

TEST INSTRUMENT BULLETIN



Our 26th Year

Greenwood, Mississippi, U.S.A.

Third Quarter 1953

IS YOUR TESTER "ON THE BLINK"?

Practically every technician will, at some time or other, damage one of his test instruments through accident or carelessness. A typical example of this is applying voltage to a multimeter when it is set up for measuring resistance or current.

Sometimes, when a tester fails to operate properly, the defective parts can be located by inspection and replaced by the owner with little difficulty. More often, however, it is necessary to seek the assistance of someone more familiar with the circuit who has the necessary equipment to do the job.

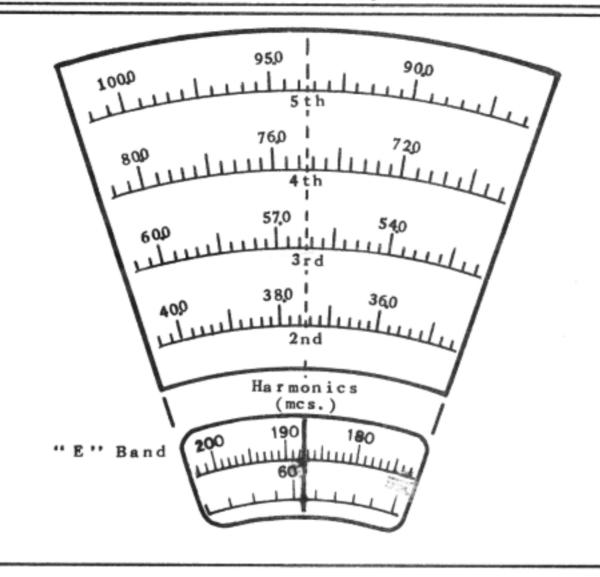
Factory Service

The factory service department stands ready to assist Supreme owners when trouble occurs. Simply write the Service Engineer and give the following information:

- Model No. & Serial No. of tester.
- A complete description of the difficulty. If due to damage, advise position of controls and how the damage occurred.
- 3. A list of the functions which are operating normally.

After receipt of this information, he is in a position to make suggestions as to the most likely cause of the difficulty or provide shipping instructions to the authorized repair station nearest your locality.

Hundreds of Supreme owners vice each year.



THOSE EXTRA RANGES NOT ON THE DIAL

Reports from experienced technicians indicate that overall alignment of TV sets brought in for service is seldom necessary unless adjustments have been tampered with. As the bandwidth of tuners and video i-f stages is very broad, a slight change in frequency of a tuned circuit does not noticeably affect the operation of the set. Discriminators do occassionally require adjustment but even this is not too common.

Unnecessary Investment

In view of the above, some technicians, who service only a few TV sets each month, have decided that the purchase of a sweep generator is not justifiable until their volume of repair work increases. A good AM generator will handle most jobs even though a sweep generator is desirable from the standpoint of convenience and speed. Many set manufacturers recognize this and provide alignment instructions for both AM and sweep generators.

Owners of the Supreme Model 666 signal generator have found that this generator is useful for many TV applications. Although the highest frequency indicated on the dial is 20.5 mc., several higher bands are available by using harmonics of the "E" band.

Harmonics

A harmonic is a multiple of the fundamental frequency. take advantage of this ser- When an oscillator is operating at a certain frequency, say (Continued on page 2, column 4)

SUPREME TUBE SETTING SERVICE, BOX 6552 GREENWOOD, MISSISSIPPI Enclosed is \$1.25. Please forward by air mail latest edition_of roll chart for my SUPREME Model ____ Tube Tester. The number of my old chart is _____. Be sure to give number on old chart! City _____State ____ No C.O.D.'s please!

WHAT ABOUT THE HIGH VOLTAGE?

Owners of Supreme Models 562, 567, 574, 584, 592, 640, 644 and 688 can obtain a television high voltage range extension unit to use with their multimeter or VTVM. These units are easy to use and afford maximum protection against shock.

To order a high voltage extension unit, advise MODEL NO, of your SUPREME multimeter or VTVM and include \$9.95 with your request. Mail your order and remittance to Service Division, Dept. TB32, Supreme, Inc. Greenwood, Mississippi. The extension unit will be shipped promptly postpaid.

KEEP YOUR TUBE DATA UP-TO-DATE

When you run up against a new or unfamiliar tube type in a radio or TV set, it's mighty reassuring to find that type listed on your roll chart. Set manufacturers often begin using new tube types in their sets before these types receive any publicity or become generally available for replacement.

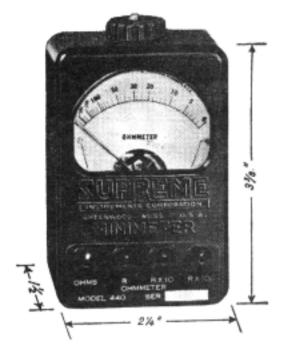
Supreme's Service

A Supreme owner who keeps in touch with our Tube Setting Service is ready to test the new types when they appear. Our tube setting laboratory starts serving you as soon as you register your tester or new chart. They continue to serve you as long as they know your correct address.

If you own a Supreme tube tester manufactured since 1940 and haven't purchased a new chart in 1953, we suggest that you order one without delay. Use the handy order form at the bottom of this page for prompt service.

A Real "Shirt Pocket" Ohmmeter

When you go on a service call, the "ailing" electrical device may or may not be convenient to haul back to the service bench -- in fact, bringing it back to the shop may



not be necessary. A few tests with an ohmmeter will usually provide conclusive information as to whether the trouble is or is not caused by such things as open fuses, simple shorts, poor switch or relay contacts, poor TV antenna connections etc. A good technician looks for simple things first and -- a good technician uses an ohmmeter. Having a Supreme Model 440 handy is good insurance against being shown up by another technician who uses an ohm-

Whether you're repairing radios, TV sets, transmitters, appliances, telephones, automobiles or what have you, you'll find the Supreme Model 440 ohmmeter is indispensable. This little instrument, about the size of a cigarette pack, can be carried around in your pocket or the glove compartment of your car. A larger and more delicate tester would be too cumbersome. In addition, the Supreme Model 440 ohmmeter saves wear, tear and accidents on the more expensive multimeter you use on the bench.

Only through quantity production can the Model 440 ohmmeter be sold at the budget price of \$12.90 (complete with test leads). If you don't find one at your regular supply house, send your order to SUPREME, INCORPORATED, BOX 9552. GREENWOOD, MISSISSIPPI for prompt shipment directly from the factory. The Model 440 becomes such a valuable companion that you will want every man working for you to have one. Send full purchase price with your order and Supreme pays postage.

THINKING OF BUYING A USED TESTER?

Very likely, you don't own For Models 600 and 616. a 1936 (or earlier model) automobile. However, if you did, you wouldn't think of driving it into a garage and asking the mechanic to install an automatic transmission, power steering or other modern features.

Yet, occasionally a newcomer to the field of electronic servicing will acquire an early model tube tester and be very much disappointed to learn that he cannot have it brought up-to-date to handle modern tubes.

Before buying a used tester, it's a good idea to write the manufacturer and find out what service is offered on that particular model.

If you have already purchased a used tester, be sure to request authorization before shipping it to the factory for repair. This may save unnecessary transportation costs if the unit can no longer be serviced economically.

NEW SETTINGS FOR SUPREME TUBE TESTERS

6CS6	56	В	3	7	24
1614	23	C	2	7	78
5814 (45)	57	В	9	7	345
1614 5814 (45) 5814	57	В	9	7	458
Kevi:	sea	Se t			
1B3 (1358 1L6) 50	E	2 1	13	578
1L6	70	В	1	2	7
1L6	80	В	1	2	357
1 V 2	70	E	4	1	5
6BF5 (17)	15	Α	3	7	24
6 BN 6	35	E	3	7	14
12BN6	35	E	3	9	14
For Models	589,	599	9 & !	504-	A,B.
6CS6	3	6	56	В	24
1614	2	6	23	C	78
1614 5814 5814	4	8	57	В	58
5814	4	8	57	В	35

5024		-			00
Rev	vised	Se	ttin	gs	
1L6	1	1	70	В	7
1L6	1	1	80	В	357
6BF5 (17	7) 3	6	15	Α	24
12BN6	3	8	49	E	14
-4 CH DI	LMC	ABD/	DAT	ren	

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CONVENIENT AS A POCKET SCREWDRIVERITESTING TV SETS AND TV TECHNICIANS

Service In Weak Signal Areas Require Better Technicians And Facilities

Fringe and very weak signal areas are the real "proving grounds" for both television sets and TV technicians. Sets which perform excellently near the TV station may prove to be lacking in sensitivity, interlace stability and signal to noise ratio when installed outside the prime signal area. Hence, installation and service in the weak signal and noisy areas taxes the ingenuity of even the most experienced electronic technicians.

Technicians in the weak signal areas invariably lose too much high priced time while waiting on a relatively stable signal to adjust a set for best local reception. This means they are losing dollars and cents when it can be avoided.

A Winning Combination

The Supreme Model 665 Composite Video Generator, and the Model 685 Video Cerrier Generator, will enable you to adjust sets when the station is coming in weak or is even off the air. With this excellent Supreme combination you can connect right to the antenna terminals of a TV set and simulate either a strong or weak signal condition. The Model 665 Composite Video Generator provides the same type of sync and blanking signal as the TV station -even the equalizing pulses. In addition, it incorporates a video section which generates a special test pattern



Model 665

for analysis and adjustment of TV sets.

Set distributors find these Supreme instruments invaluable in their service departments as some of their dealers are in these weak 57 B 35 signal areas.

> Write Supreme, Incorporated, Dept. TB31, Greenwood, Miss. for information on the Model 665 Composite Video Generator.

THOSE EXTRA RANGES

(continued from page 1, col.2)

14 mc., it also generates frequencies of 28 mc., 42 mc., etc. Of course each progressive harmonic is weaker and higher harmonics require greater input sensitivity of the receiver in order to be used.

The procedure for harmonic operation is simple.

- Turn the "set carrier" control to the maximum clockwise position.
- Set attenuator for maximum signal output.
- 3. Use the "E" band and set the dial as follows:

If desired output	Set RF
falls between	Dial to
20-40 mc.	1/2
40-60 mc.	1/3
60-80 mc.	1/4
80-100 mc.	1/5

For most applications. second or third harmonic operation is used. Table 1 contains some commonly encountered frequencies along with the correct dial settings for each.

Table 1

	I dole 2	
Frequency (mc.)	Use Band	Set Dial To
21.75	E	10.87
23.4	E	11.7
24.5	E	12.25
25.4	E	12.7
41,25	E	13.75
42.5	E	14.1
43.5	E	14.5
45.0	E	15.0

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