

OPERATING DATA
for
SUPREME MODEL 593 ANALYZER

Stock #5870

Issued July 11, 1938

GENERAL

The Model 593 offers a completely new and startlingly rapid method of taking voltage, current and resistance measurements at the tube socket. Many servicemen take only point-to-point resistance and voltage measurements because they felt that previous methods of socket analysis were too slow. The Model 593 is actually faster to operate than the point to point method, besides giving the serviceman the added opportunity of taking plate and screen grid current measurements without physically breaking the tube's circuit. Once you have used this new push-button analysis method, you will never go back to relatively slower and less fact-finding methods.

CONNECTIONS

There are only three pin jacks on the Model 593 panel. The outside two pin jacks connect to the output jacks of the multi-meter you are using. Observe polarity. (Note polarity signs under Model 593 pin jacks.) The middle jack is used for the top cap connector when testing tubes with top caps. You are furnished with this connector which has a pin plug on one end for insertion in the "top cap" pin jack and a universal top cap on the other end for connection to the top cap of the tube under test.

TEST LEADS

We have not included test leads in this shipment because our experience shows that the average serviceman has several pairs of test leads and would rather pocket the saving. Thus, we have reduced the total price by the cost of a pair of test leads and passed this saving on to you.

PRELIMINARY SET-UP

Turn set off. Remove tube under test from set. Place tube in 593 socket. Connect top cap if any. Place correct adapter on analyzer plug. If small 7-pin socket use analyzer plug without adapter. Place plug in socket of set. Connect set top cap lead, if any, to top cap connector on analyzer plug. Turn set on. If you are sure that removal of tube from set when turned on will not harm set, it will be allright to eliminate turning the set on and off each time a tube is removed.

VOLTAGE MEASUREMENTS

You will note two rows of nine push-buttons each. Between the top and bottom button in each position is located a number corresponding to the standard R.M.A. socket numbering system. "T.C." is for top cap of the tube.

Model 593

Connect a test lead between the "minus" pin jack on the 593 and the "minus" pin jack on the multimeter or set-tester used. Connect a test lead between the "plus" pin jack of the 593 and the "plus" pin jack of the multimeter or set-tester used. Adjust the multimeter or set-tester to the correct function and range. It is usually better to use a higher than normal range when there is any doubt as to the existing voltage or current.

Determine from manufacturers' tube charts the numbers of the socket pins between which you desire to measure voltage. Press one button in upper row and one in lower row corresponding to these numbers, i.e., you desire to take a filament voltage reading on a 5-prong tube. Filament terminals are 1 and 5. Press upper #1 and lower #5. If meter backs off scale release and press lower #1 and upper #5. Let's assume you next want to test plate voltage on the same tube and #2 is plate with #4 cathode. Press upper #2 and lower #4. If meter backs off scale press lower #2 and upper #4. Always set multimeter to proper function and range before using analyzer.

CURRENT MEASUREMENTS

To take current measurements in any one element, depress both upper and lower button corresponding to numbered element, i.e., let's assume you want to take plate current measurement in tube which has plate terminating on #2 pin. Set multimeter to proper function and range and depress both upper and lower #2 push buttons. Analyzer is wired so that correct polarity is automatically observed when making any anode (plate, screen grid, etc.) current measurement. For cathode current measurements, reverse position of pin plugs in 593 pin jacks so that "minus" pin jack on 593 is connected to "plus" pin jack on multimeter and vice versa. Return leads to normal position after test.

RESISTANCE MEASUREMENTS

Resistance measurements between tube elements are made exactly the same as voltage measurements. Care should be taken that the receiver's power is off, or damage to your ohmmeter may result.

! I M P O R T A N T !

Unless this paragraph is complied with, the Guarantee Policy on your Supreme Instrument is not applicable.

REGISTRATION

The Return Registration Card, which is included with each tester shipment, should be completed with the proper information and mailed immediately after the user's receipt of the tester. It is the purpose of the Return Registration Card (1) to apply the Guarantee Policy in favor of the owner of the tester, and (2) to assure the user's receipt of any additional data which may be issued with reference to the use of the tester. The issuance of new data may not be necessary, but in case new data be issued, the user is entitled to it and he will receive such new data if his ownership of the tester is registered by means of the Return Registration Card. We suggest that, in the case of tube listings, the serviceman should write for new listings two or three times a year. The Guarantee Policy is not applicable unless the tester is registered within ten days after its receipt, and the serial number of the tester should be mentioned in all correspondence.

REPLACEMENT PARTS, Etc.

If some part of the tester be damaged in service or if the user should want to order circuit drawings, analysis charts, test loads, or other accessories, his order should be accompanied by a deposit amounting to not less than fifty cents. Since an order amounting to less than fifty cents cannot be assembled, packed and shipped without financial loss, a handling charge may be made so as to make the order total fifty cents, including transportation charges. If an order be accompanied by a deposit which does not cover the cost of the merchandise and transportation charges, the shipment will be made via express C.O.D. for the balance due. We do not recommend the installation of instrument rectifiers by the user as this invariably leads to difficulties with the factory. Servicemen do not have proper calibration standards by which the A.C. ranges can be recalibrated. Instrument rectifiers are very liable to damage by inexperienced repair men and are, therefore, not guaranteed in any manner, even when new. Instrument rectifiers should be replaced by the factory or an Authorized Service Station.

GUARANTEE

The tester is not guaranteed unless the ownership thereof is properly registered. When the user registers his ownership of this tester within 10 days after receipt he will receive, in return, a "Guarantee Card" stating that the tester will be guaranteed to be free from defects in material or workmanship. Any such defect in material or workmanship will be corrected, without charge, when the tester, together with the "Guarantee Card" is delivered to the Supreme Instruments Corporation, Greenwood, Mississippi, or to any authorized Supreme Service Station within 90 days after its receipt by the user; provided that (1) the free repair or replacement of materials shall not include the cost of the installation of instrument rectifiers which are incapable of withstanding appreciable electrical overloads and are not, therefore, guaranteed by the manufacturers, and (2) the user accepts the obligation of the payment of all transportation charge involved in the corrections effected under the conditions of this guarantee policy, in accordance with the standard practices of the Radio Manufacturers Association.

TRANSPORTATION DAMAGES

The office of origin of the transportation agency which accepted this tester for the original shipment assured the shipper against external and concealed damages in transit. If the tester be received in a damaged condition, or if some part of the tester be damaged in transit, the user of the tester should ask the transportation agency, which delivered the tester, for a "Concealed Damage Report" which should be forwarded to the factory, with the return registration card, for factory instructions as to the procedure which should be followed for effecting the necessary repairs or replacements. If the destination office of the transportation agency refuses to furnish a "Concealed Damage Report" that fact should be reported in a letter to the factory with the return of the registration card.

SUPREME SERVICE STATION.

For the purpose of effecting prompt repair of damages sustained by inadvertent misuse, or for any other reason, the services of the Supreme Service Stations may be utilized instead of returning damaged testers to the factory. A list of the Supreme Service Stations may be obtained from the Supreme Factory offices. If it should be necessary to ship a tester to the factory or to a Supreme Service Station, the shipment should be made via express -- never parcel post -- and a letter should be written and forwarded, separately, advising of the shipment and including complete instructions as to the desired handling and disposition of the merchandise; otherwise the merchandise will be refused by the consignee.

If a separate letter is received by the factory, ahead of the tester's arrival, the proper acceptance forms will be made out by the factory, the tester will be received and usually repairs will be effected at once and the tester re-shipped. If the tester is not within the 90 day guarantee period, repairs will be made up to \$5.00 without sending the user an estimate unless we receive specific instructions to send an estimate in any case. If the necessary repair charges total more than \$5.00 an estimate will be sent in any case, unless the factory has received specific instructions to repair the tester regardless of cost.

When the user sends his registration card to the factory within 10 days after receipt of the tester, he will be furnished with a pocket size "Guarantee Card" which should be included with the tester shipment to either the factory or an Authorized Supreme Service Station if the tester is still within the 90 day period.

When repairs are requested of the factory or a Service Station by a customer having a "Guarantee Card" and including same in shipment, and the Guarantee is found to be still in effect, the factory or Authorized Supreme Service Station will make the repairs in accordance with the Guarantee Policy herein stated and will return the tester to the user without charge with the exception of (1) and instrument rectifier replacement (instrument rectifiers are not guaranteed) and (2) transportation charges which must be borne by the customer.

Our Service Stations are not authorized to make no-charge repairs on Supreme testers unless the "Guarantee Card" (furnished the user by the factory upon the return of the user's registration card) accompanies the tester and the tester is returned before the expiration of the 90-day period.

ALL DISPUTES REGARDING REPAIR CHARGES SHOULD BE REFERRED TO THE "SERVICE ENGINEER" AT THE FACTORY.

SUPREME INSTRUMENTS CORPORATION

GREENWOOD, MISSISSIPPI

U.S.A.

RECOMMENDED RADIO PUBLICATIONS

Modern Radio Servicing - Alfred Ghirardi
Radio Field Service Data (2nd revised edition) Alfred Ghirardi
Radio Business Promotion and Management - Ghirardi and Ruggles
Radio Physics Course - Alfred Ghirardi
Radio Trouble Shooter Gadget - Alfred Ghirardi
Published by - Radio Technical Publishing Company
45 Astor Place, New York City

Elements of Radio Communication - John H. Morecroft
Experimental Radio Engineering - John H. Morecroft
Published by - John Wiley & Sons, Inc.
440 - 4th Avenue, New York City

Sound Motion Pictures Recording & Reproduction
Servicing Sound Equipment
Public Address Systems
by James R. Cameron
Published by - Cameron Publishing Company
Woodmont, Connecticut

Projection Sound Pictures - Aaron Nadell
Published by - McGraw-Hill Book Company
330 West 42nd Street, New York City

SUPREME
MODEL 593 ANALYZER
PACKING LIST

Issued July 11, 1938

ACCESSORIES INCLUDED IN ORIGINAL MODEL 593 ANALYZER SHIPMENTS

QUANTITY: INCLUDED:	STOCK NUMBER:	DESCRIPTION	: PACKER'S : CHECK
1	: 5870	: Booklet, Model 593 Operating Data	: ✓
1	: 6725	: Card, 3" x 5" Registration	: ✓
1	: 6288	: Chart (Sample Analysis)	: ✓
1	: 7051A	: Connector, Top Cap	: ✓
1	: 8055	: Adapter, 4-pin to 7-hole analyzing	: ✓
1	: 8056	: Adapter, 5-pin to 7-hole analyzing	: ✓
1	: 8057	: Adapter, 6-pin to 7-hole analyzing	: ✓
1	: 8058	: Adapter, 7-pin to 7-hole analyzing	: ✓
1	: 8059	: Adapter, 8-pin to 8-hole analyzing	: ✓

.....203.....
Serial Number

(Signed).....*J. P. H.*.....

ACCESSORIES PARTS LIST (NOT INCLUDED IN ORIGINAL 593 SHIPMENTS)

STOCK NUMBER:	DESCRIPTION	: PRICE
6744	: Connectors, pair 4-ft. test leads with	: \$0.78
6745	: pointed pin plugs	: per pair
6986	: Connectors, pair 4-ft. test leads with	: 0.90
6987	: alligator clips and insulated pin plugs	: per pair
6288	: Chart, analysis, 50 sheets to pad	: 0.25 per pad

Prices subject to change without notice.

SUPREME INSTRUMENTS CORPORATION
GREENWOOD, MISSISSIPPI
U.S.A.



www.StevenJohnson.com

**Antique Technolgy, Tube Radios and Test Equipment
Vintage Schematics, and Publications**

Steve's Antique Technology