## BURGESS BATTERIES




F4L


B30


M30

$\mathbf{X X 3 0}$

## BURGESS BATTERIES



G6B60


4 GA42


## BURGESS FARM "A \& B" BATTERIES

No. 17 GD 60 . $11 / 2$ volt "A", 90 volt "B". Size, $155 / 8$ "x $4 \frac{5}{18}$ "x 7 ". Standard package 1.

List price, $\$ \mathbf{5 . 9 5}$
No. 18GD60. $11 / 2$ volt "A", 90 volt "B". Size, $55 / 8$ "x $63 / 4$ "x $12{ }^{7}{ }^{7}{ }^{7}$ ". Standard package 1.

List price, $\$ 7.95$
No. 398. 6 volt "A", 90 volt "B". Size, $813^{\prime \prime}$ " $45 / 8$ " $\times 14$ ". Standard package 1.

List price, $\$ 12.35$
 package $1 . \quad$ List price, $\$ 7.95$

No. 739. $71 / 2$ volt "A", 90 volt "B". Size, 813 "x $45 / 8$ "x 14 ". Standard package 1. List price, $\$ 13.60$

## BURGESS PORTABLE "A" \& "B" BATTERIES

| No. | Voltage | Size | List Price |
| :---: | :---: | :---: | :---: |
| 2F4A60. | 6A, 90B | $12^{\prime \prime} \times 234{ }^{\prime \prime} \times 43 / 8$ " | \$5.95 |
| 2F4B60. | $6 \mathrm{~A}, 90 \mathrm{~B}$ | $105 / 8 " \times 3{ }^{\prime \prime}{ }^{\prime \prime} \times 4 \frac{3}{16 \prime \prime}$ | 6.55 |
| $2 \mathrm{TXX40}$. | $11 / 2 \mathrm{~A}, 60 \mathrm{~B}$ | $23 / 8{ }^{\prime \prime} \times 1^{\frac{5}{16}}{ }^{\prime \prime} \times 71 / 8{ }^{\prime \prime}$ | 3.00 |
| 3 FA 60. | $11 / 2 \mathrm{~A}, 90 \mathrm{~B}$ |  | 7.05 |
| 4FA60. | 11/2A, 90B | $7^{\prime \prime} \times 3 \frac{1}{3}{ }^{\prime \prime} \times 41 / 4^{\prime \prime}$ | 5.95 |
| 4GA41. | $11 / 2 \mathrm{~A}, 611 / 2 \mathrm{~B}$ | $9 \frac{3}{16} \times 216^{\prime \prime} \times 3 \frac{5}{16}$ | 4.15 |
| 4GA42. | $11 / 2 \mathrm{~A}, 63 \mathrm{~B}$ |  | 4.15 |
| 4TA60. | 11/2A, 90B |  | 5.25 |
| 5 DA 60. | $11 / 2 \mathrm{~A}, 90 \mathrm{~B}$ |  | 4.95 |
| 6FA60. | $11 / 2 \mathrm{~A}, 90 \mathrm{~B}$ | $11{ }^{15} 8^{\prime \prime} \times 15 / 8{ }^{\prime \prime} \times 6^{\frac{7}{2}}{ }^{\prime \prime}$ | 4.95 |
| 6 TA60. | 11/2A, 90B |  | 5.50 |
| D4A60. | $6 \mathrm{~A}, 90 \mathrm{~B}$ |  | 6.35 |
| D5 A 60. | $71 / 2 A, 90 B$ |  | 6.35 |
| F4A41. | $6 \mathrm{~A}, 611 / 2 \mathrm{~B}$ |  | 4.75 |
| F4A50. | 6A, 75B |  | 4.50 |
| F41360. | $6 \mathrm{~A}, 90 \mathrm{~B}$ | $103 / 4{ }^{\prime \prime} \times 211{ }^{\prime \prime} \times 43{ }^{\prime \prime}$ | 4.95 |
| F5M45. | $71 / 2 \mathrm{~A}, 671 / 2 \mathrm{~B}$ | $93^{5}{ }^{\prime \prime} \times 25 / 8{ }^{\prime \prime} \times 4^{\frac{7}{6}}{ }^{\prime \prime}$ | 4.50 |
| F6A60. | 9A, 90B | $91 / 4{ }^{\prime \prime} \times 23 / 4{ }^{\prime \prime} \times 4{ }^{\frac{7}{6}}{ }^{\prime \prime}$ | 4.95 |
| G4B50. | 6A, 75B | $123 / 8{ }^{\prime \prime} \times 2 \frac{11}{6 \prime}{ }^{\prime \prime} \times 41 / 8^{\prime \prime}$ | 4.95 |
| G4B60. | 6A, 90B | $103 / 4{ }^{\prime \prime} \times 2{ }^{3}{ }^{2}{ }^{\prime \prime} \times 5^{\prime \prime}$ | 5.50 |
| G5A42. | $71 / 2 \mathrm{~A}, 63 \mathrm{~B}$ |  | 4.20 |
| T5Z60. | $71 / 2 \mathrm{~A}, 90 \mathrm{~B}$ | $91 / 2^{\prime \prime} \times 21 / 8^{\prime \prime} \times 33 / 4{ }^{\prime \prime}$ | 5.50 |
| G6B60. | 9A, 90B | $137 / 8{ }^{\prime \prime} \times 2{ }^{3} 2^{\prime \prime} \times 45 / 8$ | 5.50 |
| G6M60. | 9A, 90B | $10 \frac{3}{16}{ }^{\prime \prime} \times 31 / 8{ }^{\prime \prime} \times 4{ }^{2} 2{ }^{\prime \prime}$ | 5.50 |
| T5Z50. | $71 / 2 \mathrm{~A}, 75 \mathrm{~B}$ |  | 4.50 |
| F6A60P. | 9A, 90P |  | 5.25 |

## BURGESS BATTERIES



5308


5540



10308

## BURGESS RADIO "B" BATTERIES

No. 10308.
No. 21308.
No. 2308.
No. 5156.
No. 5308.

45
45
45
$22^{1 / 2}$
45

 volts. Size, $8 \frac{1}{32}$ "x $23^{2} 2^{\prime \prime} \times 7 \frac{1}{16} "$. Standard package 6 ...
 $\begin{array}{ll}\text { List price, } & 2.88 \\ \text { List price, } & 1.80\end{array}$

## BURGESS RADIO "B" \& "C" BATTERIES

No. 2156.
No. 2370.
No. 4156.
No. 5360 .
No. 5540 .


 $41 / 2$ volts. Size, $23 /$ " $^{2} \mathrm{x} 2^{\prime \prime} \mathrm{x} 25 / 8$ "x $2 \frac{18}{8} "$. Standard package 10... List price, $71 / 2$ volts. Size, $37 / 8$ "x ${ }_{3}{ }^{\prime \prime} \times 21 \frac{1}{6} " \times 33^{\frac{1}{2}} "$. Standard package $10 \ldots$ List price,50
.95

## BURGESS FARM RADIO "A" BATTERIES

No. 12 F 3.
No. 20F.
No. 20F2.

No. 1ES.
No. 2ES.
No. 27E.
No. 5ES.
No. CL.
No. TE.
No. 9ES.




## BURGESS HEARING AID BATTERIES

## "A" BATTERIES FOR VACUUM TUBE HEARING AIDS




$11 / 2$ volts. Size, 䅠" ${ }^{\prime \prime} \times 2{ }^{2}{ }^{2} "$. Standard package 10....................... List price, 10 $11 / 2$ volts. Size, $1^{\prime \prime}$ diameter x $23^{3} z^{\prime \prime}$. Standard package 10 ........... List price, .20 $1^{1 / 2}$ volts. Size, $1_{1}^{1}{ }^{\prime \prime} \times 37 /{ }^{\prime \prime \prime}$. Standard package $4 \ldots$ List price, . 27 $11 / 2$ volts. Size, $17 / 8^{\prime \prime} \mathrm{x} \frac{9}{1 / 1}$. Standard package 12

List price, 1.25

## "B" BATTERIES FOR VACUUM TUBE HEARING AIDS

No. K10E.
No. K15E.
No. K20E.
No. U10E.
No. U15E.
No. U20E.
No.XX15E. $22^{1 / 2}$ v
No. XX28.
No. NX 30 E .

$\qquad$
 Standard package $20 \ldots$ Standard package 20.
 Standard package 10. Standard package 10.
Standard package 10

$\qquad$ List price, .90





"A" AND "B" ASSORTMENTS

HA73. Consists of 30 No. 1ES, 24 No. 2ES, 12 No. TE, 6 No. XX30F,
HA21. Cond 1 No. XX22E. Standard package 1.............................. price, $\$ 21.69$
Consists of 2 No. XX30E, 1 No. XX22E, 8 No. TE, 6 No. 1ES, 4 No. 2ES. Standard package 1....................................... List price, 8.61

## For Carbon Hearing Aids-Universal Batteries

No. T2R.



## For Western Electric Ortho-Technic Models

No. C3WE.
No. T2WE.
No. T3WE.
$41 / 2$ volts. Size, $3^{1 / 8 " x} 1_{3_{2}^{3}}{ }^{\prime \prime} \times 25 / 8^{\prime \prime}$. Standard package 12........... List price, 85



2308


2ZE


T3WE


T3R

## BURGESS BATTERIES



F4BP

Z30BP



4F2H


No. 2


No. 1


Z

## BURGESS FLASHLIGHT BATTERIES

$11 / 2$ volts. Size, 1 "x 1 㧹". Standard package 12. $\qquad$ List price, \$ . 10
 $\qquad$ List price,10 $11 / 2$ volts. Size, $\frac{9}{18 \prime \prime} \times 17 / 8^{\prime \prime}$. Standard package 12....................... List price, . 075

## BURGESS IGNITION BATTERIES

## FOR INDUSTRIAL APPLICATIONS

## BURGESS "A" BATTERIES







## BURGESS "B" BATTERIES

No. A75BP. $1121 / 2$ volts Size, $10_{3_{2}^{7}}^{\frac{7}{2}} \mathrm{x} 33_{\frac{7}{16} " x} 2^{1 / 2 "}$. Standard package 1........... List price, $\$ 6.18$





## BURGESS "C" BATTERIES





## A QUALITY DRY BATTERY FOR EVERY PURPOSE

## RADIO-ENGINEERED FOR EXTRA LISTENING HOURS


 Eveready with $\quad \begin{gathered}\text { Interchangeable } \\ \text { wingess }\end{gathered}$

## PORTABLE "A" BATTERIES

| VS002 | 41/2 | 4 | 13/8 | $411 / 16$ | 746 | G3 | \$ . 80 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| V5003 | 71/2 | 37/8 | $25 / 8$ | $4 \% 16$ | 687 | G5 | 1.10 |
| VS004 | $11 / 2$ | 25\% | 25/8 | 41/10; | 742 | 4F | . 95 |
| Vs005 | $11 / 2$ | $313 / 16$ | 13/8 | $5 \%$ | - | 4FL | . 90 |
| VS007 | $11 / 2$ | 315/16 | 25\% | $41 / 16$ | 743 | 6F | 1.30 |
| VS008 | $11 / 2$ | 37/8 | 17/16 | $103 / 4$ | 745 | 8FL | 1.75 |
| V5009 | 6 | 258 | 25/8 | 41/8 | 744 | F4PI | . 95 |
| VSO10 | 6 | 37/8 | 213/16 | 51/2 | 7.18 | 2F4 | 1.75 |
| VSO11 | 6 | 37/8 | 17/16 | 103/4 | 747 | 2F4L | 1.85 |
| V5036 | 11/2 | - | 15/16 | 23/8 | "Sealed- | n-Steel" | . 125 |
| V 5065 | 71/2 | $23 / 16$ | 2 | 31/16 | Ensign | A47 C5 | 1.00 |
| VS067 | $41 / 2$ | 4 | 13/8 | $41 / 8$ | 736 | F3 | . 75 |
| VS129 | 71/2 | 41/16 | 15/10 | 3 | - | B5 | . 95 |


$\rightarrow \rightarrow$ PORTABLE "AB". BATTERY PACKS

| VSO18 | 71/2-9-90 | 105/8 | 37/16 | 41/8 | 754 | G6M60 | 5.95 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VS5019 | 71/2-9-90 | 91/2 | 22\%32 | 43/8 | 753 | F6A60 | 5.95 |
| VS020 | 6-71/2-1 | 97/10 | $25 / 8$ | $43 / 8$ | - | F5M45 | 4.50 |
| V5037 | 11/2-90 | 117/8 | 11/2 | 6716 | - | 6FA60 | 4.95 |
| V5038 | 71/2-63 | 83/8 | 23/4 | 41/16 | - | G5A42 | 4.20 |
| VS04 1 | $11 / 2-71 / 2$ | $45 / 16$ | $33 / 4$ | $63 \%$ | - | Gs | 5.35 |
| VSO43 | 11/2-90 | 51,2 | 211/16 | 71/8 | - | 5DA60 | 4.95 |
| VS044 | 6-90 | 121/8 | 23/4 | 43/8 | - | 2F4A60 | 5.95 |
| VS046 | 6-75 | 125/8 | 23/4 | 41/8 | Zenith Z675 | G4B50 | 4.95 |
| V5047 | 9-90 | 135/8 | 23/4 | 49/16 | ${ }_{\text {Zenith }}^{\text {Z985 }}$ | G6B60 | 5.95 |
| VS048 |  |  |  |  | ${ }_{\text {Z659 }}^{\text {Zenith }}$ |  |  |
| Vs050 | 6-71/2-75 | 109716 | 2116 | 311/16 |  | F4B60 T5750 | 4.95 4.95 |
| V5052 | $11 / 2-611 / 2$ |  | 211/10 | 37/19 | Philco 41 A4G Philco | 4G.A41 | 3.95 |
| $v 5053$ | 11/2-63 | 91/8 | 2 | 43/4 | 41 A 4 FL | 4GA42 | 3.95 |
| VS054 | $11 / 2-90$ | 10 | 23/16 | 47/8 | - | 6TA60 | 5.50 |
| V5057 | 71/2-9-90 | 93/8 | 23/6 | 33/4 | Philco P361 | T5Z60 | 5.50 |
| Vs058 | 9-90 | 91/2 | 223/3: | $43 / 8$ | Zenith Z909 | F6A60P |  |
| Kir \# 1 | Includes | 6-V | 36, 1- | S016 | Z |  | 3.19 |

FARM "AB' BATTERY PACKS

| VS021 | 11/2-90 | 1013/16 | 23/4 | 63/8 | 758 | - | 5.95* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VS022 | 11/2-90 | 153/4 | 41/4 | $6^{13 / 1}$ | 759 | 17GD60 | 7,95* |
| VS045 | 11/2-90 | 12!16 | 5\%/8 | 613/18 Zenith |  |  |  |
|  |  |  |  |  | 228 | 18GD60 | 7.95* |
| VS049 | 75 |  |  |  | Zenith |  |  |
| VS099 | 11/2-90 | 15\%/4 | $411 / 16$ | $63 / 4$ | Delux | aled |  |
|  |  |  |  |  | in St |  | 8.95* |

Prices slightly higher on Pacific Coast All prices in effect $3 / 28 / 49$

Turn page for additional types $\rightarrow$

RCA's selective distribution primarily to the RADIO TRADE steers customers back to you!


The RCA Trademark and attractive package guarantee immediate customer acceptance!


## R(A RCA BATTERIES <br> - the batteries for the radio trade

## RADIO-ENGINEERED FOR EXTRA LISTENING HOURS



VS002


VS016


VS 053
RCA's selective distribution primarily to the RADIO TRADE steers customers back to you!

The RCA Trademark and attractive package guarantee immediate customer acceptance!


VS 000C


| RCA | Voltage | $\begin{aligned} & \text { Max. D } \\ & \text { Lgth. } \end{aligned}$ | imensions, Width or Diam. | Inches <br> Body <br> Height | Interch Eveready | geable <br> Burgess | Sugq"d List Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\rightarrow \rightarrow$ FARM "A" BATTERIES |  |  |  |  |  |  |  |
| VS024 VS025 | $3^{1 / 2}$ | $711 / 16$ $111 / 16$ | $2^{13 / 16}$ | 7 | $\begin{array}{r} 740 \\ \times 125 \end{array}$ | 20 F 20 F 2 | $\$ 3.30$ 5.50 |
| $\rightarrow \rightarrow$ FARM "B" BATTERIES |  |  |  |  |  |  |  |
| V 5026 V5027 | $221 / 2-45$ $221 / 2-45$ | $81 / 16$ $81 / 16$ | $33 / 16$ $4 \% / 16$ | 7311 $73 / 16$ | 485 386 | 2308 PI 10308 Pl | $\begin{aligned} & 2.95 \\ & 3.95^{*} \end{aligned}$ |
| $\rightarrow \rightarrow$ RADIO HEARINĠ AID "A" BATTERIES |  |  |  |  |  |  |  |
| VS070 | $11 / 2$ | - | 15/10 | $41 / 10$ | Zenith Z1-S | TE | .30 |
| $\rightarrow \rightarrow$ FLASHLIGHT BATTERIES |  |  |  |  |  |  |  |
| VSOO1 | 11/2 | - | 111/32 | 213/32 | 950 | 2 | . 10 |
| V5033 | 11/2 |  | $11 / 32$ | 11516 | 935 | 1 | .10 |
| VS034 | $\begin{gathered} \text { (Baby) } \\ 11 / 2 \\ \text { (Penlite) } \end{gathered}$ | - | 37/04 |  |  | 2 | . 075 |
| $\rightarrow \rightarrow$ INDUSTRIAL \& SPECIAL BATTERIES |  |  |  |  |  |  |  |
| VS006C | $11 / 2$ | - | 25/8 | 6\%18 | 6 IGN | - | 70* |
| V5006S | $(11 / 2$ |  | $25 / 8$ |  | $6$ |  | .70* |
| VS028 | $(\underset{41 / 2}{ }$ | 23/8 | 2\%818 $13 / 16$ | 27/16 | 781 | 5360 | . 50 |
| VS029 | 11/2-3-41/2 | 315/16 | 7/8 | 31/8 | 773 | 5540 | . 95 |
| VS030 | \| $6.71 / 2 \mid$ | 41/16 | 17/16 | $31 / 16$ | X771 | 2370PI | . 85 |
| VS03 1 | 3-41/2-1 | 4 | 21/6 | 3 | 768 | 5156PI | 1.95 |
|  | 161/2-221/2 |  |  |  |  |  |  |
| V5039 | $\begin{gathered} 6 \\ \text { (Hotshot) } \end{gathered}$ | $103 / 8$ | 27/8 | 73/8 | 1461-2 | 4F4H | 3.35* |
| VS040 | (Hotshot) | 211/6 | 211/19 | 45/16 | 409 | F4H | . 80 |
| (Spring) | (Lant.) |  | 211/10 | $43 / 1$ |  |  |  |
| VS040 | $6$ | 211/16 | 211/16 | 43/16 | - | F4BP | . 80 |
| (Screw) | (Lant.) | - |  | 65/8 | TEL | - | .65* |
| VS042S | $11 / 2$ | - | 25/8 | $6 \% 16$ | TEL | - | .65* |
| V5100 | 3 | 20\%8 | 13/8 | $49 / 16$ | - | F2BP | . 71 |
| VS101 | $11 / 2$ | 25/8 | 13/8 | 4\%16 | - | 2FBP | . 71 |
| VS102 | 221/2 | $33 / 8$ | 21/8 | 23/4 | 763 | 4156 | 1.95 |
| VS 106 | $11 / 2$ | $211 / 16$ | $211 / 10$ | $43 / 16$ | 7625 | 4FH | .70* |
| VS 1.12 | 221/2-45 | 41/8 | 25/8 | 5516 | 762 S | 5308 | 2.50 |
| VS114 | 221/2-45 | 2-1/32 | 127/22 | 413/16 | - | Z30NX | 2.58 |
| VS126 | 221/2-45 | 81/8 | $31 / 4$ | 7916 | - | 2308SC | 2.95 |
| VS127W | 221/2-45 | 8 | 4 | 73/8 | - | 10308SC | 3.95* |
| VS130 | 11/2-3-41/2 | 4 | 17/16 | 37/16 | 761 T | 2370 BP | . 85 |
| VS131 | $\begin{aligned} & 3-41 / 2-61 \\ & 9-10^{1} / 2 \end{aligned}$ | 41/8 | 21/2 | 35/16 | 778 | 5156SC | 2.00 |
|  | $161 / 2-221 / 2$ |  |  |  |  |  |  |
| VS132 | $9$ | 41/16 | 213/16 | 27/8 | 703 | D6BP | 1.90 |
| V 5133 | 41/2 | $23 / 8$ | 13/16 | $31 / 16$ | 703 | 532 2 F | . 45 |
| VS136 | ${ }^{3}$ | 211/16 | $2^{11 / 16}$ | 43/16 $37 / 8$ | 766T | 2 F 215 | .90 1.63 |
| VS137 | $18-221 / 2$ | $61 / 2$ $37 / 8$ | 4 | $37 / 8$ | 766 T | 2156 | 1.63 1.35 |
| VS138 | 3 | 37/8 | 215/16 | 57/8 | - | 4 F 2 H 4 F 5 H | 1.35 $3.98{ }^{\text {a }}$ |
| VS139 | 6 | $73 / 16$ | $321 / 32$ $315 \%$ | 63/16 | 1662 | 4F5H | 3.98* |
| VS140 | $9^{9}$ | 81/6 | $315 / 18$ | 6 | 1662 794 | 41308SC |  |
| VS157 | $221 / 2-45$ | 81/8 | $43 / 8$ | 711/1d | $794$ | 21308SC | 4.15* |
| VS214 | 45 | 37/16 | $21 / 4$ | 49/16 | Spec. P Sock | sitioned | 2.30 |

- Prices slightly higher on Pacific Coast.


No. 2231 TWO-CELL "EVEREADY" AUTOMATIC SPOTLIGHT - Seamless brass tuhe. Chromium finish with rolled-on hlack decoration. Uses " "Eveready" No. 935 batteries and "Eveready" Lamp No. PR6. Unit package quantity 1.
List Price Each (Complete With Batteries) $\$ 1.65$


No. 2351 THREE-CELL "EVEREADY" AUTOMATIC SPOT. NO 2351 THREE-CELL "EVEREADY" AUTOMATIC SPOTon black decoration. Uses 3 "Eveready" No. 950 batteries and "Eveready" Lamp No. PR3. Unit package quantity 1 . List Price Each (Complete With Batteries)........ \$1.95


No, 2645 FIVE-CELL "EVEREADY" FOCUSING SEARCH. LIGHT-Chromium fittings, seamless brass tube with durable black haked on finish equipped with ring banger. Uses 5 "Everady" No. 950 batteries and "Eveready" lamp Vo. 605. Unit packatre quantity 1.
List Price Each (Complete With Batteries). .
.$\$ 4.50$



No. 25
Contains 6 No. 2251 two-cell "Eveready" Auto nutic Spotlights, displays 6. Seamless brass tube, chromium finish with rolled-on black decoration. Uses 2 "Eveready" No. 950 batteries and "Ever eady" Lamp No. PR2.

List Price Each (Complete With Batteries) ... \$1.65


No. 22
Contains 12 No. 267 two-cell "Eveready" Focusing Spotlights, displays 6. Chromium fittings seaniless brass tube with durable black baked on finish . . . equipped with ring hanger. Uses 2 "Eveready" No. 950 batteries List Price Each (Complete and "Eveready" Lamp With Batteries) ,.. \$1.00 No. 14. List Price Each (Complete
With Batteries)

Contains 12 No. 220 Penlights . . all chromium fimish on seamless brass . . Uses 2 "Eveready" No. 915 batteries and Eveready" LampNo. 222.


No. 1351
Three-Cell Prefocused Indus. trial Flashlight -General purpose type. Uses 3 "Eveready" No. 950 batteries and "Ever" eady', Lamp No. PR7. Unit Packige quantity 1 . List Price Each (Com. plete With Batteries)
$\$ 3.15$


No. 1251
Two-Cell Pre focused Indus trial Flashlight -General purpose type. Uses 2 "Eveready" No. 950 batter ies and "Ever. eady" Lamp No. PR6. Enit package quan. tity 1.
List Price Each (Com. plete With Batteries)
$\$ 2.95$


No. 1259
Two.Cell l're focused Per. ocuser Per missible Safety lashlight Uses 2 "Eveready" No. 950 batteries and Eveready amp No P6. Extra amp in bottom cap inciuded. Unit pacliage quantity 1. ist Price Each (Com. plete With Batteries)
$\$ 5.20$


No. 1359 Three-Cell Prefocused Per. missible Safety Flashlight Uses 3 "Eveready" No. 950 batteries and "Eveready" Lamp No PR7:Extro lamp in hottom cap inchuded. Unjt package quantity 1. ist Price Each (Com. plete With Batteries)
$\$ 5.50$

## SCHEDULE OF PRICES

Sell the one brand your customers will always buy-"Eveready" Radio Batteries-for fost turnover, repeot soles! Famous for fine craftsmanship and quick prafits, "Eveready" Radio Batteriespartable and farm packs-equip virtually every battery-type radio in use todoy!
Camplete data describing these best-selling batteries are given on page M-9.



467

482

A. 1300


## "EVEREADY" BATTERY SPECIFICATIONS

| Catalog Vumber | VOLTAGE | Length |  | Height | List Price Eacl: | Unit <br> Pack- <br> age <br> Quan- <br> tity | Weight oft nit Package in Pounds | Battery <br> Weight | Terminals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| "B"' BATTERIES FOR PORTABLE R |  |  |  |  |  |  |  |  |  |
| 455 | 45 Volt. | $2^{21 / 32}$ | $1{ }^{\prime \prime}$ | 311/10" | \$ 1.65 | 6 | 31/4 | 8 oz. | Snap Type -, +45 |
| 457 | 671/2 Volt. | $2^{13}$ /6" | $13 / 8{ }^{\prime \prime}$ | $21 / 2^{\prime \prime}$ | 2.25 | 6 | 21/2 | $72 / 3 \mathrm{oz}$ | Snap Type -, $+671 / 2$ |
| 467 | 671/2 Volt. | $213 / 16^{\prime \prime}$ | $13 / 8{ }^{\prime \prime}$ | $3{ }^{45} 64^{\prime \prime}$ | 2.25 | 6 | 4112 | 12 oz . | Snap Type -, $+671 / 2$ |
| 482 | 45 Volt... | 319/32 ${ }^{\prime \prime}$ | 127 /32 ${ }^{\prime \prime}$ | $51 / 2^{\prime \prime}$ | 2.00 | 6 | 111/2 | 1 lb .14 oz. | Socket --- +45 |
| 490 | 90 Volt. | $3^{23} 3^{\prime \prime}$ | $13 / 8{ }^{\prime \prime}$ | $3{ }^{45} 4^{\prime \prime}$ | 2.95 | 6 | 6112 | $1 \mathrm{lb} .1 / 2 \mathrm{oz}$. | Snap Type $\cdots$ - +90 |
| 493 | 300 Volt. . | 211/16 | $27^{7}{ }^{\prime \prime}$ | 329/32" | 10.00 | 1 | 11/4 | 1 lb .1 oz . | Pin Jacks -, +300 |
| 738 | 45 Volt. | 3 " | 25/16 | 41/8' | 2.50 | 2 | $23 / 4$ | 1 lb .4 oz. | Socket - $,+221 / 2,+45$ |
| "A'' BATTERIES FOR PORTABLE' RECEIVERS |  |  |  |  |  |  |  |  |  |
| 717 | 71/2 Volt. . | 27,32" | $115 / 16^{\prime \prime}$ | 31/32 ${ }^{\prime \prime}$ | S0.95 | 6 | 3 | 83/4 oz. | Socket -, +71/2 |
| 718 | 6 Volt. | 315/16" | 23/4" | 51/2" | 1.75 | 1 | 23/4 | 2 lb .13 oz . | Socket - +6 |
| 724 | 6 Volt... | $17 / 32^{\prime \prime}$ | $173{ }^{\prime \prime}$ | 211/32" | 0.50 | 12 | 21/4 | $22 / 3 \mathrm{oz}$. | Flashlight |
| 736 | 41/2 Volt. | $315 / 16^{\prime \prime}$ | 15/16" | $43 / 32^{\prime \prime}$ | 0.75 | 6 | 63/4 | 1 lb .1 oz . | Socket -, $+41 / 2$ |
| 74.1 | 11/2 Volt. | 37/8" | $211 / 16^{\prime \prime}$ | 53/8' | 1.65 | 1 | 23/4 | 2 lb .13 oz. | Socket -, +1.5 |
| 742 | 11/2 Volt... | $219 / 3{ }^{\prime \prime}$ | $21932^{\prime \prime}$ | $4^{\prime \prime}$ | 0.95 | 6 | 81/4 | 1 lb .6 oz. | Socket - , +1.5 |
| 743 | 1.1/2 Volt. . | $3{ }^{13} 16{ }^{\prime \prime}$ | $2{ }^{21 / 32}{ }^{\prime \prime}$ | $41 / 32^{\prime \prime}$ | 1.25 | 3 | 61/2 | $2 \mathrm{lb} .1 \mathrm{loz}$. | Socket -, +1.5 |
| 74.4 | 6 Volt... | $221 / 32^{\prime \prime}$ | $2{ }^{21}{ }^{\prime \prime}{ }^{\prime \prime}$ | $331 / 3{ }^{\prime \prime}$ | 0.95 | 6 | 83/8 | 1 lb .6 oz . | Socket -,+6 |
| 745 | $11 / 2$ Volt. | $37 / 8^{\prime \prime}$ | $17{ }^{16 \prime \prime}$ | $10^{25} 3{ }^{\prime \prime}$ | 1.75 | 2 | $53 / 4$ | 2 lb .13 oz . | Socket - -1.5 |
| 74.6 | 4.1/2 Volt. . . | $3{ }^{15} 16{ }^{\prime \prime}$ | $1516{ }^{\prime \prime}$ | 421/32" | . 75 | 6 | $71 / 2$ | 1 lb .4 oz . | Socket - , +4.5 |
| 74.7 | $6 \text { Volt... }$ | $37 /{ }^{\prime \prime}$ | 1716" | $10^{25} / 3 z^{\prime \prime}$ | 1.75 | $2$ | $53 / 4$ | $2 \mathrm{lb} .13 \mathrm{oz} .$ | Socket -,+6 |
| 950 | 11.2 Volt. . | 121/64" | am. | $2276{ }^{\prime \prime}$ | 0.10 | 48 | 91/4 | $31 / 3 \mathrm{oz}$ | Flashlight |

"A-B"' PACK FOR 1.4 VOLT PORTABLE RECEIVERS

"B" BATTERY FOR FARM TYPE RECEIVERS

"A-B" PACK FOR 1.4 VOLT FARM TYPE RECEIVERS

| 788 | $\begin{gathered} 1^{1} 2^{*} \mathrm{~A}^{*} \\ 90 \\ \\ \\ \mathrm{~B}^{\prime}{ }^{*} \end{gathered}$ | $10^{11} 16^{\prime \prime}$ | 41/8' | $6^{13} / 16^{\prime \prime}$ | \$5.95 | I | 143/4 | 14 lbs. 8 oz. | $\begin{aligned} & \text { Socket -, }+1.5 \\ & \text { Socket -, }+90 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 759 | $\begin{gathered} 1^{1} \cdot{ }^{*}{ }^{*} 1^{\prime \prime} \\ 90 \end{gathered}{ }^{*} B^{\prime \prime} .$ | 15 ${ }^{11} 16^{\prime \prime}$ | 15.32 | 615/16 ${ }^{\prime \prime}$ | \$5.95 | 1 | 181/4 | 17 lb .6 oz. | $\begin{aligned} & \text { Socket }-,+1.5 \\ & \text { Socket }--,+90 \end{aligned}$ |

## "AIR CELL" "A" BATTERIES FOR 2 VOLT RECEIVERS

| A-2600 | $2{ }^{1} \underline{\underline{2}}$ Volt | ${ }^{929} 932$ " | 61932 | 113/16 ${ }^{\prime \prime}$ | \$10.95 | 1 | 24 | 21 lb .5 oz . | Screw -, +2.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SA-2600 | 212 Volt |  | $619 / 3{ }^{\prime \prime}$ | $113 / 16^{\prime \prime}$ | 12.10 | 1 | 24 | 21 lb .5 oz . | Screw -, +2.5 |
| A-2300 | $21 / 2$ Volt | 81/4" | 5\%/6" | 85/8' | 8.50 | 1 | 121/2 | 11 lb . | Screw -, +2.5 |

"A" BATTERIES FOR 1.4 VOLT RECEIVERS

| +A-1300 | 11/4Volt. | 55/16" | $411 / 32^{\prime \prime}$ | 85/8' | \$4.85 | 1 | 7 | $5 \mathrm{lb} .131 / 2 \mathrm{oz}$. | Socket - - , +1.25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 740 | $11 / 2$ Volt. | $4{ }^{119} 9{ }^{\prime \prime}$ | 37/8' | 73/4" | 3.95 | 1 | 61/4 | 6 lb .4 oz . | Socket - , +1.5 |

# EVEREADY Dry Batteries 


"EVEREADY" "IGNITOR" DRY CELL NO. 6-
For extra long life and heavy service in all Dry Cell applications. Its exceptionally high quality and recuperative powers have made the "Eveready" "Ignitor" dry cell famous for ignition, radio, bells, buzzers, electric games, toys, lanterns and other battery operated devices.
"EVEREADY" R.R. AND INDUSTRIAL NO. 6-
Especially designed for Raitroad and Industrial use where o wide range of service conditions, from extremely heavy to extremely light are encountered.
"EVEREADY" "COLUMBIA" "GRAY LABEL" TELEPHONE CELL NO. 6-Especially designed for telephone service. Noted for its lang life on light drain service.

| Brand and Type | Jarket | Voltage | Overall Dimensions In Inches |  | Quantily in Standard Package | Apprex. Wit. of Std. Pkg. in Pounds | List Price Fach | $\dagger$ P. C. <br> List <br> l'rice <br> Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Diameter | Height |  |  |  |  |
| *eeveready" "Ignitor" No. 6 | Round | 11/2 | 25/8 | 65/8 | 12 | 27 | \$0.70 | 80.75 |
| *"Evercady" R.R. and Industrial No. 6 | Round | 11/2 | 25/8 | 65/8 | 12 | 28 | 0.75 | 0.80 |
| ***Evercady" "Columbia" |  |  |  |  |  |  |  |  |
| "Gray Label" Telephone Cell No. 6 | Round | $11 / 2$ | $25 / 8$ | 65/8 | 12 | 26 | 0.65 | 0.70 |

*Equipped with screw terminals unless Fahnestoch spring terminals are specified.
**Equipped with Fahnestock spring terminals unless screw terminals are specified.

## "EVEREADY" "HOT SHOT" BATTERIES -

For alt purposes requiring four or more dry cells in series. Particulariy adapted for electric fences, gas engines (tractors, motor boats, efc.), blasting, fire and burglar alarms, gongs, bells, annunciators, signals, lights for closets, out-houses, camps,
boats, searchlights, etc.
"Eveready" "Hot Shot" Batteries are composed of specially selected cells. Internal connections are securely soldered and the cells are completely insulated against accidental short circuits. Terminals are insulated.

| Brand and Type | Voltage | $\begin{aligned} & \text { Overall Dimensions } \\ & \text { In Inches } \end{aligned}$ |  |  | $\begin{gathered} \text { Quantity } \\ \text { in Standard } \\ \text { Package } \end{gathered}$ | Approx. Wi. of Std. Pkg. in Pounds | $\begin{gathered} \text { List } \\ \substack{\text { Price } \\ \text { Cach }} \end{gathered}$ | $\begin{aligned} & \text { +P: C } \\ & \text { List } \\ & \text { Price } \\ & \text { Each } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Lengeth | Widh | Heipht |  |  |  |  |
| "Eveready" No. 1461 | 6 | 103/8 | $23 / 4$ | 71/4 | 6 | 59 | \$3.35 | 83.65 |
| "Eveready" No. 1462 | 6 | 55/16 | 5\% 6 仡 | 71/4 | 4 | 41 | 3.35 | 3.65 |
| "Eveready" No. 1562 | $71 / 2$ | 778 | 5 | 71/4 | 4 | 52 | 4.35 | 4.75 |
| "Eveready" No. 1662 |  | $713 / 16$ | $51 / 4$ | 71/4 | 4 | 62 | 4.95 | 5.40 |

Standard Packages Contain One Type of 6.Inch Dry Cell or "Hot Shot" Battery Only.


GENERAL dry batteries contain many outstanding advancements such as extra heavy seamless extruded zinc cups, the famous paper thin separator permitting more mix and more active zinc area by utilization of the cell bottom, the curled rim lock seal which seals each cell individually. These features, found only in Generals, assure long shelf life as well as the maximum in dry battery performance.

## GENERAL A \& B RADIO FARM PACKS

General A-B packs are made with $L$ size cells in the $A$ section. These cells are $40 \%$ longer than the largest conventional $11 / 4^{\prime \prime}$ diameter cell. This construction assures the perfect balance between these " $A$ " and " $B$ " sections for current drains established by the Radio Industry.


| Type | Voltage | Standard Package | Pkg. Lbs. Weight | Eveready | Interchangeable With Burgess | Ray-O-Vac | Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 600LIIL | $11 / 2.90$ |  | 24.5 | 759 |  | A882 |  |  |
| Z60D 12 L | $11 / 2.90$ | । | 24. | 759 | $17 \mathrm{GD60}$ | AB82 | \$7.95 | \$8.25 |
| $60 \mathrm{P} 12 \mathrm{L6}$ | $9-90$ | \| | 24 |  | 18G660 |  | 7.95 | 8.85 |
| 60B6L | $11 / 2-90$ | 4 | 39 | 758 | 3G6D60 | A 8982 A 885 | 8.25 | 8.55 |
| 90FL6D | $135-9 \mathrm{C}$ | 1 | 45 |  | F90.D6 | P8960 | 10.50 1 | 11.11 |

## GENERAL ABC HOME RADIO BATTERIES

All cells used in General batteries are filled with active mix by loading equipment developed by General which automatically puts the right amount of mix into each cell and pocks it uniformly. General home radio botteries are accepted for their uniformity, dependability and long service.


| Type | Voltage | Standard Package | Pkg. Lbs. Weight | Eveready | Interchangeable With Burgess | Ray-O-Vac | East | Pacific Coast |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12LIL | $11 / 2$ | 4 | 34 | 740 | 20 F | P9203 | \$3.30 |  |
| 12 LIS | $11 / 2$ | 4 | 34 | A1300 | 19 G | PiS8A | \$3.30 | $\$ 3.30$ 3.30 |
| P24L2 | $31 / 2$ | 1 | 17 | $\times 125$ | 20 F 2 | P9403 | 4.73 | 5.15 |
| $5 \mathrm{H5}$ $\vee 30 \mathrm{D}$ | $45^{71 / 2}$ | 4 | 8.6 | 687 | G5 | P85A | 1.25 | 1.25 |
| V30D | 45 | 6 | 45 | (1) | 2308 | P5233 | 2.45 | 2.45 |
| V30DL | 45 | 6 | 51 | 487 | - | - | 2.55 | 2.55 |
| V30F | 45 | 6 | 68 |  | 10308 | P5933 | 2.95 | 3.13 |
| V30FL | 45 | 13 | 39 | - | 21308 | P9303 | 3.40 | 3.60 |
| H3D H3BS | $41 / 2$ | 10 | 7.5 | $\times 771$ | 2370 PI | P231W | . 85 | . 85 |
| H 38 S V 5 B | $41 / 2$ | 10 | 3 | 781 | 5360 | 531 R | . 50 | . 50 |
| $\checkmark 5 \mathrm{~B}$ | 71/2 | 10 | 6.3 | 773 | 5540 | 551 | . 95 | . 95 |
| HI5B5 | 221/2 | 10 | 15.4 | 768 | 5156 Pl | P5151 | 1.95 | 1.95 |
| $\mathrm{H} 15 \mathrm{~B}$ | 221/2 | 10 | 15.4 | 778 | 51565 C | P151 | 2.03 | 2.00 |
| H\|5A | 221/2 | 10 | 10 | 763 | 4156 | 4151 | 1.95 | 1.95 |

## GENERAL PORTABLE A \& B PACKS

The small size cells used in portable batteries greatly reflect the benefits derived from General's patented construction. General Batteries deliver more service hours per dollor, therefore you will find them used as original equipment in more boltery radios than any other brand.


| Type | Voltage | Standard Package | Pkg. Lbs. Weight | Eveready | Interchangeable With Burgess | Ray-O.Vac | Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40 CW 2 CF | $11 / 2-60$ | b | 8.7 |  |  | Rav-O.Vac | \$3.00 |
| 41 A 4 FL | $11 / 2-61 / 1 / 2$ | 6 | 25.5 | - | 4GMA4I | A8419 | 4.25 |
| 60A2L | $11 / 2-90$ | 1 | 5 | - | 50 MA 60 | Ab419 | 5.95 |
| ${ }^{60 \mathrm{~A} 4 \mathrm{~L}}$ | $11 / 2-90$ | 6 | 38.5 | - | 6FMA60 | A884 | 5.95 |
| $\begin{aligned} & \text { 42A5G5 } \\ & 291 \end{aligned}$ | $7 / 1 / 2-63$ $7 / 29-90$ | 1 | ${ }_{3} 3.5$ |  | 5GMA42 | A8794 | 4.70 |
| ${ }_{60 \text { 24FF4 }}$ | $71 / 2-9-90$ $6-90$ | $\frac{1}{6}$ | 33.5 | 754 | G6M60 2F4A60 | A 8878 | 5.95 |
| 60A6F6-5 | 71/2-9-90 | 1 | 3.5 | 753 | ${ }_{\text {2F4a }}$ | AB694 | 5.95 |
| 362 | 7/1/2-9-90 | 6 | 24 | 756 | T5Z60 | A 8994 | 5.95 |
| Z5084H4 | 6.75 | 1 | 7 |  | G4850 |  | 5 |
| Z6086H6 | 9.90 | I | 89 | 752 | G6860 | AB677 | 5.95 |

GENERAL PORTABLE A BATTERIES

|  |  |
| :--- | :--- |
| Type | Voltage |
| D |  |
| 4 FI | $11 / 2$ Radio A |
| 6 FI | $11 / 2$ |
| 8 FI | $11 / 2$ |
| 3 LI | $11 / 2$ |
| 3 H 3 | $41 / 2$ |
| 4 F 4 | 6 |
| $8 F 4$ | 6 |



ENERAL

## PORTABLE B BATTERIES

| Type | Voltage | Std. Pkg. Lbs. $\qquad$ Interchangeable With $\qquad$ Pkge. Weight Eveready Burgess Ray-O-Vac |  |  |  |  | Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| V30A | 45 | 6 | 11.4 | - | A30 | P430 | \$2.35 |
| F30A | 45 | 6 | 11.4 | - | A30X | B B30 P | 2.35 |
| V30B | 45 | 6 | 17 | - | B30 | P5303 | 2.35 |
| V30AA | 45 | 6 | 9 | 738 | Z30 | P7R30 | 2.60 |
| V 30 AA2 | 45 | 6 | 9 | - | Z30N |  | 2.60 |
| W30B | 45 | 6 | 12 | 482 | M30 | P7830 | 2.35 |

## GENERAL ''Duromite'' BATTERIES

New General DuroMite batteries are the finest in battery design and assembly. Thin, well-balanced flat cells are stacked like a roll of wafers. Each stack of cells sealed in its own plastic case, keeping the cells frest until put in use. Maximum service life can be obtained from minimum of space used.

| Type | Voltage | Std. Pkge. | Wei | Eve | Burge | $\underset{\text { Ray-O. Wac }}{\text { With }}$ | Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W45A | 671/2 | 12 | 10 | 467 | X $\times 45$ | 4367 | \$2.45 |
| W30A | 45 | 12 | 7 | 455 | X $\times 30$ | P3A30 | 1.75 |
| W60A | 90 | 12 | 13.5 | 490 | - | - | 3.25 |



## GENERAL "Leakproof" \& LANTERN BATTERIES

The New General "Ceakproof" nashlight cell comes to the market to fulfill the demand of practically every user. This demand is for extra long service, years of shelf life and protection against corrosion damage. The Industrial cell is recommended when light is needed frequently and for long periods.



## GENERAL IGNITION \& ELECTRIC FENCE BATTERIES

All General batteries are designed to use the most efficient cells available. The 641 is made with 12 L cells and this construction has proven to produce exceptional performance when used on Electric Fence controls and other ignition applications.

| Type | Voltage |
| :--- | :---: |
| \#6 | $11 / 2$ |
| $\# 6$ Tele | $11 / 2$ |
| 641 Multiple | 6 |

$$
\begin{aligned}
& \text { Std. Pkg. Lbs. Wnterchangeable With } \\
& \begin{array}{ccccc}
24 & 60 & \# 6 i g & - & \text { \#6 lg } \\
24 & 60 & \# 6 \mathrm{Co} & \text { \# } & \text { \# Tele } \\
6 & 54 & 1461 & - & 641
\end{array}
\end{aligned}
$$

| Price |  |
| :---: | :---: |
| East | Pacific $\mathbf{C t}$. |
| .70 | $\$ 0.75$ |
| .70 | .75 |
| 3.35 | 3.75 |



We manufacture all types of Hearing Aid and Model Airplane batteries. Write for particulars.

# general dry batteries, inc. 

MAIN OFFICES AND FACTORY • 13000 ATHENS AVE, CLEVELAND, OHIO FACTORIES • DUBUQUE, IA. - MEMPHIS, TENN. • TORONTO, ONT.
BRANCH OFFICES \& WAREHOUSES • NEW YORK, CHICAGO, DALLAS, SAN FRANCISCO, LOS ANGELES, PORTLAND, MEMPHIS, MINNEAPOLIS


2R


P-698L


P-698A


F-94A


P-83A


Turn page for more RAY-O-VAC Batteries and Specifications $\rightarrow$


# DESCRIPTIVE CATALOG OF RADIO BATTERIES 

WITH NEW INTERLOCKED FLAT CEIL
"B" Batteries that give... MUOH LONGER HI-VOLTAGE LIFE!!!

## CORRECT SERVICE

For 3 Major Markets

## OLIN INDUSTRIES, INC.

Êlectrical Division, New Haven. Conn. ond Branches

## Latest development in

## Pontir!

## ONLY OLIN "B" BATTERIES HAVE THIS new interlocked flat cell construction

already standard equipment with is rado set manufacturers


## EXCLUSIVE

## NOTE:

## OLIN Interlocked flat cells

have no waste space and
hold more power producing
chernicals than previous
conventional " $B$ " battery
assemblies.

## Result: <br> LONGER HI-VOLTAGE LIFE!




## battery comparative guide chart

## PORTABLE

| FINCHESTER OLIN | BOND <br> (old) | BURGESS | EVE READY | GENERAL | PHILCO | $\begin{aligned} & \text { RAY:O: } \\ & \text { VAC } \end{aligned}$ | R.C.A. | SEARS | WARD | WILLARD | ZENITH | 80ND OLIN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0513 |  |  |  | 60B6L | P6086L | AB85 | V5021 | 06303 | A59M | 6086L |  | 0513 |
| 0614 |  | F6A60 | 753 | 60A6F6 5 | P841A | AB994 | V5019 |  | A33 | 60A6F6/5 | P841A | 0614 |
| 0615 |  | G6M60 | 754 | 6086F6 5 |  | AB878 | VS018 |  | A35M | 6086F6/5 |  | 0615 |
| 0616 |  | G6-860 | 752 | 26086F6 | P6086F6 | AB995 | V5047 | 6401 |  | W: -3 | 2985 | 0616 |
| 0616W |  |  | 752W |  |  |  |  |  |  |  | 2985X | 0516W |
| 0616 W |  |  |  |  |  |  |  |  |  | C | ZINL | 101 |
| 1311 | 101 | 1 | 935 | C | C | 1LP | V5033 | 4659 | A3258 | c |  |  |
| 1511 | 102 | 2 | 950 | D | 0 | 2LP | V5036 | 4650 | A3259 | D | 22NL | 102 |
| 1710 | 1720 | XX45 | 467 | W45A | P67 | 4367 | V5056 | 6480 | A43 | WBM-2 | 245 | 1710 |
| 1712 |  |  | 457 |  | for new | Emerson pe | onal por | le No. | 58. No. |  |  | 1712 |
| 1713 |  |  | 490 |  | For new | Emerson pe | onal po | ble No. | 59, No. | 60 |  | 1713 |
| 3.816 |  |  | 736 |  | for new | Emerson pe | sonal por | able No. | 59, No. | 56 |  | 3816 |
| 4813 | 4823 | 8FL | 745 | BCFI |  | P98L | V5008 |  |  |  |  | 4813 |
| 4814 | 4824 | 6 F | 743 | 6 F 1 |  | P96A | vS007 | 6431 |  | 651 | 296 | 4814 |
| 4815 | 4825 | 2F4L | 747 | 8 CF 4 |  | P698L | VSO11 | 6452 |  |  | 269BL | 4815 |
| $4 \mathrm{B16}$ | 4826 | 4F | 742 | 4 F 1 | P94 | P94A | VS004 | 6430 | A21 | 451 | 294 | 4816 |
| 4817 | 4827 | $2 F 4$ | 718 | BF4 |  | P698A | VS010 | 6450 |  | WA4-1. |  | 4817 |
| 4819 | 4829 | BF | 741 | 8 F 1 | P8F1 | P98A |  |  |  | 8 F 1 |  | 4819 |
| 4914 |  | F4P1 | 744 | 454 |  | P694A | V5009 | 6451 | A28 |  |  | 4914 |
| 4918 | 4928 | G-3 | 746 | 3 H 3 | P100 | P83A | V5002 | 6440 | A24 | WA3-1 | 283A | 4918 |
| 4919 |  |  | 724 |  | For new | Emerson | ersonal po | table No. | 558, No. | 584 |  | 4919 |
| 6210 | 6220 | M30 | 482 | W30B | P 45 | P7830 | VS013 | 6461 | A42 | WBM-1 | 2783 | 6210 |
| 6211 |  | XX30 | 455 | W30A |  |  | VS055 |  |  |  |  | 6211 |

## FARM and CONSOLE RECEIVERS

| 0511 |  | 1BGD60 |  | Z60012L |  |  | VS045 | 06309 |  |  | 228 | 0511 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0512 |  | $3 \mathrm{GCD6O}$ |  | E60D12L6 |  | AB9B2 |  |  | A54M |  | 2334 | 0512 |
| 0513 |  |  |  | 60B6L | P6086L | AB85 | VS021 | 06303 | A59M | 6086L |  | 0513 |
| 0518 | 052B | 17GD60 | 758 | 600L11L | P60D11L | AB82 | V5022 | 06302 | A57M | 60DL.11L | 2802 | 0518 |
| 3217 | 317 | 5360 | 781 | H3B |  | 531R | V5028 |  |  | H3B |  | 3217 |
| 3516 | 312 | 2370pt | 771 | H3D | P3D | P231W | V5030 | 5005 | A83 | H3D |  | 3516 |
| 5216 | 1517 | 5156 | 768 | H15B | P15B | P5151 | v5031 | 6390 | A84 | H15B |  | 5216 |
| 5216.8 | 1519 | 5156 | 770 | H1583 | - | 5151 | VS131 |  |  |  |  | 5216.8 |
| 5218 | 517 | 5540 | 773 | V5B | P5B | 551 | V5029 |  |  | V5B |  | 5218 |


| Catalog Number |  | Dimensions$H \times w \times 0$ | $\begin{gathered} \text { 5td } \\ \text { Phg } \end{gathered}$ | $\begin{aligned} & \text { Sed } \\ & \text { Phg. } \\ & \text { Wgt } \end{aligned}$ | $\begin{gathered} \text { Olr } \\ \text { Unit } \\ \text { Corron } \end{gathered}$ | win chesser | Comporotive Numbers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Aurgess |  |  |  |  | Fveready | Ray-O.Vor | RCA |
| $\begin{gathered} \text { "B" } \\ \text { B } \\ A \\ A \\ T \\ E \\ A \\ 1 \\ E \\ S \\ \hline \end{gathered}$ | 1710-67.12 Volt " 8 " |  | $3.11 / 16^{\prime \prime} \times 2.3 / 4^{\prime \prime} \times 1.3 / 8^{\prime \prime}$ | 12 | 10.12 | 6 | 1710 | $\times \times 45$ | 467 | 4367 | V5016 |
|  | 1712-67.1 2 Volt "B' | $2.516^{\prime \prime} \times 2.11 / 16^{\prime \prime} \times 1.5 / 16^{\prime \prime}$ | 24 | 12 | 6 | 1712 |  | 457 |  |  |
|  | 1713-90 Volt "B" | 3.23 32' $\times 1.3 / 8^{\prime \prime} \times 3.11 / 16^{\prime \prime}$ | 6 | 6 | 6 | 1713 |  | 490 |  |  |
|  | 6211-45 Volt "B' | $3.58^{\prime \prime} \times 2.5 / 8^{\prime \prime} \times 15 / 16^{\prime \prime}$ | 12 | 6.12 | 6 | 6211 | $\times \times 30$ | 455 |  | VSOS5 |
| "A" | 3816-4.1/2 Volt "A" | $3.15 / 16^{\prime \prime} \times 1.5 / 16^{\prime \prime} \times 4^{\prime \prime}$ | 10 | 11 | 10 | 3816 |  | 736 |  |  |
| A | 4919-6 Voh " 4 " | 2.11/32'x $1.5 / 32^{\prime \prime} \times 1.5 / 32^{\prime \prime}$ | 24 | 4.12 | 12 | 4919 |  | 724 |  |  |
| E | 102-1.12 Volt "A" | $2.1 / 4^{\prime \prime} \times 1.1 / 4^{\prime \prime}$ | 480 | 107 | 48 | 1511 | 2 | 950 | 219 | V 5036 |
| ${ }_{5}^{\text {E }}$ | 101-1.12 Volf "A" | $1.13 / 16^{\prime \prime} \times 15 / 16^{\prime \prime}$ | 60 | 7 | 12 | 1311 | 1 | 935 | $11 P$ | V5033 |
|  |  |  |  |  |  |  |  |  |  |  |
| Catolog Number |  | Dimensions$H \times w \times D$ | $\begin{aligned} & \text { Sod } \\ & \text { Phg } \end{aligned}$ | 5\%d <br> Pho <br> wg | $\begin{gathered} \text { Ol } \\ \text { Unu } \\ \text { Corton } \end{gathered}$ | Win chesser | Comparative Numbers |  |  |  |
|  |  | Burgess |  |  |  |  | cveready | Ray-O.Var | RCA |
| ' ${ }^{\prime}$ ' | 6210-45 Volt "8" with new interlocked flat cells |  | $5.1 / 2^{\prime \prime} \times 3.1 / 2^{\prime \prime} \times 1.3 / 4^{\prime \prime}$ | 6 | 11 | 6 | 6210 | M30 | 482 | P7830 | VSO13 |
| "A" | 4918-4.1/2 Voli "A correct for 249 Portable Rodios | $4.11 / 16^{\prime \prime} \times 3.7 / 8^{\prime \prime} \times 1.5 / 16^{\prime \prime}$ | 10 | 13 | 10 | 4918 | G3 | 746 | P83A | V5002 |
| B | 4816-1.1/2 Volt"A correct for 224 Portable Radios | $4^{\prime \prime} \times 2.9 / 0^{\prime \prime} \times 2.9 / 16^{\prime \prime}$ | 10 | 15 | 10 | 4816 | 4 F | 742 | P944 | VS004 |
|  | 4819-1.1/2 Voll "A correct for 143 Portable Rodios | $5.5 / 16^{\prime \prime} \times 3.11 / 16^{\prime \prime} \times 2.9 / 16^{\prime \prime}$ | 6 | 18 | 6 | 4819 | 8 F | 741 | P98A |  |
| E | 4815-6 Volt " $A$ " correst for 98 Portable Radios | $3.13 / 16^{\prime \prime} \times 10.13 / 16^{\prime} \times 1.3 / 8^{\prime \prime}$ | 6 | 20 | 6 | 4815 | 2F4L | 747 | P6982 | V5011 |
| 1 | 4814-1.1/2 Volr "A correct for 83 Portable Radios | $4^{\prime \prime} \times 3.13 / 16^{\prime \prime} \times 2.9 / 16^{\prime \prime}$ | $\bigcirc$ | 13 | 6 | 4814 | $6 F$ | 743 | P96A | V 5007 |
| E | 4914-6 Volt "A" | $4^{\prime \prime} \times 2.9 / 10^{\prime \prime} \times 2.9 / 16^{\prime \prime}$ | 10 | 15 | 10 | 4914 | F4PI | 744 | P694A | V5009 |
| S | 4817-6 Voll "A" | $5.9 / 16^{\prime \prime} \times 3.13 / 16^{\prime \prime} \times 2.11 / 16^{\prime \prime}$ | 10 | 30 | 10 | 4817 | $2 F 4$ | 718 | P698A | $\checkmark$ SOIO |
|  | 4813-1.1/2 Volt " $A$ " | 3.13/16 ${ }^{\prime \prime} \times 10.13 / 16^{\prime \prime} \times 1.3 / 8^{\prime \prime}$ | 6 | 20 | 6 | 4813 | 8FL | 745 | P981 | VS008 |



## battery comparative guide chart

## PORTABLE

| BOND <br> OLIN | BOND <br> (old) | BUREESS | $\begin{aligned} & \text { EVE- } \\ & \text { READY } \end{aligned}$ | GENERAL | PHILCO | $\begin{aligned} & \text { RAY-O- } \\ & \text { VAC } \end{aligned}$ | R.C.A. | SEARS | WARD | WILLARO | ZENITH | WIN <br> OLIN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0513 |  |  |  | 60361 | P60B6L | AB85 | V5021 | 06303 | A59M | 60861 |  | 0513 |
| 0614 |  | F6A60 | 753 | 60A6F6 5 | P841A | AB994 | V5019 |  | A33 | 60A6F6/5 | P841A | 0614 |
| 0615 |  | G6M60 | 754 | 6086F6 5 |  | A8878 | V5018 |  | A35M | 60B6F6/5 |  | 0.615 |
| 0616 |  | G6.860 | 752 | 26086F6 | P60B6F6 | AB995 | V5047 | 6401 |  | Wz-3 | 2985 | 0616 |
| 0616W |  |  | 752W |  |  |  |  |  |  |  | 2985X | 0616W |
| 101 | 101 | 1 | 935 | $c$ | C | 1LP | V5033 | 4659 | A3258 | C | 21NL | 1311 |
| 102 | 102 | 2 | 950 | D | D | 2 P | VS036 | 4650 | A3259 | D | Z2NL | 1511 |
| 1710 | 1720 | XX45 | 467 | W45A | P67 | 4367 | V5056 | 6480 | A43 | WBM-2 | Z45 | 1710 |
| 1712 |  |  | 457 | for new Emerson personal portable No. 558, No. 584 |  |  |  |  |  |  |  | 1712 |
| 1713 |  |  | 490 | For new Emerson personal portable No. 559, No. 560 |  |  |  |  |  |  |  | 1713 |
| 3816 |  |  | 736 | For new Emerson personal portable No. 559, No. 560 |  |  |  |  |  |  |  | 3816 |
| 4813 | 4823 | 8FL | 745 | 8CFI |  | P98L | V5008 |  |  |  |  | 4813 |
| 4814 | 4824 | $6 F$ | 743 | 6 F1 |  | P96A | VS007 | 6431 |  | 6 F | 296 | 4814 |
| 4815 | 4825 | 2F4L | 747 | 8CF4 |  | P698L | VSOIl | 6452 |  |  | 2698L | 4815 |
| 4816 | 4826 | 45 | 742 | 4 F 1 | P94 | P94A | v5004 | 6430 | A21 | 4 F | 294 | 4816 |
| 4817 | 4827 | $2 F 4$ | 718 | $8 F 4$ |  | P698A | V5010 | 6450 |  | WA4.1 |  | 4817 |
| 4819 | 4829 | 8 f | 741 | 8F1 | P8FI | P98A |  |  |  | 8 F 1 |  | 4819 |
| 4914 |  | F4P1 | 744 | 454 |  | P694A | V5009 | 6451 | A28 |  |  | 4914 |
| 4918 | 4928 | G. 3 | 740 | $3 \mathrm{H3}$ | P100 | P83A | V5002 | 6440 | A24 | WA3-1 | 283A | 4918 |
| 4919 |  |  | 724 | For new Emerson personal portable No. 558, No 584 |  |  |  |  |  |  |  | 4919 |
| 6210 | 6220 | M30 | 482 | W30日 | P45 | P7830 | V5013 | 6461 | A42 | WBM. 1 | 2783 | 6210 |
| 6211 |  | $\times \times 30$ | 455 | W30A |  |  | Vs05S |  |  |  |  | 6211 |

FARM and CONSOLE RECEIVERS

| 0511 |  | 18GD60 |  | 260012L |  |  | V504S | 06309 |  |  | 228 | OS11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0512 |  | 3G6060 |  | E6001216 |  | A8982 |  |  | A54M |  | 2334 | 0512 |
| 0513 |  |  |  | 6086L | P60B6L | A885 | V5021 | 06303 | A59M | 6086L |  | 0513 |
| 0518 | 0528 | 17GD60 | 758 | 60DL11 | P60D114 | AB82 | vs022 | 06302 | A57M | 60DL. 11 L | 2802 | 0518 |
| 3217 | 317 | 5360 | 781 | H3B |  | 5312 | V5028 |  |  | H3B |  | 3217 |
| 3516 | 312 | 2370PI | 771 | H3D | P3D | P231w | v5030 | 5005 | A83 | H3D |  | 3516 |
| 5216 | 1517 | 5156 | 768 | H15B | P15B | P5151 | vS031 | 6390 | A84 | H15B |  | 5216 |
| 5216-8 | 1519 | 5156 | 778 | H15BB |  | 5151 | VS131 |  |  |  |  | 5216-8 |
| 5218 | 517 | 5540 | 773 | V5B | P5B | 551 | V5029 |  |  | V5B |  | 5218 |

# Muctlerdectricto 

# CLEVELAND, OHIO <br> MUELLER BATTERY AND TEST CLIPS 

U.S. P'dTENTS 1,521.903; 1,686.842; 1.779.442; 1.794.976; $1.965 .151 ; 1.994 .251 ; 1,999.613$ : 2,074,324; 2.136.814; 2.416.113.

Folr use in making quick, temporary electrical connections. Packed 10 in a box, half marked + half plain to indicate polarity Screw connections


A very No. 45 PEE WEE
and simal test clip for radio, ignition, meter Steel, eadmium plated . $\mathbf{\$ 0 . 0 7}$ LOTS OF 10

No. 45-C
Solid Copper R.F. Test Clip Solid copper radio frequency test clip. 1'hosphor bronze spring, brass screw. Will not heat up in high frequency test worl. elltirely non-ferrous. $11 / 2^{\prime \prime}$ long.
LOTS OF 10
$\$ 0.07$
\$0.10
or clips 45 and $45-C$

## No. 48-B

A small test and batlery clip for radio use and general testing jurposes. $2^{\prime \prime}$ long. Jaw spread $1 / 2 "$. Steel, cadmium plated.
EACH NET $\$ 0.07$ LOTS OF 10 . EACH NET... \$0.07 LOTS OF $10 \quad \$ 0.05$


## No. 82 Needle Clip


aeedle pierces insulated wire. Idenl for quick hookup of truck trailer lighting sy'stems, telophone and signal work Steel, cadmium plated. $2^{\prime \prime}$ long. 15 EACH NET LOTS OF 10 $\$ 0.15$
Use No. 49 Insulator for Clips 48-B, 48 -C and 82.

## No. 22 Twin-Clip

Jaws on loth ends. Great time-saver in test work. Used to hold or rack articles for display or processing. $2^{\prime \prime}$ long. Steel cadmium plateil. EACH NET.... $\$ 0.10$ LOTS OF $10 \ldots \$ 0.07$

## No. 27



A high grade test clip with meshing teetil on three sides of jaws. For laboratory and shop test work $2 \frac{7}{16 \prime \prime}$ long. plated. spread \%". Steel, cadmium
EACH NET
$\$ 0.10$
LOTS OF 10
$\$ 0.07$
EACH NET No. 27-C-Solid copper. Same size as No. 27. $\$ 0.18$ LOTS OF 10
. $\$ 0.125$


## No. 24.A

A medium sized battery clip. Stands erect on battery post. Lead coated, copper sluint protects spring. $27 / 8^{\prime \prime}$ long. Jaw syread 1 ". Steel, lead plated. EACH NET $\$ 0.14$ LOTS OF 10
.095
EACH NET No. 24-Solid copper. Same size as No. 24-A.
Use No. 26 lusulator for Clips $24-\mathrm{A}$ and 24.
$\$ 0.18$

## LARGER SIZES OF CLIPS

Each Net Lots of 10
No. 21-A-Heavy Duty Steel, lead plated, $4^{\prime \prime}$ No. 21-100 Amp. Solid Copper, $41 / 2$, long
No. 11A- 100 Amp. Steel, lead plated. $6 "$ long No. $11-200$ Amp. Solid copper. $6^{\prime \prime}$ long $\$ 0.21$
.61
.75
1.17 $\$ 0.15$ No. 33-300 Amp. Solid copper. $73 / 4$ " long 2.00

## FLEXIBLE INSULATORS FOR CLIPS



A convenient protection against short circuit and electric shock. Packed 10 in a box, 5 red and 5 black to indicate polarity. Long tail prevents hreakare of wire. Constructed so that elip is held in firmly.

## CROCODILE CLIPS

U.S. Patent No. 1,999,613


No. 85 or $85-\mathrm{C}$ Clip with
No. 87 Insulator


No. 85 -A very small elip with slender, elongated jaws for getting into tight places in radio or electrical test work. Serew conneetion EACH NET
EACH NET $\$ 0.08$ LOTS OF 10 . 10 ............. $\$ 0.05$ No. $85-\mathrm{C}$ - Same as No. 85 . exeept solid copper. A radio frequeney. entirely non-ferrous test clip.
 No. 85-T-New Crocodile "Tip-Clip"--equipped with standard phone tip on one jaw, othorwise same as No. 85 . Ideal for use as a prod, or ordinary clip connections and for connections to insulated binding posts having noll-removable heads. 25 5/8" long.
EACH NET $\$ 0.16$ LOTS OF 10 ................... $\$ 0.11$
Use No. 87 Irisulators for clips 85, $85-\mathrm{C}$ and $85-\mathrm{T}$. Red and Black. Cover entire clip except nose. Protects against short and shock. Helps to distinguish learis.

## ALLIGATOR CLIPS

No. 60-CONVENTIONAL TYPE
Aceurately made, slim jaws, fine meshing teeth. Convenient, round thumb grip, har rel comnection for hamana plug. Equipped with small soldering lip. Strong sprine with a hard bite. Cudminm plated. 2" $^{\prime \prime}$ long.
EACH NET $\$ 0.07$ LOTS OF 10


No. 60-S-SCREW CONNECTION Fliminates necessity for soldering. Otherwise same as No. 60 EACH NET $\$ 0.08$ $\qquad$ LOTS OF $10 \$ 0.05$


No. 60-CS-COPPER R.F
ALLIGATOR CLIP
Same as No. $00-\mathrm{S}$ except made of solid copper. Has brass screw connection. Ideal for R.F. Work. Will not heat un in II.F. circuits. Bright, natural copper finish. 2" long. EACH NET.................. \$0.11 LOTS OF 10.
. $\$ 0.08$
No. 60-HS-STEEL ALLIGATOR CLIP
WITH INSULATED HANDLE
Same as No. 60-S except equipped with red and hack insulating sleeves on end. Very concenient for distin. guishing leads. Has screw connection also. Cadmium plated. $21 / 4$ " long.
EACH NET ................ $\$ 0.11$ LOTS OF 10..................... $\$ 0.08$
No. 60-CHS-COPPER ALLIGATOR CLIP WITH INSULATED HANDLE Same as No. 60-CS except equipped with red and black insulating sleeves on end. Brass screw connection, for R.F. work. $21 / 4{ }^{1 /}$ long.

EACH NET
$\$ 0.15$ LOTS OF 10
$\$ 0.10$

## WEE-PEE-WEE No. 88

Entirely Non-ferrous. Smaller Than Ever! An extremely small clip for the testing in
 radlio and electrical work. Light-Weight; thin-rosed, spring-temper phosphor bronze. Ideal for close-wound coils. 1H" long; jaw spread 1/4"
EACH NET.................... \$0.16 LOTS OF 10................... \$0.11
Use No. 93.P R.F.insulator.

| Insulator No. | For Use with Clip No. | Each Net | Lots of 10 |
| :---: | :---: | :---: | :---: |
| 13 | $11,11-\mathrm{A}$ | $\$ 0.54$ | $\$ 0.38$ |
| 23 | $21,21-\mathrm{A}$ | .33 | .23 |
| 26 | $24,24-\mathrm{A}$ | .23 | .16 |
| 29 | $27,27-\mathrm{C}$ | .17 | .12 |
| 35 | $34,45-\mathrm{C}$ | 1.42 | 1.00 |
| 47 | $48-\mathrm{B}, 48-\mathrm{C}, 82$ | .11 | .075 |
| 49 | $85,85-\mathrm{C}, 85-\mathrm{T}$ | .11 | .075 |
| 87 |  | .05 | .066 |
| $93-\mathrm{P}$ | 88 |  | .035 |

## Mucellerilectictor

THE SNAPPER
A Long Insulated Test Clip and A 'Triple Threat' Radio Tool

U. S. Patent No. 2,074,324

No. 99-7" Long Insulated
The long tube is of insulating material and is fitted with spring contact jaws on the far end.
The jaws are operated by a push of the thumb on the near end. Wire is quickly and easily connected in a hole in the insulator knol binding post on the near end,
May be used as (1) A "Deep Sea" Electric Test Clip-test contacts with ease, deep in the recesses of radio chassis with no danger of short circuits; (2) An Electric Contact Prod-clip jaws may be used to make quick prod contacts, or clip one Snapper on ground circuit and prod with another; (3) A Retriever-start small screws and nuts or pick up odds and ends that may accidentally be dropped into inaccessible places.
PRICE..$\$ 0.90$ EACH Dealers' Wholesale Price, each $\$ 0.54$ Net Snappers are generally used in pairs- 1 red and 1 black.

## CLAMPIPE GROUND CLAMP



No. 58

The exclusive patented feature of a U-shaped cross section in combination with a U-shaped clamp gives a to the ClamPipe that cannot be found in any other make.
The ClamPipe will not bend or lop over when applied to a pipe. The point of the large case hardened screw, cuts through rust, paint or corrosion into clean, fresh metal, insuring a good contact. The Clamp may be tact. The Clamp may be installed on a pipe ying not spread open.
The best ground clamp value on the market. Applicable to pipe $3 / 8$ " to $13 / 8$ " outside diameter. Packed 10 in a box
EACH NET.................... $\$ 0.13$ LOTS OF 10.

$\$ 0.09$ or wire bands. of wire across the roof. in the clear.

## THE "TENNA.CLAMPIPE"

(ClamPipe Trade-mark Reg. U. S. \& Can. Pat. Off.)
A Standoff Insulator that clamps on Quickly-Easilyalmost anywhere for Television and FM Antenna Lead-Ins.

Quickly and
Permanently Supports
Lead-Ins

- On antenna masts \& crossarms.
- On pipes, Ibeams, etc., on basement ceil. ings.
- On any rigid object up to $13 / 8^{\prime \prime}$ in diameter or thickness.

SIMPLY TURN THE SCREW-EYE BY HAND FORA SOLID. PERMANENT GRIP.

A great timesaver - the installation man's third hand.

Consists of an assembly of the famous Mueller Clampipe Ground Clamp and a steel screv-eve with an insulating grommet. Holds lead-in wire from $1^{1 / 4^{\prime \prime}}$ to $21 / 2^{\prime \prime}$ away from clamp. Can be applied to any antema mast, pipe or other object up to $13 / \mathbf{B}^{\prime \prime}$ in diameter or thickness.
All metal parts are completely weatherproofed.
Insulating grommet is molded of high quality plastic having superior dielectric and non-absorptive properties. Will withstand exposure to weather.

No. 130 for all types of Flat Twin-lead.
No. 131 for all Coax Cables up to $1 / 2^{\prime \prime}$ O.D.
Packed 100 in a carton
EACH NET $\quad \$ 0.16$ LOTS OF 10........... $\$ 0.11$

$$
\text { LOTS OF } 100 \ldots \quad \$ 0.098
$$

## THE 'TENNA-CLAMP''

A New 3-in-1 Stand-off Insulator Clamp! Supports TV and FM Lead-ins on MASTS, PIPES, GUTTERS AND GUY-WIRES
Has same general features and specifications as Tema-ClamPipe de scribed above except different type clamp channeled on end to rake standard guy-wire in addition to pipes.

HAS THESE USEFUL FEATURES -- One standard size solves many lead-in problems - far more useful than straps

- Brings lead-in to edge of roof - right where you want it - no more "draping"
- On those high jobs, come right down a guy-wire - and get around the gutter


## LOW PRICES!

All packed 100 in a carton
No. 135 For all types of Flat Twin-Lead. No. 136 For Coax Cables un to $1 / 2^{* \prime} 0 . D$. EACH NET, $\$ 0.13$ LOTS OF 10, $\$ 0.09$

LOTS OF 100, $\$ 0.078$
Also in these Double Lead-in Types: No. 135-DB For Flat Twin-Lead. No. 136-DB For Coax Cables up to $1 / 2$ "O.D EACH NET, $\$ 0.25$ LOTS OF $10, \$ 0.18$

$\star$ Complete descriptions of these parts will be found on the following pages.


## THE MALLORY 2448 VIBRATOR DEAL

## Here's What You Get:

(1) Six popular Mallory vibrators

2 Twelve Mallory buffer capacitors
(3) Services $75 \%$ of your replacement needs
(4) Simplifies your inventory control
(3) Extra space for flexible inventory
(6) Cabinets firmly "stack" together; use as many as you need to handle your stock


## You Get the Cabinet

 at no Additional Cost... When You Purchase the Vibrators at Your Regular Discount

Picture at right shows how your vibrator cabinet nests with any Mallory Control Deal cabinet. Your vibrator cabinets nest together, too, to hondle your complete stock of vibrotors. The Mallory Radio Service Encyclopedio Is purchased separately.


APPLICATION-The Mallory 2448 Vibrator Deal cabinet assures more speed in vibrator replacement work . . . gives you the advantage of work-bench accessibility . . . simplifies your inventory problems . . . gives you wide coverage with a minimum selection of Mallory vibrators.
GENERAL DESCRIPTION-Consists of 6 of the most popular type Mallory vibrators. Cabinet contains 12 individual compartments, enabling you to make 6 additional selections. A large drawer is divided into 6 sections to hold a large stock of Mallory buffer capacitors. Twelve capacitors come with the 2448 Deal. Cabinet constructed of 28 -gauge sheet steel, neatly finished in blue with white lettering and orange trim.
USE IN INVENTORY CONTROL-With the Mallory 2448 Vibrator Deal cabinet in your shop, inven-
tory control is simplified. You keep similar type vibrators together. You determine at a glance which vibrators you need to re-order. This assures an adequate, up-to-date supply of Mallory vibrators you need.

CONTENTS-(Complete descriptive information on each of the following vibrators and buffer capacitors may be found on the following page and in the Mallory Capacitor Section page 9 , respectively.
Mallory Vibrators, 1 each:
$248,716,859,870,1100,1501$
Mallory Buffer Capacitors, 2 each:
OT-371, OT-372, OT-373, OW-344, OW-345, OW-346
PRICE-When you purchase the vibrators and buffer capacitors included in the Mallory 2448 Vibrator Deal, at your regular discount, you get the cabinet at no additional cost!



| Recommended Substifutions for Discontinued Vibrators |  |  |  |
| :---: | :---: | :---: | :---: |
| Discontinued Type | Recommended Replacement | Discontinued Type | Recommended Replacement |
| 2208 | See Note 2 | F297 | F294 (See Note 3) |
| F220C | See Note 2 | 299 | 298 |
| 221 | 292 | 500P | 853 |
| 223 | 222 (See Note 1) | 501 P | 853 |
| F223 | See Note 2 | 503 | 292 |
| 224 | 222 (See Note 1) | 504 | 246 (See Note 1) |
| 226 | 222 (See Note 1) | 507 P | 8.53 |
| 245SW | 245 | 508P | 859 |
| G245 | G749C | 509P | 859 |
| G248 | G725C | 510P | 859 |
| F251 | F294 | 722A | 246 (See Note 1) |
| G253 | G826C | 728A | 246 (See Note 1) |
| 253 Y | 294 | 850 | 859 |
| 271 | 270B | G850 | G826C |
| 2778 | 248 (See Note 1) | 866 | 859 |
| P285Y | 246 (See Note 1) | 868 | 870 |
| 2863 | 248 | 868 | 859 |
| 289 Y | 249 | 801 M | 294 |
| 294C | 852 | 002M | 859 |
| 294SW | 854 | 903M | 859 |
| 296 | 298 | 951P | 246 |
| 297 | 298 | T4000 | T4003 |

NOTE 1. To make this substitution certain wiring changes are necessary. See instruction sheet packed with vibrator or installation note in the Mallory Vibrator Guide and the 6th Edition Mallory Radio Service Encyclopedia.
NOTE 2. An exact duplicate is no longer available. Every effort is being exerted to determine a satisfactory sulstitute. If a substitute can be made available, your Mallory Distributor will be advised.
NOTE 3. To make this substitution the six-prong socket must be changed to a 4 -prong UX base socket and wired to match base diagram 8 .

| Type No. | Volt | Type | Bage Dia. | Can Type | Size |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 222 | 6 | Syn. | 20 | 2 | $47 / 8 \times 17 / 8 \times 1^{13 / 16}$ |
| ${ }^{4} 245$ | 6 | Syn. | 21 | 1 | $11 / 2 \times 31 / 4$ |
| ${ }^{4} 245 \mathrm{~A}$ | 6 | Syn. | 21 | 1 | $1^{15 / 16} \times 31 / 2$ |
| $245 C$ | 6 | Syn. | 28 | 1 | $11 / 2 \times 31 / 4$ |
| ${ }^{\text {S W W }}$ 245A | 4 | Syn. | 21 | 1 | $115 / 16 \times 31 / 2$ |
| ${ }^{4} 246$ | 6 | Syn. | 38 | 1 | $11 / 2 \times 31 / 4$ |
| ${ }_{+}+246$ A | 6 | Syn. | 38 | 1 | $1^{15 / 16} \times 3^{1 / 2}$ |
| 247 | 6 | Syn. | 46 | 1 | $11 / 2 \times 31 / 4$ |
| F247 | 32 | Syn. | 46 | 1 | $11 / 2 \times 31 / 4$ |
| ${ }^{4} 248$ | 6 | Syn. | 44 | 1 | $11 / 2 \times 31 / 4$ |
| ${ }^{4} 249$ | 6 | Syn. | 32 | 1 | $11 / 2 \times 31 / 4$ |
| 2708 | 6 | Syn. | 23 | 1 | $2 \times 41 / 2$ |
| 271 HD | 6 | Syn. | 24 | 1 | $2 \times 41 / 2$ |
| 273C | 6 | Syn. | 29 | 1 | $2 \times 4112$ |
| 273 D | 6 | Syn. | 31 | 1 | $2 \times 41 / 2$ |
| 292 | 6 | Int. | 3 | 2 | $11 / 2 \times 1$ \% $\times 27 / 16$ |
| 294 | 6 | Int. | 8 | 1 | $11 / 2 \times 31 / 4$ |
| ${ }^{4} \mathrm{~F} 294$ | 32 | Int. | 8 | 1 | $11 / 2 \times 31 / 4$ |
| 298 | 6 | Int. | 51 | 1 | $11 / 2 \times 27 / 8$ |
| F502P | 32 | Int. | 9 | 5 | 15\% $\times$ 358 |
| 505 P | 6 | Int. | 8 | 1 | $1^{15 / 16} \times 31 / 2$ |
| $506 P$ | 6 | Int. | 36 | 1 | $1^{15 / 16} \times 31 / 2$ |
| 5091 ' | 6 | Int. | 8 | 1 | $11 / 2 \times 27 / 8$ |
| 514 | 6 | Syn. | 30 | 6 | $1^{15 / 16 \times 31 / 2}$ |
| 716 | 6 | Syn. | 30 | 7 | $1^{15 / 16} \times 31 / 2$ |
| * *725C | 6 | Syn. | 32 | 1 | $11 / 2 \times 31 / 4$ |
| - *G725C | 12 | Syn. | 32 | 1 | $11 / 2 \times 31 / 4$ |
| 742 | 6 | Syn. | 32 | 1 | $11 / 2 \times 27 / 8$ |
| 743 | 6 | Syn. | 38 | 1 | $11 / 4 \times 31 / 4$ |
| 748 | 6 | Syn. | 44 | 1 | $11 / 2 \times 2^{7 / 8}$ |
| $4 * \mathbf{G 7 4 9 C}$ | 12 | Syn. | 21 | 1 | $11 / 2 \times 31 / 4$ |
| $4 * 825 C$ | 6 | Int. | 8 | 1 | $11 / 2 \times 31 / 4$ |
| $\triangle * 826 \mathrm{C}$ | 6 | Int. | 8 | 1 | $11 / 2 \times 31 / 4$ |
| 4 *F826C | 32 | Int. | 8 | 1 | $11 / 2 \times 31 / 4$ |
| ${ }^{4}$ * G826C | 12 | Int. | 8 | 1 | $11 / 2 \times 31 / 4$ |
| 839 | 6 | Int. | 8 | 1 | $11 / 2 \times 31 / 4$ |
| 852 | 6 | Int. | 14 | 3 | $158 \times 3$ \% |
| 853 | 6 | Int. | 10 | 3 | 158 $\times$ 3588 |
| 854 | 6 | Int. | 11 | 1 | $11 / 2 \times 31 / 4$ |
| ${ }^{4} 859$ | 6 | Int. | 8 | 1 | $11 / 2 \times 27 / 8$ |
| 860 | 6 | Int. | 14 | 7 | $11 / 2 \times 31 / 4$ |
| 870 | 6 | Int. | 14 | 1 | $11 / 2 \times 3$ |
| 903M | 6 | Int. | 8 | 1 | $11 / 2 \times 27 / 8$ |
| 952W | 6 | Syn. | 16 | 1 | $13 / 8 \times 27 / 8$ |
| 953W | 6 | Syn. | 16 | 1 | $11 / 2 \times 35 / 16$ |
| 954 | 6 | Syn. | 39 | 1 | $11 / 2 \times 35 / 16$ |
| - 1100 | 6 | Int. | 8 | 1 | 15/16 $\times 2$ 胣 |
| ${ }^{4} 1501$ | 6 | Int. | 53 | 1 | $11 / 2 \times 27 / 8$ |
| 1502 | 6 | Int. | 54 | 1 | $11 / 2 \times 27 / 8$ |
| T4002 | 2 | Syn. | 52 | 8 | $11 / 2 \times 1 / 2 \times 21 / 8$ |
| T4003 | 2 | Syn. | 50 | 1 | $15 / 16 \times 21 / 8$ |
| $\dagger \mathrm{GC7}$ | Groun | 1 Cup |  |  |  |
| AR-1 | Adap |  |  |  |  |

Int.-Interrupter Syn.-Synchronous
*Hermetically Sealed Construction.
$\dagger$ A grounding cup for $11 / 2^{\prime \prime}$ dia. vihrators which makes a low r.f. ground connection between vilrator can and power supply chassis. $\$$ To be discontinued when supplies are exhausted. $\ddagger$ No ground strap.
${ }^{4}$ Use only these types in design of new equipment. Other types are for replacement purposes only.

## MALLORY TECHNICAL MANUAL

This simply written, practical book bridges the gap between radio theory and practice. Designed for the radio serviceman, engineer, amateur or experimenter who wants the latest technical information. . . presented so that he can easily apply it to everyday problems.

Contains page after page of information profusely illustrated. It's worth far more than its price.

## MAlLORY

These Mallory Vibrators Meet $90 \%$ of Your Replacement Needs

- The 12 basic vibrator types listed at right cover $90 \%$ of your replacement needs. The entire line of Mallory Vibrators has been simplified so that replacements can be made easily and quickly. By effecting substitutions, Mallory is materially reducing the number of vibrators needed to meet your requirements.

This Mallory standardization program means that your distributor stocks fewer vibrator types and more units of each-thus delivery is tremendously speeded up.

The vibrator replacement problem is being simplified but Mallory quality remains the same. Mallory precision vibrators, backed by years of outstanding performance, still offer the dependability, the long life and the trouble-free service that you and your customers expect. It pays to insist on Mallory Approved Precision Products.

| Type No. | Volt | Type | Base <br> Dia. | Size |
| :---: | :---: | :---: | :---: | :---: |
| 245 | 6 | Syn. | 21 | $11 / 2 \times 31 / 4$ |
| 246 | 6 | Syn. | 38 | $11 / 2 \times 31 / 4$ |
| 248 | 6 | Syn. | 44 | $11 / 2 \times 31 / 4$ |
| 249 | 6 | Syn. | 32 | $11 / 2 \times 31 / 4$ |
| 273 C | 6 | Syn. | 29 | $2 \times 41 / 2$ |
| 294 | 6 | Int. | 8 | $11 / 2 \times 31 / 4$ |
| 716 | 6 | Syn. | 30 | $115 / 16 \times 31 / 2$ |
| 852 | 6 | Int. | 14 | 15/8 3 5/8 |
| 854 | 6 | Int. | 11 | $11 / 2 \times 31 / 4$ |
| 859 | 6 | Int. | 8 | $11 / 2 \times 23 / 8$ |
| 870 | 6 | Int. | 14 | $11 / 2 \times 3$ |
| 1100 | 6 | Int. | 8 | 13/16 $\times 23 / 6$ |







$R=$ Reed
$\mathbf{I}=\mathbf{P u l l}$ Interrupter
PR = Pull Rectifier
$\mid R=$ Inertia Rectifier
$C=$ Coil
$\mathrm{FR}=$ Frame

5
6



Type VP-554H • VP-F558


Type VP-551


Type VP-555H •VP-557

## Type VF-223 Audio Filter

- A complete audio filter system for use with all single-unit Vibrapacks. Designed to give maximum suppression of hum with minimum voltage drop. Especially recommended for applications which are sensitive to hum, or where voltage regulation is important as in Class " B " audio amplifiers.


Type VP-552 • VP-G556


Type VP-553

## NOISE SUPPRESSION

- Vibrapacks are equipped with built-in noise suppression equipment. Type VP-555 also includes an efficient low-frequency hum filter. Type VP-557 incorporates the first input filter condenser only. Other Vibrapacks do not include the high-voltage hum filter. Highvoltage filter requirements are similar to equivalent AC power packs.

| Catalog Number | Nominal Operating Voltage | Nominal <br> Output <br> Voltage | Maximum Output Current | Type |
| :---: | :---: | :---: | :---: | :---: |
| VP-540* | 6.3 | 250 | 60 ma . | Self-Rectifying |
| VP-551 | 6.3 | 125-150 |  |  |
| VP-552 $\dagger$ | 6.3 | 175-200 | 100 ma . | Self-Rectifying |
|  |  | 275-300 | 100 ma . | Self-Rectifying |
| VP-553 | 6.3 | 125-150 |  |  |
|  |  | 175-200 | 100 ma . | Tube Rectifier |
| VP-554H $\dagger$ | 6.3 | 225-250 275 |  |  |
| VP-555H $\dagger$ | 6.3 | 300 | 100 ma . 200 ma . 150 ma . | Tube Rectifier Tube Rectifier Tube Rectifier |
| VP-557 $\dagger$ | 6.3 | 400 |  |  |
| VP-G556 | 12.6 | 225-250 | 100 ma . |  |
|  |  | 275-300 |  | Self-Rectifying |
| VP-F558 | 32. | $\left.\begin{array}{l}225-250 \\ 275-300\end{array}\right\}$ | 100 ma. | Tube-Rectifier |

## *Includes complete audio filter.

$\dagger$ Maximum ratings are for mobile transmitter service. For continuous duty with radio receivers where longer vibrator life is essential, reduce maximum output watts ratings to $75 \%$ of listed values.

## MALLORY battery chargers

## OVERNIGHT

APPLICATIONS-Mallory Automotive and Marine Battery Chargers provide convenient, efficient and economical charging of any storage battery used in automobiles, buses, trucks, tractors, taxicabs, small boats, airplanes, and on the farm. Taper charging (an automatically decreasing charging rate) is designed into all Mallory chargers to prevent damage to battery plates and to insure maximum battery life. These chargers also are ideal for charging any 6 or 12 -volt storage battery used in industrial applications, engineering and reindustrial applaries, test equipment, and service benches, etc.
Although designed principally for storage battery charging, Mallory Automotive and Marine Battery Chargers may be used for numerous other applications. They provide an ideal power source for electroplating, model and toy trains, telegraph systems, relays and solenoids, vending machines, electric organs, generator fields, etc. In conjunction with an adequate filter they may be used as a power source for farm and portable radio filaments, auto radio receivers, telephone systems, loud speaker fields, exciter lamps, scientific apparatus, etc.
DESCRIPTION-The heart of these chargers is the Mallory Magnesium-Copper Sulfide all-metal rectifier. Unaffected by temperature and able to withstand phenomenal abuse, they provide stable output without adjustment over long life. With an exclusive self-healing feature, Malory rectifiers have been time-tested and proved to be the most rugged dependable rectifier for battery-charging applications.
Mallory Automotive and Marine Battery Chargers are made in five models to cover
the complete charging field from battery boosters to fast chargers. All chargers are conservatively designed with circuit protection and meters where required, and large capacity battery clips for ready connection to battery posts. All models are designed for operation from 115 -volt $60-$ cycle power lines and are equipped with ample leng ths of both AC and DC cables. MOUNTING-All chargers are readily portable. They may be placed anywhere: in the car, on the garage floor, on a bench, etc. The small models are equipped with two holes for wall mounting where desirable. ACCESSORIES-Although equipped with battery clips, a readily attachable polarized dashboard plug and receptacle (No. R-652) or cigarette lighter plug ( $\mathrm{R}-655$ ) are available as accessories for simple installation in an automobile. The addition of one of these receptacles makes possible simple plugin connection of the charger to the car battery. Extra battery clips (No. R-653) are available. Automatic timer control (No. R-654) is offered for use with battery chargers to control the charge. It may also be used with many household appliances.
PACKAGING-One charger per cardboard shipping carton.
No. R-652-Polarized Dashboard Receptacle, for use with these chargers.
No. R-653-Extra Battery clips.
No. R-655-Cigarette lighter plug. No. MMF-12-Specially designed filter for use in conjunction with 6-AC-4, 6-AC-6. 6-AC-10 chargers. Efficiently reduces AC ripple when these chargers are used as a DC power supply. May also be used with 6-AC-60 where max. current does not exceed 20 amps.


6-AC-4


6-AC-6


R-652


R-655


6-AC-10 • 12-AC-5

| Mallory Charger | Nominal Battery DC Volts | Maximum Charging Rate <br> DC Amps. | Tapered Rate DC Amps. | Approx. 10 Hr . Charge in Amp. Hrs. | Charging Indicator | Approx. Overall Dimensions in Inches |  |  | Approx. Shipping Weight in Pounds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catalog Number |  |  |  |  |  | Height | Width | Depth |  |
| 6AC4 | 6 | 4 | 2 | 30 | No | 47/16 | 73/8 | $3{ }^{5 / 16}$ | $4^{43 / 4}$ |
| 6AC6 | 6 | 6 | 4 | 50 | Light Bulb | $4^{7 / 16}$ | $73 / 8$ | $3 / 16$ $41 / 4$ | 121/4 |
| 6 6C10 | 6 | 10 | 7 | 85 | Meter | 6 | 8 | $4 / 4$ $41 / 4$ |  |
| 12AC5 | 12 | 5 | 3 | 40 | Meter | 6 | 8 | 4/4 |  |

These chargers come with 6 feet of AC and DC cord
The graphs below show typical charger characteristics when operating into various types of loads.






Cabinet-18" long, $103 / 4^{\prime \prime}$ high, $93 / 4^{\prime \prime}$ " wide, including handle and cable rack. Weight-45 lbs. net. Shipping Weight-47 lbs. A.C. Input-115 v., $50-60$ cycles, 10 am . D. C. Output-To charge 6 v . battery at 60 amp . max. Cables-Heavy insulation -long wearing. D.C. Cables-No. 6-9' long. Color identification for polarity. Heavy duty terminal clamps. A.C. CablesNo. $16-15^{\prime}$ long. With rugged AC plug.

## PORTABLE FAST CHARGER

- The Mallory 6-AC-60 Quick Starter is a portable unit providing 2 minute starting service or fast charging of batteries in a few hours.
A Mallory 80 amp Magnesium-Copper Sulfide rectifier stack insures dependable and rugged service. A 6 step charge control switch and ammeler allow charging rate adjustment. To provide automatic charging use the Mallory Automatic Timer Control (R-654).
Rectifier stack and transformer are efficiently cooled by a quiet running fan with an oil-less bearing motor. A convenient rack holds both AC and DC cables. The
entire unit weighs only 45 lbs. entire unit weighs only 45 lbs.
The Mallory Quick Starter will provide approximately 100 amp. hrs. charge in 2 hours. It also provides a convenient power supply for test and service equipment for horns, heaters, radio receivers, and electroplating.


## Catalog No. 6-AC-60

Automatic Timer Control for 6AC60 Charger. Variable time set ting up to 60 minutes. Contacts rated 20 amperes, 115 volis AC or 10 amperes, 230 volts, isuitable for DC loads). Also ideally suited to control lights, sunlamps, radios fans, heating devices and numerous DC loads). Also ideally suited to con trol lights, sunlamps, radios, fans heating devices and numerous other electrical household appliances,
Catalog No. 654


## MALLORY MAGNESIUM-COPPER SULFIDE RECTIFIERS

APPLICATION-Mallory MagnesiumCopper Sulfide Rectifiers are time-tried and proved to be the most rugged, dependable rectifiers for those applications requiring low DC voltages at medium and high currents such as battery chargers and eliminators, electroplating, motion picture projector arcs, welding, engine starting, circuit breaker reclosing, solenoid and relays operation, etc.
DESCRIPTION-Mallory MagnesiumCopper Sulfide Rectifiers are all metal in construction, ruggedly assembled under high pressure to withstand severe vibrations and shock. There are no bulbs, liquids, moving parts or sparking contacts. Unlike all other types of rectifiers, they contain no tempera-ture-sensitive films or layers, and have phenomenal ability to withstand abuse and extremes of temperature ( $-90^{\circ}$ to $+265^{\circ} \mathrm{F}$.). Constant output without circuit adjustments is assured over many years of useful life. Should an accidental voltage surge occur, the rectifying film will "self-heal."
SCOPE AND SIZES-Many sizes are available to supply low DC voltages from watts to kilowatts. A new rectifier engineering data folder is available upon request, covering other sizes for single phase and three phase applications, both convection and fan cooled. In addition to rectifier stacks, P. R. Mallory $\&$ Co., Inc. also manufacture a complete line of Rectoplaters (distributed exclusively by the Udylite Corporation, 1651 East Grand

Boulevard, Detroit 11, Michigan), Rectotruck Chargers (industrial electric truck chargers available through truck agents).

## REPLACEMENT RECTIFIERS—The

 Mallory Magnesium-Copper Sulfide Rectifiers listed on page 53 are only those popular sizes regularly carried in stock, principally for replacement purposes. These same rectifiers, however, may be used for numerous other applications. For example, the IB8R and IB12R rectifiers are ideal for reversing the direction of HO and O gauge model train locomotives respectively, using wound field motors (as illustrated in the wiring diagram, following page). 1B12C1J, IS16CB7, and IS16B9 rectifiers may be readily used to assemble tapering battery chargers as illustrated in the wiring diagram. The IS24B9 rectifier may be used to make up a battery eliminator to operate and test modern automobile radio receivers as shown. Other applications immediately suggest themselves, such as electroplating, model and toy train DC power sources, radio filament supplies, chatter-free relay and solenoid operation, electric organ, automotive electrodynamic speaker field supplies, generator fields, telephone and telegraph system power supplies, etc.MOUNTING-Rectifiers are available in either foot, bolt, or stud mounting, the latter two insulated from mounting means. Refer to note helow table for type of mounting on replacement rectifiers.

HARDWARE - Wherever possible or practical, universal mounting hardware is included to assist in the ready replacement of old rectifier types.
PACKAGING-Rectifiers are packed one per display carton.


IB4R


IB8R


F24H1P


1B12C1J

## MÁllory rectifiers

CHART OF REPLACEMENT RECTIFIERS

| $\begin{gathered} \text { New } \\ \text { Catalog } \\ \text { Number } \end{gathered}$ | Maximum AC Volts (Normal Line) |  | Approx. DC Volts |  |  | Max. DC $\dagger$ Amperes |  | Approximate Overall Dimensions in Inches |  |  | Replacement for Old Catalog Number | Replacement in Equipment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { (Norn } \\ & \text { No } \\ & \text { Load } \end{aligned}$ |  | Inductive Load | Resistive Load | Capaci-tive-Battery Load | Continuous Duty § | Intermittent Duty | Length | Width | Height |  |  |

Ultra-Compact Replacement Rectifiers for Battery Eliminators, etc.

| IB4R | 3.6 | 3.2 | 1.5 | 1.7 | 2.5 | 1.5 | 5.0 | 1 | $9 / 16$ | $7 / 8$ | G.T.C. Porta-Power Electro <br> Battery Eliminator |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| IB8R | 7.2 | 6.4 | 3.1 | 3.4 | 5.1 | 1.5 | 5.0 | $1 / 8$ | $9 / 16$ | $7 / 8$ | G.T.C. Porta-Power <br> Electro Battery Eliminator |
| IB12R | 10.8 | 9.7 | 4.8 | 5.2 | 7.8 | 1.3 | 5.0 | $13 / 4$ | $9 / 16$ | $7 / 8$ | All Power Supplies for |
| Electric Fence |  |  |  |  |  |  |  |  |  |  |  |

Replacement Rectifiers for Automotive Chargers and Eliminators, etc.

| [B12C1J | 10.8 | 9.8 | 4.6 | 5.1 | 7.7 | 3.2 | 24 | $23 / 4$ | $11 / 4$ | 1\% | 12Cl, Fl2Cl, IF12C1B, 12C1F, F12C1K, IB12Cl, IB12C1M, X12, X112, U12 | 4-2 Amp. Boosters Mallory 3C, 6AC4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IB12C3 | 10.8 | 9.7 | 4.5 | 5.0 | 7.6 | 4.5 | 24 | 23/4 | 13/4 | 21/8 |  | Mallory 6-AC-6-2 |
| F16C3 | 10.8 14.4 | 13.0 | 6.1 | 6.8 | 10.2 | 3.9 | 24 | 3 | $13 / 4$ | 21/8 | 16C3, F16CB3, 16CB3, 16C3B*, XB16*, M16*, X16, X116, ME16 | 5-3 Amp. Old Chargers Mallory 5535 |
| IF16CB7M | 14.4 | 12.8 | 5.9 | 6.6 | 9.9 | 6.0 | 24 | 3 | 21/2 | 33/16 |  | 6-3 Amp. Charger, Mallory 5535A |
| IS16CB7 | 14.4 | 12.8 | 5.9 | 6.6 | 9.9 | 6.0 | 24 | $33 / 4$ | 21/2 | 3 | IS16CB7M | 6-3 Amp. Charger Mallory 5535B, 6AC6 |
| 1S16B7 | 14.4 | 12.8 | 5.8 | 6.5 | 9.8 | 8.3 | 24 | $51 / 2$ | 2112 | 3 | IS16B7M, \|B16B7 | 10-7 Amp. Charger, Mallory 107, 6-AC-10-2 |
| IS16B9 | 14.4 | 12.7 | 5.7 | 6.4 | 9.7 | 11.6 | 24 | $51 / 2$ | 32 | $41 / 4$ |  | 10-7 Amp. Charger, Mallory 6AC10 |
|  |  |  | 7.6 | 8.4 | 12.6 | 4.8 | 24 | 43/3 | $21 / 2$ | 33/8 | F20C7P | A.T.R. Battery Eliminators, etc. |
| F20C7 IS24C7J | 18.0 21.6 | 16.2 19.4 | 7.6 | 8.4 10.1 | 15.1 | 4.8 | 24 | $43 / 4$ | $21 / 2$ | 33/16 | IB24C7, F24C3, F24C3P, F24C7P, F24C7, FCX24D7, 201C1, R24LR ${ }^{\text {t }}$ R24LS | Mallory 12-AC-5-2, Stancor Eliminators, Univerters, Pin Game Supplies, etc. |
|  | 21.6 | 19.1 | 8.5 | 9.6 | 14.4 | 11.0 | 24 | 71/2 | 31/2 | 41/4 |  | Stancor Battery Eliminators, etc. |
| [S24B9 | 21.6 | 19.1 | 8.5 10.7 | 11.7 | 17.8 | 4.3 | 24 | 6 | $21 / 2$ | 3 | F28C7, F28C7P, 228Cl, 267C1, R28LS | 5-3 Amp. 12-volt Chargers, Mallory $125,12 \mathrm{AC} 5$ |

Replacement Rectifiers for Pin Ball Machines, Power Supplies, etc.

| F16HIP | 14.4 | 13.1 | 6.3 | 7.0 | 10.4 | 2.2 | 24 | 21/4 | $11 / 4$ | 2 | 16A1, F16G1, F16G1P, F16HI, W16A1 211Cl, R16S | Electropak, Rectopak, Univerter, etc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F20HIP | 18.0 | 16.4 | 7.9 | 8.7 | 13.0 | 2.0 | 24 | 23/4 | $11 / 4$ | 2 | 20A1, F20G1, F20G1P, F20H1, W20A1, 212Cl, R20S, X20 | Electropak, Rectopak, Univerter, etc. |
| F24HIP | 21.6 | 19.7 | 9.6 | 10.4 | 15.7 | 1.9 | 24 | 3 | $11 / 4$ | 2 | $\begin{aligned} & \text { F24G1, F24G1P, F24H1, W24A1, } \\ & 203 \mathrm{Cl}, \mathrm{R} 24 \mathrm{~S} \end{aligned}$ | Electropak, Rectopak, Univerter, etc. |
| F28HIPM | 25.2 | 23.0 | 11.2 | 12.2 | 18.4 | 1.7 | 24 | $31 / 4$ | $11 / 4$ | 2 | F28G1, F28G1P, F28H1, F28HIP, W28Al, F28H1MP, 210Cl, R28S | Electropak, Rectopak, Univerter, etc. |
| F32HIPM | 28.8 | 26.2 | 12.8 | 14.0 | 21.0 | 1.6 | 24 | 33/4 | 1/4 | 2 | F32G1, F32G1P, F32H1, F32H1P | Electropak, Rectopak, Univerter, etc. |

NOTE: All rectifiers are single phase, full wave, bridge type.
Mounting Prefix: $1 \mathrm{~B}=$ Insulated Bolt; $\mathrm{B}=$ Grounded Boit; $\mathrm{F}=$ Grounded Foot; IF = Insulated Foot; IS = Insulated Stud.
$\mathbf{P}$ suffix designates reverse polarity stacking. Center terminal is $D C$ positive. J suffix designates universal construction with loose mounting feet for foot, bolt or stud mounting replacement.
$\dagger$ To determine AC Amps: Multiply the DC amps by the following factors: Inductive load by 1.1; resistive load by 1.2; capacitive load by 1.4 .

## *Use base from old rectifier.

§Ratings given are for resistive and inductive loads. To determine the Max. continuous DC amp. rating for capacitive and battery foads multiply these ratings by 0.82 .

## AUTOMOBILE RADIO POWER SUPPLY CIRCUIT



MODEL TRAIN LOCOMOTIVE REVERSING CIRCUITS


TYPICAL BATTERY CHARGING CIRCUITS


## MALLORY special components and miscellaneous items



Mallory Inducłuner*
Type 8301

- The Inductuner is a three-gang, infinitely variable inductance tuning device, designed to provide continuous frequency selection over a range of frequencies from approx. 50 to 240 megacycles, covering the $11 / 4,2$, and 6 -meter bands, as well as all television and FM bands.

Various tuning ranges can le selected by varying the circuit constants, as required. The ten-turn, or $3600^{\circ}$ rotation, permits convenient selection of the frequency desired without the use of a bandspread mechanism or intricate gear drive. Band width can be easily controlled by the use of a suitable bandpass circuit.
At the present time the Inductuner has acceptance as the tuning unit in television recelvers that offer $F M$, police, aircraft and amateur reception, as well as the full 13 channels assigned for video transmission.
The complete assembly is substantially mounted in a die-cast frame, completely shielded. Size $73 / 16$ " long x $1^{13 / 16 " ~} \times 1^{13 / 16}{ }^{\prime \prime}$
A technical information bulletin is availahle on request, containing complete details, electrical characteristics, and suggested circuits. Inductuner* - Regisfered trade mark for Mallory variable inductance tuning devices. Manufactured and sold under one or more of the following Paul Ware and Mallory patents: $2,163644,2,163645,2,163646,2,163647,2,260877$, $2,377789,2,377790,2,399060,2,405890$. Other patents applied for,

## TYPE VC-101 Videocoupler

The Mallory VC-101 Videocoupler is a compact inter-stage coupling unit for use in the wide-band amplifiers commonly found in teleision, radar and oscilloscope equipment. It consists of peaking
inductances and a load resistance which provide an essentially flat frequency response to 4 mc. per second. It is designed to work into a terminating capacity of 22.5 mmfd . When used with a $6 \wedge C 7$ tube in a proper circuit, a stage gain of approximately 25 may he realized. Mounting space fini high pation 2 watts; finish, high-temperature enamel. Use a No. 6 bolt
through the core for mounting. through the core for mounting


## Yard-Ohm Resistance Kits

Each Yard-Ohm Resistance Kit consists of all necessary materials to construct flexible resistors of a wide range of values. The YardOhm Kit provides a real solution to the odd-value resistor problem. In addition to replacement applications, resistors made from the Yard-Ohm Kit are ideal for meter shunts, and for use wherever a high quality flexible resistor is desired.
Each Mallory Yard-Ohm Kit consists of the following: 1 yard spiral wound resistance wire; 1 yard insulated braid; 24 spiral wire leads. The kit is available in eight resistance values.

Dissipation-all types: $1 / 2$ watt per inch.

| Catalog Number | Resistance Value (Ohms per Inch) | Carrying Capacity in Amperes | Catalog Number | Resistance Value (Ohms per Inch) | Carrying Capacity 10 Amperes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| YO-1 | 1 | . 707 | YO-50 | 50 | . 100 |
| YO-5 | 5 | . 315 | YO-100 | 100 | . 071 |
| YO-10 | 10 | . 223 | YO-250 | 250 | . 044 |
| YO-25 | 25 | . 141 | YO-500 | 500 | . 031 |



## Grid Bias Cells

- The Mallory Grid Bias Cell is a small acorn-shaped, self-contained device. The metal container or cup is the negative electrode. The black disc is the positive electrode.


## Application

The principal use of Mallory Grid Bias Cells is in the biasing of the first audio amplifier tube in modern high-gain receivers. Diagram of a typical circuit is shown at right. The bias cell does not need to be by passed to ground.

Correspondence is invited regarding the application of Mallory Grid Bias Cells. Special Technical Bulletin No. GBC746 may be obtained on request.


## Characteristics

The no-current potential of Mallory Grid Bias Cells is within plus or minus $10 \%$ of their rated voltage.


Current-The cell is strictly a potential or voltage cell for biasing class "A" amplifier tubes and should not be used for biasing power tubes or oscillators; or for any circuit where direct current may flow through, or be drawn from, the cell.

Temperature - The cells may be used at temperatures from $0^{\circ} \mathrm{F}$ to $140^{\circ} \mathrm{F}$. The voltage of the cell remains reasonably constant throughout this wide temperature range. It is recommended, however, that wherever possible the bias cell be placed in the coolest location.

Humidity-The cell exhibits no change in characteristics when exposed to a relative humidity of $90 \%$ at $120^{\circ} \mathrm{F}$.

Impedance-Mallory Grid Bias Cells are non-reactive at audio frequencies. The DC resistance of the cell ranges between 10,000 and 40,000 ohms.|

Noise-The cells do not cause noise.

Cat. No.

## Description

BC-2
GB11A
GB11B
GB12
GB13
GB14
GB15
GB16

## MÅllory special components and miscellaneous items



## Knobs

| Cat. No. | Description |
| :---: | :---: |
| 365-1 | 21/4" Bar Type Knob, Black |
| 365-R-1 | 21/4" Bar Type Knob, Red |
| 366-1 | 11/4" Bar Type Knob, Black |
| 366-R-1 | 11/4" Bar Type Knob, Red |
| 367-1 | 11/2" Dia. Round Knob, Black |
| 368-1 | 11/8" Dia. Round Knob, Black |



## Mounfing Nuts

| Cat. No. | Description | Thread | Dimension |
| :---: | :---: | :---: | :---: |
| 232 | Flat Hex Mounting Nut. | 3/8-32 | $1 / 2 \times 3 / 32$ |
| 255 | Hex Mounting Nut | 3/8-32 | $1 / 2 x^{7 / 64} \times{ }^{7 / 64}$ shoulder nut |
| A-11260-2 | Hex Mounting Nut | 3/8-32 | $1 / 2 \times 7 / 64 \times 13 / 32$ shoulder nut |
| A-11260-12 | Hex Mounting Nut | 3/8-32 | $1 / 2 x^{7 / 64} \times 7 / 32$ shoulder nut |



## Washers

| Catalog No. | Description and Dimensions |
| :---: | :---: |
| 203 | Extruded Washer-Fiber- $3 / 4^{\prime \prime}$ O.D. $\times 3 /$ " $^{\prime \prime}$ I.D. $\times 1 / 16^{"}$; Extruded $1 / 2^{\prime \prime} \times 1 / 32^{\prime \prime}$ <br> For Set See No. 212 Flat Washer. |
| 212 | Flat Washer-3/4" O.D. $\mathrm{x}^{3 / 6}{ }^{\prime \prime}$ I.D. ${ }^{1 / 32}{ }^{\prime \prime}$; Bakelite |
| 225 | Metal Washer-Nickel Finish-\%" O.D. $x$ 3/8" I.D. . 040 Brass |
| 226 | Metal Washer-Nickel Finish- ${ }^{\text {B }}{ }^{\prime \prime}$ O.D. $\mathbf{x} 7 / 16^{*}$ I.D. . 040 Brass |
| 227 | Lock Washer-Cadmium Plated Steel - ${ }^{11 / 16 "}$ O.D. $x^{23 / 64}$ I.D. |

## Matoiv <br> RADIO SERVICE ENCYCLOPEDIA

Page after page of replacement information for all pre-war and post-war receivers.


## Soldering Iroin Tips

No. 311-Replacement tip for soldering irons that are turned on for short periods only. Heats quicker than No. 312, but is not as long wearing. Made of a special Mallory copper alloy long in use as a welding tip material. Nickel plated to resist corrosion. Size- $3 / 8$ diameter, 4 " length. Plunger style with "screw driver" point.
No. 312-Replacement tip for soldering irons that are used continuously for long periods of time. Made of a special Mallory copper alloy of great hardness and high electrical conductivity. Nickel plated to resist corrosion. Size- $3 /$ " $^{\prime \prime}$ diameter, $4^{\prime \prime}$ length. Plunger style, with "screw driver" point.

## Dial Plates

For Mallory Circuit Selector, Tap ond All-Wave Switches. (Plates to match rotation of Mallory Adjustable Resisfors on page 33.)


Neat-appearing Dial plates with easy-to-read aluminum figures clearly etched on solid black background. Dimensions are $1^{13 / 16 " ~ i n ~ d i a m e t e r ~}$ with $7 / 16^{"}$ hole, with figures $7 / 64^{\prime \prime}$ high. $.020^{\prime \prime}$ aluminum stock.


[^0]
# ATR-VIBRATORS•ATR AMERICAN TELEVISION \& RADIO CO. 

## ATR aUto radio VIBRATORS



ATR Manufactures a Complete Line of Auto Radio

Replacement Vibrators

Ask your ATR Distributor for your Free Copy of the Latest ATR Vibrator Guide

## atr VIBrators

feature Ceramic Stack Spacers, and are proven units of the highest quality, engineered to perfection. They are backed by more than 17 years of vibrator design and research, development and manufacturing - ATR Pioneered in the Vibrator Field.

## ATR VIBRATOR EQUIVALENT CHART

| ATR | TYPE | SIzE | ATR <br> LIST PRICE | E-L | MALLORY | RADIART |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 324 | Int. | $11 / 2^{\prime \prime} \times 31 / 8^{\prime \prime}$ | \$4.10 | 1703 | 294 | 5300 |
| 328 | Int. | $11 / 2^{\prime \prime} \times 31 / 8^{\prime \prime}$ | 4.10 | 2090 | 854 | 5331 |
| 335 | Int. | $11 / 2^{\prime \prime} \times 31 / 8^{\prime \prime}$ | 4.10 | 2088 | 852 | 5303 |
| 340 | Int. | 1 $1 / 2^{\prime \prime} \times 27 / 8^{\prime \prime}$ | 4.10 | 2605 | 859 | 5301 |
| 508 | Syn. | 1 $15 / 16^{\prime \prime} \times 4 \frac{1}{2 \prime \prime}$ | 7.65 | 2682 | 273C | 5425 |
| 520 | Syn. | $11 / 2^{\prime \prime} \times 31 / 8^{\prime \prime}$ | 6.90 | 2688 | 245 | 5409 |
| 522 | Syn. | $11 / 2^{\prime \prime} \times 31 / 8{ }^{\prime \prime}$ | 6.90 | 2089 | 246 | 5411 |
| 524 | Syn. | $11 / 2^{\prime \prime} \times 31 / 8^{\prime \prime}$ | 6.90 | 2107 | 248 | 5400 |
| 525 | Syn. | $11 / 2^{\prime \prime} \times 31 / 8^{\prime \prime}$ | 6.90 | 2687 | 249 | 5406 |
| 547 | Syn. | $\mathrm{j}^{15 / 186^{\prime \prime} \times 31 / 2^{\prime \prime}}$ | 6.90 | 2092 | 716 | 5426 |

## THESE 10 POPULAR ATR VIBRATORS MEET $90 \%$ OF YOUR SERVICE NEEDS

## ATR • ELIMINATORS• ATR <br> \section*{AMERICAN TELEVISION \& RADIO CO.}



# ATR " $A$ " BATTERY GLIMInATORS 

Specially Designed for Testing

and Operating Auto Radios
and D. C. Electrical Apparatus
on Regular A. C. Lines, 10.)-
125 Volts 50-60 Cycles.

Illustrates Lleavy Duty "A" Battery Eliminator, Type 62OC.ELIP, Equipped with Volmeter, Ammeter and Voltage Control.

- Fully Antomatic and Fool-Proof.
- Eliminates Storage Batteries and Battery Chargers.
- Operates the Equipment at Maximum Efficiency at all Times.
- Delivers Filtered Direct Current at the Correct Voltage for Proper Operation.


## SUGGESTED USES:

As a power supply for radio sets, aircraft instruments, relays, motors and other electrical and electronic equipments. In the laboratory, for supplying various low D. C. voltages.

Battery Eliminators may be treated as batteries in the sense that they can be connected in series for higher voltages at the same current output per mait or in parallel for the same output voltage per unit at higher currents.

Equipped with Full-Wave Dry Disc Type Rectifier, Assuring Noiseless, Interference-Free Operation and Extreme Long Life and Reliability.
TYPE 610 ELIB—Rated output 6 volts at 10 amperes. Size $61 / 2^{\prime \prime} \times 91 / 8^{\prime \prime} \mathrm{X}$ $81 / 2$ "; shipping weight, 22 lbs . Code word, "SELIB".
Net Price
$\$ 29.70$
TYPE 620 C ELIP—Uses dual rectifiers. Size $61 / 2^{\prime \prime} \times 127 / s^{\prime \prime} \times 81 / 2^{\prime \prime}$. Shipping weight, 33 lbs . Code word, "HELIN"

Rated Output: 6 volts at 18 amperes or 12 volts at 9 amperes. Either output obtainable by means of simple output terminal switching arrangement.
Net Price
$\$ 45.90$
All ATR Eliminators have as standard equipment: On-Off Switch, Voltage Control, Meter (s), Fuse Protection, Rubleer Mounting Feet, 6-Ft. All-Rubber Cord Set, and Cabinet of heavy gauge metal having attractive grey-wrinkled finish.


Illustrating Standard "A" Battery Eliminator, Type 610 ELIB, Equipped with Voltmeter and Voltage Control.

## ATR • In verters - ATB AMERICAN TELEVISION \& RADIO CO.



## ATP stanampo ano HEAVY DUTY RADIO InVERTERS

Specially Designed for Operating A. C. Radios, Public Address Systems, Television Sets, Amplifiers, Intercall Systems, and Radio Test Equipment from D. C. Voltages in Vehicles, Ships, Trains, Planes, and in D. C. Districts.

Illumiraten all fiandard ATIR Radio Inverters except typea 6 and $1 \underline{2}$ RSB.
This group of ATR Inverters is specially recommended for use with A. C. radios, amplifiers, and similar electronic equipment, being exceptionally well filtered to insure interference-free radio reception. With ATR Inverters, the need for special equipment is eliminated. They are designed for quiet, long-life radio operation. All models indicated are equipped with an ATR ten-contact plug-in Inverter Vibrator of new design and construction having dual arms and utilizing eight $1 / 4^{\prime \prime}$ diameter tungsten power contacts and two silver alloy driver contacts, insuring increased long life and reliable service. These Inverters also come equipped with four point voltage regulators, which make possible the correct output voltage for minimum to maximum loads and also help compensate for input voltages which are lower or higher than normal: the operating efficiency is in excess of $85 \%$.

| Type | $\begin{aligned} & \text { Input } \\ & \text { D.C. } \\ & \text { Volts } \end{aligned}$ | A. C. <br> Output 60 Cycles | Output Wattage |  | Code Word | List <br> Irice |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Inter mittent | Continuous |  |  |
| 6 RSC | 6 | 110 volts | 85 | 75 | ARSCD | \$44.00 |
| 12 RSC | 12 | 110 | 125 | 100 | BRSCE | 44.00 |
| 24 RSC | 24 | 110 | 125 | 100 | NRSCQ | 48.50 |
| 32 RSC | 32 | 110 | 150 | 100 | Crsce | 45.50 |
| 32B-RHC | 32 | 110 | 200 | 180 | DRHCG | 69.50 |
| 50 RSC | 50 | 110 | 150 | 100 | ERSCII | 57.00 |
| 110 RSC | 110 | 110 | 250 | 150 | GRSC.J | 45.50 |
| 110A.RHC | 110 | 110 | 325 | 225 | HRIICK | 65.00 |
| 110B-RHC | 110 | 110 | 500 | 350 | IRIIOL | 75.00 |
| 110C-RSC | 110 | $110 / 220$ | 250 | 150 | JaSCM | 57.00 |
| 220 RSC | 220 | 110 | 250 | 150 | LRSCO | 48.50 |
| 220A-RSC | 220 | $110 / 220$ | 250 | 150 | Mhscr | 57.00 |

[^1]
# ATR • INVERTERS• ATR AMERICAN TELEVISION \& RADIO CO. 



Hllumtrating all Typer LID Inverters except Types 6 and 12.

## ATR Low Power InVerTers

For Operating Small A. C. Motors, Electric Razors, Radios, and Devices of Approximately 35 watts Consumption from $6,12,24,32,110$, and 220 volt D. C. Lines.

This line of ATR Low Power Inverters was specially brought out to meet the insistent demand for a good, low power, inexpensive portable Inverter for operating phonograph and other A. C. motors and a host of small A. C. devices from D. C. voltage sources. These Inverters operate at an efficiency in excess of $90 \%$ and are designed for operation of loads having a power factor as low as $60 \%$. They are ruggedly built and powered by a special ATR six-contact plug-in Inverter Vibrator utilizing four $1 / 4^{\prime \prime}$ diameter tungsten power contacts and two silver alloy driver contacts.

| Type | Input <br> I. C. volts | A.C. Output 60 eycles | Wattare |  | Code Word | List Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Intermittent | Continuous |  |  |
| 6 LID | 6 | 110 volts | 40 | 35 | ALIDM | \$29.50 |
| 12 LID | 12 | 110 | 50 | 35 | BIIDN | 29.50 |
| 24 Lid | 24 | 110 | 50 | 35 | FLIDR | 32.50 |
| 32 LID | 32 | 110 | 50 | 35 | CLIDO | 32.50 |
| 110 LID | 110 | 110 | 75 |  | DLIDP | 29.50 32.50 |
| 220 LID | 220 | 110 | 75 | 50 | ELIDQ | 32.50 |

Radio frequency interference suppressed,
Any of the above type Low Power lnverters are available with 220 volt A. C. output at urices $25 \%$ higher". In ordering, specify "S" after the type number and substitute for the last letter in the code word " T "; that is, if a 110 volt D. C. Low Power Inverter having a $2 \geqslant 0$ volt A. O. output is desired, this would be ordered as Type 110 S covered by code word, "DLIDT". Dimensions, $53 / 8^{\prime \prime} \times 4^{\prime \prime} \times 65 / 8^{\prime \prime}$; shipping weight, 7 lbs.
Replacement Viblators for any of the ahove Low Power Inverters are available. Be sure to mention the type number as well as model number when ordering. Consult Inverter Vibrator Guide

## ATR STANARPD AND IDDUSTRIAL INVERTERS


#### Abstract

For Operating A. C. Motors, Electronic Apparatus, Electrical Testing Equipment, and A. C. Electrical Appliances from D. C. Lines.

These units are specially designed for applications as indicated, permitting the use of standard A. C. equipment on D. C. lines. These Inverters operate at an efficiency in excess of $80 \%$ and are carefully built and equipped to give the longest possible life and operating satisfaction. All Inverters indicated utilize ATR ten contact plug-in vibrators, and are also equipped with four point voltage regulators as fully described above. These Industrial Inverters are recommended for use with loads having power factors as low as $60 \%$, and as low as $50 \%$ for the " $P$ " Inverters indicated. These Inverters should not be used with Neon signs.


|  | Type | Input <br> I).C. volts | A.C. Output 60 cycles | Output Watture |  | Code Word | List Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Intermitamt | Continuous |  |  |
|  | 6 ISP | 6 | 110 volts | 85 | 75 | AISPD | \$44.00 |
|  | 12 ISP | 12 |  | 125 | 100 | 131sPE: |  |
|  | 24 ISP | ${ }^{24}$ | 110 | 125 | 100 100 | LISPN | 48.50 |
|  | 32 ISP | 32 32 | 110 110 | 150 150 | 100 125 | OSSPE DISPF | 45.50 57.00 |
|  | $32 \mathrm{~B}-1 \mathrm{HP}$ | 32 | 110 | 200 | 180 | EIHP' | 69.50 |
|  | 110 ISP | 110 | 110 | 250 | 150 | FISPII | 45.50 |
|  | 110P*-ISP | 110 | 110 | 250 | 150 | GISPI | 57.00 |
| $\cdots(1)=-=0$ | 110A-IHP | 110 | 110 | 325 | 225 | НІНР', | 65.00 |
| 40 | ${ }_{220}^{110 \mathrm{ISP}}$ | 110 220 | 110 110 | 500 250 | 350 150 | JISPL | 75.00 48.50 |
|  | $220 \mathrm{P}^{*}$-ISP | 220 | 110 | 300 | 150 | KISPM | 57.00 |

[^2]Illurtrating Ileavy Duty Modele Radio and Industrial Inverters except types 6 and 12. Typer 6 and 12 lndustrial Inon page M.23.

## BATTERY ELIMINATORS Distinction

## ELECTRIFY wish ELECTRO

Now battery radio reception can be enjoyed at its best without the usual grief and expense incurred when using batteries. Radio can be used for unlimited periods without fading. Costs but a few cents per hundred hours of operation.
FOUR TYPICAL MODELS are shown on this and


## MODEL "S" COMPACT With Selenium Rectifier

Operates Any 1.4 Volt - 4, 5 or 6 Tube Battery Radio from 115 Volt, 60 Cycle Source
Designed for sets using 1A7, 1E4, 1N5G, 1Q5G, tubes to convert battery radio to an efficient AC receiver with low operating cost. Fits in battery compartment of most radios. Ideal for use in home, hotel, camp or any place where normal AC is available.

## Technical Data

"A" Supply Output
5-6 tubes (average)
1.4 V.@320ma.

4 tubes $\quad 1.4$ V. $\varrho_{2} 250 \mathrm{ma}$
4 tubes
.1.4 V.@200 ma.
"B" Supply Output
90 Volts DC @ 12 ma. max.
Primary
115 Volts AC@ 60 cycles.
Specifications
Six foot cord and plug - switch in cord.
Size: $23 / 8^{\prime \prime} \times 31 / 2^{\prime \prime} \times 63 / 4^{\prime \prime}$.
Weight packed: $31 / 2$ pounds.
On and Off switch for permanent mounting - becomes part of the radio.

## LIST PRICE $\$ 16.75$

## MODEL "P" COMPACT

Same as MODEL "S" except has tube rectifier. Also available for 220 Volt operation.

## LIST PRICE $\$ 15.00$

the following page. These are ruggedly constituted units of unusually long life-easy to install-no liquids to spill-no moving parts to get out of order and wear out-operate in any position. Completpl-filtered, hum free and silent in operation. Univi rsai plugs and sockets are provided to accommodate any radio. All units durably finished in blue hammerloid.


## MODEL "F" COMPACT

Operates Any 2 Volt - 4, 5, 6 or 7 Tube Battery Radio from 115 Volt, 60 Cycle Source
For receivers using 1A4, 1C7, 1D5, 1E5, 1F5, 1F7, 1H4G, etc., tubes to change radio into an all-electric set. Inexpensive to operate.

## Technical Data

"A" Supply Output
7 tubes $\quad 2 \mathrm{~V}$ @ 480 Ma - 500 ma max.
6 tubes 2 V @ 420 ma .
$4-5$ tubes (average) 2 V . @ 325 ma .
"B" Supply Output
67, $90,112,135$ Volts DC @ 18 ma .
Primary
115 Volts AC@60 Cycles. Also available for 220
Volt Operation.
Specifications
Six foot cord and plug, switch in cord.
Size: $23 / /^{\prime \prime} \times 4 \frac{1}{2}{ }^{\prime \prime} \times 8 \frac{1}{4}$ ".
Weight packed: $51 / 2$ pounds.

## LIST PRICE \$17.95

## MODEL 'R" SYNCRO POWER

Same as Model "F" but operates from 6 Volt DC source. Supplied with cord and battery clips. On and Off switch in eliminator turns power on.

LIST PRICE $\$ 20.75$

## ELECTRO PRODUCTS LABORATORIES

## BATTERY ELIMINATORS Distinction

## ELECTRIFY with ELECTRO

Now battery radio reception can be enjoyed at its best without the usual grief and expense incurred when using batteries. Radio can be used for unlimited periods without fading. Costs but a few cents per hundred hours of operation.
FOUR TYPICAL MODELS are shown on this and


## MODEL " $Q$ " SYNCRO POWER

Operates Any 1.4 Volt - 4, 5, or 6 Tube Battery Radio from 6 Volt DC Source

This Eliminator is to be used where 115 Volt AC lines are not available. Will provide all " $A$ " and " $B$ " voltages more efficiently and at lower cost from 6 Volt battery. Will operate a 4 -tube radio three weeks at 3 hours a day on a single storage battery ( $100 \mathrm{~A} . \mathrm{H}$. ) charge.

## Technical Data

"A" Supply Output
5-6 tubes (average)

1.4 V. @ 320 ma .

4 tubes 1.4 V. @ 250 ma .

4 tubes
"B" Supply Output
90 Volts DC@12 ma.max.
Primary
6 Volts DC @ 0.8 Amp. (for 4-tube radio).
Specifications
Cord and battery clips on primary.
On and Off switch in Eliminator turns power on.
Size: $23 / 8^{\prime \prime} \times 31 / 2^{\prime \prime} \times 63 / 4^{\prime \prime}$.
Weight packed: $31 / 2$ pounds.
LIST PRICE $\$ 18.00$
the preceding page. These are ruggedly constituted units of unusually long life-easy to install-no liquids to spill-no moving parts to get out of order and wear out-operate in any position. Completely filtered, hum free and silent in operation. Universal plugs and sockets are provided to accommodate any radio. All units durably finished in blue hammerloid.


## MODEL "A" POWER SUPPLY

Operates latest type auto radios with solenoid tuning and tone controls - also 12 Volt marine and aircraft radios from 115 Volt, 60 Cycle Source. In parallel supplies 6 Volts at 15 Amps. In series 12 Volts at $71 / 2$ Amps.

## Separately, 6 Volts at $71 / 2$ Amps.

Designed especially to do away with the bother of old-fashioned storage batteries. Ideal for the radio service man. Two separately filtered DC output sources are provided for convenience. Heavy duty transformer and chokes; and two large capacity condensers provide excellent voltage regulation.

## Technical Data

Output
6 Volts - 15 Amps. continuous.
6 Volts - 25 Amps. max. instantaneous.
12 Volts - $71 / 2$ Amps. continuous.
6 Volts - $71 / 2$ Amps. two sections continuous.
Primary
Taps on transformers for $105,115,125$ Volts, 60
cycle AC. Each completely filtered section is sep-
arately fused for heavy overloads.
Specifications
Six foot rubber cord and plug.
Size: $73 / 4^{\prime \prime} \times 73 / 4^{\prime \prime} \times 113 / 4$ ".
Weight packed: 31 pounds.
Electrostatic shield with R.F. line filter.
Large capacity bridge type rectifiers.
Two 2,000 M.F.D. condensers.
Terminals on front of panel with wing nuts
LIST PRICE $\$ 67.50$

ELECTRO PRODUCTS LABORATORIES


For quick, easy conversion of all standard radios and electrical appliances to 220 voit $50-60$ cycle operation. Designed for continuous and reliable perfarmance. $100 \%$ safety factor for momentary overloads. Vacuum

| Part No. | Wattage | Overall Dimensions | Mtg. Centers | Weight Net lbs. | LIS T |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $8 \mathrm{M1} 82$ | 80 | $25 / 8^{\prime \prime} \times 3^{\prime \prime} \times 3 \mathrm{~T}^{\prime \prime}{ }^{\prime \prime}$ | $2 \times 2$ |  |  |
| 8 MII 83 | 150 | $33 / 8^{\prime \prime} \times 35 / 8^{\prime \prime} \times 418^{\prime \prime}$ | $21 / 8 \times 27 / 8$ |  | \$ 7.30 |
| 8M184* | 300 | $3+55^{\prime \prime} \times 47^{\prime \prime} 6^{\prime \prime} \times 45 / 8^{\prime \prime}$ | $2 / 8 \times 278$ $3 \times 31 / 4$ | 91/2 | 9.55 12.15 |
| 8M185* | 500 | $3+\frac{5}{\prime \prime} \times 4+\frac{1}{6 \prime \prime} \times 45 /{ }^{\prime \prime}$ | $31 / 2 \times 31 / 4$ | $12^{91 / 2}$ | 12.15 18.25 |
| 8M186* | 1000 | $41 / 2^{\prime \prime} \times 43 / 3^{\prime \prime} \times 53 / 3^{\prime \prime}$ | $3+\frac{5}{6} \times 41 / 2$ | $201 / 2$ | 18.25 35.50 |

PRIMARY 235 VOLTS - SECONDARY 117 VOLTS
*Primary has 3 taps at 200, 220 and 240 volts; Secondary 117 volts.

## GENERAL TRANSFORMER CORPORATION

MAKERS OF BETTER ELECTRICAL PRODUCTS FOR 20 YEARS

## ELECTROX "Master" BATTERY ELIMINATOR

Today's Outstanding D.C. Power Supply Unit, the ELECTROX, Model AR-2, provides the ultimate in humless Direct Current for all-around servicing and demonstrating automabile radios and for all similar applications.
It will operate practically any type or size of automobile radio-whether push button or manually tuned.
It delivers 6 volts of Direct Current free of hum; (less than $3 \%$ ripple).
Its D.C. output is adjustable-smooth, humless Direct Current, at the correct voltage is delivered to the individual radio being operated.
Turning the rheostat adiusts the output to 6 volts for any laad current between 3 and 15 amperes. This is indicated by the easily read voltmeter located on top of the case. Made by instrument craftsmen to give dependable, troublefree service.


Model AR-2

Overall Dimensions— $111 / 2^{\prime \prime}$ long, $71 / 4^{\prime \prime}$ wide, $65 / 8^{\prime \prime}$ high.
Weight-20 pounds.
A.C. Input- 115 volts, 1 phase, 60 cycle.
D.C. Output-6 volts, at from 3 to 10 amperes, continuous rating; and from 10 to 15 omperes, intermittent; selectively determined. Negligible hum level, (less than $3 \%$ ripple).
Voltmeter-accurote; mounted on top of case for visibility.

Cartridge-type Fuse-easily accessible from outside of case. Taggle Switch—for A.C. current supply.
Long-life Selenium Rectifier; Condenser; Transformer; Filter Choke.
6 ft . A.C. cord and plug. Wing nut binding posts for connecting DC. leads. Rubber feet. Steel case-attractive, metallic-brown finish.


## ELECTROX "Standard" BATTERY ELIMINATOR

ELECTROX, Model AR-1, is a practical, low-cost D.C. power-supply unit for servicing and demonstrating automobile radios. It is an exceptionally high-grade battery eliminator-compact, rugged, dependable. It delivers Direct Current with very low ripple component, but does not have the adjustable output features embodied in the ELECTROX "Master", Model AR-2.

Overall dimensions-111/2" long by $71 / 4^{\prime \prime}$ wide by $65 / 8^{\prime \prime}$ high. Weight-20 pounds.
A.C. input- 115 volts, 1 phase, 60 cycle.
D.C. output- 6 volts at appraximately 15 amps, low ripple component.
Equipped with six foot A.C. cord and plug. Heavy binding posts are provided for connecting D.C. leads.

Toggle switch for "ON and OFF."
Cartridge type fuse-easily accessible from outside of case. Equipment-Condenser, transformer, filter choke, Selenium rectifiers, rubber feet.
Finish-Attractive, well ventilated steel case.

## ELECTROX BATTERY BOOSTERS

Designed for safely recharging single starage batteries-small, compact, light in weight but strong. Can be set on floar, shelf or counter or hung on wall. Under ordinary conditions, will recharge battery overnight.
Rectifiers are rugged, long-life Selenium. Ammeter is located in front of case and is easily read. A circuit breaker is supplied to protect against shorts and overloads, having a reset button conveniently located in the front of the case. Complete with 6 ft . A.C. cord and plug, and 5 ft . cord with battery clips for easy connection to botteries. Size: $61 /^{\prime \prime} \times 6^{\prime \prime} \times 7 \frac{1}{4^{\prime \prime}}$.
MODEL BX ELECTROX BATTERY BOOSTER, copacity 6 amperes.
MODEL CX ELECTROX BATTERY BOOSTER, capacity 10 amperes.
MODEL CX has $2 / 3$ more charging capacity than the Model $B X$ at less than $1 / 3$ higher cost.

RECTIFIER DIVISION


Model BX the schauer machine co.

## The oldest name in Rotary Power Supplies for Mobile Radio

## THE ORIGINAL CARTER GENEMOTOR FOR POLICE-TAXICAB MARINE AND SMALL AIRCRAFT MOBILE COMMUNICATIONS

## OUTSTANDING FEATURES

## SMALL SIZE --

Simplicity of design permits minimum mounting space. RELIABILITY -

Designed to deliver over 100,000 ten second transmissions without servicing for most mobile applications.
INSTANT POWER -
Full output in less than $3 / 10$ seconds. No loss of messages due to Dynamotor slugishness.
ARMATURE -
Finest design incorporates transformer laminations, triple insulated wire. Static and dynamically balanced. DiamondFinished commutators.

## VERSATILE -

Carter Genemotor available in any input voltage from 5.5 to 115 volt DC.

## SPECIFICATIONS

$11 / 2^{\prime \prime}$ Frame Genemotor-

| $\begin{aligned} & \text { Code } \\ & \text { No. } \end{aligned}$ | $\underset{\text { Volts }}{D C}$ | $\begin{gathered} \text { Input } \\ \text { Amps } \end{gathered}$ | $\begin{gathered} D C \\ V o l t s \end{gathered}$ | ${ }^{\text {OHput }}$ | Duty | $\begin{aligned} & \text { List } \\ & \text { Price } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 210A | 6 | 6 | 200 | 100 | Con. | \$44.00 |
| 251 A | 6 | 7.9 | 250 | 100 | Con. | \$47.00 |
| 351 | 6 | 10.9 | 350 | 0 |  | \$49.00 |

2" Frame Genemotor-
$61 / 8^{\prime \prime}$ long, $41 / 8^{\prime \prime}$ wide, $31 / 2^{\prime \prime}$ high, weight 8 lbs.

| 355 V | 5.5 | 18.0 | 350 | 150 | Con. | $\$ 54.50$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 355 A | 6.0 | 16.4 | 350 | 150 | Con. | $\$ 52.00$ |
| 415 V | 5.5 | 20.0 | 400 | 150 | Con. | $\$ 56.50$ |
| 415 A | 6.0 | 18.2 | 400 | 150 | Con. | $\$ 54.00$ |

3" Frame Genemotor (illustrated) -
$71 / 8^{\prime \prime}$ long, $41 / 8^{\prime \prime}$ wide, $31 / 2^{\prime \prime}$ high, weight 10 lbs .

| 420A | 6.0 | 23.4 | 400 | 200 | Con. | $\$ 57.50$ |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- |
| 420 V | 5.5 | 25 | 400 | 200 | Con. | $\$ 60.00$ |
| 425BS | 12.0 | 12.8 | 400 | 225 | Int. | $\$ 59.50$ |
| 450AS | 6.0 | 28 | 400 | 250 | Int. | $\$ 58.00$ |
| 4037AS | 6.0 | 41 | 400 | 375 | Int. | $\$ 68.00$ |
| 4228VS | 5.5 | 35 | 420 | 280 | Int. | $\$ 64.50$ |
| 520AS | 6.0 | 28 | 500 | 200 | Int. | $\$ 59.00$ |
| 520VS | 5.5 | 31 | 500 | 200 | Int. | $\$ 61.50$ |
| 5925AS | 6.0 | 42 | 590 | 250 | Int. | $\$ 70.00$ |
| 617V | 5.5 | 30 | 600 | 170 | Int. | $\$ 60.00$ |
| 620AS | 6.0 | 29.5 | 600 | 200 | Int. | $\$ 64.50$ |
| 624VS | 5.5 | 46 | 600 | 240 | Int. | $\$ 67.80$ |
| 650AS | 6.0 | 39.0 | 600 | 250 | Int. | $\$ 67.80$ |



3" Frame Genemotor-71/8" Long, 41/8" Wide, $31 / 2^{\prime \prime}$ High, Weight 10 lbs.

The Carter Original Genemotor is the result of over 15 years continuous improvement of design, performance and dependability. Unequalled power for most Police, Marine, Taxicab, Forestry, and small aircraft two-way mobile radio equipment.

The $11 / 2^{\prime \prime}$ Frame Genenotors are the lowest cost Dynamotors available for mobile radio receiver operation. Equipped with oil-less bronze sleeve bearings, lubricated for the life of the unit. The 2" Frame Genemotors are also sleeve bearing equipped and are designed for mobile Public Address amplifier operation. The 3" Frame Cenemotors fulfill the majority of mobile transmitter requirements. Ball bearing equipped, this model furnishes dependable power to more mobile equipment than any other Dynamotor Power Supply.

Average efficiency $60 \%$, voltage regulation load to no load $25 \%$, ripple $1 \%$ unfiltered.

## FILTERS-STARTING RELAYS

## FILTERS-

Any of the above Carter Genemotors can be furnished with complete filter mounted in metal hox mounted below unit. Add " X " to plete filter mounted in metal hox mounted below unit. Add ${ }^{\prime \prime}$ to end of code number $\$$ and following prices. ${ }^{\prime \prime} / 2^{\prime \prime}$ and $2^{\prime \prime}$ Frame $\$ 25.00$ list.
STARTING RELAYS-
Heavy Dury solenoid contactor starting relays are available for 5.5 , 6, 12, 24, 28, 32 and 115 yolt DC input. Add " $R$ '" to end of code number and $\$ 8.00$ to list price (Relay draws 1.3 amps at 6 volts)

DUTY RATINGS--
Intermittent duty shall be considered 10 seconds on 20 seconds off. Continuous duty is considered 24 hours per day.

## INPUT VOLTAGES

Any Carter Genemotor can be supplied for special input voltages other than 6 volts. For $5.5,12,24,28,32$ or 64 volt input add $\$ 2.50$ to list. For 115 volt DC input add $\$ 3.50$ to list.
MARINE IMPREGNATION
Special Marine Impregnation available on all Genemotor models upon request, add $\$ 2.00$ to list price.

See replacement parts reference chart page for other special models, parts and prices.

The oldest name in Rotary Power Supplies for Mobile Radio

## THE CARTER MAGMOTOR FOR POLICE-TAXICAB-MARINE AND AIRCRAFT RADIO RECEIVERS-GEOPHYSICAL AND RESEARCH ELECTRONIC EQUIPMENT <br> OUTSTANDING FEATURES



Curter Mignotor-55/8" Long, 3-11/16" Wide, $21 / 2^{\prime \prime}$ High, Weight $43 / 4$ lbs

## ALNICO FIELDS

Eliminates field coils and increases efficiency

## SMALL SIZE -

Compact design permits minimum mounting space.
MOUNTING
Rigid mounting furnished. Rubber shock mounting as illustrated available upon request at no extra cost.

## FLEXIBILITY

Extended shafts available for small power take off. Also available as an AC or DC external driven Generator.

Carter Magmotor is the ideal Rotary Power Supply for Police and Taxicab receivers. PM fields reduce size and increase efficiency. Normal brush life of 2000 to 3000 continuous running hours on models up to 25 watts output. Interintent duty models are designed for transmitter operation as well as geophysical and research applications. Ball bearing equipped. Average efficiency of receiver types $50 \%$, transmister types to $65 \%$. Output voltage regulation $20 \%$. AC ripple $1 \%$ unfiltered. The Magmotor is also available on special order in extended shaft models as AC or DC generators for 30 watt continuous duty and 50 wait intermittent duty. Special Geophysical models possess high humidity impregnation at no extra cost.

## CARTER MAGMOTOR

$55 / 8^{\prime \prime}$ long, $3-11 / 16^{\prime \prime}$ wide, $21 / 2^{\prime \prime}$ high, weight $43 / 4 \mathrm{lbs}$


## AC AND DC GENERATORS

The Magnotor is available on special order for AC output up to 220 volts at 120 cycles. DC output up to 400 volts 30 watts continuous, 50 intermittent, depending upon armature speed.
EXTENDED SHAFTS -
Available on all Magmotor models add " S ' to end of code number and $\$ 5.00$ to list
FILTERS -
Available on all Magmotor models, Add ' X ' to code number and $\$ 24.00$ to list.
STARTING RELAYS
Low power models seldom require starting relays because of low drain consumed. Heavy Duty solenoid contactor relays recommended on high output models. Add " R " to code number and $\$ 8.00$ to list for $6,12,24,28,32$ or 115 volt DC relay. ( 6 volt relay draws 1.3 amps .)

## INPUT VOLTAGES -

All Magmotors can be supplied for special input voltages other than 6 volts. For 5.5, 12, 24, 28, 32, 64 volt input add $\$ 2.50$ to list. For 115 volt DC input, add $\$ 3.50$ to list.
DUTY RATINGS
Intermittent duty shall be considered 10 seconds on 20 seconds off. Continuous duty, 24 hours per day.

## MARINE IMPREGNATION

Available on all Magmotors upon request, add $\$ 2.00$ to list. Furnished on Geophysical models as standard feature.

## MOUNTINGS -

Rigid type mountings furnished as standard base Rubber shock mounts available upon request at no extra cost.


## The oldest name in Rotary $P_{\text {over }}$ Supplies for Mobile Radio

## THE CARTER SUPER DYNAMOTOR FOR AIRCRAFT, MARINE, POLICE AND RAILROAD COMMUNICATIONS

## OUTSTANDING FEATURES

## ARMATURE-

Triple insulated windings. Additional silk insulation on models over 600 volts. Transformer grade lamination. Static \& Dynamically balanced.
ONE PIECE FRAME -
Exclusive cast frame simplifies construction and reduces losses.

## COMMUTATORS -

Hard drawn silver alloy copper segments, diamond finshed.

## BRUSHES -

Engineered for long brush and commutator life, beryllium springs.


The Super Dynamotor is designed for larger mobile transmitters requiring 150 to 250 watts of Denamotor power. Specified by leading Airlines, Marine ard Police mobile communication manufacturers. Constructed of finest materials and designed to withstand heavy overloads. Triple insulated and baked to assure dependable operation at high voltages. Triple or Quadruple insulated silk covered windings are used above 600 volts output to afford maximum insulation.
Average efficiency, $65 \%$, voltage regulation $25 \%$ or less, $1 \% \mathrm{AC}$ ripple unfiltered. Cast aluminum mounting base less grommets supplied.

## SUPER DYNAMOTOR

$81 / 4^{\prime \prime}$ long, $41 / 2^{\prime \prime}$ wide, $43 / 4^{\prime \prime}$ high, weight $113 / 4$ lbs.


## HIGH VOLTAGE SUPER DYNAMOTOR

$101 / 4^{\prime \prime}$ long, $41 / 2^{\prime \prime}$ wide, $43 / 4^{\prime \prime}$ high, weight 18 lbs .

| CS7550 | 32 | 18 | 750 | 500 | Int. | $\$ 118.00$ |
| :--- | ---: | ---: | ---: | ---: | ---: | :--- |
| DS5550 | 115 | 6 | 750 | 500 | Int. | $\$ 119.00$ |
| BS 1150 | 12 | 19 | 1000 | 150 | Int. | $\$ 100.00$ |

[^3]drain permits) and 12, 24, 28, 32, 64 volt. Add $\$ 2.50$ to list. Add $\$ 3.50$ to list for 115 volt DC input.

## DUTY RATINGS -

Intermittent duty shall be considered 10 seconds on, 20 seconds off. Continuous duty, 24 hours per day. MARINE IMPREGNATION -

Available on all Super Dynamotors upon request, add $\$ 2.00$ to list. Furnished on Marine models as standard feature. The oldest name in Rotary $P_{\text {over }}$ Supp ties for Mobile Radio

CARTER SUPER CONVERTER-Changes DC to AC for
Amplifiers -Radios - High Power Factor equipment


Carter Super Converter, Less Filter, 81/4" Long, $41 / 2^{\prime \prime}$ Wide, $5^{\prime \prime}$ High, Weight 13 lbs.
Wherever DC to AC Conversion is necessary, the Carter Super Converter provides an efficient and reliable source of AC power. Standard models are designed for high power factor, non-inductive AC loads such as amplifiers, radio receivers, (requires filtered converter), etc. Ball hearing equipped, 3600 RPM. CAUTION: Standard Super Converters will not satisfactorily operate inductive loads such as AC motors, low power factor transformers, etc.
Manually operated frequency controlled Converters available on special order. Maintain 60 cycle output with $\mathrm{a}+$ or - $10 \%$ input voltage fluctuation.
Special custom-matched Converters are also available for Wire and Tape Recorders, Sound Projectors, 7" Television Receivers, etc. See Carter Selector Chart on next page.
Overall efficiency $60 \%$ AC voltage regulation $15 \%$.

## HEAVY DUTY SUPER CONVERTER

101/4" long, $41 / 2^{\prime \prime}$ wide, $5^{\prime \prime}$ high, weight 19 lbs .


## OUTSTANDING FEATURES

SMALL SIZE
Smallest Rotary Converter. Lightweight.
CARRYING HANDLE
Easier to carry, no more "juggling" with a hot unit. OUTPUT RECEPTACLE

Convenient plug in AC outlet.

## ARMATURE

Double wound, insulated ungrounded winding. Built-in cooling fan.
BALL BEARINGS
Sealed ball bearings require no lubrication or attention for life of unit.

## SPECIFICATIONS

Carter Super Converter, 40 to 150 watt models $81 / 4^{\prime \prime}$ long, $41 / 2^{\prime \prime}$ wide, $5^{\prime \prime}$ high, weight 13 lbs.
High power factor, 85 to $100 \%$. Less filter.


FILTERS -Available on all Super Converters. Eliminates Converter noise on most frequencies from 560 KC to 54 MC . Filter mounted in noise on most frequencies from Converter. Add " X " to Code Number cast aluminum thous $\$ 25.00$ to list.
FREQUENCY CONTROL-Manually operated frequency control available on all models. Complete with vibrating reed meter, and rheostat control in aluminum housing. Add $\$ 60.00$ to list.
VOLTAGE-FREQUENCY- 220 volt output or 50 cycle available on special order. Add $\$ 5.00$ to list for each.

See Carter Selector Chart for Wire and Tape recorder, $7^{\prime \prime}$ Television receivers, etc, custom-matched Converters.

## The oldest name in Rotary Power Supplies for Mobile Radio

Whenever DC to AC Rotary Converters are used to power wire or tape recorders and other similar recording equipment, output frequency must be perfectly matched to assure proper playback performance. All of the equipment listed has been laboratory-tested and Carter Converters custom-designed for each model. Use this Chart to select the Converter designed for each model. l'rices of Selector Chart Converters are the same as standard models of similar code number.
Code letter "W" indicates a recorder type Converter.
Average efficiency $60 \%$. Voltage regulation $15 \% .70 \%$ Power Factor on wire and tape recorder models. Converters require NO FILTER, except when recorders have radio receivers

## FOR WIRE AND TAPE RECORDERS


$\xrightarrow{\mathrm{RCA}}$


16 MM SOUND PROJECTORS

| Amparo Premier 20 |  |  |
| :--- | :---: | :---: |
| Bell \& Howell \#179 |  |  |
| DeVry Super \#16 | Di 015C | $81 / 4^{\prime \prime} \times 41 / 2^{\prime \prime} \times 5 "$ |
| Victor Liteweight | Weight 13 lbs. |  |
| Victor Triumph 60 | 865.00 |  |

PORTABLE TRANSCRIPTION PLAYERS


## FOR 7" TELEVISION RECEIVERS

Popular 7" TV Receivers can now be operated from 6-12 or 115 Volt DC input with the new Carter TV Converter, designed especially for TV operation. Exclusive "Picture Control" assures steady "wave-free" reception from 110 to 135 volts DC input on 115 volt models. Clean Converter AC wave form requires NO filtering. Equal to AC reception.

## SPECIFICATIONS

TV Recenter
Slake \& Model

| A1010CT | B1010 CT | D1010 CT |
| :---: | :---: | :---: |
| $\$ 72.00$ | $\$ 72.00$ | $\$ 69.50$ |



Curter Super Converter Model D1010CT with Picture Control, $8 \frac{1}{4} 4^{\prime \prime}$ Long, 43/2" Wide, 5" High. Weight 15 lbs.


## The oldest name in Rotary Power Supplies for Mobile Radio

## REPLACEMENT PARTS REFERENCE CHART

Use this handy chart for ordering the correct CARTER Replacement Dynamotor or Replacement parts. All parts guaranteed to conform to original manufacturer's specifications.

| Mfg. Model No. | Frequency | Carter Model No. | $\underset{\text { Price }}{\text { List }}$ | $\begin{gathered} \text { Carter } \\ \text { Armature } \\ \text { No. } \end{gathered}$ | $\begin{gathered} \text { Armature } \\ \text { List } \\ \text { Price } \\ \hline \end{gathered}$ |  | Output Brushes G List Per Set | Ball Bearings E List Per Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doolittle <br> PFY-2. <br> PFY-2A <br> PFY-3 <br> PFY-3A <br> PFY-12 | $\begin{aligned} & 30-40 \\ & \mathrm{MC}-\mathrm{FM} \\ & \\ & 152-162 \\ & \mathrm{MC}-\mathrm{FM} \end{aligned}$ | 4726 VS 4726 VS | $\begin{aligned} & \$ 62.50 \\ & \$ 62.50 \end{aligned}$ | $233-2$ $233-2$ | $\begin{aligned} & \$ 30.00 \\ & \$ 30.00 \end{aligned}$ | $\begin{aligned} & \text { No. } 7 \\ & \$ 1.20 \\ & \text { No. } 7 \\ & \$ 1.20 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { No. }{ }^{2} \\ & 80 c^{2} \\ & \text { No. }{ }^{2}{ }^{2} \mathrm{c} \end{aligned}$ | $\begin{aligned} & \text { 37KVL } \\ & \$ 2.50 \end{aligned}$ |
| $\begin{gathered} \text { Federal } \\ \text { FT-125-B- } \\ 25 \mathrm{AZ} \\ \mathrm{FT}-110- \\ 25 \mathrm{AZ} \\ \text { FT-110- } \\ 50 \mathrm{AZ} \\ \hline \end{gathered}$ | $\begin{aligned} & 152-162 \\ & \mathrm{MC}-\mathrm{FM} \\ & 30-44 \\ & \mathrm{MC}-\mathrm{FM} \\ & 30-44 \\ & \mathrm{MC}-\mathrm{FM} \end{aligned}$ | 4037 AS 5915 AS 5925 AS | $\$ 68.00$ $\$ 60.00$ $\$ 70.00$ | $\begin{aligned} & 179-2 \\ & 252-2 \\ & 261-2 \end{aligned}$ | $\begin{aligned} & \$ 30.00 \\ & \$ 30.00 \\ & \$ 30.00 \end{aligned}$ | $\begin{aligned} & \text { No. } 7 \\ & \text { S1. } 20 \\ & \text { No. } 7 \\ & \$ 1.20 \\ & \text { No. } 7 \\ & \$ 1.20 \end{aligned}$ | $\begin{gathered} \text { No. }{ }^{2} \\ 80 c^{2} \\ \text { No. } 2 \\ 80 c^{2} \\ \text { No. } 2 \\ 80 \mathrm{c} \end{gathered}$ | $\begin{aligned} & 37 \mathrm{KVL} \\ & \$ 2.50 \end{aligned}$ |
| $\substack{\text { General } \\ \text { Electric } \\ \mathrm{MC} 202}$ $\mathrm{MC}-1$ $\mathrm{MC}-2$ $\mathrm{MC}-3$ | $\begin{aligned} & 152-162 \\ & \mathrm{MC}-\mathrm{FM} \\ & \\ & 30-44 \\ & \mathrm{MC}-\mathrm{FM} \\ & 30-44 \\ & \mathrm{MC}-\mathrm{FM} \end{aligned}$ | MVS415 <br> Transmitter MA2S 1 Receiver 617 V 624 VS | $\begin{aligned} & \$ 57.50 \\ & \$ 50.50 \\ & \$ 60.00 \\ & \$ 67.80 \end{aligned}$ | $\begin{aligned} & 360-4 \\ & 300-6 \\ & 279-2 \\ & 309-2 \end{aligned}$ | $\begin{aligned} & \$ 27.25 \\ & \$ 26.00 \\ & \$ 30.00 \\ & \$ 30.00 \end{aligned}$ | $\begin{gathered} \text { No. } 18 \\ \$ 1.20 \\ \text { No. } 23 \\ \$ 1.20 \\ \text { No. } 7 \\ \$ 1.20 \\ \text { No. } 7 \\ \$ 1.20 \\ \hline \end{gathered}$ | No. 80 c ${ }^{9}$ No. 9 No. 2 No. 2 80c | $\begin{gathered} 37 \mathrm{KVI} \\ \$ 2.50 \end{gathered}$ |
| Harvey 505 506 542 | $\begin{aligned} & 30-44 \\ & \mathrm{MC}-\mathrm{FM} \\ & 152-162 \\ & \mathrm{MC}-\mathrm{FM} \end{aligned}$ | 620 VS 620 VS | $\$ 67.00$ $\$ 67.00$ | $307-2$ $307-2$ | $\begin{aligned} & \$ 30.00 \\ & \$ 30.00 \end{aligned}$ | $\begin{aligned} & \text { No. } 7 \\ & \$ 1.20 \\ & \text { No. } 7 \\ & \$ 1.20 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { No. }{ }^{2} \\ 80 c^{2} \\ \text { No. }{ }^{2} 80 \mathrm{c} \end{gathered}$ | 37KVL $\$ 2.50$ |
| Kagr <br> FM50XFM100XPTL-46XFM-175X | $\begin{aligned} & 30-44 \\ & \mathrm{MC}-\mathrm{FM} \\ & 1600-6000 \\ & \mathrm{KC} \\ & 152-162 \\ & \mathrm{MC}-\mathrm{FM} \\ & \hline \end{aligned}$ | 6175 VS early model s30VS late model VSF820 VSF820 4232VS |  | 278-2 <br> 360-2 <br> 360-2 <br> 231-2 | $\begin{aligned} & \$ 30.00 \\ & \$ 40.00 \\ & \$ 40.00 \\ & \$ 30.00 \end{aligned}$ | No. 7 $\$ 1.20$ No. 30 $\$ 1.20$ No. 30 $\$ 1.20$ No. 7 $\$ 1.20$ | $\begin{gathered} \text { No. }{ }^{2} \\ 80 \mathrm{c} \\ \\ \text { No. } 14 \\ 80 c^{2} \\ \text { No. } 14 \\ 80 \mathrm{c} \\ \text { No. } \\ 80 \mathrm{c} \\ \hline \end{gathered}$ | $\begin{gathered} 37 \mathrm{KVL} \\ \$ 2.50 \\ \\ 38 \mathrm{KVL} \\ \$ 2.50 \\ \\ 37 \mathrm{KVL} \\ \$ 2.50 \\ \hline \end{gathered}$ |
| Mobile Communications (TaxiTalkie) MFM-25. 150 <br> MFM-25150B | $\begin{aligned} & 150-170 \\ & \mathrm{MC}-\mathrm{FM} \\ & 150-170 \\ & \mathrm{MC}-\mathrm{FM} \end{aligned}$ | 450AS <br> 520AS | $\begin{aligned} & \$ 58.00 \\ & \$ 59.00 \end{aligned}$ | $\begin{aligned} & 175-2 \\ & 208-2 \end{aligned}$ | $\begin{aligned} & \$ 30.00 \\ & \$ 30.00 \end{aligned}$ | $\begin{aligned} & \text { No. } 7 \\ & \$ 1.20 \\ & \text { No. } 7 \\ & \$ 1.20 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { No. }{ }^{2}{ }^{2} c^{2} \\ \text { No. }{ }^{2} \\ 80{ }^{2} \end{gathered}$ | $\begin{gathered} 37 \mathrm{KVL} \\ \$ 2.50 \end{gathered}$ |
| Matarola P8050 P8051 P8051 P8317 | $\begin{aligned} & 30-44 \\ & \text { MC-FM } \\ & 30-44 \\ & \text { MC-FM } \\ & 30-44 \\ & \text { MC-FM } \\ & 152-162 \\ & \text { MC-FM } \end{aligned}$ | $\begin{gathered} 617 \mathrm{~V} \\ 624 \mathrm{VS} \\ \mathrm{VSF} 630 \\ 4228 \mathrm{VS} \end{gathered}$ | $\begin{aligned} & \$ 60.00 \\ & \$ 67.80 \\ & \$ 86.50 \\ & \$ 64.50 \end{aligned}$ | $\begin{aligned} & 279-2 \\ & 309-2 \\ & 276-2 \\ & 207-2 \end{aligned}$ | $\begin{aligned} & \$ 30.00 \\ & \$ 30.00 \\ & \$ 40.00 \\ & \$ 30.00 \end{aligned}$ | $\begin{gathered} \text { No. } 7 \\ \$ 1.20 \\ \text { No. } 7 \\ \text { S1.20 } \\ \text { No. } 30 \\ \$ 1.20 \\ \text { No. } 7 \\ \$ 1.20 \end{gathered}$ | No. 2 No. 2 No. 14 No. 2 80 c | $\begin{gathered} 37 \mathrm{KVLL} \\ \$ 2.50 \\ \\ 38 \mathrm{KVL} \\ \$ 3.50 \\ 37 \mathrm{KVL} \\ \$ 2.50 \end{gathered}$ |
| RCA M1-7771A M1-31514 M1-7772A | $\begin{aligned} & 30-44 \\ & \text { MC-FM } \\ & 152-162 \\ & \text { MC-FM } \\ & 30-44 \\ & \text { MC-FM } \end{aligned}$ | 6175 VS 3732 VS VSF627 | $\begin{aligned} & \$ 62.00 \\ & \$ 66.00 \\ & \$ 84.00 \end{aligned}$ | $\begin{aligned} & 278-2 \\ & 176-2 \\ & 274-2 \end{aligned}$ | $\begin{aligned} & \$ 30.00 \\ & \$ 30.00 \\ & \$ 40.00 \end{aligned}$ | $\begin{aligned} & \text { No. } 7 \\ & \$ 1.20 \\ & \text { No. } 7 \\ & \$ 1.20 \\ & \text { No. } 30 \\ & \$ 1.20 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { No. }{ }^{2} \\ 80 \mathrm{c} \\ \text { No. } 2 \\ 80 \mathrm{c} \\ \text { No. } 14 \\ 80 \mathrm{c} \end{gathered}$ | $\begin{gathered} 37 \mathrm{KVL} \\ \$ 2.50 \\ \\ 38 \mathrm{KVL} \\ \$ 2.50 \end{gathered}$ |
| Radio Specialties Mfg. Co. 1096-1-1 |  | 520AS | \$59.00 | 208-2 | \$30.00 | $\begin{aligned} & \text { No. } 7 \\ & \$ 1.20 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { No. }{ }^{2} \\ 80{ }^{2} \end{gathered}$ | 37KVL <br> $\$ 2.50$ |
| Witcox Electric 358A | $\begin{aligned} & 152-162 \\ & \mathrm{MC}-\mathrm{FM} \\ & \hline \end{aligned}$ | 4228 VS | \$64.50 | $207-2$ | \$30.00 | $\begin{aligned} & \text { No. } 7 \\ & \$ 1.20 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { No. }{ }^{2} \\ 80 \mathrm{c} \end{gathered}$ | $\begin{gathered} 37 \mathrm{KVL} \\ \$ 2.50 \\ \hline \end{gathered}$ |

Above Prices Subject to Distributor's Discount.

# RADIART VIBRATORS RADIART AERIALS <br> (B) 

LIST PRICES
CURRENT RADIART VIBRATORS

Showing vibrator numbers formerly specified for these applications

 Distributors who carry a complete line.

5400 SERIES vibrator types are Standard Automotive and House hold Synchronuus units. They ute stocked by all RADIDRT J.Lpht face numbers are discontinued types replared by biriburs who carty a complete line.


| Type No. | Price | Type No. | Price | Type No. Price | Type No. Price | Type No. Price | Type No. Price | Type No. Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 5300 \\ & 5341 \mathrm{M} \end{aligned}$ | \$4.45 | 5314 5320 P | $\$ 4.45$ 4.45 | $\underset{5334}{5335} \quad \$ 4.45$ | $5400 \quad 3850,4501^{\$ 7.00}$ | 5413 \$ $\quad \$ 7.00$ | $\underset{4504,4611^{58.30}}{ }$ | 5443 3789 $\quad \$ 7.00$ |
| $\begin{gathered} 5300-32 \\ 3395 \end{gathered}$ | 6.50 | 3417 5321 | 4.45 | $\underset{5310 \mathrm{Mr}}{5342 \mathrm{M}}$ | $\begin{array}{ll}5404 & 7.00 \\ 5406 & 7.00\end{array}$ | $\begin{array}{rrr}5413-4 & 7.00 \\ 5415 & \end{array}$ | $\begin{array}{ll}5431 & 7.75 \\ 5434 & 7.60\end{array}$ | $\underset{4 \pm 04}{5443-32} \quad 7.75$ |
| $\begin{aligned} & 5301 \\ & 5327 \mathrm{P} \end{aligned}$ | 4.45 | $\begin{aligned} & 5323 \mathrm{P} \\ & 3320,5322 \mathrm{P} \end{aligned}$ | 3.75 | $\begin{array}{rr} 5343 \mathrm{M} & 5.75 \\ 3815 & \end{array}$ | $\begin{array}{ll}340655 I I . ~ & 4414.00 \\ 5407 & 7.00\end{array}$ | $541683,4502^{8.30}$ | $\begin{array}{ll}5434 & 7.00 \\ 5435 & 7.00 \\ 4318 & \end{array}$ | $\begin{array}{ll}5454 & 7.00 \\ 5463 & 8.30\end{array}$ |
| $\begin{gathered} 5303 \\ 5339 \end{gathered}$ $5304$ | 4.45 5.75 | 5326 P $53251^{3}$ | 3.75 | $\begin{array}{r} 5363 \\ 2819,2867, \\ 3.75 \\ 3313,3375,3442 \end{array}$ | $\begin{array}{ll}5407 & 7.00 \\ 5408 & 7.00 \\ 5409 & 7.00\end{array}$ | $\begin{array}{ll}5421 & 7.00 \\ 5422 & 7.75 \\ 4608 & \end{array}$ | $\begin{array}{rr} 5435.4 & 7.00 \\ 5427 & \end{array}$ | 63 <br> 3308,3315 , <br> 3317.3848. <br> 4415,4500 |
| $\begin{gathered} 5304 \\ 3780 \end{gathered}$ | 5.75 4.45 | $\begin{gathered} 5328 \mathrm{P}-32 \\ 4319 \end{gathered}$ | 8.30 |  | $\begin{array}{ll}5409 \\ 5409-4 & 7.00 \\ 5410 & 7.00\end{array}$ | $\begin{gathered} 5425 \\ 3461,4613, \end{gathered}$ | $\begin{array}{cc} 5436 & 7.00 \\ 5133 & \end{array}$ | $\begin{array}{cc}4415,4500 \\ 5464 \\ 3319 & 8.30\end{array}$ |
| 5308 5308 | 4.45 5.75 | 5331 5333 | 4.45 4.45 | 3356, 4320.5312 | $\begin{array}{ll}5411 & 7.00\end{array}$ | 4614 | $5437 \quad 7.00$ | 5468 9.70 |
| 5309 | 4.45 | 5333 | 4.45 | $\begin{aligned} & 5367.32 \\ & 3503,4314 \end{aligned}$ | 5420P. 5428 | 54267.00 | 5438 7.00 <br> 5440 7.75 <br> 3883  | 54698.90 |

5500 SERIES vilrator types are Special Application NonSyncironous units. These are slocked by RADIARI Distributors in accordance with local requirements. They are available for immediate shipment from the Factory. Order through your for immediate sh

5600 SERIES vibrator types are Special Application Synchronous units. These are stocked by RADIART Distributors in accordance with local requirements They are available for immediate shipment from the Factory. Order through your local distributor.


## CURRENT RADIART VIPOWERS

RADIART Engineering "KNOW HOW" and RADIART a hum level of 50 mv or less. Within the range of 160 KC to Dependability in an unique line of vibrator-power units. 20 MC . R.F. hash is held below 50 microvolts, even less at Completely Filtered-R.F. and A.F. Output lines filtered to

| VIPOWER MODEL | INPUT VOLTS D.C. (Nominal) | OUTPUT <br> VOLTS D.C. <br> (Nominal) | OUTPUT MILLIAMPS. | TYPE |
| :---: | :---: | :---: | :---: | :---: |
| 451 | $\begin{aligned} & 6.0 \text { or } \\ & 12.0 \end{aligned}$ | $\begin{aligned} & 250 \text { or } \\ & 180 \end{aligned}$ | $\begin{aligned} & 60 \\ & 40 \end{aligned}$ | Synchronous |
| 452 | 6.0 | 300* | 100 | Synchronous |
| 452-12 | 12.0 | $300 *$ | 100 | Synchronous |
| 453 | 6.0 | 300* | 100 | Non-Synchronous |
| 453-12 | 12.0 | 300* | 100 | Non-Synchronous |
| 454 | 6.0 | 300 | 200 | Non-Synchronous |
| 454-12 | 12.0 | 300 | 200 | Non-Synchronous |
| 455 | 6.0 | 400 | 150 | Non-Synchronous |
| 455-12 | 12.0 | 400 | 150 | Non-Synchronous |
| 456 | 6.0 or 110 V.A.C. 60 Cycle | 300* | 100 | Non-Synchronous |
| 457 | 6.0 | 150 | 40 | Synchronous |
| 4201-B2 | 6.0 | 250 | 50 | Non-Synchronous |

## RADIART VIBRATORS

## RADIART AERIALS

VIBRATOR BASE DIAGRAM CROSS INDEX
Symbols Used in Vibrator Base Diagrams A - A hot line into vibrator. $\mathrm{B}_{\mathrm{B}}$ - Br r -pass for drivint point

- External coil lead in shunt ribrator
$\mathbf{P}_{1}$-Irimary eontaet, usualls, but not necessarily con-
nected to the magnet coil in shunt ribrators.
$\mathrm{P}_{2}$ - Primary contact, may bo the magnet coil connection
$\mathrm{PP}_{2}$-Dual primary contact, closed when $\mathrm{P}_{2}$ is closed.
R -Vibrating reed in single-reed vibrators
RP-Primary ribrating reed in split-reed ribrators.
RS-Sccondary vibrating reed in spit-reed vibrators.
St - Secondary contact, closed when $P_{1}$ is elosed
$\mathrm{S}_{2}$-Sccondary contact. closed when $\mathrm{P}_{2}$ is closed.
$\dagger$ For further information as to ldentifying Characteristics, see information given on
$\dagger$ fach Vibrator type in Radiart Replacement Guide.


E


(R) $P_{F-1}$


C-1

$\mathrm{H}-1$




V-1.


AM


W-I

$\mathrm{Y}-1$


AN

OA-1




## GOTHARD DYNAMOTORS

The GOTHARD Model " HP '. 26 " is especially designed and built for Mobile Transmitter applications, intermittent duty. Length $71 / 4^{\prime \prime}$, Diam. $3^{1 / 2 \prime \prime}$. Height $4^{\prime \prime}$, Weight $81 / 4 \mathrm{lls}$,

| INPU' |  | outrut |  |  | Approx. Eflic. | App. Reg. | List |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Volts | Amps. | Volts | MA | Watts |  |  | l'rice |
| 5.6 | 24 | 400 | 200 | 80 | 60\% | 17\% | \$77.00 |
| 5.6 | 26 | 600 | 150 | 90 | 61\% | 18\% | 79.50 |
| 5.6 | 29 | 400 | 250 | 100 | 61\% | 19\% | 79.50 |
| 5.6 | 31 | 620 | 170 | 105 | 61\% | 20\% | 79.50 |
| 5.6 | 33 | 500 | 225 | 112 | 61\% | $21 \%$ | 79.50 |
| 5.6 | 34 | 420 | 280 | 118 | 62\% | 22\% | 79.50 |
| 6.0 | 40 | 400 | 375 | 150 | 63\% | 25\% | 82.00 |

Also supplied for $12,14,24,28$, or 32 Volt input
For cont inous duty applications, Models GP-12, GP-17 and GP-26 cover wattage ratings from 20 to 50 Wats. Input voltares $6,12,24$, or 32.
GP-12: Length $53 / 4^{\prime \prime}$, Diam. $31 / 2^{\prime \prime}$, Ileight $4^{\prime \prime}$,' Weight $5^{1 / 4}$ lhs.
GP-17: Length $61 / 4$ ", Diam. $31 / 2{ }^{\prime \prime}$, Height 4", Weight 6 Ils.
QP Models have steel mounting bases; width $4{ }^{\text {P }}{ }^{\prime \prime}$ ".

## GOTHARD AIRCRAFT DYNAMOTORS

| Frame | INPUT |  | OUTlPUT |  | $\begin{aligned} & \text { List } \\ & \text { Price } \end{aligned}$ | Length | Diam. | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Size | Folta | Amps. | Volts | M 1 |  |  |  |  |
| DS-12 | 12 | 2.6 | 250 | 60 | \$64.00 | $+3 / 4{ }^{\prime \prime}$ | $23 / 4$ | こ7\%" |
| DS-17 | 12 | 3.6 | 250 | 90 | 71.50 | $51 / 4$ " | $23 / 4{ }^{\prime \prime}$ | $37 / 8$ |
| SP-12 | 12 | 4.0 | 250 | 100 | 80.00 | $0^{\prime \prime}{ }^{\prime \prime}$ | $31 / 2{ }^{\prime \prime}$ | $43 / 4$ |
| SP-17 | 12 | 5.2 | 300 | 195 | 87.00 | $61 / 2^{\prime \prime}$ | $31 /{ }^{\prime \prime}$ | $5 \mathrm{5} /{ }^{\prime \prime}$ |
| SP-22 | 12 | 6.4 | 400 | 125 | 91.50 | *" | $31 / 2^{\prime \prime}$ | $61 / 2^{\prime \prime}$ |
| SF-20 | 12 | 8.4 | 400 | 150 | 104.00 | (13/4) | $4^{\prime \prime}$ | 81/2" |
| SF-25 | 12 | 10. | 500 | 150 | 123.00 | $71 /{ }^{\prime \prime}$ | $4^{\prime \prime}$ | $93 / 4{ }^{\prime \prime}$ |

Ahove ratimis are continnous duty with temperature of $40^{\circ} \mathrm{C}$
Also supplied for 6, $14,24,28$, or 32 lolt input. "SI"" and "SF" dynamotors may be supplied in fan-ventilated construction as types "SPF" and "SFF". Prices upon request.


MODEL "AK-15" CONVERTER (With Filter)


## GOTHARD ROTARY CONVERTERS

TYPE "K" 3600 RPM ( 60 Cycle) - 3000 RPM ( 50 Cycle)

| $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Frame Size | INIUT |  | OUTPUT at $90 \%{ }^{1}$ P.F. |  |  | App. Net wt. |  | List Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Volts | Amps. | Volts | 60 cy . | 50 cy. | Conv. | Add for Filter | $\begin{aligned} & \text { Less } \\ & \text { Filter } \end{aligned}$ | With |
| 6 K 11 | AK-15 | 6 | 36 | 110 | 110 | 90 | $24 \pm$ | $6 \#$ | \$79.00 | \$96.50 |
| 12 K 11 | AK-15 | 12 | 18 | 110 | 110 | 90 | 24 \# | $6 \#$ | 79.00 | 96.50 |
| 12 Kl 16 | AK-25 | 12 | 24 | 110 | 160 | 125 | 29 \# | 6 \# | 106.00 | 125.00 |
| 24 K 11 | AK-15 | 24 | 9 | 110 | 110 | 90 | 24 \# | 6 \# | 79.00 | 96.50 |
| 24K20 | AK-25 | 24 | 14 | 110 | 200 | 160 | 29 \# | 6\# | 106.00 | 125.00 |
| 24 K 30 | BK-22 | 24 | 19.4 | 110 | 300 | 250 | 38 \# | $6 \#$ | 137.50 | 154.50 |
| 24 K 50 | BK-35 | 24 | 30.4 | 110 | 500 | 400 | 45 \# | 0 \# | 159.50 | 174.50 |
| $3 \mathrm{Kl1}$ | AK. 15 | 32 | 6.2 | 110 | 110 | 90 | 24\# | 6 \# | 79.00 | 96.50 |
| 3 K 20 | AK-25 | 32 | 10.4 | 110 | 200 | 160 | 20\% $\#$ | 6\# | 106.00 | 125.00 |
| 3K30 | BK. 22 | 32 | 14.5 | 110 | 300 | 250 | 38\# | 6 \# | 137.50 | 154.50 |
| 3K50 | BK-35 | 32 | 22.0 | 110 | 500 | 400 | 45\# | 6 \# | 159.50 | 174.50 |
| 3K75 | CK-35 | 32 | 34 | 110 | 750 | 600 | 68\# | 7 \# | 193.00 | 213.00 |
| 4 K 11 | AK. 15 | 48 | 4.4 | 110 | 110 | 90 | 24 \# | 6 \# | 79:00 | 96.50 |
| 4K20 | AK-25 | 48 | 7.0 | 110 | 200 | 160 | 20 \# | 6 \# | 106.00 | 125.00 |
| 4K30 | BK-22 | 48 | 9.7 | 110 | 300 | 250 | 38\# | 6 \# | 137.50 | 154.50 |
| 4 K 50 | BK-35 | 48 | 15.2 | 110 | 500 | 400 | 45) \# | 6 \# | 159.50 | 174.50 |
| 4K75 | CK. 35 | 48 | 22.7 | 110 | 750 | 600 | 68\# | 7 \# | 193.00 | 213.00 |
| 1 K 11 | AK-15 | 115 | 1.8 | 110 | 110 | 90 | 24 | 6\# | 79.00 | 96.50 |
| 1 K 20 | AK-25 | 115 | 3.0 | 110 | 200 | 160 | 297 | 6 \# | 106:00 | 125.00 |
| 1 K 30 | BK-22 | 115 | 4.2 | 110 | 300 | 250 | 38\# | 6 \# | 137.50 | 154.50 |
| 1 K 50 | BK-35 | 115 | 6.6 | 110 | 500 | 400 | 45\# | 6 \# | 159.50 | 174.50 |
| $1 \mathrm{K75}$ | CK. 35 | 115 | 9.4 | 110 | 750 | 600 | 68\# | 7 \# | 193.00 | 213.00 |
| 1 K 100 | CK-45 | 115 | 12.4 | 110 | 1000 | 800 | 80\# | 7 \# | 249.00 | 269.00 |
| 2 K 11 | AK-15 | 230 | . 9 | 110 | 110 | 90 | 24\# | 6\# | 82.00 | 100.00 |
| 2K20 | AK. 25 | 230 | 1.5 | 110 | 200 | 160 | 29\# | $6 \#$ | 109.00 | 128.00 |
| 2K30 | BK:22 | 230 | 2.1 | 110 | 300 | 250 | 38\# | 6\# | 141.00 | 157.50 |
| 2 K 50 | BK-35 | 230 | 3.3 | 110 | 500 | 400 | 4.5\# | 6\# | 163.00 | 179.50 |
| $2 \mathrm{K75}$ | CK-35 | 230 | 4.7 | 110 | 750 | 600 | 68\# | 7 \# | 196.50 | 216.50 |
| 2K100 | CK-45 | 230 | 6.2 | 110 | 1000 | 800 | 80\# | 7 \# | 252.00 | 272.00 |

MODEL "BK-35" CONVERTER (Less Filter)
Also Rulplied for Marine Type Filter, 220 Volt A.O. Output, and automatic frequency control. Prices upon request.

## Constent Yotege irchifformers




FIUCTUATING LINE
VOLTAGE

SOLA
CONSTANT VOLTAGE
TRANSFORMER
TYPE 3


Constant Voltage Transformers are designed to provide a constant output voltage which is unaffected by changes in input voltage. Stabilization is instantaneous and automatic and there are no moving parts. Constant Voltage Transformers also provide isolation between input and output circuits. Low output voltage wave distortion and small size make these transformers especially attractive for use with all types of electronic equipment.

## CONSTANT OUTPUT

 vOLTAGE

SOLA CONSTANT voltage TRANSFORMER TYPE 21

SOLA CONSTANT VOLtAGE TRANSFORMER TYPE 1


Output capacities up to 15 VA , with output at either 6.3 volts or 115 volts. Both types are immersion proof and capable of tropical service. Type 12 furnished withseparate condenser. Prices include condenser.


TYPE 12

SOLA CONSTANT VOLTAGE TRANSFORMER

TYPE 22


FOR COMPLETE CATALOG INFORMATION SEE OPPOSITE PAGE $\rightarrow$ For complete operational data write for Bulletin 13CV-102


SOLA CONSTANTVOLTAGE
ATRANSFORMERS
TYPE 5
TYPE 41 $\rightarrow$


SOLA ELECTRIC COMPANY. 4633 WEST 16 fh STREET, CHICAGO 5O, ILLINOIS

| Catalog Number |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ELECTRICAL AND MECHANICAL SPECIFICATIONS |  |  |  |  |  |  |  |  | 60 CYCLE |
|  | $\begin{gathered} \text { Output } \\ \text { Capacity } \\ \text { in VA } \end{gathered}$ | Input Volts | Output Volts | Dimensions in Inchas |  |  |  |  | $\begin{aligned} & \text { Approx. } \\ & \text { Shipping } \\ & \text { Weight } \\ & \hline \end{aligned}$ | Price Each |
|  |  |  |  | A | B | C | E | F |  |  |
| TYPE 1 |  |  |  |  |  |  |  |  |  |  |
| 30488 | 15 | 95.125 | 6.0 | 511 | 25/ |  |  |  |  |  |
| 30492 | 15 | 95-125 | 6.0 6.3 | 5116 | 25/8 | 3716 | $51 / 16$ | $\ldots$ | 6 |  |
|  | 15 | 95-125 | 6.3 115.0 | 511/16 | $25 / 8$ 258 | 37116 | 51/16 | .... $\ldots$. | 6 | 15.00 15.00 |
| TYPE 2 |  |  |  |  |  |  |  |  |  |  |
| 30804 | 30 | 95.125 | 115.0 |  |  |  |  |  |  |  |
| 30805 | 60 | 95-125 | 115.0 | $8{ }^{816 / 16}$ | 43/166 | $43 / 8$ |  | 23/8 | 12 | 17.00 |
| 30806 | 120 | 95-125 | 115.0 | ${ }_{911 / 15}$ | -43166 | 43/8 | $81 / 16$ 81516 | 23/8 $23 / 8$ | 13 17 | 24.00 32.00 |
| TYPE 3 |  |  |  |  |  |  |  |  |  |  |
| 30807 | 250 | 95.125 | 115.0 | 115/8 |  |  |  |  |  |  |
| 30M807 | 250 | 190-250 | 115.0 | 115/8 | 6156 | 55/8 | $31 / 4$ $31 / 4$ | $61 / 8$ | 30 30 | 52.00 52.00 |
| 30808 | 500 | 95-125 | 115.0 | 141/2 | 615/16 | 55/8 | 5 | $61 / 8$ | 30 40 | 52.00 75.00 |
| 30M808 | 500 | 190-250 | 115.0 | 141/2 | 615/16 | 55/8 | 5 | $61 / 8$ $61 / 8$ | 40 | 75.00 75.00 |
| TYPE 4 |  |  |  |  |  |  |  |  |  |  |
| 30809 30 M 09 | 1000 | 95-125 | 115.0 | 191/8 | 91/2 |  |  |  |  |  |
| 30M809 | 1000 | 190-250 | 115.0 | 191/8 | 91/2 | 77/8 | 63/4 | $81 / 2$ | 115 | 125.00 125.00 |
| 30311 | 2000 | 95.125 | 115.0 | 311/8 | $91 / 2$ | 7788 | 121/4 | $81 / 2$ | 115 | 125.00 225.00 |
| 30 M 811 | 2000 | 190.250 | 115.0 | 311/8 | $91 / 2$ | $77 / 8$ | 121/4 | $81 / 2$ $81 / 2$ | 205 | 225.00 225.00 |
| TYPE 5 |  |  |  |  |  |  |  |  |  |  |
| 30 M 314. | 4000 | 95/190-125/250 | 115.0 | 215/8 | 423/4 | 976 | 121/ |  |  |  |
| 30 M 815 | 5000 | 95/190-125/250 | 115.0 | 241/8 | 423/4 | 9716 | 143/4 | 401/4 | 570 | $\begin{aligned} & 380.00 \\ & 475.00 \end{aligned}$ |
| 30M816 | 5000 | 95/190-125/250 | 230.0 | 241/8 | $423 / 4$ | 97/16 | 143/4 | 401/4 | 570 | $475.00$ |
| TYPE 6 |  |  |  |  |  |  |  |  |  |  |
| 30 M 317 | 10,000 | 190/380-250/500 | 115.0 | 48 | 351/4 | 95/8 |  |  |  |  |
| 30M818 | 10,000 | 190/380-250/500 | 230.0 | 48 | 351/4 | 95/8 95 | $387 / 8$ 3878 | $\begin{aligned} & 331 / 4 \\ & 331 / 4 \end{aligned}$ | $\begin{aligned} & 1025 \\ & 1025 \end{aligned}$ | $\begin{array}{r} 930.00 \\ 930.00 \end{array}$ |
| TYPE It |  |  |  |  |  |  |  |  |  |  |
| 30785 | 17 | 95-125 | 6.3 | 513/16 | 321/32 | 21932 |  |  |  |  |
| 30955 | 17 | 95-125 | 115.0 | $513 / 16$ | 321/32 | 2192 | 3 | 2 | $51 / 2$ | $\begin{aligned} & 20.00 \\ & 20.00 \end{aligned}$ |
| TYPE 12 |  |  |  |  |  |  |  |  |  |  |
| 301002 | 15 | 95-125 | 6.3 | 55/6 | $31 / 2$ |  | 3 |  |  |  |
| 301003 | 15 | 95-125 | 115.0 | 55/18 | $31 / 2$ | $21 / 4$ | 3 | 11/2 | $21 / 2$ | $\begin{aligned} & 18.50 \\ & 18.50 \end{aligned}$ |
| TYPE 21 |  |  |  |  |  |  |  |  |  |  |
| 30801 | 25 | 95-125 | 6.0 | 87/16 | 43/6 | 43\% | 71/10 | 23/8 | 12 |  |
| 30881 | 25 | 95-125 | 6.3 | $87 / 16$ | 43/16 | $43 / 8$ | $71 / 16$ | $23 / 8$ | 12 | 16.00 |
| 30802 | 50 | 95-125 | 6.0 | 813/16 | $43 / 16$ | 43/8 | $81 / 16$ | $23 / 8$ | 13 | 16.00 |
| 30882 | 50 | 95-125 | 6.3 | $8{ }^{13 / 16}$ | 43/16 | 43\% | $81 / 16$ | $23 / 8$ | 13 | 22.00 |
| TYPE 22 |  |  |  |  |  |  |  |  |  |  |
| 30885 | 60 | 95-125 | 115.0 | 105/6 | 43/6 | 43/8 | 99\% | 23/8 | 13 |  |
| 30886 | 120 | 95-125 | 115.0 | 113/16 | 43/15 | 43/8 | 107/6 | 23/8 | 19 | $32.00$ |
| TYPE 41 |  |  |  |  |  |  |  |  |  |  |
| 30M813 | 3000 | 95/190-125/250 | 115.0 | 4411/16 | 10 | 93/8 | 425/8 | 81/2 | 325 | 300.00 |

DIMENSIONS - A: overall length B: OVERALL WIDTH
C: OVERALI HEIGHT
EEF: MOUNTING DIMENSIONS
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

[^4]
## CORN:

|  | C = NON-\$V.ICHRONOUS |  |  | CS = NONSYMCHRONOUS |  |  | D = SYNCHRONOUS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | $\underset{\text { Lrice }}{\substack{\text { List }}}$ | Net <br> Price | Type | $\begin{gathered} \text { List } \\ \text { Price } \end{gathered}$ | Net Price | Type No. | $\begin{gathered} \text { List } \\ \text { Price } \end{gathered}$ | $\mathrm{Net}$ Price |
|  | coo | \$4.45 | \$2.67 | $\mathrm{CSO}^{\text {- }}$ - 2 | \$7:00 | \$4.20 | D00 | . $\$ 7.00$ | $\$ 4.20$ 4.20 |
|  | C00-32 | 6.50 | 3.90 | ${ }_{\text {CSO3-32 }}$ | 7.00 5.75 | 4.20 3.45 | D04 | 7.00 | 4.20 4.20 4. |
|  | ${ }^{1} \mathrm{C} 01$ | -4.45 | $\underline{2.67}$ | ${ }^{\text {CSS06. }}$ | 6.50 | 3.90 | D07 | 7.00 | 4.20 |
|  | co3 | 4.45 | 2.67 | ${ }^{\text {CS } 10} 12$ | $\begin{array}{r}6.50 \\ -700 \\ \hline\end{array}$ | 3.90 <br> 4.20 | D08 | 7.00 7.00 | 4.20 4.20 |
|  | C04 | 5.75 | 3.46 | CS11-12 | 7.00 $\times 6.25$ | 3.75 | D09-4 | 7.00 | 4.20 |
|  | cot. | 4.45 | 2.67 |  |  |  | D10 | 7.00 | 4.20 4.20 |
|  | C08.. | ... 5.75 | 3.45 | DS |  |  | D11. | 7.00 | 4.20 |
|  | \% C09.. | ... 4.45 | 2.67 | D, ${ }^{\text {c }}$ | ECIAL. |  | D13-4 | 7.00 8.30 | 4.20 4.98 |
|  | ${ }_{31} \quad$ C14. | 4.45 | 2.67 | Type | List ${ }^{\text {L }}$ | ${ }_{\text {Net }}$ | D16. | 8.30 7.00 | 4.98 4.20 |
|  | 沼 C20P | 4.45 | 2.67 | No. | Price ${ }^{\text {a }}$ | Price | ${ }^{\text {D22 }}$ | 7.75 | 4.65 |
|  | --C21. |  | $2.67$ | $\overline{\mathrm{DS} 04}$ | $\begin{array}{r} \$ 8.30 \\ 770 \end{array}$ | $\$ 4.98$ | D25 | 8.30 7.00 | 4.98 4.20 |
|  | C23P | 3.75 | $2.25$ | DS05 | $\begin{array}{r} 7.75 \\ 9.05 \end{array}$ | $\begin{aligned} & 4.65 \\ & 5.43 \end{aligned}$ | D26 | 7.00 80 | 4.908 4.98 |
| - FEATURES | C26P | 3.75 | 2.25 | DSO5-12 | $\begin{aligned} & 9.05 \\ & 9.05 \end{aligned}$ | 5.43 -6.43 | ${ }_{\text {D }}{ }^{\text {D29 }}$ | 8.75 | 4.65 |
| -C-D designed electronic | 3. C28P-32 | 8430 | 4,98 | DS07 | 7.75 | -4.65 | ${ }^{\text {O33 }}$ O. | 7.00 700 | 4.20 4.20 |
| - micrometric eswork in contact | \%1. C31 | 4.45 | 2:67 | DS07-12 |  |  | ${ }_{\text {D35-4 }}^{\text {D }}$ |  | 4 |
| (\%. point setting and assures | 12. 233 | 4,45 | 4.62 | DS07-32 |  | 5.43 | ${ }^{\text {D35 }}$-4 | 7.00 7.00 | 4.20 |
| - Exclusive C-D-0.0le piece de- |  | -4.4. | -2:67 | 0510 | 7.00 | ${ }^{4} .20$ | - |  | 4.20 4.20 |
| sign and armature weight | C42M | 3.75 | 2.25 | DS10-12 | 7.75 7 | 4.65 | D40 | 7.75 | $4: 65$ |
|  | C43M | 5.25 | 3.45 | DS15-12 | 7.75 | 4.65 |  | 7.00 775 | 4.20 4.65 |
| unit with greater efriciency. | 1) C63 | \%).75 | 3.45 | DS15-24 | 7.75 7.75 | ${ }_{4}^{4.65}$ | Di3-32 | 7.00 | . 4.20 |
| - Excelusive C-D ${ }^{\text {results in all floating unit. }}$ | * C66 | 2.75 | 3.45 | DS16-12 | 9.05 | 5.43 | ${ }^{\text {D63 }}$ | 8.30 8.30 | 4.98 |
| That's why C-D vibrators last | C67-32 | 7.00 | 4.20 | DS20 | 7.00 | 4.20 | D64. |  |  |

Unit campletely enclosed in . new floating sock-an exclusive with C-D vibrators. Eliminates usual difficulties found ingother vibrators.

- New stack design will take peak voltages of even 4,200 volts with no damage to vibrator.

Mr. Serviceman: Never be out of these popular numbers. They constitute $88 \%$ of all your demand in the ratio shown.


## C23P <br> C26P C35

$22 \%$
$5 \%$
$5 \%$
$4 \%$
$3 \%$

$4 \% |$| $\mathbf{4}$ | 00 |
| :--- | :--- |


| $4 \%$ | D 00 |
| ---: | ---: |
| $11 \%$ | D 25 |
| $9 \%$ | D 26 |



[^5] Always use C-D Buffer Capacitors for replacement.
MiEA

PROTECT THE INVESTMENT IN YOUR EQU|PMENT Recent advances in the electrical field have made more critical the need for precise voltage control equipment designed to protect and to operate highly sensitive and expensive apparatus. Whether the application involves the control of light, heat, sound, power or electronic equipment, there's a POWERSTAT variable transformer to suit every requirement.


TYPE 2PF1126


TYPE 1256

| RD | POWERSTAT |  | VARIABLE |  | TRANSFORMERS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Line } \\ \text { Voltage } \end{gathered}$ | $\begin{aligned} & \text { Output } \\ & \text { Voltage } \end{aligned}$ | Maximum <br> Output <br> Ampere | $\begin{aligned} & \text { Output } \\ & \text { KVA } \end{aligned}$ | Frequency | Type |
|  | Single Phase |  |  |  |  |  |
|  | 115 | 0-135 | 3.0 | 0.4 | *60 | 20 |
|  |  | 0.135 0.135 | 7.5 15.0 | 1.0 2.0 | $50 / 60$ $50 / 60$ | 116 |
|  |  | $0-135$ | 30.0 | 4.0 | 50/60 | ${ }_{1126-2 \mathrm{P}}^{1126}$ |
|  |  | 0.135 | 45.0 | 6.1 | 50/60 |  |
|  |  | 0.135 | 90.0 | 12.1 | 50/60 | $1156-2 \mathrm{P}$ |
|  |  | 0.135 | 135.0 | 18.2 | 50/60 | 1156 -3P |
|  |  | -0.135 | 180.0 | 24.3 | 50/60 | 1156.4 P |
| * TYPE 1126 |  | 0.135 | 270.0 | 36.4 | 50/60 | 1156 -6P |
| 1) - |  | 0.270 0.270 | 3.0 | 0.35 | 50160 | 216 1226 |
|  |  | $0-270$ 0.270 | 9.0 28.0 | 1.05 3.27 | $50 / 60$ $50 / 60$ | 1226 1256 |
|  | 230 | 0.270 | 3.0 | 0.81 | 50/60 | 216 |
|  |  | 0.270 | 7.5 | 2.0 | 50/60 | 116.25 |
|  |  | $0-270$ | 9.0 | 2.4 | 50/60 | ${ }_{1}^{1226}$ |
|  |  | 0.270 0.270 | 15.0 28.0 | 4.0 | $50 / 60$ $50 / 60$ | ${ }_{1256}^{1265}$ |
|  |  | $0-270$ | 45.0 | 12.1 | 50/60 | 1156 -2S |
|  |  | 0.270 | 56.0 | 15.1 | 50/60 | 1256.2 P |
|  |  | $0-270$ | 84.0 | 22.7 | 50/60 | 1256.3 P |
| A. TPPE 0.1726 |  | $0-270$ | 11.0 | 30.2 | 50/60 | 1256.4 P |
|  |  | -0.540 | 38.0 | 4.7 | 50/60 | $1256-6 \mathrm{P}$ $216-25$ |
|  |  | 0.540 | 9.0 | 2.1 | 50/60 | 1226.2 S |
|  |  | 0.540 | 28.0 | 6.5 | 50/60 | 1256.25 |
|  | 440 | 0.515 | 3.0 | 1.5 | 50/60 | 216-2S |
|  |  | 0.515 | 9.0 | 4.6 | 50/60 | 1226-2S 1256.25 |
|  |  | 0.515 0.515 | 28.0 56.0 | 14.4 28.8 | $50 / 60$ $50 / 60$ | $1256-2 \mathrm{~S}$ $1256-4 \mathrm{PS}$ |
| TYPE 1160 |  | -0.515 | 84.0 | ${ }_{43.2}$ | 50/60 | 1256.6 PS |


| Three Phase |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 115 | 0.135 | 3.0 | 0.7 | *60 | 20-2D |
|  | 0.135 | 7.5 | 1.8 | 50/60 | 116-2D |
|  | $0-135$ | 15.0 | 3.5 | 50/60 | 1126-2D |
|  | 0-135 | 45.0 | 10.5 | 50/60 | 1156-2D |
|  | 0.135 | 90.0 | 21.0 | 50/60 | 1156.40 |
|  | $0-135$ | 135.0 | 31.6 | 50/60 | 1156-6D |
|  | 0-270 | 3.0 | 0.6 | 50/60 | 216-2D |
|  | $0-270$ | 9.0 | 1.8 | 50/60 | 1226-2D |
|  | 0-270 | 28.0 | 5.7 | 50/60 | 1256-2D |
| 230 | 0-230 | 3.0 | 1.2 | 60 | 20L-3Y |
|  | 0-270 | 3.0 | 1.4 | 50/60 | 216-2D |
|  | 0.270 | 7.5 | 3.5 | * 60 | 116-3Y |
|  | 0-270 | 9.0 | 4.2 | 50/60 | 1226-2D |
|  | 0-270 | 15.0 | 7.0 | *60 | 1126-3Y |
|  | 0.270 | 28.0 | 13.1 | 50/60 | 1256-2D |
|  | 0.230 | 45.0 | 17.9 | 50/60 | 1156L-3Y |
|  | 0-270 | 56.0 | 26.2 | 50/60 | 1256-4D |
|  | $0-270$ | 84.0 | 39.3 | 50/60 | 1256-6D |
|  | 0.230 | 90.0 | 35.8 | 50/60 | $1156 \mathrm{~L}-6 \mathrm{Y}$ |
|  | 0.540 | 3.0 | 1.2 | *60 | 216-3Y |
|  | $0-540$ | 9.0 | 3.6 | *60 | 1226-3Y |
|  | 0.540 | 28.0 | 11.3 | *60 | 1256-3Y |
| 440 | $0.515$ | 3.0 | 2.7 | *60 | 216-3Y |
|  | $0-515$ | 9.0 | 8.0 | * 60 | 1226-3Y |
|  | 0.515 | 28.0 | 25.0 | * 60 | 1256-3Y |
|  | 0.515 | 56.0 | 50.0 | *60 | 1256-6Y |

OIL-COOLED POWERSTATS

|  |  | 15.0 | 2.0 | $50 / 60$ | 0.116 |
| ---: | ---: | ---: | ---: | ---: | :--- |
| 115 | 135 | 30.0 | 4.0 | $50 / 60$ | $0-1126$ |
|  |  | 6.0 | 1.6 | $50 / 60$ | 0.216 |
| 230 | 270 | 18.0 | 4.8 | $50 / 60$ | 0.1226 |

*When these POWERSTATS are "L" connected so that output does not exceed applied voltage, frequency range is $50 / 60$ cycles.

## POWERSTAT Variable Transformers

are auto-transformers of toroidal core design, with a movable brush-tap which rotates to deliver a con-tinuously-adjustable output voltage from a-c power lines. Into each POWERSTAT are incorporated superior qualities of top electrical performance, rugged mechanical construction, compact design and durability. POWERSTATS feature zero waveform distortion, excellent regulation, conservative ratings, standard mountings, smooth control and high efficiency. POWERSTATS are available with motor drives for pushbutton remote control, or for use with automatic controllers. A variety of motor speeds is offered.

WRITE FOR COMPLETE

# STABILINEAutomatic VOLTAGE REGULATORS 

## DELIVER CONSTANT OUTPUT VOLTAGE REGARDLESS OF VARIATIONS IN INPUT VOLTAGE OR LOAD CURRENT

Two types of automatic voltage regulators are built by The Superior Electric Company, designed to maintain constant output voltage to large loads or as a means of obtaining a constant output voltage with zero waveform distortion. Type IE (instantaneous electronic) gives instant correction; Type EM (electromechanical), while not instantaneous, corrects faster than most types of constant voltage regulators.


Because of differences in basic design, it's possible to order a STABILINE voltage regulator to meet the requirements of any problem in voltage regulation. If you have a particular problem, write The Superior Electric Company. Our staff of voltage control engineers is available for consultation - at no obligation to you. It's through this engineering service that we can best serve you; that we can design and build voltage control equipment second to none in the electrical industry.

## INSTANTANEOUS ELECTRONIC STABILINES

Completely electronic voltage regulators, instantaneous in action; no moving parts; waveform distortion never exceeds $3 \%$ output voltage is stable within $\pm .1$ of $1 \%$ for wide line variations. Available in cabinet, portable or rack-mounting models.

| Input <br> Voltage Range | Output <br> Voltage Range | Frequency <br> in Cycles | ATINGS Load Range in Amperes | Load Power Factor Range | Rated Output KVA | Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 95.135 | 110-120 | $60 \pm 10 \%$ | 0.2 .2 |  | 0.25 | 1E51002 |
| 95-135 | 110-120 | $60 \pm 10 \%$ | 0-4.4 | . 5 lagging | 0.5 | IE51005 |
| 95-135 | 110-120 | $60 \pm 10 \%$ | 0-8.5 |  | 1.0 | [E510] |
| 95-135 | 110-120 | $60 \pm 10 \%$ | 0-43.5 | to | 5.0 | IE5105 |
| 195-255 | 220-240 | $60 \pm 10 \%$ | 0-11.0 |  | 2.5 | IE5202 |
| 95-135 | 110-120 | $50 \pm 10 \%$ | 0-8.5 | . 9 leading | 1.0 | IEL5101 |
| 195-255 | 220-240 | $50 \pm 10 \%$ | 0-4.5 |  | 1.0 | IEL5201 |

## ELECTROMECHANICAL STABILINES

Consist of an electronic detector circuit controlling a motor-driven POWERSTAT variable transformer. Features: zero waveform distortion, insensitivity to magnitude and power factor of load, no effect on system power factor, no critical âdjustments, high efficiency, adjustable output voltage.

RATINGS

| Nominal Output Voltage | Input <br> Voltage <br> Range | Output <br> Voltage Range | Output Current (Amperes) | $\begin{aligned} & \text { Output } \\ & \text { KVA } \end{aligned}$ | Type |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Single Phase |  |  | 20.0 | 2.3 | EM4102 |
| 115 | 95-135 | 110-120 | $\begin{array}{r} 52.0 \\ 130.0 \end{array}$ | $\begin{array}{r} 6.0 \\ 150 \end{array}$ | EM4106 <br> EM4115 |
|  |  |  | 32.5 | 6.7 | EM8207 |
| 208 | 180-230 | 200-215 | 120.0 | 25.0 | EM8228 |
|  |  |  | 32.5 | 7.5 | EM4207 |
| 230 | 195-255 | 220-240 | 120.0 | 27.5 | EM4228 |
|  |  |  | 15.0 | 6.6 | EM4407 |
| 440 | 380-500 | 420-460 | 40.0 | 17.6 | EM4418 |
| Three Phase |  |  | 25.0 | 9.0 | EM8210Y |
|  |  |  | 38.0 | 13.5 | EM8215Y |
| 208 | 180-230 | 200-215 | 50.0 | 18.0 | EM8220Y |
|  |  |  | 113.0 | 40.0 | EM8245Y |
|  |  |  | 145.0 | 52.0 | EM8258Y |
|  |  |  | 25.0 | 10.0 | EM6210Y |
|  |  |  | 38.0 | 15.0 | EM6215Y |
| 230 | 195-255 | 220-240 | 50.0 | 20.0 | EM6220Y |
|  |  |  | 113.0 | 45.0 | EM6245Y |
|  |  |  | 145.0 | 58.0 | EM6258Y |
| 440 | 380-500 | 420.460 | 16.0 | 12.0 | EM6412Y |
|  |  |  | 22.0 | 17.0 | EM6417Y |
|  |  |  | 33.0 | 25.0 | EM6425Y |
|  |  |  | 66.0 | 50.0 | EM6450Y |
|  |  |  | 100.0 | 75.0 | EM6475Y |
|  | 400.480 | 420.460 | 131.0 | 100.0 | EM64100Y |

VOLTBOX A-C POWER SUPPLIES: Compact, portable sources of variable a-c voltage for use in laboratory, inspection and maintenance sections and in transmitter work-
 rooms. Two types available: $\mathrm{UCIM}-115 \mathrm{~V}, 50 / 60$ cycle, 1 phase, output 0.135 V , $7.5 \mathrm{amps}, 1 \mathrm{KVA}, \mathrm{UC} 2 \mathrm{M}-230 \mathrm{~V}, 50 / 60 \mathrm{cyce}, 1$ phase, output $0-270 \mathrm{~V}, 3.0 \mathrm{amps}, 810 \mathrm{VA}$.


## THE SUPERIOR ELECTRIC co brtstol, connscricut.


[^0]:    ${ }^{*} 15^{\circ}$ Spacing Between Numerals
    $\dagger 60^{\circ}$ Spacing Between Numerals
    $\ddagger 90^{\circ}$ Spacing Between Numerals

[^1]:    IRadio frequency interference completely suppressed.
    Any of the above tyme Inverters are avalable with 220 volt A.C. output at prices $25 \%$ higher. In ordering. specity "S" after the type number and substitute for the last letter in the code word "T" ; that is, if a 110 volt D. C. Jnverter having a 220 rolt A. C. output is dosired, this would be orderm as Trye 110 covered by conle word, "GRSCT

    ATR Stamard and Ileavy Duty Radio lnverters are housed in attractively finished freywrinkled metal caljinets.

    IImensions of Standard Model ladio Inverters, $8 \frac{8}{\prime \prime \prime} \times 9^{\prime \prime} \times 51 / 4^{\prime \prime}$; Shipping weight, 19) liss.

    Dimensions of Heavy Duty Model Radio Inverters, $61 / 2 " \times 11 \frac{1 / 8 "}{}$ x $81 / 2 "$; Shipping weight, 30 bs.

    For correct replacement vibrator, consult Inverter Vibrator Guide.

[^2]:    Any of the above type Inverters are availatble with 220 volt A. C. output at slightly higher prices. In ordering, follow similar directions given ahove.

    ATR Siandard and Heavy Duty Industrial Inverters are housed in attractively finished grey-wrinkled metal cabinets.

    Ihimensions of Standard Model Industrial Inverters, $83 / 8^{\prime \prime} \times 9^{\prime \prime} \times 51 / 4^{\prime \prime}$.
    Shipping weight, 19 lbs.

    1) imensions of Heavy Duty Industrial Inverters, $61 / 2{ }^{\prime \prime} \times 111 / 8^{\prime \prime} \times 81 / 2 "$; shipping weisht, 30 lbs.
    For correct replacement vibrator, consult Inverter Vibrator Guide.
    "tp" Inverters are corrected for loads having power factors as low as $50 \%$.
    Built-in filter, $\$ 10.00$ additional.
[^3]:    FILTERS
    Available on all Super Dynamotors. Add ' X " to Code Number and $\$ 30.00$ to list.
    STARTING RELAYS -
    Heavy duty solenoid contactor relays available for $12,24,28$ and 32 and 115 volt DC input. Add " $R$ " to Code Number and $\$ 8.00$ to list.

    ## INPUT VOLTAGES-

    Super Dynamotors available in 6 volt (if current

[^4]:    

[^5]:    Fi ARNING: Always check the Buffer Capacitorshefore installing anew vibrator: Fdilure to do so will void the guarantee.

