RCA Full Range Test Oscillator

Type TMV-97-B



Front View



Rear View of Chassis

The RCA Full Range Type TMV-97-B Test Oscillator is a modulated R. F. oscillator which supersedes the Type TMV-97-A. New features are a wider frequency range, an improved calibrated tuning dial (reading in frequency) and a direct-reading range switch. All older features such as small compact size, light weight, self-contained batteries, etc., of the Type TMV-97-A are retained.

The frequency range extends continuously from 90 K. C. to 25,000 K. C. (3300-12 meters) and is divided into eight bands. This covers all intermediate, broadcast, police and short-wave frequency line-up points of all makes of receivers. An eight-position range switch provides for the selection of any desired band. An attenuator (output control) gives a means of adjusting the output to any level. This is very important in modern receivers, due to the increasing practice of combining the automatic volume control with other tubes.

Of special interest to amateurs and experimenters is the simplicity with which the modulation may be eliminated. This may be done by the use of a special adapter in the modulator socket. The oscillator then may be used as a heterodyne oscillator for short-wave superheterodyne receivers or for heterodyning the I. F. frequency of all-wave receivers to permit reception of pure CW signals.

SPECIFICATIONS

Circuit—A tuned-grid, plate-modulated circuit is used, which gives good stability over a wide range of voltage and climatic conditions. The output is modulated 50% at 400

RADIOTRONS-Two Radiotrons RCA-30 are used, one as an R. F. oscillator and one as an A. F. modulator.

BATTERIES REQUIRED—One 22½ volt "B" battery and one 4½ volt "C" battery are used. The "C" battery provides filament power for the Radiotrons, the filaments of which are connected in series.

Size—Height 8½ inches (including raised handle), case alone 6½ inches, width 9¾ inches, depth

Weight - 5 lbs., including batteries.

Switch—A toggle-type operating switch for turning the oscillator "on" and "off" is mounted on the front panel.

FREQUENCY RANGE—90 K. C.-25,000 K. C. by eight bands. The Range Switch is located on the front panel and marked directly in frequency.

OUTPUT—Two binding posts on the front panel, together with an attenuator, give an easy means of connecting and adjusting the output.

Dial-Variable vernier dial adjustable from 6:1 to 20:1 speed reduction. The dial glass has been made thicker so that the indicator line is very close to the dial, thus avoiding a possible parallax.

CALIBRATION—The dial is calibrated directly in frequency to an accuracy of ±3%. Complete individual calibration may be obtained at an additional cost of \$5.00.

Case—The entire oscillator is enclosed in a black wrinkle-finished aluminum case provided with a leather handle.

Net Price \$2950 (WITH RADIOTRONS-LESS BATTERIES)

Order Stock No. 9050

RCA Tools and Accessories

The following tools and accessories are useful for servicing Radio Receivers, Combinations and Short-Wave Instruments of all types and manufacture.

Alignment Tool



Stock No. 4160

Net Price \$0.60

The Stock No. 4160 Alignment Tool is a bakelite shaft combination screwdriver and socket wrench. The matal screwdriver bit is so shaped that the increase in capacity caused by its touching a trimmer screw is offset by the reduction in inductance caused by its shape. This is very important when making adjustments on all-wave receivers where the screwdriver must be inserted through the end of the coil. The socket end fits the main tuning capacitor trimmer adjustment screws used on numerous RCA Victor Receivers. The bakelite shaft is ½" diameter, which gives entrance to ½" holes, used on older model Radiola receivers.

Alignment Wrench



Stock No. 7065

Net Price \$0.50

The Stock No. 7065 Alignment Wrench is a combination screwdriver and alligator jaw end wrench. The metal screwdriver bit is shaped so that it will have a minimum effect on the alignment of the set when it touches a trimmer screw. The end wrench is suitable for adjusting trimmer screws that are accessible only from the side. The shaft is of bakelite, \(\frac{1}{2}'' \) diameter and the overall length is $5\frac{1}{2}''$.

Riveting Punch



Stock No. 10987

Net Price \$0.50

The Stock No. 10987 Riveting Punch is a special metal punch for use with a riveting anvil. The punch may be used with the rivets usually used on radio receivers and permits the service man to make a factory type repair, instead of using machine screws to replace rivets. The punch is $\frac{5}{16}$ " in diameter and $\frac{5}{12}$ " long.

Riveting Anvil



Stock No. 10988

Net Price \$0.70

The Stock No. 10988 Off-Set Riveting Anvil is a special anvil that permits riveting in places ordinarily inaccessible. It is to be used in conjunction with a riveting punch such as Stock No. 10987. The Anvil is $\frac{5}{16}$ " in diameter and $3\frac{1}{2}$ " long.

Tuning Wand

Stock No. 6679

Net Price \$1.10

The Stock No. 6679 Tuning Wand is a special alignment tool which makes possible the checking of alignment in all-wave receivers without disturbing the adjustment of the trimmer capacitors. The tool consists of a bakelite rod having a brass cylinder at one end and a special finely divided iron core at the other end. Inserting the brass cylinder into a coil lowers its inductance, while inserting the iron increases the inductance. From this it is evident that before adjusting trimmers, the adjustment may be checked by inserting each end of the wand into the coil. Proper adjustment is evidenced by a reduction in output with either end of the wand inserted into the coil.

Knurled Nut Wrench



Stock No. 10982

Net Price \$1.20

The Stock No. 10982 Knurled Nut Wrench is a special wrench designed for tightening or removing the knurled nuts such as are used with toggle type switches. These nuts are ordinarily impossible to remove or tighten without marring. The wrench will hold a nut from 56" to ½" diameter. The overall length is 8½".

Off-Set Screwdrivers



Stock No. 3064 Net Price \$0.50 Stock No. 2930 Net Price \$0.50

The Stock Nos. 3064 and 2930 Off-Set Screwdrivers are useful for making adjustments to remote control units and other small screws that are inaccessible with an ordinary screwdriver. The No. 3064 screwdriver is $2\frac{1}{2}$ " long while No. 2930 has an overall length of $4\frac{3}{2}$ ".

Socket Wrench



Stock No. 10983

Net Price \$1.80

The Stock No. 10983 Socket Wrench is a special flexible end socket wrench designed for adjusting the alignment screws of the 1929 and 1930 Victor Receivers, Models R-32, R-35, etc. The overall length is $8\frac{8}{4}$ ".