

PHILCO SERVICEMAN



RADIO • MANUFACTURERS • SERVICE • NEWS



SEPTEMBER, 1941

New Consulting Service to be Basis for Question and Answer Column

Philco national service facilities have always been available to servicemen everywhere, but now a new service is being started at Philco headquarters just for the benefit of servicemen.

Letters on service questions and problems covering all Philco products can be addressed to the Editor, Philco Serviceman, 1244 Dufferin Street, Toronto, Ontario and individual answers will be written. Philco wants you to take advantage of this consulting service, free of charge to you, so that you can do a better service job.

Adequate Service Facilities

One of the greatest factors which has been responsible for Philco's twelve straight years of sales leadership has been Philco service. The establishment and continued maintenance of adequate service facilities at Philco distributors in every key center; the organizing of Radio Manufacturers Service with its free distribution of technical service information to all members; the close co-operation between the Philco Factory Service Department and the Philco engineering and factory on quality. . . . all of these factors have helped to build up a product and a name that can be purchased with confidence. We and you want to do everything we can, not only to maintain that confidence with the buying public, but to increase it if possible.

Free Consultation Service

Whenever you have a perplexing technical question on Philco Radios and it is inconvenient for you to get to your local Philco distributor's Service Department for help, just sit down and write to Toronto, give us full information on model numbers and run numbers, together with operating symptoms and your diagnosis to date. We'll try to help you, and if we do not have the information on some unusual condition, we are only as far as the telephone from the world's finest radio engineering department at Philco. Just remember that Philco service engineers and Philco research engineers are close friends. We want you to take advantage of this valuable consulting service any time you wish.

Every Letter Answered

In addition to the individual replies which you will receive from Toronto, we will publish in the Philco Serviceman, along with the individual's name and city, those questions of general interest. Thus the question

HOUSEHOLD ACCESSORIES PROVIDE ENDLESS PROFIT CHAIN

The many accessory items in the Philco parts line offer dealers countless opportunity for extra profits, and the best part about such business is that it is constantly repeating itself, constantly bringing floor traffic into your store—live prospects for you to interest in new radios, new refrigerators and new merchandise of all types that you might have on your sales floor.

PHONO-COMBINATION OWNERS

For all phono combination owners there are Philco Record Albums to hold their favourite records. Finished in maroon leatherette, each album holds 10 records. The hinge of the album is specially designed so that any record is easily removed.

List
10" Size Records. Part 45-2834 \$2.25
12" Size Records. Part 45-2835 2.65



Part No. 40-6459 Record Player Needles

For combination owners not fortunate enough to possess the new Philco Beam-of-Light Model, there are three (3) different kinds of Record Player needles you can sell.

The standard needle package
Part 40-6459. List.....\$0.35 each
The 1000 record needle
Part 45-2726. List..... 1.35 each
The new 4000 record needle
List 1.90 each

and answer column of the Philco Serviceman will become the serviceman's own clearing house for information.

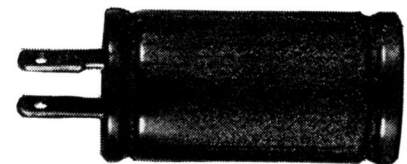
POLISHES FOR EVERY PURPOSE

For Radios and other Fine Furniture, there are three polishes. Wax Polish in soft paste form—
6½ oz. Part 45-1030. List.....\$.55
Philco Liquid Polish—8 oz. bottle
Part 45-1175. List75

For Refrigerators

Philco Refrigerator Cleaner and Polish—8 oz. Part 8020-3. List \$.80
And to complete the new polish line, there is the new Philco Wax Base polish and cleaner for use on all finishes of furniture, refrigerators or automobiles, etc. Part 45-2930. List \$.75

NOISE ELIMINATOR FOR EVERY RADIO



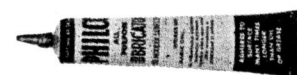
Part No. 30-4603 Noise Eliminator

Quieter radio reception for all radios where electrical interference is being brought in on the A.C. power line. Simply plugs into the wall socket. Part 30-4603. List\$1.00

LUBRICANT FOR EVERY PURPOSE

New Philco lubricant developed by Philco Engineers OBSOLETE THE OIL CAN! Use it everywhere in the household. Part 45-2806. List \$.50

The dealer who always has these supplies in stock, and who makes it easy for the customer to buy them



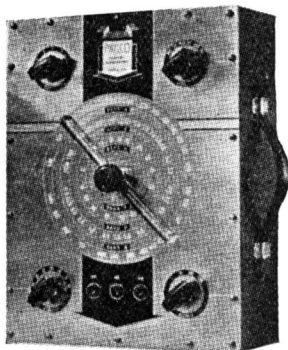
Part No. 45-2806 Philco Lubricant

from a reminder display of some kind, will profit not only from the direct sales of the accessories themselves, but from the sale of other household appliances, which sales are the natural and never-failing result of floor traffic.

Address your letters to Editor, Philco Serviceman, 1244 Dufferin St., Toronto, Ontario.

NEW SIGNAL GENERATOR MUCH IN DEMAND

PHILCO MODEL 070



Model 070
SIGNAL GENERATOR

Philco's latest and finest contribution to the famous line of quality test equipment is the new Model 070 signal generator, successor to the famous Model 177.

From the appearance standpoint this new instrument is without question the most attractive that Philco has ever built. The panel is of polished steel baked lacquer with panel markings and control markings in three colours of baked enamel. The panel dimensions are 10" by 13" Antique bronze screws further offset the attractive panel. Of particular interest from the appearance as well as the operating standpoint is the new lucite magnifying pointer. Extreme accuracy in the setting is made possible by the greatly magnified hair-line indicator.

120 K.C. to 70 M.C.

The new signal generator covers on six different bands a frequency range from 120 K.C. to 70 M.C. Band A is from 120 to 350 K.C., band B from 350 to 1050 K.C., band C from 1050 K.C. to 3.5 M.C., band D from 3.5 to 11 M.C., band E from 11 M.C. to 35 M.C. and band F from 22 M.C. to 70 M.C. The calibrated attenuator ranging from 0 to 100 and the multiplier with ranges of 1, 10, 100 and 1,000, provide convenient and accurate control of signal output. The medium and high output pin jacks provide further control of the output circuit.

LUCITE MAGNIFYING POINTER

One of the most desirable characteristics of the 070 is its complete freedom from strays and leakage signals. Because of the use of the lucite pointer indicator, which is a non-con-

A NEW PHILCO POLISH

A New Philco Wax Base Polish and Cleaner has been added to supplement the present Philco line of Furniture and Refrigerator Polishes. The New Wax Base Polish and Cleaner is suitable for use on all finishes of furniture, refrigerators, automobiles, etc. It is supplied in eight (8) ounce bottles, listing at seventy-five cents and is shipped in a display carton containing six (6) of these eight (8) ounce bottles. The part number of the carton is 45-2930 and the list price is \$4.50.

Available at your Philco Distributor.

ductor, there is no leakage or radiation at this point as would be the case with a metal indicator arm. Complete shielding of the instrument in its metal panel and metal housing further prevents the possibility of any signal coming out of the unit except at the output terminals.

The Model 070 operates from standard 25 or 60 cycle A.C. power. The instrument is furnished complete with power cord and also with output test leads.

LOW PRICED QUALITY

Now here is the best news of all. This fine new instrument, greatly improved over its predecessor, sells at a net dealer price of only \$39.50. Decide now that you are going to have the finest commercial signal generator both with respect to electrical quality and appearance quality.

SERVICEMAN CAN MAKE CONTINUITY TESTS WITH 050 TUBE TESTER

The Philco Model 050 tube tester can easily be used as a continuity checker for circuit testing. It is only necessary to place suitable test leads in the prong holes of any of the sockets. A handy pair of leads may be constructed by removing the phone tips from an old pair of test leads. A couple of prongs cut from a defective tube installed in place of the tips will insure good contact in the tube socket. The leads may be plugged into any socket prong, except the filament. By shorting the other ends of the leads, the Argon lamp will glow. Resistances up to approximately 300,000 ohms are easily read. Naturally the lamp will glow brighter on lower resistances.

This system of continuity check will enable a serviceman to test Ballast lamps, fuses, switches and electrical equipment without carrying any instruments other than the tube tester.



PHILCO Factory in Heavy Production. Wiring New PHILCO Models.
Photo Taken June, 1941.

"THANK YOU"

We deeply appreciate the comments which we are receiving from our R.M.S. members daily, in connection with the service helps and information contained in our R.M.S. mailings and in the Philco Serviceman. Here are extracts from just two of the many kind letters which we have received from members during the past month:

From Mr. E. Smith, of Meteor Radio Service and Elec. Appliance Repairs, 986 Garfield Street, Winnipeg, Man.—
"Though a little late, I would like to extend my best wishes on the eighth anniversary of R.M.S. service. Your co-operation and excellent service is really appreciated very much".

From Mr. Paul Gauthier, of 12 des Grandes Fourches, Sherbrooke, P.Q.—
"I wish to thank you for all the information I have received from R.M.S. during the past three years, and I hope that the Association will get more members every year."

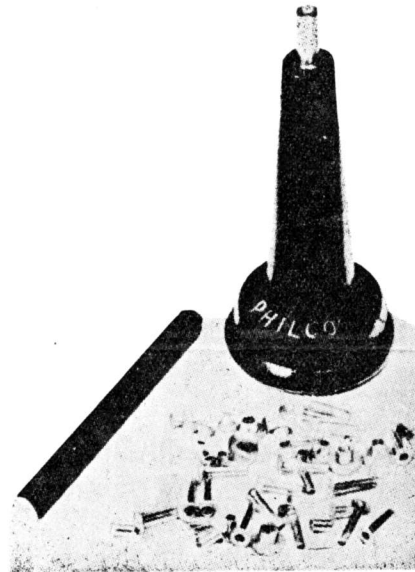
New Philco Long-Playing Needle Plays 4000 Records

The new Philco Long-Playing needle is capable of playing four thousand (4000) records without changing, when used with light-weight pickups! It is the only long playing needle that can be used without increasing record wear on the older and heavier electric pickups! List Price only \$1.90 each. Available at your Philco Distributor also in a neat merchandiser carton of twelve (12) separate needle packages.

Display package of twelve (12)—
Part 45-2933. List.....\$22.75.

RIVETING AND EYELETTING KIT

Complete with Eyelet Assortment



An indispensable service tool. The eyelet point in the top of the anvil is removable so that other sizes can be inserted. Standard Kit contains anvil with 3/16" point, 3/16" punch, and 20 of each of popular sizes of eyelets.

Eyelet Kit. Part 45-1162.

Dealer Net\$2.10

NEW PHILCO POCKET SIZE CIRCUIT TESTER POPULAR



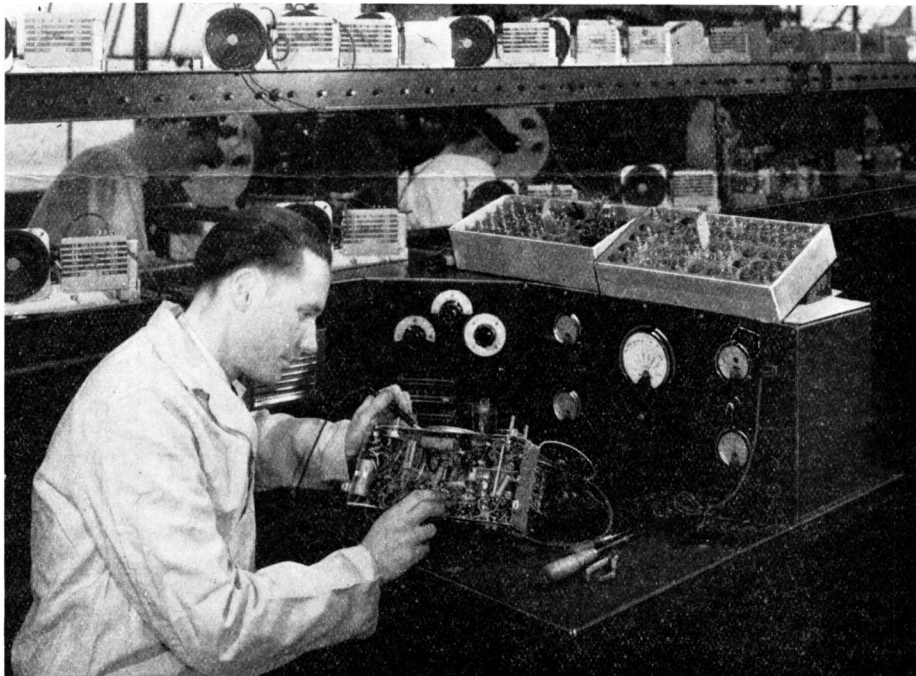
New Model 023

The new Circuit Tester, Model 023, that has just been announced by Philco, promises to be one of the most popular with Servicemen of anything ever put out.

This new tester, which is small enough to carry around in the pocket, does all of the tricks of a larger unit, and yet its size is only 5 1/4" long, 3" wide, and 2 1/4" high. Best of all, the net dealer price is only \$19.50.

The Model 023 has five D.C. voltage ranges as follows—0-10 volts, 0-50 volts, 0-250 volts, 0-500 volts, 0-1000 volts. It also has a new feature which is not found on other testers, an 0-250 millivolt scale, extremely useful in making adjustments of the light cell phonograph pickup by actual measurement of the light cell voltage output. Three milliamperage ranges are provided as follows—0-10 M.A., 0-100 M.A., 0-500 M.A. Three resistance ranges are as follows, Rx1, Rx100, Rx1000. On the Rx1 scale, the calibration in the low resistance end of the scale is directly in ohms, with 5 ohms being the first numbered division. All switching for the various meter ranges is accomplished with a single rotary switch on the top of the instrument. Switch positions are clearly marked. Complete test leads with instrument terminals, and all batteries required, are furnished with the 023.

This latest addition to the famous line of Philco Test Equipment will be one of the most popular instruments that has ever been offered to servicemen. Its extreme accuracy and its small size will make it the desirable instrument for everyone connected in any way with radio service. Ask about it now at your Philco distributor.



Inspection Testing of PHILCO 1942 Receivers. Photo Taken June, 1941

BALLAST TUBE TESTING WITH MODEL 050

Philco Model 050 Tube Tester will give a complete test on all ballast tubes in which one or more ballast sections are open. To test ballast tubes, proceed as follows:

1. Turn "line" control to the "on" position, set "load" control to the "O" position.

2. Turn "test" control to normal (short) position.

3. Set "filament" control to position 17.

4. Insert tube and throw switches to the positions as indicated in the chart. If Argon bulb glows throughout entire test, the tube is good. If bulb goes out during any part of

the test, one or more sections of the tube is open and the tube should be replaced.

It will be normal with some tubes for the lamp to glow before the test switches are operated. The lamp, however, must glow with the switches in the positions as indicated.

Tube Type	Switch Position	Tube Type	Switch Position	Tube Type	Switch Position	Tube Type	Switch Position	Tube Type	Switch Position	Tube Type	Switch Position	Tube Type	Switch Position	Tube Type	Switch Position	Tube Type	Switch Position
1A1	R		{GS		{GS	5692	{D		{GS	3613	{A	5701	{G	BL49C	{A		
1B1	R	6.126	{CGS	5589	{CGS	5630	{CGS	115.42	{CGS		{G		{G				
1C1	R		{CG		{CG		{AG		{CG	5502	{D	5702	{ACG				
1D1	R		{GS	5590	{D	5633	{GS	5693	{ACG	135K1	{A	5703	{CFG	BL49D	{GS		
1E1	R	6.129	{CGS		{F		{CG	5694	{CFG		{G				{CG		
1E2	{A		{CG	5592	{C	5636	{AG	135K1A	{D	5503	{D	5704	{G	G133	{D		
1F1	R	6.133	G		{D		{G		{G	5510	{D	5705	{AG	K13T56	{A		
1G1	R	6.135	G	5593	{C		{R	5695	{A		{R				{G		
1J1	R	40	D		{D	5637	{AG	140L44	{G	5512	{D	5707	{DS	K40C	{A		
1K1	R	40A2	{D	5595	{D	5638	{ACG	140R	{AD		{F				{G		
1L1	R	40W	D		{D		{CFG	140R4	{D	5514	{A	5708	{GS	K40D	{GS		
1N1	R	40X300	D	5596	{C	5640	{AG	140R4	{F	5515	{A	5709	{CG		{CG		
1P1	R	42A1	C		{D		{R			5516	{G			K42BG	{A		
1Q1	R	42A2	{C	5597	{GS	5641	{ACG	140R8	{D	5517	{A	5710	{G		{G		
1R1G	R		{D		{CGS		{CFG		{F		{G			K42-CG	{A		
1S1G	R	42B2	{C	5598	{C	5644	{AG	140R44	{DS	5518	{A	5711	{G		{G		
1T1G	R		{D		{D		{ACG		{AD	5519	{GS			K42D-DG	{GS		
1U1	R	42HA	G	5600	{D	5647	{CGS	150R	{DS	5520	{CGS	5712	{ACG		{CG		
1V1	R	45W	D		{D		{CFG		{AD	5521	{G	5714	{CG	K42E	{GS		
1X1	R	46A1	C	5601	{D	5648	{G	160LB	{A	5522	{A				{CG		
1Y1	R	46A2	{C	5602	{F	5649	{CGS	160LC	{G	5523	{CGS	5715	{G	K42E1	{GS		
2	R		{D		{D		{CG	49LD	{GS	5524	{A	5716	{G		{CG		
3	R	46B2	{C	5603	{F	5651	{G	50	{D	5525	{G	5717	{G	K42E	{CG		
4	R		{D		{D		{G	50A2	{D	5526	{A	5718	{G		{CG		
5	R	49A1	C	5604	{D	5652	{G	50B2	{D	5527	{A	5719	{G		{CG		
5E1	R	49A2	{C	5605	{DS	5653	{G		{F	5528	{G	5720	{G	K42E1	{GS		
6	R		{D		{AD		{G	50W	{D	5529	{A	5721	{G		{CG		
7	R	49B2	{C	5606	{A	5654	{G	50X3	{D	5530	{A	5722	{G		{G		
8	R		{D		{G		{G	50X3T	{D	5531	{A	5723	{G	K43B	{A		
9	R	49KB	{A	5607	{DS	5655	{ACG	50X300	{D	5532	{A	5724	{G		{G		
BKU126D	{R		{G		{AD		{CFG		{D	5533	{A	5725	{G	K43B2	{A		
	{AR	49KC	{A	5608	{DS	5656	{G	55A1	{C	5534	{A	5726	{G		{G		
	{ABDR		{G		{AD		{G	55A2	{C	5535	{A	5727	{G	K49B	{A		
	{ABCDR	49KD	{GS	5609	{D	5657	{CGS		{D	5536	{A	5728	{G		{G		
BKU172B	{DRS		{CG		{F		{G	55B2	{C	5537	{A	5729	{G	K49C	{A		
	{BDRS	49LB	{A	5610	{D	5658	{G	165R4	{D	5538	{A	5730	{G		{G		
	{BCDRS		{G		{F		{G	165R8	{F	5539	{A	5731	{G	K49D	{GS		
BKV51DJ	{R	49LC	{A	5611	{DS	5659	{ACG	55KB	{A	5540	{A	5732	{G		{CG		
	{AR		{G		{AD		{CFG	60R30-G	{G	5541	{A	5733	{G	K50C	{A		
	{ABR	5552	{A	5612	{AG	5660	{G		{D	5542	{A	5734	{G		{G		
	{ABCR		{G		{C		{G	69.2033	{A	5543	{A	5735	{G	K54B	{A		
BKX11BJ	{ARS	5553	{A	5613	{DS	5661	{G	69.2037	{A	5544	{A	5736	{G		{G		
	{AR		{G		{AD		{G	80A1	{C	5545	{A	5737	{G	K55B-BG	{A		
	{ARB	5554	{A	5614	{DS	5662	{ACG	80A2	{C	5546	{A	5738	{G		{G		
BKX21BJ	{ARS		{G		{AD		{CFG	80B2	{D	5547	{A	5739	{G	K55C	{A		
	{AR	5555	{A	5615	{D	5663	{G	85LC	{A	5548	{A	5740	{G		{G		
	{ARB		{G		{F		{G	185LB	{A	5549	{A	5741	{G	K55D	{GS		
33-3341-1	{R	5556	{A	5616	{AG	5664	{G	185LC	{G	5550	{A	5742	{G		{CG		
	{AR		{G		{ACG		{G	86A1	{C	5551	{A	5743	{G	KY49C	{A		
	{ABR	5561	{A	5617	{CFG	5665	{G	86A2	{C	5552	{A	5744	{G		{G		
33-3377	{F		{G		{D		{G	86B2	{D	5553	{A	5745	{G		{G		
	{CF	5562	{A	5618	{D	5666	{G	92A1	{C	5554	{A	5746	{G	K42B-BG	{A		
33-3391	{GS		{G		{F		{G	92A2	{C	5555	{A	5747	{G		{G		
	{G	5563	{A	5619	{D	5667	{G	92B2	{D	5556	{A	5748	{G	L42C-CG	{A		
	{GA		{G		{F		{G	95K2	{D	5557	{A	5749	{G		{G		
2LR212	{A		{GS	5616	{DS	5668	{G	100.37	{D	5558	{A	5750	{G	L42D-DG	{GS		
	{G	5567	{CGS		{AD		{G	100.38	{D	5559	{A	5751	{G		{CG		
2UR224	{A	5571	{D		{G	5669	{G	115.14	{GS	5560	{A	5752	{G	L49B	{A		
	{G	5574	{G	5617	{DS	5670	{G	115.22	{CGS	5561	{A	5753	{G		{G		
2VR215	{A		{G		{AD		{G	115.40	{G	5562	{A	5754	{G	L49C	{A		
	{G	5576	{D	5618	{D	5671	{G	115.41	{A	5563	{A	5755	{G		{G		
3CR241	{GS		{G		{F		{G		{G	5564	{A	5756	{G		{G		
	{CGS	5577	{D	5619	{D	5672	{G	100.37	{D	5565	{A	5757	{G	BK49D-10	{GS		
	{CG		{G		{F		{G	2903	{A	5566	{A	5758	{G		{CG		
3ER248	{GS		{G		{F		{G	2904	{A	5567	{A	5759	{G	BK55B	{A		
	{CGS	5580	{A	5620	{D	5673	{G	2905	{A	5568	{A	5760	{G		{G		
	{CG		{G		{A		{G	3035	{G	5569	{A	5761	{G	L455.5C	{A		
3.25	{A	5581	{G	5621	{A	5674	{G	3326	{GS	5570	{A	5762	{G		{G		
	{G	5584	{G	5622	{A	5675	{G	115.28	{CGS	5571	{A	5763	{G	L495.5C	{A		
	{G		{G		{C		{G	115.40	{G	5572	{A	5764	{G		{G		
4XR308	{GS		{D	5623	{A	5676	{G	115.41	{A	5573	{A	5765	{G	MT30A	{A		
	{CGS	5586	{D	5624	{A	5677	{G		{G	5574	{A	5766	{G		{G		
	{CG		{AG		{A		{G		{G	5575	{A	5767	{G	YTU9	{A		
5B	{D		{ACG	5625	{A	5678	{G		{G	5576	{A	5768	{G		{G		
	{F		{CFG		{A		{G		{G	5577	{A	5769	{G		{G		
6B	{D		{GS		{G		{G		{G	5578	{A	5770	{G	YTD16040	{A		
	{F	5587	{CGS	5626	{DS	5679	{G		{G	5579	{A	5771	{G		{G		
	{F		{CG		{AD		{G		{G	5580	{A	5772	{G		{G		
	{F		{CG		{CG		{G		{G	5581	{A	5773	{G		{G		
6.125	{GS	5588	{GS	5629	{CGS	5690	{CG	115.40	{G	5582	{A	5774	{G	W143357	{A		
	{CGS		{CG		{CG		{G	115.41	{A	5583	{A	5775	{G		{G		
	{CG		{CG		{G		{G		{G	5584	{A	5776	{G		{G		

PHILCO CORPORATION of Canada Limited

PARTS AND SERVICE DIVISION
TORONTO

The Philco Serviceman reaches you free of charge
with the compliments of your Philco Distributor