

RCA Victor SERVICE NOTES

for

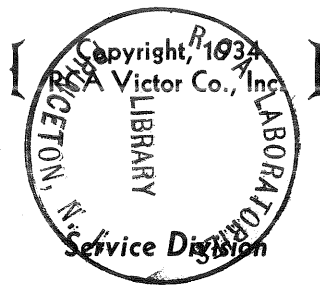
1934

Broadcast Radio Receivers

All-Wave Radio Receivers

Phonograph Combination Instruments

Miscellaneous Service Information



RCA Victor Company, Inc.

Camden, N. J., U. S. A.

INTRODUCTION

The Instruction Books and Service Notes contained herein are for the radio receiver and phonograph combination models sold by the RCA Victor Co., Inc., during the year 1934. This information has been compiled for RCA Victor Distributors and Dealers for use by their personnel in conjunction with the servicing and replacing of parts in the instruments listed.

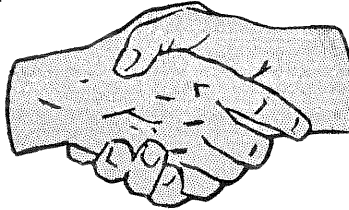
Proper operation of any radio receiver is dependent upon correct service methods and replacement of defective parts. We earnestly recommend that you follow the instructions given, use the equipment recommended and replace defective parts with genuine RCA Victor Factory Tested Replacement Parts. Your Distributor will be glad to obtain any part or service equipment mentioned in this book and give you every possible assistance in the performance of your work.

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RCA Tools and Accessories -	RCA Victor Models 140, 141, 141-E and 240 (with external I. F. transformers) -
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SHAKE, RADIO SERVICE ENGINEER



You are interested in servicing every kind of radio apparatus; RCA makes all kinds of radio apparatus and is interested in having it properly serviced.

—You are interested in the stabilization of the radio service business. So is RCA. Everything that benefits radio in any of its branches benefits RCA.

—Between you and RCA there is a natural partnership. You can depend on RCA to see things from your point of view —You can depend on RCA, as your partner, to support you in anything that benefits the radio service business in particular and the radio industry and the public in general.

—You can depend on RCA to produce accurate Test Instruments designed for your needs and priced for your pocketbook.—You can depend on RCA for Replacement Parts for RCA Victor sets that are built with the same precision as the original parts.—You can depend on RCA to furnish you with complete technical information on its products.—You can depend on the RCA trademark making it easier for you to obtain customers and easier to keep them satisfied.

TEAM UP WITH RCA . . . SEE YOUR RCA PARTS DISTRIBUTOR FOR

*Test Equipment . . . Oscillators . . . Output Meters . . . Special Tools
Antenna Systems . . . Cathode Ray Test Equipment . . . RCA Victor
Replacement Parts . . . Phonograph Modernisation Kits . . . Auto Radio Locks*

RCA PARTS



DIVISION

RCA VICTOR COMPANY, INC.

CAMDEN, NEW JERSEY

Why RCA Victor Instruments Are Easily Serviced



The Model Shop

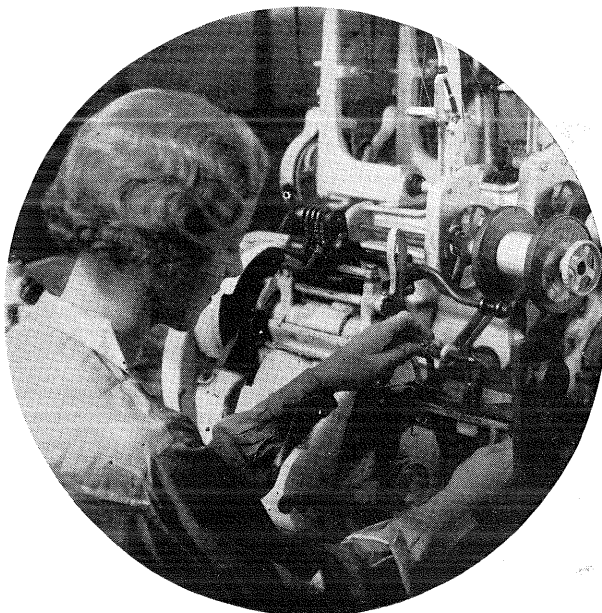
OF VITAL interest to every RCA Victor Dealer and Service Engineer is the RCA Victor Model Shop. It is pictorially presented here for the first time.

There are two primary functions of the Model Shop. Here every new RCA Victor receiver, every new test instrument is born. Drawings for new merchandise come from the Engineering Staff and, after careful study, the first 100 units are turned out by hand. If there is anything in the blue printed specifications that proves impractical under actual shop conditions, it is quickly disclosed and the Engineering Staff is called for consultation and necessary change.

But the actual construction of new circuits, new or improved use of tubes, new merchandise, is only the beginning of the activities of the Model Shop. When the hand-made sets are completed, they are housed in dull, drab-looking cabinets having the exact acoustical properties of the cabinets designed for the receivers—"Greys," they are called—and are shipped to all points of the compass, to every section of the United States, but only to RCA Victor Field En-

gineers. These men put the new receivers through their paces in every conceivable way.

In the very shadow of the most powerful broadcasting stations, all new receivers are given the acid test for performance. On the burning plains of Texas, they must perform with the





same fidelity of tone that characterizes their performance in the highest points of the Rockies. Each RCA Victor Field Engineer virtually lives with the new instrument while it is in his possession, and finally returns it with his report and recommendations. Again the Model Shop tests the returned receivers; gives careful consideration to every recommended change. Then when the Engineers are satisfied that the receiver is the finest that can be produced, blueprints and handmade, field-tested sets are turned over to the production department, and a new RCA Victor is on its way to hundreds of thousands of homes.

Practically every operation in the manufacture of a radio set is performed in the Model Shop, and all of them by hand. Semi-automatic machinery is used in coil-winding, braiding, etc., but for the most part, every operation is a hand operation. And yet the Model Shop occupies only a small section of one floor in one of the many RCA Victor buildings.

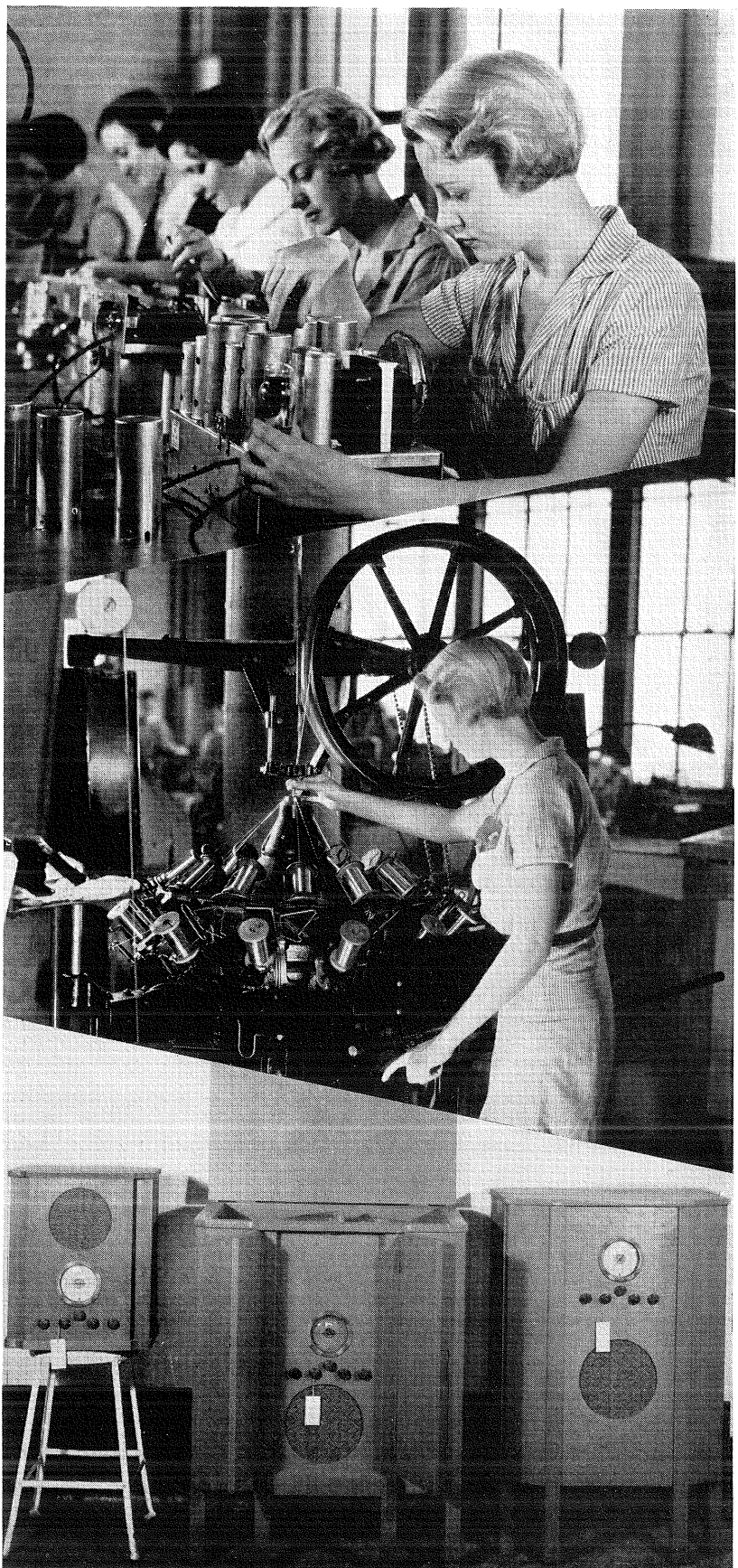
The construction of new receivers from blueprints is but one of the two major functions of the Model Shop. Indeed, it is the primary function. But no less important to the RCA Dealer and Service Engineer is the fact that in this shop the work of the Service Engineer is constantly being simplified. Behind all this there is but one objective—to make the work of the Service Engineer less complicated, to make it easier for the Engineer to make repairs and replacements on RCA Victor sets.

Here our own staff of Field

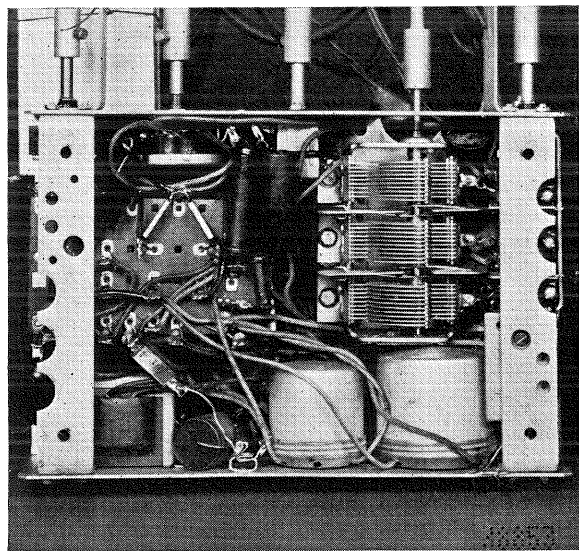
Engineers comes frequently, and from every quarter of the globe. With them, they bring the ideas they have personally developed while making field tests of the Grey-housed models. And with these ideas they go to work. Every facility of the shop is at their command. The Engineering Laboratory, with its costly, modern, scientific equipment, is open to the visiting Field Engineer. A work bench is assigned, tools are provided and here the RCA Field Engineer proceeds to build into the set personally the changes that he believes will prove most helpful to the army of Service Engineers. But that does not mean always that the recommended changes will be made. It develops sometimes that what might be gained by such changes is more than lost in other ways. But conferences of engineers and countless tests demonstrate the practicability of any suggested plan. Every suggested change or improvement is given careful consideration. That improvements are constantly being made is attested by photographs on the following page, which illustrate the ease with which all parts of the typical RCA Victor chassis may be reached by the Service Engineer, as compared with the intricate job of getting at the older models.

KEY TO ADJACENT VIEWS

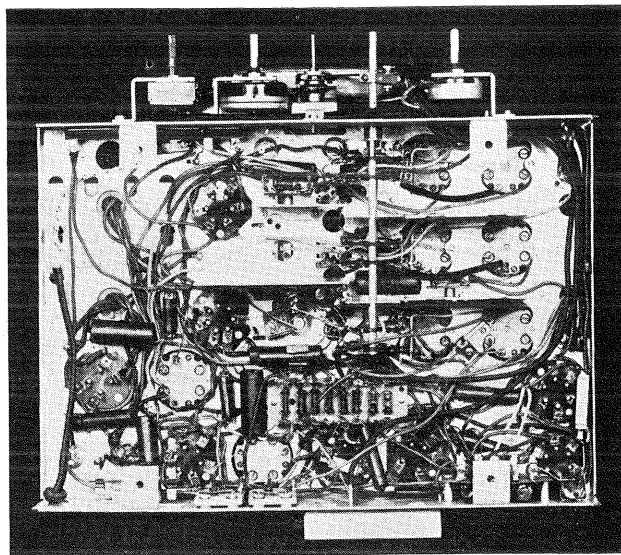
- Upper Left:* Aligning Gang Tuning Capacitors
- Center Left:* General View of Electrical Laboratory
- Bottom Left:* Impregnating R F Coil Assemblies
- Upper Right:* Model Shop. Main Production Line
- Center Right:* Shielding a Braided Cable
- Bottom Right:* Grey Cabinets, housing hand-made chassis for field tests



These pictures show how the RCA Model Shop simplifies the Radio Service Engineer's problems



Chassis Model 331 of 1934, built in layers



Chassis Model 143 of 1935, all parts accessible

Year after year RCA Victor simplifies and makes easier the sale and servicing of RCA Victor instruments, attachments and parts . . . Daily, the Model Shop is striving to make easier and more profitable the work of the Service Engineer.