerial, built into the cabinet, provides excellent reception in most locations. If there are no local broadcast stations in your area, the use of an external aerial is recommended. An insulated wire approximately 20 feet long, placed around the baseboard of the room or under the rug, will usually be satisfactory. To attach the external aerial to the receiver, remove the connector which is secured by a screw to the back of the chassis, at the lower left-hand corner, as shown in drawing "A." Remove the insulation from one end and fasten the wire to the connector, as shown in drawing " $B$ "; tape the exposed metal parts of the connection. Avoid contact between the bare wire and any metal object. If the receiver is later operated with its built-in aerial only, be sure to place the connector under the screw on the chassis, as shown in drawing "A," and tighten the screw. A ground connection should not be made to this receiver.
3. If no extra aerial is used, place the radiophonograph in a location which is clear of large metal objects. If it is placed too near such objects,
 reception may be weak.
4. Connect the power-cord plug to an outlet of the correct voltage and frequency, as indicated above. If there is any doubt as to the voltage and frequency in your locality, consult the local power company. If a slight hum is heard when the radio is operated at low volume, reverse the position of the plug in the outlet.

## RADIO OPERATION



## CONTROLS

1. MASTER OFF-ON SWITCH, PHONO-RADIO SELECTOR, AND VOLUME CONTROL.

With this control at its center position, both the receiver and the phonograph are off. Turning the control to the right, from its center (OFF) position, turns the receiver on; continued turning in the same direction increases the volume of the receiver. Turning the control to the left, from its center (OFF) position, turns the phonograph on; continued turning in the same direction increases the volume of the phonograph.
2. TUNING CONTROL.

This control selects stations of different frequencies within the broadcast band, as indicated by the pointer on the tuning scale.

## 3. TONE CONTROL.

When set to its left-hand position, this control emphasizes the treble (high) tones. When set to its right-hand position, it emphasizes the bass (low) tones. The left-hand position is recommended for voice and for music when high-note reproduction is desired. The right-hand position is recommended for music when mellowness is desired, or when reception is unusually noisy. This control may be used in the operation of both radio and phonograph.

## RADIO OPERATING PROCEDURE

1. Turn the master switch to the right, from its center (OFF) position, until a click is heard and the tuning scale is illuminated. Continue turning the control to a point about halfway between its center and extreme right positions.
2. After allowing a short time for the tubes to heat, turn the tuning control until the desired station is heard.
3. Reduce the volume by turning the master control to the left until the station can just be heard, and readjust the tuning control carefully.

## IMPORTANT

When tuning a radio with the volume control turned too high, it is difficult to locate the point where the station is exactly tuned in. If the station is not tuned in properly, one or more of the following conditions may be noticed:

1. Distortion (poor tone quality).
2. Interference from other stations operating on adjacent frequency channels.
3. An increase in noise (static) either from atmosphetic conditions or from some local electrical device.

After the exact setting of the tuning control has been made, adjust the volume to the desired level with the volume control. Do not control the volume of the receiver by changing the setting of the tuning control.
4. If the receiver is operated with the built-in aerial, with no extra aerial attached, turning the cabinet to different positions on the table will cause variations in volume, especially when the receiver is tuned to a weak or distant station. This directional effect is a characteristic of all built-in aerials of the "loop" type. In many instances this characteristic can be used to advantage in reducing noise or station interference. For the best reception, place the cabinet in a position which reduces the volume of the interference and increases the volume of the desired station; the best position for the cabinet varies for different stations.
5. Set the tone control for the desired tonal quality.

## PHONOGRAPH OPERATION



## CONTROLS

In addition to the master control and the tone control, which are described under "RADIO OPERATION," the following controls, located under the cabinet lid, are also used in the operation of the phonograph:

1. OFF-ON SWITCH

With this control set to the OFF position, the phonograph mechanism is inoperative. With the control set to the ON position, the phonograph mechanism is operative. Note: For phonograph operation the master control must be turned to the left, from its center (OFF) position.

## 2. AUTOMATIC-MANUAL SELECTOR

With this control set to the AUT. position, the automatic changer mechanism is operative. With the control set to the MAN. position, the automatic changer is inoperative, and records must be handled manually. Note: For either automatic or manual operation of the phonograph, the off-on switch must be set to the ON position.

## 3. REJECT SWITCH

When this control is pushed to the left, with the automatic-manual selector in the AU'T. position, automatic operation of the phonograph is started, or an unwanted record is rejected.

## AUTOMATIC OPERATING PROCEDURE

1. Turn the master control to the left, away from its center (OFF) position, until a click is heard and the tuning scale is illuminated.
2. Raise the cabinet lid. Note: The tone arm should be in position on the tone-arm rest. If it is not on the rest, allow the changer to complete its cycle before placing it on the rest.
3. Set the two record supports and the record shelf for the particular size of records to be played. For 10 -inch records the long arms of the supports should extend toward the spindle, and the shelf should be turned to its extreme clockwise position. For 12 -inch records the short arms of the supports should extend toward the spindle, and the shelf should be turned to its extreme counterclockwise position.
4. Carefully place a maximum of twelve 10 -inch, or ten 12 -inch, records on the spindle so that the bottom record rests on the record supports and the shelf.
5. Set the automatic-manual selector to the AUT. position.
6. Set the off-on switch to the ON position.
7. Push the reject switch to the left, and release. The bottom record will drop onto the turntable, and the cycle of operation will start.
8. Adjust the volume control and tone control for the desired volume and tonal quality.
9. To reject a record at any time during the operation of the changer, push the reject switch to the left, and release.
10. WHEN IT IS DESIRED TO STOP THE CHANGER, ALLOW THE TONE ARM TO RESET ITSELF AT THE OUTSIDE GROOVE OF THE RECORD. CAREFULLY LIFT THE TONE ARM TO ITS REST, AND SET THE OFF-ON SWITCH TO THE "OFF" POSITION.

## 11. Turn the master control to its center (OFF) position.

12. When the phonograph is not in use, remove the records supported by the record supports and the record shelf.

## CAUTIONS

1. The changer is equipped with safety features so that the tone arm can be moved, or the changer stopped, during the change cycle without damage to the tone arm or any adjustments. However, it is good practice to avoid stopping the changer or touching the tone arm during the change cycle.
2. Do not overload the changer. The maximum load is twelve 10 inch, or ten 12 -inch, records.
3. Do not leave records on the record supports, or the records may become warped.

## MANUAL OPERATING PROCEDURE

1. Turn the master control to the left, away from its center (OFF) position, until a click is heard and the tuning scale is illuminated.
2. Raise the cabinet lid; turn the two record supports and the record shelf to the 12 -inch setting.
3. Set the automatic-manual selector to the MAN. position.
4. Carefully place the record to be played on the turntable.
5. Set the off-on switch to the ON position.
6. Carefully place the tone arm onto the record so that the needle rests in the starting groove, and adjust the volume control and tone control for the desired volume and tonal quality.
7. After the record has been played, carefully lift the tone arm to its rest. Or, if desired, push the reject switch to the left, and release; the tone arm will automatically reset itself onto the tone-arm rest. This action is a special feature of the phonograph mechanism. If no other records are to be played, set the off-on switch to the OFF position.
8. Turn the master control to its center (OFF) position.

## TONE ARM

## REPLACING THE NEEDLE

To replace the pickup needle, hold the old needle firmly to support the crystal, and loosen the needle screw on the end of the tone arm with a small screwdriver. Remove the old needle, and insert the new one as far into the needle hole as it will go, with the flat side of the shank facing toward the needle screw. Hold the needle firmly in the proper position, and tighten the needle screw.

The tone arm of this phonograph is equipped with a highquality crystal pickup. It rests lightly on the record, to provide long record life. The preciousmetal needle used should last through the playing of several thousand records.

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Your new Philco is a high quality instrument. It has been built with care and skill and is delivered to you with a promise of years of pleasure and satisfaction.

To fulfill that promise, first of all, your Philco is guaranteed under the terms of the Standard Warranty below. But beyond this, Philco maintains an extensive fac-tory-trained service organization of its distributors, dealers and servicemen, which is constantly available to you as a Philco owner. It is an added value which comes to you with every Philco product.

In accordance with this policy, it is your Philco dealer's desire and responsibility to render any service required under and during the period of the warranty. After the expiration of the warranty, he will be equally helpful in securing necessary repairs and adjustments for you, either in his own shop at reasonable cost or by referring you to a nearby member of "Philco Service," a world-wide association of appliance servicemen.

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## STANDARD WARRANTY

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[^0]:    "We warrant each new Pbilco Radio Receiver and Speaker to be free from defects in material and workmanship under normal use and service, our obligation under this warranty being limited to making good at our depot any part or parts thereof which shall, within ninety (90) days after delivery of such Receiver to the original retail purchaser, be returned to our depot with transportation charges prepaid, and which our examination shall disclose to our satisfaction to bave been thus defective; this warranty being expressly in lieu of all other warranties expressed or implied, and of all other obligations or liabilities on our part, and we neither assume nor authorize any representative or other person to assume for us any other liability in connection with the sale of Receivers or Speakers.

    This warranty shall not apply to any Receiver or Speaker which shall bave been repaired or altered other than by us in any way so as, in our judgment, to affect its stability, or reliability, nor which bas been sutject to misuse, negligence or accident, nor which bas bad the serial number altered, effaced or removed. Neither shall this warranty, apply to any Receiver or Speaker which has been connected otherwise than in accordance with the instructions furnished by us."

