

# PLAIN TALK

AND

## Technical Tips

*a monthly publication for the service industry prepared by:*



# RCA VICTOR



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PRODUCT PERFORMANCE  
RCA SALES CORPORATION

### SERVICE DATA SUBSCRIPTIONS

Subscribing to RCA Victor Television and Radio/"Victrola" service data assures the service technician of complete technical literature covering RCA Victor Home Instrument products. Although the majority of subscribers are RCA Television and Radio/"Victrola" service dealers and independent service technicians, many others with varying interest also subscribe to RCA technical publications. Among these subscribers are engineers, technical schools, government activities, and other manufacturers.

To renew a subscription that is currently in effect, the subscriber should notify his local RCA Victor distributor of his desire to renew. RCA Victor Distributors normally send a renewal reminder to the subscribers sometime during the month of April or May so that they can determine their new service data distribution requirements and process their mailing lists prior to the expiration of the current subscription year.

If your address has been changed, be sure to inform your local RCA Victor distributor of your new address.

New subscriptions to RCA Victor service data can be arranged for any time of the year by contacting your local RCA Victor Distributor. New subscribers automatically receive all publications covering Television and Radio/"Victrola" instruments produced during the current subscription year. The subscription year extends from July 1 to June 30 of the following year.

A subscription includes a complement of Television service data, Television service tips, Television parts tips, Radio/"Victrola" service data, Radio/"Victrola" parts tips covering all RCA Victor Home Instrument products produced during the subscription year. Monthly issues of "Plain Talk and Technical Tips" are also included in a service data subscription. The literature is mailed directly to the subscriber at approximately monthly intervals.

If you are not now on the RCA Victor service data subscription lists check with your local RCA Victor Distributor for details—you will find it well worth your while—remember—a service job can be performed with less expenditure of time and effort when complete service information is available.

### RCA VICTOR SERVICE DATA

RCA Victor service data represents the official reference to be used by the service industry in handling RCA Victor home instrument products.

Each issue is compiled from engineering information obtained directly from the design and manufacturing engineers.

RCA Victor service data covering Television instruments is prepared according to the chassis number employed in the instrument. Television service data is assigned a file number which includes the year followed by a "T" number.

Radio/"Victrola" service data information is prepared on the basis of the RCA Victor instrument model number. As with all service data, complete specifications, tube and transistor complements, assembly and disassembly instructions, and service adjustments are included. Circuit board illustrations, complete schematic information, and parts lists are also included.

Service data includes a cross reference to model number, chassis number and sales name for the various instruments in which the basic chassis is used.

Occasionally additional models employing a given chassis are manufactured some time after the first service data appears. Certain combination instruments and remote control instruments fall into this category; additional service data is prepared to cover such instruments. This data is referred to as a "supplementary" service data and carries a file number with an "S" number indicating that it is supplementary to the original data.



Figure 1—RCA Victor Service Data

## SERVICE DATA INDEX

Subscribers to RCA Victor service data periodically receive the latest index. Identified as "Volume I, II, and III, the index covers RCA Victor Television and Radio/"Victrola" instruments from 1945 through 1964.

The index cross references model numbers to service data number; chassis number to service data number; and sales name to model number. In addition, a Service Tip index and Parts Tip index is included.

Another section of the index lists record changers by service data number and by model number. Cartridge and styli identification is also given.

To provide for quick identification the Volume III index is printed on pink paper. Volume II (yellow paper) covers instruments from 1958 through 1960. Volume I (printed on green paper) includes instruments from 1945 through 1957. These publications provide a complete Service Data reference for all RCA Victor home instrument products from 1945 through 1964. All three volumes are currently available through RCA Sales Corporation, Consumer Relations, Building 1-206, 600 North Sherman Dr., Indianapolis, Indiana 46201.

## EDITIONS AND PRINTINGS

Service Data normally contains a notation identifying the edition and printing at the lower left hand corner of the front page. This information is particularly helpful in determining the status of the Service Data. A **FIRST EDITION, FIRST PRINTING** means that the Service Data is in its original form. **SECOND** and subsequent **PRINTINGS** have basically the same material as the first printing with corrections of typographical and minor errors. These *printings* are prepared to fill the demand for additional quantity, and are generally *not* given full distribution.

A **SECOND EDITION** will contain all of the previous information plus up-dating additions and changes and will supersede any first edition. When a second edition is received, the first edition should be removed from file and discarded. Second editions receive full distribution.

## RCA SERVICE DATA BINDER

A special binder for RCA Victor Service data is available from your RCA Victor distributor. It is an attractive, three-ring binder, maroon in color with gold lettering, using large 2 inch rings.

The binder is designed to accept all the Television and Radio/"Victrola" service data publications for any given year. A clear vinyl pocket incorporated on the back edge provides for subject and date inserts. For added convenience, a number of these inserts are furnished on a loose leaf page within each binder.

Check with your local RCA Victor Home Instruments distributor for information regarding the price and availability of these binders.

## PLAIN TALK AND TECHNICAL TIPS

"Plain Talk and Technical Tips" is included in the RCA Victor service data subscription. This four page publication is especially designed to carry items of general interest to the technician and is written in down-to-earth language.

"Plain Talk" includes new product information on recently announced RCA Victor instruments, such as new chassis used in Television and Radio, simplified explanations of new circuitry, descriptions of new tubes and components, and new test equipment in-



Figure 2—"Plain Talk and Technical Tips"

cluding its application in servicing RCA Victor products. Topics relating to customer relations, hints on the use of service literature, and many other articles of interest to the service technician.

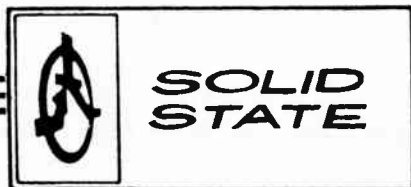
The theme of "Plain Talk" has always been to maintain a brief and varied cross section of topics which will interest the average servicing technician. The four page style, and the use of illustrations in addition to the plain language employed contribute to easy reading with a minimum of "time out" from the technician's busy schedule.

## SINGLE COPIES AND EXTRA COPIES

Single copies and additional copies of any particular service data issued during the last five years (including the current year) are available at a nominal cost by writing to:

RCA Sales Corporation  
Consumer Relations  
Building 1-206  
600 North Sherman Drive  
Indianapolis, Indiana 46201

Many other supplementary publications including a complete price list of available publications may also be obtained by writing to the same address. When requesting service data for a particular instrument, it is important that the model number be included in the request. If insufficient information is received by Consumer Relations, it may not be possible to fulfill the request for service literature.



## TRANSISTOR SERVICE LITERATURE

The service technician is always interested in acquiring additional knowledge on the subject of transistors and many good publications are available today on this subject. Some literature treats the transistor from a theoretical standpoint, covering the chemistry of the device and design considerations in circuits which employ the transistor.

A down-to-earth approach to the transistor and its use is projected in a series of six booklets produced by the RCA Sales Corporation.

These booklets describe a basic transistor concept and cover related circuits and servicing techniques in a practical manner that minimizes the complexities of the transistor.

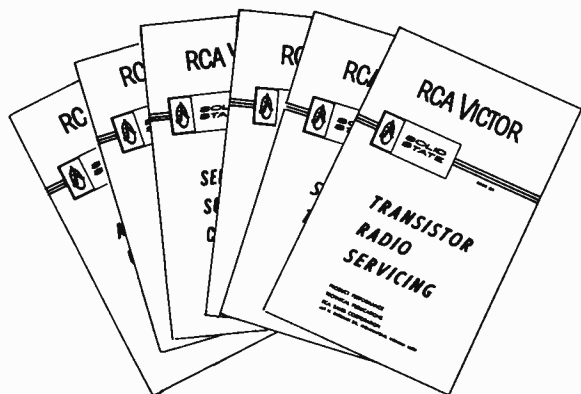


Figure 3—Six Solid State Booklets

*Book One* entitled "A Basic Concept of Transistors" covers the operation of the transistor, a definition of transistor characteristics, and methods of biasing the transistor. The transistor is compared to two diodes for the purpose of visualizing the amplifying action and for making tests on transistors.

*In Book Two*, "The Transistor In Practical Circuitry" various methods of connecting transistors and different forms of coupling are discussed. In addition some special applications of Solid State devices are described, and the circuits of several Solid State instruments are reviewed including the RC-1218 all transistor AM/FM tuner.

*Book Three*, "Servicing Solid State Circuitry" covers some practical approaches in trouble shooting transistor products. This includes the use of test equipment, servicing techniques and the testing and replacement of transistors.

*Book Four* is entitled "Transistor TV Circuitry," and describes a transistorized television instrument. Each stage is covered by simplified schematics or block diagrams along with easy reading text. The use of transistors in all circuits of a television set is a reality today and the service technician will find interesting reading as each circuit used is described.

*Book Five*, "Servicing Transistor Television," covers the aspects of service approaches for transistorized television. A comparison is made between the tube type receiver and the transistorized receiver; advisory note on test equipment and tools are given. A servicing procedure is presented along with servicing examples. This booklet will dispel many of the concerns the service technician may have regarding transistor television servicing.

*In Book Six*, "Transistor Radio Servicing," a brief review of the transistor and transistor circuits is included. A practical approach to servicing, making use of signal tracing and signal injection is discussed in this booklet.

If you are looking for a very simple and practical approach to the subject of transistors and Solid State circuitry be sure to inquire at your local RCA Victor Distributor concerning the availability of these booklets.

Another good source of information is the RCA Transistor Manual. While this manual is primarily a reference book, it contains a great deal of general information on the transistor, its behavior, and its application in practical circuits. The latest issue of this important reference is available at most every electronics parts and equipment dealers.



Figure 4—The RCA Transistor Manual

RCA Victor Service Data represents still another source of transistor circuit information. Each data includes a schematic, a physical layout, and alignment procedures for the specific instrument covered in the data. A study of the service data will provide the service technician with much background information to better equip him for understanding and servicing transistorized products.

Start your own transistor library using these publications as basic building blocks—add other publications to your library as your time and interest dictate—before long you will be servicing transistor products with the same ease which you now service tube type products.

## SPECIAL SERVICE DATA

A special "alignment" data, (T1), is prepared each year which covers the alignment procedures for all RCA Victor black and white television instruments. This data contains the latest revisions and engineering changes in the schematic diagram section. The "T1" issue is prepared later in the year so that all instruments announced through mid-year can be included. Valuable service information on tuners is also given in this publication.

This year, another special service data, (T2), will be prepared; it will contain alignment information on all color television receivers announced up to the time of publication of the data.

Remember to utilize the basic service data for black and white and color instruments for most service requirements. When "T1" and "T2" become available use them to advantage not only for bench service and alignment checks, but for the additional tuner information, service hints, and fully updated schematics contained therein.

## PREVIOUS YEARS' DATA

Current service data subscriptions can be obtained only as a complete package including Television and Radio/"Victrola" publications. Previous years' Television and Radio/"Victrola" service data is available separately. Television service data (issued during any one year) is priced at \$4.50. Radio/"Victrola" service data (issued during any one year) is available at \$3.00.

Television and Radio/"Victrola" service data can be obtained for the previous five years through:

RCA Sales Corporation, Consumer Relations, Building 1-206, 600 North Sherman Drive, Indianapolis, Indiana 46201.

## CHANGE OF ADDRESS

When you change your mailing address, make sure that you notify your local RCA Victor distributor. This is important in order to avoid any delay or interruption of your RCA Technical Publications subscription literature.

If you should change your address any time during the year, make sure that you inform your distributor. Be certain to submit your complete address including the ZIP Code. This will insure uninterrupted receipt of all the RCA Victor Television and Radio/"Victrola" service data to which you have subscribed.

## PARTS TIPS AND SERVICE TIPS

In addition to the Television service data, Radio/"Victrola" service data, and "Plain Talk and Technical Tips," the RCA service data subscription includes several other publications of value to the service technician.

At various times throughout the subscription year, special service tips and parts tips are included with the service data mailings.

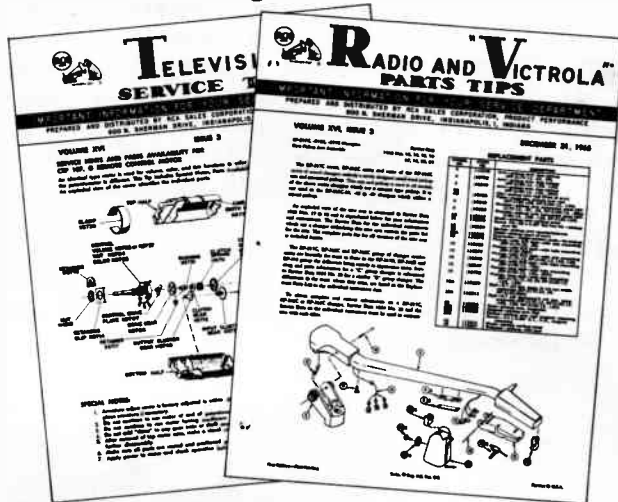


Figure 5—Parts Tips and Service Tips.

Service tips are issued to keep the service technician posted on any special service hints, or adjustment procedures, which comes about as service experience on various products is acquired.

Parts tips represent various additions, changes, or deletions of parts which occur as engineering or manufacturing changes take place. The service technician uses these to update the related service data.

Each issue of Television service or parts tips and Radio/"Victrola" service or parts tips is assigned a reference number and title to provide for quick identification and facilitate filing.

## HOW TO SUBSCRIBE

Subscription to RCA Victor service data can be arranged for by contacting your local RCA Victor distributor. This can be done at any time during the year since new subscribers automatically receive all publications covering Television and Radio/"Victrola" instruments produced during the current subscription year. The subscription year extends from July 1 to June 30 of the following year.

### RCA SALES CORPORATION

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INDIANAPOLIS, INDIANA 46201  
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