## NEW GOLD RUSH PROMOTION HAS 'PARTS' NUGGETS

Outstanding Values Featured
On Many Accessory Items
During This 3-Month Promotion

Great news for Philco dealers and servicemen is the gigantic No. 5 Philco Accessory Gold Rush Promotion for three months—September 12 through November 30.

Bargains galore on red-hot items will skyrocket profits for Philco dealers and servicemen in every part of the country. And there are parts and accessories included in this terrific No. 5 Gold Rush Promotion that will gladden the heart of every dealer and serviceman, whether he's in home radio, auto radio, or TV.

#### **Announcement Mailed**

You've probably received by mail the colorful broadside announcing this final drive for big nuggets. Initial announcement of this great Philco Accessory Promotion raised nationwide enthusiasm to fever pitch. Because here are some of the red-hot "in demand" items included:

Universal coils, record changers, Philco universal and other speakers, phonograph needles and volume controls, enough to simplify the work and increase efficiency of every radio serviceman.

#### **Push Profits**

Vibrators, rear-seat speakers, and test equipment, to push profits of radio servicemen and dealers way beyond the anticipated goal.

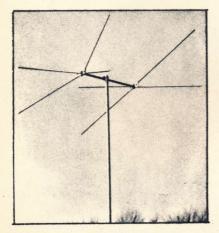
And television aerials and portable batteries will zoom profits of dealers and servicemen in every part of the country.



Yes sir, Philco again leads the industry with the greatest profit-cooperation plan for dealers and servicemen in many a day. So be sure to keep your eye tuned to mail from your Philco Distributor. And stop in to see him right away. For the Philco No. 5 Accessory Gold Rush Promotion is moving right now for greater profits, and you can move with it—by stopping in right away at your Philco Distributor.

## Conical High-Gain TV Aerials Recently Announced By Philco

Philco has announced the introduction of a brand-new line of conical, or fan-type television aerials, designed for effective TV reception in fringe areas and localities where obstacles cause weak signals and reflection interference.



Conical High-Gain Aerial

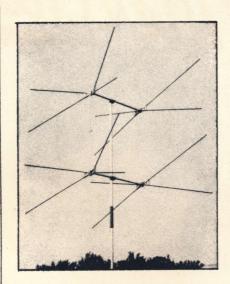
Aluminum components are used in thoroughly engineered designs, for maximum weather protection. And the famous Philco engineering laboratories have set specifications for these new television aerials after extensive field tests and design considerations.

These specifications insure maximum signal pickup and reflection rejection. Designed on the basis of the conical shape, which theoretically offers very broad frequency response, the new Philco Conical Television Aerials are modified to the "X", or fan, shape through practical considerations and many field tests.

Reflectors are used for increased signal pickup through directional characteristics, which also increases "ghost" rejection and other forms of directional interference.

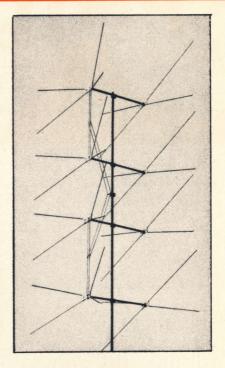
Three new Philco Conical Television Aerial kits are available. Each aerial features 4-to-1 front-to-back ratio on all frequencies; low inception angle; full audio and video band pass; high efficiency on Channels 2 to 13, and the use of 72, 150, or 300-ohm transmission lines. Only one leadin is needed.

The Conical High-Gain Aerial kit with reflectors is ordered by Part No. 45-1673. List price \$18.00.



Stacked Conical Aerial

The Conical High-Gain Stacked Array Aerial kit is ordered by Part No. 45-1674. List price \$36.00. This kit is used when more directivity is desired than is obtainable with the single aerial.



Super-Stacked Conical Aerial

The Super-Stacked Conical Aerial kit offers the utmost in directivity, for signal pickup and "ghost" rejection. It is ordered by Part No. 45-1675. List price \$75.00.

These new Philco aerials are available at your Philco Distributor.

## Hints On Beating Humid Conditions With Proper Refrigerator Operation

The continued spell of hot weather in some sections of the country has resulted in praise of the admirable job being done by Philco Advanced Design Refrigerators.

However, some reports of abnormal food-compartment temperatures have resulted in investigation by field engineers, who have found that improper operation of Philco Advanced Design Refrigerators by consumers has resulted in complaints.

The field engineers found that, in most cases, the trouble is usually eliminated by explanation of the features which have been built into these refrigerators, so that the customer may enjoy the advantages to the utmost.

Here are some of the reasons reported to cause abnormal cabinet temperatures:

Poor door seal or poor cabinet seal.

Improper setting of the tempera-



ture control, and improper position of the humidity control.

Abnormal frosting on the evaporator, indicating failure to defrost regularly.

Insufficient ventilation in the unit compartment, due to leveling feet being run up tightly.

Refrigerator installed against the wall with insufficient clearance, re(Continued on page 7)



### Philco Announces New Profitable Items

Here's happy news for Philco dealers and servicemen—new items in the great Philco Accessory line that will mean more profits and more sales than ever before.

It's the new Philco Flashlite and Philco Pen-Lite—items which will light the way to bigger and better ledger totals. For not only do these new Philco Flashlites and Philco Pen-Lites have the fine quality in materials and dependability characteristic of all Philco products, but in addition, are packaged in attractive, colorful merchandising cartons which make them easy to display and easy to sell.

Once you see them, you'll like

them—just like your customers. For they're the sturdiest, most dependable lighting devices you've ever seen. Specially processed metals are used to withstand rough treatment, and springs and contacts are rust and corrosion resistant.

The new Philco Pen-Lites feature the outstanding bearing rotary switch, for effortless, wearless, and perfectcontact on-off action.

These brand-new, sales-appealing Philco Flashlites and Philco Pen-Lites are available at your Philco Distributor. Be sure to show these dependable, attractively merchandised, and profitable items in your counter or window display today.

## On Fixing The Studebaker Reel Aerial

An auto radio member of PHILCO SERVICE reports a simple method of fixing the Studebaker Reel Aerial if the flexible shaft breaks away from the rod.

This aerial, Part No. 91-0256, is extended or pulled down by a knob control inside the car. In some cases, the flexible shaft may pull out of the rod.

Proper method of insertion and soldering is explained in Service Bul-



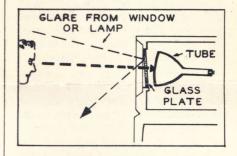
letin PR-1722 sent to auto radio members of PHILCO SERVICE.

The member reports that the repair is an easy soldering job, and any warranty station can handle this minor fix.

## New Philco TV Ends 'Glare'

A "No Glare" optical system, developed by Philco engineers, which diverts reflections from lights, room objects, or windows, to the floor and away from the television screen has been introduced by Philco in the 1950 television line.

This new system enables television to be viewed in a lighted room without any of the annoying glare and reflections from inside or outside light. This makes for more comfortable viewing, as authorities agree that television should not be viewed in a darkened room where the pupils of the eyes open wide and thus tire more quickly, because of the concentration on the light from the picture tube.



In the Philco "No Glare" system, the picture tube is tilted backward, so that the viewer looks slightly downward at the screen, at the scientifically correct angle to his normal line of vision. A glass plate has been tilted forward in front of the tube, so that distracting reflections from room lights or windows cannot strike the eye, as they are reflected to the floor, and no stray light hits the picture tube to reduce brightness or contract

To further reduce the glare, the picture mask area is covered with a special green lacquer which was developed during the war for camouflage purposes, to provide the maximum reduction in reflection.

This "No Glare" feature means that lights can be used in the same room with these new 1950 Philco models without regard to the exact placement of the lights, and that these new receivers can be placed anywhere in the room, even directly in front of, or opposite, large windows.

## NEW PHILCO TV CIRCUIT DESIGN ELIMINATES L-V POWER SUPPLY

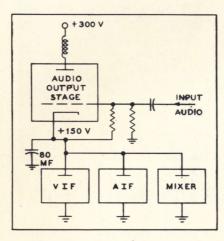
Philco's constant efforts to bring the public quality merchandise economically has again produced a circuit that definitely reduces costs, and does so without any reduction of performance or quality.

This unusual circuit eliminates the need for two low-voltage power supplies. To meet the requirements of some television receivers, the power supply must furnish one "B" supply of approximately 300 volts for the sweep circuits, and another "B" supply of approximately 150 volts for the video and sound i-f circuits.

Two separate power supplies were used to furnish these voltages, because the use of a single power supply in conjunction with a large voltage-dropping resistor developed too much heat, and increased the power consumption. The new circuit overcomes this handicap by utilizing the voltage drop in the audio output stage.

In other words, the audio output stage substitutes for the high-wattage dropping resistor, thereby eliminating the wasted power consumption in the dropping resistor, and also eliminating any new source of heat.

As shown by the simplified block diagram, the audio output stage is in series with the video i-f, sound i-f, and mixer stages. The entire circuit is connected from the +300-volt supply to chassis ground.



The drop across the audio output stage is approximately 150 volts, leaving a remainder of 150 volts, which acts as a low-voltage supply for the other circuits.

Audio variations are filtered from this 150-volt supply by a large 80-mf. electrolytic condenser.

This new circuit design is incorporated in Philco Television Models 50-1104, 50-1105, 50-1106, and many other brand-new Television models.

For instance, one of the most important single items in aligning television receivers is the method of connecting the signal generator. There must be a stable ground connection and a firm, dependable input connection, to prevent regeneration or instability.

Other TV test equipment used during alignment causes similar difficulties if not connected correctly and firmly.

### Jigs Aid Quick Alignment

Consistent reliable alignment of TV sets requires the use of alignment jigs. A group of alignment jigs have been designed for Philco television receivers, to be used with practically any make of test equipment, which permit the serviceman to do a much better and faster job, thus reducing call-backs which usually result in considerable customer dissatisfaction and a loss of profit to the serviceman.

#### Jigs Available

The Philco TV alignment jigs are: Part No. 45-1635, Cable for all test jigs suitable for connection to Philco TV Visual Aligner Model 7008; Philco AM Generator Model 7070, and Philco AM-FM Generator Model 7170.



#### Jig Connector Cable

Part No. 45-1636, Connector jig for stage-by-stage alignment of all model TV sets except those covered by Jig 45-1670.

Part No. 45-1637, Dummy aerial load for all 1948 TV sets.

Part No. 45-1638, Mixer test jig for television sets using the 8-channel upright turret tuner, Models 48-700, 48-1000, 48-1001, 48-1050, and 48-2500.

Part No. 1639, Mixer test jig for TV sets using the 8-channel *inverted turret tuner*, Models 49-1002, 49-1040, 49-1075, 49-1077, 49-1150, 49-1175, 49-1240, 49-1275, 49-1278, 49-1279, 49-1280, 49-1450, 49-1475, and 49-1480.

PHILC

Part No. 45-1670, I-f jig for stageby-stage alignment on 1949 Philco television sets with separate i-f subbase.

(Continued on page 8)

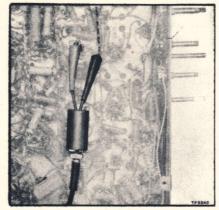
## Proper Alignment of Philco TV Aided By Six New Test Jigs

Proper alignment of television receivers is extremely important if sound and picture quality are to be peaked at their best values. However, many servicemen are finding that, even with good test equipment, and good television receivers, performance after alignment is not as good as desired.

#### **Troubles Result**

Troubles such as oscillation and motorboating in the sound section, and poor quality and oscillation in the video section, occur after test equipment is removed. In some cases, ordinary test probes introduce capacity effects. This causes oscillation and improper operation, making

alignment difficult as soon as certain test equipment is connected.



I. F. Jig

## 'BUT BEYOND THIS'— A STORY OF PHILCO SERVICE

"Your new Philco Television Receiver is a high-quality instrument. It has been built with care and skill and is designed to bring you years of pleasure and satisfaction. Your Philco instrument is guaranteed under the terms of the Standard Warranty, but beyond this—"

These few lines begin the forthright statement of Philco's guarantee on a Philco product. The last little



phrase—"but beyond this"—begins the story of an extensive factory-trained service organization that is constantly available to every Philco owner. Whether the product is Television, Radio, Refrigerator or any other Philco appliance, the members of this organization offer capable, reliable service at standard, reasonable labor charges; they guarantee their work, and they use only genuine Philco replacement parts.

PHILCO SERVICE members are as much a part of the Philco family as they are a part of every community in the nation. Numbering in the tens of thousands, all members receive mailings at frequent intervals which contain up-to-the minute information direct from the factory. This close factory tie-in gives each member the support of the entire Service and Engineering resources of Philco, but what is more important, it assures the consumer of good-quality service on all Philco products.

Only the most competent applicants are considered for membership in PHILCO SERVICE. With the cooperation of Philco Distributors, these candidates are given thorough training in schools conducted through-

out the country. Thousands of technicians have been trained in Television, for example, by qualifying and registering with the Philco Distributor for participation in a series of intensive, Factory-Supervised train-

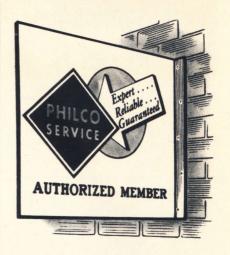


ing programs. These are conducted by men who have had full advantage of Philco's many years of experience in Television.

Because Philco believes in "learning by doing" these schools have a very practical approach. Each student is given ample opportunity to familiarize himself with all the latest Philco test equipment. He is also given current models of Television receivers to work on, and soon learns to solve all types of service problems. Class procedure has been carefully worked out by experts. The text material is constantly revised to meet new developments, while the lab projects are devoted to actual field conditions.

In keeping with Philco's policy of thoroughness, these schools are not operated on a one-time basis, but are constantly repeated. Refresher courses are scheduled at regular intervals for post-graduate study, and it is an inspiration to the industry to witness the eagerness with which these technicians pursue the training opportunities that Philco provides.

Philco has spent millions in research and engineering to produce the finest of products. Every Philco product thus produced carries with it the standard warranty—"but beyond this"—beyond this Philco has invested in each community the na-



tion over an organization of factorytrained product servicemen who are charged with the responsibility of serving you well. Look for the PHIL-CO SERVICE diamond that is the emblem which each member proudly displays and the symbol that proclaims his work to be EXPERT, RELIABLE and GUARANTEED.

## Single Tools In Kits Replaceable

Servicemen have written in bemoaning the fact that they have lost one or two of the parts in the Philco Tool Kits, Part Nos. 45-9514 and 45-9515.

The servicemen have requested that the blades and socket wrenches be made individually available.

We are happy to announce that this has been done, and that these parts may be ordered through your Philco Distributor by the following part numbers:

| Part No<br>Kit 1<br>45-95 | No. Description List                  | Price |
|---------------------------|---------------------------------------|-------|
| 45-9536                   | Handle                                | \$.76 |
| 45-9539                   | Screwdriver blade, 1/8", 4" long      | .37   |
| 45-9540                   | Screwdriver blade, 3/16", 4" long     | .45   |
| 45-9541                   | Screwdriver blade, 1/4", 5" long      | .42   |
| 45-9542                   | Screwdriver blade, No. 1 Phillips, 4" |       |
| 45-9543                   |                                       |       |
| Part N                    |                                       |       |
| Kit<br>45-9               | ito.                                  | Price |
| 45-9536                   | Handle                                | .76   |
| 45-9544                   | Hex wrench, 1/4" socket, 3" long      | .55   |
| 45-9545                   | Hex wrench, 5/16" socket, 3" long     | .55   |
| 45-9546                   | Hex wrench, 11/32" socket, 3" long    | .55   |
| 45-9547                   | Hex wrench, 3/8" socket, 3" long      | .64   |
| 45-9548                   | Hex wrench, 7/16" socket, 3" long     | .64   |
|                           |                                       |       |



## Philco Summertime Refresher Set Is 'Very Successful'

"The success story of the Philco Summertime Refresher Set promotion reads like a good story—inter-



esting from beginning to end." That's the way one of the many letters reads which we've received from people all over the country.

We'd like to thank all the people who've written us, telling us what a terrific promotion the Philco Accessory Summertime Refresher Set was, and how perfectly timed it was for the weather. Many of the letters praised the attractive packaging, and told of increased sales in refrigeration and other items, once the customers came in.

We'd like to add a word here, and explain that every Philco promotion

## Letters Praise Radio Component Handbook

We've received letters telling us how handy many servicemen have found the new special edition of the Radio Component Handbook, sponsored by Philco. The May issue of the Philco Service and Accessory Merchandiser included an announcement describing the new Handbook.

And we'd like to take this opportunity to mention again that the new Radio Component Handbook is the one that every radio engineer and technician has been waiting for. It's written by engineers and technicians with the "know-how" of over 20 years' experience in the design, application, and specification of radio components.

Tables, charts and curves, plus complete explanations on practical



points, make the book an invaluable reference. Be sure to get it at your Philco Distributor.

is planned with three factors in mind: sales appeal of promotional item; worth-while profit margin, and customer "draw", to help sales of other products.

These factors can be seen in every Philco Accessory promotion. Not only can the value be seen in the promotion itself, but the appeal and effect are readily observed in the profit ledgers of Philco dealers and servicemen in every part of the country.

WE'RE WAITING FOR MAIL FROM YOU. So send in your ideas, hints and kinks, or facts on any successful promotions you've run on Philco accessories or service.

# Philco Cooperates In PRSMA Meet And Promotion

The well-known Philco cooperation policy with servicemen is again being applied by helping in program preparation and showing equipment at the PRSMA Radio and Television Service Convention and Exhibit to be held September 18, 19 and 20 in Philadelphia.

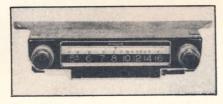
The convention is to be followed next month by an intense promotion of interest to servicemen's organizations throughout the country. The promotion, sponsored by PRSMA, the Philadelphia Radio Servicemen's Association, has the theme: October Is Radio's Preventive Maintenance month. This theme is to be promoted through spot radio announcements, direct mail pieces, and pointof-contact displays. Philco is assisting the campaign purely as a service to servicemen, by planing and designing many of the promotional details and material.

## \$10.00 Check Sent For Idea About Auto Radio Head

There's a \$10.00 check on its way to Mr. S. A. Sturms at Winston-Salem, N. C., for sending us a letter telling of a practical idea concerning the substitution replacement of control heads for automobile radios.

We'll quote Mr. Sturms' letter:

"In reading your Philco Service and Accessory Merchandiser for December, I have found that there is a \$10.00 check waiting for ideas submitted by servicemen or members. Here is something we have been doing at C. R. Williams & Son that might be of interest to you.



"The Ford Control Head (Philco Model C-627-M) can be used in place of the Philco Model C-600-M Universal Control Head. This is an idea you might pass on to all Philco auto radio servicemen in case they need a Model C-600-M Control Head in a hurry.

"I hope this information can be of use to you."

Thanks a lot for your letter, Mr. Sturms, and we're certain that this information will be of help to many servicemen.

And to all readers of the Philco Service and Accessory Merchandiser,

### PHILCO Service and Accessory MERCHANDISER

### Beating Humid Conditions . . .

(Continued from page 2) stricting air flow through the fluetype condenser.

Overcrowding and improper packing of foods in refrigerator.

Practically all of these causes of improper operation can be traced, directly or indirectly, to hurried installation techniques by dealers and servicemen. In the cases where improper operation is caused by incorrect settings of the temperature control and humidity control by the consumer, the job is again one of more thorough customer instruction by the installing dealer or serviceman.

Some customers have reported cases of high temperatures in their refrigerators, after using the average household thermometer and trying to take temperature readings at repeated intervals. This type of reading will show 10 to 12 degrees higher than the actual average food temperature in the cabinet. Actually, temperature readings with this type of thermometer should be taken by submerging the thermometer in a small jar or glass of water, and allowing sufficient time, preferably overnight, for the water and all associated parts to become the same temperature.

In areas where extreme heat and humidity conditions, and frequent opening of the door keep food-compartment temperatures from dropping sufficiently, the field engineers suggest removing the baffle seal gasket from the door liner, and plugging the holes on the liner with suitable buttons, or using the same buttons which hold the seal gasket to the liner.

When it is determined that the evaporator temperature is not low enough, remove the temperature-control feeler tube from the evaporator clamp, and cover the feeler tube at the clamping point with spaghetti tubing, then replace under the clamp. This will result in lower evaporator temperatures with resultant lower temperatures in the food compartment.

In extreme cases where room temperatures are very high, satisfactory cabinet temperatures can be maintained by temporarily removing the drain baffle. This should not be done generally, but is merely a suggestion where all other methods have proven ineffective. In all cases where this is done, it must be explained to the customer that it is necessary to reinstall the baffle to satisfactorily defrost the refrigerator.

The field engineers point out that

CONVENTIONAL, "L.P.", AND 45 RPM

RECORDS.

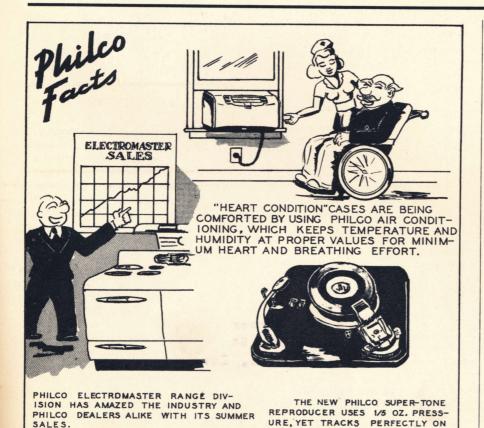
the field practices mentioned in the preceding paragraphs are hints for extreme cases. Satisfactory operation in most cases is obtained by observing proper installation and operation instructions, and making certain that the customer understands them.

#### MIKE FARAD Sex:



To "TELL THEM WHERE TO COME." I use a radio-service return Post Card that is personalized with my own imprint.

(PR 1536—1000 @ \$11.45 at your Philco Distributor)



### Your \$10.00 Check Is Waiting Here

That's right! If you're a dealer or serviceman, and if you've used any successful idea for promoting more business or speeding up service work, we want to hear about it. And for \$\$\$, too.

We're particularly interested in hearing about any promotion for selling Philco parts or accessories, such as tubes, batteries, aerials, and so on, or any gadget or system you've used in your service work that has really proved helpful.

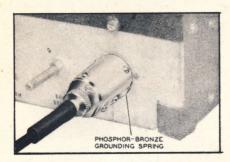
Every letter or photograph printed rates \$10.00. Material submitted becomes the property of Philco Corporation. If you can use a \$10.00 bill, think hard! Come up with a good idea, and then send your letter to us, right away! Address all mail for the Philco Service and Accessory Merchandiser to:

PHILCO CORPORATION
P. O. Box 6738
Philadelphia 32, Pa.

PHILCO Guality PARTS AND ACCESSORIES

### Proper Alignment . . .

(Continued from page 4)



R. F. Alignment Jig

Complete instructions are included with each jig. Be sure to get these time-saving jigs for better TV alignment now. They're at your Philco Distributor.

### HERBERT:



EVEN "FIBBER McGEE" HAS ONE— I BET.

October is radio's preventive maintenance month. Urge your customers to get all old "SLEEPERS" restored to first-class condition.

### Questions and Answers

- Q. How many TV receivers are in the new 1950 Philco television line?
- A. Seventeen models have been released, and all include the latest TV development, the Philco Electronic Built-In Aerial System. From 22 to 30 tubes are used in the new models, including the picture tube and rectifiers. All the receivers have tube rectifiers, not selenium.

There are 7 table models, including styles in blonde, mahogany, and plastic. Additional styles include 2 consoles, 2 consolettes, and 6 console combinations, thus making a complete line of 17 brand new TV receivers, each containing the latest developments in television research for sensitivity, picture quality, and stability.

- Q. What is the proper way to clean the inside of a Philco refrigerator?
- A. To prevent soap or other cleanser odors, and for health safety, refrigerator should be cleaned inside by the use of only baking soda and warm water. To clean the exterior finish of a refrigerator, use only Philco Refrigerator Polish, available at your Philco Distributor; this polish is made to clean and preserve the fine finish.
- Q. In the last issue of the Philco Service and Accessory Merchandiser, you stated in this column

- that 1949 air conditioners are hermetically sealed and need not be oiled. Is that correct?
- A. Thank you for calling this matter to our attention. Actually, the Philco air conditioner compressor unit is hermetically sealed. However, the fan motor is of the conventional type, and should be oiled periodically. Units in Philco freezers and refrigerators are hermetically sealed, and have no fan motors; hence they require no oiling, because all moving parts are within the sealed unit.
- Q. We'd like to buy a refrigerator, but we have 115 volt, 50 cycle power here. Does Philco make any units we can use?
- A. Standard Philco Refrigerators can be used simply by installing a Philco Autotransformer Kit, Part No. 8040-17, which includes the autotransformer and necessary hardware for quick installation on the refrigerator. Conversion autotransformers are also available for operation on 200-270 volts, 50/60 cycle. This kit is ordered by Part No. 8040-18. Complete instructions are included with each kit.

Any questions? Send them in. We'll do our best for an answer. Our address is just below to the left.

PHILCO CORPORATION
P. O. BOX 6738
PHILADELPHIA 32, PA.
RETURN POSTAGE GUARANTEED

### FOR:

R. W. Turner 3928 68th St Des Moines, Iowa Sec. 562, P. L. & R.
U. S. POSTAGE
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PHILADELPHIA, PA.
Permit No. 655

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POSTMASTER: If addressee has moved, notify sender on Form 3547, postage for which is guaranteed. When Form 3547 is sent, abandon this mailing. Return only if no correct address is available.