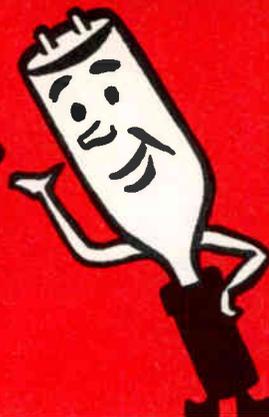




TUBE TIPS



A NEWSLETTER TO THE BROADCASTING INDUSTRY

RCA TUBE DIVISION

HARRISON, N. J.

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RCA Increases Warranty-Adjustment Periods on 5820 Camera Tubes

Increased dependability and longer service life of the RCA-5820 image orthicon camera tube, resulting from years of experience in its design and manufacture, have made it possible for RCA to liberalize substantially the adjustment policy covering this widely used TV camera tube, D. Y. Smith, Vice-President and General Manager, RCA Tube Division, has announced. The new policy, he said, is in effect as of January 16, 1956.

"Under the new policy," Mr. Smith said, "the 5820 will be covered by full adjustment up to 50 hours and pro rata up to 500 hours of service. The new policy supersedes the previous coverages of 15 and 350 hours, respectively.

"In those cases where full adjustment is granted, the dollar savings under the new policy, as compared to the previous one, may be more than \$170; for pro rata adjustments, the saving can be as much as \$360," Mr. Smith stated. He pointed out that this more liberal adjustment policy is a direct reflection of RCA's insistence on product improvement, through continuous research and effective quality-control techniques.



New RCA Publications Contain Valuable Data for Broadcasters

Two new booklets which should be of value to broadcast station engineers were issued recently by the RCA Tube Division and are available from RCA tube distributors at 20 cents per copy.

The first publication, "RCA Interchangeability Directory of Industrial-Type Electron Tubes," lists in alphabetical-numerical sequence 2,000 type designations of vacuum power tubes, vacuum and gas rectifiers, thyratrons, ignitrons, magnetrons, cold-cathode (glow-discharge) tubes, phototubes, oscillograph tubes, camera tubes, and receiving-type tubes for industry and communications. The booklet shows the RCA direct-replacement type or the RCA similar-type, whichever is available.

The second new publication, "RCA Photosensitive Devices and Cathode-Ray Tubes," covers six types of TV camera tubes, 56 types of cathode-ray tubes, and 45 types of phototubes. Included in the camera-tube section are data and spectral-response curves for iconoscopes, image orthicons, and vidicons. Among subjects in the section on cathode-ray tubes are oscillograph-tube types; view-finder, monitor, and projection kinescopes; flying-spot types; and monoscopes.

N. Y. Station to Install New High-Efficiency Transmitter Using Two RCA-5671's

The first production model of an RCA-developed AM radio transmitter that is expected to reduce broadcast operating costs by 50% was purchased recently by station WINS, New York City. Designated the RCA "Ampliphase" transmitter (type BTA-50G), this new transmitter utilizes two RCA-5671 air-cooled power triodes in its output stage and uses phase-modulation principles to produce high-efficiency, standard broadcast amplitude modulation.



The revolutionary RCA "Ampliphase" transmitter offers radio broadcasters such important advantages as the following:

- (1) Eliminates approximately half of normally required power tubes, bulky components, and accessory equipment. Instead of the approximately 35 Kw of audio power required to modulate the usual 50-Kw AM radio signal, the RCA "Ampliphase" transmitter requires only a few watts of audio power.
- (2) Substantial savings in building space. The transmitter requires less than half the floor space needed by existing 50-Kw radio transmitters.
- (3) Simplified and less costly installation.

The RCA-5671 is the famous multistrand thoriated-tungsten filament tube that was designed to meet the exacting requirements of high-power broadcast stations. In unmodulated class C telegraphy service, it has a maximum plate dissipation of 25 Kw. The 5671 can be used at maximum rated plate voltage and plate input at frequencies as high as 10 Mc.

New RCA Junior VoltOhmyst a Compact, Versatile VTVM

Incorporating latest circuit improvements, the new RCA WV-77B Junior VoltOhmyst® offers the broadcast engineer an accurate, versatile vacuum-tube voltmeter in a compact, attractive design. A test unit weighing but four pounds, the all-electronic WV-77B has features usually found only in more expensive instruments, including zero-centering facilities for discriminator alignment; dc polarity-reversing switch to eliminate need for test-lead switching; an ohms probe that is always positive for quick checking of electrolytic capacitors; degenerative bridge circuit that provides freedom from line-voltage changes; and a completely shielded metal case for stability in radio frequency fields.

Supplied with the WV-77B is the new WG-299A DC/AC—Ohms Probe and Cable which features a handy, built-in switch for instant selection of dc or ac/ohms operation. This probe is completely shielded, and is also insulated to prevent accidental shorts, grounds, and shocks.

User price (optional) of the WV-77B Junior VoltOhmyst is only \$55.00, complete with WG-299A dc/ac—ohms probe.

New Schedule Shows Price Reductions for 22 RCA Industrial Tube Types

Price reductions for 22 RCA industrial tube types are listed in a new, eight-page Distributor Resale Price Schedule published recently by the RCA Tube Division. Effective February 1st, the new schedule also confirms all additions, deletions, and changes in the RCA lines of industrial-receiving tubes, power tubes, cathode-ray and phototube types, and semiconductor devices. Capsule descriptions of all types are included, along with approximate shipping weights and adjustment codes.

Among the price changes noted in the new schedule are the following:

Tube Type	New Distributor Resale Price (Optional)	Former Distributor Resale Price (Optional)
3B28	\$ 6.45	\$ 7.15
3C23	11.98	12.50
4X150-D	38.95	48.00
833-A	49.00	49.50
891	235.00	237.00
891-R	381.00	385.00
892	235.00	237.00
892-R	381.00	385.00
6198	230.00	315.00
6326	550.00	565.00

In the new schedule, the price changes as well as the seven new types added to the RCA line are pointed out by symbols.

The new Distributor Resale Price Schedule (Form 3F801) is enclosed with chief engineers' copies of this issue of TUBE TIPS. For additional copies, see your RCA distributor or write to RCA Order Service, 34 Exchange Place, Jersey City 2, N. J.

Broadcasters Hail RCA Power Tube Types 875-B, 6166, and 866-A

Two letters from the field tell the same story about long-life performance of RCA power tubes. First, from WBAL/WBAL-TV, Baltimore, comes this message from William C. Bareham, chief engineer: "We are very happy to make the following report relative long tube life covering three 857-B rectifier tubes which are going strong at 40,950 hours in our 50-Kw AM transmitter, and three 6166 power amplifier tubes in our 50-Kw TV transmitter, which are still making power at 9827 hours." Then, from WISL, Shamokin, Pa., chief engineer Ray Williard writes: "I thought perhaps you might be interested in the report of two RCA-866-A mercury vapor rectifier tubes we have established here at WISL. At the present time they recorded 20,500 hours of continuous service and are still going strong... probably not a record for this type tube but, at any rate, the practicability of purchasing dependable RCA tubes is obvious."



5

Reasons Why the RCA-5820 Image Orthicon is Preferred by TV Station Men



Camera-men like the picture they get with an RCA-5820 Image Orthicon. RCA-5820's are stable, have excellent color response.



Sales Managers have a beautiful picture to sell the sponsor—products look good to the buying audience. RCA Image Orthicons in the cameras do wonders for the "sales picture".



Producers know that they have almost unlimited scope of operation—with RCA Image Orthicons in the cameras. "Eye-level" sensitivity of these tubes makes it possible to pick up any scene they want—regardless of location.



Chief Engineers appreciate the technical advantages of RCA Image Orthicons. The tubes enable them to train operators quickly, produce quality pictures over a wide range of light levels.



Technical Directors make good use of the capabilities of RCA Image Orthicons. They get the depth of focus they need . . . they are sure of high picture uniformity between cameras . . . they can produce a wide variety of lighting effects.

With a record of performance as well-known to telecasters as station call letters, the RCA-5820 Image Orthicon has been serving TV stations faithfully since 1949. No finer black-and-white camera tube is built.



PICK-UP TUBES for TELECASTING

RADIO CORPORATION OF AMERICA