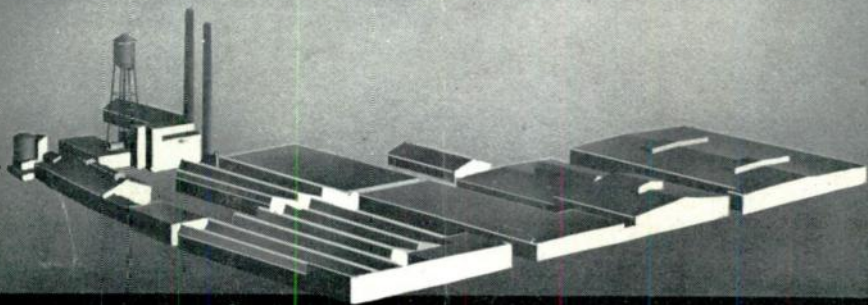


THE CD



CAPACITOR

VOL. 4

APRIL, 1940

No. 1

CORNELL-DUBILIER ELECTRIC CORP.
HAMILTON BOULEVARD
SOUTH PLAINFIELD, N. J.

AN OPPORTUNITY TO CASH IN ON HELPFUL SERVICE HINTS

HERE'S your chance to pass on to your fellow servicemen and dealers some of the helpful ideas and kinks for servicing sets which have been the result of your experience. Yes, Cornell-Dubilier will pay you \$2.00 for each suggestion published, in forthcoming issues of this publication!

Suggestions on testing, spotting troubles in specific models of sets, repairing them, circuits and mechanical hints, etc., will all be acceptable. All contributions must be original, not taken from magazines or other copyrighted sources which is unlawful. Hints will be judged by their actual usefulness to other servicemen. Any number of hints may be submitted at one time. No box-tops, postage, etc., are necessary to be sent in with your hints. There is no obligation whatever.

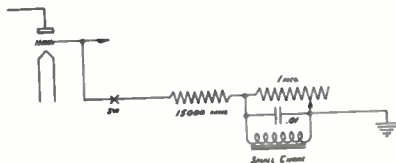
Merely write your hint or suggestion as briefly as possible on a separate sheet of paper (preferably type-written), together with a simple diagram or sketch if required, being sure to give your name and mailing address on the same sheet. All hints must however be limited to 75 words. If you can tell your story in less, so much the better.

Hints and suggestions published in "The Capacitor" become the property of Cornell-Dubilier Electric Corp., and all unpublished items will not be returned. Send in your hints today! Address your letter to the Editor of "The C-D Capacitor" Cornell-Dubilier Electric Corp., So. Plainfield, N. J. Suggestions are acceptable NOW! The best ones received will be published in the coming issue of "The Capacitor" to be issued monthly

hereafter. And remember, send in as many hints as you care to. Here are a few examples of the type suggestions and hints desirable:

An Auxiliary Tone Control

To add an effective tone control on a set or amplifier, the tuned band-pass filter shown in the accompanying diagram provides a means of emphasizing bass response. A switch may be inserted in the lead to the grid of the power tube as indicated to disconnect the circuit for the reception of weak signals.



Checking a.v.c. Circuits

A simple method of checking a.v.c. circuits of many standard models of receivers is to ground the grid return of the first i.f. coil. If this trick doesn't increase sensitivity of the set something has gone haywire in the circuit.

A Hum Detector

In order to locate hum due to magnetic leakage surrounding a power transformer or filter choke, a small electromagnet simply connected to a set of headphones will serve as a direction finder of stray fields. If greater sensitivity is desired, a vacuum tube voltmeter can be employed as the detector instead of phones.

absolutely
FREE

TO ALL SERVICE MEN !



**256
Pages**

WORTH DOLLARS and more to you in solving capacitor replacement problems properly and more economically. Contains all the latest circuits and data on capacitors in standard makes of receivers, conveniently indexed to circuit diagrams in RIDER'S MANUALS, VOLUMES I to X INCLUSIVE. Subsequent supplements to this Manual will be published in the C-D CAPACITOR.

Ask your servicemen friends if they have a copy. If not have them send in the coupon below.

NAME
(Please Print)

ADDRESS

CITY STATE

Please check your classification in radio.

Serviceman; Engineer; Amateur; Dealer; Student;
(Other occupation)

TELL US HOW YOU LIKE THE C-D CAPACITOR

WE intend to issue "The Capacitor" regularly every month hereafter instead of every now and then as in the past. Rather than send you an issue containing a larger number of pages with a long lapse of time between publication dates, we will send you an issue of the present size but published more frequently. Issues including supplements to the C-D Capacitor Manual will of course consist of several more pages of standard set listings.

We therefore welcome your comments on this issue and any suggestions for material contents you would like to see appear in future issues. As announced in this issue, future num-

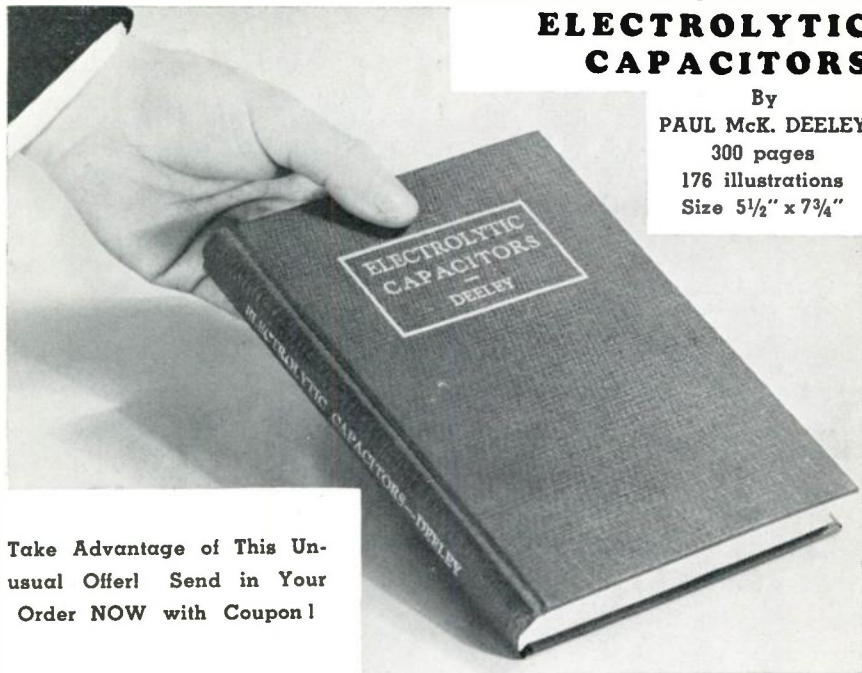
bers will contain selected hints, tricks and circuits on radio servicing in brief form furnished by our vast number of servicemen readers. In addition, listings of up-to-date models of sets supplementary to the "C-D Capacitor Manual for Radio Servicing" will be included from time to time, also the free sale and swap section, "The Trading Post," and a smile or two in "Did you hear the one about . . ."

Let's hear what you think of this setup, as, after all, we want to make this little publication as informative, valuable and interesting as possible to you so that you will look forward to receiving each and every issue.

Get This Book for Only \$1⁰⁰

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Cornell-Dubilier Electric Corporation

HAMILTON BOULEVARD, SO. PLAINFIELD, N. J.



A Free Market-Place for Buyers, Sellers, and Swappers.

This department, a regular feature of The C-D Capacitor, is designed to help readers who wish to buy, sell or trade radio material with other readers.

These advertisements are listed FREE of charge to C-D readers so if there is anything you would like to buy or sell; if you wish to obtain a position or if you have a position to offer to C-D readers, just send in your ad.

These columns are open only to those who have a legitimate, WANTED, SELL or SWAP proposition to offer. The Cornell-Dubilier Electric Corp. reserves the right to edit advertisements submitted, and to refuse to run any which may be considered unsuitable. We shall endeavor to restrict the ads to legitimate offers but cannot assume any responsibility for the transactions involved.

Please limit your ad to a maximum of 40 words, including name and address. Advertisements will be run as promptly as space limitations permit.

FOR SALE—Rider's No. 1 Volume, brand new, three dollars (\$3.00). Modern Radio Shop, 181 Broadway, Providence, R. I.

FOR SALE—RCA 16 MM sound on film projector Model PB-139-B1, complete with spares of tubes, photocell exciter lamp and projection bulb. A1 shape. Make cash offer. Need Palliard-Bolex silent projector. Wm. D. Gerdson, 1206 Radcliffe Pl., Plainfield, N. J.

WILL TRADE set 24 volumes Alexander Hamiltons Modern Business Course, cost \$210.00. Want Radio analyzer, oscillator, meters, Rider's Manuals, &c. E. S. Barnett, P. O. Box 616, South Boston, Va.

FOR SALE—Portable recording machine with xtal mike, built-in, hi-gain amplifier, volume indicator and switch to connect for PA use. A factory built job, still within its guarantee period. Warren Preeshl, New Richmond, Wisc.

SELL OR TRADE—GE 24/1500 volt dynamotor. Mimeograph; 110 volt DC to 110 volt AC MG set; Ranger oscillator; 8 h.p. outboard motor; 35mm projector.

WANTED—Test equipment and manuals; 16mm and 35 mm sound or silent projector. RCA 16mm sound camera. Wm. Hansen, Niles, Mich.

POSITION WANTED—As helper in any kind of radio or electrical work. Am training with American Television Institute, and will accept minimum pay in order to continue training. Am very eager and ambitious to work. Richard Walker, 2351 Champlain St., N.W., Washington, D. C.

SWAP OR SALE—Good RCA 849 broadcast tube \$35.00 cash or good A.C. test oscillator Weston or Clough-Brengle. David Oehlsen, 69 W. 23 St., Chattanooga, Tenn.

FOR SALE—Weston Model No. 1 milliammeter ranges 10-50-500 Bakelite instrument with case \$15.00. Two 6 volt Edison batteries with charger \$10.00. Test oscillator equivalent RCA TMV 97-C \$10.00. 1 in. oscillograph ver. and hor. amp. complete with 5 tubes \$10.00. R. Bronson, 142-18-230 Pl., Rosedale, N. Y.

FOR SALE—110 volt AC, 6 volt DC 36 watt amplifier complete. Write for details. One Weston 669 vacuum tube voltmeter in carrying case, Vol. 1-3 Gernsback Manuals, state best cash price. Hoffman Radio Service, Ripon, Wisc.

WANTED—Rider's Manuals 6-7-8-9. Also a good tube checker. Gustave Mondrush, 9918 Lauder Ave., Detroit, Mich.

WANTED—Scott 30 or 23 tube receiver, state price, condition.

FOR SALE OR TRADE—8 Tube Hallicrafter, Universal BB mike, DeForest radio course, following RCA equipment, M34 auto radio, phonograph oscillator, Universal output transformers, wave traps, etc. OK Radio Service, 2235 N. 39 St., Milwaukee, Wisc.

FOR SALE—Dependable 1938 Model 311 Portable DeLuxe tube tester. Floating filaments, 4½" rectangular meter incorporating dual range ohmmeter and capacity meter scales. Condenser and tube leakage neon. New condition, \$18.50 cash. Earl Hammond, 11 East St., Cumberland, Md.

THE RADIO TRADING POST—(Continued)

FOR SALE OR TRADE—Two RCA motion picture sound heads in good condition with all mounting attachments for powers projectors, two GE 1/4 h.p. motors for sound—heads, one RCA PG-10 type PA21 theatre amplifier with speaker, all for \$100.00. 4 6 v., 300 amp. hr. Willard batteries, cost \$51.00 each, only used four months, in perfect condition. Price \$15.00 each. Taylor Radio Repair, Beaver Dam, Ky.

SWAP Xmtr parts for camera equipment. H. E. Leigh, 323 N 3, San Jose, Calif.

FOR SALE OR TRADE—H.V. power trans; carbon plate 50 watters; mill meters; cond. mike; 2-button mikes; transceivers; 04a and 12d with sockets. Fred E. Herman, 2834 West Fullerton Ave., Chicago, Ill.

FOR SALE—Hand duplicator outfit, takes mimeograph stencils, \$5.50; \$32 Steel Guitar like new with case, \$8.50; 6 ft. trumpet horn, \$4.95; antique Regina music box, plays tin records with chime effects, with 12 classic numbers, perfect condition, \$35.

WANTED—Piano accordion, oscillator, moving picture outfit. Park Circle Radio, 3451 Park Heights Ave., Baltimore, Md.

FOR SALE—Trumpets; units; amplifiers; testers. National Sound Service Co., 625 Main St., Worcester, Mass.

POSITION WANTED—Young man, 20, R CA graduate, holder of radiotelephone first class and telegraph second class licenses, desires position in any type radio station. Harry E. Anderson, New Lenox, Illinois.

WANTED—Used marine receiver or transceiver. Will pay cash or trade guns, etc. Woodrow Cooke, 214 S. Ravenell, Florence, S. C.

SELL OR SWAP—New leg type brass lframe telegraph key; Leach break-in relay model 18 heavy 110 v.; two .004 MF 5000 v. mica transmitting condensers in cast aluminum cases.

WANT—Oscillograph, no draw voltmeter, or multimeter with 1 meg. or better. J. E. Doyle, P. O. Box 172, Avon, Mass.

COMPLETE Phone or CW amateur 30 watt transmitter with matched modulator and double button carbon microphone. Also 1936 RCA 7 tube receiver. Best cash offer or trade. Karl H. Stello, 1601 Broadway, Kansas City, Mo.

FOR SALE—1 No. 89 De Luxe Supreme tube checker. One No. 339 De Luxe Supreme analyzer, A-1 condition, except cabinets. Price \$23.50 each, both for \$44.00. Ideal Radio Service, 1713 Larrabee St., Chicago, Ill.

FOR SALE—One Powers Model 6B 35mm projector with accessories. This is full size theater type projector in good condition; or will trade for Gradlex camera. Can also provide projector completely adapted for television transmission. A. C. Wooldridge, 96 Lincoln Avenue, Little Falls, N. J.

FOR SALE—One Triplett, No. 666, V-O-M, slightly used, in perfect condition, \$8.00; one Model No. 76, A. B. Dick, hand-fed mimeograph, used, with automatic counter, in good condition. Takes up to 14" paper, \$10.00. Theo. J. Geiselhart, 64 Clinton Pl., East Rutherford, N. J.

WANTED—Rider's or Gernback service manual used service equipt used amateur receiver, and parts, have cash. Ed. Sujak, 5321 W. 30th Pl., Cicero, Ill.

FOR SALE—Gherardi No. 1 and No. 2, \$. Resistance measurement, Rider, \$1.50. Cathode Ray tube at work, Rider, \$. Dewey Radio Co., 79-19 37th Ave., Jackson Heights, New York City.

WANTED—Gernsback's or Rider's service manuals from 4 to 8, also test oscillator.

WILL SWAP—Carter Genemotr 32 to 180 v. DC, good condition, NaAld 950 Gem Octal adapter, also NaAld 908CN analyzer kit, both new, 32 v. Delco plants and motors. Knortz Electrical Co., Honeoye Falls, N. Y.

FOR SALE—Jewel tester, model 444. A-1 condition guaranteed. Write best offer. Sciera Radio Service, Fillmore, N. Y.

AMATEURS!

Write for this complete



TRANSMITTING CATALOG

No. 160T

Containing data, charts and complete listing of C-D Mica and Dykanol Capacitors for radio transmitters.

Did you hear the one about—



Clash

Lawyer: "So you want a divorce. Aren't your relations pleasant?"

Client: "Mine are, sir, but hers are terrible." — *The Rotary Merry-Go-Round, Fairfield, Iowa.*

Comeback

"I want a shave," said the disgruntled Sergeant as he climbed into the barber's chair. "No haircut, no shampoo, no rum, witch hazel, hair tonic, hot towels, or face massage. I don't want the manicurist to hold my hand, nor the bootblack to handle my feet. I don't want to be brushed off, and I'll put on my coat myself. I just want a plain shave, with no trimmings. Understand that?"

"Yes, sir," said the barber quietly. "Lather, sir?" — *Troy (N. Y.) Times-Record.*

Business Activity

Rastus: "How's business, Sambo?"

Sambo: "Lawdy, man, business am sure good. Ah's done bought a mule for \$10, swapped it fo' a bicycle, swapped dat fo' a mangle iron, swapped dat fo' a bedstead, and ah sold dat bed fo' \$10."

Rastus: "But you-all ain't made nothin' on de turnover."

Sambo: "Ah knows dat, but look at de business ah's done." — *Bulletin, Estevan, Saskatchewan, Canada.*

Fumble

Professor's daughter: "Circumstances compel me to decline a marital arrangement with a man of no pecuniary resources."

Student: "Er—I don't get you. . . ."

Professor's daughter: "That's just what I'm telling you!" — *Bulletin, St. Albans, Vermont.*

Prelude

Scotch Gent—"My lad, are you to be my caddie?"

Caddie—"Yes, sir."

S. Gent—"And how are you at finding lost balls?"

Caddie—"Very good, sir."

S. Gent—"Well, look around and find one so we can start the game." — *West Point Pointer.*

"Why all the heavy thought, Ethel?"

"I'm trying to make up my mind whether to be popular tonight or act like a lady."

"I beg your pardon, Miss, but would you like to go for a ride?"

"Sir, I'll have you know I'm a lady."

"I know that. If I wanted a man I'd go home and get my father!"

Teacher—"Bobby, why was it so hard for Paul Revere to complete his ride?"

Bobby—"Because he passed lots of houses where they'd forgotten to pull down their shades."

He—"I am a self-made man."

She—"Yes, a shining example of cheap labor and poor material."

Student (being arrested)—"But, officer, I'm a college man."

Cop—"I'm sorry, but ignorance is no excuse!"

"Say, you seem to know a lot about love!"

"I should say so! I've been a taxi driver for years."

"There is no use living in the past. There is no future in it."



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EXCLUSIVE MANUFACTURER OF

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Capacitor Analyzer. Model BF-50. The C-D Capacitor Analyzer measures capacities between .00001 and 240 mfd of all types of capacitors. Measures power-factor, 0-50%. Checks insulation resistance. Direct reading linear scale calibration. Push button switching. Cathode eye for bridge balance; six color coded scales. Model BF-50 complete, less tubes—List \$41.50—Net \$24.90

Capacitor Bridge. Will accurately check capacities .00001 to 50 mfd of all type capacitors. Indicates power-factor of electrolytics. Checks for open, shorts, and high and low capacity. Can be used as a continuity meter. Direct reading ranges with all markings directly in microfarads. The C-D Capacitor Bridge is the most compact and useful instrument of its type, ever offered to the radio industry. Model BN complete, less tubes—List \$16.50—Net \$9.90.

Capacitor Decades. The C-D Capacitor Decades are the first inexpensive, practical capacitor decades ever developed. Ideally suited for experimental circuits, filter design, bridge measurements, etc. Capacity range between .0001 and 11.1 mfd available in three decades, which can be used continuously on 220 V. A. C. or 600 V. D. C. circuits. Decades supplied in attractive bakelite cases $3\frac{3}{8}$ " x 5" x 3".

Model CDA-5, .011 mfd. in .0001 mfd. steps
—List \$9.00—Net \$5.40.

Model CDB-5, 1.1 mfd. in .01 mfd. steps—
List \$9.00—Net \$5.40.

Model CDC-5, 10. mfd. in 1 mfd. steps—
List \$16.00—Net \$9.60.

Commercial tolerance of 5% used in above models. Tolerance of 3% available at slightly higher cost.

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