

PHILCO SERVICEMAN



RADIO • MANUFACTURERS • SERVICE • NEWS

MAY, 1942



EDITORIAL

Philco Goes "All-Out" to Aid R.M.S. Members With Newspaper Advertisements

In recent national advertisements appearing in daily newspapers all over Canada, Philco has featured the following message to the radio-owning public:



R.M.S. members will naturally derive much benefit from publicity of this sort, and there is much more similar publicity to follow. Smart R.M.S. members are "cashing in" on these valuable leads by

- Identifying themselves and their shops with R.M.S. signs.
R.M.S. Lapel Buttons
R.M.S. Shop Coats
- Advertising with R.M.S. Envelope enclosures.
R.M.S. Calendars
R.M.S. Blotters
R.M.S. Mailing Cards
R.M.S. Handbills
- Leaving Reminders after each Service Call
R.M.S. Service Record Stickers
R.M.S. Tube Stickers
R.M.S. Chassis Stickers
- Using R.M.S. Stationery
R.M.S. Letterheads
R.M.S. Envelopes
R.M.S. Business Cards
R.M.S. Service Record Cards
R.M.S. Estimate Forms
R.M.S. Repair Tags
- Newspaper Ads with R.M.S. Ad mats
- Displaying R.M.S. Standard Charges on:
R.M.S. Placards and Plaques
R.M.S. Bill Forms
R.M.S. Vest Pocket Cards

SERVICE BULLETINS

Philco Service Bulletins have been freely supplied to all R.M.S. members on current models, and Service Manuals for older models are available at moderate prices.

In The Armed Forces



We recently received word that G. (Gus) Schneider is now in the armed forces. Mr. Schneider, until his joining up, was Calgary Service Manager for Motor Car Supply Co. of Canada Limited, Philco distributors for Alberta.

Philco Service Bulletins and Manuals

NEW BULLETIN

Philco Service Bulletin No. 362 has just been mailed to all Philco Distributors and to all members of Radio Manufacturers Service. This Service Bulletin completes the issue of Philco Service Bulletins for all 1942 Philco Home and Auto radios, and should be added to the list shown on page 4 of the April, 1942 issue of the Philco Serviceman.

MANUAL DISCONTINUED

Car Radio Wiring Diagram Manuals volume CRI, and volume CRIA have been discontinued from the Philco line of manuals due to unavailability.

NEW MANUAL

The Philco 1942 Year Book has just been announced. This manual contains complete service information, wiring diagrams, parts lists, and alignment information on all domestic Philco radio models, standard car radio models, and custom car radio models, issued during the calendar year of 1941.

1942 Year Book— { \$1.50 with binder
 } 1.00 less binder

PARTS CATALOGUE

The Philco Loose Leaf parts catalogue has been constantly revised and kept up to date by the issue of new catalogue pages, bringing to R.M.S. members the very latest in materials and equipment.

R.M.S. Members' Corner

Equipment Wanted

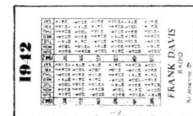
Model 177 Philco Signal Generator.

Anyone having one of these instruments and wishing to dispose of it, please write Mr. M. A. Seeback, Box 81, LaFleche, Sask.

* * * * *

The following two ideas have been contributed by Frank Davis of Vancouver, B.C. He writes "Enclosed find two ideas we have found very successful. So we thought you might like to pass them along to the rest of the fellows via the Philco Serviceman. You may refer them to us for copies if you wish. We think this publication is of great assistance in every way. Happy Landings."

Cuts of the two mailing cards used by Mr. Davis are below. Card size about 4" x 2".



Major Parts of New Philco Model 56

Tubes Used, XXL, 7C5E, 7B7E(2), 7C6, 6F6EG(2), 80	
Speaker	16-0007
Voice Coil and Cone Ass.....	25-0038
Power Transformer, 60 cycle	12-0032
25 cycle	12-0031
Volume Control	13-0004
Pilot Lamp	34-2064
Tone Control	13-0002
Output Transformer	12-0077
Dial Drive Cord.....	11-0004
Electrolytic 10-0004, 10-0005, 30-2459, 10-0011	
Dial Scale	07-0050
Field Coil Assembly—replace speaker	

SELL AND INSTALL PHILCO AERIALS for Home Radios

PHILCO SAFETY AERIAL

Makes Horizontal Wire Aerials Obsolete

QUICK PROFITS—EASILY MADE—by selling and installing this popular all-wave aerial. Sales possibilities are unlimited, because every radio owner who still uses an old-fashioned horizontal wire aerial is a prospect, and there are hundreds of such customers in your own neighborhood.

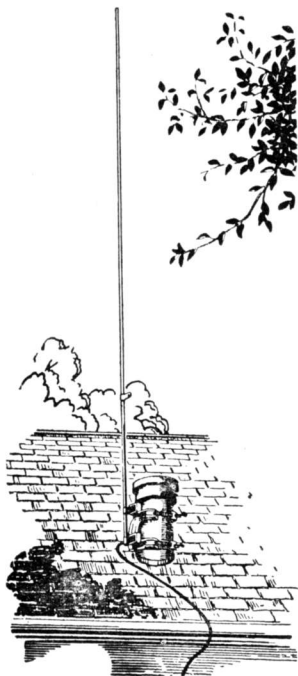
EASY TO SELL—because it improves the appearance of the home, it improves reception, especially Foreign Reception, and you can quote a **Low Price!** The aerial itself, is inexpensive and you can install it in less than a half hour!

The Safest Aerial on the Market—because it protects against shorts with power lines. In its vertical position it is less likely to fall across wires than a horizontal aerial, and furthermore, a high voltage condenser isolates the aerial from the radio.

For All Sets—Old or New—In many locations the new loop-operated radios require the additional pick-up of an outdoor aerial, and because of its low capacity the Safety Aerial is ideal for the purpose.

Complete and ready to install—40 foot weather-proof lead-in is already soldered to base of 12 foot, 4 section cadmium plated rod. Lightning arrestor, ground clamp and fittings to fasten the aerial to a flat surface, or a vent pipe, are packed with each aerial.

Part No. 40-6370 List Price **\$4.50**



AUXILIARY AERIAL

For all 1941 and 1942 PHILCO Home Radios Having Built-in Aerial System

This Aerial is similar to the Safety Aerial but includes the special plug-in coupler illustrated and described on the right. It is the only outdoor aerial to use with the 1941 and 1942 Philco Home Radios having the built-in aerials, in those locations where additional pick-up is needed.

Part No. 45-2817 List Price **\$5.50**

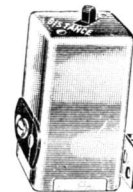
1941-42 AERIAL COUPLER

Designed to adapt the loop-operated 1941-42 Philco Home Radio models for use with an outdoor aerial, this transformer provides the necessary matching without disturbing the sensitive Domestic and Overseas Aerial System.

The coupler plugs into a three hole socket at the back of the 1941-42 Philco chassis, and is secured permanently in place with a self-tapping screw supplied with it.

By means of a convenient switch at the top of the coupler, the outdoor aerial can be disconnected from the circuit, when improved receiving conditions make the additional pick-up unnecessary.

The coupler is included with the Philco Auxiliary Aerial, but is supplied separately for those customers who already have the Safety Aerial installed, and also for use by servicemen in testing the 1941-42 Philco Home radios in the shop. Have one of these couplers on hand so that you will not have to remove the loop when bringing a chassis to the shop.



Part No. 76-1134

List Price **\$2.50**

NOISE REDUCING LEAD-IN SYSTEM

Converts any outdoor aerial to the noise reducing type, and operates up to four radios.

This low impedance lead-in system eliminates any pick up of noise between the aerial and the radio. It consists of a thoroughly impregnated aerial transformer, fifty feet of weather-proof, colour-coded transmission line and a set matching transformer.

The set-matching transformer has low impedance and high impedance secondaries to match any type of radio. Additional transformers can be used to operate a number of sets (up to four) from the aerial system.

Part No. 40-6484

List Price **\$5.95**

FARM RADIO AERIAL



The completely assembled aerial, with lead-in and aerial wire already soldered together, and assembled to the strain insulator. Highest quality, durable materials — including sixty feet of heavy seven-strand aerial wire, forty feet of weather-proof lead-in wire, flexible lead-in strap,

porcelain strain insulators and nail-on knobs, lightning arrestor and ground clamp.

PART NO. 45-2950

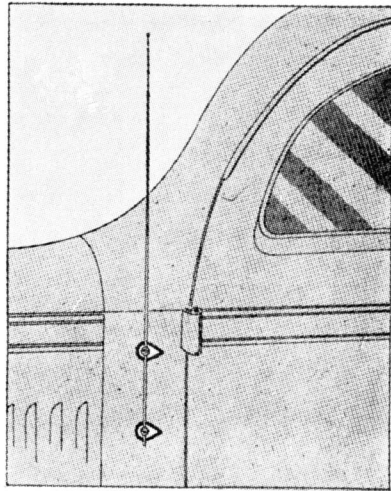
List Price **\$3.00**

FOR SATISFACTION AND PROFITS

for Car Radios

SIDE COWL AERIALS

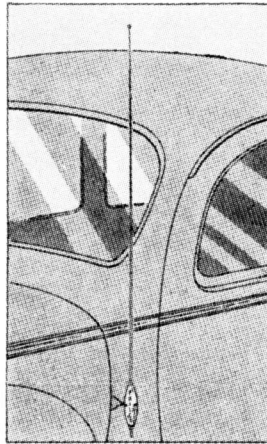
Streamlined Stanchions
elongated stanchion kits included



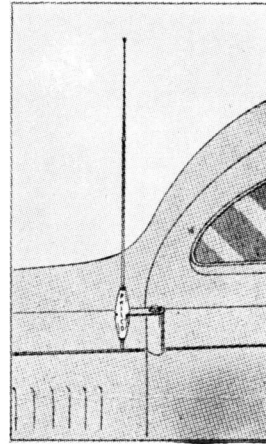
Three section—65 inch
Part 91-0219—List **\$4.50**
Four section—88 inch
Part 91-0220—List **\$6.50**

THREE WAY MOUNTING AERIAL

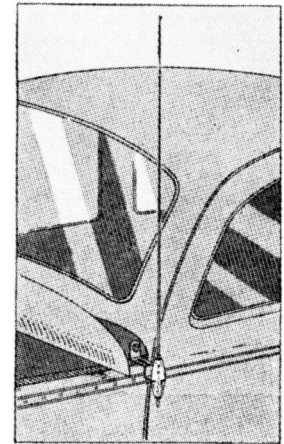
—No Drilling of Exposed Body Surfaces—All Three Brackets Supplied



1. Alligator Hood Mtg.



2. Hinge Pin Mtg.



3. Underhood Mtg.

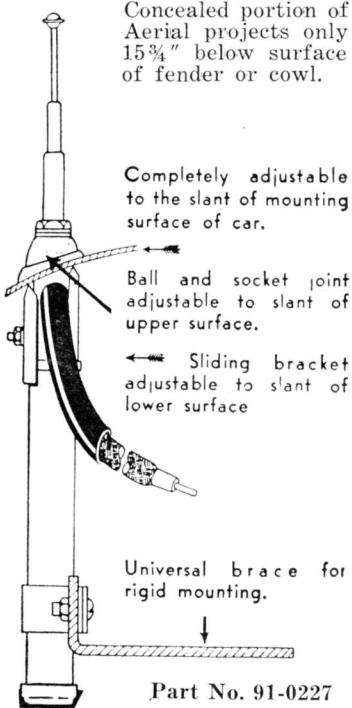
Three section rod extends to 65 inches

Part No. 91-0216—List Price **\$4.50**

PHILCO HIDEAWAY AERIAL

Concealed portion of Aerial projects only 15 3/4" below surface of fender or cowl.

Three section rod—45 inches. High "Q"
Lead-in with 18 inch waterproof section.
No adapter kits to buy.



Completely adjustable to the slant of mounting surface of car.

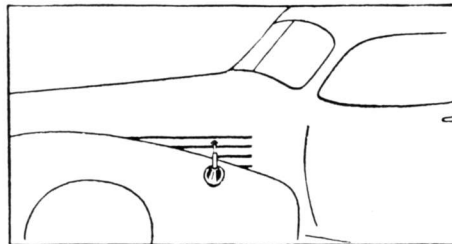
Ball and socket joint adjustable to slant of upper surface.

Sliding bracket adjustable to slant of lower surface

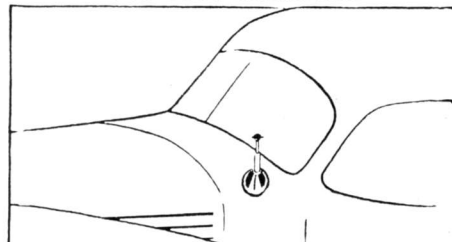
Universal brace for rigid mounting.

Part No. 91-0227
List **\$6.25**

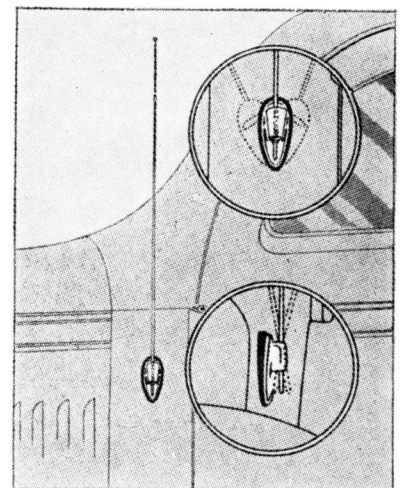
FOR FENDER INSTALLATION



FOR COWL INSTALLATION



DUO-FLEX AERIAL



Adjustable in ANY direction AFTER installation.

Three section rod—65 inches; 48 inch lead-in; plugs into socket in stanchion.

Part No. 91-0217—List **\$5.25**

PHILCO TUBE CLASSIFICATION

The following classification into six major types of Philco Tubes has been made in order to assist radio servicemen to find information on tubes to suit certain purposes. The tubes were first divided into the six major classes.

1. Rectifiers and diodes.
2. Power Amplifier Tubes.
3. Triode Voltage Amplifiers.
4. Tetrode and Pentode Voltage Amplifiers.
5. Frequency Converters.
6. Duplex Tubes.

Rectifiers and Diodes are used for power supply, detectors and A.V.C. tubes—power amplifier tubes are used in the

output audio stages. Triode Voltage Amplifiers may be used in R.F., I.F., A.F. or oscillator circuits. Pentode and Tetrode Voltage amplifiers may be used in R.F., I.F., A.F., or oscillator circuits. Frequency converters are used as first detectors in superheterodyne circuits. Duplex tubes are combination tubes, having (in the one tube) two or more different purpose tubes.

Each type of tube is further divided into type of socket used, and filament or heater voltage.

In order to simplify the list as much as possible, metal, G. GT, and GT/G tubes are only shown once, since the corresponding types differ only in mechanical structure and size, rather than in electrical characteristics.

RECTIFIERS AND DIODES

LOKAL SOCKET		OCTAL SOCKET		6 PRONG SOCKET		5 PRONG SOCKET		4 PRONG SOCKET	
Type	Fil.	Type	Fil.	Type	Fil.	Type	Fil.	Type	Fil.
7A6	7.0	0A4G	0	25Y5	25.0	84	6.3	82	2.5
7Y4	7.0	0Z4G	0	25Z5	25.0			5Z3	5.0
7Z4	7.0	5T4	5.0					80	5.0
35Z3	35.0	5U4G	5.0					83	5.0
		5V4G	5.0					83V	5.0
		5W4GT/G	5.0					IV	6.3
		5X4G	5.0					81	7.5
		5Y3G	5.0					12Z3	12.6
		5Y4G	5.0						
		5Z4	5.0						
		6A4GT	6.3						
		6H6GT/G	6.3						
		6W5G	6.3						
		6X5G	6.3						
		6ZY5G	6.3						
		25Z6GT/G	25.0						
		35Z4GT	35.0						
		35Z5GT/G	35.0						
		45Z5GT	45.0						
		50Y6GT/G	50.0						
		117Z6GT/G	117.0						

TETRODE AND PENTODE VOLTAGE AMPLIFIERS

LOKAL SOCKET		OCTAL SOCKET		6 PRONG SOCKET		5 PRONG SOCKET		4 PRONG SOCKET	
Type	Fil.	Type	Fil.	Type	Fil.	Type	Fil.	Type	Fil.
1LN5E	1.4	1N5EG	1.4	57E	2.5	15E	2.0	1A4E	2.0
7A7E	7.0	1D5EG	2.0	58E	2.5	24AE	2.5	1B4E	2.0
7B7E	7.0	1E5EG	2.0	6C6E	6.3	35E	2.5	32E	2.0
7C7E	7.0	6J7EG	6.3	6D6E	6.3	36E	6.3	34E	2.0
7L7E	7.0	6K7EG	6.3	77E	6.3	39/44E	6.3		
1232E	7.0	6SJ7EG	6.3	78E	6.3				
		6SK7EGT	6.3						
		6U7EG	6.3						
		6W7EG	6.3						

TRIODE VOLTAGE AMPLIFIERS

LOKAL SOCKET		OCTAL SOCKET		5 PRONG SOCKET		4 PRONG SOCKET	
Type	Fil.	Type	Fil.	Type	Fil.	Type	Fil.
1LE3	1.4	1E4G	1.4	27	2.5	26	1.5
7A4	7.0	1G4GT/G	1.4	56	2.5	30	2.0
7B4	7.0	1H4G	2.0	485	3.0	01A	5.0
7F7	7.0	6AE6G	6.3	37	6.3	12A	5.0
7N7	7.0	6AF5G	6.3	76	6.3	40	5.0
XXL	7.0	6C5GT/G	6.3				
XXD	12.6	6C8G	6.3				
		6F5G	6.3				
		6F8G	6.3				
		6J5GT/G	6.3				
		6K5G	6.3				
		6L5G	6.3				
		6P5G	6.3				
		6SC7	6.3				
		6SF5	6.3				
		12F5GT	12.6				
		12J5GT	12.6				
		12SC7	12.6				
		12SF5GT	12.6				

POWER AMPLIFIERS

LOKAL SOCKET		OCTAL SOCKET		7 PRONG SOCKET		6 PRONG SOCKET		5 PRONG SOCKET		4 PRONG SOCKET	
Type	Fil.	Type	Fil.	Type	Fil.	Type	Fil.	Type	Fil.	Type	Fil.
1LA4E	1.4	1A5EGT/G	1.4	53	2.5	19	2.0	1F4E	2.0	2A3	2.5
1LB4E	1.4	1C5EGT/G	1.4	59	2.5	2A5E	2.5	33E	2.0	45	2.5
3LE4E	2.8	1G6GT/G	1.4	6A6	6.3	6B5	6.3	49	2.0	71A	5.0
7A5E	7.0	1Q5EGT/G	1.4	12A5E	12.6	41E	6.3	46	2.5	182B	5.0
7B5E	7.0	1E7EG	2.0			42E	6.3	47E	2.5	183	5.0
7C5E	7.0	1F5EG	2.0			79	6.3	6A4E	6.3	3A3	6.3
35A5E	35.0	1G5EG	2.0			89	6.3	38E	6.3	10	7.5
		1J6G	2.0			43E	25.0			50	7.5
		3Q5EGT/G	2.8								
		6A5G	6.3								
		6B4G	6.3								
		6F6EG	6.3								
		6G6EG	6.3								
		6K6EG	6.3								
		6L6EG	6.3								
		6N6G	6.3								
		6N7G	6.3								
		6V6EGT/G	6.3								
		6Y7G	6.3								
		6Z7G	6.3								
		25A6EG	25.0								
		25AC5G	25.0								
		25B6EG	25.0								
		25L6EG	25.0								
		35L6EG	35.0								
		50L6EGT	50.0								

FREQUENCY CONVERTERS

LOKAL SOCKET		OCTAL SOCKET		7 PRONG SOCKET		6 PRONG SOCKET	
Type	Fil.	Type	Fil.	Type	Fil.	Type	Fil.
1LA6E	1.4	1A7EG	1.4	2A7E	2.5	1A6E	2.0
7A8E	7.0	1C7EG	2.0	6A7E	6.3	1C6E	2.0
7B8E	7.0	1D7EG	2.0				
7J7E	7.0	6A8EG	6.3				
		6B8EG	6.3				
		6J8EG	6.3				
		6L7EG	6.3				
		6SA7EGT	6.3				

DUPLEX TUBES

LOKAL SOCKET		OCTAL SOCKET		7 PRONG SOCKET		6 PRONG SOCKET	
Type	Fil.	Type	Fil.	Type	Fil.	Type	Fil.
1LD5E	1.4	1H5GT	1.4	6B7E	6.3	1B5/25S	2.0
1LH4	1.4	1F7EG	2.0	6E6	6.3	1F6E	2.0
7B6	7.0	1H6G	2.0	6F7E	6.3	2A6	2.5
7C6	7.0	6B8EG	6.3	12A7E	12.6	55	2.5
7E6	7.0	6Q7G	6.3			75	6.3
7E7E	7.0	6R7G	6.3			85	6.3
14B6	14.0	6SQ7GT/G	6.3				
		6T7G	6.3				
		6V7G	6.3				
		12Q7GT	12.6				
		12SQ7GT/G	12.6				
		12SR7	12.6				
		50Z7G	50.0				

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