## WITH THIS ISSUE

de present a new catalog which re!lects our gröwth. due to your patronage, for which we are extremely grateful.

The last few years have resulted in an increase in business necessitating a substantial increase in our force and quarters. We now occupy the entire sixstory building at $54-56$ Vesey Street, a total floor area of 20,000 square feet, every bit of which is utilized. The basement of the building is used for stock. Our metropolitan sales division and offices are located on the street floor. Shipping and receiving departments occupy the next floor. These have been greatly enlarged to dacilitate speedy handling of your orders. For the convenience of our large forcign trade, we have just organized a foreign department, where all export correspondence and orders are handled. Expert linguists will answer mail in any language. even Chinese.

Executive and general offices are located on the sec-
ond floor. On this floor is also the art department together with the test laboratories. The third floor is occupied by machine shop, aszembly department and service laboratory. Only the very latest and best test equipment is used. The next floor is the stock room, and the overflow from this is placed on the next floor, where are also located spraying and finishing departments.

We have added to our staff either in advisory, consulting or active capacities, men who are known over the entire world as authorities in radio and electrical engineering. We have in addition full access to the facilities of the research laboratory in one of the largest technical schools in the East. In this issue of our catalog we want to introduce you to some of our staff. We will let you meet more in future issues. Your suggestions and comments are invited. Please address "Catalog Editor."

## Let Us Introduce M. B. Sleeper M.E.I.R.E.



Mr. Slecper is well known as the author of innumerable text books and pamphlets on radio. Many a radio man still remembers some of the famous circuits designed by him. The "RX-1," the "X-11," the famous "Pilot lVasp" which he enginecredain conjunction with R. S. bruse, the "Air-Huund," the "Air Scout" and uthers.

Mr. Stefer is well versed in the needs and requirements of the serviceman and dealer. Wherever radio frien cungregate you will har of "AlB."

## Have You Met Bertram M. Freed?



Many years in the radio service field have gaired for Bertram M. Freed an envia ble, country-wide reputation as a service authority. Thousands of service men hate read and are familiar with his "Operating Notes fur Service Men" for several years, a leading contribution tu "Radio Craft." the serv. lice man's magazine. For a lung time Ms. Freed thatiaged the repair department of whe of the largest radio retail urgainizations if die East. At present he is at suciated with this same companjo ifin afl impurtant capacity, and vae that erables Mr. Freed to keep in cluse curitact with all that pertains to radio service and repait. In ala effolt to aid selvicing, he has de signed mariy tuols and devices to assist in the test and tepail of teceivers. We have induced Mr. Fieed to manage our oervice mad teat departueato which are as your dioposal for eerviciag, teas and repair of your racaivera at a müaizal fot. All thio work it wader the percoatal oupervision of Mr. Frodi. Wrisa our Sarfice Departmazt for fall detaile.

## Meet Alfred A. Ghirardi

Mr. Alfred A. Ghirardi is instructor in Radio and Electrical Engineering in one of the largest New York technical schools. He is author of the now famous "Radio Physics Course," a stanlard textin schools throughout the country. Mr. Ghirardi is now busily engaged in preparing a new and larger ", Radio Physics Course" in response to many requests. He was formerly assuciate editor of "Radiu Engin-
 eering," "Radio Me shanics", and "Radio nical consultant for the Pilot Radio and Tube Corp. He is nuw the techni al and chinf engineer of the Radio Technical Service Bureau. Mr. Ghirardi can tell how a tecelver ur unit will operate and its characteristics, before it is even built. He is a member of the N. Y. Electrical Suciety. Mr. Ghirardi is that rare specimen, a practical rescarch and development engineer. He is a friquetat contributor to the pages of "Radio Engineeritag," "Radiu Design" and "Radiu News."

## Introducing Gerson Lewis H.S. A.L.M.E., I.R.K

Gereun Lewis was furmErly associate editor of "Radiu Lesign" and was in charge of the Kadio Le siga laboratury. He was also managilig head of "Speed." the mail vider divisiut of filut Electric and Mifs. Cup.

Alung with Mí B Sleef er he did tadiu work on the Filut Ahplatie Fiadiu Lab. viatury. 1 ater ho becartie eriginear $\mathrm{i}_{1}$ charge of $d e$ velopiment at the sleeper Resealch latas., whero re mute cuntrul fur radio was
 develuped. He has been actively assuciated ia radio since his graduation froma techaical schoul in is contributes to "Radiu Eagineering," "Radis" other radiu and electrical magazines.

# The そej a Reason! 

 IF you could walk into our place of business, we wouldn't have to write this. You would see a modern, efficient radio merchandising mart. As we took you through the various departments, over the floors occupying thousands of square feet, you would be thrilled at the size of this business machine and enthusiastic in voicing your admiration at the smooth-working efficiency of so vast an organization. But only a very few can call here, so in a few feeble words we try to tell you the story.From our start in this business, we have had just one policy-VALUES AND SERVICE. Our entire organization, from the president down through the managers of departments to the erraid boys, have this as their guiding, beacon. "He profits most who serves best" is the best business motto. Modestly, yet with pardonable pride, we point to our present size and place in the radio industry as the best proof of it.

Located in New York, in the world's largest radio center, our experienced buyers are ever alert for quality merchandise at attractive prices. The main idea in this catalog is to offer all the wanted materials at the very lowest prices consistent with good quality and service. We will understate rather than overstate, and refrain from wild and extravagant claims which insult your common sense and intelligence.

As our experience grows, we are more and more convinced that you want honest, straightforward statements so you can pick the best value for the least money. We pledge an unbending adherence to these policies, which have been justified by the faith of the many customers whose satisfaction has caused the growth of this establishment to its present size.

## TRANSPORTATION

Please indicate on your order as to how shipment is to be made. If order is to be forwarded parcel post, include enough to pay for postage. We pay your parcel post insurnice, when full remittance, including postage, accompanies your orders. Over remittances will be refunded. If not enough has been enclosed to pay for postage, we reserve right to ship C. O. D. or express collect for the balance. We reserve right in make shipment in manner wo think best.
$2 \%$ DISCOUNT
All prices quoted are neti a $2 \%$ cash discount has already been deducted.

## HOW TO ORDER

We pay pontame on our convenlent order blanka. If you are all out of these blanke a post card will bring a sur to you. Indicate catalog number, page number and full description of ltem.

## "SAME-DAY SHIPMENTS"

We cnn xupply you with any liem In radlo, even though not listed In fbla entalos. Tell us what you want, and we will forward our lowest net prices to you.

## NO MAIL ORDERS

 ACCEPTED UNDER $\$ 3.00$ Mall orders for less than $\$ 3.00$ cannot be accepted. If we were to ship such small orders, it would increase our operating exses and result in an increase narices.
# "If I Knew You and You Knew Me" 

By W. E. COOPER

If I knew you and jou knew me,
'Tis seldom we would disagrec;
But, never having yet clasped hand, Both often fail to understand That each intends to do what's right And treat each other "honor bright."
How little to complain there'd be
If I knew you and you knew me.
Whenever we ship you by mistake
Or in your bill some error make,
From irritation you'd be free
If I knew you anc you knew me. Or when some goods you "fire back,"

Or make a "kick" on this or that,
We'll take it in good part you see,
If I knew you and you knew me.
With customers ten thousand strong Occasionally things go wrong-
Sometimes our fault. sometimes theirsForebearance would decrease all cares; Kind friend, how pleasant things would be; If I knew you and you knew me.
Then let no doubting thoughts abide Of firm good faith on either side;
Confidence to each other give, Living ourselves, let others live;
But any time you come this way,
That you will call we hope and pray;
Then face to face we each shall see And I'll know you and you'll know me.

RETURN MERCHANDISE
In returning merchandise, please ask for authorization. All merchandise must be returned via parcel post or express, all charges prepaid.
We number amonfs our thousands of customers the U. $S$ versity. Columbia College, Yale University Hebrew Technical Institute, Turts Collece, Sheffield Insbs and hosts of others. As we habs, and hatisfled these organizahave satisfled these organizations, we feel confident we can strictly net cash. Remarkable strictly net cash. Remarkable fiven by us make it profitable Fiven by us make it profitable
for you to buy for cash. All for you to buy for cash. All
goods are shipped $F$. O. B. New Goods are shipped F. We advise remitance with York. We advise remittance with order. By remitting with order
you save C. O. D. collection charges made bv the Post Olflce, charges made bv the Post Olilce,
and express. This amounts to and express. This amounts to
quite a saving in most cases.

## C. O. D. SHIPMENTS

All C. O. D. orders must be accompanied by at least $20 \%$ deposit. No C. O. D. shlpments made to foreign countrles. We will ship documents agalnst sight draft on nny Nev York bank。

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Make remittances by cashiers' sheck, postal money order. cash. express order, or personal check. Personal checks, unless certlifed will be held untll payment is made. U. S. Postage Stampn In noy denominations, in good condition, accepted in payment. Cash should be sent by registered mall.

# ANOTHER' SMASHIITOTRIOMPHI 

## Reliafe

The amallest and most complete radio recelver ever manufactured. Complete in overy aense, contalning features of the most expensive midget aet on the market and many of ita own. Housed in a beautiful cabinet of selected woods. the Hellable Junlor produces enormous volume with distortion-iree tone.

## Circuit Details

The circult is newly develaped and one of the most efficlent ever deslgned, conslating of two tuned R.F. stages and two audio stages with Pentode output.

## Special R.F. Circuit

The double tuning condenser, which permits high galn per stage without the usual interference between stages, and the radio prequency transformers were apeclally designed to secure utmost ensitivity and the sharpest eelectivity.

## New Special Design Power Detector

The detector uses a 224 as a power detector in the latest detector clrcult design. The Rellable Junlor has a power detector that will handle enormous volume without distortion and yet is far more eenaltive than the old grid leak and condenser method of detection.



## Audio Amplifiers

The audlo amplifier consists of a twostage compensated a mollfer. The first stage is resistance coupled while the output stage which uses a Pentode is special transformer coupled. This ampllfier gives tremendous gain and power. A phonograph pickup can be used, if desired, something which is not posslble with recelvers with a
single audlo stage.

## Full Range Dynamic

A dynamlc soeaker designed for use with al Pentode tube is the reproducer. It assures falthiul, pull-throated reproduction ot all musle and speech

## Filter Circuit

The filter circuit contalna 7 mfd of high grade linen-paper condensers. And 8 mpd electrolytic in a brute force designod. Absolutely no hum.

## Constant Voltages

The voltage divider system is so deslgned as to always furnish steady voltages to all tubes, due to the ingenlous drop system employed.

Over-Size Power Transformer
The power transformer employed is of a cenercus oversize type which delivers the full speciffed volages to all tubes. Bullt to a standard, not to a price, it glves long. unfalling service.

## Tuning Control

The tuning dial, of the latest type in design ana artistic in appearance, is e pull vision direct drive, with NO

## Multi-Mu and Pentode Tubes Used

The use of a multi-mu tube increases the sensitlvity and volume. Selectivity is brought up to a new degree by reducing cross talk modulation to a minimum. A Pentode tube in the output circult handles the enormous power input and dellvers it to the speaker in a new reallisms of tone.

## Handsomely Finished Cabinet

The cabinet is gracefully designed. It Is made of $h$ - 1 -rubbed satin-finlahed walnut, and mersures $18^{\prime \prime}$ ¹03/3"x7". The on and off ewitch is combined with the full range smooth volume control.

## Full Shielding

The chassie is cadmlum plated and fully shlelded. Every new fuature is bullt into thla recelver. Not a job lot. but a carefully designed, wellplanned, capably-bullt recelver.
Cat. No. 3928

## YOUR PRICE <br> $\$ 16.75$

Complete with Tubes
Ready to Operate
When sote are ordered in late of or more deduct $5 \%$ additior- ${ }^{-}$


## SaSalle

## Modern Pentode Auto Radio

The La Salle Auto Radio represents the newest developments in auto radio. Uses the new radio tubes. specially designed for automobile radio, a Utah selfbaffling dynamic speaker, easiest installation of anc automotive set, high sensitivity, quality comparable to the home receiver, and the latest and most eifijcient control system yet devised. Battery drain is kepi down to a minimum and assures long battery life.
Uses Newly Developed Automotive Tubes The lua Salle uses six of the new automotive tules. Three of the 236 screen grid type, two of the $2: 37$ general purpose type and a 238 Power Pentode output tube. This combination gives it stability, sensitivity and freedom from tube trouble and burnout. The automotive tubes are of the heater type, non-microphonic, sturdy construction, and designed to operate over a filament range of from 6 volts to 7.5 volts. This insures equal reception when the car is at rest or when rumning and the generator charging the cur battery, increases the potential across the battery by 1 to $1^{11}$. volts.

## Full Range Utah Dynamic

A special automobile dynamic speaker, manufactured by Utah is standard equipment with each set. It is it speaker worthy of the finest motor car. Has adjustable brackets that will allow easy installation in any car in any position. The Utah Auto Speaker is acoustically correct and will give quality comparable to the finest receivers in the home.

## The Utah Motor Car Control

The modern motor car radio deserves a remote control that is equal to the car and radio in mechanical perfection, appearance, and reliability. The control is at the fingertips of the driver and is not affected by road shock and requires no drilling or cutting to install. The Utah has no back lash, no lost motion, no clunsy rotating drive and does not require straight line installation. Cable up to 10 feet long will be supplied at no extra charge, when spedfied. If a longer drive is needed there will be an additional charge of 25 e per 100 k

## Filtered Power Supply

"A" power is drawn from the car battery. "B" supply is taken from four large dry " $B$ " batteries mounted in a steel case which fastens out of sight under the floor boards. This case is standard eqiupment included with the receiver. Voltages from the "B" battomee are divided within the set. Each lead is filtered to prevent interstage coupling.

## Easy Installation

La Salle Pentode Autu Radio is the smallest aver designed fur motor car use. It can be installed in a fraction of the time needed for other makes, A screw driver and pliers are tho only tools necessary. No drilling, cutting or marring of the car necessary. A collar on the receiver provides for installation on steering column. Where installation against a flat surface is desired the collar can be removed. Complete receiver with Utah Auto Speaker, Utah Kemote Cusitrol, Baltery Bux. Ignition Suppressors, (suppressors for six-cylinder cars), Generator Filter.
Cat. No. $3696 \quad$ YOUR $P$ PRICE +50 Less Iubes
Extra Suppressors 45c each


earphone connections. A handsume walnut cabinet is supplied with all models.
The receiver fur A. C. uses wo 2'2
The Universal is also available in a battery operated model. The battery job uses two 236's, a 237 first audio and two 238 Pentodes. The receiver is identical in appearance with the A. C. model excepting that it has no provision for dynamic field.

## Univeral Kit for 110.115 volta, 60 - cycle A C. <br> Universal Kit for battery operation.

Cat No. 8607
Universal for 110.115 volts, 60 -cycle A C. Factory assembled and wired.
Cat. No. $3608 \quad$ Yrice $\$ 99.50$

## Pilot Universal Super Wasp Receiver

## Latest Model

The most advanced receiver ever offered the radio listener. Covers in seven steps the wave length range of 15 to 650 meters. One switch, controlled from the front panel controls all wave-length changes. This is as important an improvement to radio as the self-starter to automobiles. There are seven available overlapping ranges 15 to 23 meters, $2 \cdot 2$ to 41,40 to 75 , 70 to 147,146 to 270,240 to 500 , and 470 to 650 . Any one range may be instantly sclected, a scale on the front panel indicating the range which is active.
The Universal uses a stage of tuned screen grid K. F. amplification, a screen grid detector using a new method of regeneration control which does not alter the tuning, an impedance coupled audio stage with 245 push-pull. Has provision for dynamic peaker field excitation, phonograph pickup and d a 280

| Yourt |
| :---: |
| Price |
| $\$ 79.00$ |

Cat. No. 3609
Universal Battery Operated. Factory assembled and wired.

Your
Price
$\$ 93.00$

Pilot Television Receiver


## Variable Shielded Condensers

Cut. Nu. 3syo. single sectloo

Cat. No. 8600. Doable seotion

Cat. Na BeO1. Triple motica



Your $\$ 1.14$
Your \$2. 19 Your
Price
$\$ 3$
$\mathbf{3}$ Your
Price
$\$ 4.47$


## CQMIPLETE LINE QD IPILAT HADIO PARTS

Radio Surplus Corporation, 54-56 Vesey Street, New York


## Pillod Miellget Super- - Heteradyre



 inches deep.
This wonderful set has nutomatie volume control, full vision flluminated Btatima selcotor, tone control, phonograph connection and a full-voiced dynamic devilaned super-heterodyne clrcuit that gives rean-cut stpamion betweet fating, eliminates *blanting, nud nssures unfforns mignal strength. No ofher radio ket at this price has this expensive feature,
The Midisct Super-Heterodyng employs three 551 varianie-mn tubes two 227 s, one 247 Pentode
and one 250 rectifler. The circuit compriges one RF stage ahead of the first detector, local osclllator, I.F, stage, second detector and output Cat. No. 8031.

YOUR PRICE \$ 99.50 110-volt D. C. Model available at same price. Models available for battery or $25-\mathrm{cycl}$ e operation.

## Pilot Standard Console Super-Meteroalyne



The ten-tube Pilot
 climinates rading "ntiververnt
"blanthy" in the foud mpeaker when Irom one atation reatures ure full-
vision statlon sevision statlon se-
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## Pilot DeLuxe Console Super-Meterodyne



Gudet, afid the the lattor, has a long fength of baffie cian ormins wut the deepest notes and ieproduces every initruunily metel shows when a gtatiun is fully tunedin, find is a valuable ald lif cealizing tho sele tivity and high tome quality uf which tho aet is capable. Overali dimangiona of 5 luctics deap
rer tubea are required: Sour sils, three syyen med two
隹
Cint No, 3933. FoF 110-70ib, YOUR PRIOX 50-60 cycle.



## AD RADIO NATVION ALPRODUCTS $\sim$ N



# The New National Thrill Box <br> Double Screen Grid <br> Using New Variable Ma Tubes 

## the nex National 5-tube short wave "Thrill-Box recelver was

 designed in response to a continuous demand for a highly sensitive yet easily tuned short wave recelver. It is capable of giving consistent loud speaker reception irom the numerous iorelgn short wave broadcast stations, as well as meeting the strongest requirement of amateur End commerclal operators.
## High Gain Circuit Employed

The circuit comprises a stage of tuned screen grid R.F. and a screen grid detector. Typo 285 or 551 variable mu tubes are used in the R.F. and detector stages. The two stage audio ampliffer uses 227 tubes in both stages to eliminate all hum. The output stage is purh-pull. A jack is provided after the first otage for headphone reception, if desired. Four sets of f.F. colls are included. They cover from 15 to 115 metorn. Spectal solls are avallable for other rangea and blank forms for experimental purposes,
"Wide Band Spread" Operation
The wtralght line frequency tuning condenser is of a spectal construction and may be asily adjustod to provide for the "wide band epread" required for apectal amateur and commerclal work.

## All-Electric Operation

The power pack is a separate unit thoroughly shielded and mounted in an attractive metal caso. It supplles all nec(or 16 to 116 w.th cabl lues 2-385. Moaicic Cat. No. 3886. $\underset{\text { Your }}{\text { Youte }} \$ 46.75$ tubes Model DC Sws-For 2-volt battery operation (with colls for 15 to 115 meters). In kit form. Uses $2-232^{\prime} \mathrm{s}, 2-230^{\prime} \mathrm{s}$, and 1-231 tube. This recelver may also be used with six-volt tubes as per instructions furnished.
Cat, No. 3867.
$\underset{\text { PRICE }}{\text { Yotr }} \$ 44.10 \underset{\text { tubee }}{\text { Le. }}$ A-B Power Supply for uso whth Model AC SW5 Completely wired with plug-in cable, uses a 280 tube.
Cat, No. 3868 .
Yotr $\mathbf{\$ 2 0 . 3 0 \text { Less }}$ Band Spread Colle for 80, 40, or 80 meter. Per set of two por band.
Cat. No, 3869.
 We can furnish either DC SW5 or AC SWS model wired and ready to operate at an udditional cost of s5.8s.

## SPECRAL SHDRT WAVE TUNING CONDENSERS

## Type SE 100



## The new National Type SE 100 Variable Condenser has

 been designed especially for short-wave work and is not of the "cut down" broadcast variety. Among the outstanding insulated fis the use of the 2,0 rotation equicycle plates hole panel mounting, is well as provision for baseboard mounting, ${ }^{2} 4^{\prime \prime}$ shaft and $R-39$ low-loss insulation. Size Rotor and stator plates readily removable to alter capacity range to meet spectal circuit requirementa.Cat. No. 3870-Type S E $100-100 \mathrm{mmf}$.
List $\$ 3.75$. Your Price...${ }^{2}$...
\$2.21
Cat. No. 3871 List $\$ 3.50$. Your Price 50 mmf .
Type s T 100 ame an nbove but eqitunc plates, $180^{\circ}$ rotation,
Cet. No. $3872-$ Type \& T $100-100 \mathrm{mmf}$.
List $\$ 3.75$. Your Pric
\$2.21



## Special Short Wave Plug-

 in InductancesType R-39
Moulded of R-39, the new low-10ss coll form material developed by the Radio Freauency Laboratories for short-wave use, Forins avallable with UX four prong,
UY flve prong, ol speclal six prong base, for use in standard sockets.
The colls listed below are designed for ase with the new National SW5 "Thrill. Box.


Cat.
Your
Hange
Lint
3874
Color Nio
10
$\$ 2.75 \ldots \$ 1.62$
$\begin{array}{rlrr}\text { Brown } & 10 & 9 \text { to } & 1 \\ \text { Black } & 11 & 14.5 \text { to } & 25\end{array}$
Black 114.5 to 25 " $2.50 \ldots .47$
Red $12 \quad 23$ to $42 \quad 2.50 \ldots$ 1.47

White
Green $14 \quad 85$ to 115
$250 \ldots$. 1.47

Blue
15
85 to 115
$2.50 \ldots$ 1.47

Blu• 15 116 to 200 " $2.75 \ldots$. 1.62

Orange 16200 to 860 * $2.75 \ldots$. 1.62

Yellow $17 \quad 350$ to 550 . 8.7 1.62

Spectal 18 540 to 850
0 per
3.53

Four prong UX, five prong UY or mix prong special
Cat. No. 3s75. Last $\$ 1.50$. Your Prico................ 89c


## (L)RADIO NAJIONALPRODURTS (N

## De Luxe National NIB 30 Screen Grid Tuner




## National Velvetone Amplifier-Speaker

This new yelvetone Amblifer Speaker unit 19 dealgied eypecialls for use with the MB-30 tuner A The the tuner it $14,1, \ldots, n^{2}$保
Your
Price


## Full Line of National Parts in Stock

## BUD EQUIPMENT-EVERYTHING IN RADIO

Wand Super Short Wave Converter

A New Thrill in Radio With the Turn of a Knob



Makes Your Present Set a Short and Long Wave Receiver

The Bud Super short wave converter is a fully A.C. operated screen grid converter with self-contained filainent supply and an adapter whereby plate current is taken frum the bruadcast receiver. Housed in a compact DieCast Aluminum case and finished in a beautiful crystaline brown. When operated in combination with any standard broadcast receiver either superheterodyno or tuned radiu frequency type, the Bud super short wave cunverter will give loud apeaker volume of short wave and bruadcast programs of all the American and foreignt
 tion to get radio messages from ucean linerg, aeroplanes, direct without depending of rebivadiasthe from local statiour. Cubiplete with e pairy of culls. Shipg. ive © ibs.

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BUD AERIAL FİTEK


A very sthactuve compant thit that really Eliablée gol to cut whi interfeifig eigthists alid bitag la the atathon yout draite.
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$\underset{\substack{\text { Your } \\ \text { Yrice }}}{\text { Per }} 88 \mathrm{c}$
COIL FORMS
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ANTENNA ELIMINATOR
A device that can be fastened Into
cablnet of set and lakee place of an ouiside aerial

Cat. No. 3597
$118 t \$ 2.50$
$\underset{\substack{\text { Your } \\ \text { Prue }}}{\$ 1.47}$

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Eatil; frataliod aras :Ef, pracit.al Flactal
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AUTO RADIO SILENCER KITS

The ifteal kit for ataturashor m-tatlatonnt sisting of bpechally ronsirliced sponk wilig
 a Genterator silencer of the finest typer, with Cumblete in attractive catton


Cat. No. 3:99. 4-cyl. Cars. List Prlce 81.50 Your
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Cat. No. 3393. 0-c5l. Cars. list Price $\$ 3.80$ $\underset{\substack{\text { Your } \\ \text { Price }}}{ } \$ 3.41$
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Price +
$\underset{\substack{\text { Your } \\ \text { Price }}}{ } \$ 4.18$
Cat. No. 3595. Md. A Fords. Llst Price $\$ 3.10$ $\underset{\substack{\text { Your } \\ \text { Price }}}{ } \$ 2.99$

Constant impedenca
Volume Contiol


A salctully desiblied ihit ive all putpused +heto the ewthe ithpedafog is desircd acioen
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Price
$\$ 1.47$

## 5-POINT DOUBLE POLE

 SEIECTOR SWITCH
$t$ uinrdy. Ampant e-fector swith that is ideal lut use 1 l insiaissions, where one instrument as recelver, speaker or meters can
we connected un lo five aronits by merely turning the swith Has no peer fur bel analyzer ronstruction.
ent. No. 3n9t
81.50 $\substack{\text { Your } \\ \text { prote } \\ \text { 88c } \\ \hline}$

## PHONE TIPS

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 Your Price
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$\$ 4.10$ <br> \section*{NNO For Better Radio <br> \section*{NNO For Better Radio KNOWN TEE KNOWN TEE <br> <br> FORLD OVER <br> <br> FORLD OVER mmarlund mmarlund <br> <br> PRECISION <br> <br> PRECISION PRODUCTS PRODUCTS <br> <br> RELIABILITY <br> <br> RELIABILITY <br> <br> H} <br> <br> H}


Rumarkable a.tube distance getler Consiats of regencrative detertor and one stage of audio. Designed

 erar. for phone. but
 waro and plug in colle.

Cat. No. 3830

## Your Hrice $^{\circ} \$^{\circ}$. 18

New Midget Short Wave Condensers

Solderal non-corrusive frase wlates. eturdy irame and yecurately fitunsmation. Four - noine bronce riplag contact. $\because$ o bigtanl. Adjustment lockins erem worke in a truore. Casmot bure
 Max. yuner
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$3842 \quad 27 \quad 10 \mathrm{mmpt} .200 \mathrm{mmf} . \quad 1.65$
$3843 \quad 18 \quad 7 \mathrm{mmp} .140 \mathrm{~mm}$. 1.47
3844 it $\begin{aligned} & \text { a mal t } 100 \mathrm{man} \text { ? } 1.35\end{aligned}$
334811 a mmt 80 mmt 1.18
3540 7 8 mat. Bo mmi. 1.06
$33478 \quad$ amit. 93 mart .88
$3848 \quad 3 \quad 8 \mathrm{mmp}$. $90 \mathrm{mmt} . \quad .88$
Transmitting Condensers


The extromels low losges and high qualits u! Hammarlund 'I'rasumitting Condenserd mabeg them Ideal for high Dowered tranamitters. Spaclng between plate da . $883^{*}$. Breatiown voltane id 3500 volte wi 800 KC. using 500 cscle alteraator

| $\begin{aligned} & \text { Cat } \\ & \text { Na } \end{aligned}$ | Capacity | $\begin{aligned} & \text { luur } \\ & \text { Price } \end{aligned}$ |
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| 3849 | 106 mmid. |  |
| 3880 | 800 mmid. |  |
| 3881 | 890 mmid. |  |

Short Wave Plug-in Inductors
(minstracted like tha regular mug-in coils. but -llad for nso ita or valuable brimity De Fund freauencry stagn Mrimp ntamilard ur

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105 to 205 meier plug-in coils. Your
Prico
$\$ 1.18$
R.F. Choke Coils Polarized Type


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Whuity autced for use in detector dlate circuits
"B" Dlua and exid ro turn leads of RE. tubea or wherever R.F. Alterins is required. Bolh 15dea will carry 80 ma .


So Millibeury inductance. Capacity. a mam? DC. resistanco. 216 ohme Cat. No. 3835

YOLR
PHICE
\$1.18
250 millihensy inductance. Cadacits, 8 mmf . D.C. realotance. 420 ohma. Cat Na. 88sa
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 Lech released. Radio's latest dovelopments huve been so incorporated into the Ensoy os to produce tremendous volume and selectivity WITHOUT
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A self-contained portable all-clectric rethat it may be plugged into any A Aile toraze socket
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Mighty in Performunce
Wat constluction caletal Je-iell. I urtion White ampliticati
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All the new teatures in Kallu are pat of
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## 

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smgan dial control individual filmment montal Milament control. Very seti-
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For Traveling Men, Hospital Patients and Shut-In Individuals
Wherever there is flectric current, this sut vontanad eme the tecever is a fit


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This is a device which must really be used to be appreciated. When the recelver is lifted off the hook, the shutoft acts and quiets the radio. When you hang the recelver up, the radlo is automatically turned on. No need waiting for the tubes to heat. The Shut-Off merely shuts down the speaker and not the radio,


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Id.al rave fiw
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 GRIL R F. STAGE plas regenerative dio
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or magnettc spfarerl Imagine, $\mathbf{1 0 . 0 0 0}$ mile reception mosibie
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Eight PLüG-IN coils (samme type un usied oil all cummerctal mululdwent) are incluted-cover range of 14 to 157 meters. Audtuonal




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R. F. Choke
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pacits. This chuke allows the detector easily over
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This tspa huzzer in the samo as used on our mia arljustable. Has ataniard arljustabla, Has mianciard
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 Tho Pentcde the now comer cutput "ube non
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socket sne thto inn $2 \pm 3$ tube into the adspier to get the iull renofit of lbe pentode tuha Glras
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The famous Samann Pam Amplifipe. Tisno $\because 10$ push permits the operation of thls amplifer on flue
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With Supply for Field
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tnehouse Rectox unlt Tow for spegtsers. trick13 chargets and ellminators Input 8 ko 15 mut A Colin cut ropta $D C$
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## Power Amplifiers-Loftin-White Type-Pentode Amplifiers

## R. C. A. Victor 2 Stage Push Pull Amplifier

A product of R. C. A.-Victor, this amplifier is the same as used in Victor models R-32, P-42, RE-45, and RE-75. Uses a 226 in the first audio stage, with 245 in push-pull in the output. Provided with phonograph pickup transformer, hum adjuster and tone control. The amplifier in addition to supplyin its own A. B. C. voltages, also supplies $11 / 2$ and $21 / 2$ volts for the filaments of the tuner and $B$ voltages for the detectur and R.F. tubes. Also supplies field supply for any D.C. dynamic. The output is designed to operate into the voice coil of the dynamic speaker. This
is just the amplifier arnund which in


Kolster 245 Push-Pull Amplifier and Matched Dynamic Speaker
 radio phonograpb. Dub lic auluss svetems, and mall audionluma, Rc mroduces with marvelans nroducrs with marvelnus th the first stage. fol lnwer ho push-muli $\Omega \pm 5$ Thdistoried outnut is jower nack assures lonk continued encrice with
 12108 Cat. No 35:3
$\substack{\text { Your } \\ \text { Price } \\ \$ 15.00}$
Matched Dynamic Speaker
 Has a frea guspension type moving entl giving it great fenstivity

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Acme Single Stage Power Amplifier A Power Amplifier for Any Set

Mo matter what sot you bave, ite volume can be mado greater and its quallity better just by adding on Acme Powr Amplifer with a nowertube (171.A or 8.71-A). The amplifier conslat of a atare of reststance counled amplification with impedance leak sutomatic "C" auppls and a transformer to suppls the nower tube. All you have to do is connect the ampliffar to the set. and yolle B auply, connect your anenker and you ket radio an you have nerer yet heard it. Ehipning welght. $k$ lba.

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Direct munled Amnlifera of the latest desimn. these emibody all features that will be rasked fan be ponnected directly tuner or microphone Can be connected directly into the input with.
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Model 245 usea $1.224,1-245$ and a 280 . Innut direct 10224 con Ni Welcht. Output direct from 245 plate. Outbut $\& 8$ watis. Ship Cat. No.

826


# Three Stage Power Amplifier 250 Push-Pull <br> A Product of General Amplifer Corp. of Cambridge, Mass. 

The ideal amplifier for Pullic Aduress systems. Uses a 227 first stage operating into 228
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Special Newly Developed Motor

## fin renlintole relevisor is rominped with a symohrnnous anr Fida

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To fliter nut Injullous limn disturbances a highly limproved filf svitem is msed. The supporimg hracket is made ne strong hut lig
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Model H - 1


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The I.C. A. bakelite conising diacs bave been dealsned and constructed in accordance with Bell Laboratory bnedficalions. The holes ars bald out
metures.


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Speed Control
For sjuchronizallon of viciure and elgnals.
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Television has thls year taken lis greatest porward stride since the Incepton of the art. Columbia and National Broadcast Cornorations are ditly transmitting television programs. Television today is peen filther adianced than radin was in 1021. Every experimpnter and rarlio fan is delving into it At lhe piescnt stage it ls possible enr everyone to "nntribute improvements to the art. Re the first in wnt neighbnhond to show television. He list folevision apparatus
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The laraest, heaviest and most powelfil pickup on the market. Iet so deluatels count the balanced that it lles like a feather on the record. Double cone arm with uminue hinke for raising and lowring head, makes needle changing more convenicnt than erpr. pick-up control 18 s bult-in irature of she. Shig. wi conreniently located on lbe. 820.00 Cst. No. 8134
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The Weboter Electrlc Pick-un will farthfulls reproduce all frequencies. Remarkable clearness and rolume and freedoni frotu any objerionable noises when waying ans type record aro featurea that nrove scientificallo correct design of this Websice Pick-up. A volume control 18 buitt into the baee of the Dick-up allowing a iull range of rolutne control Fiamsher in antlque bronze. snps. wt. 4 lbs. cumpléio.
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Complete with Cord Connector

For sets ualng push-pull andio This तevice enables one to connect additional epeaners to any radio oet. without rewling nr adapter conder the power mbere the adapter under the powre tube or tuhes and conner the arinional speakers with the con Cat. No. 3112

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Not fust another tong control but embodiee features of design that make it a real control. Control is actuaipd on the grids of the powt tubes instead of on the plates, giving a larger degree of tone rcgulation. Proviaion - miside to slluw the connertion of extra opeaters. This is a real convenience and a dintinct Powerinng peaiure. Arailable in able and pancl mounting stslea. and for push-pull output and single power stage Cat. No. 8143. FOR TABIE TIPE.
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ni highost possible sensidivits. Produces en or molls volume brifecrily clear and Irea from Handsomely finlshed in gold. Shpg. wib. 8 lan.

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Brilliant, bmeht. mallna or deen tone is at jolir
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Ons of the hrol and fine an inne controls. Permita Bas in high Trehle. Coniplete with hakelite knob and escutch eon Dlate. Nat. No. 3:73

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For Home and Theatre Uso
The Kolster Pick-un is hernetically sealedtherebs preventing attraction of toreign particles In the Kolster Pick-un sou will find nothing bu be best Cobalt kteel maznets. which assures the usor if nermanent ratisfactory operation hinde ans conditions. forbere and at hational vaiue here cict heen oirtal a more bens inat. radio rilectric pick uns.

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With 12＂Turntables
Manufactured by General Eloctric
NEW MODEL
Not to be confused with the older model．Available for A．C．or D．C．These new phonograph motors conie to you fully assembled and mounted on $1 / a^{\prime \prime}$ warp－ pronf veneer panels measuring $15 " \times 15$＂ready to install into your own cabinet．

These motors are absolutely noiseless and humlens．Built as only motor manufacturers of long experience could know how，they are an epitome of phonograph manufacture．The ideal motors to use for recording．They have ample power to onerate anv recorder head．Com－ pletely equipped with speed regulator，cord and attachment plug and a 12 ＂turn－tahle to take any size records．Measures over all $16^{\prime \prime} \times 16^{\prime \prime} \times 10^{1 / 2}{ }^{\prime \prime}$ ．Shpg．wt．， 25 lhs．

Specify whether A．C．or D．C．model is wanted．
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THE ALLEN A．C．MOTOR
For 110 Volt 50－60 Cycle A．C．


One of the most emcient and alm glest nhonngrash motors ever de－ algned．Silent synchronous tyne motnr．1t．atarls and stops at the fick of a finger．Regurdless of voltage fluctuations，they revolve at exartly 80 revolutinns ner minute，eliminaling the need of a speed control．Measures only 1 is＂in depth．it is a marvel of compart and enicient dealgn．Easy io minunt． Complete
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For 100 Volt 50－60 Cycle A．C．
A self－starting indurtlon mne have earnad wide．spread prassa and apnroval beramsa perfect and unintarrunted servelr and unlform speed under servira roltage variations．open typ roltage variatinns．Dpent ty lation．No heat or hume vinti－ apeclal－cut bakelito pahric seara apeclal－cut bakelito Pabric sears．Long oversize sleeve bearings．Comes complete with mounting Dlate，turatable and epeod regulator．
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## SCRATCH FILTER

A sturdy Dowerful compoct heary diy motor of the asil btarting indurtion tyre．Will not set un disturling mises in
any reciver．Equipfed with large braring surfacey to pro－ vide adequate support and to Insure lons life Watck start－
Ing，full spmed is attalned in－ stantly，Comes ready to mount with turntahle，mounting plate，

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THE PRIME GREEN GIANT MOTOR For 110 Voles 50.60 Cgcle A．C．
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A neressity for all phonogranh plckurs．The noise made by the needle as it rides in the rerord grnoic is amplificd and appease in the Eneaker os a backictulad scratch．This the flter ellminntes．Mnunted in m metal case ${ }_{4}$＂qquare hy $11_{s}$＂high．Tapped to match the impedance of different plckups．Connects directly across pickup．
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A dual electrical
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for blending one rec－ ord into another without lapse be－ tween．Uses self－starting．speed regulating induction
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These dynamics are of the three point auspension balanced spring. They nse a 280 tube as a full wave rectifier to sunnly the field; gives more nowerful fiele? with les hum than the psual 4 Ci enosker. ComFlete with output transformers.

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D. C. AUDITORIUM SPEAKER

4000 Ohm Field


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Jensen Jr. Auditorium Speaker
Uses 280 Rectifier Tube


Thnrover mente] D7 A ra iuntor Audl. torium Speahar IEAS a. 2En roctlfying tube Thesa speakers have push-pull pransformars and reporodile wilth mag. nificent roluma prom any set. or am. pllfer. An iffal opfaket for all Dut. Cat. NO. 8RTO


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A sunerine heave duts unit for home. theatre, large hall or outuloer use. Thes 110 volt fin cycle $\Lambda C$ curpen: Hight sockret subply for field excitation. Individually parked. Shpe. wt. 21 dos.

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Koleter Magnetic Speaker





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Etarg andlble frequen cy In parfertlo tepror ducen at ant colume with hrilliance and $f$ dellita.
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Replacement cone for any eneaker chaspla Choica of ${ }^{2 \prime \prime}$ or $12{ }^{2}$
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Require 2-5/64" hole for mounting. Highly nickeled with silver face dials. Shpg. wt., 1 lb .


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Toggle Switch

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CUTLEER-HAMMER 3.POINT SWITCH

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The Roliable Tuta Teator provides $n$ quick and accurate way to rheck all rubse, fonsraved scale on face of the finstrimernt ehows what the corhirectly from 110 rolte a C line. Wide twing on second re:uling th give mubual conductance callu shows matantly whether tube is gond or basier cat afford to be willuoll one. Shat. Wh.
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Readrite Plug-in Line Voltmeter


Br nligatig into an this frekre with exact voltace at that Eorkpt is randily de-
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1 lb. nc. Inat
$\underset{\text { POIRF }}{\text { FOLR }} \$ 1.75$

OHMMETER MULTIPLIER


This resistor when used with a $\because=12$ volt talt ry increases sistance A mincernary ndjumpt for hotio resiclan e meters blown on this Cilt. Xn. 30ne.s03. Tlat \$1.30.
$\underset{\substack{\text { Yourr } \\ \text { rifce }}}{\text { res }} 88 \mathrm{c}$

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A nair of lealla purnishat with thatatral polarity erop iructs Five foot lonk Indisponsible fur the


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## JEWELL PRECISIDN MEASURING METERS



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| PENTODE POWER TRANSFORMER | RELIABLE PHONIC | PILOT LITES | 110-Volt Pilot Light |
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| anamieldied | TELEVISION MOTOR | (1) Standard Plot Hits rot. | Candelabra Base ear and Amber |
|  |  | ¢ $31 / 2$ volte. and $2 \% / 2$ |  |
|  |  | 5 \%oll | yock price |
|  |  | Per | $\$ 1.97$ |
| cosk | feman in | $\begin{aligned} & \text { Your 55C Per box } \\ & \text { Price } \\ & \text { of } 10 \end{aligned}$ | box of 2.5 Slogly Dc each |
|  |  | \$5.25 Per 100 | 8ingis be each |
|  | thay ot al tin | FUSES | Flashlight Lamps |
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## Remarkable Values In Battery Dperated Sets



ATWATER KENT MODEL 20

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ansuer in inma purving prahlem mas agTe fou mane follary and loge nf tima 14 ite now


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SUPERHETERODYNE CATACOMB REPLACEMENTS


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STROMBERGCARLSON TREASURE CHEST


The world-faminus neutrodrne receiver offere, at a fraction of the manuiacturing cost. No
exneuse was spared when these sots weln exneluse Has spared when hese kets wern bultt Has three luned R.F. staces and a
ouner detertor. Every staze is individually ahielded Develons tremendous gain due to the carefully designed R.F. stages. Real siromberg tone. Weston fllament meter on front danel protects against excessive battery voltage. Antenna switch Dcrmits uge of any length aprial witbout changing tuning
Qtringht-lime tuning spreadg stations over en ire dials. so nowerfully and guhstantially lire dials. So nowerfuly and suhstantially constructed that at and aerial can he nsed in
nlace of the usulal untial systemi. S.C. nutpult niter oroter's the sneaker aralnsi burnoul power luhe. pi=lur 11\%A ur 1T1A. Shng Your Price $\$ 24.85$

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The moot tamnils of all Fread Figemann nom
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The famons reflexed noutmodye recejver Operates a loud speaker on three UVI H lubes. Space for batierics in cabinet. lowodial control. Oricinal lise brlce was $\$ 65.00$. Measures $14^{\circ}$ lung br $1.3^{\circ}$ decp The ideal pet where fparp is an Importan:t factor. Shpg. Wit lollg.

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Price
$\$ 8.75$

Thia Nodel 80 Freed Fiseman recelver ia Heensed under Latolir datents. Cbea b tubes. 8201 A tubes and a 171 A or 112 A nower tube. Two-dial control with antenns irlmmer. Tolally shiplded with nonmicrophonle clins for detsctor tube. Jy tremels eriective and sensitive. Shng. wh. 25 lus.

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Price
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One of the gnest batiory recrivers ever made. A Gencral Electric jiroduct. Nepu tralized T.R.F. rereiver with a regenraWre retector. Dese 4 UX190's and a 180 nower tube. Excentionally fine for dis. dance recrption. Provision for long and short antenna connccion. Verniers on both tuning and regeneration controls. Shor. Wi. 35 the
(het. No. 3083

Freshman Masterpiece* Type E


One-dial conirol recciver. Has a noutrol for dintance recention and a rombinced oms sudio frequency fransformers illasure fath ful reproduction. The tube sub-nancl is aponge rubber mounted in absorh vibra tinns from reaching the pluhes. Has thren RF. tuned stages. lisea 5 白ilias and a $112 A$ or 171 A dower tube. Measures 20 " hy $10^{\prime \prime}$ by $10^{\prime \prime}$. Housed in a walnili cani net. with meial front nancl. Wincinw tone dial. Shpe. wi. 30 lbs.
rat. No. 308:

## SEMI-PORTABLE SUPER. HETERODYNE AR-812



## $\underset{\substack{\text { Your } \\ \text { Price }}}{\$ 8.75}$

 altuma is needed as it hase a unllitio luch. Find cumbarimenta provido a! are for tha baflafles the catacomb Resemible malies a fine intermetiate fre quency araplifier for a fhort rave super-heterodyne recelver. Juet the rectiver to lise for the car, canus or boat. Shpg. Wit. 30 lis.

Ont. No. 8080

## BARGAINS

IN

## BATTERYSETS

'The sets described on these pages are hattery set:; which were used as floor and demonstration models in the large radio and deparament stores in New York City and the vicinity. Most of these sets can he easily electrified hy any ol the A and P combinations described in this ratalog, while whers can be casily adapted for tine use of the new two-volt battery tubes. These sets offer great poscibilitics to the progressive dealers. as thore is a large demand fur battery reccirers for use at buncalove, camps. automobiles, motor boats, etc.
We do not sell these sets as brand new, but evere receiver is tested and mat in perfect electrical condition before it leares nur plant. The prices quoted do not include tubes or accessories. On this special sale we cannot exchange or ac cept returied sets for credit

Atwater Kent Model 35* In Metal Cabinet


Your Price
$\$ 11.75$
Perhama the monst pumblar A. K. receiver use in allomubile installation. Small sized
 Full visioned eingle-rlial con
 mbtanel ahlowny for berfect resulas over
 A distinct bus. Shpg. wh. 10 lbs.


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## THE NEW SIX-VOLT TUBES




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Superior Midget Condensers


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Superior Condenser


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## FLECHTHEM SUPERIOR CONDENSERS

1,000-volt Type HSM Filter Condenser

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Non-Inductive Filter Condensers Uncased



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A Filter Condensera


High Tension
Transmitting Condensers


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PRICE


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We can supply replacements for al－ most every receiver made．whether it he power transformer，alidio trans－
former，conclenser，and blocks，re－ fnrmer，condenser，and blocks，re－
sistors or volume contrnls．All we nend knriw is the trope set．serial number，model number，part needed， Gan．Just give 11 s suficirnt infnima－ lirin and Warement pirt irlentical to the rine that is to ton replacrit as resistance． ance installed，our renlacement nart n not have to be replaced．They are bullt to last and dimcultem that may confront youl and asslst you in any Flre entire perfect batisfaction．If you are in need of Call unon them ior help when necessary

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| A．C．Dajinn Co． | 87.00 |  | Colnmhin－ |  |  | $\text { Gons. } 25 \text { cycle }$ | 0.25 |  | 20 | 0.75 |  |
| A．C． 63 <br> Acme Flec．Co． | 6.25 | \％ 8.80 | C1－C3 ${ }^{\text {Kolnter }}$ | 4.00 8.50 | 4.50 | K R Kisos Equaphnae－ | 6．00） | 4.50 | Sentinnl Elin Sta | 4.50 |  |
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| lormer <br> I）（I，yric） |  | $\begin{array}{r}6.78 \\ \hline 8.75\end{array}$ |  | ¢．25 5.50 |  |  | 7.50 3.75 | 4．80 |  | 2.16 | $\begin{aligned} & 6.75 \\ & 6.75 \end{aligned}$ |
| Amrad AC7 |  | 4.50 |  | 8．2\％ |  | Hín Porter $B$ | 4.00 |  | Sparion A C E | \％．00 |  |
| N1 |  | 6.75 |  | \％． 50 |  | $B$ Super |  |  | 11－7－02－8：1 | 4.75 | 4.50 |
| Apex |  |  |  | 0．25 |  | Power | 4.25 |  | ！1：30 | 4.01 | 7.00 |
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|  |  | 4.50 | Vil Nif Gil | 2.50 |  |  |  | 13.85 | $7.1: 17^{1: 10}$ | $\begin{aligned} & 8.00 \\ & -.011 \end{aligned}$ |  |
|  |  | 4.50 | Nil Gili－1－I）（ | 2.50 |  | ［fincrizer －1才 I＇nck | 6.01 | K．กก | 7．1： 78 | ¢． 0111 .0111 | 1200 |
| 81－6゙\％18ッカハー |  |  | Nil Sil 1 C | 4.00 | 4.30 | 11.13 | 4.8 .5 | $4 . \% 0$ | zis： | 1．\％ |  |
| 1rope）$\$ .31$ |  | 8.75 | （1）S I C |  | 13．75 | 18－31－\％1 |  |  | \％．70（uses 2） | 1．25 | 7.00 |
| ก．14．821． |  |  | N11 5\％A C |  | 0.75 | Inc chokea | 200 | 4.50 | Z－ا $11 \mathrm{Mcm} \mathrm{1)}$ | $\because .10$ | 7.00 |
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| Humb \＆Thno |  | 6．75 |  | 6.00 | $7.0 n$ | $\begin{aligned} & \text { 111 (Speaker) } \\ & \text { 64-4mif } \end{aligned}$ | 2．50 |  |  | S | 12 |
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## 

A.K. 37 CONDENSER. CHOKE BLOCK (With 3 Chokes)

 For replacement
in $A$ twater
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 OENSERS. AT pxant dupliesib an atro. caparities and coloreid luals. makiog for enmedy renlacement. fils riabt int o be melizal in silvantaga in ang filrering arsiem desintid or 171-A tuhis. tlo

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A.K. 87-38

FILTER ASSEMBLY

 3010 V."

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\begin{aligned}
& \text { Cat. No. } 84 n \theta \\
& \begin{array}{c}
\text { Your } \\
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\end{array} \$ 1.45
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A.K. REPLACEMENT

AUDIO TRANSFORMERS
For universul reflacemant in all A. K. recelv. ers as well an any other eot. eppeclally buldgeta ans portablen. Prorides eremendous distortionfoe arrinliflcaiton. All etage ratio.

Oet. Ne. 416
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FOR A.K. DIAL BELTS

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ATWATER KENT POWER PACK
For 40.41, 42, 44, 52 Models

a complate renlacement power pack for use in the zhove models n: A. If. Sate, relialle and highly efificiont an tructom. The proper
 CHOKE BLOOC jmpregratel in a heavy, pressed stecl cave. ADdemen the Hexible leads In the ressiance and terminal strip, and to the $\because \because 8$ rectifier is the wily work to be dne in replacement. A guaranted unit, supplying all filament plate and bias veltages.

Cnt. No. $34 \mathrm{C7}$
Your ín. 45

## POWER PACK FOR

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A complete power-pack mhich supplies filament and plate current for 4-226, 3-2.27, 1-171A, 1-28n trpe tubes and will clange any Aiwater Kent liattery recoiver into a molem electric set. Irack coniains puwer twansformer, filter shokes, filter condunsers, and all nreces ary resistances for bias, eic. ill high grade patts. Although designed for A.K. Eats, can very handily be used for any other battery set. Makes a battery set modern and up-to-date at a very low prise. Cat. Nu. 3414

| Your |
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| Price 97 |

REPLACEMENT BY-PASS CONDENSERS

For A.K. Sets


For R. P. Alament and nlatg pircult bremes. Ellchtly Alf. ferent, in construstlon than the oficisial, Eit neveitheles.


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\text { Cet. No. } 8113
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$\underset{\text { Yrour }}{\text { Yrice }} 25 \mathrm{c}$
A.K. 37

POWER TRANSFORMER


Your
prre
$\$ 2.25$
A.K. 37 3-SECTION BY-PASS


A bich graile replacement condensar for by-passlng the R. F. flament and plata circuit of the following $A$ ivater Kent modele. 37, 38, 40. 42, 44, and 49.

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Constracted and designed to iak etse Dlace of the odd-mounted output Alter condanser as used in models 87. 83. 40, 44, 46. Expecially well made. Clat No. 8410

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Theso excellent guaran- $0=-2$ teed flexthle resistors are
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|  | Power Tramsformers |  |  |  |
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|  | C | Model 608 nsformer $\qquad$ W-5145 <br> $\$ 1.10$ |  |  |
| crosley power pack CHOKE <br> Orizinal Crotioy sholk= $\qquad$ $\qquad$ <br> Your Price $65 C$ |  |  |  |  |
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|  |  | A.DAPTER |  |  |

## Freshman-Freed-Earl- Freed-Eiseman Condensers

## Freed-Eisemann Filter Block For NR80 Model



Original and genuine replacement block for NR-80 A.C. model receiver. Highly efficient. In sealed metal can. Total capacity 9.6 mfd . Consists of $1-4$ mfd.. $400 \mathrm{~V} ., 2-1$ mfd., 400 V., 1-2 mfd., 200 V, , 1-1 $\mathrm{mfl}, 250 \mathrm{~V} ., 1-.1 \mathrm{mfd} ., 400 \mathrm{~V}$.

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Genuine F.E. replacement unit, factory No, 2441. Total capacity 10.1 mfd . Composed of longlasting, high-working voltage condensers. An original block for all NR-85 F. E. receivers.

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Original blocks. Factory No. 3078. Correct size and capactts. Only difference to in higher worlsing voliages, resulting in longer life and greater ealisfaction.

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Manufactured he Frashman for replacencelit in all "Q" model recelvers. Buret quality and highee manufacture. Total canacits $8 \frac{1}{2}$ mifds.

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Price
350

Freshanan Q D Condenser Block


Fartory No. 49 日g A later de-
 receivers. Utmor. Aallelaction. Total cauactts $\mathrm{T}^{1 / 2}$ mfda

Ont. No. 8362
Your 4275
Price 42.75

Freshman N-60-S Condenser Blocks


Original manufacturer's pliter untt. Factory No. 45:8. ComDosed of the correct capacities totalling $1^{11}$ 't mid. Later deaign and more satisfaction. Cnt. No. $33 \times 1$ Your ©P? TE
Price je
Earl Model 41 Condenser Block





Freod Model 55-56 Condenser


Obs. No, 890日. 60 Cyela
Your 92.75
Cat. No. 83:0. 25 Lescle Your (3.15


Freed Model 95 Block


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Your ©
Price $D 25$
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Phosphor Bronze Belts
For Earl, Freed, Freshman Freed-Eisemann Reblacement belts for all
 hiprible: already made 10 hit whinut any tronble ${ }^{10}$ Hor


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## FREED, EARL. FIBESHMAN. Power Transformers

## Freshman Q Transformers



Slandard replace ment for Fresh. man and Polydyne recelvers. Supplles 22~, $2 n \theta$. 2ñ. 171A and

Cat. No. 3316
Your $\$ 3.85$
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25 -Carle Mndel. 81.25
Earl and Kolster Transformer With Brackets

at. No. 8917
Your
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Keplacement for Fall and Kolster recrivers. but can be 11 und for anyect using 5.226 e. $2.227 \mathrm{~B}, 2.271 \mathrm{~A} \mathrm{~B}$ and a 280. Comes romblete with brarke.s ready to mount.

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Same transformint as abote bith. Jors



 18. 5 volts inr 2kn, and रूo. 1?. 13 14. aro high voltage.
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Price

Freed Eisemann NR 85 Power Transformer Replacement for FF.
 NRS3 receltre aunblips $5 \% 8.1$ ? 5 . and 1 . $\because 20$ () with a $2 S 1$ rects. ner. The first audio $2 \because 6$. is on a endarate flament windinz.

Your
Price 5
F.E. NR- 11 Replacement

Transformer
Suppllas B.201.s and $171 \lambda$ in condunc. all 201/ gerles filament receivers. cat. No. 8318 Your © 35




Earl Power Transformere

|  <br>  <br> eat. No. 20:3 <br> lour 01.95 Price e |
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Freshman M60S Transformer


Freshman $N$ Power Transformer Replacement for N baries receivers.
 the anme case wilh the transformer
 wiallug.
Cat. No. 832e


Your $\$ 4.50$

Freshman Audio
Transformer


Replarembint for morlela. Q

$\underset{\substack{\text { Yoir } \\ \text { prite }}}{ } 40 \mathrm{c}$


Cat. No. 33?8
Your
Price
P5C

Freshman Q D Transformer
Replacement for OD


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Supdllea 1 K T for 220'B. $21 / 2 \quad$ for 821 or 224'a or 5 vole for 17ia. 8 volt and $21 / 2$ volt windinge center tapped. Re Dlacement for Fresh.

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$\$ 1.65$

Freed Eisemann NR80
Power Transformer


Replanoment int F. P. Nr. 90 remploen Supglee $5-200 \mathrm{~s}$ 1-2:7. and 1.171 and
 winding.
Cat. No. 3331 Your P © 4.75
Freshman $\mathrm{C}_{\mathrm{A}}$ - 60 -S Filament Transformers
Sundlifa ligh roltafe and filament for "Si for fireshm
Cat. No. 3332
$\begin{array}{ll}\text { lour } \\ \text { Frice } & \text { 2 } \\ \text { 2 }\end{array}$


Freshman Plate Transformer for Power Acnplifier


Eupplica high rollage and $7^{1 / 6}$ volt whulthy for the rectilier. Susplifes 210 Cat. No. s:33s
$\underset{\substack{\text { your } \\ \text { Price }}}{ } 1.95$

We carry the most complete stock of R.C.A. replacement parts in tho country. Every flemt is guaranteed. We can supply in addrtion to the units listed here, any K.C.A. or Victor part. On units not listed, to avoid delay, send us the part to be replaced. Our net quotation will go to you in the return mail. The service man will find that many of these Radiola replacements can also be used for other recemers. Complete technical data on any untt will be furnished on request.

## R.C.A. 64-67

## Power Transformer



For FODlacoment use in tho R. C.A. Models 64 and 67 . The 84 uses 8-227. $\begin{array}{ll}2-250 & \text { and } 2 \text {. } \\ 281 .\end{array}$ $\begin{array}{lcc}\tilde{2} 81 . & \text { The } & 07 \\ \text { uses } & 7-227, & 1 .\end{array}$ uses $7-227,1$.
250 and $2-281$. This is slso an Ideal transiormer to use in
bullding un a
250 push 250 push pull
amplifier. shpg. 6. Lis lbs. 825.00

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| $\$ 7.95$ |

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8484 Power Transformet...........................25 cycle......................... $18.75 \quad \mathbf{5 . 2 5}$

s340 Power Transformer...........................33.51-25 cycle..as...... 18.75 $\quad \mathbf{1 8 . 2 5}$


8350 Power Transformer......................60-25 cycle.................... 18.75 $\mathbf{1 8 . 2 5}$
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2249 Voltage Divider.................................. $53, \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$
8333 Condenser Block and Choke........18, 33, $51 \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$













5899 Output Trans. and Cond......................... 106 A.C. Speaker....... 10.201 .45


R.C.A. Double Choke
for Models $18,33,51$

| Consists of two 30 honry 80 millismpere vhoket. Whan connmetert |  |
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## R.C.A. Filter Condenser <br>  <br> Used In Model 17 <br> Total capscity 14 mids. Hen two 35 mfd . sections. ons 3 mfd. ons 2 mfd , and two 1 mfc . mertlons. Working voliage, 680 D.C. Shog, wt. \& ibs. <br> Cor. No. 8989 <br> List 819.80 $\underset{\substack{\text { pour } \\ \text { Price } \\ \$ 2.95}}{ }$

## R.C.A. Bypass Condensers <br> Used th Models 18, 88, 51 <br> Part No, 5998

FOUr section onit with three 1 mfd , and - 5 mid section. Rated st 450 rolte DC. Idesi for sll R.F. and A.F. 5 F -Deses.


Lst $\mathbf{8 5 . 0 0}$ Your 198
Price

## Majestic Taris and Replaceenments

We can supply Majestic Replacement Parts for all types and model receivers. To save time and facilitate replacement send in the defective part which you want replaced. All our replacement parts are fully guaranteed.


Filament Transformer For Model 180
 TVTE 8 F
A hieth whinge nower trans-
formin sumblomg the plates

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Frand heay loady nlaced
 balr of bloctra ment tramaforam a preforet 1at. Nos 360)

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price
$\$ 4.80$
rower Pack Chokes
For Majeatic Rncejera


Majestic "B" Eliminator Transformer
 Bor all Majeatic Eliminators An exact dunlicate of the original but better: corrcit size and rollages. bas extra lad for hi-jo cepter sapod. The rer tranaformer for any Rar. theon Eliminator. Cat. No. 8882

| Vour |
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| SARO | 86ก0 | 3 | $25 c$ |
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Majestic Push. Pull Input

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Mat. Nin gaon
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$\$ 1.50$


Majestic Power Transformer Plate and Filament
For Models 70, 71, 72


Cat. No. 968 r
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Price
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Cat. No. 9687
Your
$\$ 5.35$
By-Pass Condenser Units for Majestic Sets

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Yo. 715-Same for models 70. 71. 73 WW throll|
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No. 71:-For model go berles 130A rhass!s 4 mid condenser for detector catbode by-paes



Push-Pull Output
Transformers
As Cesed in Models
:0, :1, :2, 80. 81, D2, 100, 180


An $1 d 0$ al renlacement
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$\underset{\substack{\text { Yourn } \\ \text { Frico } \\ \$ 1.75}}{ }$
Majestic Set Dial Cables
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COLONIAL "B" CHOKE Freshman, Freed and Earl Claokes


 $\underset{\substack{\text { Your } \\ \text { Price }}}{ } 69 \mathrm{c}$


Cat. No. Eatisiaction vorlel linur Pile
 3:3\% FRFFED EISEMANN. N゚R 87 $45 c$ 27 c 27c 27c 45c
$\underset{\substack{\text { Your } \\ \text { Price }}}{\substack{\text { 65c }}}$


EARL DOUBLE CHOKES A carciully mound and
constructed
double choke coil. Will serve


Cit. دo. 3:13
Your $\mathbf{Y l} \mathbf{\$ 1} \mathbf{0} 2$

| Crosley Power Pack Choke | CROSLEY DOUBLE CHOKES | CROSLEY CHOKE |
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| Tivinal Censing rhnkes. 20 ment nurneg ure tizareshielded. Comes in nrat hial inads. Can with long dexible Cat. No. 3387 | S5 mila Idcal for uea in a hrute force filter. and all Croaleg recmitera. Fully ehleldef in a brown metal case. with long connecting leads. Cat. No. 3389 |  |
| ${ }_{\text {Your }} \text { Price }$ | Your Price 75 c | Your 60e |


| General Electric Chokes | Thordarson Choke | Reliable Double Choke | Victor Tapped Chokes |
| :---: | :---: | :---: | :---: |
|  | A sturdy 30 henry choke. 120 mite. <br> Cat. No, 3:13 |  | $15$ |
|  | e \$1.15 |  | Nhewtine ine innet.fiter |
| Cat No. Your Price |  | Price ell. 1.0 | No. sisn Y'nur $\mathbf{G E}$ |
| def | nghouse F | T.C.A. Filter Choke |  |
| ${ }_{\text {325в }} \quad \text { strallac } \quad \$ 2.25$ | hoke |  | R.C.A.-Brunswick Choke |
| R.C.A. Filter Chokes |  |  |  |
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Cat. No. $8: 51$

## $\underset{\substack{\text { Your } \\ \text { Price }}}{ } 95 \mathrm{c}$

Reliable Shielded Power Choke


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$\underset{\substack{\text { Your } \\ \text { Irice }}}{ } \$ 1.35$

Reliable Pentode 245 Choke A thorouchle tmpregnatad fl. ter choke desiancel esperially 245. Fentuide ampitiging tubus 30 benry at 1 汤 nils.


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$\$ 1.50$

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Reliable Condenser Blocks for Pentode, Miulti-Mu, and 245 Receivers
A scientifically designed product guaranteed to give perfect satisfaction in every respect. The highest quality foil and paper were used in their mannfacture, fully impregnated to include moisture and assure long life. All
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Recommendef for their easy application to any radio receiver on the market today. The condenser capacities were purposely made low su that any ruparily combination can bo obtained loy connecting condensers in jarallel. An crubllenty cunatructed brimk, the appearance of which will greatly enhauces asty recuiver in whimh it in used Jigh working voltages saffly rated. Cuntainis:

Tised In all Brunswich 14, 21. 81 SPI and equivalent bierner 'lully receivera

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Bosch 48
Condenser Block


Ra Elallor.! for Boose modele $4 \hat{A} 1$ A ci. 4 leais


O62. Na. 8541
your $\$ 3.25$

Kolster-Dubilies


Oriminal as ured in Kolster sete. Toial cspacty 7.1 mfids. Cur. afratlely rated at 400 volia.

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Potter $10^{1} \& \mathrm{mfd}$ fur Zenilh


For Zonith models ZE-11, 14.14 hr. Makes au ideal replacemeth bork tur at:y milate 245.510 ne mifi. condruscie. Leada $1:$ inches Cnt. No. 91:35


Victor 105' mfd. Block

Genito Vlciut roplaceweak is
 les with
$\mathrm{Cos}, \mathrm{Ne} 8-48 \mathrm{~T}$

| Your |
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| $\$ 1.65$ |

Potter $y^{3,}$ mind Block


Used in Metrodeno Recelvers and a. rurarement for any 171.A rolte. Sectlons $2.4 \mathrm{mfd} . .1 \mathrm{mind}$, f. $\therefore$ mfil. in metal case what :onrenient mounting arrexs

Oat. Nn. 34313
Your 01.51
Price

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| R.C.A. Brunawick 4.5 Mfd. Block 4.5 Mfd. Block <br> On. No. 3850 |  | Dubilier-Brunswick <br> 6 Mfd. Filter <br> Ueed in 0-10be reoedvers. $\quad 4$ mid. at 000 vol: D D. working roltaro. <br> Cat. No. 8983 <br> Your $\$ 1.40$ |  |
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| Philoo-Dubilier 16 Mfd. Block |  | ser Block | Dubilier Condensers <br> Typo P. L. 1073 <br> $5 *$ <br> mid Tota 400 D.C. Vole 400 D.C. Volta $400{ }_{5}^{5}$ D.C. Vild. Volts 200 D.C. Volte 200 D.C. Volts ก. $83 \star 8$ Your 95 c |
| Thomas 8.5 Mfd. Block | Faradon 6 Mfd. Block <br> Composer $\square$ Cnt. N <br> Your Pricic 650 6 |  |  |
|  | Radiola Condenser Blocks <br> Deofgned and hullt aspecially for Radiola setwo Contring high mitage-surge-proos condengers in reat shleldeत caso. <br> Cat. No. Model <br> 3335... R.C.A. 17 <br> Your Price $\$ 3.75$ <br> $3336 \ldots$ R.C.A. 18, 33, 51 <br> Your Price 90 <br> 3337 ....R.C.A. 80, 82 <br> Your <br> Price <br> $\$ 3.75$ <br> 3338....R.C.A. 66 <br> Your $\$ 1.85$ |  |  |
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## Genuine Kolster Power Transformer

Roplacement for madel $\mathrm{K}-2 \%$ sots ulng 210 or 250 tabea


This rranaformer hes a 1100 volt econders. censer tapped. 133 . $24 / 2$. 7 1/2 and 18 volt flament windinge. shpz. Wh. 7 lob
Cat. No. 8284

## $\underset{\substack{\text { Your } \\ \text { Price }}}{ } \$ 5.75$

Stromberg-Carlson Power Transformer

Eqalacticent for soodelg 685, 688 For 5-227, 1-171A and
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Cas. No. $8 \times 10$
$\underset{\substack{\text { Your } \\ \text { Price }}}{\substack{\text { en }}} \mathbf{4 . 5 0}$
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This power bluck is a replacement for Vilctor rer cated. they will supdly a 245 push pull awplides and also 227 Byty 880' and 226 .

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$\underset{\substack{\text { Yource }}}{\text { Price }} \$ 2.50$
For 25-35 CYOLA
$\underset{\text { Your }}{\text { Price }} \$ 3.25$

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For 227, 245. 247, 224, 551, and 280 Tubes

can be used as re Thacement for most re-
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 or $22.4{ }^{\prime \prime}$ s, $2-245^{\circ} \mathrm{s}$, and a 250 . Shippin's weight. © ! bs.

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> To

## GENERAL REPLACEMENT TRANSFORMER



Enmountod iransiormer for remacement purposes in Tectivers using 224's, 227's and 245's and a 280 . All comnections made to solucring lugs on side. Shipring weight, 4 lbs . Cat. No, 2273
YOUR PRICE (8)2,

## COLONIAL POWER TRANSFORMER

For Model 32 A.C.

moanta in elvectron S゙pecial oper type constewetion allows vertical ventilation jreventinf ang over-heating l'an be uscd with any "is puller unit, amlilif: er or rociver
 シy) high rullinge wind Primary tapped to alluw operation on ably line viltade between 95 and $1 \because \cup$ vults.

## Cat. No. 3274

YOUK 1'ilct
\$2.95

Freshman Filament Supply Transformer


Cast. No. ${ }^{3276}$
Your co?
Price 3.45
 3 lbs.
Cat. No. 82: 8
Your
Price 2.25
Earl and Freed Power Transformer


This tranaformer
 Frend and Eiarl recelvers Ieplacement for the inl


 Cat. No. 3:502 Four
putite
$\$ 4.50$

Fup Mulels No. 21, 20, 35, 88 Yuat $\$ 3.00$


## 

Radiart Step-Down Transformer


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pllance wbleh conemm
wact
faslly m
    Your ©%, %
    Price &e.-Le
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Peerless Power Transformers

A. seninu ieplacantels ciacalormar for al Durtuser. aniply -urnulted with lata and hear latumativis Hड́s. एंडlin 21 $2-4 \% 7$ yis and 1280 ?upted. 17 cpersionis. An excelleis. ranolcimer anon ous your $\$ 3.10$

## 12. Volt Step=Duwn Trandentiner <br> 

Reliatule Filiment
Transfurner

other carries 8 ampin for two tind tho two Pertode tubre. Both whatings

 General Use Filament Transformer

down and

and $7 . \overline{\mathrm{a}}$ vols at



Cat. No. 3418


## TRANSFORMERS



## Volume Condrols. Bodentiometers, Theastats



## RESISTANCES

 $\because$ find vilue in volty uf thas needed, the current drafin at the plate voltage used and thlis will wive the blaalng egistur
To find the biasing resistor theeded the plate current (in amperes) of the tube or tubes to be blased if divided into the lijo volts plate. The biasingor example, to find the blasing resistor for iwo 245 tubes, the plate current is 68 mila at Howtver, any value from 700 to 800 ohms will given. the platecurrent .068 ampl divided Into ofo wlll give $q 16$ ohme.

Wire-Wound Resistances

| No. | Ohama | No. | Ohme |
| :---: | :---: | :---: | :---: |
| $86 \%$ | 10 | Q101 | $\because 00$ |
| 863 | 10 O. T. | 2110 | 400 |
| 86.1 | $\because 0$ | $\because 103$ | గิక0 |
| 86.5 | \#0 O. ' ${ }^{\prime}$. | $\because 10 \pm$ | : 30 |
| 86id | 40 | 2105 | 1.000 |
| 86\% | +11 C. T. | $\because 10 \%$ | 1.700 |
| ¢A8 | 1.50 C. 2. | $210 \%$ | $\because .5 \mathrm{cu}$ |
| Per <br> SSOR | at Erices lozen, ed. | $\mathrm{Fr} \mathrm{He}$ | $j$ |

Flexible Wire-Wound
Grid Suppressors

C. T. Resistance
 Na 888. 20 uhme.......... IOC No. 688. so ohma..........15c

Variable Grid Leak

Mdcrumgter adjustwent. Fitis any ind
lean mount. Rarge. meg wo 10 merobme abpg. wi, ouse No. 9878 $\xrightarrow[\substack{\text { Your } \\ \text { Price }}]{ } 48 \mathrm{c}$
$\frac{\text { Price } 40 C}{\text { Wire-Wound Grid }}$ Suppressors


Love Uns sale No. 1885 $\$ 1.50$

Carbon Resiastora
 $\substack{\text { No } \\ \text { N1 } \\ \$ 1.50 \\ \$ 1.50}$

Par dozets
Cbyice as $130-25 u-850-375-400$ $-500-i 50-1000-1200-1800$ $-200 u-3000-4000-5100-10$ - $18.000-20.000-88.000-900$ $18.000-20.000-88.000-9<000$
$40.000-10.000-78.000$




## KL DLACEMENT RESISTOKS FOK ALL R.C.A.-VICTOR RECEIVEKS Fui K3z, Kjs, K\$3



 Aeroros ind 10 sisajard ie placement ivi 1 UZ\& 30 icieav. efe. Toial icaldarico la 2620
uting taphed iectlone of 2000.
 Equicued aith uñod soldeing luge. $\underset{\substack{\text { Your } \\ \text { Price }}}{ } 95 \mathrm{c}$
No can Purimin roulozernear ieelsturs fur all typo Reillo 180 and Fictore Give tyju tenerter and reslstur. or,


Freshman Fixed Resistances


WIre Wound-Batid on Laca Tubes 23.000 utaly :ulsh used in Frashman N Madela. Tapped 1500. 4800 . 930 0500 and 2200 chmo. Your Price, each.

Temple Resistances
and Voltage Dividers (OнмITE)

reuped at 1.000 . 8.000 . 880 Leupad as 81.800 ubma
$8,000, ~ 1.600 .8 .060$ Oen be uned an vultase diride is Cun Na 8151
$25 c$
$\$ 2.00$
dozen
Earl:Freed Redistanco



## 35 c <br> tach $\$ 3.00$

dozei
Bremer Tully 510 Resistor

$\pm .600$ Ubmis
usto Na $918 y$ Special 60 c

## RESISTORS • PIGTAILS • RHEOSTATS • WIREWOUND

Metalized Pigtail or Carbon Resistors
A necessity for the Dealer and Service Man. All sizes carried in stock.

|  |  | Your 81 <br> Price <br> 8 <br> 1 <br> Luts of 50 Oe each Lots 700 each cut. No. sseg |
| :---: | :---: | :---: |
| Amsco Resistors <br> A standard grid leak mount pestitur for u* in yuwer Lacks. "B" elimihators. ote. Has large yower handling capacity. Non-indmetive tspe resistur. Avalable in following pripular sizes: <br>  <br>  1 mazgulm. 2.5 wistt taths. <br> Your Price $\mathbf{O C}^{\circ}$ <br> \$2.00 Per Dozen <br> Dut. No. y $\ddagger 2 y$ | '20" Resistor Kit <br> This kie ennciats of 20 rif the most commiuhls luscd sizes lin <br>  accurste to about $5 \%$ on the kmisll sizes and 10 "O 011 tho <br>  pasy replacement and bulitering. Odi-size valuca tin be <br>  parisllel. A tonntint kit und easy tu cialy rach kil. Shay. wi. 1 ll 1 at. Xu. y\$30. Llat siivu. <br> $\underset{\substack{\text { Yiur } \\ \text { Urice }}}{ } \$ 1.85$ | Carter Wire Wound 3 Watt Resistors <br> An aculrate wiace Tưmml redislur cabD lute wI disaipittió is wialls lirid leask <br>  <br>  s.uUu vhirs. 1u, UuU vhoce. <br> $\underset{\text { Price }}{\text { Your }} 45 \mathrm{C}$ <br> Cul. Nu. 8b: 57 |
| Rheosfate <br> Perfect contact arm rheostaty, Yradmen made of moulded bakitite, $V$ er $y$ olurdy and will hut hrat up umituly, <br>  Type <br> 1.1. 6 <br> soue Fifo <br> 0 ohru. 8 ober wlh <br> . 50 c <br> (1a) 1 ? <br> 10 Vernier <br> $\$ 1.00$ <br> 20 ohm. 30 ohm. <br> Fer Dosea <br> Oas No, 8428 | Variable Voltage Divider Variable Slides | R.C.A. Voltage Control <br> MANTAINS EONSTANT VULTAGK <br> Ofigifull thale tur vultage quition ta is atiowiuk \& $P$ A. 14 sind the A. 4. with ratiabiajo ievervora, but <br>  bavio to buantalu vollage by coatavilite fiom B Exigus to ito veits bluz Coaber! <br>  and Grid to bu wolt trakeo <br>  <br> Yun Price <br> Nen Nu. 8417 |




Durham Metalizad

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 duJ isvale R9Ktal sud s.t. leak sbiled

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\text { Y\% } 5 \text { utum }
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1 \text { vou ohme }
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8000 \text { ohma }
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Splitdorf 12,500 ohm Resistor


Electrad 100,000 ohm Kesistor



## Wire－Wound Insulated Resistors



60－WATT RATING
These are Wire Wound Re－ aistors．Never haro they been offered a：our low prices． They are all new and perfect． and each une is marker as
 resletor．
Cat．No．200s．Bupplag welght： 12 oan．each．

| oma | Soer ficm |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  | 40c |
|  | 32 c |  | 50c |
|  | 34c | coize | 52 c |
| ${ }^{700}$ | 34 c |  | 55 c |
|  | 40c | cos | 60 c |
| as． |  | 10000 | 65 c |

## K－2673067 Resistor <br> 

rosed in RPA5．Pal No． 116 ？
Cat No． 3008 1．1st， 81.80 $\underset{\text { Price }}{\substack{\text { Your } \\ \text { Put }}}$

K－2673090 Resistor
2，450 Ohms


Wacd in RFA 4 and 4A．Part cat No．zong iJat， 81.50 $\underset{\substack{\text { Your } \\ \text { Price }}}{ } 60 \mathrm{c}$
 Cead in RPA $\downarrow$ and
Yo．R21．
Cat．No． 3010 Rist． 81.50 $\underset{\substack{\text { Your } \\ \text { Price }}}{ } 60 \mathrm{c}$

K－2673047 Resistor 6.000 Ohms


Oned
Rat
in
7 and 74．Part No． R47．
Cat No．3011 Lote 18.50 $\underset{\substack{\text { Your } \\ \text { Price }}}{ } 60 \mathrm{c}$

K－2670325 Resistor


Tind in RPA 1A and 4．Part No．R：25．
Cat．Nos． 300 s
Ust $\$ 1.30$ $\underset{\substack{\text { Your } \\ \text { Price }}}{ } 60 \mathrm{c}$


Part No．R31． 1.100 obma K－633822 Resistor 30 ohms tapded at 10 in 10 ． 10．Part，No．204．4 t eed in
 $\underset{\text { Price }}{\text { You }} 60$

## K－2673044 Resistor


1.100 ohms tapped at $\tilde{\sim} 00$ ． Used in RPA 7 and $7 A$ ．Pari No．R4d
Cas No． 9007 ISat． 81.50 Your
Price
00
0．

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Wo can supply replacement resistors for all receivers．Write for prices． EARL．All－1．000 ohm Rrid bias
EIRI．，Model $31.3: 3.32,41: 4000-750$ ohms

 IREEJ EISIMMNN，Modtl TE．T9， $95 ; 5.000 \mathrm{ohm}$ ．．．．．．． 3018
 10del 16． 510 ohina．Per doz $\cdots 3020 \ldots .31 .50$






 FRFE！EISEMANN，Mod FREED EISEMANN，Moth ベルGO，\＆ 000 nhms．．．．．．．．．．3（32．．．200
 FBFED FISEMINN，Model NRTU， 10.000 ohms．．．．．．．．．．．3034．．．．2no


 FREED FISEMAND，Nodnt NRRS， $1000-150-2000$ ohms ．．．3038．．．．4nc
 rlikishlsiN Modrl G60S Voltase Divider


 GENEISAL MOTOLS，$\therefore$ 16005 037：olims iaphel at 800
$\qquad$


TEMPLE：I．（．－－$\because 3$ ohm voliate diviler



## Wire－Wound Voltage Dividers on Baked Lava Tubes




## Kolster Wire <br> Wound P．csis：ance bayy




Cat．No． 3012
Your
Price
Pa 30c
Kolster No． 4919 ．8，700 obme． Cat．No． 3013 Your $30 c$
ce

Stromberg－Carlson

3.100 ohm tapped at 1.100 ohm Cat．No． 3014
Your
Price
$75 c$
6.000 ohm tapped at 3.000 ohm． Cat．No． 3015
$\underset{\substack{\text { Your } \\ \text { Price }}}{ } 75 \mathrm{C}$

## Andio Frequency Transiormers and Impedances



SELECTUNER
SHALION SELEETOE NED STATIC

For must ty bes of foble about the homm, ataing from vacuum cleaners. bowing machines, electric fans, toasters, ete, Installed by plugging tho unit into the wall socket between current and receiver. Shpg, wt, 1 to.
No. 730. List $\$ 3.00$.

Your $\$ 1.71$


COMBINITION SOCKDT INTENN: AVD (TRREDT OTTLET
No. 637 . J.ist $\$ 1.00$.
Your
Price
$59 C$
BELDEN FUSED CABLE


HAMILTON VOLTAGE REGULATOR
 tant stations throligh the locals. Alluws the compasticon of up t.
four speations or the upuration of four kpeatits of the upn mation of
two simaltantoutly, A turn oi the fatob switehes troth ote +brater to another. Sturdbly hotilt; does (at. No. 3649


FRESHMAN MIDGET CONDENSER


A seven-plate thadeng unismally wode on
 fan be usod in sho:t wave rowotvera as neutralizers, tegoneration controls, etc
Cat, No, 3648
$\underset{\substack{\text { Your } \\ \text { Price }}}{45 \mathrm{c}}$

FREED-EISEMANN NR83 VOLUME CONTROL STRIP


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Cthlizing the Band Pass ptinciple the Accuratumer by a simple adjustment allows you to eut out tal terfermg stations. Eliminates eross
salk and bllows reception of dis-


List $\$ 2.50$

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Dial Light
tinala alumetable uocs. Cat. No, 30:? Your Price 75 c prestat

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Eouutifies the Cut, No. 3073

Your
Price $\mathbb{1}$ dor.

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SUB PANEL SOCKETS


Particulariy adapted for use
on $m$ etal subpanels. Tinned 1 ngs project through botton - mownection. socket terminal IV. Harked on the base so facilitate wiring. Hesvy nickled phosphor bronze f suolint one niece moulded take So Sop fubes and in 5 prong for UX ype qubes. Slipg. wt. 1/2 1 b .
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Non - removable top. Have hole through shanks. Bake. lite. Shps. wt., 4 ozs.

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I.C.A. SUPER VOLTAGE CONTROL

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## Radio Trequenty Truninag dails and Condensers




Special 2 Gang Condenser

Colonial Condenser


General Motors Sing?e .00035 Mfd Condenser



Day Fan-General Motors Untuned R.F. Transformer


The ideal untumnd unit for日tages.
Primar
Primary and secondary wuthd on
the same furni. An exiellent coupline derice. cat. No. з:8 Your Price 35C
R.C.A. Super Het
I.F. Trans. Coils (1)


Colonial R.F. Coils


## Day Fan G.M. 4 Gang Condenser


aifd Vathtub conden
sir. die cast for uur abllity. Each sectio L) meana of algna feanerator, at the fac
$\underset{\substack{\text { Your } \\ \text { Prite }}}{ } 95 \mathrm{c}$

| Shield-Base-Cap | Equalizing |
| :---: | :---: |
| For 2.2-222-2.27 Tubes Astuunding value! Base fits around ang socket. Cap fits around $B$ Id terminal. Sbpe. Wt.. 1 lb, | Condenser <br> Companinate comlenser gecticiad. gleo usod in nautrillalag diculte. |
| No. 160 <br> BET OF 8 PDECES | No. 188 |
| $\underset{\substack{\text { Your } \\ \text { Price }}}{ } 10 \mathrm{c}$ | Your TE Price |

Aluminum Shields
 or al Durposea. Heav Dollshed aluminum
 $88 / 10^{\prime \prime}$. State alze
doaired in your order Cat. No. 8709
Your 76 per
Price 8 doz Price 0 doz.

## MATCHED 䀦. F . COHL SETS


R.F. CHOKE


Your 35́e
Price
Freshman Easket Weave Coils

R.C.A. Neutralizing Condensers

|  | $B a k \operatorname{lit}$ condenger Fish mounting boles. Ceed as R.F cumpenaalor detector trimme abJ flate cuubling condenaer Gat. Nio y yoa $\underset{\substack{\text { Yourr } \\ \text { Price }}}{ } 12 \mathbf{c}$ |
| :---: | :---: |

FULL VISION DIAL


Cat. So. 3808
$\underset{\text { Price }}{\text { Pour }} 95 \mathrm{c}$

Microphone Button

gTapb muzec spent rocwcas 1urwilued to tTecty-five experiwenta

Car No: 8509
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HONEYCOMB COILS




## Zenith A. C. Power Transformer

Replacement for 7enith 33, 33-X, 34, 35, 35-Z
Dolivers 300 Delivers 300 volts cach side of center sap. Also supplics 5 volts at $1 / 3$ ampere for two $21 / 2$ volts winding for geven 224 's or 227 tubes.

Cat. No. 8923 $\underset{\substack{\text { Your } \\ \text { Price }}}{\substack{1.95}}$

Peerless Courier No. 22 Voltage Divider

Contains two separate sections of $100 n 00$ and 2.500 ohms. Also following sections in
geries $3,000,150.000 .100 .000$ and 500.000 ohma.
Cat. No. 9924

## Your $65 C$ Price

Peerless Audio Transformers


A high-grade molature proof transformer.
Special iron core. Tinned luge for easy poldoring. Fiat ampuncation ourra usi ntate ravio.
Ot Na 8ces
$\underset{\substack{\text { Yource } \\ \text { Prtc } \\ 65 c}}{ }$
2,500-Ohm Filter Choke


This choke is designed to be used in place of This choke is designed to be used in place of the dynamic speaker fleld. By inserting shis receiver without imnairing the efficiency of the power supdly unit.
Cat. No. 3920
$\underset{\substack{\text { Your } \\ \text { Price }}}{ } \$ 1.85$

Flechtheim Superior


Electrolytic Condensers

## Wet Type-Inverted

An 8 mid. unlt having the snest electrical characteriatica to be used in atandard filtar diranita where peak voltage in mot over 500 volts D.C. For nece in 18 and Pantode ciroulta vhich employe a Dlate tranaformer delivetar uD to 876 valt RNB NO.
Ont. No. 80en

## Your 950 Price

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## ،NG HEAD


thine will find many a use in the boratory. Frecisien bullt through--Ings and all ateel parts are highly A two atep pulleg is provided for ng. 16 is provided with a carefully taper screw on one end. The other s an arbor having a s/a capacity luck. The pollshing head comes with wheel, a Carbornndum grinding otone, wlre cleaning wheel and a plece of rouge. This polishing head can be if small metal parts. It can also be a horizontal drill press. The polisha horizontal drill press. The polishComes complese with buffer wheel Cindstone wire bruph wheal and bueuge. Shps. wt. 6 lbi.
910. Complete with all Atteohmenta Your
Price

GOODELL PRATT UTILITY BENCH LATHE


No. 1919. Completo with all Attachments. The Lathe is perbaps the most versatile tool to be found in the experimenters "shop." Thls size, wo have selected an the most convonient for radio work. The Lathe is a product of Goodell-Pratt Co., an assurance of good workmanship. It is aubstantially conatructed throughout. The bed is $1 \mathrm{~N}^{\prime \prime}$ long and is milled its entire length. The head stock has a spindle with a taper hole in both cnds. In which the regular equipment. consisting of a laper thread spindle, saw arbor. 0 to $5 / 32^{*}$ capacity check and slotted 1ace plate. flt. The tail stock is adjustable for position and is equipped with screw fced and clamp lock. The rest is adjustable for position and height.
Extrome distance between centera is $3 y^{\prime}$
Swing 5". The pulley ateds are $1^{\prime \prime}$ and 1 He $^{\prime \prime}$ in diameter The pulley ateps are 1 and grooved. so round belt can be used if deaired. Frame, tail stock and ioe rest finished in red and black enamel. Steel parts are polliked. Shpe. wt. 10 lbs. Nn. 1918
$\begin{array}{ll}\text { Your } & \oplus 0 \\ \text { Price } & \infty \quad 0\end{array}$

AUTOMAT BENCH
Thia ia a fine bench
drill for seneral use in the radio shod. It takt all round bank drill. up to it". All the working parts of thi machine are clamped to a $10^{\prime \prime}$ steel rod of $1 / 2^{n}$ diameter, which ate into a black enameled base that taket a bench epace of only $4^{\prime \prime}$ by $\mathbf{8 "}^{\prime \prime}$. The automatic feed is operated by the band wheel and thumb screw at the tod of the ateel feed screw. The auto matic feed will lower the drill and ralae it at a rate detorminesl by the cuttling adeed. The drive ehaft is constructed with \%" "hruat ball bearing Geara and piniona are machine cut from solld blanks. The table proder is $21 / 6^{\prime \prime}$ square. All 1 ron daris are finished in red and black en. all ateed parts are polished. A clamp is
vided to hold the drill to the table wh rided to hold the drill to the table wh
drlllige. BhDE. Wt. 8 . drllling. EhDE. wit. ${ }^{6}$ lbs. 1920.

Your
Price

Lenk Automatic Blow Torches

Deveiocs a blaat 1.700 Fshrenheit, and will operate for about ing es hours on one and commercial sicohol and commercial sichate phicld is pro. Cetachable shield
vis profrom ail drafte on outfrom all draithon outeelf. Staris. in twenty aeconds.
Bighly
nickel
long by
plated. ShDg. mt. 3 lbs No. 60\%-30. 1 jat 83.00

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Price $\$ 2.06$

## Blow <br> Torch

64"n2\%* Flam heat
$1400^{\circ}$ Leak-proof. Nes denatured alcohol. nozzio cap. Blowit it No. 606-86. LIat 31.78 cole frict $\$ 1.20$

## Radio Tool Chest



The mos. necesasars and ever needful radjo tools are in this kit- bhould be in every cuatom tool box. And jusi as useful in your laboratory or workuhop. Here are the contents: y and 8 In. screw driver, ecriber, reamer, counteraink, pliers, center-punch, and knurled nuis: and 3 wrenand Enuried nuts: and 3 wren from $1 / 6$ mexagon nuta. ranging cardbourd case. ShDz. Wt 3168. No. 600. Prlee $\$ 1.95$

Aluminum Solder


No. 609. Por 2 oa. strip 21 C
Diagonal Cutting Pliers


Snipa wlree oft in pleasing man. ner. ShyE. Wt. 8 czas.


## Klein Pattern Pliers



Blape. wt. 1 to 2 lbe.
Nu. 589-403. $\begin{array}{ll}\mathbf{B}^{\prime \prime} & \text { lonk. } \\ \text { No. } & \mathbf{5 9 0}-498 .\end{array}$ $8^{\prime \prime \prime}$ loay.
$\underset{\text { Yrice } 5 \text { © }}{\text { Y }}$
$\underset{\text { Your }}{\text { Yose }} 70$ C
Combination Pliers


INSULATED HANDIESI TEST ED TO B.000 VOITSI COHI bines side cutter. wire cutter. flat nose. and gas plier, terew driver and reamer. Correctly hardened and tempered jaws and cuttars. Firat quality. Shps. wh. 1 to 8 lba.
No. 884-492.
${ }^{\mathbf{N o m}}$ long.
Na 088 -482.
$7{ }^{10}$ lone.
No. 586-492.
No. ${ }^{\circ} \mathrm{long}$.

Your 55c Your 65c Your 75c


Jong nose. with sile cutter. ened and tempered steel. Shpg $\begin{array}{lll}\text { wi. } 8 \text { oze. Your } & \text { 39C }\end{array}$

Wrench Set


Adjusts nuts imporsible to reach wiws other larker tools. Fite
 adde wizes. Shige. wi 8 oze. Nute $\begin{array}{ll}\text { odd mizes. Shpe. wi Your } \\ \text { case. } & \text { Yous. }\end{array}$
No. 602-2034. I'rice $4 \pm$
Reamer


ENLARGES drilled liules in bakelite and wood. $\stackrel{8}{\mathrm{Nu} .} 878$.
$\underset{\text { Price }}{21 C}$
Socket Wrench Set


## Electric Soldering Iron <br> 

Maximum performance at a minlmum cost Long life nichrome wirs heating element. Best ma 1b. 610. Lst 82.00. Your 876 Extra Tip. 15 c enoh

## Rosin-Core Solder

Simplifies coldering - assures perfect rectrical and mechanical jolnt. Niu. 607. 4 oz. an. Your
Hrice
$17 E$
No. 609. Une Pound Epool. Your
Prloe

## Perfect Grinders




$2^{\circ}$ rule. try-square or re $45^{\circ}$. Divided into \%aths, on both sides machined. 8hpe. wi.

Cat No. 3946

.vry-Use Electric lotor Attachment


Holda grindatone, buffs, sawa, drills, wire scratch brushes, etc.. for grinding tools and cutlery. polishing and buffing of all kinds. drilling holes, preparing metais for welding. Simply fastens with se: screws directly to ahaft of your Amall motor in a jiffy. Made of witheat grade cold rollevi wtecl. With machined flanges, and fitted With three jaw 0 to $9 / 32^{\prime \prime}$ drill chuck. Comes in five aizes to fit
 ahaite. Be cure to state alze of your motor ahaft when urdering.
Shpe. wt. 2 lbe.

$$
\begin{aligned}
& \substack{\text { cat. No. } \\
3558}
\end{aligned} \begin{gathered}
\text { Your } \\
\text { Price }
\end{gathered} \text { G8C }
$$



Nickel plated, fully hardened eteel. Extra heavy epring. released by knob at tod of handle by aimple turn. Handle contalna 8 drill points from $1 / 16^{\prime \prime}$ to $11 / 64^{*}$. each in eparate compartment. Sbpr. wt. 8 lba .

Cat. No. Your
8589 $\underset{\sim}{\text { Price }}$
Carbon Steel Twist Drill Sets


Consists of one of each drill: $1 / 16^{\prime \prime}$, 5/64" 3/32"", 7/B4"
 Cat. No. 3581
Your Price 35 c
Consists of one drill each ize from No. 1 ©o No. 60. Wire gauge 60 drills in all. Shpr. wt. 1 lb.
Your Price + O
Both of the above drill seta are put up in conveniently folded paper containers.


Just the kit for those ingtallation jobs. Containa 7 pieces. Natural finish. Drod forged tools. Contains: $5^{\prime \prime}$ Sorew Driver, 6" Comb Pller, g" Wrench, 10 ox. B.P. Hammer, z/" Cold Chlsel, 25 D.E. Wrench, 3/8" Punch.
Shpe. We. 7 lbs.
Llat $\$ 5.00$
Cat. No. 35K5
Your
Price
In Lote of $81 \times, ~ \$ 8.35$


Solid disc wheel. 8 Jaw chuck opens to $1 / 4 \mathrm{\prime} \mathrm{\prime}$. Very carefully machined. $113 / 2=$ long. Shpg. wt 3 lbs.

| Your |
| :---: |
| Price |
| $89 c$ |

## Angle Wrenches



Drop forged stecl. correctly harden ed and tempered. Note bolt ad justing jaw mechanism. Slipg. wt ${ }^{2}$ to j lbs. 6" $^{\prime \prime}$ long.

| Cint. No. Your |  |
| :---: | :---: |
| 358: | Price | $\mathbf{C O}$

$8^{\prime \prime}$ long.
$\begin{array}{cc}\text { Cat. No. Your } \\ 3504 & \text { Price } \\ \text { SYC }\end{array}$
$10^{\circ \prime}$ long.
Cut. No.
3568 $\quad \begin{aligned} & \text { Your } \\ & \text { Price }\end{aligned} \quad 9 \mathrm{Cl}$

## Countersink

Flts all hand and breast drills. Size \% \% Shpe. wt. \& oze.

$$
\begin{array}{cc}
\text { Cat. No. Your } \\
8860 & \text { Price }
\end{array}
$$

Heavy Duty Electric Soldering Iron


Tises famous long life nichrome heating element. Perfectly balheating elemient. Perfectly bal-
anced. Cool handle. Long copper tip.
Cat. No. 8566
Liat 82.50
Your
Price
Brtra Tipa, 160 ench

## COOLS FOR THE CUSTOM

## ，NG HEAD


：hine whll find many a use in the boratory．Precision bullt through－ －Inge and all ateel parts are highly A swo atep pulley is provided for ng．it is provided with a carefully taper acrew on one end．The other s au arbor having a uck．The Doliahing head come with wheel，a Carbor undum grinding atone， wire cleaning wheel and a plece of rouge．This polishlng head can be a grinder or as a Dolisher．to clean small metal parta．It can also be a horizontal drill presa．The polish－ 1 Is finiahed in red enamel and polished Comes complese with buffer wheel， grindstone．wire brush wheel and buf－
ure．Shpg．wh． 8 lba． uge．ShDE．wh． 6 lba．
919．Complete with all Atmahmente $\begin{array}{ll}\text { Your } \\ \text { Price } & 0\end{array}$

GOODELL PRATT UTILITY BENCH LATHF：


No．1919．Complete with all Attachments． The Lathe is perhaps the most versatile tool to be found in the experimenters＂shod．＂ Thla size，we have elected as the most con－ venient for radio work．The Lathe is a pro－ duct of Goodell－Pratt Co．，an assurance of duct of Goodell－Pratt Co．，an asaurance of oud workmanship．It is substantially con－ and is milled it entire length is The head and is milled its entire length．The head stock has a spinule wirh a taper hole in both ends．in which the regular equipment．con 0 to $5 / 32^{*}$ capsclty check and slotted face 0 to 5／32＂capacity check and slotted lace plate．1lt．The tail stock is adjustable ior and and clamp lock．The rest is adjustable for Extreme and histance bit
Extreme distance between centers is $31 /{ }^{\circ}$ Swing $5^{\prime \prime}$ ．The pulley steps are $1^{\prime \prime}$ and 1 Hi in diamicter with $z^{\prime \prime}$ face．Large step is grooved．日o round belt can be used if desired． Frame，tail stock and tee rest finished in red and black enamel．Bteel parts are pollehed Shpq．Wi． 16 lbi．Nn． 1918.
$\underset{\substack{\text { Your } \\ \text { Price }}}{\substack{ \\\hline}}$

## AUTOMAT BENCH

This is a fine bench drill for eeneral use in the radio shop．It take all round bhank drills up to is＂．All the working parta of thi machine are clamped to a $10^{\circ}$ steel rod of $3 / /^{\prime \prime}$ diametar，which sete in－ to a black enameled baee that taken a bench apace of only $4^{\prime \prime}$ by $8^{\prime \prime}$ ． The automatsc feed is operated by the hand wheel and thumb screw at the tod of the steel feed acrew．The aute－ matic feed will lower the drill and raise it at a rate determingl by the cutting apeed．The drive ehaft is constructed with $3 / 4$＂thrust ball bearing． Gears and pinions are machine cut from colld blanks．The table proper is $21 / 6^{\prime \prime}$ square．All iron paris are flished in red and black en． all steel parts are polished．A clamp is

vided to hold the drill to the table wh vided to hold the drill to the table wh drilling．日hDE．Wi．No．${ }^{6}$ lbsio．

Your
Price 42.45
cenk Automatic Blow Torches

Develoys blast Developa blast of
$1.700^{\circ}$ Fahrenheit．and will operate for about ing．Uaes denatured and commercial alcohol．A cetachable shield is pro－ vided io protect blast from all drafte on out－ lloor Work．Bluws it－ eelf．8tarts．in twenty $3 \%$＂．Bighly nlekel plated． No．60s－30．Ljat 83.00 Your
Price
$\$ 2.06$


Radio Tool Chest


The mos．necesaary and ever needful radio tools are in this kit－should be in every custom set bullder＇s or service man＇u tool box．And juti as useful in your laboratory or workshod． Here are the contents： 3 and 6 in．screw driver，scriber，reamer， countersink，pliers；center－punch．
socket wrench oei for hexagon and knurled nuis：and 3 wren－ and knurled nuis：and sawring from $1 / 4{ }^{\text {＂}}$ to $1 / 2$＂．Attractivo cardboerd case．Shipg．wi 3 lbe
Your
No．600．Prioe $\$ 1.95$




Shpe．Wi． 1 to 2 lbs．
No．B89－499．Your © No． $590-408$ ．Your 70c

Combination Pliers


INSULATED HANDIESI TEST－ ED TO 8.000 VOLTS I COm－ binea side culter．wire cutter． flat nuee．and gas pller，surew driver and reamer．Correctly hardened and tempered daws and culters．First quality．Sbpy

No．884－492．
$0^{10}$ long．
No． $8855-492$
No．586－492
No．
$8^{\prime \prime}$
long．
Your 55c
Price
Your $55 c$
Price
Your $75 c$
Price


Long noss，with silie cutter 61／2 long．First quality hard－ aned and tempered steel．Shuk．
wh． 8 oze． No．683－484．

Your
39C

## Wrench Set



Adjusta nuta impossible tu reach whil other larker woly．Fita
 odds sizes．Shpe．Wt 8 ozs．Nute case．Your 23e
No．

Reamer

ENLARGES drilled liulte in bakelite and


Your
Prico 1 c
Socket Wrench Set


## Electric Soldering Iron

Maxlmum periormance at a mins mum cost Long life nlchrome wire heating element．Best ma－ terlals throughout．ShDE．Ft． 1 1b．610．List 8： | Your |
| :--- | :--- |
| Prico |
| 18 |

Extra Tip． 16 c each
Rosin－Core Solder
Simpllfies soldering－msures parfect electrical and mechanical jolat．No．607． 4 oz．ean． lour
l＇rice
170
No．6ad．One Pound Bpool Your ©
Price

Perfect Grinders
Cat．No． 3378.


## Bench Vises

Carefulls machin－ ed and yulabhed ed and Unulashed aturds．Opolla wide，and clamya on any place． Steel Ectew．two －teal cullding rode．

cat No．3382． $21 / 2 "$ wide fow $\underset{\text { Price }}{\text { Your }} \$ 1.35$
On Na 3381． $31 / x^{\prime \prime}$ wide gnw $\underset{\substack{\text { Yuare } \\ \text { Price }}}{\substack{\text { 2／2 }}}$


[^0]:     and 15 inches
    $\qquad$
     R.F. stage, the cointinatlon woiking inco the firat detectol and rollowed by two 1.F. atages, hacond dotector, and push
    Cat. No. 89s2, E'or 120 -volt $50-60$
    110-Foit D.U. model RFaliable st
    

